14th August, 2020

BSE Limited Phiroze Jeejeebhoy Towers Dalal Street Mumbai: 400 001 **Scrip Code: 500440**	**National Stock Exchange of India Limited** Exchange Plaza, 5th Floor Plot No. C/1, G Block Bandra Kurla Complex Bandra (East) Mumbai – 400 051 **Scrip Code: HINDALCO**
Mr. Daniel Schammo Banque Internationale A Luxembourg Societe Anonyme 69, Route d'Esch L-2953 Luxembourg Fax No. 00 352 4590 2010 Tel. No. 00 352 4590-1	

Sub: Notice of 61st Annual General Meeting & Annual Report of Hindalco Industries Limited ('the Company')

Ref: Regulation 34(1) of the Securities and Exchange Board of India (Listing Obligations & Disclosure Requirements) Regulations, 2015 ('Listing Regulations')

Dear Sir/ Madam,

Pursuant to Regulation 34(1) of Listing Regulations, enclosed herewith is the Notice of 61st Annual General Meeting ('AGM') of the Company along with the Annual Report for the Financial Year ended 31st March, 2020.

The AGM Notice & Annual report for the year ended 31st March, 2020 are being dispatched electronically to those members whose email- ids are registered with the Company / Depositories.

The AGM Notice & Annual report is also uploaded on the Company's website viz. www.hindalco.com.

This is for your information & record.

Thanking you

Yours faithfully

For HINDALCO INDUSTRIES LIMITED

ANIL MALIK
President & Company Secretary
Encl: as above

HINDALCO INDUSTRIES LIMITED

CIN No: L27020MH1958PLC011238

Registered Office: Ahura Centre, 1st Floor, B Wing, Mahakali Caves Road, Andheri (East), Mumbai-400 093,
Tel: (91-22) 6691 7000, Fax: (91-22) 6691 7001, E-mail: hilinvestors@adityabirla.com, website: www.hindalco.com

NOTICE OF ANNUAL GENERAL MEETING

NOTICE is hereby given that, the Sixty-first Annual General Meeting ('AGM') of the Shareholders of Hindalco Industries Limited ('the company') will be held on **Thursday**, **10th September, 2020** at **03:00 p.m.** through Video Conferencing (VC) or Other Audio Visual Means (OAVM), to transact the items of business mentioned below:

ORDINARY BUSINESS:

1. To receive, consider and adopt the Audited Financial Statements (including Audited Consolidated Financial Statements) for the year ended 31st March, 2020 and the Report of the Directors and the Auditors thereon.
2. To declare Dividend on equity shares of the Company for the year ended 31st March, 2020.
3. To appoint a Director in place of Mr. Debnarayan Bhattacharya (DIN: 00033553), who retires by rotation and being eligible, offers himself for reappointment.

SPECIAL BUSINESS:

4. **To ratify the remuneration of the Cost Auditors for the financial year ending 31st March, 2021 and in this regard to consider and if thought fit, to pass the following resolution, which will be proposed as an Ordinary Resolution:**

   "RESOLVED THAT pursuant to the provisions of Section 148 and all other applicable provisions, if any, of the Companies Act, 2013 ('the Act') and the Companies (Audit and Auditors) Rules, 2014 (including any statutory modification(s) or re-enactment thereof, for the time being in force), the remuneration of ₹ 15,00,000 /- per annum (Rupees Fifteen Lakh only) plus taxes, as applicable and reimbursement of actual travel and out-of-pocket expenses for the financial year ending 31st March, 2021 to be paid to M/s. R. Nanabhoy & Co., Cost Accountants, appointed by the Board of Directors of the Company to conduct the audit of the cost records of the Company, be and is hereby ratified and confirmed.

   RESOLVED FURTHER THAT the Board of Directors of the Company (including any Committee thereof) be and is hereby authorised to do all such acts, deeds and things and take all such steps as may be necessary, proper or expedient to give effect to this resolution."

5. **To approve the appointment of Mr. Sudhir Mital (DIN: 08314675) who was appointed as an Independent Director on the Board of the Company, under Section 149, read with the Rules made thereunder and Schedule IV of the Companies Act, 2013 and the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 and in that behalf, to consider and if thought fit to pass the following resolution, which will be proposed as an Ordinary Resolution:**

   "RESOLVED THAT pursuant to the provisions of Sections 149 and 152 read with Schedule IV and all other applicable provisions, if any, of the Companies Act, 2013 ('the Act') and the Companies (Appointment and Qualification of Directors) Rules, 2014 (including any statutory modification(s) or re-enactment thereof, for the time being in force) and pursuant to the provisions of the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 ('Listing Regulations') (including any modification or amendment thereof) for the time being in force, Mr. Sudhir Mital (DIN: 08314675), being eligible and fulfilling the criteria of independence as provided in the Act and the Listing Regulations and in respect of whom the Company has received a notice in writing from a Member under Section 160(1) of the Act proposing his candidature for the office of Director of the Company, be and is hereby appointed as an Independent Director of the Company, not liable to retire by rotation, to hold office for the term of 5 (five) consecutive years, on the Board of Company with effect from 11th November, 2019."

6. **To approve the appointment of Mr. Anant Maheshwari (DIN: 02963839) who was appointed as an Independent Director on the Board of the Company, under Section 149, read with the Rules made thereunder and Schedule IV of the Companies Act, 2013 and the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 and in that behalf, to consider and if thought fit to pass the following resolution, which will be proposed as an Ordinary Resolution:**

   "RESOLVED THAT pursuant to the provisions of Sections 149 and 152 read with Schedule IV and all other applicable provisions, if any, of the Companies Act, 2013 ('the Act') and the Companies (Appointment and Qualification of Directors) Rules, 2014 (including any statutory modification(s) or re-enactment thereof, for the time being in force) and pursuant to the provisions of the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 ('Listing Regulations') (including any modification or amendment thereof) for the time being in force, Mr. Anant Maheshwari (DIN: 02963839), being eligible and fulfilling the criteria of independence as provided in the Act and the Listing

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Regulations and in respect of whom the Company has received a notice in writing from a Member under Section 160(1) of the Act proposing his candidature for the office of Director of the Company, be and is hereby appointed as an Independent Director of the Company, not liable to retire by rotation, to hold office for the term of 5 (five) consecutive years, on the Board of Company with effect from 14th August, 2020."

7. **To continue the directorship of Mrs. Rajashree Birla(DIN:00022995) as a non-executive director and in this regard to consider and if thought fit, to pass the following resolution, which will be proposed as a Special Resolution:**

   "RESOLVED THAT pursuant to the provisions of the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 (including any statutory modification(s) or re-enactment(s) thereof, for the time being in force) and any other applicable laws, rules and regulations consent of the members of the Company is accorded to continuation of Mrs. Rajashree Birla (DIN: 00022995), who will be attaining the age of 75 years on 15th September, 2020, as a Non-Executive Director of the Company."

8. **To re-appoint Mr.Yazdi Piroj Dandiwala (DIN: 01055000) as an Independent Director and in this regard to consider and if thought fit, to pass the following resolution, which will be proposed as a Special Resolution:**

   "RESOLVED THAT pursuant to the provisions of Sections 149 and 152 read with Schedule IV and all other applicable provisions, if any, of the Companies Act, 2013 ('the Act') and the Companies (Appointment and Qualification of Directors) Rules, 2014 (including any statutory modification(s) or re-enactment thereof, for the time being in force) and pursuant to the provisions of the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 ('Listing Regulations') (including any modification or amendment thereof) for the time being in force, Mr. Y. P. Dandiwala (DIN: 01055000), being eligible and fulfilling the criteria of independence as provided in the Act and the Listing Regulations and in respect of whom the Company has received a notice in writing from a Member under Section 160(1) of the Act proposing his candidature for the office of Director of the Company, be and is hereby appointed as an Independent Director of the Company, not liable to retire by rotation, to hold office for the second term of 5 (five) consecutive years, on the Board of Company with effect from 14th August, 2020."

By Order of the Board of Directors
For Hindalco Industries Limited

Anil Malik
Company Secretary
Membership No.: A11197

Place : Mumbai
Date : 14th August, 2020

NOTES:

GENERAL:

1. In view of the continuing restrictions on the movement of people at several places in the country, due to the outbreak of COVID-19, the Ministry of Corporate Affairs, Government of India ('MCA'), and the Securities and Exchange Board of India ('SEBI'), have allowed companies to conduct Annual General Meetings ('AGM') through video-conferencing ('VC') / other audio-visual means ('OAVM') during the calendar year 2020, without the physical presence of Members. This also addresses the health and safety of the Members.

   This AGM is being convened in compliance with applicable provisions of the Companies Act, 2013 ('the Act') and the Rules made thereunder; provisions of Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 ('Listing Regulations'); the provisions of General Circular No. 20/2020 dated 5th May, 2020 read with General Circular No. 14/2020 dated 8th April, 2020; General Circular No.17/2020 dated 13th April, 2020 issued by the MCA and Circular No. SEBI/HO/CFD/CMD1/CIR/P/2020/79 dated 12th May, 2020 issued by SEBI, ('MCA and SEBI Circulars').

2. An Explanatory Statement pursuant to Section 102 of the Act, in respect of Item nos. 4 to 8 of the Notice set out above, is annexed hereto. The Board of Directors have considered and decided to include item nos. 4 to 8 as Special Business as they are unavoidable in nature. The relevant details, pursuant to Regulations 26(4) and 36(3) of the Listing Regulations and Secretarial Standard on General Meetings issued by the Institute of Company Secretaries of India, ('ICSI') in respect of Director seeking re-appointment at this AGM is annexed.

3. In accordance with the Secretarial Standard - 2 on General Meetings issued by the ICSI read with Clarification / Guidance on applicability of Secretarial Standards - 1 and 2 dated 15th April, 2020 issued by the ICSI, the proceedings of the AGM shall be deemed to be conducted at the Registered office of the Company i.e. Ahura Centre, 1st Floor, 'B' Wing, Mahakali Caves Road, Andheri (East), Mumbai 400 093 which shall be the venue of the AGM. Since the AGM will be held through VC / OAVM, the Route Map is not annexed in this Notice.

4. Members attending the AGM through VC / OAVM shall be counted for the purpose of reckoning the quorum under Section 103 of the Act.

5. In compliance with the provisions of Section 108 of the Act, read with the Companies (Management and Administration) Rules, 2014 as amended by the Companies (Management and Administration) Amendment Rules, 2015 and Regulation 44 of Listing

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Regulations and MCA circulars, the Company is pleased to provide its members the facility to cast their vote by electronic means on all resolutions set forth in this Notice. The Company has appointed National Securities Depository Limited ('NSDL') for facilitating voting through electronic means, as the authorized agency. The Members may cast their votes using an electronic voting system from a place other than the venue of the AGM ('remote e-voting'). The instructions for e-voting are enclosed with this Notice.

6. Pursuant to the provisions of the Act, a Member entitled to attend and vote at the AGM is entitled to appoint a proxy to attend and vote on his/her behalf and the proxy need not be a Member of the Company. Since this AGM is being held pursuant to the MCA Circulars through VC / OAVM, physical attendance of Members has been dispensed with. Accordingly, the facility for appointment of proxies by the Members will not be available for the AGM and hence the Proxy Form and Attendance Slip are not annexed to this Notice.

7. The Register of Directors and Key Managerial Personnel and their shareholding, maintained under Section 170 of the Act, the Register of Contracts or Arrangements in which the Directors are interested, maintained under Section 189 of the Act, the certificate from the statutory auditors of the Company certifying that the ESOS Schemes of the Company are being implemented in accordance with the SEBI (Share Based Employee Benefits) Regulations, 2014 will be available for inspection by the Members through electronic mode during the AGM.

   The aforesaid documents along with documents referred to in the Notice will also be available electronically for inspection by the Members, without payment of any fees, from the date of circulation of this Notice up to the date of AGM, i.e. Thursday, 10th September, 2020. Members seeking inspection of the aforementioned documents can send an email to hilinvestors@adityabirla.com.

8. The Members can join the AGM in the VC / OAVM mode 15 minutes before and after the scheduled time of the commencement of the Meeting by following the procedure mentioned in the Notice. The facility of participation at the AGM through VC / OAVM will be made available for minimum 1,000 members on 'first come first serve' basis. This will not include large Shareholders (Shareholders holding 2% or more equity shares), Promoters, Institutional Investors, Directors, Key Managerial Personnel, the Chairpersons of the Audit Committee, Nomination and Remuneration Committee and Stakeholders' Relationship Committee, Auditors etc. who are allowed to attend the AGM without restriction on account of 'first come first serve' basis.

9. Institutional / Corporate Shareholders intending to authorise their representatives to attend the meeting pursuant to Section 113 of the Act, are requested to email certified copy of the Board / governing body resolution / authorisation etc. authorising their representatives to attend and vote on their behalf at email IDs hilinvestors@adityabirla.com with a copy marked to evoting@nsdl.co.in.

10. I. The Company has listed its shares at:

    a) BSE Limited,
    Phiroze Jeejeebhoy Towers,
    Dalal Street, Mumbai – 400 001.

    b) The National Stock Exchange of India Limited,
    5th Floor, Exchange Plaza,
    Plot No. C/1, G Block,
    Bandra-Kurla Complex,
    Bandra (E), Mumbai- 400 051.

    II. The Company has listed its Debentures at:

    The National Stock Exchange of India Limited,
    5th Floor, Exchange Plaza,
    Plot No. C/1, G Block,
    Bandra-Kurla Complex,
    Bandra (E), Mumbai – 400 051.

The listing fees of these Exchanges have been paid in time.

DISPATCH OF ANNUAL REPORT:

11. In compliance with the aforesaid MCA Circulars and SEBI Circular dated 12th May, 2020, Notice of the AGM along with the Annual Report 2019-20 is being sent only through electronic mode to those Members whose email addresses are registered with the Company/ Depositories. Members may note that the Notice and Annual Report 2019-20 will also be available on the Company's website www.hindalco.com, websites of the Stock Exchanges i.e. BSE Limited and National Stock Exchange of India Limited at www.bseindia.com and www.nseindia.com respectively, and AGM notice is also available on NSDL website i.e. www.evoting.nsdl.com.

DECLARATION OF RESULT:

12. The Board of Directors has appointed Mr. B. Narasimhan, Proprietor, BN & Associates, Company Secretaries as a Scrutinizer to scrutinize the remote e-voting process and e-voting at the AGM in a fair and transparent manner.

13. The Scrutinizer shall, immediately after the conclusion of voting at the AGM, first count the votes cast during the AGM, thereafter unblock the votes cast through remote e-voting and make, not later than 48 hours of conclusion of the AGM, a consolidated Scrutinizer's Report of the total votes cast in favour or against, if any, to the Chairman or a person authorised by him in writing, who shall countersign the same.

14. The result declared along with the Scrutinizer's Report shall be placed on the Company's website

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www.hindalco.com and on the website of NSDL www.evoting.nsdl.com immediately. The Company shall simultaneously forward the results to National Stock Exchange of India Limited and BSE Limited, where the shares of the Company are listed.

BOOK CLOSURE:

15. The Register of Members and Transfer Books in respect of Equity Shares of the Company will remain closed from Saturday, 05th September, 2020 to Thursday, 10th September, 2020 (both days inclusive) for the purpose of payment of dividend.

PAYMENT OF DIVIDEND:

16. The final dividend, as recommended by the Board of Directors, if approved at the AGM, payment of such dividend subject to deduction of tax at source will be made on or after Thursday, 10th September, 2020 as under:

    (i) To all Beneficial Owners in respect of shares held in dematerialized form as per the data as may be made available by the National Securities Depository Limited ('NSDL') and the Central Depository Services (India) Limited ('CDSL'), as of the close of business hours on Friday, 04th September, 2020;

    (ii) To all Members in respect of shares held in physical form after giving effect to valid transfer, transmission or transposition requests lodged with the Company as of the close of business hours on Friday, 04th September, 2020.

    Equity shares that may be allotted upon the exercise of stock options granted under the Employee Stock Option Scheme before the book closure date shall rank pari passu with the existing equity shares and shall be entitled to receive the dividend, if approved at the meeting.

    The Company shall make the payment of dividend to those Members directly in their bank accounts whose bank account details are available with the Company and those who have given their mandate for receiving dividends directly in their bank accounts through the Electronic Clearing Service ('ECS') / National Electronic Clearing Service ('NECS').

    In terms of the MCA and SEBI Circulars, in case, the Company is unable to pay dividend to any Member by the electronic mode, due to non-availability of the details of the bank account, the Company shall upon normalisation of the postal services dispatch the dividend warrant to such Member by post.

17. Members holding shares in dematerialized form are requested to intimate all changes pertaining to their bank details, National Electronic Clearing Service (NECS), Electronic Clearing Service (ECS), mandates, nominations, power of attorney, change of address, change of name, e-mail address, contact numbers, etc., to their Depository Participant (DP). Changes intimated to the DP will then be automatically reflected in the Company's records which will help the Company to provide efficient and better services. Members holding shares in physical form are requested to intimate such changes to the Company.

18. To avoid the incidence of fraudulent encashment of dividend warrants, Members are requested to intimate the Company under the signature of the Sole / First Joint holder, the following information, so that the bank account number and name and address of the bank can be printed on the dividend warrants:

    - Name of Sole / First Joint holder and Folio number.

    - Particulars of bank account, viz.

    i) Name of bank

    ii) Name of branch

    iii) Complete address of bank with PINCODE

    iv) Account type, whether Savings (SB) or Current Account (CA)

    v) Bank Account Number

    Further, in case Members have not updated their bank account details, please do so by sending a copy of a cancelled cheque leaf (self-attested), with name, bank account number, bank address and IFSC code printed thereon. In case the cheque leaf does not contain the aforesaid details, please submit a copy of the first page of the bank account passbook showing the aforesaid details, duly attested and signed by the bank manager.

DEDUCTION OF TAX AT SOURCE ON DIVIDEND:

19. Pursuant to Finance Act 2020, dividend income will be taxable in the hands of shareholders w.e.f. 01st April, 2020 and the Company is required to deduct tax at source from dividend paid to shareholders at the prescribed rates. For the prescribed rates for various categories, the shareholders are requested to refer to the Finance Act, 2020 and amendments thereof. The shareholders are requested to update their PAN with the Company (in case of shares held in physical mode) and depositories (in case of shares held in demat mode).

    A Resident individual shareholder with PAN and who is not liable to pay income tax can submit a yearly declaration in Form No. 15G/15H, to avail the benefit of non-deduction of tax at source by email to hiltds@adityabirla.com by Friday, 04th September, 2020. Shareholders are requested to note that in case their PAN is not registered, the tax will be deducted at a higher rate of 20%.

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Non-resident shareholders can avail beneficial rates under tax treaty between India and their country of residence, subject to providing necessary documents i.e. No Permanent Establishment and Beneficial Ownership Declaration, Tax Residency Certificate, Form 10F, any other document which may be required to avail the tax treaty benefits by sending an email to hiltds@adityabirla.com. The aforesaid declarations and documents need to be submitted by the shareholders by Friday, 04th September, 2020.

UNPAID DIVIDEND & TRANSFER TO IEPF ACCOUNT:

20. Pursuant to the provisions of Section 124 of the Act, unpaid/unclaimed dividend for the financial year 2011-2012 has been transferred by the company to the Investor Education Protection Fund ("IEPF") established by the Central Government.

    In terms of the provisions of Section 125(5) of the Act, dividend which remains unpaid/unclaimed for a period of seven years from the date of declaration will be transferred to the IEPF.

    Further, in terms of the provisions of the Investor Education and Protection Fund Authority (Accounting, Audit, Transfer and Refund) Rules, 2016 ("IEPF Rules"), equity shares in respect of which dividend has not been paid or claimed for seven consecutive years of more from the date of declaration will also be transferred to an account viz. "Investor Education and Protection Fund Authority Ministry of Corporate Affairs", which is operated by the IEPF Authority pursuant to the IEPF Rules.

    Shareholders, who have so far not encashed their dividend relating to the financial year 2012-13 are requested to do so by Friday, 25th September, 2020, by writing to the Company at the Registered office, failing which the dividend and the equity shares relating thereto will be transferred to the "Investor Education and Protection Fund Authority Ministry of Corporate Affairs".

    In compliance with the aforesaid Rules, the Company has already transferred equity shares for which dividend remained unpaid/unclaimed for a period of seven years from the date of declaration to the Investor Education and Protection Fund Authority Ministry of Corporate Affairs, after providing necessary intimations to the relevant shareholders. Details of unpaid/unclaimed dividend and such equity shares are uploaded on the website of the Company as well as that of the MCA. No claim shall lie against the Company in respect of unclaimed dividend amount and equity shares transferred to the Investor Education and Protection Fund Authority Ministry of Corporate Affairs, respectively, pursuant to the IEPF Rules. Members can however claim both the unclaimed dividend amount and equity shares from the IEPF Authority by making applications in the manner provided in the IEPF Rules.

DEPOSITORY SYSTEM:

21. As per Regulation 40 of Listing Regulations, as amended, securities of listed companies can be transferred only in dematerialized form with effect from, 01st April, 2019, except in case of request received for transmission or transposition of securities. In view of this and to eliminate all risks associated with physical shares and for ease of portfolio management, members holding shares in physical form are requested to consider converting their holdings to dematerialized form. Members can contact the Company in case of any queries by sending email to hilinvestors@adityabirla.com.

    In terms of the Listing Regulations, it is mandatory to furnish a copy of PAN card to the Company in the following cases viz. deletion of name, transmission of shares and transposition of shares.

22. As per the provisions of Section 72 of the Act, facility for making nominations is now available to INDIVIDUALS holding shares in the Company. Members holding shares in physical form may obtain the Nomination Form from the Company at its Registered office or can download the form from Company's website i.e. www.hindalco.com. Members holding shares in electronic form have to approach their DPs for completing the nomination formalities.

23. Members are requested to make all correspondence in connection with the shares held by them by addressing letters directly to the Company quoting their Folio number or their Client ID number with DP ID number, as the case may be.

24. Shareholders are requested to read the "Shareholders' Information" Section of the Annual Report for useful information.

PROCEDURE FOR JOINING AGM THROUGH VC / OAVM:

25. Member will be provided with a facility to attend the AGM through VC / OAVM through the NSDL e-voting system. Members may access the same at https://www.evoting.nsdl.com under shareholders/members login by using the remote e-voting credentials. The link for VC / OAVM will be available in shareholder/members login where the EVEN of Company will be displayed. Please note that the members who do not have the User ID and Password for e-voting or have forgotten the User ID and Password may retrieve the same by following the remote e-voting instructions mentioned in the notice to avoid last minute rush. Further members can also use the OTP based login for logging into the e-voting system of NSDL.

26. Members are encouraged to join the Meeting through Laptops for better experience.

27. Further Members will be required to allow Camera and use Internet with a good speed to avoid any disturbance during the meeting.

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28. Please note that participants connecting from Mobile Devices or Tablets or through Laptop connecting via Mobile Hotspot may experience Audio/Video loss due to Fluctuation in their respective network. It is therefore recommended to use Stable Wi-Fi or LAN Connection to mitigate any kind of aforesaid glitches.

29. Shareholders who would like to express their views/ask questions during the meeting may register themselves as a speaker may send their request mentioning their name, demat account number/folio number, email id, mobile number at hilinvestors@adityabirla.com during the period Saturday, 05th September, 2020 at 09:00 A.M. to Monday, 07th September, 2020 at 05:00 P.M.

30. Shareholders who would like to express their views/ have questions may send their questions in advance mentioning their name demat account number/folio number, email id, mobile number at hilinvestors@adityabirla.com. during the period Saturday, 05th September, 2020 at 09:00 A.M. to Monday, 07th September, 2020 at 05:00 P.M.

The same will be replied by the company suitably.

31. Those shareholders who have registered themselves as a speaker will only be allowed to express their views/ ask questions during the meeting.

PROCEDURE FOR REMOTE E-VOTING AND VOTING DURING AGM:

32. Members are requested to attend and participate in the ensuing AGM through VC / OAVM and cast their vote either through remote e-voting facility or through e-voting facility to be provided during the AGM.

33. The facility of e-voting during the AGM will be available to those Members who have not cast their vote by remote e-voting. Members, who have cast their vote by remote e-voting, may attend the AGM through VC/ OAVM but will not be entitled to cast their vote once again on resolutions.

34. In case of any queries, you may refer the Frequently Asked Questions (FAQs) for Shareholders and e-voting user manual for Shareholders available at the download section of www.evoting.nsdl.com or call on toll free no.: 1800-222-990 or send a request to Mrs. Sarita Mote- Assistant Manager at evoting@nsdl.co.in.

35. The remote e-voting period commences on Monday, 07th September, 2020 at 09:00 A.M. and ends on Wednesday, 09th September, 2020, at 05:00 P.M. During this period, Members of the Company holding shares either in physical form or in demat form, as on the cut-off date i.e. Friday, 04th September, 2020 may cast their vote by remote e-voting. The remote e-voting module shall be disabled by NSDL for voting thereafter. Once the vote on a resolution is cast by the Member, the Member shall not be allowed to change it subsequently.

PROCEDURE FOR CASTING VOTE ELECTRONICALLY USING NSDL E-VOTING SYSTEM:

The way to vote electronically on NSDL e-voting system consists of "Two Steps" which are mentioned below:

Step 1: Log-in to NSDL e-voting system at https://www.evoting.nsdl.com/

Step 2: Cast your vote electronically on NSDL e-voting system.

Details on Step 1 is mentioned below:

How to Log-in to NSDL e-voting website?

1. Visit the e-voting website of NSDL. Open web browser by typing the following URL: https://www.evoting.nsdl.com/ either on a Personal Computer or on a mobile.

2. Once the home page of e-voting system is launched, click on the icon "Login" which is available under 'Shareholders' section.

3. A new screen will open. You will have to enter your User ID, your Password and a Verification Code as shown on the screen.

   Alternatively, if you are registered for NSDL eservices i.e. IDEAS, you can log-in at https://eservices.nsdl.com/ with your existing IDEAS login. Once you log-in to NSDL eservices after using your log-in credentials, click on e-voting and you can proceed to Step 2 i.e. Cast your vote electronically.

4. Your USER-ID details are given below:

   a. For Members who hold shares in demat account with NSDL : 8 Character DP ID followed by 8 Digit Client ID: For example if your DP ID is IN300*** and Client ID is 12****** then your user ID is IN300***12******.

   b. For Members who hold shares in demat account with CDSL: 16 Digit Beneficiary ID: For example if your Beneficiary ID is 12********** then your user ID is 12**********.

   c. For Members holding shares in Physical Form: EVEN Number followed by Folio Number registered with the company: For example if folio number is 001*** and EVEN is 101456 then user ID is 101456001***.

5. Your password details are given below:

   a. If you are already registered for e-voting, then you can use your existing password to login and cast your vote.

   b. If you are using NSDL e-voting system for the first time, you will need to retrieve the 'initial password' which was communicated to you. Once you retrieve your 'initial password', you need to enter the 'initial password' and the system will force you to change your password.

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c. How to retrieve your 'initial password'?

i. If your email ID is registered in your demat account or with the company, your 'initial password' is communicated to you on your email ID. Trace the email sent to you from NSDL from your mailbox. Open the email and open the attachment i.e. a .pdf file. Open the .pdf file. The password to open the .pdf file is your 8 digit client ID for NSDL account, last 8 digits of client ID for CDSL account or folio number for shares held in physical form. The .pdf file contains your 'User ID' and your 'initial password'.

ii. If your email ID is not registered, please follow steps mentioned below in process for those shareholders whose email ids are not registered.

6. If you are unable to retrieve or have not received the "Initial password" or have forgotten your password:

a) Click on "Forgot User Details/Password?"(If you are holding shares in your demat account with NSDL or CDSL) option available on www.evoting.nsdl.com.

b) Physical User Reset Password?" (If you are holding shares in physical mode) option available on www.evoting.nsdl.com.

c) If you are still unable to get the password by aforesaid two options, you can send a request at evoting@nsdl.co.in mentioning your demat account number/folio number, your PAN, your name and your registered address.

Members can also use the OTP (One Time Password) based login for casting the votes on the e-Voting system of NSDL.

7. After entering your password, tick on Agree to "Terms and Conditions" by selecting on the check box.
8. Now, you will have to click on "Login" button.
9. After you click on the "Login" button, Home page of e-voting will open.

Details on Step 2 is given below:

How to cast your vote electronically on NSDL e-voting system?

1. After successful login at Step 1, you will be able to see the Home page of e-voting. Click on e-voting. Then, click on Active Voting Cycles.
2. After click on Active Voting Cycles, you will be able to see all the companies "EVEN" in which you are holding shares and whose voting cycle is in active status.
3. Select "EVEN" of company for which you wish to cast your vote.
4. Now you are ready for e-voting as the Voting page opens.
5. Cast your vote by selecting appropriate options i.e. assent or dissent, verify/modify the number of shares for which you wish to cast your vote and click on "Submit" and also "Confirm" when prompted.
6. Upon confirmation, the message "Vote cast successfully" will be displayed.
7. You can also take the printout of the votes cast by you by clicking on the print option on the confirmation page.
8. Once you confirm your vote on the resolution, you will not be allowed to modify your vote.

Process for those shareholders whose email ids are not registered with the depositories for procuring user id and password and registration of email ids for e-voting for the resolutions set out in this notice:

1. In case shares are held in physical mode please provide Folio No., Name of shareholder, scanned copy of the share certificate (front and back), PAN (self attested scanned copy of PAN card), AADHAR (self attested scanned copy of Aadhar Card) by email to hilinvestors@adityabirla.com.
2. In case shares are held in demat mode, please provide DPID-CLID (16 digit DPID + CLID or 16 digit beneficiary ID), Name, client master or copy of Consolidated Account statement, PAN (self attested scanned copy of PAN card), AADHAR (self attested scanned copy of Aadhar Card) to hilinvestors@adityabirla.com.
3. Alternatively member may send an e-mail request to evoting@nsdl.co.in for obtaining User ID and Password by providing the details mentioned in Point (1) or (2) as the case may be.

THE INSTRUCTIONS FOR MEMBERS FOR e-VOTING ON THE DAY OF THE AGM ARE AS UNDER:-

1. The procedure for e-voting on the day of the AGM is same as the instructions mentioned above for remote e-voting.
2. Only those Members / shareholders, who will be present in the AGM through VC / OAVM facility and have not casted their vote on the Resolutions through remote e-voting and are otherwise not barred from doing so, shall be eligible to vote through e-voting system in the AGM.
3. The details of the person who may be contacted for any grievances connected with the facility for e-voting on the day of the AGM shall be the same person mentioned for remote e-voting.

By Order of the Board of Directors
For Hindalco Industries Limited

Place : Mumbai
Date : 14th August, 2020

Anil Malik
Company Secretary
Membership No.: A11197

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ANNEXURE TO NOTICE

Explanatory Statement pursuant to the provisions of Section 102 of the Companies Act, 2013.

Item No. 4

The Board, on the recommendation of the Audit Committee, has approved the appointment of and payment of remuneration to M/s R. Nanabhoy & Co., Cost Accountants, Mumbai, to conduct the audit of the cost records of the Company for the financial year ending 31st March, 2021.

In accordance with the provisions of Section 148 of the Act, read with the Companies (Audit and Auditors) Rules, 2014, the remuneration payable to the Cost Auditors has to be ratified by the shareholders of the Company.

Accordingly, consent of the members is sought for passing an Ordinary Resolution as set out at Item No. 4 of the accompanying Notice, for ratification of the remuneration payable to the Cost Auditors for the financial year ending 31st March, 2021.

The Board recommends the Ordinary Resolution set out at Item No. 4 of the Notice for approval by the shareholders.

None of the Directors / Key Managerial Personnel of the Company or their relatives are, in any way, concerned or interested, in the said resolution.

Item No. 5

Based on the recommendation of the Nomination and Remuneration Committee, the Board of Directors of the Company at its meeting held on Monday, 11th November, 2019, have appointed Mr. Sudhir Mital (DIN: 08314675), as an Independent Director of the Company not liable to retire by rotation, to hold office for a period of five consecutive years subject to consent by the Shareholders of the Company at the ensuing AGM.

The Company has received a declaration from Mr. Sudhir Mital confirming that he meets the criteria of Independence as prescribed under the Act and Listing Regulations. Mr. Sudhir Mital is also not disqualified from being appointed as a Director in terms of Section 164 of the Act and has given his consent to act as Director of the Company.

A copy of the draft letter of appointment for Independent Directors, setting out the terms and conditions for the appointment of Independent Directors is available for inspection by the Members on the website of the Company www.hindalco.com. Considering the current situation, the Company is not able to provide physical inspection of documents at its registered office upto the date of AGM.

The brief resume in relation to the experience, functional expertise, members on other Companies' Boards and Committees in respect of the appointment of Mr. Sudhir Mital as an Independent Director, as required under the Listing Regulations as set out in this Notice.

Mr. Sudhir Mital is not related to any other Director and Key Managerial Personnel of the Company.

The Board is of the opinion that it will be beneficial to the Company to avail his services as an Independent Director of the Company and recommends the Ordinary Resolution as set out in Item No. 5 of the Notice for approval of the Shareholders.

In the opinion of the Board, the Independent Director proposed to be appointed fulfils the conditions specified in the Act and the rules made thereunder and that the proposed director is independent of the management.

Save and except Mr. Sudhir Mital and his relatives, to the extent of his shareholding interests, if any, in the Company, none of the other Directors, Key Managerial Personnel and their relatives are in any way, concerned or interested in the said resolution.

This Explanatory Statement may also be regarded as a disclosure under the Listing Regulations.

Item No. 6

Based on the recommendation of the Nomination and Remuneration Committee, the Board of Directors of the Company at its meeting held on Friday, 14th August, 2020, have appointed Mr. Anant Maheshwari (DIN: 02963839), as an Independent Director of the Company not liable to retire by rotation, to hold office for a period of five consecutive years subject to consent by the Shareholders of the Company at the ensuing AGM.

The Company has received a declaration from Mr. Anant Maheshwari confirming that he meets the criteria of Independence as prescribed under the Act and Listing Regulations Mr. Anant Maheshwari is also not disqualified from being appointed as a Director in terms of Section 164 of the Act and has given his consent to act as Director of the Company.

A copy of the draft letter of appointment for Independent Directors, setting out the terms and conditions for the appointment of Independent Directors is available for inspection by the Members on the website of the Company www.hindalco.com. Considering the current situation, the Company is not able to provide physical inspection of documents at its registered office up to the date of AGM.

The brief resume in relation to the experience, functional expertise, membership on other Companies' Boards and Committees in respect of the appointment of Mr. Anant Maheshwari as an Independent Director, as required under the Listing Regulations is set out in this Notice.

Mr. Anant Maheshwari is not related to any other Director and/or Key Managerial Personnel of the Company.

The Board is of the opinion that it will be beneficial to the Company to avail his services as an Independent Directors of the Company and recommends the Ordinary Resolution as set out in Item No. 6 of the Notice for approval of the Shareholders.

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In the opinion of the Board, the Independent Director proposed to be appointed fulfils the conditions specified in the Act and the rules made thereunder and that the proposed director is independent of the management.

Save and except Mr. Anant Maheshwari and his relatives, to the extent of his shareholding interests, if any, in the Company, none of the other Directors, Key Managerial Personnel and their relatives are in any way, concerned or interested in the said resolution.

This Explanatory Statement may also be regarded as a disclosure under the Listing Regulations.

Item No. 7

As per the provisions of the Listing Regulations, as amended from time to time approval of the Members by way of a special resolution is required for continuation of directorship of non-executive directors of the Company who have attained the age of 75 years.

Mrs. Rajashree Birla (DIN: 00022995), Non-Executive Director will attain the age of 75 years in September 2020.

Mrs. Rajashree Birla is serving as the Non-Executive Director on the Board of Directors of the Company since 15th March 1996. Over the years Mrs. Birla has made remarkable contributions towards the business and the Corporate Social Responsibility activities (CSR Activities) of the Company.

The Board based on the recommendations of the Nomination and Remuneration Committee considers that given the background, seniority, expertise, vast experience in the field of business management, CSR activities and her immense contribution to the Company, the continued association of Mrs. Rajashree Birla would be beneficial to the Company and it is desirable to continue to avail her services as Non-Executive Director. Accordingly, the Board recommends continuation of Mrs. Rajashree Birla as a Non-Executive Director till the end of her current term i.e. till she retires by rotation.

The Board commends the Special Resolution set out at Item No. 7 of the Notice for the approval by the Members.

None of the directors or Key managerial personnel except Mrs. Rajashree Birla and Mr. Kumar Mangalam Birla, Chairman and their relatives are in any way concerned or interested in the resolution at Item No. 7

Item No. 8

As per the provisions of Section 149(10) of the Act, an Independent Director shall hold office for a term up to 5 consecutive years on the Board of the Company but shall be eligible for re-appointment on the passing of the special resolution by the Company.

The Nomination and Remuneration Committee of the Board of Directors, on the basis of the report of performance evaluation of Independent Directors, has recommended the re-appointment of Mr. Y. P Dandiwala (DIN:01055000) as the Independent Director of the Company for a second term of 5 (five) consecutive years in accordance with the provisions of the Act and Listing Regulations with effect from 14th August 2020.

Mr. Y. P. Dandiwala has consented to his re-appointment and has confirmed that he does not suffer from any disqualifications which stand in the way of his re-appointment as the Independent Director. The Company has also received declarations from Mr. Y. P. Dandiwala confirming that he meets the criteria of independence as prescribed under Section 149 (6) of the Act and Regulation 16(1)(b) of the Listing Regulations.

Considering his background, experience and contributions made by him during his tenure, the Board is of the opinion that his continued association would be of immense benefit to the Company and it is desirable to continue to avail services of Mr. Y. P. Dandiwala, as an Independent Director.

As per the requirements of Section 149 of the Act, approval of the members by way of special resolution is also sought for continuation of directorship of Mr. Y. P. Dandiwala, till the end of his second term of 5 year and who has completed his first term of five year.

A copy of the letter of his appointment as Independent Director, setting out the terms and conditions of his re-appointment is available for inspection by the members on the website of the Company www.hindalco.com. Considering the current situation, the Company is not able to provide physical inspection of documents at its registered office up to the date of AGM.

The brief resume in relation to the experience, functional expertise, memberships on other Companies' Boards and Committees in respect of their re-appointment of the Independent Director, as required under Regulation 17 of Listing Regulations is set out in this Notice as an Annexure.

In the opinion of the Board, the Independent Director proposed to be appointed fulfils the conditions specified in the Act and the rules made thereunder and that the proposed director is independent of the management.

The Board commends the Special Resolution(s) set out at Item No. 8 of the Notice for the approval by the Members.

Save and except Mr. Y. P. Dandiwala and his relatives, to the extent of their shareholding interest, if any, in the Company, none of the other Directors/Key Managerial Personnel of the Company or their relatives is, in any way, concerned or interested, financially or otherwise, in the resolution.

This Explanatory Statement may also be regarded as a disclosure under the Listing Regulations.

By Order of the Board of Directors
For Hindalco Industries Limited

Anil Malik
Company Secretary
Membership No.: A11197

Place : Mumbai
Date : 14th August, 2020

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Annexure

Details of Directors seeking appointment and re-appointment in Annual General Meeting to be held on 10th September, 2020

A. Brief Resume including qualification, experience and expertise in specific functional area:

a. Debnarayan Bhattacharya

Debnarayan Bhattacharya is a Non-Executive Director and the Vice Chairman of your Company with effect from 31st July, 2016. He has experience in managing business operations. He joined the Aditya Birla Group in 1998 and has held several key positions within the Aditya Birla Group. He was appointed as Managing Director of the Company in the year 2003. He is qualified in Bachelor of Engineering (Chemicals) and IIT from Kharagpur.

b. Sudhir Mital

Sudhir Mital is a Non-Executive Director and Independent Director of your Company with effect from 11th November, 2019 for a period of five years. He is a graduate from Allahabad University with a Master's degree in Indian History. He also holds additional Masters in Rural Development from the University of Birmingham. He has been a former member of the Indian Administrative Service from the Punjab Cadre, Secretary to Department of Fertilizers – Government of India, and Special Secretary to MCA. He was also a former acting Chairman of Competition Commission of India (CCI). He has rich professional experience in the fields of public policy and governance after nearly four decades of service. He has been a key functionary with regards to the Companies Bill, 2013.

c. Anant Maheshwari

Anant Maheshwari is a Non-executive Independent Director of your Company with effect from 14th August, 2020 for a period of five years. He is currently working President at Microsoft Corporation Pvt Ltd. He is PGDBM, IIMA, 1998 having dual degrees from BITS Pilani. Also, MSc (Hons) Economics and a BE (Hons) Electricals & Electronics. He is highly experienced and proficient in his profession having well-rounded work experience spanning Microsoft, Honeywell and McKinsay. Further, has expertise in several areas such as Technology and automation, enterprise and industrial market and strategic development among others.

d. Rajashree Birla

Rajashree Birla is a Non-Executive Director and was appointed on the Board of Directors on 15th March, 1996. She is an exemplar in the area of community initiatives and rural development. Mrs. Birla spearheads the Aditya Birla Centre for Community Initiatives and Rural Development, the Group's apex body responsible for development projects. She oversees the Group's social and welfare driven work across 40 companies. The footprint of the Centre's work straddles over 5,000 villages, reaching out to 7.5 million people. Furthermore, Mrs. Birla is the Chairperson of the FICCI – Aditya Birla CSR Centre for Excellence, Habitat for Humanity (India) and is on the Board of the Asia Pacific Committee as well as Habitat's Global Committee. She is the Chairperson of FICCI's first ever Expert Committee on CSR. She serves on the Board of Director's CSR Committee of State Bank of India. She is Member on the Advisory Board of "The Research Society for the Care, Treatment and Training of Children in Need of Special Care", Mumbai, and of BAIF Development Research Foundation, Pune. As a patron of arts and culture, she heads the "Sangit Kala Kendra", a Centre for performing arts, as its President. In recognition of the exemplary work done by Mrs. Birla, leading national and international organizations have showered accolades upon her. Among these the most outstanding ones have been that of the Government of India's "Padma Bhushan" Award in 2011 in the area of "Social Work", The Economic Times "Corporate Citizen of the Year Award" twice over, in 2002 and 2012, besides the "Global Golden Peacock Award for CSR" presented by Dr. Ola Ullsten, the Former Prime Minister of Sweden in Portugal in 2010. The Institute of Directors (IOD) Distinguished Fellowship Award, and FICCI FLO's Lifetime Achievement Award, are among the many other distinctions received by her. Apart from your Company, Mrs. Birla is a Director on the Boards of Grasim Industries Limited and Ultratech Cement Limited. She is also on the Board of the Aditya Birla Group's international companies spanning Thailand, Indonesia, Philippines and Egypt.

e. Yazdi Dandiwala

Yazdi Dandiwala is a Non-Executive Director and Independent Director of your Company with effect from 14th August, 2015 for a period of five years. He is qualified as a Bachelor in Science and holds a degree in Law. He is Solicitor by profession. He is currently a partner of Mulla & Mulla and Craigie Blunt & Caroe, Advocates & Solicitors. He has experience as a corporate Commercial Lawyer with experience in corporate and commercial transactions.

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B. Other Details

Name of Director	Mr. Debnarayan Bhattacharya	Mr. Sudhir Mital**	Mr.Anant Maheshwari#	Mrs. Rajashree Birla	Mr. Yazdi Dandiwala
Date of Birth; Age	13/09/1948, 72 years	11/11/1953, 67 years	07/04/1973, 48 years	15/09/1945; 75 years	10/11/1950, 70 years
Date of Appointment	31/07/2016	11/11/2019	14/08/2020	15/03/1996	14/08/2015
Expertise in specific functional areas	Industry & Management	Public policy & Administration	Industry & Management	Industrialist	Lawyer
Qualifications	B.E. (Chemicals), IIT	Masters in Indian History	PGDBM IIMA, MSc (Hons) Economics, BE (Hons) Electrical & Electronics	B.A	B.Sc., LL.B. Solicitor
Relationship with other Directors, Managers and Key Managerial Personnel of the Company	Nil	Nil	Nil	Mother of Mr. Kumar Mangalam Birla	Nil
No of Board meetings attended	06	01	NA	03	06
List of outside Directorships held, Excluding Alternate Directorship and Private Companies.	1. Vodafone Idea Limited 2. NOCIL Limited	Nil	Nil	1. Grasim Industries Limited 2. UltraTech Cement Limited 3. Aditya Birla Health Services Limited 4. Century Enka Limited 5. Century Textiles and Industries Limited 6. Pilani Investment and Industries Limited	1. Century Textiles and Industries limited 2. Pilani Investments & Industries Corporation Limited 3. Hindalco-Almex Aerospace Limited
Chairman/ Member of the Committee of the Board of Directors of the company	Nil	Nil	Nil	Nil	1. Audit Committee (Member)
***Chairman/ Member of the Committee of the Board of Directors of other companies in which he/ she is a Director.**					
a. Audit Committee	1. Vodafone Idea Limited (Member)	Nil	Nil	Nil	1. Hindalco-Almex Aerospace Limited (Member) 2. Century Textiles & Industries Limited (Chairman)
b. Stakeholders' Relationship Committee	1. Vodafone Idea Limited (Member)	Nil	Nil	Nil	1. Century Textiles & Industries Limited (Member)
No. of Shares Held in the Company	15,71,937	Nil	Nil	6,12,470	206

Note:

* Pursuant to SEBI (Listing Regulations and Disclosures Requirement) Regulations, 2015 only two Committees viz. Audit Committee and Stakeholders' Relationship Committee are considered.

** Mr. Sudhir Mital is appointed as Independent Director w.e.f. 11th November, 2019.

Mr. Anant Maheshwari is appointed as Independent Director w.e.f. 14th August, 2020.

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For ease of participation by Members, provided below are key details regarding the AGM for reference:

Sr. No	Particulars	Details of access
1.	Link for live webcast of the AGM and for participation through VC / OAVM	https://www.evoting.nsdl.com/ by using e-voting credentials and clicking on video conference
2.	AGM queries and speaker registration and period of registration	By email on hilinvestors@adityabirla.com Period of registration: Saturday, 05th September, 2020 at 09:00 A.M. to Monday, 07th September, 2020 at 05:00 P.M.
3.	Link for remote e-voting	https://www.evoting.nsdl.com
4.	Username and password for VC	Members may attend the AGM through VC by accessing the link https://www.evoting.nsdl.com by using the remote e-voting credentials. Please refer the instructions provided in the Notice.
5.	Helpline number for VC participation and e-voting	Contact NSDL at 1800-222-990 or write them on evoting@nsdl.co.in or visit website: www.evoting.nsdl.com
6.	Cut-off date for e-voting	Friday, 04th September, 2020
7.	Time period for remote e-voting	Monday, 07th September, 2020 at 09:00 A.M. till Wednesday, 09th September, 2020, at 05:00 P.M.
8.	Book closure dates	Saturday, 05th September, 2020 till Thursday, 10th September, 2020 (both days inclusive)
9.	Last date for publishing results of the e-voting	Saturday, 12th September, 2020
10.	Registrar and Transfer Agent - contact details	In- House RTA Ahura Centre, B wing, 1st Floor, Mahakali Caves Road, Andheri (East). Mumbai- 400 093. Email id: hilinvestors@adityabirla.com
11.	Hindalco Industries Limited– contact details	Registered Address: Ahura Centre, B wing, 1st Floor, Mahakali Caves Road, Andheri (East). Mumbai- 400 093. Email id: hilinvestors@adityabirla.com

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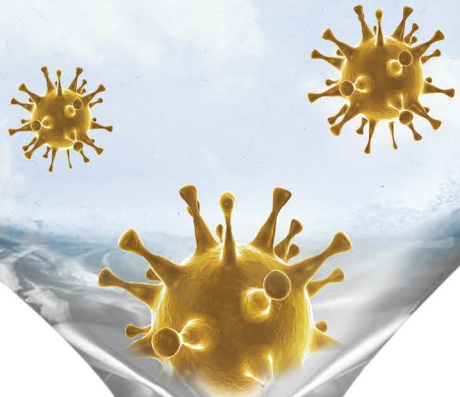
TOUGH TIMES DON'T LAST



TOUGH COMPANIES DO

ADITYA BIRLA

HINDALCO

ANNUAL REPORT

2019-20

HINDALCO
INDUSTRIES LIMITED

**BIG IN
YOUR LIFE**

Mr. Aditya Vikram Birla

We live by his values

Integrity, Commitment, Passion, Seamlessness and Speed

CHAIRMAN'S LETTER TO SHAREHOLDERS

"Dear Shareholder",

Covid-19 and the associated lockdowns across countries have triggered a once-in-a-century crisis for the society and the economy in 2020. January now seems like a month of a bygone era — such has been the enormity of change. This is a defining period in human and business history: one that will test the resilience of individuals, societies, corporations, and nations.

Given the fog of uncertainty all around, it is hard to be prescient in these times. But there is little doubt on one reality: companies with quality leadership, sound business fundamentals, and a track record of winning in turbulent times, will emerge as champions in the new global order.

GLOBAL ECONOMY

It has been several months since the pandemic engulfed the world and yet there is a lot of uncertainty with respect to the extent of the economic contraction due to this crisis, and the subsequent pace of recovery.

This year will see an economic contraction, but this 2020 recession is turning out very different from the past recessions. It has been too sudden – almost off the cliff; its spread has been all-encompassing – affecting almost every economy and sector, and the plunge in economic activity levels and employment has been unprecedented.

On the positive side, this recession is likely to be one of the shortest, assuming no second wave of the pandemic recurs. As present lockdowns around the world get lifted, and businesses reopen, economic activity is likely to bounce back fairly quickly. Around $9-trillion stimulus from different governments globally will help to support this recovery, along with the monetary actions by Central banks. These policies will also help to restrict the second-order effects like defaults and bankruptcies.

Some scars of the crisis will remain in the form of subdued consumer and business confidence. Some sectors, like airlines and hospitality, will take time to recover fully. And some supply chain disruption effects will linger. The International Monetary Fund (IMF) and other agencies are predicting that it could take about 5-6 quarters for global GDP to inch back to pre-crisis levels, and the global economic trajectory thereafter will be below the Pre-Covid trajectory for the next few years.

As the world emerges from the current crisis, the next few years are likely to be marked by lack of buoyancy in growth, subdued commodity prices and inflation, a cautious trend in project investments, heightened risks of de-globalisation and political uncertainty; and increased dependence of financial systems on ultra-loose monetary policy conditions. We will also have to watch out for potential post-Covid changes in consumer behaviour (such as more virtual engagements) and of operating models of organisations (such as work-from-home norms, diversification of supply chain risks, more use of e-commerce).

INDIAN ECONOMY

Covid-19 struck India at a time when the underlying economic conditions were subdued on account of heightened global uncertainty and stress in the domestic financial system.

Against this backdrop, a stringent national lockdown to slow the spread of the pandemic started in the last week of FY20 and remained active to varying degrees in different geographies through most of the Q1 of FY21. It is estimated that about 80% of India's GDP originates from districts which were classified under the red and orange zones during the lockdown, where economic activity remained severely constrained.

> A wide range of insights and experiences accumulated over diverse situations, allows the Group to fortify its businesses from both the immediate and the lingering effects of economic pain, caused by the pandemic.

Correspondingly, India's GDP is likely to contract in FY21, which would be the first such instance in over four decades. The contraction is estimated to be particularly severe during Q1.

Responding to this challenge, both the Reserve Bank of India (RBI) and Government of India announced several policy measures to provide relief to the affected sections of the economy, to reduce the possibility of business failures and to support the process of recovery. Government has initiated some remarkable reforms in agriculture, mining, and public sector enterprises. Such pragmatic policies – along with the ambitious National Infrastructure Pipeline program that the Government had announced in December 2019 – will support India's medium-term growth rebound. In the interim, however, the Indian economy – like the global economy – will need to navigate through some difficult quarters.

ABG IN PERSPECTIVE

Over a longer historical arc, the Aditya Birla Group has witnessed dramatic disruptions across periods, businesses, and geographies. And yet, we have come out stronger always. A wide range of insights and experiences accumulated over diverse situations, allows the Group to fortify its businesses from both the immediate and the lingering effects of economic pain, caused by the pandemic.

In these turbulent and dynamic times, the Group's near-term focus is to hold the ship steady and to see it through the turbulence – by emphasising on conservation of cash, the safety of its teams and assets, and strengthening its business relationships. The Aditya Birla Group is also closely examining the evolving changes in the business environment and their implications, to position itself well for leveraging the opportunities through and after the economic revival.

As the events began to unfold worldwide in the last quarter of the financial year, we anchored to our core strengths – our people, our processes, and our agility. In line with the Group's core philosophy of employee care and wellbeing, swift action was taken to shut down our offices, manufacturing units, retail outlets and branches— where necessary; and recalibrate

operations where feasible. Overnight, everyone switched to a new paradigm of work from home and adopted digital technology seamlessly. This is not an easy transition for large, diverse global organisations. But it was made possible due to the adaptability and commitment of our employees, discipline of the leadership, strong processes, and past investments in digital technologies. Our culture of learning hugely supported this quick switch over. A multi-generational workforce was an added advantage; as the younger digital-native employees played a reverse mentor role in guiding the older employees to become digitally savvy; the older employees enabled others to stay calm, focused and productive in difficult times. Continuous listening to employees through pulse surveys and guiding them to ***Make the Most*** of the situation led to a productive and winning mindset. A pulse survey conducted with ABGites showed an assuring trend – 86% were confident about delivering their Q1 goals of the new fiscal.

Faced with an unprecedented nationwide lockdown, our group businesses proactively created ***'Business Continuity Plans'*** working through different scenarios. Our teams engaged deeply and meaningfully with customers and value chain partners to support them better in these extraordinary times.

Over the last few months, business models have been reassessed, to identify strategic and tactical opportunities to improve effectiveness, prune avoidable costs as well as prepare for the new normal New opportunities are continuously being ideated and explored. For example, Aditya Birla Fashion and Retail has made an emphatic foray into masks, our Chemicals Business is producing disinfectants, and the Fibre Business is manufacturing antibacterial fibre.

A crisis of such magnitude is a great reminder of our responsibility to give back to society. True to its legacy, ABG has curated a multi-pronged approach to help our communities fight Covid-19, with a commitment of over ₹ 500 Crore towards Covid relief measures. This entailed a contribution of ₹ 400 Crore to the PMCARES Fund.

The pandemic has also accelerated our shift to digitization across businesses. A new wave of digital energy is being unleashed with a clear focus on getting closer to our customers.

Our Group businesses are also leaving no stone unturned in redefining workplace hygiene. Every business has implemented new standards of safe working with guidelines for social distancing and zero-touch interactions. Similar protocols have been created for safe and superior customer engagements. We believe that things will continue to be dynamic and uncertain in the coming months. Even as we open offices and factories with protocols to put employee safety at the forefront and enhance productivity, we will continue to leverage our strength of adaptability and agility.

A crisis of such magnitude is a great reminder of our responsibility to give back to society. True to its legacy, ABG has curated a multi-pronged approach to help our communities fight Covid-19, with a commitment of over ₹ 500 Crore towards Covid relief measures. This entailed a contribution of ₹ 400 Crore to the PM-CARES Fund. In addition, we have also leveraged the capabilities of our apparel business to commence the production of one million triple-layer surgical masks and 100,000 coverall garments. Several hundred thousand food packets, provisions and disinfectants have been distributed to the needy across the country. Given the depth of our presence in India, we have also earmarked over 300 beds for Covid-19 patients at our network of hospitals in our units.

This unflinching support to our employees, communities and other stakeholders is core to our DNA and will enable our long-term, sustainable growth.

YOUR COMPANY'S PERFORMANCE

The metal industry, and particularly aluminium and copper sectors, faced a volatile and challenging year in fiscal 2019-20. The subdued growth in CY2019 was a result of rising trade barriers, uncertainty surrounding trade and geopolitics and region-specific structural factors. The impact of Covid-19 on global growth since March 2020 has further depressed the economic outlook for the year ahead.

Your Company registered a strong consolidated performance in FY2019-20, reflecting its resilience to withstand market cycles. This spirited show was driven by a continued record performance from Novelis, coupled with stable performance of the Indian aluminium and copper businesses.

Your Company reported a consolidated EBITDA of ₹ 15,536 Crore on a turnover of ₹ 1,18,144 Crore in FY2019-20. Your Company's aluminium and copper business in India, and Novelis continued to deliver steady operational performance, despite lower LME and tough market conditions. The major enablers were lower input prices and better cost efficiencies. Your Company (including Utkal) continued to achieve record aluminium production levels at 1.314 Mt and alumina production of 2.735 Mt in FY2019-20. Utkal Alumina also registered its best ever production in FY2019-20. All plants operated at their designed capacities. Production of aluminium value-added products (excluding wire rods) stood at 319 Kt in FY2019-20 reflecting a flattish growth y-o-y and your Company's focus on strengthening its downstream portfolio to become further delinked from LME volatility.

In the copper business, cathode production was 321 Kt, lower compared to the year earlier due to loss of production because of lockdown and plant shutdown in the month of March 2020. Continuous Cast Rod production was at a record high of 263 Kt, up 7% y-o-y because of continuous ramp-up of the CCR#3 plant at Dahej.

Novelis reported yet another remarkable performance this year with a record adjusted EBITDA of $1.472 billion, an increase of 8%. Adjusted EBITDA/tonne of $450 was also the highest ever. Novelis continues to improve its product mix with the share of beverage can sheet at 66% and automotive body sheets at 19% in FY2019-20. Your Company reported the share of recycled contents at 60% in FY2019-20, and this has been continuously rising with Novelis emerging as the world's largest recycler.

Your Company registered a strong consolidated performance in FY2019-20, reflecting its resilience to withstand market cycles. This spirited show was driven by a continued record performance from Novelis, coupled with stable performance of the Indian aluminium and copper businesses.

Your Company continues to focus on strengthening the balance sheet, with the consolidated net debt to EBITDA dropping to 2.61x at the end of March 2020.

On 14th April 2020, your Company completed the acquisition of Aleris at an enterprise value of $2.8 billion. The Divestment procedures for Aleris' automotive assets are underway. This acquisition will allow further product diversification for Novelis, with the addition of high aerospace and expanded speciality capabilities, while cementing your Company's position as the leading aluminium value-added player in the world.

CONCLUSION

FY20 is not just another fiscal. Never has the transition between two financial years been as tumultuous for the global economy. The pandemic is no doubt, a sobering reminder of how the world can change in unforeseeable ways.

As Covid-19 gets quelled and the global economy reawakens, endurance will pave the way for renewal — for individuals and corporations alike. When we emerge from the coronavirus, I have no doubt that the world will recognise and celebrate corporations that are exemplars of good governance and sustainable growth. You can count on your Company as being one of them.

Yours sincerely,

Kumar Mangalam Birla
Chairman

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OUR MANUFACTURING FACILITIES

Designed for excellence

Novelis Inc.

North America

1 US

Kentucky, West Virginia, Georgia, New York, Indiana and Ohio

2 Canada

Ontario

South America

3 Brazil

Europe and the UK

4 Germany

5 UK

6 Switzerland

7 Italy

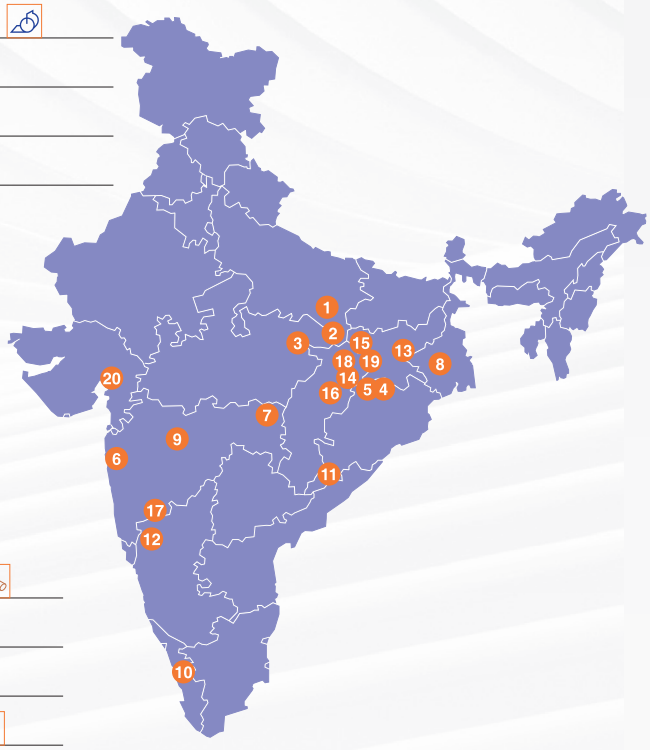
Asia

8 China

9 South Korea

Note: Maps not to scale

1. Renukoot
2. Renusagar
3. Mahan
4. Aditya
5. Hirakud
6. Taloja
7. Mouda
8. Belur



9. Hindalco Almex Aerospace Limited (HAAL)
10. Alupuram
11. Utkal
12. Belagavi
13. Muri
14. Gare Palma
15. Kathautia
16. Dumri

17. Durgmanwadi/Chandgad
18. Lohardaga
19. Samri Region
20. Dahej

- Power Plant
- Aluminum Smelter
- Aluminium Rolled Products
- Alumunium Foil Plant
- Aluminium Extrusion Plant
- Innovation Centre
- Recycling Facility
- Heat Treatment – Automotive Finishing Lines
- Alumina Refinery
- Bauxite Mines
- Coal Mines
- R&D/Technology Centre
- Heat Treatment
- Sheet Ingot Casting
- Cold Rolling
- Integrated Copper Complex
- Hot Rolling
- Coating Facility
- Brazing And Finishing
- Converting Facility
- Finishing Facility
- Painting Facility
- Alumunium Hard Alloys

MESSAGE FROM THE MANAGING DIRECTOR

Dear Stakeholders,

For the aluminium and copper industry, fiscal 2020 was characterised by the turbulence caused by the ongoing US-China trade war, the price volatility on the London Metal Exchange and the impact of Covid-19 on global trade and markets. Despite these headwinds, Hindalco stood out and delivered a strong performance. It was a clear demonstration of how Hindalco's sustained focus on cost control, operational efficiencies and future-proofing the business model has served to energise our performance.

We recorded yet another year of best-ever financial and operational results, bolstered by a record performance by Novelis and stability in the Indian businesses. Our performance was driven by the highest-ever production and shipment of aluminium upstream and copper value-added products coupled with higher shipments of beverage cans by Novelis.

Our EBITDA margins in FY20 were one of the best in the industry. Our balance sheet continues to strengthen and we brought down the consolidated Net Debt-to-EBITDA to 2.61 times at the end of FY 2020. This was a validation of our core strategies and objectives and exemplified the success of our integrated business model. It is also a testament to our consistent focus on operational excellence and our commitment to creating long-term value for all our stakeholders.

DELIVERING VALUE CONSISTENTLY

FY20 was a remarkable year with Novelis delivering its best-ever performance and the domestic aluminium business showing sustained performance. As a result, we crossed a number of operational and financial milestones, clocking the highest-ever:

- Metal production of 1,314 Kt and sales of 1,290 Kt for Hindalco Aluminium
- EBITDA margin at an industry high of 17% for Hindalco
- Adjusted EBITDA of $1,472 million at Novelis
- Adjusted EBITDA/tonne of $450 at Novelis

Our downstream strategy of reducing our exposure to LME price fluctuations and increasing the share of value-added products across businesses is playing out well. In FY 2019-20, we have succeeded in delinking ~80% of Hindalco's consolidated EBITDA from the LME. In keeping with our sustainable business model, we are steadily scaling up the downstream product business to achieve robust sales volumes for value-added products. The India Aluminium VAP Sales were maintained at 24% of the total metal sales in FY20.

In the Copper business, the shift towards value-added products like copper rods gained momentum. The production and sales of copper rods was at an all-time high with the continuous ramp-up of the Continuous Cast Rod-3 (CCR-3) facility.

Novelis reported yet another year of record performance with best-ever adjusted EBITDA and EBITDA per ton in FY2019-20. Adjusted EBITDA grew 8% to a record $1.472 billion. This performance was mainly driven by its portfolio optimisation, better cost efficiencies, favourable product mix, innovations, customer centricity and favourable demand for lightweight, sustainable aluminium solutions across end-markets.

Novelis leveraged its extensive recycling footprint to increase recycled content in its shipments to 60% in FY 2019-20. Beverage can sheet shipments increased from 63% in FY 2018-19 to 66% in FY 2019-20. Novelis' expansion projects -- at Guthrie, Kentucky, in Changzhou, China, and in Brazil -- are progressing well; these will help meet the fast-growing demand for lightweight automotive body sheets and sustainable packaging.

AN EYE TO THE FUTURE

Our focus on innovation for improving our product mix will help us fortify our leadership position in the value-added segment. Our intent is to double the share of value-added products in the domestic aluminium business. The capacity expansions at Utkal Alumina and focus on copper value-added products will enable us to tap growing opportunities in the power, consumer durables and household segments.

Hindalco's broad vision is to achieve balanced, sustainable growth across our upstream and downstream businesses. A big enabler is the completion of the Aleris acquisition on April 14, 2020, which marks our entry into the high-value, high-potential aerospace and building & construction segments. It also raises our product profile with the addition of aerospace segment to become the world's leading aluminium value-added player.

BIG STRIDES TOWARDS A GREENER TOMORROW

With our sustainability-first approach to business, Hindalco has taken several pioneering steps towards a greener, stronger, smarter world. To meet the growing needs of the EV market, Novelis developed the world's first aluminium sheet battery enclosure. Weighing substantially less than an equivalent steel design, it is the most cost-effective solution for mass production EV vehicles.

Another example of our sustainability thinking is our proactive and pioneering development of the eco-friendly all-aluminium trailer for the logistics and freight industries. Made from high-strength aluminium alloy, Hindalco's 34-foot long aluminium trailer is 50% lighter, saves over 15,000 litres of fuel, and emits 25 tons less GHGs.

As a step towards reducing plastic waste, Hindalco innovated India's first aluminium-foil-laminated jute bags as a food packaging solution to replace the thousands of plastic bags used at the iconic Tirupati temple in Andhra Pradesh.

Bauxite residue disposal is a global concern, and Hindalco has identified a circular economy solution where the residue is used as an input to the construction industry. We now supply bauxite residue to 40 cement plants in India, where it replaces mined minerals such as laterite and lithomarge. We are the first aluminium company in the world to have enabled such large-scale commercial application for bauxite residue.

Hindalco's sustainability initiatives were recognised by its inclusion in the Dow Jones Sustainability Index (DJSI) 2019 in the Emerging Markets category. Its DJSI score places Hindalco among the world's top three aluminium companies. It is one of 12 companies from India to make the list and the only aluminium manufacturer to be included.

WORKING FOR SAFER COMMUNITIES

During the Covid lockdown in India, Hindalco continued to serve its customers in essential industries. We achieved this tough target by reorienting supply chains to offer uninterrupted supplies from our warehouses and operating plants.

Hindalco produced aluminium foil for critical needs such as pharmaceutical packaging of Chloroquine Phosphate and Hydroxychloroquine sulphate tablets and other important Covid drugs. Our aluminium was used in manufacturing components of life-saving ventilators, components of X-ray and CT scan machines, Covid testing booths and other hospital equipment, Personal Protection Equipment (PPE) kits and sanitiser stands.

The safety of our employees, associates, communities and all other stakeholders has always been a high priority and is integrated into the core of our business. During the pandemic, Hindalco-Novelis continued to prioritise the health and safety of the workforce. Measures taken included providing work-from-home option to majority of employees

MESSAGE FROM THE MANAGING DIRECTOR (continued)

in offices, running plant operations with reduced staff, moving a number of employees into the plants to minimise travel, staggering shifts in plants, following strict social distancing, hygiene and safety protocols, and ensuring rigorous cleaning and sanitisation of all facilities, colonies, staff buses, etc. Hindalco continues to take all possible precautions to control the spread of infection.

In the midst of the pandemic, we rose to meet our social responsibilities, with initiatives for distribution of food and essential items, and sanitisation of communities close to our plants. Beyond business, our social investments in India have led us to touch lives of 1.1 million people belonging to 655 villages in 11 states. For FY 19 - 20, our CSR spend in India was ₹ 63.65 crore. In addition, we mobilized over ₹ 85.77 crore through Government schemes. We were indeed proud to receive the Government of India's National CSR Award in recognition of our initiatives in skilling and livelihoods.

OUR PEOPLE, OUR PRIDE

The pandemic helped show the true mettle of our employees. I am proud of the way our people rallied around and displayed remarkable fortitude in highly challenging circumstances.

Keeping in mind the new normal, we are continually working on our Employee Value Proposition and innovating our programs and initiatives for holistic employee development. We have designed multiple online programs on both behavioural/leadership and functional/technical aspects. We have extended our potential assessment process to a broader employee population now so as to create a bigger talent pool and provide more career opportunities. Our HR Business Partners model has strengthened our strategic focus on talent management, capability building, and driving performance.

We have also focused on increased development conversations as well as regular feedback. The Hindalco Technical University plays a key role in building functional capabilities. Our internal recognition platforms PRIDE and PRAISE continue to motivate and engage our teams and individuals. We also drive several employee wellness initiatives that help create supportive environments for our people.

We are confident that our sustainable business model and the critical strategic investments that we have taken will strengthen and future proof the business. While volatile environments will continue to test the industry, I am confident that following our Purpose will help us to stand strong and raise our performance above the sector. There are great opportunities in front of us as we work to build a greener, stronger, smarter future for all. I would like to express my gratitude to our stakeholders for your belief in us, and I seek your continued support.

Yours sincerely,

Satish Pai
Managing Director

CORPORATE INFORMATION

BOARD OF DIRECTORS

Non-Executive Directors

Mr. Kumar Mangalam Birla
Chairman

Mrs. Rajashree Birla

Mr. Debnarayan Bhattacharya
Vice Chairman

Mr. Madhukar Manilal Bhagat (till 30th August, 2019)

Mr. Kailash Nath Bhandari

Mr. Askaran Agarwala

Mr. Yazdi Dandiwala

Mr. Ram Charan (till 14th August, 2020)

Mr. Girish Dave (till 11th November, 2019)

Ms. Alka Bharucha

Mr. Vikas Balia (w.e.f. 19th July, 2019)

Mr. Sudhir Mital (w.e.f 11th November, 2019)

Mr. Anant Maheshwari (w.e.f 14th August, 2020)

Executive Directors

Mr. Satish Pai
Managing Director

Mr. Praveen Kumar Maheshwari
Chief Financial Officer & CEO (Copper Business)

COMPANY SECRETARY & COMPLIANCE OFFICER

Mr. Anil Malik

CORPORATE

Mr. Samik Basu
Chief Human Resources Officer

Mr. Bibhu Prasad Mishra

President & Head Manufacturing Centre of Excellence

Mr. V. R. Shankar
President & Head-Legal

Mr. Aniruddha Kulkarni
Chief Strategy Officer

BUSINESS/UNIT HEADS

Mr. Devotosh K. Das
Chief Marketing Officer (Aluminium)

Mr. A. Krishna Kumar
President & Head-Chemicals & Specialties Business

Mr. Satish Jajoo
Chief Operating Officer & Cluster Head
(Renukoot, Renusagar and Mahan Units)

Mr. B. Arun Kumar
President (Downstream Operations-Aluminium)

Mr. Rajesh Gupta
Senior President & Cluster Head
(Aditya and Hirakud Units)

Mr. Pramod Unde

President (Mining and Minerals)

SUBSIDIARIES

Utkal Alumina International Limited

Mr. Nagesh Narisetty

President & Unit Head

Novelis Inc.

Mr. Steve Fisher
President & CEO

AUDITORS

Price Waterhouse & Co Chartered Accountants LLP

COST AUDITORS

R. Nanabhoy & Co., Mumbai

AWARDS & ACCOLADES
ANNUAL REPORT 2019-20 CORPORATE

- Silver Shield for Excellence in Financial Reporting for FY2018-19 awarded by The Institute of Chartered Accountants of India (ICAI).
- Hindalco entered the Dow Jones Sustainability Indices (DJSI) Emerging Markets Index 2019 edition and secured 3rd rank among Materials Sector – Aluminium industry peers.
- CII ITC Sustainability Award 2019 – Commendation for significant achievement under Corporate Excellence category.
- Hindalco Everlast was voted a 'Superbrand FY19-20' by consumers in the Aluminium Roofing Category. The consumer poll, conducted by Superbrands India along with Nielson, witnessed participation from more than 18,000 consumers, who voted for their preferred brands.
- Denso International India Pvt. Ltd., an esteemed FRP Finstock Customer awarded Hindalco for outstanding overall performance at its Business Partners Meet 2019.

ADITYA ALUMINIUM

- Presented the 7th FICCI Quality Excellence Award (Platinum Prize 1st) for Industry by the Federation of Indian Chambers of Commerce & Industry, Delhi, for excellence in Quality process in April 2019.
- Gold award for "Chapter Convention on Quality Concepts" by Quality Circle Forum of India in September 2019.
- Platinum Award presented by Frost & Sullivan for Future Ready Factory of the Year presented in December 2019.
- The CII Eastern Regional Productivity Award presented by the Chairman CII Eastern region for contribution in the areas of Productivity in January 2020.

MAHAN ALUMINIUM

- India Manufacturing Excellence Award 2019 presented by Frost & Sullivan for being selected as the Future Ready Factory of the year.

- Best Performance Award 2019 presented by the Indian Institute of Metals.
- Certificate of Merit 2019 earned from Frost & Sullivan for Project Evaluation & Recognition Programme.
- CII Award for Customer Obsession in 'Active Customer Engagement' category.
- CSR Impact Award presented by Dalmia Bharat CSR BOX for imparting quality education for the community.
- CSR Times Award presented at National CSR Summit 2019 for CSR work in the field of livelihood programmes.
- FICCI Safety System Excellence Award - Certificate of Appreciation.
- Certified by CII as Energy Efficient Unit 2019.

- Platinum Award for HR Excellence 2019 presented by Apex India Foundation.
- Numerous prizes won during CII TPM Club competitions for Kaizen, Human Mistake Proofing and Energy Efficiency Circle Competition.
- India CSR Gold Award 2019.
- FAME (Foundation for Accelerated Mass Empowerment) CSR Excellence award in 2019 Platinum category for excellence in "Quality Education Projects".
- People First HR Excellence Platinum Award.
- Employee Engagement Platinum Award 2019 presented by HR Association of India.

RENUKOOT

- First National CSR Award presented by the Ministry of Corporate Affairs, the highest recognition in the domain of CSR by the Government of India. The award recognizes Hindalco's contribution to India's national priority areas – skill development and livelihoods
- CSR Health Impact Award-2019 presented by the I.S.W. Council, New Delhi,

- CII Excellent Energy Efficient Award -2019.
- CII National Award for Excellence in Water Management 2019.
- Seem National Energy Management Award 2019 for excellent efforts towards energy conservation by Society of Energy Engineers and Managers.
- Four Quality Circle teams bagged "Par Excellence" & "Excellence" awards during 33rd National Convention on Quality Concepts-NCQC 2019 held at IIT BHU Varanasi by QCFI.
- Four Quality Circle teams bagged "Gold Award" during Varanasi Centre Convention on Quality Concepts-VRCCQC 2019 held at Varanasi by QCFI.

RENUSAGAR

- Greentech Award-2019 for Tech-Plast as certified Green Product.
- Two Quality Circle teams bagged "Par Excellence" award during 33rd NCQC 2019 held at IIT BHU Varanasi.
- UPNEDA Award for Excellence in Energy Conservation under PAT cycle 1.
- 8th FICCI Safety System Excellence Awards for Industry-2019 from FICCI New Delhi.

AWARDS & ACCOLADES
ANNUAL REPORT 2019-20 CORPORATE (continued)

JHARKHAND MINES - LOHARDAGA

- FAME Platinum Award 2019 for Best CSR for Lohardaga Mines, for the outstanding Project on Community Development.
- NMDC Award for Social Awareness 2018-19 for Bhusar Bauxite Mines, presented by the Federation of Indian Mineral Industries (FIMI), New Delhi, for significant contribution to socio-economic development of the host community.
- "National Safety Award (Mining)" for the Year 2015 & 2016 presented in December 2019 to Jalim & Sanai Bauxite Mines at Lohardaga and Samri Bauxite Mines in the category of "Longest Accident-Free Period".

JHARKHAND MINES - KATHAUTIA

- Awards during the Annual Safety Week Celebrations by Director General of Mines Safety (DGMS) for Overall Performance, Safety Management Plan, Compliance of recommendations of 10th and 11th Safety Conference; Runners up Trophy in Storage & Transportation of Explosives Award.
- CII Award for Excellence in Safety Health & Environment (SHE) and 2nd Runners Up in Safety, Health, Environment & Mining.

GARE PALMA MINES

India CSR award for Sanitation in four Gram Panchayats and safe drinking water supply to one entire Gram Panchayat.

HIRAKUD SMELTER & POWER

- Grow Care India CSR award-2019 in Gold category for Best innovative CSR Project by Grow care India foundation, New Delhi.
- Quality Circle team won awards in Excellence and Par Excellence category of NCQC (National Convention On Quality Concept) 2019 - Varanasi chapter.

ALUPURAM

Runners Up award for "Excellence in Safety Management" from National Safety Council, Kerala chapter.

BELAGAVI

- Frost & Sullivan Sustainability 4.0 Award 2019, Certificate of Merit in Challengers Category.
- Jury Special Mention Award by TERI for initiative on Red Mud Management.

DAHEJ

FAME (Foundation for Accelerated Mass Empowerment) CSR Excellence Platinum award 2019 for excellence in Social Development Projects.

MANAGEMENT DISCUSSION & ANALYSIS

Hindalco Industries Limited, the metals flagship company of the Aditya Birla Group, is the world's largest aluminium rolling and recycling company, and a major copper player. It is also one of Asia's largest producers of primary aluminium. In India, the Company's aluminium manufacturing units comprise the full value chain-from bauxite mining, alumina refining, coal mining, captive power generation and aluminium smelting to downstream value addition of aluminium rolling, extruding and foil making. Hindalco's copper facility in India comprises a world-class copper smelter, downstream facilities, a fertilizer plant and a captive jetty. The copper smelter is among the world's largest custom smelters at a single location.

Novelis Inc., Hindalco's wholly-owned subsidiary is the world's largest producer of aluminium beverage can stock and the largest recycler of used beverage cans (UBCs). Novelis provides innovative solutions to its customers in the beverage cans, automobile and speciality products segments. It operates an integrated network of technically advanced rolling and recycling facilities across North America, South America, Europe and Asia. Hindalco's global footprint spans 47 manufacturing units across 10 countries.

In FY 2019-20 the Company delivered a resilient performance in terms of operational stability and financial performance, despite macroeconomic challenges, tough business conditions and global uncertainties. Novelis continued to report its best-ever EBITDA and EBITDA per tonne with stable shipments. Primary aluminium registered its highest ever overall metal sales and Copper clocked its highest ever domestic copper rod sales. Hindalco continued to maintain its strong balance sheet in FY 2019-20, resulting in a consolidated Net Debt-to-EBITDA of 2.61 times at the end of the year.

KEY INITIATIVES DURING THE YEAR

Hindalco completed the acquisition of Aleris on 14th April 2020, and the integration process to drive synergies and unlock the long-term value has begun. The divestment procedures for automotive assets in Lewisport in the U.S. and Duffel in Europe is underway. The acquisition of Aleris provides Novelis further product diversification with the addition of high-end aerospace and expanded speciality capabilities. It insulates Hindalco-Novelis from global price volatility and sharpens focus on the downstream business. From being a largely commodity-driven Company, Hindalco has become the world's largest downstream player.

Novelis, remains committed to advancing all its organic projects, announced its 200Kt automotive finishing facility in Guthrie, Kentucky in the U.S, 100Kt of the auto finishing line in China, a rolling, casting and recycling capacity in Pinda, Brazil and the recycling facility in Greensboro in the U.S.

Novelis successfully issued US$1.6 billion bonds at 4.75% due in CY 2030 and extended debt maturity profile at attractive rates. These proceeds are used to repay existing US$1.15 billion, 6.25% Bonds, due in 2024 with a net interest savings of around US$ 17 million per annum.

Utkal's Alumina brownfield capacity expansion, by 500 Kt, is expected to be completed in Q4 of FY 2020-21. This will further strengthen the Company's integration and boost the availability of best-in-class alumina to its aluminium smelters in India.

Hindalco's focus on a sustainable business model with its downstream strategy of product expansion in India, will nearly double its existing downstream capacity in the next five to six years. This will enhance share of VAP to insulate Consolidated Hindalco from LME volatility further. Hindalco has made certain investments to enhance capacities in the extrusion press and capabilities in VAP products such as Circles and Hard Alloys along with investments in a new scrap furnace at the Hirakud FRP facility.

1. INDUSTRY ANALYSIS

1.1 Aluminium Segment and Industry Review

In CY 2019, global economic growth slowed down despite accommodative monetary and expansionary fiscal policies in developed and emerging markets. The growth was subdued as a result of rising trade barriers, uncertainty surrounding trade and geopolitics and region-specific structural factors. The prolonged uncertainty around the resolution of the trade war also dented investments across regions. Only the U.S. economy performed better than expected supported by personal consumption and government spending. Other prominent economies like China, Eurozone, and emerging

MANAGEMENT DISCUSSION & ANALYSIS

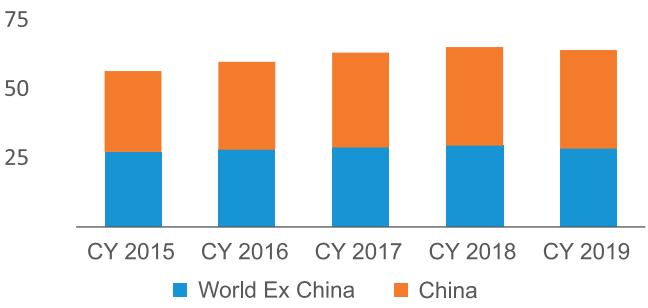
nations, including India, witnessed a moderation in economic activities. Chinese economic growth registered its weakest performance since 1992. The Eurozone felt the worst impact of the US-China trade war and uncertainties around Brexit, resulting in dismal economic growth.

The prolonged US-China trade war dampened global economic sentiments with most of the major economies experiencing a slowdown in economic growth. This in turn affected aluminium consumption. In 2019, primary aluminium consumption growth declined to 2% y-o-y from the growth of 3% y-o-y in 2018. The world, excluding China, reported aggregate consumption de-growth of around 4% in 2019, down from 2% in 2018, owing to weakening demand in North America, Japan, Italy, France. Among user industries, only packaging including foil stock recorded around 3% growth y-o-y in 2019 whereas consumption growth declined in sectors like Transportation, Construction, Consumer Durables and Machinery and Equipment sectors.

In CY 2019, China witnessed slowdown due to two issues: first, the trade war with the US and second, coping with moderation in the domestic economy. Consequently, due to a sharp decline in demand from the electrical, transport, and construction sectors, aggregate aluminium consumption de-growth was 1% in CY 2019 from around 2% growth in CY 2018.

Global aluminium production excluding China grew around 1% y-o-y in CY 2019 versus growth of around 2% y-o-y a year ago; production in China declined by 3% y-o-y due to production cuts, as compared to flattish growth in 2018. As a result, overall global production marginally degrew by 1% y-o-y in CY 2019, down from around 1% y-o-y growth in CY 2018. Given the sharper slowdown of global consumption by 2% as against a production slowdown of 1%, the deficit moderated to ~1 Mt. Consequently, global inventories reduced from ~12 Mt in the beginning of CY 2019 to ~11 Mt by the end of CY 2019.

Primary Consumption of Aluminium (Mt)



FY 2019-20: KEY HIGHLIGHTS

Achieved

Record Aluminium metal production at

1,314 Kt

Record Aluminium metal sales at

1,290 Kt

Alumina production at

2,735 Kt*

Aluminium value-added products (VAP) in India (excluding wire rods) production at

319 Kt

Record Copper rods production at

263 Kt

Overall shipments in Novelis of

3,273 Kt

Consolidated Revenue of

₹ 1,18,144 crore

Consolidated EBITDA of

₹ 15,536 crore

Consolidated PAT of

₹ 3,767 crore

Record Adjusted EBITDA in Novelis

US$ 1.472 billion

Record Yearly adjusted EBITDA/ton in Novelis

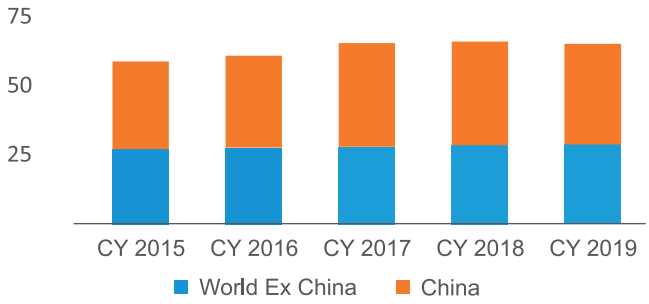
US$ 450

Recycled inputs in Novelis

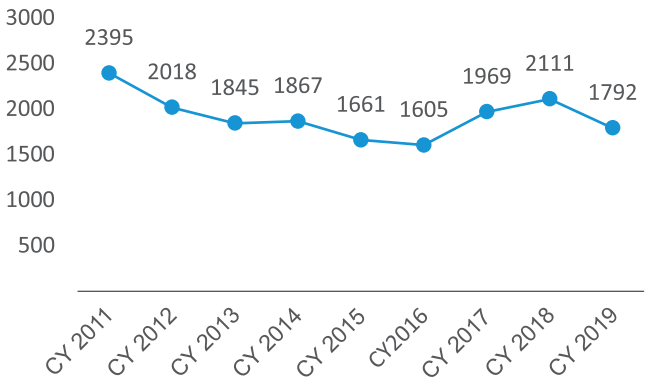
60%

**including Utkal, the wholly-owned subsidiary*

Primary Production of Aluminium (Mt)



Global Aluminium Prices ($/tonne)



In CY 2019, due to significant weakness in demand and the ongoing US-China trade war, global aluminium prices continued to plunge from $1,846/t in January 2019 to close at $1,770/t in December 2019. The average value of premiums at Main Japanese Port (MJP), European Rotterdam Ingot duty paid and US Midwest premium in CY 2019 was $99/t, $143/t and $18 cents/lb, versus $117/t, $165/t and $19 Cents/lb, respectively, in CY 2018.

In the domestic market, aluminium production declined by 2% in FY 2019-20 while domestic consumption is estimated to decline by around 6-7%. User industries like Transportation, Electrical and Industrial Machinery Equipment sector saw drop in consumption, while Packaging and Consumer Durables were the major demand drivers. Imports continued to be a concern for domestic players, which accounted for 58% of the market in FY 2019-20. Overall imports including scrap touched ~2.2 Mt in FY 2019-20 from ~2.3 Mt in FY 2018-19.

1.1.1 Outlook:

In CY 2020, the global macroeconomic environment is expected to remain highly volatile due to rising trade tensions between the US and China and the impact of COVID-19. The necessary protection measures imposed because of the pandemic are severely affecting economic activity and causing demand shocks and supply chain disruptions. Consequently, as per the World Bank June '2020 update, the global economy is expected to shrink by 5.2% in CY 2020 compared to 2.4% growth in CY 2019.

The adverse effects of COVID-19 prompted extraordinary stimulus measures from the government. According to a global consulting firm, government' have announced US$ 10 trillion just in the first two months of the pandemic which is thrice what was announced during the 2008-09 global financial crisis. The Central Banks of major economies are taking an accommodative policy stance to aid economic growth.

The global aluminium consumption is seen to be highly correlated with economic growth, and hence, global aluminium consumption growth in CY 2020 may decline by 7% to 8%. Almost all user industries except packaging, are likely to show a declining trend. The sharpest reduction in consumption may be in Transportation, Construction, Consumer Durables and Machinery & Equipment sectors. As China has reportedly recovered from the COVID-19 crisis, the fall in aluminium consumption is expected to be around 1 to 2% and in the world excluding China, this fall is expected to be in the range of 13% to 15% in CY 2020.

As smelting is a continuous process, global aluminium supply is likely to increase marginally by 1% to 63–64 Mt. Production in the world excluding China is expected to drop by around 1% to around 27–28 Mt. Primary aluminium supply in China is likely to grow marginally in the 36–37 Mt range, on the back of ramp-ups at state-owned enterprises.

In CY 2020, with an increase in supply by 1%, and a sharp slowdown in demand by 8% to 10%, the inventories are expected to increase by ~5 Mt by the end of 2020, leading to significant surplus markets. Consequently, the inventories are likely to increase to ~16 Mt by the end of 2020 up from ~11 Mt at the end of 2019.

India announced a stimulus of ~₹ 20 lakh crore which is approximately 10% of its GDP as against 1.2% of its GDP at the time of the global financial crisis in 2008-09. As of end-May 2020, the policy repo rate is at 4%, which is even lower than the 2008-09 financial crisis. Going forward, this is likely to support the overall economic revival. However, in the short term, due to lockdown and

MANAGEMENT DISCUSSION & ANALYSIS

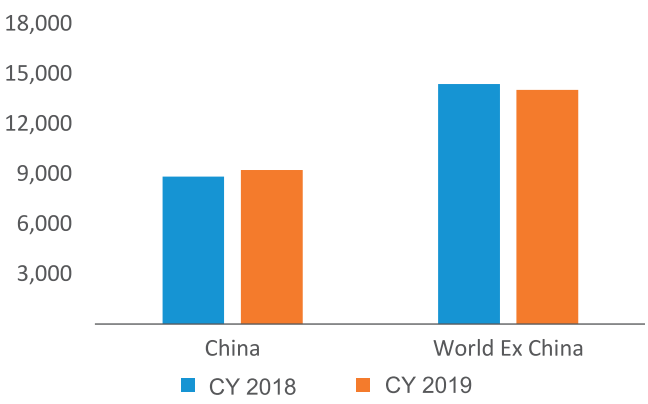
recovery from COVID-19, domestic demand is likely to decline by ~20-25% at the closing of FY 2020-21, due to slowdown in Transportation, Building & Construction, Industrial Equipment, and Consumer Durables. The only green shoot is a marginal growth in the packaging and pharma sectors. Imports of aluminium products, including scrap, continue to remain a major concern for the domestic aluminium producers. Over the last few years, the domestic rolled products industry has been witnessing an increase in dumping of imports especially from China, at unfair prices leading to the pricing pressure. Hence, the Company is in the process of approaching the Government for remedial trade measures on imports of rolled products. In light of the existing business environment, pricing pressure due to imports in rolled products is expected in FY 2020-21 as well, unless some proactive measures are taken by the Government to support the Aluminium industry in India.

1.2 Copper Segment and Industry Review

Global refined copper consumption saw a dip of 0.7% in CY 2019 as compared to the healthy growth of 2.9% in CY 2018. Global copper market was impacted by the various trade-related disputes, slowing Chinese economy that constitutes 50% of global consumption and strengthening U.S. dollar in CY 2019. However, China saw a growth of 1%, world excluding China saw a drop in copper consumption by 2.3% in CY 2019. This drop in copper consumption was driven by weak manufacturing activities in Europe (majorly Germany).

All these challenges clubbed with COVID-19, led to a sudden dip in global copper consumption by 17% in Q1 CY 2020 as compared to Q4 CY 2019. China alone saw a massive dent in refined copper consumption by over 33% in Q1 CY 2020 leading to a crash in copper prices. Copper LME that was just shy of the US$ 6,000 level at the end of December 2019 went down to US$ 4,800 by the end of March 2020 after touching a peak of US$ 6,300 in mid-January 2020.

Refined Copper Production (Kt)

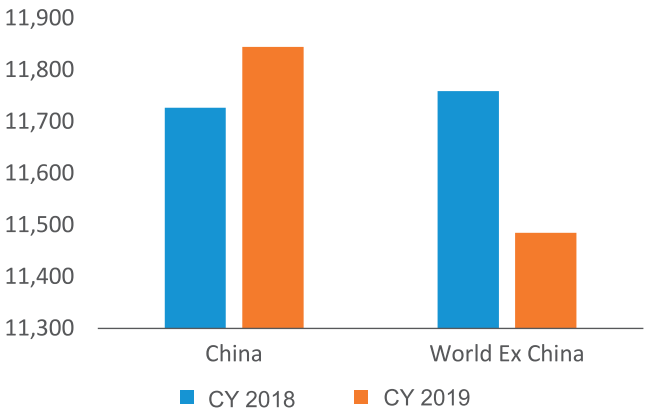


On the raw material side, copper mines saw a slight de-growth of 0.3% in Copper concentrate production globally in CY 2019 compared to previous year. This was on account of multiple issues faced by the mining industry including local community issues in some South American countries, and a drop in copper grade in some large global mines etc.

The tight concentrate market has impacted benchmark Tc/Rc for CY 2020 with benchmark dropping by 23% from 20.7 US cents/lb during CY 2019 to 15.9 US cents/lb. As far as spot Tc/Rc is concerned, drop in refined copper output at China during Q1 CY2020 by around 6% due to COVID-19 led to a surplus in the concentrate market as the rest of the world had not been impacted to a great extent at that time. This caused a temporary rise in spot Tc/Rc from around 11.5 US Cents/lb in Q4 CY2019 to around 15.0 US Cents/lb in Q1 CY2020.

In the domestic market, Copper demand saw a growth of 2.5% in FY 2020 compared to 13.5% in FY 2019. Sluggish demand in FY 20 can be attributed to poor demand from the Transportation and Power sectors. With new tariffs imposed on copper imports from the ASEAN region from January 2020, imports recorded a growth of 16%, much lower as compared to the growth of 30% a year back in FY 2019. The overall market share of imports in the domestic market increased from 40% in FY 2019 to 45% in FY 2020.

Refined Copper Consumption (Kt)



1.2.1 Outlook

Uncertainty related to COVID-19 and the other macroeconomic environments across the globe is going to impact the copper consumption in CY2020. However, at the same time, various stimulus declared by different countries is expected to provide some support to the overall demand. Global demand for refined Copper is likely to be around 22 Mt in CY2020, down by 5.5% compared to last year. China is expected to de-grow by 5%.

The world exluding China is expected to see a dip of 6% in CY2020 led by Europe, which is expected to see a degrowth for the second consecutive year. In CY2019, European industrial production shrunk amid slowed manufacturing activities and troubled automotive output. The feeble signs of recovery visible in early CY2020 has been blown away by the Covid crisis. European copper consumption is expected to see a drop of 8% in CY2020 vs a drop of 6.9% in CY2019.

Recovery in copper consumption in China and world excluding China to CY2019 level is expected by CY2022.

As far as the mines output is concerned, copper concentrate production is expected to drop by ~4-5% in CY2020. The COVID-19 pandemic has impacted the Southern Hemisphere in a big way, and many large mines in Peru, Panama, etc. have already declared force majeure. This will tighten the concentrate market which is likely to be in a deficit of around 400 Kt in CY2020 compared to a deficit of around 170 Kt in CY2019. The peak of this deficit is expected in Q2 CY2020, which is expected to then ease out during the second half of the CY2020. Accordingly, spot Tc/Rc is expected to hit bottom in Q2 CY2020 and then improve as the concentrate position eases out as the year progresses to its end.

For India this financial year, industrial output will be restricted by the current countrywide COVID-19 lockdowns. Migrant labour shortages and transport disruptions have already impacted both metals demand and supply. Industries are facing bottlenecks at different parts along their value chain and will take some time for these to clear and industrial activities to start at pre-COVID levels. The recent economic stimulus declared by the Indian Government will provide some support towards improving the copper consumption in India across sectors.

1.3 Novelis – Industry Review & Business overview

Economic growth, material substitution, and sustainability, including awareness around the harm to environment from polyethylene terephthalate (PET) plastics, continue to drive increasing global demand for aluminium and rolled products. With the exception of China, where can sheet overcapacity and strong competition remains, favourable market conditions and increasing customer preference for sustainable packaging options is driving higher demand for infinitely recyclable aluminium beverage cans and bottles. At the end of FY 2019, we began expanding rolling, casting and recycling capability in Pindamonhangaba, Brazil to support this demand.

Meanwhile, the demand for aluminium in the automotive industry continues to grow, and this has driven the investments made by the company in automotive sheet finishing capacity in North America, Europe and Asia in recent years. This demand in aluminium in the automotive industry is also driving additional investments made by Novelis in Guthrie, Kentucky (U.S.) and Changzhou, China. This demand has been primarily driven by the benefits that result from using lightweight aluminium in vehicle structures and components, as companies respond to stricter Government emissions and fuel economy regulations, while maintaining or improving vehicle safety and performance This has resulted in increased competition with high-strength steel.

The worldwide spread of COVID-19 has caused travel and business disruption and economic volatility. Novelis is closely monitoring the changing landscape with respect to COVID-19 and taking actions to manage its business and support its customers while focusing on the health and safety of all its employees.

On April 14, 2020, Novelis completed the acquisition of Aleris and has begun integration of its operations to drive synergies and long-term value. The divestment procedures for automotive assets at Lewisport in the U.S. and Duffel in Europe are underway. This acquisition will provide further product diversification with the addition of high-end aerospace and and expansion of its specialty capabilities in the U.S, Europe and Asia.

For a region-wise detailed business overview, please refer to the 10K filed by Novelis Inc. dated May 7th, 2020 for the year ended March 31, 2020.

1.3.2 Outlook

The global demand for flat rolled products in the near-term is likely to remain modest in cyclical end markets resulting from the current pandemic situation. In the current environment and post-COVID, industries like Beverages, Food Packaging, Pharmaceuticals will tend to benefit, leading to a higher demand for FRP in these segments.

The beverage can sheet market has historically been a recession-resistant product and is expected to remain resilient in the current COVID environment, particularly in North America and Europe. With the rising preference for sustainable beverage packaging, aluminium will continue to drive demand for beverage can sheet in the coming years.

Currently, the global automotive industry has seen adverse effects due to COVID-19. Aluminium FRP demand for automotive body sheets, driven by light-weighting trends in the Transportation sector, premium vehicles and Electric Vehicles continues to see strong traction with some positive signs of revival with the growing demand for automotive, majorly in the U.S., Europe and China. It is still unclear as to how much the COVID-19 will the impact overall near-term automotive demand.

In the Aerospace segment, reduction in production is seen as consumer travel is expected to drive lower demand in the next calendar year. In the longer-term, FRP growth in the Aerospace segment, remains intact with high order backlog from all aircraft manufacturers across the globe.

MANAGEMENT DISCUSSION & ANALYSIS

2. BUSINESS SEGMENT REVIEW

2.1 Hindalco – SWOT Analysis

INDIA ALUMINIUM

Strengths

- Integrated business model generating healthy cash flows
- Dominant player in India across upstream and downstream
- Utkal - among the world's most economical and efficient Alumina producer; capacity expansion of 500 Kt in progress and the Utkal capacity to reach 2.0 Mt
- Increased focused on Value Added Products (VAP) to be more LME-delinked

Weakness

- Commodity product with smaller share of VAP currently
- Upstream Business linked to Global Aluminium Price volatility

Opportunities

- Immense headroom for growing market in India; Aluminium consumption in India at 1/12th of global average
- Rising Aluminium penetration in Building & Construction, Automotive, Packaging, and Transportation bodes well for growing VAP demand
- Substitution opportunity versus steel, uPVC, wood, among others.

Threats

- Global Aluminium Prices, Forex and raw material price volatility
- Competition from China
- Threat of rising imports of scrap and other VAP to India from the Free Trade Agreement (FTA) countries
- Domestic availability/shortage of coal and bauxite

NOVELIS

Strengths

- Global presence - across nine countries, enabling global play with marquee customers
- Market leader in Can and Automotive FRP products
- Entry in the high-end aerospace segment providing further product diversification.
- ~60% share of recycling in Novelis portfolio - cost competitiveness
- Acquisition of Aleris to provide further product diversification and drive synergies.

Weakness

- Lack of access to Shanghai Future Exchange (SHFE) metal in China

Opportunities

- Growing penetration of aluminium cans for beverage and food packaging in emerging markets
- Growing automotive market is driven by EVs, energy efficiency and light-weighting focus across the globe
- Entry in the Aerospace, Defence and High-end specialities segments with the acquisition of Aleris

Threats

- Cost Competitiveness in China
- Price erosion on account of growing competition
- Impact of COVID-19 on automotive industry

Strengths

- A balanced portfolio of revenue streams to tide through volatile market
- Secured concentrate supply via long term contracts with miners
- Increased focused on VAP in Copper

Weakness

- Import dependence for Copper concentrate supplies

COPPER

Opportunities

- Immense headroom for growth due to lower consumption vs global average

Threats

- Mine disruptions
- Duties & FTAs – trade politics

2.2 Operational Performance & Financial Review

Financial Table: Hindalco Standalone & Consolidated

(₹ Crore)

Description	Standalone		Consolidated	
	FY 2019-20	FY 2018-19	FY 2019-20	FY 2018-19
Revenue from Operations	**40,242**	**45,749**	**1,18,144**	**1,30,542**
Earning Before Interest, Tax and Depreciation (EBITDA)				
Novelis*			10,435	9,565
Aluminium			3,729	5,096
Copper (including DHIL)			1,276	1,683
Other Segments			(16)	(76)
Unallocable Income/ (Expense) - (Net) & GAAP Adj.			112	359
Total EBITDA	**4,403**	**5,186**	**15,536**	**16,627**
Depreciation and amortization (including net impairment loss/(reversal) of non-current assets)	1,708	1,693	5,135	4,766
Finance Cost	1,679	1,683	4,197	3,778
Earning before Exceptional Items, Tax & Share in Profit/(Loss) in Equity accounted Investments	**1,016**	**1,810**	**6,204**	**8,083**
Share in Profit/(Loss) in Equity accounted Investments	-	-	4	-
Earning before Exceptional Items and Tax	**1,016**	**1,810**	**6,208**	**8,083**
Exceptional Income/ (Expenses) (Net)	(64)	-	(284)	-
Profit Before Tax (After Exceptiona Items)	**952**	**1,810**	**5,924**	**8,083**
Tax Expense	332	605	2,157	2,588
Profit/ (Loss) After Tax	**620**	**1,205**	**3,767**	**5,495**

*As per US GAAP

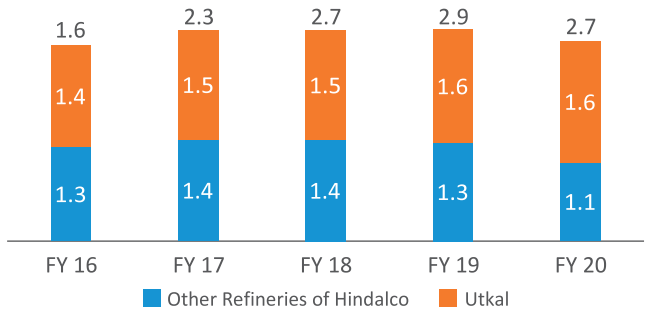
Hindalco Aluminium Business Review

2.2.1 Operational Overview – Aluminium

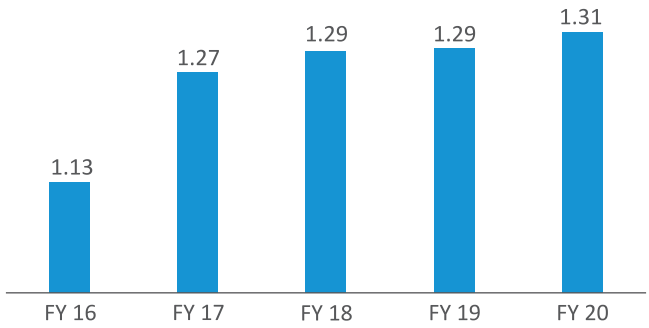
The Company achieved record operational performance in its aluminium business in FY 2019-20, despite the challenging business environment. This was supported by stable operations at all its manufacturing units in India with yet another record production of aluminium at 1.314 Mt. Alumina production was at 2.735 Mt Overall metal sales in all forms were at a record high of 1.290 Mt versus 1.274 Mt in FY 2018-19.Utkal Alumina also recorded its best-ever production and continues to be the most economical and efficient alumina producer globally, running at maximum capacity to produce 1.6 Mt of world-class alumina and providing strong support to most of Hindalco's India smelting facilities, leading to better cost optimization and quality input (Alumina). Production of VAP excluding wire rods was flat YoY, at 319 Kt in FY 2019-20.

MANAGEMENT DISCUSSION & ANALYSIS

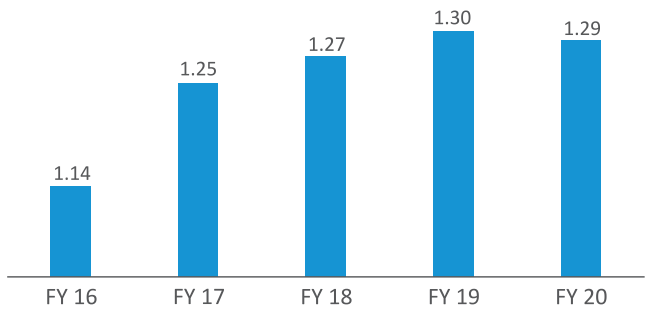
Alumina Production (Hydrate as Alumina) (Mt)



Aluminium Metal Production (Mt)



Aluminium Metal Sales in All Forms* (Mt)



*Including wire rods and other value added products.

On the coal side, in FY 2019-20, the total quantity secured through coal linkages stands at 12.2 Mt, translating to about 75% of annual coal requirements of Hindalco. Overall, 98% of annual coal requirements is secured through long-term linkages and captive mines. The Company has three captive mines- Gare Palma IV/4, Gare Palma IV/5 and Kathautia. The captive mine at Dumri is in the process of obtaining necessary statutory clearances and is expected to be operational in FY 2020-21.

2.2.2 Financial Overview

Aluminium

Revenue for Hindalco's aluminium business was ₹21,749* crore in FY 2019-20, from ₹23,775* crore in FY 2018-19, down 9%. EBITDA was at ₹3,729 crore versus ₹5,096 crore a year earlier, lower by 27% due to lower realization partially offset by lower input costs and better efficiencies. The EBITDA margins were at 17.1% in FY 2019-20, one of the best in the industry.

*(*The above numbers are without elimination of Inter-segment revenue)*

(₹ Crore)

Description	FY 2019-20	FY 2018-19	% Change
Revenue	21,749	23,775	-9%
EBITDA	3,729	5,096	-27%

Note: In the consolidated financial statements, within the aluminium segment, the significant entities are Hindalco and Utkal Alumina International Ltd. Since Utkal Alumina is a wholly-owned subsidiary of Hindalco and supplies a substantial quantity of its production to Hindalco, we have analyzed the combined performance of Hindalco's aluminium business along with Utkal Alumina.

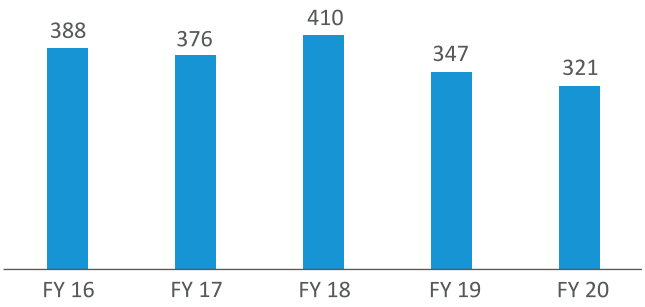
2.3 Copper Business Review

2.3.1 Operational Overview

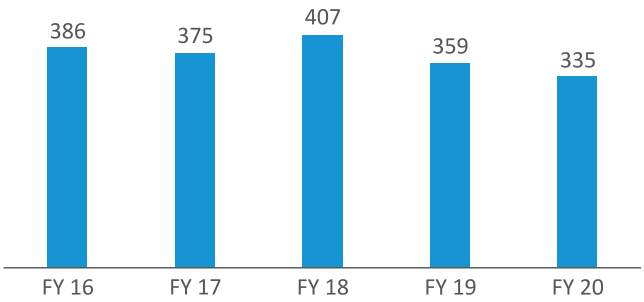
The copper business delivered a stable performance in FY 2019-20 in terms of sales and production despite challenging market conditions and production disruptions due to planned maintenance and related issues. Cathode production fell 7% from FY 2018-19 on account of plant disruptions in the last ten days of March 2020 due to the lockdown. Copper rod production was the highest ever at 263 Kt, up 7% in FY 2019-20. Production of Di-Ammonium Phosphate (DAP) was 230 Kt from 303 Kt due to some operational issues in the early part of the FY 2019-20.

Total Copper Metal Sales was at 335 Kt in FY 2019-20 down by 7% compared to the previous year due to lower production. The sales of Copper VAP (Copper Rods) were up by 6% at 257 Kt in FY 2019-20. The share of VAP (CC Rods) to Total metal sales has reached 77% in FY 2019-20, from 68% in the previous year.

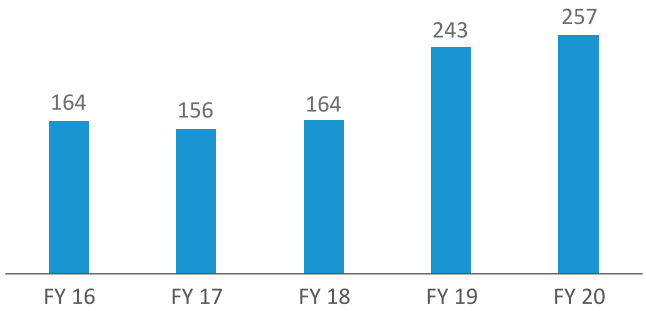
Copper Cathode Production (Kt)



Copper Metal Sales in All Forms (Kt)



Copper VAP - CC Rod Sales (Kt)



2.3.2 Financial Overview

Copper Business (including DHIL) revenue for FY 2019-20 was at ₹18,533* crore (vs. ₹ 22,198* crore in FY 2018-19), due to lower realizations and volumes. EBITDA fell 24% at ₹ 1,276 crore (vs. ₹ 1,683 crore in FY 2018-19) on account of lower volumes and by-product realizations in FY 2019-20 during the year.

**The above numbers are without elimination of Inter-segment revenue.*

(₹ Crore)

Description	FY 2019-20	FY 2018-19	% Change
Revenue	18,533	22,198	-17%
EBITDA	1,276	1,683	-24%

2.4 Novelis Business Review

2.4.1 Operational Overview

Novelis Inc. is the leading producer of flat-rolled aluminium products and the world's largest recycler of aluminium. Driven by its purpose of shaping a sustainable world together, Novelis works alongside its customers to provide innovative solutions in the beverage can, automotive, and speciality markets (which includes foil packaging, certain transportation products, architectural, industrial, and consumer durables). The Aleris acquisition has given Novelis entry into the aerospace segment. Novelis operates an integrated network of technically advanced rolling and recycling facilities across North America, South America, Europe, and Asia, and leverages its global manufacturing and recycling footprint to consistently deliver high-quality products around the world.

Novelis reported yet another year of record performance with its best-ever adjusted EBITDA and EBITDA per ton in FY 2019-20. The performance was mainly driven by its portfolio optimization, better cost efficiencies, favourable product mix, innovations, customer centricity and favourable demand for lightweight, sustainable aluminium solutions across end-markets.

Novelis has developed innovative products and processes to drive lightweight aluminium adoption across end-markets. It developed the first aluminium sheet battery enclosure to address the needs of customers in the fast-rising electric vehicle and battery markets. It is supplying Toyota with premium aluminium automotive body sheet for the all-new 2019 Toyota RAV4 and help RAV4 achieve weight savings. Novelis leveraged its extensive recycling footprint and the favourable market conditions to maintain the recycled content at 60% in FY 2019-20.

Total shipments were flat to 3.273 Mt in FY 2019-20. Share of beverage can sheet shipments increased from 63% in FY 2018-19 to 66% in FY 2019-20, and automotive body sheet shipments were at 19% in FY 2019-20, despite challenges in some regions, primarily Europe and China, and in the world market due to the pandemic lock down.

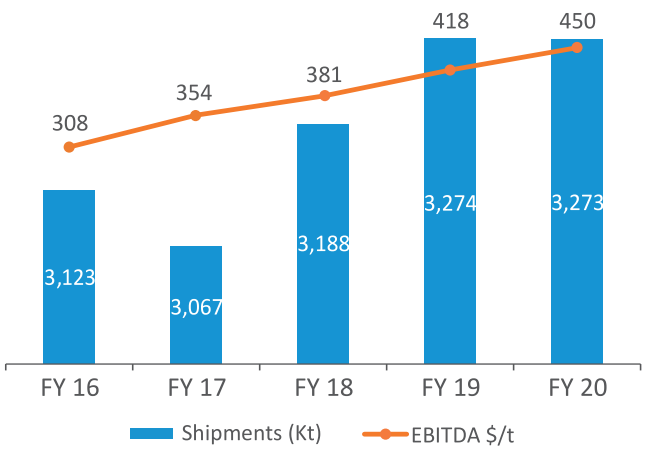
Novelis operates in four key geographies: North America, Europe, Asia and South America. In North America, in FY 2019-20, total shipments were 1,111 Kt. Novelis announced plans to set up a 200 Kt automotive finishing facility in Guthrie, Kentucky in the US, to cater to the growing automotive demand in this region. This facility is expected to be operational in FY 2020-21.

In Europe, the Company shipped 892 Kt across product categories in FY 2019-20. In Asia, Novelis shipped 711 Kt of rolled products versus 710 Kt in FY 2018-19. Its automotive finishing line expansion project of 100 Kt is progressing well and is expected to be operational in FY 2020-21. In South America, Novelis shipped 559 Kt in FY 2019-20, up from 526 Kt in the previous year.

In FY 2019-20, Novelis reported a record overall adjusted EBITDA/tonne of $450, up from $418/tonne, reflecting a strong and consistent performance year after year.

MANAGEMENT DISCUSSION & ANALYSIS

Shipments (Kt) and EBITDA Per Tonne ($)



With Novelis' thrust on sustainability and recycled aluminium, the share of recycled inputs was at 60% in FY 2019-20. The Company has invested significantly in recycling initiatives and developed high-tech recycling capabilities over the years. Its new rolling, casting and recycling expansion in Brazil is expected to be commissioned in FY 2021-22.

2.4.2 Financial Overview

Novelis' net sales in FY 2019-20 were at $ 11.2 billion, down 9% mainly driven by lower average global aluminium prices and local market premiums. Adjusted EBITDA stood at a record high of $ 1.472 billion, up 8%, on the back of portfolio optimization, favourable metal prices, better cost efficiencies and favourable foreign exchange, partially offset by less favourable recycling benefits due to lower aluminium prices. Novelis reported free cash flow of $ 384 million driven by stronger adjusted EBITDA and lower interest costs. Net income (without Exceptional Items) stands at $ 590 million in FY 2019-20 vs. $ 468 million in FY 2018-19 up by 26% year on year.

($ in Million)

Description	FY 2019-20	FY 2018-19	% Change
Net Sales	11,217	12,326	-9%
Adjusted EBITDA	1,472	1,368	8%
Net Income/ (loss) excluding Special Items*	590	468	26%

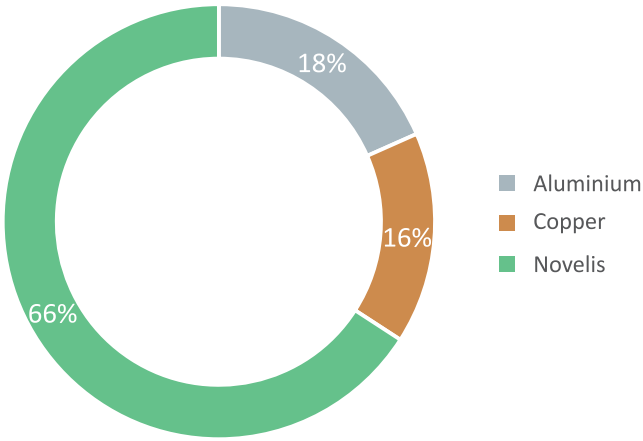
**Tax-effected special items may include restructuring & impairment, metal price lag, gain/loss on assets held for sale, loss on extinguishment of debt, loss/gain on sale of business*

3. CONSOLIDATED FINANCIAL STATEMENTS

3.1 Revenue

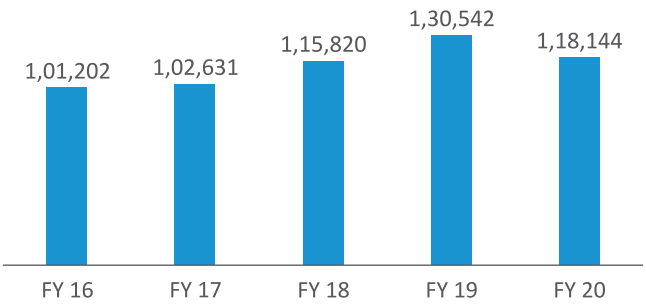
Hindalco's consolidated revenue was at ₹1,18,144 crore in FY 2019-20 compared to ₹1,30,542 crore in FY 2018-19, down by 9% due to lower global aluminium prices and local market premiums.

Revenue split by business for FY 2019-20:



Revenue

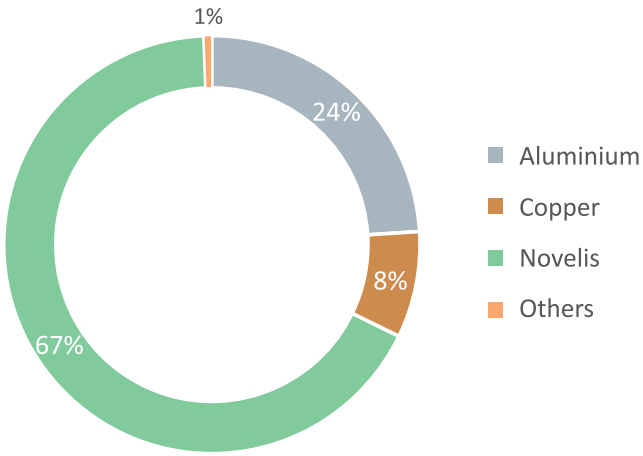
(₹ Crore)



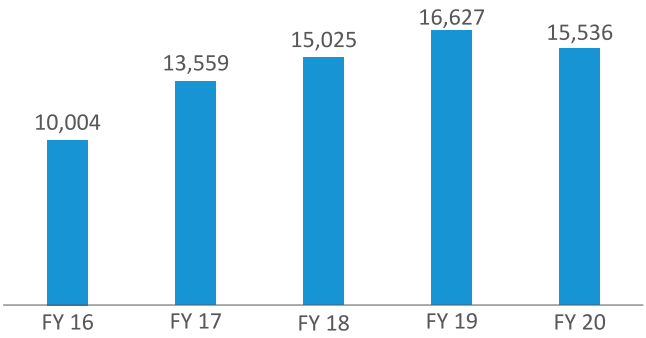
3.2 EBITDA

Consolidated EBITDA FY 2019-20 declined by 7% to ₹15,536 crore from ₹16,627 crore in the previous year. This was due to lower EBITDA in aluminium and copper businesses in India,offset by a best-ever performance by Novelis in FY 2019-20. The EBITDA margin in FY 2019-20 was better at 13.2% compared to 12.7% in FY 2018-19.

EBITDA : Split by Business in FY 2019-20



EBITDA (₹ Crore)



3.3 Finance Cost

Finance Cost increased by 11% at ₹4,197 crore in FY 2019-20 from ₹3,778 crore in FY 2018-19 due to the impact of refinancing cost of ₹568 crore in Novelis in FY 2019-20. Novelis successfully refinanced its 6.25%, $1.15 billion bonds due in 2024 with an attractive 4.75%, $1.6 billion bonds due in 2030, with a net interest savings of $17 million per annum.

3.4 Depreciation and amortization (including net impairment loss/(reversal) of non-current assets)

Depreciation and amortization (including net impairment loss/(reversal) of non-current assets) increased to ₹5,135 crore in FY 2019-20 from ₹4,766 crore in FY 2018-19 mainly on account of progressive capitalization and adoption of IndAS 116 "Leases" effective from April 1, 2019 and exchange impact.

3.5 Exceptional Income/(Expense)

The total exceptional expense of ₹284 crore in FY 2019-20 was majorly on account of the closure of one of Novelis' foil plants in Ludenscheid, Germany, which allowed driving more inter-plant efficiencies in the region and optimizing its overall product portfolio towards high-margin, recycled content friendly products. This plant ceased all its production during the fourth quarter of FY 2019-20. The exceptional expense also includes the restoration of Red Mud pond and other related expenses at the Muri Alumina refinery.

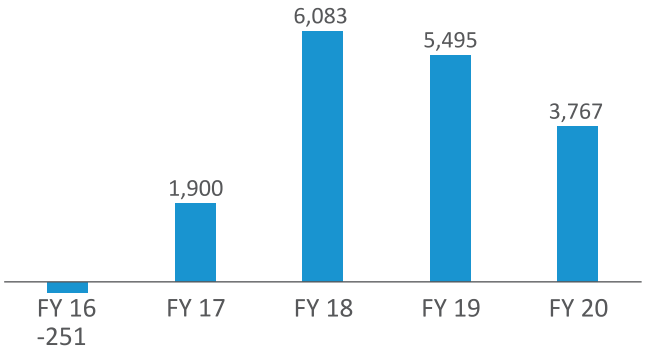
3.6 Taxes

Provision for tax was at ₹2,157 crore in FY 2019-20 against ₹2,588 crore in FY 2018-19. This decrease in taxes was due to lower profitability of the company in FY 2019-20.

3.7 Profit/(Loss) after tax

Profit After Tax (PAT) in FY 2019-20 was at ₹3,767 crore compared to ₹5,495 crore a year ago. FY 2019-20 includes an exceptional expense (before tax) of ₹284 crore mainly on account of the closure of one of Novelis' foil plant facilities in Ludenscheid, Germany and the impact of refinancing cost at Novelis of ₹568 crore in FY 2019-20. The net profit margin in FY 2019-20 stands at 3.2% versus 4.2% in FY 2018-19.

Profit After Tax (₹ Crore)



3.8 Consolidated Net Debt to EBITDA

The consolidated balance sheet continued to remain strong with the Net Debt to EBITDA at 2.61 times at the end of March 2020 versus 2.48 times at the end of March 2019.

3.9 Key Financial Ratios (Consolidated)

(i) Debtors Turnover (Days)

The Consolidated Debtors Turnover Days on March 31, 2020 stands at 32 days versus 30 days at the end of March 31, 2019. This shows consistency in managing its credit with customers and this also reflects the Company's strong

MANAGEMENT DISCUSSION & ANALYSIS

financial position with respect to most of its customers. The Debtor Turnover (days) is calculated as Average Debtors / Total Consolidated Sales multiplied by 365 days.

(ii) Inventory Turnover (Days)

The Consolidated Inventory Turnover Days on March 31, 2020 was little higher maintained at 75 days versus 67 days at the end of March 31st, 2019. This shows how the Company managed its inventory levels during the year. This was higher primarily due to some inventories in March on account of the lockdown. The Inventory (days) is calculated as Average Inventory / Cost of Goods Sold (Cost of Sales + Depreciation) multiplied by 365 days.

(iii) Interest Coverage Ratio:

The Consolidated Net Interest Coverage Ratio as on March 31, 2020 stands at 3.70 times versus. 4.40 times at the end of March 31, 2019. This is a bit low over the previous year because of lower earnings (EBIT) and higher interest cost due to the impact of refinancing costs in Novelis. This ratio reflects the Company's ability and strength to meet its interest obligations.

(iv) Current Ratio

The Consolidated Current Ratio as on March 31, 2020 stands at 1.78 times versus 1.58 times at the end of March 31, 2019. This ratio reflects the Company's strong liquidity or solvency.

(v) Debt to Equity Ratio

The Consolidated Debt to Equity Ratio as on March 31, 2020 stands well above 1.0x at 1.15 times versus. 0.91 times as on March 31, 2019. This reflects the Company's strong balance sheet and ability to meet its current short-term obligations.

(vi) Return in Net Worth (RONW)

The Consolidated Return on Net Worth as on March 31, 2020 stands at 6.46% compared to 9.56% as at March 31, 2019. This was lower compared to the previous year due to the lower profits and impact of the refinancing cost in Novelis. Adjusting for the post-tax impact of ₹568 crore in FY 2019-20 this will be 7.08%.

(vii) Operating Margins

The Consolidated Operating margins in FY20 stands at 12.15% versus 11.87% in FY19 reflecting higher operating profit in FY20 compared to the previous year. (Operating Margin = Operating Profit/Net Sales)

3.10 Consolidated Cashflow:

Cash from operations for Hindalco Consolidated stands at ₹12,665 crore in FY 2019-20 versus ₹11,977 crore in FY 2018-19.

The table below shows the comparative movement of Cash flows:

(₹ in Crore)

Particulars		Consolidated	
		Financial Year ended	
		31.03.2020	31.03.2019
A.	**CASH FLOW FROM OPERATING ACTIVITIES**		
	Operating Cash flow before working capital changes	13,945	15,548
	Changes in working capital	(1,178)	(1,683)
	Cash generated from operations before Tax	**12,767**	**13,865**
	(Payment)/Refund of Direct Taxes	(102)	(1,888)
	Net Cash generated/ (used) -Operating Activities (a)	**12,665**	**11,977**
B.	**CASH FLOW FROM INVESTMENT ACTIVITIES**		
	Net Capital Expenditure	(6,732)	(5,968)
	Sale proceeds from Slump Sale	25	-
	(Purchase) / Sale of treasury instrument (Net)	(1,578)	(308)
	Investment in equity accounted investees	(3)	(6)
	Loans & Deposits (given) / received back (Net)	266	94
	Interest and dividends received	331	540
	Investment in Equity Shares at FVTOCI	(653)	-
	Others	43	-
	Net Cash generated/ (Used) - Investing Activities (b)	**(8,301)**	**(5,648)**
C.	**CASH FLOW FROM FINANCING ACTIVITIES**		
	Equity Raised / Debentures Redeemed	4	3
	Treasury shares acquired by ESOP Trust	(7)	(124)
	Net Debt inflows	10,949	(1,441)
	Interest & Finance Charges paid	(4,016)	(3,581)
	Dividend Paid (including Dividend Distribution Tax)	(320)	(323)
	Net Cash generated/ (Used) - Financing Activities (c)	**6,610**	**(5,466)**
	Net Increase/(decrease) in Cash and Cash Equivalents (a) +(b) + (c)	**10,974**	**863**

4. BUSINESS OUTLOOK

Hindalco continued to deliver strong and resilient performance in FY 2019-20, despite a challenging business environment and significant market uncertainties. Currently, around 77% of Hindalco's consolidated EBITDA is LME-delinked, an affirmation of its diversified, value-added portfolio.

The Company's relentless focus is on better efficiencies and cost competitiveness, as all its smelters continue to be in the first quartile of the global cost curve. The capacity expansion project at Utkal Alumina refinery will further help in reducing the overall integrated cost of production going forward. The company is also focused on cash conservation and maintaining adequate liquidity to continue to deliver sustained performance despite the current tough environment due to COVID-19. The Company's long-term strategic investments in Novelis and the India downstream expansion will enhance its capabilities. In addition, the acquisition of Aleris will provide further product diversification in Novelis to strengthen the Company's long-term sustainable business model.

The Copper Continuous Cast Rod mill (CCR#3) is ramping up well, taking rod capacity to ~82% of cathode production, from 40% in the earlier years. This VAP capacity will help the Company drive a larger market share and meet the growing demand for Copper in the domestic market.

Hindalco will continue to keep a close watch on input prices, including coal, which affects the overall cost of production. The Company endeavours to mitigate this impact by utilizing its resources well, with better efficiencies across all products and plant locations, including Novelis. The Company is also focusing on further enriching its product mix and is evaluating investments in aluminium downstream facilities towards newer products and its existing product lines to cater to this demand. However, concerns over low-cost imports in aluminium and copper continue to hurt the domestic aluminium and copper industry.

The recent acquisition of Aleris by Novelis will cater to newer customers and products in Aerospace and high-end speciality, Truck & Trailer businesses, which will enhance its existing product portfolio. This will help Novelis to solidify further its leadership position as the global aluminium value-added player.

Novelis' ongoing organic expansion projects in the US, Brazil and China will drive overall business to the next level with its product diversity and market leadership while maintaining its balanced and disciplined approach towards decision-making in each of its product categories.

5. PRICE RISK MANAGEMENT

Hindalco's financial performance was significantly impacted by fluctuations in prices of aluminium, exchange rates and interest rates. The Company takes a structured approach to the identification, quantification and hedging of such risks by using derivatives in commodity and currency, which is driven by a comprehensive risk management policy of the Company.

6. SUSTAINABILITY

With a focus on creating value, exceeding expectations and operating responsibly, we continue our journey towards a resilient, responsible and reliable future. To continue being a leading non-ferrous metals and mining company, we ensure that our operations are run in an environmentally conscious and socially responsible manner.

The amalgamation of sustainability with our business strategy has helped us in the effective management of our business in the turbulent business environment and challenging situations. In one of the critical steps in moving towards integrating sustainability with business strategy, we have undertaken an assessment of material topics for the company. This is being done by the Sustainability team in collaboration with enterprise risk management. The outcome of the exercise will help us in identification of topics that are of importance to us and our stakeholders.

We have strengthened our sustainability framework to embed sustainability in our company culture. We are developing task forces for key sustainability areas, such as, water and waste management, along with commencing organization-wide capacity building initiatives on sustainability. Hindalco has also adopted the sustainability technical standards released by the Group's Sustainability Cell. The Company's sustainability committee which is chaired by the Managing Director reviews progress on various sustainability interventions on a regular basis.

We are known to be a company that is resource-efficient when it comes to consumption of natural resources – either in the form of raw material or in the form of energy consumption. We are proud to be progressing on our targets for improving energy intensity and GHG emission intensity of our operations. This is further strengthened by efforts to improve our renewable energy footprint, wherein we are now close to 50 MW of installed solar power generation capacity across our plants. Our operations are best among the industry when it comes to specific freshwater consumption. These achievements are a result of efforts and innovation by our employees.

MANAGEMENT DISCUSSION & ANALYSIS

We are cognizant of the complex nature of our operations. This puts the health and safety of our employees on the forefront. We take every step to ensure that every person working at our premises reaches home back safely. In order to further strengthen the safety framework, we have introduced a fatality prevention programme. The programme aims to identify areas where safety needs to be improved and we take the necessary steps accordingly.

Our supply chain plays a major role in the smooth running of our operations. To extend our sustainability efforts across the supply chain, we have developed a framework to assess our suppliers on various sustainability parameters. The assessment will help them in the identification of areas of improvement and further enhance sustainability practices in their respective operations.

Being a responsible corporate citizen, we have continued our focus on strengthening the community development framework. This helps in propagating the culture of shared growth among the community.

Detailed initiatives and progress against sustainability key performance indicators are provided as part of our annual sustainability report available on our website.

7. SAFETY

We expect everyone working for Hindalco including contractors & other associates responsible for carrying out various business-related tasks having safety hazards, have the necessary training, skills and competencies. Hindalco has invested 14,75,216 man-hours in need-based safety training in FY 2019-20. It amounts to more than 4 man-days training per person per year. Most of the training sessions were followed by practical competency tests.

Everyone working for us at our manufacturing sites and mines is empowered to intervene when he/she sees any unsafe act, unsafe condition or unsafe practices including stoppage of work if need be. This year employees working at our manufacturing sites & mines made 4,15,658 safety interventions. The practice of safety intervention is further augmented with structured Behaviour Based Safety (BBS) Observation process from FY 2019-20. Our 17 world-class safety standards and 7 guidelines describe the control and physical barriers we require to prevent incidents. To ensure that all our manufacturing sites & mines are safely operated and well-maintained as stipulated in our safety standards and guidelines, the cross-functional internal audit system is in place. Apart from this, we practise a safety audit of each facility by corporate / cross entity team which is carried out once a year using subject matter experts (SMEs) from line functions of other units. If an emergency incident does occur, we have procedures in place to reduce the impact on people, society and the environment. We routinely update and test our emergency response potential by simulating incidents such as a spill, a leak or a fire and conducting mock drills. To test our emergency plans and procedures, we have worked closely with local services and regulatory agencies in the FY 2019-20. These tests not only continually improve our readiness to respond but also foster coordination among various agencies.

We at Hindalco, continually work to minimize the impact and likelihood of incidents. However, some do occur. Regrettably, six people lost their lives in FY 2019-20. Thus our severity rate jumped to 348 in FY 2019-20 from 254 in the FY 2018-19. However, owing to the fewer number of reportable injury accidents, the frequency rate of injuries has come down to 0.38 in year FY 2019-20 as compared to 0.49 in the year FY 2018-19. At the start of year FY 2020-21, Apex Safety Committee of Hindalco spent considerable time reflecting on the safety performance of the Company as measured by the number of fatalities. This included carrying out a full review of Hindalco's safety approach, the effectiveness of various safety programs etc. and what needs to change at Hindalco to prevent fatalities and all other serious incidents. After thorough deliberation, Hindalco decided to implement one additional safety program, i.e. Serious Injury and Fatality (SIF) prevention program from year FY 2020-21 and revisit entire risk assessment of all the tasks carried of all across Hindalco. Since last three years, we are carrying out Qualitative Exposure Assessment (QEA) and Quantitative Exposure Assessment of work environment pollutants like noise, dust, fumes to workmen. We completed this exercise for almost all manufacturing sites/mines of Hindalco in year FY 2019-20, and the recommendations emanated out of these exercises are under active implementation. To further strengthen the occupational health & hygiene aspect, Hindalco implemented three world-class occupational health standards.

8. HUMAN CAPITAL

With around 25,000 direct employees in India and another 11,000 outside the country, people are at the centre of driving excellence at Hindalco. The Aditya Birla Group is one of the most preferred employers in the country. This enables us to attract the required talent and retain them.

Keeping in mind the new normal, we are constantly working on our Employee Value Proposition and innovating our programs and initiatives for holistic employee development. We have designed multiple online programs on both behavioural/leadership and functional/technical aspects. Specially designed programs for building digital capability have also been rolled out. We have extended our Potential Assessment Process to a larger employee population now to create a bigger talent pool and provide career opportunities.

We have strengthened our partnership with the HR Business Partners working closely on talent management, capability building, driving performance and strategic projects with them. This year we have strived to make our performance management process digital by introducing a digital tool for normalization. We have also focused on increased development conversation as well as regular feedback. We have been closely working on increasing employee engagement and building an open, transparent and inclusive culture by working extensively on action plans based on the results of our employee engagement survey.

9. INTERNAL CONTROLS

A strong internal control culture is pervasive throughout the Group. Regular internal audits at all locations are undertaken to ensure that the highest standards of internal control are maintained. The effectiveness of a business' internal control environment is a component of senior management performance appraisals. The principal aim of the system of internal control is the management of business risks, with a view on enhancing shareholder value and safeguarding the Group's assets. It provides reasonable assurance on the internal control environment and against material misstatement or loss.

10. COVID-19 UPDATES

The Company's first and foremost objective has been to protect the health and safety of our workforce across all our facilities. The Company has taken several precautionary measures, which will remain in place until the pandemic crisis is resolved.

I. Operations :

As a part of continuous process manufacturing, the Company's four aluminium smelters, and the Utkal Refinery in India operated at near full capacity during the lockdown. The Company's coal and bauxite mines also operated at regular scale. The aluminium downstream plants in India had shut down initially, except at two locations, while other downstream facilities continued to operate and serve essential sector customers.

In the U.S., Novelis has experienced increased disruption to its global aluminium production and supply chain.

After initial temporary shutdowns, the copper operations have been restarted.

All major Capital Expenditures, excluding maintenance and essential capital expenditures for the next financial year, is being curtailed for both India and Novelis.

II. Customers :

In spite of the operational challenges, Hindalco continued to serve its customers in essential industries, by reorienting supply chains to offer uninterrupted supplies from its warehouses and its operating plants. During the lockdown, Hindalco produced aluminium foil for pharmaceutical packaging of Chloroquine Phosphate, Hydroxychloroquine sulphate tablets and other critical drugs. Hindalco aluminium was used in manufacturing components of life-saving ventilators, components of X-ray and CT scan machines, COVID testing booths and other hospital equipment, Personal Protection Equipment (PPE) kits and sanitizer stands.

III. Employees :

Hindalco-Novelis prioritized the health and safety of the workforce by providing the work-from-home option to the majority of employees in offices, running plant operations with reduced staff, moving a number of employees into the plants to minimize travel, staggering shifts in plants, following strict social distancing, hygiene and safety protocols, and ensuring rigorous cleaning and sanitization of all facilities, colonies, staff buses, etc. The Company continues to take all possible precautions to keep infections at bay.

IV. Communities :

Hindalco has taken on the responsibility of sanitizing and supporting villages around its plants. The Company supplied food, groceries and other essentials to the communities through its CSR teams.

Novelis extended strong support to response and recovery efforts and has directly provided 28 non-profits including local hospitals and food banks, with resources to keep communities safe.

Cautionary Statement

Statements in this "Management Discussion and Analysis" describing the Company's objectives, projections, estimates, expectations or predictions may be "forward looking statements" within the meaning of applicable securities laws and regulations. Actual results could differ materially from those expressed or implied. Important factors that could make a difference to the Company's operations include global and Indian demand supply conditions, finished goods prices, feedstock availability and prices, cyclical demand and pricing in the Company's principal markets, changes in the government regulations, tax regimes, economic developments within India and the countries within which the Company conducts business and other factors such as litigation and labour negotiations. The Company assumes no responsibility to publicly amend, modify or revise any forward looking statements, on the basis of any subsequent development, information events or otherwise.

FINANCIAL HIGHLIGHTS - STANDALONE

(₹ Crore)

	2019-20@	2019-20@	2018-19@	2017-18@	2016-17@	2015-16@	2014-15	2013-14	2012-13	2011-12	2010-11
PROFITABILITY	**US$ in Mn ***										
Sales and Operating Revenues	5,676	40,242	45,749	43,446	39,383	36,713	36,869	30,101	28,070	28,297	25,348
Less: Cost of Sales	5,159	36,578	41,503	38,322	34,569	33,367	33,453	27,609	25,866	25,192	22,193
Operating Profit	**517**	**3,664**	**4,246**	**5,124**	**4,814**	**3,346**	**3,417**	**2,492**	**2,204**	**3,105**	**3,155**
Other Income	104	739	940	948	1,005	979	882	1,124	983	616	347
Less: Depreciation, Amortization and Impairment	241	1,708	1,693	1,617	1,428	1,282	837	823	704	690	687
Less: Interest and Finance Charges	237	1,679	1,683	1,901	2,323	2,390	1,637	712	436	294	220
Profit before Exceptional Items and Tax	**143**	**1,016**	**1,810**	**2,554**	**2,068**	**653**	**1,825**	**2,081**	**2,047**	**2,737**	**2,595**
Exceptional Income/ (Expenses) (Net)	(9)	(64)	-	(325)	85	-	(578)	(396)	-	-	-
Profit/ (Loss) before Tax from Continuing Operations	**134**	**952**	**1,810**	**2,229**	**2,153**	**653**	**1,247**	**1,685**	**2,047**	**2,737**	**2,595**
Less: Tax Expenses	47	332	605	793	596	99	322	272	347	500	458
Profit/ (Loss) from Continuing Operations	**87**	**620**	**1,205**	**1,436**	**1,557**	**554**	**925**	**1,413**	**1,699**	**2,237**	**2,137**
Profit/ (Loss) from Discontinued Operations (Net of Tax)	-	-	-	-	-	(2)	-	-	-	-	-
Profit/ (Loss) for the Period	**87**	**620**	**1,205**	**1,436**	**1,557**	**552**	**925**	**1,413**	**1,699**	**2,237**	**2,137**
Business Reconstruction Reserve (BRR)#											
Expenses adjusted against BRR (Net of Tax)	-	-	-	-	-	682	97	86	-	-	-
Profit/ (Loss) for the Period had the expenses not adjusted against BRR	87	620	1,205	1,436	1,557	(130)	828	1,327	1,699	2,237	2,137
FINANCIAL POSITION											
Gross Fixed Assets (excluding CWIP)	6,676	50,296	48,898	48,264	46,742	43,316	35,434	26,804	15,073	14,478	14,287
Capital Work-in-Progress (CWIP) **	170	1,282	982	737	712	3,079	10,744	17,277	23,605	16,257	6,030
Less: Accumulated Depreciation, Amortization and Impairment	**2,247**	**16,928**	**15,376**	**13,900**	**12,358**	**11,063**	**9,374**	**8,749**	**7,975**	**7,328**	**6,703**
Net Fixed Assets	**4,599**	**34,650**	**34,504**	**35,101**	**35,096**	**35,332**	**36,804**	**35,332**	**30,703**	**23,407**	**13,615**
Investments	3,270	24,639	25,495	27,025	29,332	27,311	21,251	21,907	20,482	18,087	18,247
Other Non-Current Assets / (Liabilities) (Net)	(295)	(2,223)	(1,565)	(708)	516	(1,038)	(1,193)	(1,174)	(751)	(207)	2,096
Net Current Assets	1,523	11,472	9,658	8,330	9,539	9,230	9,400	8,339	8,409	5,319	4,782
Capital Employed	**9,097**	**68,538**	**68,092**	**69,748**	**74,483**	**70,835**	**66,262**	**64,404**	**58,843**	**46,606**	**38,740**
Less: Loan Funds	3,059	23,044	19,534	20,297	27,150	28,676	29,007	27,672	24,871	14,574	9,040
Net Worth	**6,038**	**45,494**	**48,558**	**49,451**	**47,333**	**42,159**	**37,255**	**36,732**	**33,972**	**32,032**	**29,700**

(₹ Crore)

	2019-20@	2019-20@	2018-19@	2017-18@	2016-17@	2015-16@	2014-15	2013-14	2012-13	2011-12	2010-11
	US$ in Mn *										
Net Worth represented by :											
Equity Share Capital	29	222	222	223	223	205	207	206	191	191	191
Other Equity:											
Share Warrants	-	-	-	-	-	-	-	-	541	541	-
Reserves and Surplus	5,771	43,482	43,285	42,497	41,235	36,568	37,049	36,526	33,240	31,300	29,509
Other Comprehensive Income	238	1,790	5,051	6,731	5,875	5,386	-	-	-	-	-
	6,038	**45,494**	**48,558**	**49,451**	**47,333**	**42,159**	**37,255**	**36,732**	**33,972**	**32,032**	**29,700**

RATIOS AND STATISTICS

	Unit	2019-20@	2018-19@	2017-18@	2016-17@	2015-16@	2014-15	2013-14	2012-13	2011-12	2010-11
Operating Margin	%	9.11	9.28	11.79	12.22	9.11	9.27	8.28	7.85	10.97	12.45
Net Margin	%	1.54	2.63	3.31	3.95	1.50	2.51	4.70	6.05	7.91	8.43
Gross Interest Cover^	Times	2.62	3.08	3.18	1.73	1.81	1.75	1.50	1.61	3.62	5.74
Net Interest Cover	Times	2.62	3.08	3.19	2.51	1.81	2.63	5.08	7.31	12.67	15.92
ROCE	%	3.93	5.13	6.39	5.90	4.30	5.22	4.34	4.22	6.50	7.27
ROE	%	1.36	2.48	2.90	3.29	1.31	2.48	3.85	5.00	6.98	7.20
Basic EPS	₹	2.79	5.41	6.45	7.56	(0.64)	4.48	7.09	8.88	11.69	11.17
Diluted EPS	₹	2.79	5.41	6.45	7.55	(0.64)	4.48	7.09	8.87	11.68	11.16
Cash EPS^^	₹	10.47	13.01	13.70	14.49	8.95	8.53	11.22	12.55	15.29	14.76
Dividend per Share ##	₹	1.00	1.20	1.20	1.10	1.00	1.00	1.00	1.40	1.55	1.50
Capital Expenditure (Cash outflow)	₹ Crore	1,395	1,263	1,178	1,041	1,399	2,073	3,458	5,531	7,168	5,749
Debt Equity Ratio	Times	0.51	0.40	0.41	0.57	0.68	0.78	0.75	0.73	0.45	0.30
Book value per Share	₹	202.49	216.25	220.28	211.00	204.16	180.41	177.92	177.44	167.31	155.14
Market Capitalisation$	₹ Crore	21,502	46,145	48,166	43,756	18,162	26,638	29,266	17,538	24,774	40,040
Number of Equity Shareholders	Nos.	3,32,014	3,04,345	2,99,521	3,19,783	3,92,888	3,38,655	3,61,686	4,41,166	3,83,724	3,20,965
Number of Employees	Nos.	22,477	22,865	23,555	23,679	24,118	21,976	20,902	20,238	19,975	19,341
Average Cash LME (Aluminium)	US$	1,749	2,035	2,046	1,688	1,592	1,888	1,773	1,976	2,317	2,257
Average Cash LME (Copper)	US$	5,855	6,337	6,451	5,152	4,852	6,556	7,103	7,855	8,485	8,140

* Balance Sheet items are translated at closing exchange rate and Profit and Loss items are translated at average exchange rate.

** Including Intangible assets under development

Financial restructuring scheme formulated by the Company under the provisions of the Companies Act, approved by the Bombay High Court, to deal with various costs associated with its organic and inorganic growth plan.

Proposed/Interim Dividend for the Period

@ Figures for FY 2019-20, FY 2018-19, FY 2017-18, FY 2016-17 and FY 2015-16 are as per Ind AS compliant financial statements. Previous periods figures are as per Previous GAAP financial statements.

$ including Treasury shares held by the Company

^ Gross interest coverage ratio is calculated as Operating Profit plus Other Income divided by Interest and Finance Charges plus Finance costs transferred to Capital Work-in-Progress/ Intangible Assets under development

^^ Cash EPS is calculated as Profit/ (Loss) for the year plus Depreciation, Amortization and Impairment divided by Weighted average numbers of equity shares

FINANCIAL HIGHLIGHTS - CONSOLIDATED

₹ in Crore

	2019-20@	2019-20@	2018-19@	2017-18@	2016-17@	2015-16@	2014-15	2013-14	2012-13	2011-12	2010-11
PROFITABILITY	**US$ in Mn ***										
Sales and Operating Revenues	16,664	1,18,144	1,30,542	1,15,820	1,02,631	1,01,202	1,06,696	90,007	82,243	82,549	73,703
Less: Cost of Sales	14,640	1,03,794	1,15,042	1,01,899	90,183	92,387	97,751	81,721	74,406	74,365	65,775
Operating Profit	**2,024**	**14,350**	**15,500**	**13,921**	**12,448**	**8,815**	**8,944**	**8,286**	**7,837**	**8,184**	**7,929**
Other Income	167	1,186	1,127	1,105	1,111	1,189	1,105	1,017	1,012	783	513
Less: Depreciation, Amortization and Impairment	724	5,135	4,766	4,607	4,469	4,507	3,591	3,553	2,861	2,864	2,759
Less: Interest and Finance Charges	592	4,197	3,778	3,911	5,742	5,134	4,178	2,702	2,079	1,758	1,839
Profit before Share in Equity Accounted Investments, Exceptional Items and Tax	**875**	**6,204**	**8,083**	**6,508**	**3,348**	**362**	**2,280**	**3,049**	**3,909**	**4,345**	**3,843**
Share in Profit/(Loss) in Equity Accounted Investments (Net of Tax)	1	4	-	(125)	(25)	172	175	67	(16)	50	(57)
Profit before Tax and Exceptional Items	**876**	**6,208**	**8,083**	**6,383**	**3,323**	**534**	**2,455**	**3,116**	**3,893**	**4,395**	**3,786**
Exceptional Income/(Expenses) (Net)	(40)	(284)	-	1,774	(8)	(577)	(1,940)	(396)	-	-	-
Profit/(Loss) before Tax from Continuing Operations	**836**	**5,924**	**8,083**	**8,157**	**3,315**	**(43)**	**515**	**2,720**	**3,893**	**4,395**	**3,786**
Less: Tax Expenses	304	2,157	2,588	2,074	1,433	498	256	525	886	786	964
Profit/(Loss) from Continuing Operations	**532**	**3,767**	**5,495**	**6,083**	**1,882**	**(541)**	**258**	**2,195**	**3,007**	**3,608**	**2,822**
Profit/(Loss) from Discontinued Operations (Net of Tax)	-	-	-	-	-	(161)	-	-	-	-	-
Profit/(Loss) before Non-Controlling Interest	**532**	**3,767**	**5,495**	**6,083**	**1,882**	**(702)**	**258**	**2,195**	**3,007**	**3,608**	**2,822**
Less: Non-Controlling Interest in Profit/(Loss)	-	-	(1)	-	(18)	(451)	(596)	20	(20)	211	366
Net Profit/(Loss) for the Period	**532**	**3,767**	**5,496**	**6,083**	**1,900**	**(251)**	**854**	**2,175**	**3,027**	**3,397**	**2,456**
Business Reconstruction Reserve (BRR)#											
Expenses adjusted against BRR (Net of Tax)	-	-	-	-	-	682	97	86	-	500	(3,439)
Profit/(Loss) for the Period had the expenses not adjusted against BRR	**532**	**3,767**	**5,496**	**6,083**	**1,900**	**(933)**	**757**	**2,089**	**3,027**	**2,896**	**5,896**
FINANCIAL POSITION											
Gross Fixed Assets (excluding CWIP)	18,626	1,40,334	1,30,142	1,25,094	1,21,186	1,23,522	1,01,940	87,914	60,054	53,961	48,207
Capital Work-in-Progress (CWIP) **	1,025	7,721	4,098	2,063	1,814	4,214	14,111	23,059	33,834	22,798	9,253
Less: Accumulated Depreciation, Amortization and Impairment	6,788	51,139	44,283	40,006	36,499	37,849	29,981	26,750	22,126	18,661	15,802
Net Fixed Assets	**12,863**	**96,916**	**89,957**	**87,151**	**86,501**	**89,887**	**86,070**	**84,223**	**71,763**	**58,098**	**41,657**
Investments	1,249	9,411	9,012	10,781	15,157	12,438	12,346	12,961	12,601	10,551	10,855
Other Non-Current Assets/ (Liabilities) (Net)	(1,647)	(12,407)	(9,581)	(8,497)	(6,737)	(8,859)	(7,235)	(6,924)	(6,573)	(5,758)	(3,142)
Net Current Assets	4,203	31,664	20,538	17,499	14,961	15,074	16,571	18,289	16,901	11,771	11,330
Capital Employed	**16,668**	**1,25,584**	**1,09,926**	**1,06,934**	**1,09,882**	**1,08,540**	**1,07,752**	**1,08,549**	**94,692**	**74,662**	**60,700**
Less: Loan Funds	8,927	67,257	52,416	52,074	63,817	67,552	68,467	66,163	57,603	41,042	29,460
Less: Non-Controlling Interest	1	10	9	9	6	381	956	1,781	1,759	1,709	2,217
Net Worth	**7,740**	**58,317**	**57,501**	**54,851**	**46,059**	**40,607**	**38,329**	**40,605**	**35,330**	**31,911**	**29,023**

₹ in Crore

	2019-20@	2019-20@	2018-19@	2017-18@	2016-17@	2015-16@	2014-15	2013-14	2012-13	2011-12	2010-11
	US$ in Mn*										
Net Worth represented by :											
Equity Share Capital	29	222	222	223	223	205	207	206	191	191	191
Other Equity:											
Share Warrants	-	-	-	-	-	-	-	6	541	541	-
Equity Component of Compound Financial Instruments	1	4	4	4	4	3	-	-	-	-	-
Reserves and Surplus	7,377	55,577	52,599	47,644	41,770	36,443	38,122	40,393	34,597	31,179	28,832
Other Comprehensive Income	333	2,514	4,676	6,980	4,062	3,956	-	-	-	-	-
	7,740	**58,317**	**57,501**	**54,851**	**46,059**	**40,607**	**38,329**	**40,605**	**35,330**	**31,911**	**29,023**

RATIOS AND STATISTICS

	Unit	2019-20@	2018-19@	2017-18@	2016-17@	2015-16@	2014-15	2013-14	2012-13	2011-12	2010-11
Operating Margin	%	12.15	11.87	12.02	12.13	8.71	8.38	9.21	9.53	9.91	10.76
Net Margin	%	3.19	4.21	5.25	1.85	(0.25)	0.80	2.42	3.68	4.12	3.33
Gross Interest Cover^	Times	3.57	4.37	3.83	2.36	1.91	1.95	1.85	2.04	3.16	3.56
Net Interest Cover	Times	3.70	4.40	3.84	2.36	1.95	2.41	3.44	4.26	5.10	4.59
ROCE	%	8.28	10.79	9.74	8.27	5.06	5.99	5.30	6.32	8.17	9.36
ROE	%	6.46	9.56	11.09	4.13	(0.62)	2.23	5.36	8.57	10.64	8.46
Basic EPS	₹	16.94	24.67	27.30	9.22	(4.55)	4.14	10.91	15.81	17.74	12.84
Diluted EPS	₹	16.93	24.66	27.29	9.22	(4.55)	4.13	10.91	15.81	17.74	12.83
Cash EPS^^	₹	40.03	46.07	47.98	30.91	20.78	21.53	28.73	30.75	32.70	27.25
Capital Expenditure (Cash outflow)	₹ Crore	6,791	6,005	3,001	2,938	4,245	5,978	9,424	11,871	12,512	7,909
Debt Equity Ratio	Times	1.15	0.91	0.95	1.39	1.66	1.79	1.63	1.63	1.29	1.02
Book Value Per Share	₹	259.56	256.07	244.33	205.32	196.64	185.61	196.67	184.53	166.68	151.61

* Balance Sheet items are translated at closing exchange rate and Profit and Loss items are translated at average exchange rate.

** Including Intangible assets under development.

Financial restructuring scheme formulated by the Company under the provisions of the Companies Act, approved by the Bombay High Court, to deal with various costs associated with its organic and inorganic growth plan.

@ Figures for FY 2019-20, 2018-19, FY 2017-18, FY 2016-17 and FY 2015-16 are as per Ind AS compliant financial statements. Previous periods figures are as per Previous GAAP financial statements.

^ Gross interest coverage ratio is calculated as Operating Profit plus Other Income divided by Interest and Finance Charges plus Finance costs transferred to Capital Work-in-Progress/ Intangible Assets under development

^^ Cash EPS is calculated as Profit/ (Loss) for the year plus Depreciation, Amortization and Impairment divided by Weighted average numbers of equity shares

DIRECTORS' REPORT

Dear Shareholders,

Your Directors have pleasure in presenting the 61st Annual Report and the Audited Standalone and Consolidated Financial Statements of your Company for the year ended 31st March, 2020.

FINANCIAL HIGHLIGHTS:

₹ in Crore

Particulars	Standalone		Consolidated	
	2019-20	2018-19	2019-20	2018-19
Revenue from Operations	**40242**	**45749**	**118144**	**130542**
Other Income	739	940	1186	1127
Profit Before Interest, Tax and Depreciation (PBITDA)	**4403**	**5186**	**15536**	**16627**
Depreciation and Amortization	1708	1693	5091	4777
Impairment Loss/ (Reversal) of Non-Current Assets (Net)	-	-	44	(11)
Finance Costs	1679	1683	4197	3778
Profit before Exceptional Items and Tax & Share in Profit / (Loss) in Equity Accounted Investments	**1016**	**1810**	**6204**	**8083**
Share of Equity Accounted Investments	-	-	4	*
Profit before Exceptional Items and Tax	**1016**	**1810**	**6208**	**8083**
Exceptional Items	(64)	-	(284)	-
Profit before Tax	**952**	**1810**	**5924**	**8083**
Tax Expenses	332	605	2157	2588
Profit/ (Loss) for the period	**620**	**1205**	**3767**	**5495**
Other Comprehensive Income (Loss)	(3400)	(1681)	(2723)	(2466)
Total Comprehensive Income	**(2780)**	**(476)**	**1044**	**3029**
Basic EPS	**2.79**	**5.41**	**16.94**	**24.67**

* Amount below rounding off convention.

Appropriations to Reserves:

₹ in Crore

Appropriations	2019-20	2018-19
Opening Balance in Retained Earnings and Other Comprehensive Income	9865	10800
Total Comprehensive Income for the Current Year	(2780)	(477)
Dividends paid	(316)	(307)
Transition Impact - Leases (Ind AS 116)	(9)	-
Hedging (Gain)/ Loss and cost of hedging transferred to non financial assets	14	(1)
Transferred to Debenture Redemption Fund	(150)	(150)
Closing Balance in Retained Earnings and Other Comprehensive Income	6624	9865

Dividend:

For the year ended 31st March, 2020, the Board of Directors of your Company has recommended dividend of ₹ 1.00 per share (previous year ₹ 1.20 per share) to equity shareholders.

Equity shares that may be allotted upon exercise of options granted under the Employee Stock Option Scheme and out of the Share Capital Suspense before the Book Closure for payment of dividend will rank paripassu with the existing shares and shall also be entitled to receive the aforesaid dividend.

In terms of provisions of Regulation 43A of the Securities and Exchange Board of India (Listing Obligations & Disclosure Requirements) Regulations, 2015, herein after referred to as "Listing Regulations" your Company has formulated a Dividend Distribution Policy. The Policy is given in **Annexure-I** to the Annual Report and is also accessible from your Company's website www.hindalco.com.

OVERVIEW AND STATE OF THE COMPANY'S AFFAIRS:

Standalone full year highlights:

The Standalone and Consolidated Financial Statements for the Financial Year ended 31st March, 2020 have been prepared in accordance with the Indian Accounting Standards (IND AS) as notified by the Ministry of Corporate Affairs.

Your Company registered a revenue of ₹ 40,242 crores for the fiscal year 2020 vs ₹ 45,749 crores in the previous year. EBITDA (Earnings before Interest, Tax, Depreciation

and Amortisation) stood at ₹ 4,403 crores, down 15 per cent compared to the last year, due to lower realisations in Aluminium on account of lower LME and lower Copper EBITDA on account of lower volumes and by-product realizations. Depreciation was higher by 1 per cent due to progressive capitalization in FY20. The Finance Cost was flat Year on Year at ₹ 1,679 crores in FY20 versus ₹ 1,683 crores in FY19. There was no prepayment of loans, as well as no new long term loans were drawn during the financial year 2019-20. The Profit before Tax (and Before Exceptional Items) stood at ₹ 1,016 crore, down by 44 per cent compared to the previous year due to lower EBITDA. Net Profit for FY20 stood at ₹ 620 crores as compared to ₹ 1,205 crore during the previous year.

Consolidated Full Year Highlights:

Hindalco's Consolidated Revenue stood at ₹ 1,18,144 crore for FY20 compared to ₹ 1,30,542 crore in the previous year down 9 per cent due to lower global aluminium prices. The Company recorded consolidated EBITDA (Earnings before Interest, Tax, Depreciation and Amortisation) of ₹ 15,536 crore, down by 7 per cent due to lower realisations. Consolidated Profit before Tax (and Before Exceptional Items) was ₹ 6,208 crore in FY20, down by 23 per cent compared to the previous year on account of lower EBITDA and higher interest cost impacted by one time refinancing cost of ₹ 568 crores in FY20. Net Profit after Tax in FY20, stood at ₹ 3,767 crores compared to ₹ 5,495 crores in the previous year down 31 per cent Year on Year. For detailed analysis, refer to the Management Discussion and Analysis section of the Annual Report.

Highlights of the Company's Subsidiaries:

1. Utkal Alumina International Limited

Utkal Alumina revenues were ₹ 2,653 crore in FY20 compared to ₹ 4,073 crore in FY19 down 35 per cent because of lower transfer pricing on account of subdued global alumina prices in FY20 versus FY19.

The EBITDA for FY20 stood at ₹ 992 crore lower by 58 per cent compared to ₹ 2,355 crore in FY19. The Profit after Tax in FY20 was ₹ 317 crore versus ₹ 1,425 crore in FY19 down by 78 per cent Year on Year on account of lower EBITDA in FY20. (Refer to the table below for comparison in FY20 versus FY19 key financial number)

Particulars	FY2019-20	FY2018-19	% Change
Revenue	2,653	4,073	(35%)
EBITDA	992	2,355	(58%)
PAT	317	1,425	(78%)

2. Novelis Inc.

The Performance highlights of Novelis Inc. are provided in detail for FY20 versus FY19 in the Management Discussion and Analysis Section of the Annual Report.

KEY INITIATIVES:

In India operations, the Utkal's Alumina refinery brownfield capacity expansion, by 500 Kt, is expected to be completed in the later half of FY21. This project was at a capital outlay of around ₹ 1,500 crore. This will further help strengthen the Company's integration and boost the availability of best-in-class alumina and in a reduction of the overall cost of production going forward. In the downstream expansion, the Company made some progress towards enhancing capacities in extrusion press and capabilities in the products such as Circles and Hard Alloys and invested in the new scrap furnace at Hirakud facility. These on-going downstream expansion projects will enhance the Company's capabilities and becoming further LME delinked.

Novelis recently announced expansion projects of 200 Kt automotive finishing facility in Guthrie, Kentucky in the US and additional 100 Kt of Auto finishing line in China, is progressing well and is expected to be commission in FY21. The rolling, casting and recycling capacity in Pinda, Brazil to meet growing customer demand is also expected to be commission in FY22. In addition to this, Novelis investment to expand and upgrade recycling capacity at its Greensboro facility in the US is also expected to be completed by FY22.

On 14th April 2020, Novelis completed the acquisition of US-Based Aleris Corp. This will enhance its Asia operations with full metal chain integration; further, diversify its portfolio with its entry into the aerospace segment. Currently, the integration process has commenced while driving synergies and unlock value. Divestment procedures for automotive assets in Lewisport in the US and Duffel in Europe is underway.

HUMAN RESOURCES:

Several innovative people - focused initiatives have been instituted at the group level, and these are translated into action at all of the group companies. Our basic objective is to ensure that a robust talent pipeline and a high-performance culture, centred around accountability is in place. We feel this is critical to enable us retain our competitive edge.

RESEARCH AND DEVELOPMENT:

Your Company's Research & Development (R&D) activities are focused on providing innovative, cost-effective and sustainable solutions to support consistent growth of business. The R&D activities of your Company include process, product and application development, to develop short term as well as long term solutions to the issues faced by non-ferrous sector, such as, raw material quality, cost effective management of waste generated during processing, recovery of value from by-product as well as any waste products, developing better understanding of the science of processes, reducing the specific energy consumption and carbon footprint etc. Specific programs have also been

DIRECTORS' REPORT

initiated to foster better understanding of the requirement of existing and prospective customers, and to provide a better service through application development, so as to increase your company's market share in the chosen market space. Technical competencies developed by your company will go a long way in terms of quick absorption of technologies, enabling pushing boundaries of our processes, so as to increase the economic performance and improve our new product/new application pipeline to address the impending market opportunities.

Your Company already operates two Hindalco Innovation Centres (HIC), one HIC-Alumina at Belagavi working on R&D of bauxite ore, alumina refining and specialty alumina, hydrate products; as well as waste management; and one HIC-SemiFab located at Taloja, near Mumbai, working in the area of tribology, energy and environment management and aluminium fabricated products and new applications. Additionally, R&D Team at Birla Copper, Dahej, is focusing on maximisation of copper recovery as well recovery of various metal values, such as, Selenium, Tellurium, Nickel, Bismuth, etc., from the effluent generated in the plant and value added applications of the solid wastes generated, namely, copper slag and phospho-gypsum. In addition, your company engages the Aditya Birla Group's corporate research and development centre, Aditya Birla Science and Technology Company Private Limited ("ABSTCPL"), for conducting R&D in select areas of work through chartered R&D projects. These are based on the domain expertise and R&D facilities available in ABSTCPL. The engagement has resulted into patent applications, which have been and will be assigned to your company on the grant of the patent. ABSTCPL's forte of having multidisciplinary teams of technical experts, scientists and engineers, enables your company to develop building competencies in select areas, as a long term value to business. Both the HICs at Belagavi and Taloja as well as ABSTCPL are DSIR, GOI recognised R&D Centres.

CONSOLIDATED FINANCIAL STATEMENTS:

The Consolidated Financial Statements for the year ended 31st March, 2020 have been prepared by your Company in accordance with the provisions of the Companies Act, 2013, ("the Act") read with the Companies (Accounts) Rules, 2014, applicable Accounting Standards and the provisions of Listing Regulations and forms part of the Annual Report.

EMPLOYEE STOCK OPTION SCHEMES:

ESOS – 2006:

During the year ended 31st March, 2020, the Company has allotted 3,59,415 fully paid-up equity share of ₹ 1/- each of the Company (previous year 52,330) on exercise of options under ESOS 2006.

ESOS – 2013:

During the year ended 31st March, 2020, the Company has allotted 3,33,027 fully paid-up equity share of ₹ 1/- each of the Company (previous year 515,013) on exercise of options under ESOS 2013.

The details of Stock Options and Restricted Stock Units granted under the above mentioned Schemes are available on your Company's website viz. www.hindalco.com.

A certificate from the statutory auditor on the implementation of your Company's Employees Stock Option Schemes will be placed on the day of Annual General Meeting on NSDL's portal for inspection by the members.

There is no material change in the Schemes and the aforementioned schemes are in compliance with SEBI (Share Based Employee Benefits) Regulations, 2014.

CORPORATE GOVERNANCE:

Your Directors reaffirm their continued commitment to good corporate governance practices. Your Company fully adheres to the standards set out by the Securities and Exchange Board of India for Corporate Governance practices.

The entire report on Corporate Governance forms part of the Annual Report.

ABRIDGED ANNUAL REPORT:

Ministry of Corporate Affair ('MCA') General circular No. 20/2020 dated 05th May, 2020 states that considering prevailing situation and owing to difficulties involved in dispatching of physical copy of financial statements (including Board's report, Auditor's report or other documents required to be attached therewith), such statements shall be sent only by email to the members, trustees for the debenture-holder of the company and to all other persons so entitled. Therefore, Company has decided neither to print Full Annual Report nor Abridged Annual Report. Requested to take note of the same.

DIRECTORS' RESPONSIBILITY STATEMENT:

As stipulated in Section 134(3)(c) of the Act, your Directors subscribe to the "Directors' Responsibility Statement" and confirm that:

a) in the preparation of the annual accounts, applicable accounting standards have been followed along with proper explanations relating to material departures;

b) the accounting policies selected have been applied consistently and judgments and estimates have been made that are reasonable and prudent so as to give a true and fair view of the state of affairs of the company as at 31st March, 2020 and of the profit of your company for that period;

c) proper and sufficient care has been taken for the maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding the assets of your company and for preventing and detecting fraud and other irregularities;

d) the annual accounts of your Company have been prepared on a going concern basis;

e) your Company had laid down internal financial controls and that such internal financial controls are adequate and were operating effectively;

f) your Company has devised proper system to ensure compliance with the provisions of all applicable laws and that such systems were adequate and operating effectively.

ENERGY, TECHNOLOGY AND FOREIGN EXCHANGE:

The information on conservation of Energy, Technology Absorption and Foreign Exchange Earnings and Outgo stipulated under Section 134(3) (m) of the Act, read with Companies (Accounts) Rules, 2014 is set out in **Annexure-II** to the Annual Report.

PARTICULARS OF EMPLOYEES:

In accordance with the provisions of Section 197(12) of the Act, read with the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014, the names and other particulars of employees are to be set out in the Directors' Report, as an addendum thereto. However, in line with the provisions of Section 136(1) of the Act, the Report and Accounts as set out therein, are being sent to all members of your Company excluding the aforesaid information about the employees. Any Member, who is interested in obtaining these particulars about employees, may write to the Company Secretary at the registered office of your Company.

Disclosures pertaining to remuneration and other details as required under section 197(12) of the Act, read with Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014 are attached as **Annexure-III** to the Annual Report.

DIRECTORS:

Board Constitution and Changes:

Mr. Debnarayan Bhattacharya (DIN: 00033553) will retire from office by rotation at the ensuing Annual General Meeting, and being eligible, offers himself for reappointment. Mr. Bhattacharya has given required declaration under the Act.

Mr. Girish Dave (DIN: 00036455), ceased to be Independent Director of your Company due to age and other personal reasons w.e.f. 11th November, 2019.

Mr. Ram Charan (DIN:03464530) Independent Director has resigned w.e.f 14th August 2020 due to his increase in personal Commitments.

Mr. Sudhir Mital (DIN: 08314675) is appointed as Independent Director on the Board of the Company w.e.f. 11th November, 2019, subject to shareholder approval at the ensuing Annual General Meeting. Mr. Mital has given the required declarations under the Act and the Listing Regulations.

Mr. Anant Maheshwari (DIN: 02963839) is appointed as Independent Director on the Board of the Company w.e.f. 14th August, 2015, subject to shareholder approval at the ensuing Annual General Meeting. Mr. Maheshwari has given the required declarations under the Act and Listing Regulations.

Mr. Yazdi Piroj Dandiwala (DIN: 01055000) was appointed Independent director of the Company for the period of five years in Annual General Meeting held on 16th September 2015. Mr. Dandiwala is eligible to re-appoint as independent director for the further period of five year.

As per the requirement of Listing Regulations all listed Companies are required to appoint or continue the directorship of all non-executive director who has attained the age of seventy five years by way of passing special resolution. Mrs. Rajashree Birla (DIN: 00022995), is non-executive director will be attaining the age of 75 years in September, 2020. Therefore special resolution from shareholders is required for continuing her directorship in the Company.

The Board recommends, appointment of Mr. Sudhir Mital, Mr. Anant Maheshwari, continuing directorship of Mrs. Rajashree Birla and re-appointment of Mr. D. Bhattacharya & Mr. Y. P. Dandiwala. Item seeking your approval is included in the Notice convening the Annual General Meeting.

Brief resumes of the directors being appointed/ re-appointed is forming part of the notice of the ensuing Annual General Meeting.

All the directors being appointed/reappointed have given required declaration under the Act and Listing Regulations.

Independent Directors Statement:

Independent Directors on your Company's Board have submitted declarations of independence to the effect that they meet the criteria of independence as provided in Section 149(6) of the Act and Regulation 16(1)(b) of the Listing Regulations.

Policy on appointment and remuneration of Directors and Key Managerial Personnel:

The Nomination and Remuneration Committee has formulated the remuneration policy of your Company which is attached as **Annexure-IV** to the Annual Report.

DIRECTORS' REPORT

Meetings of the Board:
The Board of Directors of your Company met six times during the year, details of which are given in the Corporate Governance Report forming part of the Annual Report.

Annual Evaluation:
Pursuant to the provisions of the Act and Listing Regulations, the directors has carried annual performance evaluation of Board, Independent Directors, Non-executive Directors, Executive Directors, Committee and Chairman of the Board.

The evaluation framework focused on various aspects of the Board and Committees such as review, timely information from management etc. Also, the performance of individual directors was divided into Executive, Non-Executive and Independent Directors and based on the parameters such as contribution, attendance, decision making, action oriented, external knowledge etc.

Board members have evaluated Independent Directors, Non-executive Directors, Executive Directors, Committee and Chairman of the Board. The result of evaluation was satisfactory and meets the requirements of the Company. Board fully agreed and rated 100 per cent on its functioning, skill sets and working atmosphere. Independent Directors scored well on expressing their views and in understanding the Company and its requirements. Non-Executive Directors scored well in understanding the Company and its requirements and keep themselves updated on the areas to be discussed. Executive Directors are action oriented and ensures timely implementation of the Board decisions. Board is completely satisfied with the functioning of various Committees. Board has full faith in the Chairman in leading the Board effectively and ensuring contribution from all its members.

AUDIT COMMITTEE:

The Audit Committee comprises of Mr. K. N. Bhandari, Independent Director, Mr. Vikas Balia, Independent Director and Mr. Y. P. Dandiwala, Independent Directors. Mr. Satish Pai: Managing Director and Mr. Praveen Kumar Maheshwari: Chief Financial Officer and Whole-Time Director are the permanent invitees. In the meeting of Audit Committee Further details relating to the Audit Committee are provided in the Corporate Governance Report forming part of the Annual Report.

KEY MANAGERIAL PERSONNEL:

In terms of provisions of Section 203 of the Act, Mr. Satish Pai: Managing Director, Mr. Praveen Kumar Maheshwari: Chief Financial Officer and Whole-Time Director and Mr. Anil Malik: Company Secretary are the Key Managerial Personnel of your Company.

VIGIL MECHANISM:

Your Company has in place a vigil mechanism for directors and employees to report concerns about unethical behaviour, actual or suspected fraud or violation of your Company's Code of Conduct. Adequate safeguards are provided against victimisation to those who avail of the mechanism and direct access to the Chairman of the Audit Committee in exceptional cases is provided to them.

The vigil mechanism is available on your Company's website viz. www.hindalco.com.

AUDITORS:

Statutory Auditors:
M/s. Price Waterhouse & Co. Chartered Accountants LLP (Registration No. 304026E/E-300009), are the Statutory Auditors of the Company who are appointed for a period of five years i.e., to hold office from the conclusion of the Fifty Eighth Annual General Meeting held in 2017 till the conclusion of the Sixty third Annual General Meeting of the Company, to be held in the calendar year 2022.

The observation made in the Auditor's Report are self-explanatory and therefore, do not call for any further comments under Section 134(3)(f) of the Act.

Cost Auditors:
Pursuant to provisions of Section 148 of the Act read with the Companies (Cost Records and Audit) Amendment Rules, 2014, the Board of Directors of your Company have on the recommendation of the Audit Committee, appointed M/s. R. Nanabhoy & Co., Cost Accountants, Mumbai as Cost Auditors, to conduct the cost audit of your Company for the financial year ending 31st March, 2021, at a remuneration as mentioned in the Notice convening the Annual General Meeting. As required under the Act, the remuneration payable to the cost auditor is required to be placed before the Members in a general meeting for their ratification. Accordingly, a resolution seeking member's ratification for the remuneration payable to Cost Auditors forms part of the Notice of the ensuing Annual General Meeting.

Secretarial Auditors:
Pursuant to provisions of Section 204 of the Act read with the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014, the Company has appointed M/s. BNP & Associates, Company Secretaries, Mumbai as Secretarial Auditor for conducting the Secretarial Audit of your Company for the financial year ended 31st March, 2020. The Report of the Secretarial Auditors is annexed herewith as **Annexure-VA** to the Annual Report.

As per Regulation 24A of the Listing Regulations, material unlisted subsidiaries of a listed entity incorporated in India is required to annex a Secretarial Audit Report issued by a Company Secretary in practice.

In compliance with the above requirement, the Secretarial Audit Report of Utkal Alumina International Limited, a material subsidiary of your Company, is given in **Annexure-VB** to the Annual Report.

The Secretarial Audit Reports do not contain any qualification, reservation or adverse remark.

ENVIRONMENT PROTECTION AND POLLUTION CONTROL:

Your Company is committed to sustainable development. A detailed report of the Company's initiatives and commitment to environment conservation is part of Sustainability & Business Responsibility Report forming part of the Annual Report.

PARTICULARS OF LOANS, GUARANTEES AND INVESTMENTS:

Details of Loans, Guarantee and Investments covered under the provisions of Section 186 of the Act read with Companies (Meetings of Board and its Powers) Rules, 2014 are given in the notes to Financial Statements of the Annual Report.

CORPORATE SOCIAL RESPONSIBILITY:

In terms of the provisions of Section 135 of the Act read with Companies (Corporate Social Responsibility Policy) Rules, 2014, the Board of Directors of your Company has constituted a Corporate Social Responsibility ("CSR") Committee which is chaired by Mrs. Rajashree Birla. The other Members of the Committee for the financial year ending 31st March, 2020 were Mr. Y. P. Dandiwala, Independent Director, Mr. A. K. Agarwala, Non-Executive Director, Mr. Satish Pai: Managing Director and Mr. D. Bhattacharya: Non-Executive Director. Dr. Pragnya Ram, Group Executive President, Corporate Communications & CSR is a permanent invitee to the Committee.

Your Company also has in place a CSR Policy and the same is available on your Company's website viz. www.hindalco.com. The Committee recommends to the Board activities to be undertaken during the year.

Your Company is a caring corporate citizen and lays significant emphasis on development of the communities around which it operates. Your Company has identified several projects relating to Social Empowerment & Welfare, Infrastructure Development, Sustainable Livelihood, Health Care and Education during the year and initiated various activities in neighbouring villages around plant locations. During the Financial Year 2019-20, the Company has spent ₹ 38.53 Crores under Section 135 of the Act on CSR activities, which represent 2.05 % of average net profits of the Company for last three financial years.

The Annual Report on CSR activities is attached as **Annexure-VI** to the Annual Report.

RISK MANAGEMENT:

Pursuant to the Regulation 21 of the Listing Regulations of the Company has constituted Risk Management Committee, which is mandated to review the risk management plan/ process of your company.

Risk evaluation and management is an ongoing process within the organization. Your Company has comprehensive risk management policy which is periodically reviewed by the Risk Management Committee.

CONTRACTS AND ARRANGEMENTS WITH RELATED PARTIES:

During the financial year, your Company entered into related party transactions which were on arm's length basis and in the ordinary course of business. There are no material transactions with any related party as defined under Section 188 of the Act read with Companies (Meetings of Board and its Powers) Rules, 2014 and Listing Regulations. All related party transactions have been approved by the Audit Committee of your Company.

The policy on Related Party Transactions as approved by the Audit Committee and the Board is available on your Company's website viz. www.hindalco.com.

EXTRACT OF ANNUAL RETURN:

In terms of the provisions of Section 92 (3) of the Act read with the Companies (Management and Administration) Rules, 2014, an extract of the Annual Return of your Company for the financial year ended 31st March, 2020 is given in **Annexure-VII** to the Annual Report.

BUSINESS RESPONSIBILITY REPORT:

As per Regulation 34 (2)(f) of Listing Regulations a separate section of Business Responsibility Report forms part of the Annual Report.

INTERNAL CONTROL SYSTEM AND THEIR ADEQUACY:

Your Company has an Internal Control System, commensurate with the size, scale and complexity of its operations. The scope and authority of the Internal Audit (IA) function is defined by the Audit Committee.

The IA department monitors and evaluates the efficacy and adequacy of internal control system in the Company, its

DIRECTORS' REPORT

compliance with operating systems, accounting procedures and policies at all locations of the Company.

Based on the report of internal auditors, the process owners undertake corrective action in their respective areas and thereby strengthen the controls. Significant audit observations and corrective actions thereon are presented to the Audit Committee of the Board.

INTERNAL FINANCIAL CONTROL:

Your directors confirm having laid down internal financial controls and that such internal financial controls are adequate and were operating effectively.

SUBSIDIARY, JOINT VENTURES OR ASSOCIATE COMPANIES:

The financial statements of your Company's subsidiaries and related information have been placed on the website of your Company viz. www.hindalco.com.

In accordance with the provisions of the Section 129 (3) of the Act, read with the Companies (Accounts) Rules, 2014, a report on the performance and financial position of each of the subsidiaries, associates and Joint Venture is attached as **Annexure-VIII** to the Annual Report.

The names of Companies which have become or ceased to be subsidiaries, Joint Ventures and associates are also provided in the aforesaid statement.

OTHER DISCLOSURES:

- There were no material changes and commitments affecting the financial position of your Company between end of financial year and the date of report.
- Your Company has not issued any shares with differential voting.
- There was no revision in the financial statements.
- Your Company has not issued any sweat equity shares.
- Mr. Satish Pai is a director on the Board of Novelis Inc, wholly owned subsidiary. He is in receipt of annual fee of US$ 1,50,000 in the calendar year 2019 . Mr. Praveen Kumar Maheshwari: Whole Time Director and Chief Financial Officer has not received any commission/ Remuneration from your Company's subsidiaries.
- There is no change in the nature of business.
- During the year under review, your Company has not accepted any fixed deposits from the public falling under Section 73 of the Act read with the Companies (Acceptance of Deposits) Rules, 2014. Thus, as on 31st March, 2020, there were no deposits which were unpaid or unclaimed and due for repayment.
- There are no significant and material orders passed by the regulators or courts or tribunals impacting the going concern status and company's operations in future.
- As per the requirement of the Sexual Harassment of Women at the Workplace (Prevention, Prohibition and Redressal) Act, 2013, your Company has complied with provisions relating to the constitution of Internal Complaint Committee under POSH.
- Directors of your Company hereby state and confirm that the Company has complied with all the applicable Secretarial Standards.

APPRECIATION:

Your Directors place on record their sincere appreciation for the assistance and guidance provided by the Honourable Ministers, Secretaries and other officials of the Ministry of Mines, Ministry of Coal, the Ministry of Chemicals and Fertilizers and various State Governments. Your directors thank the Financial Institutions and Banks associated with your Company for their support as well.

Your Company's employees are instrumental in your Company scaling new heights, year after year. Their commitment and contribution is deeply acknowledged.

Your involvement as Shareholders is greatly valued. Your directors look forward to your continuing support.

For and on behalf of the Board

Satish Pai	**K.N. Bhandari**
Managing Director	Independent Director
DIN:06646758	DIN:00026078

Place : Mumbai
Dated : 14th August, 2020

ANNEXURE-I

Dividend Distribution Policy

1. Introduction

1.1. As per the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, as amended, the Company is required to formulate and disclose its Dividend Distribution Policy. Accordingly the Board of Directors of the Company ('the Board') has approved this Dividend Distribution Policy for the Company at its meeting held on 13th February, 2017.

1.2. The objective of this policy is to provide clarity to stakeholders on the dividend distribution framework to be adopted by the Company. The Board of Directors shall recommend dividend in compliance with this policy, the provisions of the Companies Act, 2013 and Rules made thereunder and other applicable legal provisions.

2. Target Dividend Payout

2.1. Dividend will be declared out of the current year's Profit after Tax of the Company.

2.2. Only in exceptional circumstances including but not limited to loss after tax in any particular financial year, the Board may consider utilising retained earnings for declaration of dividends, subject to applicable legal provisions.

2.3. 'Other Comprehensive Income' (as per applicable Accounting Standards) which mainly comprises of unrealized gains/losses, will not be considered for the purpose of declaration of dividend.

2.4. The Board will endeavor to achieve a dividend payout ratio (gross of dividend distribution tax) in the range of 10 % to 30% of the Standalone Profit after Tax, net of dividend payout to preference shareholders, if any.

3. Factors to be Considered for Dividend Payout

The Board will consider various internal and external factors, including but not limited to the following before making any recommendation for dividends:

- Stability of earnings
- Cash flow position from operations
- Future capital expenditure, inorganic growth plans and reinvestment opportunities
- Industry outlook and stage of business cycle for underlying businesses
- Leverage profile and capital adequacy metrics
- Overall economic / regulatory environment
- Contingent liabilities
- Past dividend trends
- Buyback of shares or any such alternate profit distribution measure
- Any other contingency plans

4. General

Retained earnings will be used for the Company's growth plans, working capital requirements, debt repayments and other contingencies.

5. Review

This policy would be subject to revision / amendment on a periodic basis as may be necessary.

6. Disclosure

This policy (as amended from time to time) will be available on the company's website and in the Annual Report.

ANNEXURE-II

Disclosure of particulars with respect to Conservation of Energy, Technology Absorption and Foreign Exchange Earnings and Outgo as prescribed under Rule 8(3) of the Companies (Accounts) Rules, 2014

A. CONSERVATION OF ENERGY

a. The steps taken on Conservation of Energy

i. Periodic Energy Audit conducted in all units as per schedule.

ii. During the year, M&V (monitoring & verification) audit, as part of BEE PAT (Perform, Achieve & Trade) scheme were conducted in six units (incl UAIL). Actual savings achieved is significantly higher than the target set by BEE and ESCerts (Energy Savings Certificates) recommended for issuance against the excess savings.

iii. Facilitating and coaching young professionals for BEE Energy Manager/Auditor examination. In addition to the existing Energy Managers/ Auditors across all units, additional 15 professionals qualified during 2019-20.

iv. During the year, three large units were Certified ISO 50001.

v. New Generation Economiser, replacement of pump seals and various actions to reduce steam consumption in Aluminium Refinery.

vi. Reduction in Aluminium Smelter energy consumption through phased implementation of copper insert collector bar, clamp modification, Step stub Anode, pot noise control etc.

vii. Power Plant efficiency improvement by improving Condenser Vacuum through improvised tube cleaning, TG overhauling, duct modification through CFD study etc.

viii. Replacement of Cooling Tower Fan blade with E-Glass Epoxy FRP blade.

ix. Installation of fan less Cooling Tower.

x. Auxiliary power reduction through automation & process optimization.

xi. Rationalization of motor, pump & fan capacities and replacement of inefficient pumps & motors with high efficiency pumps & motors.

xii. Energy efficient & corrosion resistant coating in pumps.

xiii. Revamping of Preheating/Annealing Furnaces.

xiv. Phased replaced of conventional light with energy efficient LED Light.

xv. Installation of VFD in variable load application.

xvi. Compressed Air system efficiency improvement through replacement of inefficient compressors, arresting leakages, process optimization etc.

xvii. Power Factor improvement.

b. Steps taken by the Company for utilising alternate sources of energy.

i. Solar PV Power Plant for captive consumption, installed at three locations totaling 13.5 MWp (including UAIL) during the year.

ii. Hydo Power Plant (under JV) of 4.0 MW commissioned during the year for captive consumption.

iii. Contract has been finalized and project initiated for Solar PV Power Plant at three location totaling 49.0 MWp.

iv. Feasibility study is underway for additional 7.0 MWp Solar PV Power Plant.

c. The capital investment on energy conservation equipment & projects.

The Capital investment on Energy conservation equipment & projects for the year was INR 115 crore.

B. TECHNOLOGY ABSORPTION:

A. Efforts made towards technology absorption:

i. Belagavi completed the 50 days trial of Humate removal Chemical (N-85531) during the year for process liquor purity improvement. Results being encouraging, extended trial is planned at Belagavi.

ii. Successful trial of scale inhibitor (Max-HT) was taken in Live Steam Heaters in Digestion section at Belagavi. The same has been established now as a regular Chemical.

iii. Advance Process Control (APC) - A statistical model of the Rotary kiln-2 for calcination of alumina is developed using Historical data analysis to predict product quality parameters and for on-line optimization and

advanced process control of rotary calciner. A simulation tool is developed which will act as a virtual kiln. The model is hooked up to fetch the real time data from DCS and can predict the crucial product quality parameter.

iv. IPF - To transform existing manufacturing facilities into smart facility by introducing real time intelligence and decision-making system for all stakeholders and to create single digital manufacturing platform for Belagavi plant, IOT (Internet of Things) based IPF (Intelligent Plant Framework) implemented in Grinding and Digester section. This provides Real time monitoring of: 1. Machine performance and variations, 2. Quality variations, 3. Various in-process time losses. This platform will now be extended to entire Belagavi plant.

v. Specific Areas in which R&D has been carried out during the year at HIC Belagavi include:

   a) Process ability studies on different types of bauxites and its blends, in order to find out an optimum process parameters of Bayer plant leading to the improvement of efficiency of the plant.

   b) Process development to reduce colloidal iron from the Bayer liquor, leading to the improvement of quality of the hydrate.

   c) Development of a high-polishing grade alumina.

   d) Development of a normal soda super-ground alumina for high-end ceramic application.

   e) Development of nano-hydrate for fibre coating and fire retardant filler for different polymeric applications.

   f) Development of siloxane coated superfine, as well as “milled & microfined” hydrates for improving the properties of the polymeric products.

   g) Development of environment friendly green cold tamping paste for smelting and other metal industries.

   h) Research on the usage of bauxite residue for road construction.

vi. Following Technology development efforts has been undertaken at Mahan Smelter:

   a) Digitization of Laboratory Data Management System for Raw Material & Process in Carbon Plant.

   b) Modification of teeth segment replacement of secondary crusher.

   c) Automated Crushing & Feeding system of Solid Pitch.

   d) Additional Magnetic Head pulley at secondary crusher inlet to improve anode quality.

   e) Increase in Anode slot height by 10 mm and supply of unidirectional slot pattern in Baked Anodes for improvement in DC power consumption at Pot Room.

   f) Cast House Server Virtualization for enhanced reliability and efficiency in Cast House and its connectivity has been established with ALPSYS, Lab., Renukoot and Mumbai.

   g) IBA High speed Trending software for big data analysis of process parameters & BDs in cast house i.e Ingot & Sow Casting, WRM, CHTAs line through IBA Software.

   h) Smart Earth tester installation in HFO area for tanker earthing.

   i) Digitization the in house report generation for NET & Gross Weight between the Potroom & Cast house.

   j) Robotic technology used for additional 3rd skimming cycle in Sow Caster to eliminated manual skimming being done by operators to Improve Sow Quality system/safety.

   k) DG (320 KVA) set commissioning to make power available in case of power outage/blackout for molten metal pouring in furnace & lighting.

   l) Cast House - Stack emission monitoring for Cast house furnaces.

   m) Installation of HFTR & Micro pulse in Unit-6&3 for SPM Control at Power Plant.

   n) Installation of De-Nox burner in Unit-3 for Nox control at Power Plant.

vii. Technology absorption efforts at Utkal Alumina during FY20 were as follows:

   a. 5MW Solar Power plant installed and commissioned from Jan-2020.

   b. New alternate flocculant introduced in lead Deep cone washers (DCW) in place of existing flocculant. Plant trial was conducted in the DCWs after successful laboratory trials. Dosages were optimized in subsequent trials.

ANNEXURE-II

c. For enhancing cooling capacity in precipitation area in context of maintaining liquor productivity at design level with higher plant operating factor additional heat transfer area was added in Plate Heat Exchangers (PHEs). The job is taken up in phased manner and already additional plates were installed in two nos. PHE's.

d. R&D work has been taken up with IIT Mumbai for utilisation of bauxite residue in road making by geo-polymerization (25 meter Road made with the mixture for trial).

e. Study conducted with GAMI (China) team for dewatering of stored wet mud in Red Mud storage - A.

f. Through process control optimization sustained designed level of liquor productivity of 90.1 g/l, which is among the best in the world for identical technology in Alumina Refinery. Even with higher level of production, consistent production quality was maintained.

g. Utkal achieved lowest energy consumption through various energy conservation initiatives, which is among the best in the world for identical technology in Alumina Refinery.

h. Conducted Bio-diversity study as a pioneering initiative under sustainability drive through IUCN – 1st Alumina refinery in HINDALCO.

i. Increased Boiler efficiency in CGPP through HMPS installation and improved combustion control system.

viii. Technology absorption efforts at Hirakud Smelter included the following during the year:

a) Use of Copper insert Collector bars for the pots that were relined following the schedule of lining replacement. This project is based on indigenous technology with design development by ABSTC, Aditya Birla Science & Technology Centre, a premier research facility of Aditya Birla Group. This technology was also adopted at Mahan and Aditya Smelters for pots taken out for relining.

b) Introduction of Cathode Collector Bar sealing with Cast Iron for specific energy reduction.

c) Modification of Yoke dimensions to minimize energy losses thereby reducing energy consumption.

ix. Specific areas in which R&D has been carried out at Renukoot include the following:

- Resource Conservation e.g. Developed In-house Heat treatment / surface treatment of bigger sizes dia AISI H13 grade extrusion dies for Press # 7 & 8 better and cost effective metallurgical process, yield improvement in die service life and increasing productivity.
- New products development e.g. Internal Quality Evaluation of 9 & 13.5"dia of AA7075 & ALU 6082 Wagg Stuff critical casting of Logs & Billets for VSSC & Export USA etc.
- New products development e.g. special hydrates, special alumina, and new applications for refractory, wear resistant media, electrical insulation and ceramic grades etc.
- Optimization of process parameters for efficiency e.g. Condition monitoring & Health Assessment of chimney, Caustic and Oil tank in-service condition of entire plant by various NDT techniques etc.
- Optimization of process parameters for efficiency e.g. Heat Treatment of extrusion dies by Vacuum Heat Treatment controlled process etc.
- Participation in proficiency testing / inter laboratory comparisons programs.
- Clean Development Mechanism e.g. Improvement in salt bath to vacuum heat treatment process enhance capacity along-with state of the art technology and measurement tools.
- Solid waste utilization to better environment and work place.
- Optimization of process parameters for efficiency e.g. Alu-alu blister application, partially annealed Al-Mn series product for exports. Litho recovery improvement and LPG Cylinder application and clad brazing sheet.

- Resource Conservation e.g. Prediction and optimization of bauxite of different source and grades, better and cost effective additives for Bayer's process, yield improvement in precipitation process, grease and lubrication development for use in alloy production.
- Energy conservation in Heat treatment practices of aluminium alloys and also Carbon anode making plant process.

x. Technology absorption activities at Aditya Aluminium included the following:
- Installation of AICM – Alloy Ingot Casting Machine & ICM facility for new products.
- Copper inserted Collector Bar Pots in Potline were introduced in a phased manner to reduce the specific DC energy consumption.
- "Intelligent Tapping" Project was successfully completed ---Secure hot metal tapping to save pot line from the eventuality of open circuit with real time PTA position monitoring and decision making.
- New Weigh Bridge for APAR- Automating weighing and on line data transfer to Cast-house level-2 with integration to Oracle system for auto invoicing.
- Erection and commissioning of Tertiary crusher in GAP for quality improvement.
- Modified teeth segment replacement of secondary crusher resulting butt size reduction from 80 mm to 65 mm.
- Installation of magnetic roller separator in BRS silo 2 dust collector to remove Fe from bath dust roller and in shot blast for recovery of spilled/lost steel shots.
- Installation of Automated boom barriers installation in CRS Aditya, CRS Hirakud and anode assembly storage.
- Remote I/O based control systems in Green anode plant, Carbon.
- Installation of user interface indication in manual anode feeding, bath charging, butt charging, anode assembly storage.
- Use of Flue wall Building Machine for the first time to build refractory Flue walls of Anode Baking Furnace.
- Installation of in house developed baked anode slot cleaning facility to ensure proper cleaning of packing coke materials from anode slot.
- Facility developed for arrangement of unidirectional slot pattern in Baked Anodes for improvement in DC power consumption at Pot Room.
- Packing coke screening facility developed in Anode baking Furnace to avoid fines deposition in Flue walls.
- New aluminized sheet developed and tested in ABF as a replacement to Polythene sheet with improved life in terms of repeated use. Polythene sheet is a daily consumable of ABF Operation.
- Online & real-time digital integration of system to reduce TAT (Turn Around Time) of Metal Ladles between Potroom and Cast House. (In-house development).

B. Benefits derived like product improvement, cost reduction, product development or import substitution

i. Belagavi's Humate removal trials has helped in realizing improved product characteristics such as hydrate brightness etc. Also regular use of scale inhibitor has yielded in increased life of live steam heater and also decreased steam consumption.

ii. Introduction of APC in Belagavi Calciner has facilitated faster decision making and has lead to steady kiln operation thereby give energy benefits and quality control. Online SMS for critical Quality LAB Parameters of Calciners #1,2,3,4 results in quick decision making for the Process control is now feasible.

iii. Digitization Initiative at Belagavi- Online condition monitoring of Bauxite ball mill to enhance reliability of equipment is now realized.

iv. Work at HIC Belagavi has yielded following benefits, especially for Belagavi Unit:
- Improvement of plant operating processes and efficiency.
- Increase in sales realization in the value added products, leading to the improvement in business profitability.
- Enhancement of customer satisfaction.
- Increase in market share in preferred applications.
- Utilization of waste / recovering of values from the wastes.
- Development of environmental friendly products, leading to a more sustainable business.
- Energy reduction.

ANNEXURE-II

v. Benefits of the technological developments at Mahan has accrued following benefits:
   - New product development, i.e. High purity Aluminium P0303 & P0404 Sows.
   - Use of granulated flux for efficient furnace performance.
   - In house modifications in regenerative burners components and refractory for cost reduction.
   - Improved Environmental performance at Power Plants, Automation levels & Process Control at Smelters and MIS at Smelters.

vi. Benefits accrued at Utkal from their efforts include:
   - Entry into the space of Green Energy, non- fossil fuel based.
   - Improved process control, cost reduction thru alternative flocculant usages.
   - Improved liquor productivity, plant reliability and reduced energy consumption.
   - Waste utilization, through use of bauxite residue.

vii. Significant gains on DC energy consumption has been realized on pots (Electrolytic Cells used for aluminium smelting) which have had their Collectors bar replaced with those having Copper inserts. Gains have been realized at all smelters which implemented this project.

viii. Benefits derived as a result of technology related work at Renukoot include:
   - Developed new products along-with manufacturing process development and application e.g. extrude products of various sections for Industrial machineries, Aerospace, Aviation, Defence & Automobiles sectors.
   - Developed new products along-with manufacturing process development and application e.g. rolled products of AA7075 & 6068 for Bus Bars, Light weight Re-railing equipments, Tractor Pump Bodies, Industrial machineries, Aerospace, & Hydraulic Re-railing sectors.
   - Gained entry into critical and strategic sector application market.
   - Energy conservation efforts have resulted into cost minimization, improvement in operational efficiency and productivity and also production.
   - Technological up-gradation with thrust on energy reduction and capacity enhancement.
   - Increased application of solid wastes e.g. Fly ash, Carbon dust etc.
   - Participation in PT programs have resulted into increased confidence level in our test capabilities.

ix. Benefits accrued as a result of efforts at Aditya Smelter are as follows:

New Product Development - Alloy Ingot A356.2 (Trial lot); Premium P0404 grade SOW; New metal grade P0507.

Import Substitution-

- Rexroth proportional valve replaced with parker proportional valve installed & taken in line in GAP.
- Solios pulsing card replaced with HART make pulsing injector card in ABF.
- Indigenous load cell controller in all FTA (Old: HD Muller, New: Vishay Nobel).
- Indigenous load cell controller in Hooking -Unhooking system in ARS (Old: SENSY, New: Vishay Nobel).
- ABF pulsing injector coil replaced with indigenous coil (Solios to Tara-Maa).
- Redundant laser senor implementation in rodding bench for detection of anode presence in ARS.
- Redundant pneumatic system in shot blasting machine in ARS.
- In house development of vacuum pneumatic panel in GAP as an alternative to Solios.
- Replacement of VC puller rope drawn encoder ASM to SICK.
- Controlling High Butt by installation of laser in auto carbon striping to increase reliability & manpower saving.
- Inclinometer sensor installation in all tools and grab for detection of inclination of tools in all FTA.
- OEM beaters substitution (for GAP Mixer and Cooler) with increased life cycle.
- Development of Beaters from different vendor other than OEM – Cost Saving.

- Development of Cage Pivot from different vendor other than OEM – Cost Saving.
- Development of Foot bellow assembly from Local vendor other than OEM – Cost Saving.
- Indigenized development of FTA filling pipe bellow from local vendor other than OEM – Cost Saving.
- Development & installation of Heavy duty cylinder for Finishing Machine: Heavy duty cylinder developed locally which has increased the cylinder life from 20-30 days to more than 6 months.
- Development of P&F Chains of Anode Rodding Shop.
- Indigenous development of P&F trolley rollers.
- Indigenous development of Heat exchanger.

C. In case of imported technology (imported during the last three years reckoned from the beginning of the financial year)-

Technology Imported for	Year of Import	Has Technology been fully absorbed	If not fully absorbed, areas where this has not taken place, reason thereof and future plan of action
At Aditya Aluminium: Ingot Casting Machine (To Manufacture PFA (Primary Foundary Alloy- 356.2) – Scope (includes casting/demoulding/ packaging)- packaging 2 nos ABB Robos part of the line.	2019	Hot Commissioning done on Feb'20; PAT pending due to COVID-19.	Ingot Casting Machine: Machine Line Installation Completed. Hot commissioning completed. The machine is in operation and we have currently casted about 50MT of Alloyed Ingots during trial cycles. Trials had to be stopped. Trails will resume once the COVID issue is over and will be followed by PAT (Performance Acceptance Test).
At Aditya Aluminium: Degasser: for Metal Quality (Reduction of Hydrogen inclusions)-STAS CFF: M/s Befesa (Spain).	2019	To be commissioned	CFF and Degasser is mechanically installed and ready. Trials will begin by May/June after STAS Expert visit. It was deferred due to Corona Scare.
At Aditya Aluminium: TAC (Treatment of Aluminium in Crucibles): For Reduction of Alkalis in Molten Metal.	2019	To be Commissioned	TAC Mechanical installation is in progress and will be completed by June end. Electrical cabling and Instrumentation part will be completed only after Befesa Expert Visit. We have planned commissioning by July after Befesa Expert visit.
At Aditya Aluminium: EMS (Electro Magnetic Stirrer) for Homogenous Mixing of melt in furnaces.	2019	To be commissioned	EMS installation is complete and is ready for commissioning. The commissioning started by ABB Experts but was called off in between because of Corona Scare. It will be completed on their return.

d) Expenditure Incurred on Research & Development (R&D)

The Company has spent ₹ 29 crore for Research and Development during the Financial Year 2019- 2020.

D. Foreign Exchange earnings & Out Go.

a) Activities related to exports. Exports (FOB) during the year were ₹ 11,009 crore.

b) Total Foreign Exchange used and earned.

(1) Foreign Exchange used ₹ 17,722 crore.

(2) Foreign Exchange Earned ₹ 11,009 crore.

For and on behalf of the Board

Satish Pai
Managing Director
DIN:06646758

K.N. Bhandari
Independent Director
DIN:00026078

Place : Mumbai
Dated : 14th August, 2020

ANNEXURE-III

Details pertaining to remuneration as required under Section 197(12) of the Companies Act, 2013 read with Rule 5(1) of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014

i. The percentage increase in remuneration of each Director, Chief Financial Officer and Company Secretary during the Financial year 2019-20, ratio of the remuneration of each Director to the median remuneration of the employees of the Company for the Financial year 2019-20 are as under:

Sr. No.	Name of Director/KMP	Remuneration# of Director/KMP for financial year 2019-20 (₹ in Lakhs)	% increase in Remuneration in the Financial Year 2019-20	Ratio of remuneration of each Director/ to median remuneration of employees
1	Kumar Mangalam Birla	0.00	(100.00%)	0.00
2	Rajashree Birla	109.15	809.58%	17.81
3	A.K.Agarwala	12.48	41.18%	2.04
4	Vikas Balia**	10.19	**	1.66
5	Y.P. Dandiwala	22.04	80.21%	3.60
6	K.N. Bhandari	21.05	31.73%	3.43
7	Alka Bharucha	7.91	51.24%	1.29
8	Ram Charan*	3.87	(38.47%)	0.63
9	D.Bhattacharya^	11.39	50.26%	1.86
10	Sudhir Mittal**	1.94	**	0.32
11	M.M.Bhagat *	12.07	(15.89%)	1.97
12	Girish Dave*	7.91	14.64%	1.29
13	Satish Pai	3191.05	11.13%	520.56
14	Praveen Kumar Maheshwari	626.49	46.59%	102.20
15	Anil Malik	142.65	4.12%	23.27

^ At the time of retirement, Board had approved pension of ₹ 0.335 crore per month, hence he has been paid ₹ 4.02 crore as a pension for his past services as the Managing Director.

Remuneration includes commission payable to Non-Executive Directors for the year ended 31st March, 2020 . Sitting fees paid to Directors is excluded.

** Dr. Vikas Balia (DIN:00424524) was appointed as Independent Director w.e.f. 19th July, 2019.Mr. Sudhir Mittal (DIN:08314675) was appointed as Independent Director w.e.f. 11th November, 2019.

* Mr. M M Bhagat (DIN: 00006245) has ceased to be an Independent Director w.e.f 30th August, 2019.

* Mr. Girish Dave (DIN: 00036455) has resigned as Independent Director w.e.f. 11th November, 2019.

* Mr. Ram Charan (DIN: 03464530) has resigned as Independent Director w.e.f. 14th August, 2020.

i The median remuneration of employees of the Company during the financial year was ₹ 6.13 Lacs

ii In the financial year, there was an increase of 9.27% in the median remuneration of employees

iii There were 22,477 permanent employees on the rolls of Company as on 31st March, 2020

iv Average percentage increase made in the salaries of employees other than the managerial personnel in the last financial year i.e. 2019-20 was 9.27% whereas the increase in the managerial remuneration for the same financial year was 15.72%. For the purpose of managerial personnel, Managing Director and Whole time Director are considered.

v It is hereby affirmed that the remuneration paid is as per the Remuneration Philosophy / Policy of the Company.

vi Remuneration excludes amortization of fair value of employee share based payments under IndAs 102 and provision for gratuity and leave encashment recognised on the basis of actuarial valuation.

vii During the current Financial Year, Mr. Satish Pai has been granted 264,704 Stock Options and 62,241 Restricted Stock Options (RSU's).

For and on behalf of the Board

Satish Pai
Managing Director
DIN:06646758

K.N. Bhandari
Independent Director
DIN:00026078

Place : Mumbai
Dated : 14th August, 2020

ANNEXURE-IV

Hindalco Industries Limited ('the Company') an Aditya Birla Group Company adopts/ shall adopt this Executive Remuneration Philosophy/Policy as applicable across Group Companies. This philosophy/ policy is detailed below

Aditya Birla Group: Executive Remuneration Philosophy/Policy

At the Aditya Birla Group, we expect our executive team to foster a culture of growth and entrepreneurial risk-taking. Our Executive Remuneration Philosophy/Policy supports the design of programs that align executive rewards – including incentive programs, retirement benefit programs, promotion and advancement opportunities– with the long-term success of our stakeholders.

Our business and organizational model

Our Group is a conglomerate and organized in a manner such that there is sharing of resources and infrastructure. This results in uniformity of business processes and systems thereby promoting synergies and exemplary customer experiences.

I. Objectives of the Executive Remuneration Program

Our executive remuneration program is designed to attract, retain, and reward talented executives who will contribute to our long-term success and thereby build value for our shareholders.

Our executive remuneration program is intended to:

1. Provide for monetary and non-monetary remuneration elements to our executives on a holistic basis.
2. Emphasize "Pay for Performance" by aligning incentives with business strategies to reward executives who achieve or exceed Group, business and individual goals.

II. Covered Executives

Our Executive Remuneration Philosophy/Policy applies to the following:

1. Directors of the Company.
2. Key Managerial Personnel: Chief Executive Officer and equivalent (eg: Deputy Managing Director), Chief Financial Officer and Company Secretary.
3. Senior Management : As decided by the Board.

III. Business and Talent Competitors

We benchmark our executive pay practices and levels against peer companies in similar industries, geographies and of similar size. In addition, we look at secondary reference (internal and external) benchmarks in order to ensure that pay policies and levels across the Group are broadly equitable and support the Group's global mobility objectives for executive talent. Secondary reference points bring to the table, the executive pay practices and pay levels in other markets and industries, to appreciate the differences in levels and medium of pay and build in as appropriate for decision making.

IV. Executive Pay Positioning

We aim to provide competitive remuneration opportunities to our executives by positioning target total remuneration (including perks and benefits, annual incentive pay-outs, long term incentive pay-outs at target performance) and target total cash compensation (including annual incentive pay-outs) at target performance directionally between median and top quartile of the primary talent market. We recognize the size and scope of the role and the market standing, skills and experience of incumbents while positioning our executives.

We use secondary market data only as a reference point for determining the types and amount of remuneration while principally believing that target total remuneration packages should reflect the typical cost of comparable executive talent available in the sector.

V. Executive Pay-Mix

Our executive pay-mix aims to strike the appropriate balance between key components: (i) Fixed Cash compensation (Basic Salary + Allowances) (ii) Annual Incentive Plan (iii) Long-Term Incentives (iv) Perks and Benefits

Annual Incentive Plan:

We tie annual incentive plan pay-outs of our executives to relevant financial and operational metrics achievement and their individual performance. We annually align the financial and operational metrics with priorities/ focus areas for the business.

Long-Term Incentive:

Our Long-term incentive plans incentivize stretch performance, link executive remuneration to sustained long term growth and act as a retention and reward tool.

We use stock options as the primary long-term incentive vehicles for our executives as we believe that they best align executive incentives with stockholder interests.

We grant restricted stock units as a secondary long term incentive vehicles, to motivate and retain our executives.

ANNEXURE-IV

VI. Performance Goal Setting

We aim to ensure that for both annual incentive plans and long term incentive plans, the target performance goals shall be achievable and realistic.

Threshold performance (the point at which incentive plans are paid out at their minimum, but non-zero, level) shall reflect a base-line level of performance, reflecting an estimated 90% probability of achievement.

Target performance is the expected level of performance at the beginning of the performance cycle, taking into account all known relevant facts likely to impact measured performance.

Maximum performance (the point at which the maximum plan payout is made) shall be based on an exceptional level of achievement, reflecting no more than an estimated 10% probability of achievement.

VII. Executive Benefits and Perquisites

Our executives are eligible to participate in our broad-based retirement, health and welfare, and other employee benefit plans. In addition to these broad-based plans, they are eligible for perquisites and benefits plans commensurate with their roles. These benefits are designed to encourage long-term careers with the Group.

Other Remuneration Elements

Each of our executives is subject to an employment agreement. Each such agreement generally provides for a total remuneration package for our executives including continuity of service across the Group Companies.

We limit other remuneration elements, for e.g. Change in Control (CIC) agreements, severance agreements, to instances of compelling business need or competitive rationale and generally do not provide for any tax gross-ups for our executives.

Risk and Compliance

We aim to ensure that the Group's remuneration programs do not encourage excessive risk taking. We review our remuneration programs for factors such as, remuneration mix overly weighted towards annual incentives, uncapped pay-outs, unreasonable goals or thresholds, steep pay-out cliffs at certain performance levels that may encourage short-term decisions to meet pay-out thresholds.

Claw back Clause:

In an incident of restatement of financial statements, due to fraud or non-compliance with any requirement of the Companies Act 2013 and the rules made thereafter, we shall recover from our executives, the remuneration received in excess, of what would be payable to him / her as per restatement of financial statements, pertaining to the relevant performance year.

Implementation

The Group and Business Centre of Expertise teams will assist the Nomination & Remuneration Committee in adopting, interpreting and implementing the Executive Remuneration Philosophy/Policy. These services will be established through "arm's length", agreements entered into as needs arise in the normal course of business.

ANNEXURE-VA

Form No. MR-3
SECRETARIAL AUDIT REPORT FOR THE FINANCIAL YEAR ENDED 31st MARCH 2020

[Pursuant to Section 204 (1) of the Companies Act, 2013 and Rule no. 9 of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014]

To
The Members
Hindalco Industries Limited
Ahura Centre, 1st Floor,
B Wing, Mahakali Caves Road,
Mumbai - 400093

We have conducted the Secretarial Audit of the compliance of applicable statutory provisions and the adherence to good corporate practices by HINDALCO INDUSTRIES LIMITED having CIN No. L27020MH1958PLC011238 (hereinafter called the 'Company') for the audit period covering the financial year ended on 31st March 2020 (the 'audit period'). Secretarial Audit was conducted in a manner that provided us a reasonable basis for evaluating the corporate conducts/ statutory compliances and expressing our opinion thereon.

Based on our verification of the Company's books, papers, minute books, forms and returns filed, soft copy as provided by the company and other records maintained by the Company and also the information provided by the Company, its officers, agents and authorized representatives during the conduct of Secretarial Audit; We hereby report that in our opinion, the Company has, during the audit period complied with the statutory provisions listed hereunder and also that the Company has proper Board-processes and compliance-mechanism in place to the extent, in the manner and subject to the reporting made hereinafter.

We have examined the books, papers, minute books, forms and returns filed and other records maintained by the Company for the financial year ended on 31st March, 2020 according to the provisions of:

(i) The Companies Act, 2013 (the 'Act') and the Rules made thereunder;

(ii) The Securities Contracts (Regulation) Act, 1956 and the Rules made thereunder;

(iii) The Depositories Act, 1996 and the Regulations and Bye-laws framed thereunder;

(iv) Foreign Exchange Management Act, 1999 and the Rules and Regulations made thereunder to the extent of Overseas Direct Investment and External Commercial Borrowings.

(v) The following Regulations and Guidelines prescribed under the Securities and Exchange Board of India Act, 1992;

(a) The Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeovers) Regulations, 2011;

(b) The Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 2015;

(c) The Securities and Exchange Board of India (Share Based Employee Benefits) Regulations, 2014;

(d) The Securities and Exchange Board of India (Registrars to an Issue and Share Transfer Agents) Regulations, 1993; and

(e) The Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015;

(f) The Securities and Exchange Board of India (Issue and Listing of Debt Securities) Regulations, 2008.

(vi) Other laws specifically applicable to the Company are:

(a) The Mines Act, 1952; and

(b) The Mines and Minerals (Regulation and Development) Act, 1957.

We have also examined compliance with the applicable clauses of the Secretarial Standards issued by the Institute of Company Secretaries of India during the audit period;

During the audit period, the Company has complied with the provisions of the Acts, Rules, Regulations and Bye-laws mentioned above.

During the period under review, provisions of the following regulations were not applicable to the Company:

(i) The Securities and Exchange Board of India (Delisting of Equity Shares) Regulations, 2009;

(ii) The Securities and Exchange Board of India (Buyback of Securities) Regulations, 1998; and

(iii) The Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations, 2009;

(iv) The Foreign Exchange Management Act, 1999 and the Rules and Regulations made thereunder to the extent of Foreign Direct Investment.

We further report that –

The Board of Directors of the Company is duly constituted with proper balance of Executive Directors, Non-Executive Directors and Independent Directors as on 31st March 2020 as under:

ANNEXURE-VA

I. Two Executive Directors;

II. Six Non- Executive Independent Directors; and

III. Four Non- Executive Non -Independent Directors

During the year the following changes in the composition of the Board of Directors were carried out in compliance with the provisions of the Act, Rules made thereunder and SEBI Listing Regulations:

I. Re- appointment of Following Independent Directors in the 60th Annual General meeting :
   a. Mr. Ram Charan (DIN: 03464530), w e f 30th August 2019 until 29th August 2024
   b. Mr. K. N. Bhandari (DIN:00026078), w e f 30th August 2019 until 29th August 2024

II. Appointment of Dr. Vikas Balia (DIN: 00424524) in 60th Annual General Meeting, w e f 19th July 2019 until 18th July 2024

III. Resignation of Mr. Girish Dave (DIN: 00036455), as an Independent Director, w e f 11th November 2019

IV. Appointment of Mr. Sudhir Mittal (DIN: 008314675), as an Additional Director w e f 11th November 2019 for a tenure of 5 years

V. Re-appointment of Mrs. Rajashree Birla (DIN: 00022995), as an Director, Retired by Rotation and re-appointed in the 60th Annual General Meeting held on 30th August 2019

VI. Mr. M M Bhagat (DIN:00006245), Cessation as an Director w e f 30th August, 2019

Adequate notice is given to all directors to schedule the Board Meetings, agenda and detailed notes on agenda were sent at least 7 (seven) days in advance except for one Board Meeting where consent for shorter notice was obtained from majority of the directors. System exists for seeking and obtaining further information and clarifications on the agenda items before the meeting and for meaningful participation at the meeting.

Decisions at the meetings of the Board of Directors of the Company were carried through on the basis of majority. There were no dissenting views by any member of the Board of Directors during the audit period.

We further report that there are adequate systems and processes in the Company commensurate with the size and operations of the Company to monitor and ensure compliance with applicable laws, rules, regulations and guidelines.

We further report that during the audit period, following specific event / action has occurred during the year:

1. During the audit period, the Company has allotted its equity shares under Employee Stock Option Schemes, as follows:
   i. First Quarter from 1st April, 2019 to 30th June, 2019 – 3,15,671 equity shares of ₹ 1 each.
   ii. Second Quarter from 1st July, 2019 to 30th September, 2019 –78,326 equity shares of ₹ 1/- each.
   iii. Third Quarter from 1st October, 2019 to 31st December, 2019 – 1,16,372 equity shares of ₹ 1/- each.
   iv. Fourth Quarter from 1st January, 2020 to 31st March, 2020 – 1,82,073 equity shares of ₹ 1/- each.
2. Board of Directors in their meeting on 09th August 2019, had approved the issuance of Commercial Papers for an amount not exceeding ₹ 900 Crore. Further, on 22nd November 2019, the Company allotted 18,000 securities at ₹ 900 Crore issue size, maturing on 20th February 2020 on Private Placement. Furthermore, the Company had made an application to the National Stock Exchange for approval of listing the securities.

For BNP & Associates
Company Secretaries
[Firm Regn. No. P2014MH037400]

Avinsah Bagul
FCS: 5578
ACS : 19862
UDIN: F005578B000314150

Place : Mumbai
Date : 04.06.2020

Note: This report is to be read with our letter of even date which is annexed as Annexure A and forms an integral part of this report.

ANNEXURE-A

To,

The Members,

Hindalco Industries Limited

Secretarial Audit Report of even date is to be read along with this letter.

1. The compliance of provisions of all laws, rules, regulations, standards applicable to Hindalco Industries Limited (the 'Company') is the responsibility of the management of the Company. Our examination was limited to the verification of records and procedures on test check basis for the purpose of issue of the Secretarial Audit Report.
2. Maintenance of secretarial and other records of applicable laws is the responsibility of the management of the Company. Our responsibility is to issue Secretarial Audit Report, based on the audit of the relevant records maintained and furnished to us by the Company, along with explanations where so required.
3. We have followed the audit practices and processes as were appropriate to obtain reasonable assurance about the correctness of the contents of the secretarial and other legal records, legal compliance mechanism and corporate conduct. The verification was done on test check basis to ensure that correct facts as reflected in secretarial and other records produced to us. We believe that the processes and practices we followed, provides a reasonable basis for our opinion for the purpose of issue of the Secretarial Audit Report.
4. We have not verified the correctness and appropriateness of financial records and Books of Accounts of the Company.
5. Wherever required, we have obtained the management representation about the compliance of laws, rules and regulations and major events during the audit period.
6. The Secretarial Audit Report is neither an assurance as to the future viability of the Company nor of the efficacy or effectiveness with which the management has conducted the affairs of the Company

For BNP & Associates
Company Secretaries
[Firm Regn. No. P2014MH037400]

Avinsah Bagul
FCS: 5578
ACS : 19862
UDIN: F005578B000314150

Place : Mumbai
Date : 04.06.2020

ANNEXURE-VB

Form No. MR-3

SECRETARIAL AUDIT REPORT FOR THE FINANCIAL YEAR ENDED 31st MARCH 2020

[Pursuant to section 204(1) of the Companies Act, 2013 and Rule 9 of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014]

To

The Members of

Utkal Alumina International Limited
J 6 Jayadev Vihar,
Bhubaneswar
Orissa- 751013

We have conducted the secretarial audit of the compliance of applicable statutory provisions and the adherence to good corporate practices by Utkal Alumina International Limited having CIN U13203OR1993PLC003416 (hereinafter called the 'Company') for the financial year ended on 31st March 2020 (the "audit period").

We conducted the Secretarial Audit in a manner that provided us a reasonable basis for evaluating the Company's corporate conducts/ statutory compliances and expressing our opinion thereon.

We are issuing this report based on:

(i) Our verification of the Company's books, papers, minutes books, soft copy of various records sent over mail, scanned copies of minutes of Board and Committee and statutory registers sent over mail, forms and returns filed and other records maintained by the Company;

(ii) Our observations during our visits to the Corporate office of the Company;

(iii) Compliance certificates confirming compliance with all laws applicable to the Company given by the Key Managerial Personnel / Senior Managerial Personnel of the Company and taken on record by the Board of Directors; and

(iv) Representations made, documents shown and information provided by the Company, its officers, agents and authorized representatives during our conduct of Secretarial Audit.

We hereby report that, in our opinion, during the audit period covering the financial year ended on 31st March 2020, the Company has:

(i) Complied with the statutory provisions listed hereunder; and

(ii) Board processes and compliance mechanism in place to the extent, in the manner and subject to the reporting made hereinafter.

The members are requested to read this report along with our letter of even date annexed to this report as **Annexure-A**.

1. Compliance with specific statutory provisions

We further report that:

1.1. We have examined the books, papers, minutes books, forms and returns filed and other records maintained by the Company during the year according to the applicable provisions / clauses of:

(i) The Companies Act, 2013 (the 'Act') and the Rules made thereunder;

(ii) The Depositories Act 1996 and Regulations and Bye-laws framed thereunder;

(iii) The Securities and Exchange Board of India (Registrar to Issue and Share Transfer Agents) Regulations 1993 regarding the Companies Act and dealing with Client;

(iv) The Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 2015; and

(v) Secretarial Standards issued by the Institute of Company Secretaries of India (Secretarial Standards).

1.2 During the period under review:

(i) The Company has complied with the provisions of the Act, Rules, Regulations, Guidelines and Secretarial Standards as mentioned above.

(ii) Generally complied with the applicable provisions / clauses of:

(a) The Act and Rules mentioned under paragraph 1.1 (i)

(b) The Secretarial Standards on meetings of Board of Directors (SS-1) and Secretarial Standards on General Meetings (SS-2) mentioned under paragraph 1.1 (v) above to the extent applicable to Board meetings held during the year and the 26th Annual General Meeting held on 27.09.2019. The compliance with the provisions of the Rules made under the Act with regard to the Board meetings held through video conferencing were verified based on the minutes of the meeting provided by the Company.

1.3 We are informed that, during / in respect of the year, the Company was not required to initiate any compliance related action in respect of the following laws / rules / regulations / standards and was consequently not required to maintain any books, papers, minute books or other records or file any forms/ returns thereunder:

(i) The Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeovers) Regulations, 2011;

(ii) The Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations, 2018;

(iii) The Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015;

(iv) The Securities and Exchange Board of India (Share Based Employee Benefits) Regulations, 2014;

(v) The Securities and Exchange Board of India (Issue and Listing of Debt Securities) Regulations, 2008;

(vi) The Securities and Exchange Board of India (Delisting of Equity Shares) Regulations, 2009;

(vii) The Securities and Exchange Board of India (Buyback of Securities) Regulations, 2018; and

(viii) The Foreign Exchange Management Act, 1999 and the Rules and Regulations made thereunder to the extent of Foreign Direct Investment, Overseas Direct Investment and External Commercial Borrowings.

1.4 We have also examined, on test-check basis, the relevant documents and records maintained by the Company and provided to us with respect to the following laws specifically applicable to the Company:

(i) Mines Act, 1952 and Mines Rules, 1955; and

(ii) Mines and Minerals (Development and Regulation) Act 1957 and Mineral Conservation and Development Rules, 1988.

2. Board processes:

We further report that:

2.1 The Board of Directors of the Company as on 31st March 2020 comprised of:

(i) Six Non-Executive Non-Independent Directors (including two directors i.e. Mr. Praveen Kumar Maheshwari (DIN:- 00174361) and Mr. Anil Arya Vasant (DIN:- 03310125) who were appointed as Additional Directors, by the Board of Directors and subject to the approval of Shareholders at the ensuing General Meeting).

2.2 The processes relating to the following changes in the composition of the Board of Directors and Key Managerial Personnel during the year were carried out in compliance with the provisions of the Act :

(i) Re-appointment of Mr. Nagesh Narisetty as a Chief Executive Officer of the Company for a further period of three years w.e.f. 1st August 2019 by Board of Directors.

(ii) Appointment of Mr. Alphonso Das (DIN:- 01452522) as an Additional Director by the Board of Directors of the Company w.e.f. 20th Septemebr 2019 and the same was approved by the members at 26th Annual General Meeting held on 27th September 2019. However, Mr. Das has tendered his resignation as a Director w.e.f. 27th February 2020.

(iii) Appointment of Mr. Rajesh Kumar Gupta (DIN:- 08567889) as an Additional Director by the Board of Directors of the Company w.e.f. 20th September 2019 and the same was approved by the members at 26th Annual General Meeting held on 27th September 2019.

(iv) Appointment of Mr. Indrajit Pathak (DIN:- 00194571) as an Additional Director by the Board of Directors of the Company w.e.f. 20th September 2019 and the same was approved by the members at 26th Annual General Meeting held on 27th September 2019.

(v) Mr. Madhukar Manilal Bhagat (DIN:- 00006245) resigned as the director of the Company w.e.f. 30th August 2019.

(vi) Mr. Ashok Kumar Machher (DIN:- 02797592) resigned as the director of the Company w.e.f. 20th September 2019.

(vii) Pursuant to the transfer of services of Mr. Shree Nath Mishra, Chief Financial Officer (CFO) from the Company to Hindalco Industries Limited, he resigned as the CFO of the Company w.e.f. 31st October 2019.

(viii) Mr. Sudhakar Biswal was appointed by the Board of Directors of the Company as CFO of the Company w.e.f. 31st October 2019.

(ix) Appointment of Mr. Praveen Kumar Maheshwari (DIN:- 00174361) as an

ANNEXURE-VB

Additional Director by the Board of Directors of the Company w.e.f. 31st October 2019 and the same is subject to approval of the Shareholders at ensuing General Meeting.

(x) Appointment of Mr. Anil Vasant Arya (DIN:- 03310125) as an Additional director by the Board of Directors of the Company w.e.f. 30th January 2020 and the same is subject to the approval of Shareholders at ensuing General Meeting.

2.3 Adequate notice was given to all the directors to enable them to plan their schedule for the Board meeting.

2.4 Notice of the Board meetings was sent to the directors at least seven days in advance as required under Section 173 (3) of the Act and SS-1.

2.5 Agenda and detailed notes on agenda were sent to the directors at least seven days before the Board meetings except for two meetings

2.6 Agenda and detailed notes on agenda for the following items were either circulated separately less than seven days before or at the Board meetings and consent of the Board for so circulating them was duly obtained as required under SS-1:

(i) Supplementary agenda notes and annexures in respect of unpublished price sensitive information such as audited financial statement / results, unaudited financial results and connected papers; and

(ii) Additional subjects/ information/ presentations and supplementary notes

2.7 A system exists for directors to seek and obtain further information and clarifications on the agenda items before the meeting and for meaningful participation at the meeting.

2.8 We note from the minutes verified that, at the Board meetings held during the year:

(i) Majority decisions were carried through; and

(ii) No dissenting views were expressed by any Board member on any of the subject matters discussed, that were required to be captured and recoded as part of the minutes.

3. Compliance mechanism

There are reasonably adequate systems and processes in the Company, commensurate with the size and operations, to monitor and ensure compliance with applicable laws, rules, regulations and guidelines. There is scope for further improvement in the compliance systems and processes, commensurate with the increasing statutory requirements and growth in operations.

4. Specific events / actions

a) Pursuant to an agreement dated 10th November 2000, between Orissa Mining Corporation Limited (OMCL) and Utkal Alumina International Limited (the Company), the OMCL had agreed that in consideration of it rendering the requisite services to the Company and in consideration for transferring by it to the Company of the prospective license and mining lease of Baphilimali Mines and all rights thereto, the Company was required to issue Fully Convertible Cumulative Preference Shares aggregating to ₹ 20 crores (Rupees Twenty Crores only) which would carry a rate of return of 15% p.a.

Subsequently the Company had entered into a Debenture Subscription Agreement dated 01st October 2007 with OMCL, wherein it was agreed by the Company to issue and redeem One Zero Coupon Unsecured Redeemable Non-convertible Debenture to assure the aforesaid payment of ₹ 20 Crore to OMCL and till the time Preference Shares are issued to them. Since the Company is not in a position to issue Preference Shares to OMCL, the Company had issued One Zero Coupon Unsecured Redeemable Non-convertible Debenture of ₹ 3,00,00,000/- (Rupees Three Crores only) which was redeemed on 30th September 2019. In current year also, the Company has issued another new zero One Zero Coupon Unsecured Redeemable Non-convertible Debenture and the same will be redeemed on 30th September 2020.

b) The Company has executed "Alumina Offtake Agreement" with Hindalco Industries Limited viz. Holding Company on 26th July 2010. The said agreement was terminated on mutually agreed terms between the parties on 31st March 2018.

The Company executed another "Alumina Offtake Agreement" with Hindalco Industries Limited viz. Holding Company on 16th May 2018.

For the operational convenience, the Company carried out revision in pricing terms like quality discount, offtake discount, etc. on 30th April 2019 in the said agreement and accordingly the Company executed another revised Memorandum of Undertaking for the same.

c) In respect of the expansion undertaken by the Company in the refinery for manufacturing of "Alumina" from 1.5 Million tonnes / Annum to 3.00 Million tonnes / Annum, the Ministry of Environment, Forest and Climate Change (Impact Assessment Division), Government of India, has

laid down Terms of Reference on 22nd May 2017, wherein the Company is required to earmark 2.5 % of the total project cost towards Enterprise Social Committee (ESC).

To meet the requirement of ESC, the Company requested for setting up of an Apparel manufacturing unit at Tikri, Odisha and the same was consented by Ministry of Environment, Forest and Climate Change (Impact Assessment Division), Government of India on 25.06.2018. Also to undertake the aforesaid project and other activities the Company had separately incorporated a Company, Limited by Shares under Section 8 of the Companies Act, 2013 in the name of "Utkal Alumina Social Welfare Foundation", vide certificate of incorporation issued by Registrar of Companies of Odisha on 07th January 2020.

The Company made an investment of 1,00,000 equity shares of ₹ 10 each aggregating to ₹ 10,00,000 in the aforesaid "Utkal Alumina Social Welfare Foundation" and thereby making the aforesaid "Utkal Alumina Social Welfare Foundation" (Company established under Section 8 of the Companies Act, 2013) as a Wholly Owned Subsidiary of the Company.

Venkataraman Krishnan
Associate Partner
ACS No.:- 8897/COP No.:- 12459

For BNP & Associates
Company Secretaries
[Firm Regn. No. P2014MH037400]
[PR No.:- 637 / 2019]

Place : Mumbai
Date : 27.05.2020

ANNEXURE-A

Annexure A to the Secretarial Audit Report for the financial year ended 31st March 2020

To,

The Members,
Utkal Alumina International Limited

Our Secretarial Audit Report of even date is to be read along with this letter.

1. The Company's management is responsible for maintenance of secretarial records and compliance with the provisions of corporate and other applicable laws, rules, regulations and standards. Our responsibility is to express an opinion on the secretarial records produced for our audit.
2. We have followed such audit practices and processes as we considered appropriate to obtain reasonable assurance about the correctness of the contents of the secretarial records.
3. we have considered compliance related actions taken by the company based on independent legal / professional opinion obtained as being in compliance with law.
4. We have verified the secretarial records furnished to us on a test basis to see whether the correct facts are reflected therein. We also examined the compliance procedures followed by the company on a test basis. We believe that the processes and practices we followed, provides a reasonable basis for our opinion.
5. We have not verified the correctness and appropriateness of financial records and Books of Accounts of the Bank.
6. We have obtained the management's representation about the compliance of laws, rules and regulations and happening of events ,wherever required.
7. Our Secretarial Audit Report is neither an assurance as to the future viability of the Bank nor of the efficacy or effectiveness with which the management has conducted the affairs of the Company.

Venkataraman Krishnan
Associate Partner
ACS No.:- 8897/COP No.:- 12459

For BNP & Associates
Company Secretaries
[Firm Regn. No. P2014MH037400]
[PR No.:- 637 / 2019]

Place : Mumbai
Date : 27.05.2020

ANNEXURE-VI

Annual Report on CSR Activities: 2019-20

1	A brief outline of the Company's CSR policy, including overview of projects or programs proposed to be undertaken and a reference to the web link to the CSR policy and projects or programs		To actively contribute to the social and economic development of the underserved communities, lifting the burden of poverty and helping bring in inclusive growth. In so doing, build a better, sustainable way of life for the weaker sections of society and raise the Country's Human Development Index. The projects which are identified includes Education, Health Care, Sustainable Livelihood, Infrastructure Development and Social Change. The Company's CSR policy is available on the Company's website viz. www.hindalco.com
2	Composition of the CSR Committee	:	Mrs. Rajashree Birla, Chairperson Mr. Satish Pai, Member Mr. Askaran Agarwala, Member Mr. D. Bhattacharya, Member Mr. Y.P. Dandiwala, Member Dr. Pragnya Ram, Group Executive President, CSR, Legacy Documentation & Archives. Permanent Invitee
3	Average net profit of the Company for last three financial years	:	₹1,876.54 Crores
4	Prescribed CSR Expenditure (two percent of the amount as in Item 3 above)	:	₹ 37.53 Crores
5	**Details of CSR spent during the financial year** Total amount spent for the financial year 2019-20	:	₹ 38.53 Crores
	Amount unspent (as against amount mentioned at point 4 above)	:	NIL
	Way the amount spent during the financial year	:	Details Given Below

Hindalco's CSR Report 2019-20

S. No	CSR Projects/Activities Identified	Sector in which the project is covered	Projects/Programmes; Local Area/ Others. The States/District where the project undertaken	Amount Outlay (Budget) Project/ Programme-wise (₹ in Lakh)	Amount Spent on the Project/ Programmes (₹ in Lakh)	Cumulative Expenditure up to reporting period (₹ in Lakh)	Amount Spent: Direct or through implementing agency*
1	**Preschool education** Balwadies/play schools/crèches; Strengthening Anganwadis	Education	Sonbhadra (UP); Singrauli(MP); Howrah(WB); Hazaribaug (Jharkhand); Balrampur (Chhattisgarh); Sambalpur(Odisha); Belagavi(Karnataka);	44.37	20.34	20.34	Direct/HJST
2	**School Education Program** Enrolment awareness programmes/ events; Formal schools; Education Material (Study materials, Uniform, Books etc.); Scholarship (Merit and Need based assistance) School competitions/ Best teacher award; Cultural events Quality of Education (support teachers, Improve education methods); Specialised Coaching; Exposure visits/awareness Formal schools inside campus(Company Schools) Support to Midday Meal Project	Education	Sonbhadra (UP); Singrauli(MP); Howrah(WB); Lohardaga, Ranchi (Jharkhand); Balrampur (Chhattisgarh); Sambalpur (Odisha) Belagavi (Karnataka); Kolhapur (Maharashtra);	1,294.98	1,158.43	1,158.43	Direct/HJST
3	**Education support programs:** Knowledge Centre/Library; Adult/Non Formal Education; Celebration of National days; Computer education; Reducing drop out and Continuing Education; Kasturba Gandhi Balika Vidyalaya; Career counselling	Education	Sonbhadra (UP); Singrauli(MP); Howrah(WB); Lohardaga, Daltanganj & (Jharkhand); Balrampur (Chhattisgarh); Sambalpur & Koraput (Odisha); Ernakulam(Kerala); Belagavi (Karnataka); Kolhapur & Raigad (Maharashtra); Bharuch(Gujarat)	176.33	97.11	97.11	Direct

ANNEXURE-VI

S. No	CSR Projects/Activities Identified	Sector in which the project is covered	Projects/Programmes; Local Area/ Others. The States/District where the project undertaken	Amount Outlay (Budget) Project/ Programme-wise (₹ in Lakh)	Amount Spent on the Project/ Programmes (₹ in Lakh)	Cumulative Expenditure up to reporting period (₹ in Lakh)	Amount Spent: Direct or through implementing agency*
4	**Vocational and Technical Education:** Strengthening ITI's; Skill Based Individual training Programmes	Education	Sonbhadra (UP); Ranchi, Daltanganj & Hazaribaug (Jharkhand); Raigarh & Balrampur (Chhattisgarh); Sambalpur (Odisha); Belagavi(Karnataka); Nagpur (Maharashtra)	26.90	49.15	49.15	Direct
5	**School Infrastructure:** New School Building Construction; Renovation and Maintenance of School buildings; School Sanitation & drinking Water; School Furniture & Fixtures	Education	Sonbhadra (UP); Singrauli(MP); Lohardaga, Ranchi (Jharkhand); Raigarh & Balrampur (Chhattisgarh); Sambalpur(Odisha); Belagavi (Karnataka); Kolhapur & Raigad (Maharashtra)	70.79	167.81	167.81	Direct
6	**Preventive Health Care:** Immunization; Pulse Polio Programme; Health Check up camps; Mobile Dispensary; Malaria/Diarrhoea Control Programme; School Health Check ups; Yoga and fitness classes	Health Care	Sonbhadra (UP); Singrauli(MP); Howrah(WB); Lohardaga, Ranchi, Daltanganj & Hazaribaug (Jharkhand); Raigarh & Balrampur (Chhattisgarh); Sambalpur(Odisha); Ernakulam(Keral); Belagavi(Karnataka); Nagpur, Kolhapur & Raigad (Maharashtra); Bharuch (Gujarat)	83.36	131.67	131.67	Direct/HJST
7	**Curative Health Care program:** Hospitals/ Dispensaries/ Clinics; General Health Check up camps; Specialised Health Camps; Eye Camps; Surgical Camps; Tuberculosis	Health Care	Sonbhadra (UP); Singrauli(MP); Howrah(WB); Daltanganj & Hazaribaug (Jharkhand); Balrampur (Chhattisgarh); Sambalpur & Koraput (Odisha); Belagavi(Karnataka); Kolhapur & Raigad (Maharashtra)	235.60	162.03	162.03	Direct/HJST
8	**Reproductive and Child Health:** Mother and Child Care; Adolescent Health Care; Infant and Child Health; Support to Family Planning programmes; Nutritional Programmes for mother and Child	Health Care	Sonbhadra (UP); Singrauli(MP); Howrah(WB); Daltanganj & Hazaribaug (Jharkhand); Balrampur (Chhattisgarh); Sambalpur(Odisha); Kolhapur (Maharashtra)	60.62	45.91	45.91	Direct
9	**Quality / Support Program:** Referral services; Treatment of BPL, Old age and Needy patients; HIV-AIDS Awareness; RTI/STD Awareness; Support to differently abled; Ambulance Services; Blood Donations/Grouping	Health Care	Sonbhadra (UP); Singrauli(MP); Howrah(WB); Lohardaga (Jharkhand); Balrampur (Chhattisgarh); Sambalpur (Odisha); Kolhapur(Maharashtra)	165.59	163.62	163.62	Direct/HJST
10	**Health Infrastructure:** Renovation of Health centres; Village / Community Sanitations; Individual Toilets; Repair and installation of new drinking water sources; Water purifications	Health Care	Sonbhadra (UP); Singrauli(MP); Howrah(WB); Lohardaga(Jharkhand); Balrampur (Chhattisgarh); Sambalpur (Odisha); Belagavi(Karnataka); Kolhapur(Maharashtra)	255.72	203.21	203.21	Direct/HJST
11	**Agriculture and Farm Based:** Agriculture and Horticulture trainings; Transfer of technology; Support to Demonstration Plots; Agricultural implements and inputs; Exposure Visits; Integrated Agriculture / Horticulture programmes; Soil Health and Organic farming	Environment and Sustainable Livelihood	Sonbhadra (UP); Singrauli(MP); Lohardaga, Ranchi (Jharkhand); Raigarh & Balrampur (Chhattisgarh); Sambalpur & Koraput (Odisha); Belagavi(Karnataka); Kolhapur(Maharashtra)	262.23	253.70	253.70	Direct/HJST

S. No	CSR Projects/Activities Identified	Sector in which the project is covered	Projects/Programmes; Local Area/ Others. The States/District where the project undertaken	Amount Outlay (Budget) Project/ Programme-wise (₹ in Lakh)	Amount Spent on the Project/ Programmes (₹ in Lakh)	Cumulative Expenditure up to reporting period (₹ in Lakh)	Amount Spent: Direct or through implementing agency*
12	**Animal Husbandry:** Animal Vaccination and Treatment; Breed improvement; Milk productivity improvement programmes and Trainings	Environment and Sustainable Livelihood	Sonbhadra (UP); Singrauli(MP); Balrampur (Chhattisgarh); Sambalpur, Belagavi(Karnataka); Nagpur (Maharashtra)	16.05	14.73	14.73	Direct
13	**Non farm & Skills Based Income generation Program:** Capacity Building Programmes; Rural enterprise Development and Income Generation programme(IGP) support; Support to SHGs for IGP	Environment and Sustainable Livelihood	Sonbhadra (UP); Singrauli(MP); Lohardaga, Hazaribaug (Jharkhand); Balrampur (Chhattisgarh); Sambalpur (Odisha); Belagavi(Karnataka); Kolhapur (Maharashtra)	113.21	115.03	115.03	Direct/HJST
14	**Natural Resource conservation programs & Non-conventional Energy:** Bio gas support Programme; Solar Energy Support; Other energy efficient supports; Plantations; Soil Conservation; Land development; Water Conservation and harvesting structures; Development of Common pasture land	Environment and Sustainable Livelihood	Sonbhadra (UP); Singrauli(MP); Lohardaga (Jharkhand) Raigarh & Balrampur (Chhattisgarh); Sambalpur Ernakulam (Kerala); Belagavi (Karnataka)	118.42	63.06	63.06	Direct/HJST
15	**Livelihood Infrastructure:** Construction of Check Dams; Lift Irrigation	Environment and Sustainable Livelihood	Sonbhadra (UP); Singrauli(MP); Howrah(WB); Kolhapur (Maharashtra); Sambalpur(Odisha)	46.20	75.31	75.31	Direct
16	**Rural Infrastructure development:** Construction and Repair of Community Infrastructures	Rural Development Projects	Sonbhadra (UP); Singrauli(MP); Howrah(WB); Lohardaga, Ranchi, (Jharkhand); Raigarh & Balrampur (Chhattisgarh); Sambalpur(Odisha); Belagavi(Karnataka); Kolhapur& Raigad (Maharashtra)	560.55	633.23	633.23	Direct
17	**Institutional building & strengthening:** Strengthening and Formation of Community Based Organisations/ SHGs	Social Empowerment	Sonbhadra (UP); Singrauli(MP); Howrah(WB)	16.16	23.63	23.63	Direct/HJST
18	**Support to development organizations:** Support to Old age Homes; Orphanages, etc.	Social Empowerment	Sonbhadra (UP); Sambalpur (Odisha) Belagavi (Karnataka); Raigad (Maharashtra)	3.75	152.36	152.36	Direct/HJST
19	**Social Security:** Support to Old age, Widow, physically Challenged Persons/ poor	Social Empowerment	Sonbhadra (UP); Singrauli (MP); Daltanganj (Jharkhand); Raigarh (Chhattisgarh); Sambalpur(Odisha); Nagpur & Kolhapur (Maharashtra)	16.64	35.47	35.47	Direct
20	**Awareness Programmes:** Community Awareness programmes/ Campaign against social abuse, early marriages, HIV prevention, etc.	Social Empowerment	Sonbhadra (UP); Singrauli(MP); Daltanganj (Jharkhand); Balrampur (Chhattisgarh); Belagavi(Karnataka); Raigad (Maharashtra); Bharuch (Gujarat); Sambalpur(Odisha)	10.40	36.25	36.25	Direct
21	**Social Events to minimise causes of poverty:** Support to mass marriages, widow remarriages; National days celebrations; Support with basic amenities	Social Empowerment	Sonbhadra (UP); Singrauli(MP); Lohardaga (Jharkhand); Sambalpur & Koraput (Odisha); Belagavi(Karnataka); Kolhapur & Raigad (Maharashtra)	31.44	13.04	13.04	Direct/HJST

ANNEXURE-VI

S. No	CSR Projects/Activities Identified	Sector in which the project is covered	Projects/Programmes; Local Area/ Others. The States/District where the project undertaken	Amount Outlay (Budget) Project/ Programme-wise (₹ in Lakh)	Amount Spent on the Project/ Programmes (₹ in Lakh)	Cumulative Expenditure up to reporting period (₹ in Lakh)	Amount Spent: Direct or through implementing agency*
22	**Protection and promotion of heritage/ culture/Sports:** Support to rural cultural programmes, Festivals & Melas.	Promotion of Heritage/Art and Culture/ Sports	Sonbhadra (UP); Singrauli(MP); Howrah(WB); Lohardaga(Jharkhand); Balrampur (Chhattisgarh); Sambalpur & Koraput (Odisha); Belagavi (Karnataka); Kolhapur(Maharashtra); Bharuch(Gujarat)	107.14	47.10	47.10	Direct/HJST
23	**Overheads**			99.30	191.29	191.29	Direct
24	**Total (₹ in Lakh)**			**3,815.75**	**3,853.48**	**3,853.48**	

* HJST- Hindalco Jana Seva Trust is the implementing agency in some of our projects, registered under Trust Act.

6. Reason for not spending two per cent of the average net profit of the last three financial years on CSR:

Not Applicable

RESPONSIBILITY STATEMENT

The Responsibility Statement of the Corporate Social Responsibility Committee of the Board of Directors of the Company is as indicated:

The implementation and monitoring of CSR Policy is in compliance with CSR objectives and policy of the Company.

Mr. Satish Pai
Managing Director
(DIN:06646758)

Mrs. Rajashree Birla
Chairperson, CSR Committee
(DIN: 00022995)

Date: 12th June, 2020

ANNEXURE-VII

FORM NO. MGT 9

EXTRACT OF ANNUAL RETURN AS ON THE FINANCIAL YEAR ENDED ON 31st MARCH, 2020
Pursuant to Section 92(3) of the Companies Act, 2013 and Rule 12(1) of the Companies (Management & Administration) Rules, 2014.

I. REGISTRATION & OTHER DETAILS

1	Corporate Identification Number (CIN) of the Company	L27020MH1958PLC011238
2	Registration Date	15th December, 1958
3	Name of the Company	Hindalco Industries Limited
4	Category / Sub-category of the Company	Public Limited - Limited by shares and Company having share capital
5	Address of the Registered office & contact details	Ahura Centre, 1st Floor, 'B' Wing, Mahakali Caves Road, Andheri (East), Mumbai-400 093 Tel: (91-22) 6691 7000 Fax: (91-22) 6691 7000
6	Whether listed Company Yes / No	Yes
7	Name, Address & contact details of the Registrar & Transfer Agent, if any	In House Share Transfer Agent Ahura Centre, 1st Floor, 'B' Wing, Mahakali Caves Road, Mumbai, 400 093 Contact No: 022 6691 7001

II. PRINCIPAL BUSINESS ACTIVITIES OF THE COMPANY

(All the business activities contributing 10 % or more of the total turnover of the company shall be stated)

S. No.	Name and Description of main products / services	NIC Code of the Product / service	% to total turnover of the Company
1	Aluminium and Aluminium Products	24202	49.66%
2	Copper and Copper Products	24201	37.52%

III. PARTICULARS OF HOLDING, SUBSIDIARY AND ASSOCIATE COMPANIES

Sr. No.	Name and address of the Company	CIN/GLN	Holding/ Subsidiary/ Associate	% of shares held	Applicable Section
1	Utkal Alumina International Limited J-6 Jayadev Vihar, Bhubaneswar, Odisha 751013	U13203OR1993PLC003416	Subsidiary	100.00%	2(87)(ii)
2	Utkal Alumina Social Welfare Foundation J-6 Jayadev Vihar, Bhubaneswar, Khordha, Odisha 751013	U85100OR2020NPL032448	Subsidiary	100.00%	2(87)(ii)
3	Minerals & Minerals Limited Hindalco Complex, Court Road, Lohardaga, Jharkhand 835302	U26990JH1970PLC000875	Subsidiary	100.00%	2(87)(ii)
4	Hindalco-Almex Aerospace Limited Ahura Centre, 1st Floor, 'B' Wing, Mahakali, Caves Road Andheri (East), Mumbai- 400 093	U27203MH2007PLC166651	Subsidiary	97.18%	2(87)(ii)
5	Suvas Holdings Limited Chandermukhi Building, Nariman Point, Mumbai 400021	U40300MH2000PLC128785	Subsidiary	74.00%	2(87)(ii)
6	Dahej Harbour and Infrastructure Limited Dist: Bharuch, Gujarat 392130	U45201GJ1998PLC035047	Subsidiary	100.00%	2(87)(ii)
7	Lucknow Finance Company Limited Hindalco Industries Ltd, P.O. Renukoot Sonbhadra, Uttar Pradesh 231217	U65992UP1989PLC010802	Subsidiary	100.00%	2(87)(ii)

ANNEXURE-VII

Sr. No.	Name and address of the Company	CIN/GLN	Holding/ Subsidiary/ Associate	% of shares held	Applicable Section
8	Renuka Investments & Finance Limited Hindalco Industries Ltd, P.O. Renukoot Sonbhadra, Uttar Pradesh 231217	U65910UP1994PLC017081	Subsidiary	100.00%	2(87)(ii)
9	Renukeshwar Investments & Finance Limited Hindalco Industries Ltd, P.O. Renukoot Sonbhadra, Uttar Pradesh 231217	U65910UP1994PLC017080	Subsidiary	100.00%	2(87)(ii)
10	Tubed Coal Mines Limited Ahura Centre, 1st Floor, 'B' Wing, Mahakali Caves Road Andheri (East), Mumbai- 400 093	U10100MH2007PLC174466	Subsidiary (Joint Operation)	60.00%	2(87)(ii)
11	East Coast Bauxite Mining Company Private Limited J-6 Jayadev Vihar, Bhubaneswar, Odisha 751013	U13203OR2007PTC009597	Subsidiary	74.00%	2(87)(ii)
12**	Hindalco do Brasil Industria e Comercio de Alumina Ltda Ouro Preto, State of Minas Gerais, at Avenida Américo René Gianetti, s/n, Saramenha, ZIP Code 35400-000	NA	Subsidiary	100.00%	2(87)(ii)
13**	A V Metals Inc. 79 Wellington Street West, Suite 3000, Toronto, Ontario, Canada M5K 1N2	NA	Subsidiary	100.00%	2(87)(ii)
14	A V Minerals (Netherlands) N.V. Amerika Building, Hoogoorddreef 15, 1101 BA Amsterdam (Netherlands)	NA	Subsidiary	100.00%	2(87)(ii)
15	Novelis Services (Europe) Inc. * c/o Corporation Service Company, 251 Little Falls Drive, Wilmington, New Castle County, Delware 19808 USA	NA	Subsidiary	100.00%	2(87)(ii)
16#	Novelis Inc. 231 Church Street, Mississauga, Ontario L5M 1N1, Canada	NA	Subsidiary	100.00%	2(87)(ii)
17##	Novelis (India) Infotech Ltd. Ahura Centre,1st Floor, B Wing Mahakali Caves Road, Andheri (East), Mumbai City MH 400093	U72502MH2008SLC178655	Subsidiary	100.00%	2(87)(ii)
18##	4260848 Canada Inc. 231 Church Street, Mississauga, Ontario L5M 1N1, Canada	NA	Subsidiary	100.00%	2(87)(ii)
19##	4260856 Canada Inc. 231 Church Street, Mississauga, Ontario L5M 1N1, Canada	NA	Subsidiary	100.00%	2(87)(ii)
20##	8018227 Canada Inc. 231 Church Street, Mississauga, Ontario L5M 1N1, Canada	NA	Subsidiary	100.00%	2(87)(ii)
21##	Novelis Corporation (Texas) 211 E. 7th Street, Suite 620, Austin, 78701-3218, USA	NA	Subsidiary	100.00%	2(87)(ii)
22##	Logan Aluminium Inc. (Delaware) Corporation Service Company, 251 Little Falls Drive, Wilmington, DE 19808 USA	NA	Associate (Joint Operation)	40.00%	2(87)(ii)
23##	Novelis Acquisitions LLC Corporation Service Company, 251 Little Falls Drive, Wilmington, DE 19808 USA	NA	Subsidiary	100.00%	2(87)(ii)

Sr. No.	Name and address of the Company	CIN/GLN	Holding/ Subsidiary/ Associate	% of shares held	Applicable Section
24##	Novelis Holdings Inc Corporation Service Company, 251 Little Falls Drive, Wilmington, DE 19808 USA	NA	Subsidiary	100.00%	2(87)(ii)
25##	Novelis South America Holdings LLC Corporation Service Company, 251 Little Falls Drive, Wilmington, DE 19808	NA	Subsidiary	100.00%	2(87)(ii)
26##	Novelis do Brasil Ltda Av.Das Nacoes Unidas, 12.551- 14th and 15th floor, Torre Empresarial World Trade Centre, Brooklin Novo,Cep-04578-000, Brazil	NA	Subsidiary	100.00%	2(87)(ii)
27##	Novelis Lamines France SAS Rue Blaise Pascal, Technopolis, Batiment E, 28000 Chartres, France	NA	Subsidiary	100.00%	2(87)(ii)
28##	Novelis PAE SAS 725 rue Aristide Berges, Voreppe 38340, France	NA	Subsidiary	100.00%	2(87)(ii)
29##	Novelis Aluminium Beteiligungs GmbH Hannoversche Strasse 1, Gottingen, 37075, Germany	NA	Subsidiary	100.00%	2(87)(ii)
30##	Novelis Deutschland GmbH Hannoversche Strasse 1, Gottingen 37075, Germany	NA	Subsidiary	100.00%	2(87)(ii)
31##	Novelis Sheet Ingot GmbH (Germany) Hannoverschestrasse 1, Göttingen 37075, Germany	NA	Subsidiary	100.00%	2(87)(ii)
32##	Novelis Aluminium Holding Company 25/28 North Wall Quay, Dublin 1, Ireland	NA	Subsidiary	100.00%	2(87)(ii)
33##	Novelis Italia SpA Via Vittorio Veneto No. 106, Bresso, Milan, Italy	NA	Subsidiary	100.00%	2(87)(ii)
34##	Novelis de Mexico SA de CV Integra Servicios Integrales de Negocios, S.C., Calle Lazaro Cardenas No. 206, Colonia Leones, Monterrey, Nuevo Leon, C.P., 64600, Mexico	NA	Subsidiary	100.00%	2(87)(ii)
35##	Novelis Korea Limited 250 Jeokseo-Dong, Yeongju-City, Kyungsangbuk-Do, Korea	NA	Subsidiary	100.00%	2(87)(ii)
36##	Novelis AG (Switzerland) Sternenfeldstr. 19, Kusnacht, CH-8700, Switzerland	NA	Subsidiary	100.00%	2(87)(ii)
37##	Novelis Switzerland SA Route des Laminoirs 15, Sierre, 3960 Switzerland	NA	Subsidiary	100.00%	2(87)(ii)
38##	Novelis UK Ltd. Latchford Lock Works, Thelwall Lane, Warrington, Cheshire, WA4 1NN, UK	NA	Subsidiary	100.00%	2(87)(ii)
39##	Novelis Europe Holdings Limited Latchford Lock Works, Thelwall Lane, Warrington, Cheshire, WA4 1NN, UK	NA	Subsidiary	100.00%	2(87)(ii)
40##	Novelis Services Limited Latchford Lock Works, Thelwall Lane, Warrington, Cheshire,WA4 1NN, UK	NA	Subsidiary	100.00%	2(87)(ii)

ANNEXURE-VII

Sr. No.	Name and address of the Company	CIN/GLN	Holding/ Subsidiary/ Associate	% of shares held	Applicable Section
41##	Novelis (Shanghai) Aluminium Trading Company Room 17T23, Shanghai World Financial Center, 100 Century Avenue, Pudong New Area, Shanghai, China	NA	Subsidiary	100.00%	2(87)(ii)
42##	Novelis (China) Aluminium Products Co. Ltd. No.19 Xingtang Road, Xin Bei District, Changzhou City, Jiangsu Province, China	NA	Subsidiary	100.00%	2(87)(ii)
43##	Novelis MEA Ltd (Dubai) Office No. 902, Level 9, Al Fattan Currency House, Tower, Dubai International Financial Centre, Dubai, UAE	NA	Subsidiary	100.00%	2(87)(ii)
44##	Novelis Vietnam Company Limited No. 3 VSIP II-A, Street No. 19, Vietnam-Singapore Indusrtial Park II-A, Tan Uyen District, Binh Duong Province, Vietnam	NA	Subsidiary	100.00%	2(87)(ii)
45##	Brecha Energetica Ltda Fazenda Usina Da Brecha, S/n, Município de Guaraciaba, Estado de Minas Gerais, CEP 35436-000- Brazil	NA	Subsidiary	99.99%	2(87)(ii)
46##	Novelis Services (North America) Inc Corporation Service Company, 251 Little Falls Drive, Wilmington, DE 19808 USA	NA	Subsidiary	100.00%	2(87)(ii)
47##	Global Employment Organization PAC Corporation Service Company, 251 Little Falls Drive, Wilmington, DE 19808 USA	NA	Subsidiary	100.00%	2(87)(ii)
48	Deutsche Aluminium Verpackung Recycling GMBH Postfach 10 06 64, 41490 Grevenbroich/ Aluminiumstr, Grevenbroich 41515, Germany	NA	Associate	30.00%	2(6)
49	France Aluminium Recyclage SA Rhenane Nord- RD52, Biesheim 68600, France	NA	Associate	20.00%	2(6)
50	Aluminium Norf GMBH Koblenzer Strasse 120, Neuss - Stuttgen, D-41468, Germany	NA	Associate (Joint Operation)	50.00%	2(6)
51	Aditya Birla Science and Technology Company Private Limited Aditya Birla Centre, C Wing, 1st Floor, S.K. Ahire Marg, Worli, Mumbai 400030	U74200MH2006PTC158951	Associate	49.00%	2(6)
52	Aditya Birla Renewables Subsidiary Limited A-4, Aditya Birla Centre S. K. Ahire Marg, Worli, Mumbai 400030	U40108MH2018PLC309087	Associate	26.00%	2(6)
53	Aditya Birla Renewable Utkal Limited (ABRUL) A-4, Aditya Birla Centre S. K. Ahire Marg, Worli, Mumbai 400030	U40300MH2019PLC325878	Associate	26.00%	2(6)
54	Mahan Coal Limited 489, Parihar house, Majankhurd, Majan more P.O.-Kachni, Waidhan, Distt - Singrauli Waidhan Sidhi MP 486886	U01010MP2006PLC018586	Associate (Joint Operation)	50.00%	2(6)
55	Logan Aluminium Inc. Russellville, Kentucky	NA	Associate (Joint Operation)	40.00%	2(6)
56	AluInfra Services SA, Route des Laminoirs 15, 3960 Sierre, Switzerland	NA	Associate (Joint Operation)	50.00%	2(6)

** 100% subsidiary of A V Minerals (Netherlands) N.V.

100% subsidiary of A V Metals Inc.

100% subsidiary of Novelis Inc.

IV. SHARE HOLDING PATTERN

(Equity share capital breakup as percentage of total equity)

(i) Category-wise Share Holding

Category of Shareholders	No. of Shares held at the end of the year [As on 31-March-2019]				No. of Shares held at the end of the year [As on 31-March-2020]				% Change during the year
	Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	
A. Promoters									
(1) Indian									
a) Individual/ HUF	23,98,696	–	23,98,696	0.11	23,98,696	–	23,98,696	0.11	0.00
b) Central Govt	–	–	–	–	–	–	–	–	–
c) State Govt(s)	–	–	–	–	–	–	–	–	–
d) Bodies Corp.	74,50,82,362	–	74,50,82,362	33.18	74,50,82,362	–	74,50,82,362	33.17	0.01
e) Banks / FI	–	–	–		–	–	–	–	–
f) Any other	1,63,16,130	–	1,63,16,130	0.73	1,63,16,130	_	1,63,16,130	0.73	0.00
Sub Total (A) (1)	**76,37,97,188**	**–**	**76,37,97,188**	**34.01**	**76,37,97,188**	**–**	**76,37,97,188**	**34.00**	**0.01**
(2) **Foreign**									
a) NRI Individuals	–	–	–	–	–	–	–	–	–
b) Other Individuals	–	–	–	–	–	–	–	–	–
c) Bodies Corp.	–	–	–	–	–	–	–	–	–
d) Any other	–	–	–	–	–	–	–	–	–
Sub Total (A) (2)	–	–	–	–	–	–	–	–	–
TOTAL (A)	**76,37,97,188**	**–**	**76,37,97,188**	**34.01**	**76,37,97,188**	**–**	**76,37,97,188**	**34.00**	**0.01**
B. Public Shareholding									
1. Institutions									
a) Mutual Funds	29,72,06,144	15,420	29,72,21,564	13.24	34,50,10,711	13,510	34,50,24,221	15.36	(2.12)
b) Banks / FI	57,31,524	48,550	57,80,074	0.26	74,17,357	47,700	74,65,057	0.33	(0.07)
c) Central Govt/ State Govt	24,15,954	2,87,480	27,03,434	0.12	89,41,900	2,87,480	92,29,380	0.41	(0.29)
d) Venture Capital Funds	–	–	–	–	–	–	–	–	–
e) Insurance Companies	19,64,36,757	6,080	19,64,42,837	8.75	23,76,25,609	6,080	23,76,31,689	10.58	(1.83)
f) FIIs	53,19,36,583	5,820	53,19,42,403	23.69	41,96,63,307	2,710	41,96,66,017	18.68	5.01
g) Foreign Venture Capital Funds	–	–	–	–	–	–	–	–	–
h) Others (specify)	–	–	–	–	–	–	–	–	–
Sub-total (B)(1):-	**1,03,37,26,962**	**3,63,350**	**1,03,40,90,312**	**46.05**	**1,01,86,58,884**	**3,57,480**	**1,01,90,16,364**	**45.37**	**0.69**
2. Non-Institutions									
a) Bodies Corp.	–	–	–	–	–	–	–	–	–
i) Indian	11,19,76,240	1,18,232	11,20,94,472	4.99	12,41,99,659	4,75,825	12,46,75,484	5.55	(0.56)
ii) Overseas	–	3,25,54,840	3,25,54,840	1.45	–	3,25,54,840	3,25,54,840	1.45	0.00
b) Individuals									
i) Individual shareholders holding nominal share capital upto ₹ 1 lakh	10,48,11,267	77,37,825	11,25,49,092	5.01	11,06,50,500	66,61,422	11,73,11,922	5.22	(0.21)
ii) Individual shareholders holding nominal share capital in excess of ₹ 1 lakh	1,59,35,925	6,66,061	1,66,01,986	0.74	1,46,01,972	6,66,061	1,52,68,033	11.40	(10.66)
c) Others (specify)	–	–	–	–	–	–	–	–	–
Non Resident Indians	57,40,534	12,68,823	70,09,357	0.31	60,65,392	11,55,386	72,20,778	0.32	(0.01)
Overseas Corporate Bodies	–	–	–	–	–	–	–	–	–
Foreign Nationals	1,63,159	–	1,63,159	0.01	1,45,380	–	1,45,380	0.01	0.00
Clearing Members	66,96,493	–	66,96,493	0.30	68,45,686	–	68,45,686	0.30	(0.01)
Trusts	72,27,190	–	72,27,190	0.32	95,68,145	–	95,68,145	0.43	(0.10)
Foreign Bodies - D R	–	–	–	–	–	–	–	–	–
Sub-total (B)(2):-	**25,25,50,808**	**4,23,45,781**	**29,48,96,589**	**13.13**	**27,20,76,734**	**4,15,13,534**	**31,35,90,268**	**13.96**	**(0.83)**
Total Public (B)	**1,28,62,77,770**	**4,27,09,131**	**1,32,89,86,901**	**59.18**	**1,29,07,35,618**	**4,18,71,014**	**1,33,26,06,632**	**59.33**	**(0.14)**

ANNEXURE-VII

Category of Shareholders	No. of Shares held at the end of the year [As on 31-March-2019]				No. of Shares held at the end of the year [As on 31-March-2020]				% Change during the year
	Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	
C. Shares held by Custodian for GDRs & ADRs									
Shares held by Custodian	13,81,82,847	21,000	13,82,03,847	6.15	13,52,55,558	21,000	13,52,76,558	6.02	0.13
Shares Held by Promoters	1,45,42,309	–	1,45,42,309	0.65	1,45,42,309	–	1,45,42,309	–	0.65
Sub Total(C)	**15,27,25,156**	**21,000**	**15,27,46,156**	**6.80**	**14,97,97,867**	**21,000**	**14,98,18,867**	**6.67**	**0.13**
Grand Total (A+B+C)	**2,20,28,00,114**	**4,27,30,131**	**2,24,55,30,245**	**100.00**	**2,20,43,30,673**	**12,56,55,042**	**2,24,62,22,687**	**100.00**	**0.00**

(ii) Shareholding of Promoter

Sr. No.	Shareholder's Name	Shareholding at the beginning of the year			Shareholding at the end of the year			% change in Share-holding during the year
		No. of Shares	% of total Shares of the Company	% of Shares Pledged / encumbered to total shares	No. of Shares	% of total Shares of the Company	% of Shares Pledged / encumbered to total shares	
1	IGH Holdings Private Limited	34,99,63,487	15.59	0.00	34,99,63,487	15.59	0.00	0.00
2	Turquoise Investments and Finance Private Limited	12,40,12,468	5.52	0.00	0	0.00	0.00	(5.52)
3	Trapti Trading & Investments Pvt Ltd	9,30,63,124	4.15	0.00	0	0.00	0.00	(4.15)
4	Grasim Industries Ltd	8,80,48,812	3.92	0.00	8,80,48,812	3.92	0.00	0.00
5	Pilani Investment & Ind. Corp. Ltd.	2,98,57,969	1.33	0.00	2,98,57,969	1.33	0.00	0.00
6	Umang Commercial Company Limited	2,73,30,360	1.22	0.00	2,73,30,360	1.22	0.00	0.00
7	Birla Institute of Technology and Science	2,15,83,090	0.96	0.00	2,15,83,090	0.96	0.00	0.00
8	Trustee Holding Shares Under the Scheme of Merger of HIL/IGCL/ IGFL on Behalf of Hindalco	1,63,16,130	0.73	0.00	1,63,16,130	0.73	0.00	0.00
9	Birla Group Holdings Private Limited	67,31,467	0.30	0.00	22,82,92,308	10.16	0.00	9.86
10	Kumar Mangalam Birla	8,65,740	0.04	0.00	8,65,740	0.04	0.00	0.00
11	Aditya Vikram Kumar Mangalam Birla Huf	6,48,632	0.03	0.00	6,48,632	0.03	0.00	0.00
12	Rajashree Birla	6,12,470	0.03	0.00	6,12,470	0.03	0.00	0.00
13	TGS Investment And Trade Private Limited	44,85,249	0.20	0.00	0	0.00	0.00	(0.20)
14	Vasavadatta Bajaj	1,21,319	0.01	0.00	1,21,319	0.01	0.00	0.00
15	Neerja Birla	1,14,640	0.01	0.00	1,14,640	0.01	0.00	0.00
16	Kumar Mangalam Birla F & N G of Ananyashree Birla	35,895	0.00	0.00	35,895	0.00	0.00	0.00
17	Global Holdings Private Limited	6,336	0.00	0.00	6,336	0.00	0.00	0.00
18*	PT Indo Bharat Rayon	96,33,890	0.43	0.00	96,33,890	0.43	0.00	0.00
19*	PT Sunrise Bumi Textile	30,04,167	0.13	0.00	30,04,167	0.13	0.00	0.00
20*	PT Elegant Textile Industry	19,02,752	0.08	0.00	19,02,752	0.08	0.00	0.00
21*	Surya Kiran Investments Pte Ltd.	1,500	0.00	0.00	1,500	0.00	0.00	0.00
		77,83,39,497	**34.66**	**0.00**	**77,83,39,497**	**34.65**	**0.00**	**(0.01)**

* 0.65% GDR held by Promoter Group

(iii) Change in Promoters' Shareholding (please specify, if there is no change)

Sr. No.	Particulars	Date	Reason	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
				No. of shares	% of total shares	No. of shares	% of total shares
1	Birla Group Holdings Private Limited						
	At the beginning of the year	01-04-2019		67,31,467	0.30%	67,31,467	0.30%
	Changes during the year	09-05-2019	Transferred due to Amalgamation			22,15,60,841	9.86%
	At the end of the year	31-03-2020		22,82,92,308	10.16%	22,82,92,308	10.16%
2	Turquoise Investments and Finance Private Limited						
	At the beginning of the year	01-04-2019		12,40,12,468	5.52%	12,40,12,468	5.52%
	Changes during the year	09-05-2019	Transferred due to Amalgamation	12,40,12,468	5.52%		
	At the end of the year	31-03-2020		0	0.00%	0	0.00%
3	Trapti Trading & Investments Pvt Ltd						
	At the beginning of the year	01-04-2019		9,30,63,124	4.14%	9,30,63,124	4.14%
	Changes during the year	09-05-2019	Transferred due to Amalgamation	9,30,63,124	4.14%		
	At the end of the year	31-03-2020		0	0.00%	0	0.00%
4	TGS Investment And Trade Private Limited						
	At the beginning of the year	01-04-2019		44,85,249	0.20%	44,85,249	0.20%
	Changes during the year	09-05-2019	Transferred due to Amalgamation	44,85,249	0.20%		
	At the end of the year	31-03-2020		0	0.00%	0	0.00%

(iv) Shareholding Pattern of top ten Shareholders

(Other than Directors, Promoters and Holders of GDRs and ADRs):

Sr. N0.	Name	Shareholding		Cummulative shareholding during the year (01.04.2019 to 31.03.2020)				
		No. of shares at the begining (01.04.2019 end of year (31.03.2020)	% of the Total shares of the Company	Date	Increase/ Decrease in shareholding	Reason	No. of shares	% of total shares
1	LIFE INSURANCE CORPORATION OF INDIA	170858048	7.61%	01-Apr-19			170858048	7.61%
				03-May-19	509217	Purchase	171367265	7.63%
				10-May-19	3155678	Purchase	174522943	7.77%
				17-May-19	3959704	Purchase	178482647	7.95%
				24-May-19	2603401	Purchase	181086048	8.06%
				31-May-19	2554785	Purchase	183640833	8.18%
				07-Jun-19	2310882	Purchase	185951715	8.28%
				14-Jun-19	4402737	Purchase	190354452	8.48%
				21-Jun-20	2611258	Purchase	192965710	8.59%
				30-Jun-19	2254420	Purchase	195220130	8.69%
				05-Jul-19	-44615350	Sell	150604780	6.71%
				12-Jul-19	50253068	Purchase	200857848	8.94%
				19-Jul-19	1322936	Purchase	202180784	9.00%
				26-Jul-19	4002226	Purchase	206183010	9.18%
				02-Aug-19	3088565	Purchase	209271575	9.32%
				09-Aug-19	1586473	Purchase	210858048	9.39%
				27-Dec-19	-868000	Sell	209990048	9.35%

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Sr. N0.	Name	Shareholding		Cummulative shareholding during the year (01.04.2019 to 31.03.2020)				
		No. of shares at the begining (01.04.2019 end of year (31.03.2020)	% of the Total shares of the Company	Date	Increase/ Decrease in shareholding	Reason	No. of shares	% of total shares
				31-Dec-19	-2980000	Sell	207010048	9.22%
				03-Jan-20	-2662030	Sell	204348018	9.10%
				10-Jan-20	-4949706	Sell	199398312	8.88%
				17-Jan-20	-4666000	Sell	194732312	8.67%
				24-Jan-20	-3424880	Sell	191307432	8.52%
				13-Mar-20	-1719088	Sell	189588344	8.44%
		192558344	8.57%	31-Mar-20	2970000	Purchase	192558344	8.57%
2	ICICI PRUDENTIAL EQUITY & DEBT FUND	39279831	1.75%	01-Apr-19			39279831	1.75%
				05-Apr-19	-1652285	Sell	37627546	1.68%
				26-Jul-19	344595	Purchase	37972141	1.69%
				27-Dec-19	-982438	Sell	36989703	1.65%
				31-Dec-19	-103208	Sell	36886495	1.64%
				03-Jan-20	-4060124	Sell	32826371	1.46%
				28-Feb-20	1777266	Purchase	34603637	1.54%
		34603637	1.54%	31-Mar-20			34603637	1.54%
3	FRANKLIN TEMPLETON INVESTMENT FUNDS	36014674	1.60%	01-Apr-19			36014674	1.60%
				24-May-19	-1035349	Sell	34979325	1.56%
				31-May-19	-364269	Sell	34615056	1.54%
				14-Jun-19	-327395	Sell	34287661	1.53%
				21-Jun-19	-178528	Sell	34109133	1.52%
				12-Jul-19	-291429	Sell	33817704	1.51%
				26-Jul-19	-13595	Sell	33804109	1.51%
				15-Nov-19	-657840	Sell	33146269	1.48%
				20-Dec-19	-1211657	Sell	31934612	1.42%
				27-Dec-19	-534329	Sell	31400283	1.40%
				17-Jan-20	-330625	Sell	31069658	1.38%
		31069658	1.38%	31-Mar-20			31069658	1.38%
4	ICICI PRUDENTIAL BLUECHIP FUND	29339464	1.31%	01-Apr-19			29339464	1.31%
				31-Aug-19	124819	Purchase	29464283	1.31%
		29464283	1.31%	31-Mar-20			29464283	1.31%
5	ICICI PRUDENTIAL LIFE INSURANCE COMPANY LIMITED	23285078	1.04%	01-Apr-19			23285078	1.04%
				05-Apr-19	-70473	Sell	23214605	1.03%
				12-Apr-19	4020343	Purchase	27234948	1.21%
				19-Apr-19	1469904	Purchase	28704852	1.28%
				26-Apr-19	325526	Purchase	29030378	1.29%
				03-May-19	-57276	Sell	28973102	1.29%
				10-May-19	-45882	Sell	28927220	1.29%
				17-May-19	-2641916	Sell	26285304	1.17%
				24-May-19	-1802835	Sell	24482469	1.09%
				31-May-19	-937979	Sell	23544490	1.05%
				07-Jun-19	3485	Purchase	23547975	1.05%
				14-Jun-19	4541	Purchase	23552516	1.05%
				21-Jun-19	-54950	Sell	23497566	1.05%
				30-Jun-19	-8770	Sell	23488796	1.05%
				05-Jul-19	-947901	Sell	22540895	1.00%

Sr. N0.	Name	Shareholding		Cummulative shareholding during the year (01.04.2019 to 31.03.2020)				
		No. of shares at the begining (01.04.2019 end of year (31.03.2020)	% of the Total shares of the Company	Date	Increase/ Decrease in shareholding	Reason	No. of shares	% of total shares
				12-Jul-19	633	Purchase	22541528	1.00%
				19-Jul-19	-964374	Sell	21577154	0.96%
				26-Jul-19	-169571	Sell	21407583	0.95%
				02-Aug-19	1158	Purchase	21408741	0.95%
				09-Aug-19	713736	Purchase	22122477	0.99%
				16-Aug-19	-198404	Sell	21924073	0.98%
				23-Aug-19	-52	Sell	21924021	0.98%
				30-Aug-19	-758	Sell	21923263	0.98%
				06-Sep-19	-454	Sell	21922809	0.98%
				13-Sep-19	2256	Purchase	21925065	0.98%
				20-Sep-19	-1081075	Sell	20843990	0.93%
				27-Sep-19	-464952	Sell	20379038	0.91%
				04-Oct-19	-1608289	Sell	18770749	0.84%
				11-Oct-19	184898	Purchase	18955647	0.84%
				18-Oct-19	-130704	Sell	18824943	0.84%
				25-Oct-19	-995152	Sell	17829791	0.79%
				01-Nov-19	-13080	Sell	17816711	0.79%
				08-Nov-19	-151620	Sell	17665091	0.79%
				22-Nov-19	61900	Purchase	17726991	0.79%
				29-Nov-19	554411	Purchase	18281402	0.81%
				06-Dec-19	-4425	Sell	18276977	0.81%
				13-Dec-19	-168749	Sell	18108228	0.81%
				20-Dec-19	177439	Purchase	18285667	0.81%
				27-Dec-19	152857	Purchase	18438524	0.82%
				31-Dec-19	-1535	Sell	18436989	0.82%
				03-Jan-20	-166898	Sell	18270091	0.81%
				10-Jan-20	7497307	Purchase	25767398	1.15%
				17-Jan-20	1211404	Purchase	26978802	1.20%
				24-Jan-20	-395338	Sell	26583464	1.18%
				31-Jan-20	1198963	Purchase	27782427	1.24%
				07-Feb-20	156985	Purchase	27939412	1.24%
				14-Feb-20	-2007078	Sell	25932334	1.15%
				21-Feb-20	-4000	Sell	25928334	1.15%
				28-Feb-20	6765	Purchase	25935099	1.15%
				06-Mar-20	2399	Purchase	25937498	1.16%
				13-Mar-20	368144	Purchase	26305642	1.17%
		28029419	1.25%	31-Mar-20	1723777	Purchase	28029419	1.25%
6	ICICI PRUDENTIAL MULTI-ASSET FUND	17209589	0.77%	01-Apr-19			17209589	0.77%
				24-May-17	1011534	Purchase	18221123	0.81%
				02-Aug-19	2077853	Purchase	20298976	0.90%
				05-May-19	701024	Purchase	21000000	0.94%
				12-May-19	617947	Purchase	21617947	0.96%
				19-May-19	575878	Purchase	22193825	0.99%
				26-May-19	660411	Purchase	22854236	1.02%
				02-Jun-19	137200	Purchase	22991436	1.02%
				23-Jun-19	-844201	Sell	22147235	0.99%
				30-Jun-19	430413	Purchase	22577648	1.01%
				06-Mar-20	1300502	Purchase	23878150	1.06%
		23878150	1.06%	31-Mar-20			23878150	1.06%

ANNEXURE-VII

Sr. N0.	Name	Shareholding		Cummulative shareholding during the year (01.04.2019 to 31.03.2020)				
		No. of shares at the begining (01.04.2019 end of year (31.03.2020)	% of the Total shares of the Company	Date	Increase/ Decrease in shareholding	Reason	No. of shares	% of total shares
7	LIFE INSURANCE CORPORATION OF INDIA P & GS FUND	3303664	0.15%	01-Apr-19			3303664	0.15%
				03-May-19	140000	Purchase	3443664	0.15%
				10-May-19	1375876	Purchase	4819540	0.21%
				17-May-19	1405322	Purchase	6224862	0.28%
				24-May-19	578802	Purchase	6803664	0.30%
				21-Jun-19	1279712	Purchase	8083376	0.36%
				30-Jun-19	620319	Purchase	8703695	0.39%
				05-Jul-19	898120	Purchase	9601815	0.43%
				12-Jul-19	2630600	Purchase	12232415	0.54%
				19-Jul-19	892912	Purchase	13125327	0.58%
				26-Jul-19	650741	Purchase	13776068	0.61%
				02-Aug-19	1024618	Purchase	14800686	0.66%
				09-Aug-19	1102978	Purchase	15903664	0.71%
				16-Aug-19	1585000	Purchase	17488664	0.78%
				23-Aug-19	900000	Purchase	18388664	0.82%
				30-Aug-19	803591	Purchase	19192255	0.85%
				06-Sep-19	311409	Purchase	19503664	0.87%
				13-Sep-19	475000	Purchase	19978664	0.89%
				04-Oct-19	1098000	Purchase	21076664	0.94%
				11-Oct-19	1136000	Purchase	22212664	0.99%
				18-Oct-19	520000	Purchase	22732664	1.01%
				25-Oct-19	630000	Purchase	23362664	1.04%
				12-Nov-19	200000	Purchase	23562664	1.05%
				27-Dec-19	-100000	Sell	23462664	1.04%
				31-Dec-19	-150000	Sell	23312664	1.04%
				03-Jan-20	-368000	Sell	22944664	1.02%
				10-Jan-20	-790000	Sell	22154664	0.99%
				17-Jan-20	-963253	Sell	21191411	0.94%
				24-Jan-20	-384525	Sell	20806886	0.93%
				31-Jan-20	-50000	Sell	20756886	0.92%
				06-Mar-20	869371	Purchase	21626257	0.96%
				13-Mar-20	1205000	Purchase	22831257	1.02%
		23756886	1.06%	31-Mar-20	925629	Purchase	23756886	1.06%
8	GOVERNMENT OF SINGAPORE	22931100	1.02%	01-Apr-19			22931100	1.02%
				12-Apr-19	204051	Purchase	23135151	1.03%
				03-May-19	-67560	Sell	23067591	1.03%
				10-May-19	-80502	Sell	22987089	1.02%
				17-May-19	-211914	Sell	22775175	1.01%
				24-May-19	-16223	Sell	22758952	1.01%
				31-May-19	16749	Purchase	22775701	1.01%
				07-Jun-19	-263777	Sell	22511924	1.00%
				14-Jun-19	1611283	Purchase	24123207	1.07%
				21-Jun-19	30043	Purchase	24153250	1.08%
				30-Jun-19	389111	Purchase	24542361	1.09%
				05-Jul-19	61797	Purchase	24604158	1.10%
				12-Jul-19	-1108	Sell	24603050	1.10%
				19-Jul-19	-41002	Sell	24562048	1.09%

Sr. N0.	Name	Shareholding		Cummulative shareholding during the year (01.04.2019 to 31.03.2020)				
		No. of shares at the begining (01.04.2019 end of year (31.03.2020)	% of the Total shares of the Company	Date	Increase/ Decrease in shareholding	Reason	No. of shares	% of total shares
				26-Jul-19	-61303	Sell	24500745	1.09%
				02-Aug-19	-77434	Sell	24423311	1.09%
				09-Aug-19	-131039	Sell	24292272	1.08%
				16-Aug-19	-52071	Sell	24240201	1.08%
				23-Aug-19	-91514	Sell	24148687	1.08%
				30-Aug-19	-510242	Sell	23638445	1.05%
				06-Sep-19	8600	Purchase	23647045	1.05%
				13-Sep-19	-37860	Sell	23609185	1.05%
				20-Sep-19	34932	Purchase	23644117	1.05%
				27-Sep-19	-365757	Sell	23278360	1.04%
				30-Sep-19	-9880	Sell	23268480	1.04%
				04-Oct-19	-107189	Sell	23161291	1.03%
				11-Oct-19	-7577	Sell	23153714	1.03%
				18-Oct-19	37902	Purchase	23191616	1.03%
				25-Oct-19	-127734	Sell	23063882	1.03%
				01-Nov-19	-33007	Sell	23030875	1.03%
				08-Nov-19	14910	Purchase	23045785	1.03%
				15-Nov-19	113733	Purchase	23159518	1.03%
				22-Nov-19	-4189	Sell	23155329	1.03%
				29-Nov-19	216733	Purchase	23372062	1.04%
				06-Dec-19	-789359	Sell	22582703	1.01%
				13-Dec-19	523591	Purchase	23106294	1.03%
				20-Dec-19	115969	Purchase	23222263	1.03%
				31-Dec-19	-42424	Sell	23179839	1.03%
				03-Jan-20	-182167	Sell	22997672	1.02%
				10-Jan-20	-9293	Sell	22988379	1.02%
				17-Jan-20	-115367	Sell	22873012	1.02%
				24-Jan-20	-89202	Sell	22783810	1.01%
				31-Jan-20	-22154	Sell	22761656	1.01%
				07-Feb-20	-127227	Sell	22634429	1.01%
				14-Feb-20	108989	Purchase	22743418	1.01%
				21-Feb-20	-9900	Sell	22733518	1.01%
				28-Feb-20	-1424762	Sell	21308756	0.95%
				06-Mar-20	497666	Purchase	21806422	0.97%
				13-Mar-20	-32852	Sell	21773570	0.97%
		21782130	0.97%	31-Mar-20	8560	Purchase	21782130	0.97%
9	SBI-ETF NIFTY 50	16029918	0.71%	01-Apr-19			16029918	0.71%
				05-Apr-19	123059	Purchase	16152977	0.72%
				12-Apr-19	-3439	Sell	16149538	0.72%
				19-Apr-19	-362	Sell	16149176	0.72%
				26-Apr-19	10214	Purchase	16159390	0.72%
				03-May-19	45612	Purchase	16205002	0.72%
				10-May-19	122175	Purchase	16327177	0.73%
				17-May-19	215028	Purchase	16542205	0.74%
				24-May-19	71133	Purchase	16613338	0.74%
				31-May-19	65341	Purchase	16678679	0.74%
				07-Jun-19	51766	Purchase	16730445	0.75%
				14-Jun-19	71857	Purchase	16802302	0.75%

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Sr. N0.	Name	Shareholding		Cummulative shareholding during the year (01.04.2019 to 31.03.2020)				
		No. of shares at the begining (01.04.2019 end of year (31.03.2020)	% of the Total shares of the Company	Date	Increase/ Decrease in shareholding	Reason	No. of shares	% of total shares
				21-Jun-19	83622	Purchase	16885924	0.75%
				30-Jun-19	-20096	Sell	16865828	0.75%
				05-Jul-19	139041	Purchase	17004869	0.76%
				12-Jul-19	283178	Purchase	17288047	0.77%
				19-Jul-19	215158	Purchase	17503205	0.78%
				26-Jul-19	99505	Purchase	17602710	0.78%
				02-Aug-19	141231	Purchase	17743941	0.79%
				09-Aug-19	176852	Purchase	17920793	0.80%
				16-Aug-19	98808	Purchase	18019601	0.80%
				23-Aug-19	47856	Purchase	18067457	0.80%
				30-Aug-19	59428	Purchase	18126885	0.81%
				06-Sep-19	54254	Purchase	18181139	0.81%
				13-Sep-19	48688	Purchase	18229827	0.81%
				20-Sep-19	66230	Purchase	18296057	0.81%
				27-Sep-19	-61428	Sell	18234629	0.81%
				30-Sep-19	20585	Purchase	18255214	0.81%
				04-Oct-19	46636	Purchase	18301850	0.82%
				11-Oct-19	27672	Purchase	18329522	0.82%
				18-Oct-19	132750	Purchase	18462272	0.82%
				25-Oct-19	61773	Purchase	18524045	0.82%
				01-Nov-19	140785	Purchase	18664830	0.83%
				08-Nov-19	122290	Purchase	18787120	0.84%
				15-Nov-19	111333	Purchase	18898453	0.84%
				22-Nov-19	87615	Purchase	18986068	0.85%
				29-Nov-19	72747	Purchase	19058815	0.85%
				06-Dec-19	70800	Purchase	19129615	0.85%
				13-Dec-19	76641	Purchase	19206256	0.86%
				20-Dec-19	59472	Purchase	19265728	0.86%
				27-Dec-19	7180	Purchase	19272908	0.86%
				31-Dec-19	35837	Purchase	19308745	0.86%
				03-Jan-20	47436	Purchase	19356181	0.86%
				10-Jan-20	42657	Purchase	19398838	0.86%
				17-Jan-20	35931	Purchase	19434769	0.87%
				24-Jan-20	52392	Purchase	19487161	0.87%
				31-Jan-20	31560	Purchase	19518721	0.87%
				07-Feb-20	63189	Purchase	19581910	0.87%
				14-Feb-20	46728	Purchase	19628638	0.87%
				21-Feb-20	35223	Purchase	19663861	0.88%
				28-Feb-20	345681	Purchase	20009542	0.89%
				06-Mar-20	428075	Purchase	20437617	0.91%
				13-Mar-20	215077	Purchase	20652694	0.92%
		21563700	0.96%	31-Mar-20	911006	Purchase	21563700	0.96%
10	ICICI PRUDENTIAL VALUE DISCOVERY FUND	16982829	0.76%	01-Apr-19			16982829	0.76%
		20110804	0.90%	31-Mar-20	3127975	Purchase	20110804	0.90%

(v) Shareholding of Directors and Key Managerial Personnel:

Sr. No.	Shareholding of each Directors and each Key Managerial Personnel	Date	Reason	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
				No. of shares	% of total shares	No. of shares	% of total shares
1	Name: Mr. Kumar Mangalam Birla						
	At the beginning of the year	01-04-2019		9,01,635	0.04%	9,01,635	0.04%
	Changes during the year			-			
	At the end of the year	31-03-2020		9,01,635	0.04%	9,01,635	0.04%
2	Name: Smt. Rajashree Birla						
	At the beginning of the year	01-04-2019		6,12,470	0.03%	6,12,470	0.03%
	Changes during the year	-					
	At the end of the year	31-03-2020		6,12,470	0.03%	6,12,470	0.03%
3	Name: Mr. A.K. Agarwala						
	At the beginning of the year	01-04-2019		1,16,148	0.01%	1,16,148	0.01%
	Changes during the year			-			
	At the end of the year	31-03-2020		1,16,148	0.01%	1,16,148	0.01%
4	Name: Mr. D.Bhattacharya						
	At the beginning of the year	01-04-2019		15,71,937	0.07%	15,71,937	0.07%
	Changes during the year			-			
	At the end of the year	31-03-2020		15,71,937	0.07%	15,71,937	0.07%
5	Name: Mr. K.N. Bhandari						
	At the beginning of the year	01-04-2019		5,071	0.00%	5,071	0.00%
	Changes during the year						
	At the end of the year	31-03-2020		5,071	0.00%	5,071	0.00%
6	Name: Mr. Ram Charan						
	At the beginning of the year	01-04-2019		-	0.00%	-	0.00%
	Changes during the year			-			
	At the end of the year	31-03-2020		-	0.00%	-	0.00%
7	Name: Mr. Y.P. Dandiwala						
	At the beginning of the year	01-04-2019		206	0.00%	206	0.00%
	Changes during the year			-			
	At the end of the year	31-03-2020		206	0.00%	206	0.00%
8	Name: Mrs. Alka Bharucha						
	At the beginning of the year	01-04-2019		-	0.00%	-	0.00%
	Changes during the year	-					
	At the end of the year	31-03-2020		-	0.00%	-	0.00%
9	Name: Mr. Vikas Balia						
	At the beginning of the year	01-04-2019		325	0.00%	325	0.00%
	Changes during the year	-					
	At the end of the year	31-03-2020		325	0.00%	325	0.00%
10	Name: Mr.Sudhir Mital						
	At the beginning of the year	01-04-2019		-	0.00%	0	0.00%
	Changes during the year	-					
	At the end of the year	31-03-2020		-	0.00%	0	0.00%
11	Name: Mr. Satish Pai						
	At the beginning of the year	01-04-2019		30,000	0.00%	30,000	0.00%
	Changes during the year		Exercise of stock option	3,25,653			
	At the end of the year	31-03-2020		3,55,653	0.02%	3,55,653	0.02%

ANNEXURE-VII

Sr. No.	Shareholding of each Directors and each Key Managerial Personnel	Date	Reason	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
				No. of shares	% of total shares	No. of shares	% of total shares
12	Name: Mr. Praveen Kumar Maheshwari						
	At the beginning of the year	01-04-2019		-	0.00%	-	0.00%
	Changes during the year		Exercise of stock option	1,11,297			
	At the end of the year	31-03-2020		111297	0.00%	1,11,297	0.00%
13	Name: Mr. Anil Malik						
	At the beginning of the year	01-04-2019		25,686	0.00%	25,686	0.00%
	Changes during the year		Exercise of stock option	2,000			
	At the end of the year	31-03-2020		27,686	0.00%	27,686	0.00%

* Including shares held as father and natural guardian of Ms. Ananyashree Birla. Additionally he holds 648,632 equity shares as a Karta of Aditya Vikram Kumar Mangalam Birla HUF

V. INDEBTEDNESS

Indebtedness of the Company including interest outstanding/accrued but not due for payment.

₹ in Crore

Particulars	Secured Loans excluding deposits	Unsecured Loans	Deposits	Total Indebtedness
Indebtedness at the beginning of the financial year				
i) Principal Amount (refer note 6)	15,713	3,788	-	19,501
ii) Interest due but not paid	-	-	-	-
iii) Interest accrued but not due	542	24	-	566
Total (i+ii+iii)	**16,255**	**3,812**	**-**	**20,067**
Change in Indebtedness during the financial year	-			
* Addition	1,046	9,413	-	10,459
* Reduction	-	(6,925)	-	(6,925)
Net Change	1,046	2,487	-	3,534
Indebtedness at the end of the financial year	-			
i) Principal Amount	16,782	6,269	-	23,051
ii) Interest due but not paid	-	-	-	-
iii) Interest accrued but not due	534	33	-	567
Total (i+ii+iii)	**17,316**	**6,302**	**-**	**23,618**

*including Exchange Rate Difference on Foreign Exchange Borrowings

Note:

1. Includes current maturities of long term loan
2. Includes Sales tax defferral
3. Cash Credit - Movement is not available, hence not considered for movement
4. Addition / Reduction excluding Interest payment
5. Addition/Reduction does not include unamortized fees. However, the opening and closing Principal is after adjustment of unamortized expenses.
6. Opening balance adjusted on account of transition to Ind AS 116 Leases. Lease Liabilities are not included in above table

VI. REMUNERATION OF DIRECTORS AND KEY MANAGERIAL PERSONNEL

A. Remuneration to Managing Director, Whole-time Directors and / or Manager:

₹ In Crore

Sr. No.	Particulars of Remuneration	Name of MD/WTD/ Manager		Total Amount
	Name	Mr. Satish Pai	Mr. Praveen Kumar Maheshwari	
	Designation	Managing Director	Whole time Director	
1	Gross salary			
	(a) Salary as per provisions contained in section 17(1) of the Income-tax Act, 1961	24.19	4.57	28.76
	(b) Value of perquisites u/s 17(2) Income-tax Act, 1961	6.99	1.47	8.46
	(c) Profits in lieu of salary under section 17(3) Income-tax Act, 1961	–	–	–
2	Stock Option (refer note below)	–	–	–
3	Sweat Equity	–	–	–
4	Commission	–	–	–
	- as % of profit	–	–	–
	- others, specify	–	–	–
5	Others- Employers Contribution to Provident Fund	0.71	0.14	0.85
	Employer Contribution to Superannuation Fund not included in perquisite Exemption	0.02	0.02	0.04
	COE Reimbursement	–	0.06	0.06
	Total (A)	**31.91**	**6.26**	**38.17**
	Ceiling as per the Act			62.00

Note - The perquisite value of stock options exercised by above directors is included as part of 1(b) above.

B. Remuneration to other Directors

₹ In Crore

Sr. No.	Particulars of Remuneration	Name of Directors												Total Amount
		Mr. Kumar Mangalam Birla	Smt. Rajashree Birla	Mr. A.K. Agarwala	Mr. D. Bhattacharya*	Mr. M.M. Bhagat	Mr. K.N. Bhandari	Mr. Y.P. Dandiwala	Mr. Ram. Charan	Mrs. Alka Bharucha	Mr. Girish Dave	Mr.Vikas Balia	Mr. Sudhir Mital	
1	Independent Directors													
	Fee for attending board committee meetings	–	–	–	–	0.04	0.04	0.04	0.01	0.02	0.02	0.02	0.005	0.20
	Commission	–	–	–	–	0.12	0.21	0.22	0.04	0.08	0.08	0.10	0.019	0.87
	Others, please specify	–	–	–	–	–	–	–	–	–	–	–	–	–
	Total (1)	–	–	–	–	**0.16**	**0.25**	**0.26**	**0.05**	**0.10**	**0.10**	**0.12**	**0.02**	**1.06**
2	Other Non-Executive Directors													
	Fee for attending board committee meetings	0.03	0.02	0.05	0.05	–	–	–	–	–	–	–	–	0.15
	Commission	0.00	1.09	0.12	0.11	–	–	–	–	–	–	–	–	1.32
	Others, please specify	–	–	–	–	–	–	–	–	–	–	–	–	–
	Total (2)	**0.03**	**1.11**	**0.17**	**0.16**	–	–	–	–	–	–	–	–	**1.47**
	Total (B)=(1+2)													**2.53**
	Total Managerial Remuneration (A+B)													**40.70**
	Overall Ceiling as per the Act													68.00

* In addition to above, the Board approved pension of Mr. D. Bhattacharya of ₹ 0.335 crore per month, hence he has been paid ₹ 4.02 crore as pension and ₹ 0.02 crore towards reimbursement of medical expenses for his past service as Managing Director.

ANNEXURE-VII

C. Remuneration to Key Managerial Personnel other than MD / Manager / WTD

₹ in Crore

Sr. No.	Particulars of Remuneration	Name of Key Managerial Personnel		Total Amount
	Name	Mr. Praveen Kumar Maheshwari	Mr. Anil Malik	
	Designation	CFO	CS	
1	Gross salary			
	(a) Salary as per provisions contained in section 17(1) of the Income-tax Act, 1961	4.57	1.29	5.86
	(b) Value of perquisites u/s 17(2) Income-tax Act, 1961	1.47	0.05	1.52
	(c) Profits in lieu of salary under section 17(3) Income- tax Act, 1961	–	–	–
2	Stock Option	–	–	–
3	Sweat Equity	–	–	–
4	Commission	–	–	–
	- as % of profit	–	–	–
	- others, specify	–	–	–
5	Others- Employers Contribution to Provident Fund	0.14	0.04	0.18
	Employers Contribution to Superannuation Fund not included in perquisite	0.02	0.02	0.04
	COE Reimbursement	0.06	0.03	0.09
	Total	**6.26**	**1.43**	**7.69**

VII. PENALTIES / PUNISHMENT / COMPOUNDING OF OFFENCES:

	Type	Section of the Companies Act	Brief Description	Details of Penalty / Punishment / Compounding fees imposed	Authority [RD / NCLT / COURT]	Appeal made, if any (give Details)
A.	**COMPANY**					
	Penalty Punishment Compounding	There were no penalties / punishment / compounding of offences for year ended 31st March, 2020				
B.	**DIRECTORS**					
	Penalty Punishment Compounding	There were no penalties / punishment / compounding of offences for year ended 31st March, 2020				
C.	**OTHER OFFICERS IN DEFAULT**					
	Penalty Punishment Compounding	There were no penalties / punishment / compounding of offences for year ended 31st March, 2020				

ANNEXURE-VIII

Form AOC-1

Pursuant to first proviso to sub-section (3) of Section 129 read with Rule 5 of Companies (Accounts) Rules, 2014, Statement containing salient features of the financial statement of subsidiaries/associate companies/joint ventures

Part "A" - Subsidiaries

Figures INR in Crore & Foreign Currency in Million

Sr. No.	Name of the Subsidiary Company	Country	Reporting currency	Capital	Reserves	Total Assets	Total Liabilities	Investments: Shares, Debnture, Bonds & Others	Turnover/ Revenues	Profit/ (Loss) before Tax	Provision for Tax	Profit/ (Loss) after Tax	Proposed Dividend	% of Share Holding
1	Minerals and Minerals Limited {}	India	INR	0.05	10.57	29.27	18.65	-	42.47	3.15	0.88	2.27		100
2	Renuka Investments and Finance Limited {}	India	INR	9.25	80.06	89.99	0.68	75.27	6.22	0.91	0.02	0.89		100
3	Renukeshwar Investsment and Finance Limted {}	India	INR	4.80	43.38	48.18	0.00	41.68	3.78	(1.24)	(0.11)	(1.13)		100
4	Suvas Holding Limited {}	India	INR	29.93	(1.02)	39.31	10.40	1.19	3.79	1.04	0.20	0.84		74
5	Utkal Alumina International Limited {}	India	INR	6,251.48	1,135.83	10,579.01	3,191.70	1,345.59	2,807.82	504.10	186.69	317.41		100
6	Hindalco-Almex Aerospace Limited {}	India	INR	88.56	3.97	99.63	7.10	24.20	101.29	9.79	0.96	8.84		97.18
7	Lucknow Finance Company Limited {}	India	INR	9.90	5.91	16.89	1.08	7.61	2.67	2.19	0.51	1.69		100
8	Dahej Harbour and Infrastructure Limited {}	India	INR	50.00	39.15	153.05	63.91	75.23	76.89	29.26	7.64	21.62		100
9	East Coast Bauxite Mining Co.Pvt.Ltd. {}	India	INR	0.01	(0.04)	0.01	0.04	-	-	(0.01)	-	(0.01)		74
10	Utkal Alumina Social Welfare Foundation@	India	INR	0.10	(0.01)	0.10	0.01	-	-	(0.01)	-	(0.01)		100
11	A V Minerals (Netherlands) N.V. *	Netherlands	INR	13,115.25	(1,118.36)	11,997.11	0.23	-	-	(0.75)	-	(0.75)		100
			USD	1,740.74	(148.44)	1,592.33	0.03	0.00	0.00	(0.11)	0.00	(0.11)		
12	A V Metals Inc. #*	Canada	INR		11,781.09	11,781.10	0.01	-	-	-	-	-		100
			USD	-	1,563.66	1,563.66	0.00	0.00	0.00	0.00	0.00	-		
13	Novelis Inc. ##*	Canada	INR	11,904.18	(5,013.68)	26,233.26	19,342.76	0.00	4,163.86	3,333.31	29.31	3,304.01	0.00	100
			USD	1,580.00	(665.45)	3,481.84	2,567.29	0.00	587.29	470.15	4.13	466.01	0.00	
14	4260848 Canada Inc.*	Canada	INR	924.03	(627.01)	303.22	6.20	0.00	0.00	87.97	5.19	82.78	0.00	100
			USD	122.64	(83.22)	40.25	0.82	0.00	0.00	12.41	0.73	11.68	0.00	
15	4260856 Canada Inc.*	Canada	INR	1,386.09	(951.72)	443.62	9.25	0.00	0.00	131.24	7.74	123.50	0.00	100
			USD	183.97	(126.32)	58.88	1.23	0.00	0.00	18.51	1.09	17.42	0.00	
16	Novelis South America Holdings LLC *	USA	INR	0.01	(0.01)	-	-	-	-	-	0.00	-	-	100
			USD	0.00	(0.00)	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	
17	Novelis (India) Infotech Ltd.	India	INR	1.00	1.05	2.36	0.31	-	0.06	0.27	(0.01)	0.28	-	100
18	Novelis Corporation (Texas) *	USA	INR	-	(6,660.56)	36,817.32	43,477.89	-	31,415.09	1,142.89	253.50	889.38	-	100
			USD	0.00	(884.03)	4,886.63	5,770.66	0.00	4,430.95	161.20	35.76	125.44	0.00	
19	Novelis de Mexico SA de CV *	Mexico	INR	0.05	(0.05)	-	-	-	-	-	0.00	-	-	100
			USD	0.01	(0.01)	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	
20	Novelis do Brasil Ltda. *	Brazil	INR	1,388.71	3,670.33	11,814.70	6,755.66	-	13,370.30	2,592.31	1,291.57	1,300.74	-	100
			BRL	958.53	2,533.37	8,154.86	4,662.96	0.00	7,737.05	1,500.10	747.40	752.71	0.00	

ANNEXURE-VIII

Figures INR in Crore & Foreign Currency in Million

Sr. No.	Name of the Subsidiary Company	Country	Reporting currency	Capital	Reserves	Total Assets	Total Liabilities	Investments: Shares, Debnture, Bonds & Others	Turnover/ Revenues	Profit/ (Loss) before Tax	Provision for Tax	Profit/ (Loss) after Tax	Proposed Dividend	% of Share Holding
21	Novelis Korea Limited *	Korea	INR	108.41	3,231.60	8,533.25	5,193.24	0.00	13,036.27	463.30	121.43	341.87	0.00	100
			KRW	17,536.00	5,22,740.00	13,80,329.00	8,40,053.00	0.00	21,73,599.00	77,248.00	20,246.00	57,002.00	0.00	
22	Novelis UK Ltd. *	England	INR	1,367.16	1,007.73	3,153.93	779.03	-	3,346.03	99.35	7.47	91.88	-	100
			GBP	146.10	107.69	337.03	83.25	0.00	371.20	11.02	0.83	10.19	0.00	
23	Novelis Services Limited *	England	INR	1,514.47	2,229.08	3,751.30	7.75	-	239.99	262.06	22.48	239.58	-	100
			USD	201.01	295.86	497.90	1.03	0.00	33.85	36.96	3.17	33.79	0.00	
24	Novelis Deutschland GmbH *	German	INR	1,001.67	37.07	6,865.49	5,826.75	-	21,048.22	181.79	0.00	181.79	-	100
			EUR	120.80	4.47	827.94	702.67	0.00	2,671.71	23.08	0.00	23.08	0.00	
25	Novelis Aluminium Beteiligungs GmbH *	England	INR	0.21	0.18	0.39	-	-	-	(0.00)	-	(0.00)	-	100
			EUR	0.03	0.02	0.05	-	-	-	(0.00)	-	(0.00)	-	
26	Novelis Switzerland SA *	Switzerland	INR	39.08	3,385.25	4,598.37	1,174.04	0.00	5,055.07	106.13	22.78	83.35	0.00	100
			CHF	5.00	433.07	588.26	150.19	0.00	703.06	14.76	3.17	11.59	0.00	
27	Novelis Laminés France SAS *	France	INR	25.71	26.20	54.14	2.23	-	4.71	0.20	0.11	0.09	-	100
			EUR	3.10	3.16	6.53	0.27	0.00	0.60	0.03	0.01	0.01	0.00	
28	Novelis Italia SPA *	Italy	INR	446.59	53.77	1,106.68	606.32	-	1,837.80	(26.68)	0.59	(27.27)	-	100
			EUR	53.86	6.48	133.46	73.12	0.00	233.28	(3.39)	0.07	(3.46)	0.00	
29	Novelis Aluminium Holding Company *	Ireland	INR	1,800.22	488.85	7,163.83	4,874.75	-	204.18	(6.47)	113.49	(119.96)	-	100
			EUR	217.10	58.95	863.92	587.87	0.00	25.92	(0.82)	14.41	(15.23)	0.00	
30	Novelis PAE SAS *	France	INR	33.50	93.21	222.93	96.22	-	113.90	5.29	0.95	4.34	-	100
			EUR	4.04	11.24	26.88	11.60	0.00	14.46	0.67	0.12	0.55	0.00	
31	Novelis Europe Holdings Limited *	Wales	INR	369.91	1,887.13	5,688.11	3,431.07	-	-	(327.01)	0.00	(327.01)	-	100
			USD	49.10	250.47	754.96	455.39	0.00	0.00	(46.12)	0.00	(46.12)	0.00	
32	Novelis AG (Switzerland) *	Switzerland	INR	7.82	1,521.14	7,028.70	5,499.75	-	5,827.93	105.63	0.61	105.02	-	100
			CHF	1.00	194.60	899.17	703.57	0.00	810.55	14.69	0.08	14.61	0.00	
33	Novelis Holdings Inc. *	USA	INR	0.00	1,362.70	2,503.21	1,140.51	-	-	(550.69)	(81.49)	(469.19)	-	100
			USD	0.00	180.87	332.24	151.38	-	-	(77.67)	(11.49)	(66.18)	-	
34	8018227 Canada Inc. *	France	INR	0.00	(684.55)	1,911.20	2,554.09	0.00	0.00	(33.13)	6.07	(39.20)	0.00	100
			USD	0.00	(90.86)	253.67	344.53	0.00	0.00	(4.67)	0.86	(5.53)	0.00	
35	Novelis Acquisitions LLC *	USA	INR	-	-	(0.00)	(0.00)	-	-	-	0.00	-	-	100
			USD	0.00	0.00	(0.00)	(0.00)	0.00	0.00	0.00	0.00	-	0.00	
36	Novelis Sheet Ingot GmbH (Germany) *	German	INR	165.85	-	1,370.57	1,204.72	-	680.47	(33.11)	0.00	(33.11)	-	100
			EUR	20.00	0.00	165.28	145.28	0.00	86.37	(4.20)	0.00	(4.20)	0.00	
37	Novelis MEA Ltd (Dubai) *	USA	INR	6.87	427.65	1,124.75	690.22	-	3,322.08	247.56	0.00	247.56	-	100
			USD	0.91	56.76	149.28	91.61	0.00	468.56	34.92	0.00	34.92	0.00	
38	Novelis (Shanghai) Aluminum Trading Company *	China	INR	23.56	98.17	131.62	9.88	-	50.95	5.00	1.45	3.55	-	100
			CNY	22.14	92.29	123.72	9.29	0.00	50.06	4.92	1.42	3.49	0.00	
39	Novelis (China) Aluminum Products Co. Ltd. *	China	INR	901.36	214.95	2,485.60	1,369.29	-	1,448.63	149.23	37.55	111.68	-	100
			CNY	847.31	202.06	2,336.55	1,287.18	0.00	1,423.26	146.62	36.90	109.72	0.00	

Figures INR in Crore & Foreign Currency in Million

Sr. No.	Name of the Subsidiary Company	Country	Reporting currency	Capital	Reserves	Total Assets	Total Liabilities	Investments: Shares, Debnture, Bonds & Others	Turnover/ Revenues	Profit/ (Loss) before Tax	Provision for Tax	Profit/ (Loss) after Tax	Proposed Dividend	% of Share Holding
40	Novelis Vietnam Company Limited (Vietnam) *	Vietnam	INR	6.62	25.72	43.88	11.53	0.00	0.00	(3.93)	(0.03)	(3.97)	0.00	100
			VND	20,820.00	80,873.89	1,37,955.88	36,261.99	0.00	0.00	(12,941.02)	113.64	(13,054.66)	0.00	
41	Novelis Services (North America) Inc. *	USA	INR	0.00	0.00	0.04	0.04	0.00	0.00	0.00	0.00	-	0.00	100
			USD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	
42	Novelis Services (Europe) Inc. *	USA	INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	100
			USD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	
43	Brecha Energetica Ltda *	Brazil	INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	99.99
			BRL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	
44	Novelis Global Employement, Organization, Inc	USA	INR	2.45	(0.11)	28.74	26.40	-	-	0.73	0.15	0.57	-	100
			USD	0.33	(0.01)	3.81	3.50	0.00	0.00	0.10	0.02	0.08	0.00	
45	Hindalco Do Brazil Industria Comercia de Alumina LTDA	Brazil	INR	1,037.66	(953.95)	235.36	151.66	-	288.81	(56.95)	0.00	(56.95)		100
			Reais	26.48	(24.35)	6.01	3.87	0.00	9.94	(1.96)	0.00	(1.96)		

Deutsche Aluminium Verpackung Recycling GmbH

France Aluminium Recyclage SA

Subsidiary of AV Minerals (Netherlands) N.V.

Subsidiary of AV Metals Inc.

@ Subsidiary of Utkal Alumina Interanational Limited

% De-registered/Dissolved/Liquidated etc.

$ Under Liquidation

* Balance sheet items are translated at closing exchange rate and Profit/(Loss) items are translated at average exchange rate.

{} For Indian Entities Revenue includes Turnover + Other Income

List of Subsidiaries which have been liquidated / amalgameted / sold during FY 19-20
NA

From Ccy	To Ccy	Avg spot rate for the year	Closing rate for 31st March 2019
AUD	INR	48.3164	46.2455
BRL	INR	17.2809	14.4879
CAD	INR	53.3089	53.3969
CHF	INR	71.9006	78.1688
CNY	INR	10.1783	10.6379
EUR	INR	78.7817	82.9225
GBP	INR	90.1416	93.5798
JPY	INR	0.6522	0.6995
NOK	INR	7.8663	7.2373
SEK	INR	7.4030	7.5807
SGD	INR	51.6894	52.9969
ZAR	INR	4.8020	4.2318
KRW	INR	0.0600	0.0618
VND	INR	0.0030	0.0032
USD	INR	70.8991	75.3430

From Ccy	To Ccy	Avg spot rate for the year	Closing rate for 31st March 2019
BRL	USD	0.2440	0.1923
CHF	USD	1.0151	1.0375
CNY	USD	0.1436	0.1412
EUR	USD	1.1113	1.1006
GBP	USD	1.2716	1.2421
JPY	USD	0.0092	0.0093
SEK	USD	0.1044	0.1006
SGD	USD	0.7292	0.7034

List of Subsidiaries which are yet to commence operations.
East Coast Bauxite Mining Co.Pvt.Ltd

ANNEXURE-VIII

Part "B" Statement pursuant to Section 129 (3) of the Companies Act, 2013 related to Associate Companies and Joint Ventures

Sr. No.	Name of Associates / Joint Ventures	Shares of Associate/Joint Ventures held by the company on the year end				Profit/Loss for the year				
		Latest Audited Balance Sheet Date	Number of shares	Amount of investment (₹ in crore)	Extent of Holding% attributable	Networth to Shareholding as per latest audited balance sheet (₹ in Crore)	Considered in consolidation (₹ in Crore)	Not considered in consolidation	Description of how there is significant influence	Base on why the associate/ joint venture is not considered
Associates										
1	Aditya Birla Science and Technology Company Private Limited	31-Mar-20	98,00,000	9.80	49.00	18.38	3.43		Note A	
2	Aditya Birla Renewables Subsidiary Ltd	31-Mar-20	68,95,200	6.90	26.00	6.34	(0.69)		Note A	
3	Aditya Birla Renewable Utkal Limited (ABRUL)	31-Mar-20	12,74,000	1.27	26.00	1.30	0.01		Note A	
4	Associates of Novelis Inc.@	31-Dec-19	3,001.00	2.09		(1.62)	(0.01)			
Joint Ventures										
1	Hydromine Global Minerals (GMBH) Limited	31-Mar-18	66,562	1.37	45.00	30.45			Note B & C	
2	MNH Shakti Limited	31-Mar-20	1,27,65,000	12.77	15.00	13.41	0.82		Note C	
Joint Operations										
1	Mahan Coal Limited	31-Mar-20	4,12,50,000	19.25	50.00	11.57	1.19			
2	Tubed Coal Mines Limited	31-Mar-20	1,52,96,700	0.00	60.00	1.72	(0.08)			
3	Associates of Novelis Inc. ©		10,041.00	1842.73		(273.32)	15.84			
@ - Associates of Novelis Inc.										
Deutsche Aluminium VerpackungReccling GMBH		31-Dec-19	1	1.72	30%	(1.51)	0.00	Equity		
France Aluminium Recyclage SA		31-Dec-19	3,000	0.37	20%	(0.11)	(0.01)	Equity		
@ - Joint Operations of Novelis Inc.										
Aluminium Norf GmbH		31-Dec-19	1	1	50%	(0)	0	Equity		
Ulsan Aluminium Limited		31-Mar-20	5,000	1,819	50%	37	15	Equity		
Logan Aluminium Inc.		31-Mar-20	40	0.00	40%	(310)	0	Consolidated		
AluInfra Services SA		31-Dec-19	5,000	23	50%	0	0.2	Equity		

Note A: There is significant influence due to percentage holding of share capital

Note B: Non-availability of financial statements

Note C: The Group has joint control over the joint arrangements

For and on behalf of the Board of Hindalco Industries Limited

Praveen Kumar Maheshwari
Whole-time Director & Chief Financial Officer
DIN-00174361

Satish Pai
Managing Director
DIN-06646758

Anil Malik
Company Secretary

K N Bhandari
Director
DIN-00026078

Place : Mumbai
Dated : June 12, 2020

SUSTAINABILITY & BUSINESS RESPONSIBILITY REPORT

Building Sustainable Businesses at the Aditya Birla Group:

Aditya Birla Group is set on a path of becoming a leading Indian conglomerate for building sustainable practices throughout its operations worldwide. We foresee a future built of "Sustainable Businesses" which would continue to flourish in a "Sustainable World" with growing needs and stringent environmental and legal constraints. Transcending towards a "Sustainable World", we envision a future which would contain only "Sustainable Businesses". On our path of transformation towards a Sustainable World, we integrate innovation with our existing sustainability models with an ambition to make our business sustainable in every sense of its term.

In an attempt to make our company and business endeavours adaptable for the future world, we have committed ourselves to operate within the constraints of a two-degree sustainable world - a pledge entered into by all nations at the historic United Nations Paris Agreement 2015 on Climate Change. Being well aware of our operational implications on the environment, we take efforts to mitigate these impacts thereby contributing towards the creation of a sustainable planet.

Preparing ourselves for a sustainable future, we ponder over a question about the status quo of sustainable ways today – "If everyone and every business followed the law as written today, is the planet sustainable?". Rapid growth of population, which is estimated to reach 9 billion by 2050, coupled with the challenges of climate change, scarcity of natural resources, increased pollution levels, large volume of waste generation and loss of biodiversity pose a threat to the sustenance of our planet. It calls for collective efforts from leaders across the globe to unite international bodies and governments to mitigate these ecological risks and control the damage caused till date. For us at Aditya Birla Group it is imperative to be ahead in leading this change for better.

We work to strengthen our management systems in order to contribute effectively in building a sustainable business. This forms the initial step of our programme to transform to a sustainable business. Further as part of this programme, our "Responsible Stewardship" agenda focusses on moving past mere legal compliances and conforming to the international standards set by the global bodies of the International Finance Corporation (IFC), the Organisation for Economic Cooperation and Development (OECD), the International Standards Organisation (ISO), Occupational Health and Safety Advisory Services (OHSAS), the Global Reporting Initiative (GRI), the Forestry Stewardship Council and others. We have adopted a Group wide Sustainable Business Framework of Policies, and formulated Technical Standards, and Guidance Notes for our leadership, as well as our managers, employees and contract workers to inculcate a sense of ownership among them towards their performance contributions in building a sustainable business. Our Group Sustainable Business Framework is currently certified to 14 international standards (http://sustainability.adityabirla.com/).

We have seen subsequent reductions in our number of accidents, and consumption of energy and water. We have also been successful in implementing our Biodiversity plans. As part of our World Business Council for Sustainable Development's Water and Sanitation and Hygiene (WASH) pledge we aim to provide safe drinking water, sanitation and hygiene for every employee at all our operational sites. This programme led us to build new bathrooms especially for women and differently abled people. Such initiatives ensure well-being of our people thereby fostering an environment for inclusive growth. Achievements of these type draws us closer to our goal of building a platform for a sustainable business. It becomes the need of the hour to think beyond the agenda of "Responsible Stewardship" in order to create completely sustainable business models and systems for the future. Accounting for the global mega-trends and their geographical, physical, technological effects and the changes needed in the legal system (including regulations and tax) – are some of the parameters that needs to be transformed for businesses to adapt to the future needs of a "Sustainable World". To identify the risks these external factors can have on our businesses, we need to enhance our performances and involve our Strategic stakeholders having expertise in these domains. To ensure our preparedness for the future, we need to improve our business models, strategies and risk profiles to "Future Proof" our business endeavours. In order to build resilient business operations, we need to align our value chains with the demands of a "Sustainable World". If only a "Sustainable business" can be contained in a "Sustainable World", then it must be backed by a "Sustainable Value Chain". With an aim to lead in this endeavor, it has become our business imperative to map our value chains to the sustainable model of the future. Our leadership is getting ready to identify external factors that might have an influence on our value chains and business models and the changing needs in terms of our products and brands.

To minimize the impacts of these inevitable changes of the future, we need to build robust and sustainable supply chains for our businesses.

For influencing such a change, it will take time especially with businesses with complex value chains. But to begin our journey on this path, we are making the businesses of today 'future-ready' and thereby contributing in our own way to the larger picture of building a "Sustainable tomorrow".

BUSINESS RESPONSIBILITY REPORT

Hindalco Sustainability Vision

"Hindalco endeavours to become the leading Indian conglomerate for sustainable business practices across our global operations. We believe that this means that as we go forward towards the constrained operating environments of 2030 and 2050 that for a continued "Sustainable World" it can increasingly only contain "Sustainable Businesses".

Hindalco has been publishing Sustainability Report since FY 11 using the Global Reporting Initiative (GRI) Framework. The report for 2018-19 titled **'Transforming Towards a Resilient, Responsible and Reliable Future'** has been assured to the **Comprehensive Option of GRI standard** by EY (External independent assessing agency).

The Company will also publish Sustainability Report for FY 2019-20 and it will be hosted on its website www.hindalco. com. Any shareholder interested in obtaining a physical copy of the same may write to the Company Secretary at the Registered Office of your Company.

Section A: General Information about the Company

1.	**Corporate Identity Number (CIN) of the Company**	L27020MH1958PLC011238	
2.	**Name of the Company**	Hindalco Industries Limited	
3.	**Registered address**	Ahura Centre, 1st Floor, B Wing, Mahakali Caves Road, Andheri (East), Mumbai: 400093	
4.	**Website**	www.hindalco.com	
5.	**E-mail id**	anil.malik@adityabirla.com	
6.	**Financial Year reported**	01st April, 2019 to 31st March, 2020	
7.	**Sector(s) that the Company is engaged in (industrial activity code-wise)**	ITC Code	Product Description
		7601	Aluminium Ingots
		7606	Aluminium Rolled Products
		7605	Aluminium Redraw Rods
		7403	Copper Cathodes
		7408	Copper Wires
		7408	Continuous Cast Copper Rods
		2807	Sulphuric Acid
		7108	Gold
		7106	Silver
8.	**List three key products/ services that the Company manufactures/provides (as in balance sheet)**	• Aluminium Ingots / Rolled Products • Copper Cathodes • Concast Copper Rods	
9.	**Total number of locations where business activity is undertaken by the Company**	Major International Locations • USA • Germany • United Kingdom • Brazil • South Korea	
		Number of National Locations: • 4 Aluminium; • 1 Copper Unit • 4 Chemical Units (including one unit of Utkal Alumina International Limited, wholly owned subsidiary of the Company) • 4 Power Units • 5 Rolled FRP • 2 Extrusions • 1 Foil	

Registered Office and Zonal Marketing Offices	• Ahura Centre, 1st Floor, B Wing, Mahakali Caves Road, Mumbai: 400 093. • Bauxite and Coal Mines in the state of Jharkhand, Chhattisgarh, Maharashtra and Orissa. • Copper Marketing office are at Mumbai, Bangalore and Noida.

Markets served by the Company	Local	State	National	International
	✓	✓	✓	✓

Section B: Financial Details of the Company (Standalone)

1.	Paid-up Capital (₹)	222.39 crores
2.	Total Turnover (₹)	40222 crore
3.	Total Profits after taxes (₹)	620 crore
4.	Total Spending on Corporate Social Responsibility (CSR) as percentage of profit after tax (%)	The company has spent ₹ 38.53 Crore as CSR spent which is which is 2.05 % of the average net profit for the previous three financial years
5.	List of activities in which expenditure in 4 above has been incurred	a. Education b. Health Care c. Women empowerment d. Sustainable Livelihood e. Infrastructure Development

Section C: Other Details

1. Does the Company have any Subsidiary Company/ Companies?

Yes, as on 31st March, 2020, the Company has 45 subsidiaries-11 domestic and 34 foreign.

2. Do the Subsidiary Company/Companies participate in the BR Initiatives of the parent company? If yes, then indicate the number of such subsidiary company(s):

Hindalco's Sustainability Report covers only the India Operations. Further, Novelis Inc., also publishes Sustainability Report (Purpose Report) separately.

3. Do any other entity/entities (e.g. suppliers, distributors etc.) that the Company does business participate in the BR initiatives of the Company? If yes, then indicate the percentage of such entity/ entities?

At present, suppliers and distributors with whom the Company does business, do not participate in the Business Responsibility initiatives of the Company directly.

Section D: BR Information

1. Details of Director/Directors responsible for BR

a. Details of the Director/Director responsible for implementation of the BR policy/policies

DIN Number	01055000
Name	Mr. Y. P. Dandiwala
Designation	Independent Director

b. Details of the BR head

Sr. No.	Particulars	Details
1.	DIN Number (if applicable)	N.A.
2.	Name	Mr. Anil Malik
3.	Designation	President & Company Secretary
4.	Tel. No.	022-66626666
5.	E-mail id	anil.malik@adityabirla.com

2. The National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business released by the Ministry of Corporate Affairs has adopted nine areas of Business Responsibility. These briefly are as follows:

P1	Businesses should conduct and govern themselves with Ethics, Transparency and Accountability
P2	Businesses should provide goods and services that are safe and contribute to sustainability throughout their life cycle
P3	Businesses should promote the well being of all employees
P4	Businesses should respect the interests of, and be responsive towards all stakeholders, especially those who are disadvantaged, vulnerable and marginalised
P5	Businesses should respect and promote human rights
P6	Business should respect, protect, and make efforts to restore the environment
P7	Businesses, when engaged in influencing public and regulatory policy, should do so in a responsible manner
P8	Businesses should support inclusive growth and equitable development
P9	Businesses should engage with and provide value to their customers and consumers in a responsible manner

The mapping of the aforesaid principles to the disclosures shall be made in the Sustainability Report 2019-20 will be available on our website www.hindalco.com.

CORPORATE GOVERNANCE REPORT

GOVERNANCE PHILOSOPHY

The Aditya Birla Group is committed to the adoption of best governance practices and its adherence in the true spirit, at all times. Our governance practices are a product of self-desire reflecting the culture of the trusteeship i.e., deeply ingrained in our value system and reflected in our strategic thought process. At a macro level, our governance philosophy rests on five basic tenets viz., Board accountability to the Company and the shareholders, strategic guidance and effective monitoring by the Board, protection of minority interests and rights, equitable treatment of all shareholders as well as superior transparency and timely disclosures.

In line with this philosophy, Hindalco Industries Limited (the Company), flagship Company of the Aditya Birla Group, is striving for excellence through adoption of best governance and disclosure practices. The Company, as a continuous process, strengthens the quality of disclosures, on the Board composition and its functioning, remunerations paid and level of compliance with various Corporate Governance Codes.

Compliance with Corporate Governance Guidelines

The Company is fully compliant with the requirements under Securities and Exchange Board of India (Listing Obligations & Disclosure Requirements) Regulations 2015, and amendment thereto hereinafter referred to the "Listing Regulations". Your Company's compliance with these requirements is presented in the subsequent sections of this report.

BOARD OF DIRECTORS

Composition of the Board

Your Company's Board comprises of 10 Non-Executive Directors as on March 31, 2020 with considerable experience in their respective fields. Of these, 6 Directors are Independent Directors which includes one woman director.

None of the Directors on the Board is a Member of more than 10 Committees or a Chairman of more than 5 Committee (as specified in Regulation 26 of Listing Regulations), across all the Companies in which they hold Directorships. Further, none of the Non-Executive Directors serve as Independent Directors in more than seven listed companies and none of the Executive or Whole-time Directors serve as Independent Directors on any listed Company. All the Directors have periodically intimated about their Directorship and Membership in the various Boards / Committees of other companies. The same is within permissible limits as provided by the Companies Act, 2013 and Listing Regulations.

The details of the Directors with regard to outside directorships and committee positions as at March 31, 2020 are as follows:

Director#	Category	No. Of other Director-ships Held[5]	No. of outside Companies Committee Positions Held[6]		Name of Outside Listed Entity where the person is a Director	Category of Directorship in outside Listed Entities
		Public	Member	Chairman		
Mr. Kumar Mangalam Birla[7,8] [DIN: 00012813]	Non-Executive Chairman	08	-	-	1. Grasim Industries Limited	Non-Executive Chairman
					2. UltraTech Cement Limited	Non-Executive Chairman
					3. Vodafone Idea Limited	Non-Executive Chairman
					4. Century Textiles and Industries Limited	Non-Executive Chairman
					5. Aditya Birla Capital Limited	Non-Executive Chairman
Mrs. Rajashree Birla[7,8] [DIN: 00022995]	Non-Executive	06	-	-	1. Grasim Industries Limited	Non-Executive Director
					2. UltraTech Cement Limited	Non-Executive Director
					3. Pilani Investment and Industries Corporation Limited	Non-Executive Director
					4. Century Textiles and Industries Limited	Non-Executive Director
					5. Century Enka Limited	Non-Executive Director
Mr. A. K. Agarwala[2] [DIN: 00023684]	Non-Executive	05	-	-	1. Tanfac Industries Limited	Non-Executive Director
Mr. D. Bhattacharya [DIN: 00033553]	Non-Executive Director	02	03	-	1. Vodafone Idea Limited	Non-Executive Director
					2. NOCIL Limited	Independent Director

Director#	Category	No. Of other Director-ships Held[5]	No. of outside Companies Committee Positions Held[6]		Name of Outside Listed Entity where the person is a Director	Category of Directorship in outside Listed Entities
		Public	Member	Chairman		
Mr. K. N. Bhandari[1] [DIN: 00026078]	Independent[1]	08	04	03	1. Jaiprakash Associates Limited	Independent Director
					2. Gujarat Sidhee Cement Limited	Independent Director
					3. Saurashtra Cement Limited	Independent Director
					4. Jaiprakash Power Ventures Limited	Independent Director
					5. Shristi Infrastructure Developments Corporation Limited	Independent Director
Mrs. Alka Bharucha[1] [DIN: 00114067]	Independent[1]	08	05	03	1. UltraTech Cement Limited	Independent Director
					2. Orient Electric Limited	Independent Director
					3. Honda Siel Power Products Limited	Independent Director
					4. Birlasoft Limited	Independent Director
Mr. Ram Charan[1] [DIN: 03464530]	Independent[1]	01	-	-	-	-
Mr. Y. P. Dandiwala[1] [DIN: 01055000]	Independent[1]	03	02	01	1. Century Textile and Industries Limited	Independent Director
					2. Pilani Investment and Industries Corporation Limited	Independent Director
Mr. Satish Pai [DIN: 06646758]	Managing Director	-	-	-	-	-
Mr. Praveen Kumar Maheshwari [DIN: 00174361]	Whole-time Director	01	-	-	-	-
Dr. Vikas Balia[1,3] [DIN: 00424524]	Independent[1]	01	-	-	-	-
Mr. Sudhir Mital[1,4] [DIN: 08314675]	Independent[1]	-	-	-	-	-

1. Independent Director means a director defined as such under Regulation 16 of the Listing Regulations and Section 149 of the Companies Act, 2013.
2. Mr. A. K. Agarwala was an Executive Director till September 10, 2003. Thereafter, he has moved to other responsibilities in the Aditya Birla Group.
3. Dr. Vikas Balia was appointed as an Independent Director w.e.f July 19, 2019.
4. Mr. Sudhir Mital was appointed as an Independent Director w.e.f November 11, 2019.
5. Excludes Directorship held in Private Limited Companies, Foreign Companies and Companies under Section 8 of the Companies Act, 2013.
6. Represents only membership/chairmanship of Audit Committee and Stakeholders Relationship Committee of Indian Public Limited Companies.
7. No other Director is related to any other Director on the Board except for Mr. Kumar Mangalam Birla and Mrs. Rajashree Birla who are son and mother respectively.
8. Mr. Kumar Mangalam Birla and Smt. Rajashree Birla belong to the Promoter group of the Company.
9. Mr. M M Bhagat (DIN: 00006245) has ceased to be an Independent Director w.e.f August 30, 2019 due to old age.
10. Mr. Girish Dave (DIN: 00036455) has resigned as Independent Director w.e.f. November 11, 2019 due to age and personal reasons.

The average tenure of the Board as on 31st March, 2020 is approximately 10 years.

CORPORATE GOVERNANCE REPORT

Board's functioning and Procedure

Hindalco's Board of Directors plays a primary role in ensuring good governance and functioning of the Company. All statutory and other significant & material information including information as mentioned in Regulation 17 (7) read together with Schedule II of Listing Regulations is placed before the Board to enable it to discharge its responsibility of strategic supervision of the Company as trustees of the shareholders.

Your Company's Board of Directors have identified the following skills / expertise / competencies to function and discharge their responsibilities effectively:

- Industry knowledge
- Innovation
- Financial Literacy
- Corporate Governance
- Strategic Expertise
- Marketing
- Legal and Compliance
- Sustainability
- Risk Management
- Human Development
- General Management
- Metals and Mining

	Industry Knowledge	Innovation	Financial Literacy	Corporate Governance	Strategic Experience	Marketing	Legal & Compliance	Sustainability	Risk Management	Human Development	General Management	Metals and Mining
K M Birla	√	√	√	√	√			√	√	√	√	√
Rajashree Birla	√			√				√			√	
Satish Pai	√	√	√	√	√	√	√	√	√	√	√	√
D. Bhattacharya	√	√	√	√	√	√	√	√	√	√	√	√
P K Maheshwari	√	√	√	√	√		√	√	√	√	√	√
A K Agarwala	√	√	√	√	√	√	√	√	√	√	√	√
K N Bhandari	√		√	√	√		√		√	√	√	√
Ram Charan	√	√	√		√	√		√	√	√	√	
Y P Dandiwala	√		√	√	√		√	√	√		√	
Alka Bharucha	√		√	√	√		√	√	√		√	
Vikas Balia	√	√	√	√	√		√		√		√	
Sudhir Mital	√		√	√	√		√	√		√	√	

Board members collectively display the following personal qualities:

- *Integrity* – fulfilling a director's duties and responsibilities;
- *Curiosity and courage* – to ask questions and courage to persist in asking or challenging management and fellow board members where necessary;
- *Interpersonal skills* – work well in a group, listen well, be tactful, able to communicate point of view frankly;
- *Interest* – in the organization, its business and the people;
- *Instinct* – good business instincts and acumen, ability to get to the crux of the issue quickly;
- Believer in gender diversity; and
- *Active participation* – at deliberations in the meeting.

Your Company's Board comprises of an equal number of Independent and Non-Independent Directors. The Directors are professionals, possessing wide experience and expertise in their areas of function - strategy; finance; governance and legal; marketing, insurance, among others, which together with their collective wisdom fuel your Company's growth. With one-sixth of the Board comprising of woman directors, the Board reflects gender diversity.

A brief profile of the Directors of your Company is as follows:

Kumar Mangalam Birla was appointed as a Non-Executive Chairman of our Company with effect from October 19, 1995. He is the Chairman of the $48.3 billion multinational Aditya Birla Group, which operates in 36 countries across six continents. He is a Chartered Accountant and holds an MBA degree from the London Business School. Mr. Birla chairs the Boards of all major Group companies in India and globally - Novelis, Columbian Chemicals, Aditya Birla Minerals, Aditya Birla Chemicals, Thai Carbon Black, Alexandria Carbon Black, Domsjö Fabriker and Terrace Bay Pulp Mill. In India, apart from chairing your Company's Board, he also chairs the Boards of UltraTech Cement Limited, Grasim Industries Limited, Aditya Birla Capital Limited and Vodafone Idea Limited. In over two decades, that he has been at the helm of the Group, he has accelerated growth, built meritocracy and enhanced stakeholder value. In the process he has raised the Group's turnover from $2 billion in 1995, to over $48 billion today. He has been the architect of over 40 acquisitions by the group in 20 years in India and globally, the highest by an Indian multinational in India. Under his stewardship, the Aditya Birla Group enjoys a position of leadership in all the major sectors in which it operates. Over the years, Mr. Birla has built a highly successful meritocratic organisation, anchored by an extraordinary force of 120,000 employees belonging to 42 different nationalities. Outside the Group, Mr. Birla has held several key positions on various regulatory and professional Boards. He was a Director on the Central Board of the Reserve Bank of India. He was Chairman of the Advisory Committee constituted by the Ministry of Company Affairs and also served on The Prime Minister of India's Advisory Council on Trade and Industry. As the Chairman of Securities and Exchange Board of India (SEBI) Committee on Corporate Governance, he authored the First Report on Corporate Governance titled ''Report of the Kumar Mangalam Birla Committee on Corporate Governance''. Mr. Birla also served as Chairman of SEBI's committee on Insider Trading, which formulated Corporate Governance principles for Indian corporates. Mr. Birla is deeply engaged with Educational Institutions. He is the Chancellor of the Birla Institute of Technology & Science (BITS) with campuses in Pilani, Goa, Hyderabad and Dubai. He is also the Chairman of Indian Institute of Management, Ahmedabad. On the global arena, Mr. Birla serves on the London Business School's Asia Pacific Advisory Board and is an Honorary Fellow of the London Business School. A firm practitioner of the trusteeship concept, Mr. Birla has institutionalised the concept of caring and giving at the Aditya Birla Group. With his mandate, the Group is involved in meaningful welfare driven activities that distinctively impact the quality of life of weaker sections of society.

Rajashree Birla is a Non-Executive Director and was appointed on the Board of Directors on March 15, 1996. She is an exemplar in the area of community initiatives and rural development. Mrs. Birla spearheads the Aditya Birla Centre for Community Initiatives and Rural Development, the Group's apex body responsible for development projects. She oversees the Group's social and welfare driven work across 40 companies. The footprint of the Centre's work straddles over 5,000 villages, reaching out to 7.5 million people. Furthermore, Mrs. Birla is the Chairperson of the FICCI – Aditya Birla CSR Centre for Excellence, Habitat for Humanity (India) and is on the Board of the Asia Pacific Committee as well as Habitat's Global Committee. She is the Chairperson of FICCI's first ever Expert Committee on CSR. She serves on the Board of Director's CSR Committee of State Bank of India. She is Member on the Advisory Board of "The Research Society for the Care, Treatment and Training of Children in Need of Special Care", Mumbai, and of BAIF Development Research Foundation, Pune. As a patron of arts and culture, she heads the "Sangit Kala Kendra", a Centre for performing arts, as its President. In recognition of the exemplary work done by Mrs. Birla, leading national and international organizations have showered accolades upon her. Among these the most outstanding ones have been that of the Government of India's "Padma Bhushan" Award in 2011 in the area of "Social Work", The Economic Times "Corporate Citizen of the Year Award" twice over, in 2002 and 2012, besides the "Global Golden Peacock Award for CSR" presented by Dr. Ola Ullsten, the Former Prime Minister of Sweden in Portugal in 2010. The Institute of Directors (IOD) Distinguished Fellowship Award, and FICCI FLO's Lifetime Achievement Award, are among the many other distinctions received by her. Apart from your Company, Mrs. Birla is a Director on the Boards of Grasim Industries Limited and UltraTech Cement Limited. She is also on the Board of the Aditya Birla Group's international companies spanning Thailand, Indonesia, Philippines and Egypt.

Debnarayan Bhattacharya is a Non-Executive Director and the Vice Chairman of our Company with effect from July 31, 2016. He has experience in managing business operations. He joined the Aditya Birla Group in 1998 and has held several key positions within the Aditya Birla Group. He was appointed as Managing Director of the Company in the year 2003. He is qualified in Bachelor of Engineering (Chemicals) and IIT from Kharagpur.

Askaran Agarwala is a Non-Executive Director of our Company and was appointed on the Board in 1998. He is a Trustee of several organisations including Sarla Basant Birla Param Bhakti Trust, Aditya Vikram Birla Memorial Trust, The Aditya Birla Foundation, Ladsaria Charitable & Welfare Trust and Hellen Keller Institute of the Deaf and Blind. He holds a degree in Commerce and Law of Calcutta University and is fellow member of the Institute of Chartered Accountants of India.

Mr. Sudhir Mital is a Non-Executive Director and Independent Director of our Company with effect from November 11, 2019

CORPORATE GOVERNANCE REPORT

for a period of five years. He is a graduate from Allahabad University with a Master's degree in Indian History. He also holds additional Masters in Rural Development from the University of Birmingham. He has been a former member of the Indian Administrative Service from the Punjab Cadre, Secretary to Department of Fertilizers – Government of India, and Special Secretary to MCA. He was also a former acting Chairman of Competition Commission of India (CCI). Has rich professional experience in the fields of public policy and governance after nearly four decades of service. He has been a key functionary with regards to the Companies Bill, 2013.

Kailash Nath Bhandari is a Non-Executive and Independent Director on the Board of our Company. Prior to joining our Company, he has also served as the Chairman and Managing Director of the New India Assurance Company Limited. He holds a Bachelor's degree in Arts and Law.

Ram Charan is a Non-Executive and Independent Director of our Company. He holds the Bachelor of Engineering, MBA and Doctorate from Harvard Business School. He is a best¬selling author having five books on Corporate Governance and Global Adviser to Senior business leaders and Board of Directors of various companies around the world. He has authored and co-authored books on corporate governance. Mr. Ram Charan has served on boards of several global Companies.

Dr. Vikas Balia is a Non-Executive Director and Independent Director of our Company with effect from July 19, 2019 for a period of five years, founder of Legalsphere Law firm is a rank holding Chartered Accountant and a lawyer and has a Master's degree in Mercantile Laws with doctoral research (Ph.D.) on Securitization Laws. He has varied and extensive experience on commercial and constitutional law. He is an adjunct faculty in many institutions and lectures for CA, Law and MBA students.

Yazdi Dandiwala is a Non-Executive Director and Independent Director of our Company with effect from August 14, 2015 for a period of five years. He is qualified as a Bachelor in Science and holds a degree in Law. He is Solicitor by profession. He is currently a partner of Mulla & Mulla and Craigie Blunt & Caroe, Advocates & Solicitors. He has experience as a corporate Commercial Lawyer with experience in corporate and commercial transactions.

Alka Bharucha is a Non- Executive Director and Independent Director of our Company with effect from July 11, 2018 for a period of five years. She earned her B.A (Hons) in 1976 and LLB in 1979 from University of Bombay, Masters in Law from the University of Bombay and University of London and is a Solicitor, High Court Mumbai and Supreme Court of England and Wales. She began her career with Mulla & Mulla & Craigie Blunt & Caroe, and joined Amarchand & Mangaldas as partner in 1992. In 2008, she co-founded Bharucha & Partners which, on inception, was ranked by RSG Consulting, London among the top fifteen firms in India. Mrs. Bharucha has been ranked by Chambers Global, Legal 500 and Who's Who Legal amongst India's leading lawyers. She chairs the transactions practice at Bharucha & Partners. Her core areas of expertise are mergers and acquisitions, joint ventures, private equity, banking and finance.

Satish Pai was appointed as Whole-time Director on our Board since August 2013 and appointed as the Managing Director of our Company with effect from August 01, 2016 for a period of five years. He holds a Bachelor's degree in Mechanical Engineering from the Indian Institute of Technology, Madras. He has experience in areas such as operations, recruitment and training.

Praveen Kumar Maheshwari is currently working as the Chief Executive Officer of the Copper Business of Hindalco Industries Limited, an industry leader in Aluminium & Copper; and the metals flagship company of the Aditya Birla Group. He is also the Chief Financial Officer of the Company and is a Whole-time Director on its Board. Mr. Maheshwari, a Chartered Accountant with an MBA from IIM - Ahmedabad, has over 37 years of work experience. Prior to joining Hindalco Industries Limited he worked with Bharat Forge Limited as Group CFO & Executive Director - Finance.

Board Meetings

The Company Secretary drafts the agenda for each meeting along with the explanatory notes. The Board meets at once a quarter to review the quarterly results and other items on the agenda. Various Board Committees meet as per the legal requirement or otherwise to transact the business delegated by Board of Directors.

The Companies Act 2013, read with the relevant rules made thereunder, facilitates the participation of Director in Board/Committee Meetings through video conferencing or other audio visual mode the option to participate in the meeting through video conferencing was made available for the Directors except in respect of such meetings/Items which are not permitted to be transacted through video conferencing.

The Members of the Board have complete freedom to express their opinion and decisions are taken after detailed discussion. The details of Board Meetings held during FY 2019-2020 are as outlined below:

Date of Board Meeting	City	No. of Directors Present
May 16, 2019	Mumbai	08 out of 12
July 19, 2019	Mumbai	10 out of 12
August 09, 2019	Mumbai	10 out of 13
August 30, 2019	Mumbai	12 out of 13
November 11, 2019	Mumbai	09 out of 12
February 12, 2020	Mumbai	12 out of 12

The details of attendance of each Director at the Board Meetings and Last Annual General Meeting (AGM) are as follows:

Name of Director#	No. of Board Meetings		Attended Last AGM@
	Held	Attended	
Mr. Kumar Mangalam Birla	06	05	Yes
Mrs. Rajashree Birla	06	03	Yes
Mr. A. K. Agarwala	06	05	Yes
Mr. D. Bhattacharya	06	06	Yes
Mr. K. N. Bhandari	06	05	Yes
Mrs. Alka Bharucha	06	04	Yes
Mr. Ram Charan	06	02	No
Mr. Y. P. Dandiwala	06	06	Yes
Mr. Satish Pai	06	06	Yes
Mr. Praveen Kumar Maheshwari	06	06	Yes
Dr. Vikas Balia*	04	04	Yes
Mr. Sudhir Mital**	01	01	No

@AGM held on August 30, 2019.

*Dr. Vikas Balia was appointed on the Board of the Company at its meeting held on 19th July, 2019.

**Mr. Sudhir Mital was appointed on the Board of the Company at its meeting held on 11th November, 2019.

#Mr. M M Bhagat attended all 4 Board meetings along with the AGM held on August 30, 2019 during FY 2019-2020 before he ceased to be a director w.e.f. 30th August, 2019. Mr. Girish Dave attended 4 out of 5 Board meetings along with the AGM held on August 30, 2019 during FY 2019-2020 before he resigned w.e.f. 11th November, 2019.

PERFORMANCE EVALUATION OF BOARD

Pursuant to the provisions of Companies Act, 2013 and Listing Regulations, the Directors have carried annual performance evaluation of Board, Independent Directors, Non-Executive Directors, Executive Directors, Committee and Chairman of the Board.

The evaluation framework focused on various aspects of Board and Committees such as review, timely information from management etc. Also, performance of individual directors was divided into Executive, Non-Executive and Independent Director and based on the parameters such as contribution, attendance, decision making, action oriented, external knowledge etc.

The evaluation exercise has been carried out by the Board on the basis of Evaluation template for Board, Independent Director, Non-Executive Director, Executive Directors, Committees and Chairman of the Board. The template had various questions to be replied by the directors on aforesaid parameters. The Nomination and Remuneration Committee evaluated the performance on the basis of response received from the Directors. Similarly, the Independent Directors evaluated the performance of Non Independent Directors, Chairman and assessed the quality, quantity and flow of information between the Company, Management and the Board.

Outcome of the evaluation exercise:

1. The Board as a whole perform satisfactorily.
2. Independent Directors are rated high in understanding the Company's business and expressing their view during the Board Meeting.
3. The Non-Executive Directors scored well in all aspects.
4. Directors rated Executive Directors as action oriented and good in implementing Board decisions.
5. Board members rated high to the Chairman leading the board effectively.
6. Board members has shown satisfaction in functioning of the Committees.

INDEPENDENT DIRECTOR'S MEETING

During the year under review, the Independent Directors met without the presence of Non Independent Directors and members of the management inter alia to discuss:

- Evaluate the performance of Non Independent Directors and the Board of Directors as a whole.
- Evaluate the performance of the Chairman, taking into account the views of Executive and Non-Executive Directors.

Evaluate the quality, content and timelines of flow of information between the Management and the Board that is necessary for the Board to effectively and reasonably perform its duties

The Independent Directors expressed satisfaction on the overall performance of the Directors and the Board as a whole.

In the opinion of the Board, the Independent Directors fulfil all the conditions specified in the Listing Regulations as amended and are independent of the management.

FAMILIARISATION PROGRAMME FOR INDEPENDENT DIRECTORS

All new Independent Directors inducted on the Board are given a letter of appointment setting out their roles, functions, duties and responsibilities.

The Directors are familiarized with your Company's Business and its operations. Interactions are held between the Directors and Senior Management of your Company. Directors are familiarized with organizational set-up, functioning of various department, internal control processes and relevant information pertaining to your Company. They are periodically updated on industry scenario, changes in regulatory framework and the impact thereof on the working of your Company.

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The details on the Company's Familiarization Programme for Independent Directors can be accessed at: http://hindalco.com/about-us/management-team/board-of-directors.

COMMITTEES OF THE BOARD OF DIRECTORS

The Board has constituted following Committees of Directors to deal with matters and monitor the activities falling within the respective terms of reference:-

AUDIT COMMITTEE

Constitution of Audit Committee and its functions

Your Company has an Audit Committee at the Board level which acts as a link between the Management, the Statutory and the Internal Auditors and the Board of Directors and oversees the financial reporting process. The Committee is governed by a Charter which is line with the regulatory requirements mandated by the Companies Act, 2013 and Listing Regulations.

The Committee comprises of three Non-Executive Directors, all of whom are Independent Directors. The followings are the members of Audit Committee:

Mr. K.N. Bhandari*	–	Chairman
Mr. Y.P. Dandiwala	–	Member
Dr. Vikas Balia#	–	Member

Mr. Anil Malik, Company Secretary, also acts as Secretary to the Committee.

* The Board appointed Mr. K N Bhandari as the Chairman of the Audit Committee on 30th August, 2019 as Mr. M. M. Bhagat, the then Chairman of the Audit Committee who ceased to be a director of the Company on the said date.

\# The Board inducted Dr. Vikas Balia as a member of the Audit Committee on 30th August, 2019 in place of Mr. M. M. Bhagat.

During the year, the Audit Committee met 4 times i.e on May 16, 2019, August 09, 2019, November 11, 2019 and February 12, 2020 to deliberate on various matters. The attendance of each Audit Committee members are as follows:

Name of the Director#	No. of Meetings Held	No. of Meetings Attended
Mr. K. N. Bhandari	04	03
Mr. Y. P. Dandiwala	04	04
Dr. Vikas Balia	02	01

\# Mr. M M Bhagat attended both Audit Committee meetings during FY 2019-2020 before he ceased to be a director w.e.f. 30th August, 2019.

1. The Chairman of the Audit Committee, Mr. K. N. Bhandari was present at the last Annual General Meeting of your Company held on August 30, 2019.
2. The Managing Director, Whole-time Director, CFO, the representative of the Statutory Auditor, Head of the Internal Audit are permanent invitees of the Audit Committee. The representative of the Cost Auditors are invited to the Audit Committee Meetings whenever matters relating to cost audit is considered.
3. Mr. Anil Malik, Company Secretary, acted as Secretary to the Committee.

Role of Audit Committee:

(1) Oversight of the listed entity's financial reporting process and the disclosure of its financial information to ensure that the financial statement is correct, sufficient and credible;

(2) Recommendation for appointment, remuneration and terms of appointment of auditors of the listed entity;

(3) Approval of payment to statutory auditors for any other services rendered by the statutory auditors;

(4) Reviewing, with the management, the annual financial statements and auditor's report thereon before submission to the board for approval, with particular reference to:

(a) Matters required to be included in the Director's Responsibility Statement to be included in the Board's Report in terms of clause (c) of sub section (3) of Section 134 of the Companies Act, 2013;

(b) Changes, if any, in accounting policies and practices and reasons for the same;

(c) Major accounting entries involving estimates based on the exercise of judgment by management;

(d) Significant adjustments made in the financial statements arising out of audit findings;

(e) Compliance with listing and other legal requirements relating to financial statements;

(f) Disclosure of any related party transactions;

(g) Modified opinion(s) in the draft audit report;

(5) Reviewing, with the management, the quarterly financial statements before submission to the board for approval;

(6) Reviewing, with the management, the statement of uses / application of funds raised through an issue (public issue, rights issue, preferential issue, etc.), the statement of funds utilized for purposes other than those stated in the offer document / prospectus / notice and the report submitted by the monitoring agency monitoring the utilisation of proceeds of a public or rights issue, and making appropriate recommendations to the board to take up steps in this matter;

(7) Reviewing and monitoring the auditor's independence and performance, and effectiveness of audit process;

(8) Approval or any subsequent modification of transactions of the listed entity with related parties;

(9) Scrutiny of inter-corporate loans and investments;

(10) Valuation of undertakings or assets of the listed entity, wherever it is necessary;

(11) Evaluation of internal financial controls and risk management systems;

(12) Reviewing, with the management, performance of statutory and internal auditors, adequacy of the internal control systems;

(13) Reviewing the adequacy of internal audit function, if any, including the structure of the internal audit department, staffing and seniority of the official heading the department, reporting structure coverage and frequency of internal audit;

(14) Discussion with internal auditors of any significant findings and follow up there on;

(15) Reviewing the findings of any internal investigations by the internal auditors into matters where there is suspected fraud or irregularity or a failure of internal control systems of a material nature and reporting the matter to the board;

(16) Discussion with Statutory Auditors before the audit commences, about the nature and scope of audit as well as post-audit discussion to ascertain any area of concern;

(17) To look into the reasons for substantial defaults in the payment to the depositors, debenture holders, shareholders (in case of non-payment of declared dividends) and creditors;

(18) To review the functioning of the whistle blower mechanism;

(19) Approval of appointment of Chief Financial Officer after assessing the qualifications, experience and background, etc. of the candidate;

(20) Carrying out any other function as is mentioned in the terms of reference of the Audit Committee.

(21) Reviewing the utilisation of the loans and / or advances from / investments by the Holding Company in the subsidiary exceeding ₹ 100 Crore or 10% of the asset size of the subsidiary, whichever is lower including existing loans / advances/ investments existing as on April 01, 2019.

B. The audit committee reviews the following information:

(1) Management Discussion and Analysis of financial condition and results of operations;

(2) Statement of significant related party transactions (as defined by the audit committee), submitted by management;

(3) Management letters / letters of internal control weaknesses issued by the Statutory Auditors;

(4) Internal audit reports relating to internal control weaknesses;

(5) The appointment, removal and terms of remuneration of the Chief Internal Auditor; and

(6) Statement of deviations:

(a) Quarterly statement of deviation(s) including report of monitoring agency, if applicable, submitted to Stock Exchange(s) in terms of Regulation 32(1) of the Listing Regulations.

(b) Annual statement of funds utilized for purposes other than those stated in the offer document/prospectus/notice in terms of Regulation 32(7) of the Listing Regulations.

STAKEHOLDER'S RELATIONSHIP COMMITTEE

The Company has a "Stakeholder's Relationship Committee" at the Board level to specifically look into various aspects of interests of shareholders, debenture holders and other security holders.

The role of the committee is to specifically look into various aspects of interest of shareholders, debenture holders and other security holders including:

1. Resolving the grievances of the security holder of the Company including complaints related to transfer/ transmission of shares, non-receipt of Annual Reports non-receipts of declared dividends, issue of new/ duplicate Certificate, General Meetings etc.
2. Review of measures taken for effective exercise of voting rights by shareholders.
3. Review of various measures and initiatives taken by the listed entity for reducing the quantum of unclaimed dividends and ensuring timely receipt of dividend warrants/ annual reports/ statutory notices by the shareholders of the Company.

The following are the members of the Committee:

Mr. K. N. Bhandari	–	Chairman
Mr. A. K. Agarwala	–	Member
Mr. Satish Pai*	–	Member

Mr. Anil Malik, Company Secretary, is the Compliance officer and acts as secretary to the Committee.

* The Board inducted Mr. Satish Pai as a member of the Stakeholders' Relationship Committee on 30th August, 2019 in place of Mr. M. M. Bhagat who ceased to be a director on the Board of the Company as on the aforesaid date.

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During the year under review, the Committee met four times i.e on May 16, 2019, August 09, 2019, November 11, 2019 and February 12, 2020 to deliberate on various matters referred above. Details of attendance by Directors for the Committee meetings are as follows:

Name of the Director#	No. of Meetings Held	No. of Meetings Attended
Mr. K. N. Bhandari	4	3
Mr. A. K. Agarwala	4	3
Mr. Satish Pai	2	2

Mr. M M Bhagat attended both Stakeholders Relationship Committee meetings during FY 2019-2020 before he ceased to be a director w.e.f. 30th August, 2019.

The Company's shares are compulsorily traded and delivered in the dematerialised form in all Stock Exchanges. To expedite the transfer in the physical segment, necessary authority has been delegated to certain officers, who are authorised to transfer up to 10,000 shares under one transfer deed.

Number of shareholders complaints received so far/number not solved to the satisfaction of shareholders/number of pending complaints

Details of complaints received, disposed off and pending during the year, number of shares transferred during the year, time taken for affecting these transfers and the number of share transfers pending are furnished in the "Shareholder Information" section of this Annual Report.

NOMINATION AND REMUNERATION COMMITTEE

The Board has formed a Nomination and Remuneration Committee consisting of the following members:

Mr. K. N. Bhandari*	–	Chairman
Mr. Kumar Mangalam Birla	–	Member
Mr. Y. P. Dandiwala#	–	Member

Mr. Anil Malik, Company Secretary also acts as Secretary to the Committee

* The Board appointed Mr. K N Bhandari as the Chairman of the Nomination & Remuneration Committee on 30th August, 2019 as Mr. M. M. Bhagat, the then Chairman of the Nomination & Remuneration Committee who ceased to be a director of the Company on the said date.

The Board inducted Mr. Y P Dandiwala as a member of the Nomination & Remuneration Committee on 30th August, 2019 in place of Mr. M. M. Bhagat.

As per Section 178 of Companies Act, 2013 and Regulation 19 of Listing Regulations, the terms of reference are as follows:

- Identify persons who are qualified to become Directors and who may be appointed in Senior Management and recommend to the Board their appointment and removal.
- Formulation of criteria for evaluation of performance of Independent Directors and the Board.
- Carry out evaluation of every Director's performance.
- Formulate the criteria for determining qualifications, positive attributes and independence of a Director.
- Recommend to the Board a policy, relating to the remuneration for the Directors, Key Managerial Personnel and other employees.
- Devise a policy on Board diversity.
- Whether to extend or continue the term of appointment of Independent Director on the basis of report of performance evaluation of Independent Director.
- Recommend to the board, all remuneration, in whatever form, payable to senior management.

The scope and functions of the Committee is in accordance with the provisions of the Companies Act, 2013 and Listing Regulations.

During the year under review, the Committee met four times i.e on May 16, 2019, July 19, 2019, August 09, 2019 and November 11, 2019 to deliberate on various matters referred above. The details of attendance of the members is as below:

Name of the Director#	No. of Meetings Held	No. of Meetings Attended
Mr. K. N. Bhandari	4	3
Mr. K. M. Birla	4	4
Mr. Y. P. Dandiwala	1	1

Mr. M M Bhagat attended all three Nomination & Relationship Committee meetings during FY 2019-2020 before he ceased to be a director w.e.f. 30th August, 2019.

CORPORATE SOCIAL RESPONSIBILITY COMMITTEE (CSR)

The Corporate Social Responsibility Committee comprises of the following members:

Mrs. Rajashree Birla	–	Chairman
Mr. Satish Pai	–	Member
Mr. A.K. Agarwala	–	Member
Mr. D. Bhattacharya	–	Member
Mr. Y. P. Dandiwala	–	Member

Dr. Mrs. Pragnya Ram: Group Executive President: Corporate Communications and CSR is a permanent invitee to the Committee.

Mr. Anil Malik, Company Secretary, also acts as Secretary to the Committee.

The terms of reference of Corporate Social Responsibility Committee broadly comprises of following:

(a) Formulate and Recommendation of CSR Policy to the Board indicating the activities to be undertaken by the Company as specified in Schedule VII of Companies Act, 2013.

(b) Recommend the amount of expenditure to be incurred on the activities referred to in clause(a).

(c) Provide guidance on various CSR activities to be undertaken by the Company and to monitor its progress.

During the year under review, the Committee met once i.e. on April 24, 2019 to deliberate on various matters referred above. The details of attendance of the members is as below:

Name of the Director	No. of Meetings Held	No. of Meetings Attended
Smt. Rajashree Birla	1	1
Mr. Satish Pai	1	1
Mr. D. Bhattacharya	1	1
Mr. A. K. Agarwala	1	1
Mr. Y. P. Dandiwala	1	1

RISK MANAGEMENT COMMITTEE

The Company has a robust risk management framework to identify, monitor and minimize risk as also identify business responsibilities.

Your Company has comprehensive Risk Management Policy. The following are the Members of Risk Management Committee:

- Mr. A.K. Agarwala – Chairman
- Mr. Satish Pai – Member
- Mr. D. Bhattacharya – Member
- Mr. Praveen Kumar Maheshwari – Member
- Mr. Vikram Sondhi – Member
- Mr. Anil Mathew – Member

Mr. Anil Malik, Company Secretary, is Compliance Officer of the Risk Management and also acts as Secretary to the Committee.

Mr. J C Laddha superannuated w.e.f. 30th June, 2019 accordingly, the Board at its meeting held on 30th August, 2019 reconstituted the Risk Management Committee by removing Mr. Laddha.

During the year under review, the Committee met four times i.e on April 08, 2019, July 08, 2019, October 09, 2019 and January 08, 2020 to deliberate on various matters. Details of attendance by Directors for the Committee meetings are as follows:

Name of the Director / member	No. of Meetings Held	No. of Meetings Attended
Mr. A. K. Agarwala	4	4
Mr. Satish Pai	4	4
Mr. D. Bhattacharya	4	4
Mr. Praveen Kumar Maheshwari	4	4
Mr. Anil Mathew	4	4
Mr. Vikram Sondhi	4	4

Non-Executive Director's Compensation and Disclosure

All fees/compensation including sitting fee paid to the Non-Executive Directors of the Company are fixed by Board of Directors within the limits approved by the shareholders. Details of sitting fees/compensation paid including stock options, if any, to them are given at the respective places in the report.

Remuneration of Directors and Others

Your Company has two Executive Directors, the Board of Directors decides the remuneration of the Managing Director and Whole-time Director on the recommendation of Nomination and Remuneration Committee.

The Company has a system where all the Directors or Senior Management of the Company are required to disclose all pecuniary relationship or transactions with the Company. There were no pecuniary relationships or transactions between your Company and Non-Executive Director during the year.

Besides sitting fees ₹ 50,000/- per meeting of the Board, ₹ 25,000/- per meeting of the Audit Committee and ₹ 20,000/- per meeting for any other Committee thereof, the Company also pays Commission to the Non-Executive Directors.

For FY 2019-20, the Board has approved payment of ₹ 2.20 Crore (previous year ₹ 4.50 Crore) as Commission to the Non-Executive Directors of the Company pursuant to the authority given by the shareholders at the Annual General Meeting held on September 24, 2014 to pay Commission not exceeding 1% of the net profits of the Company to the Non-Executive Directors of the Company. The amount of commission payable is determined after assigning weightage to attendance and the type of meeting and other responsibilities.

Executive Directors are paid remuneration within the limits envisaged under Section 197, Schedule V of Companies Act, 2013. The said remuneration is approved by the Board as well as shareholders of the Company.

CORPORATE GOVERNANCE REPORT

The details of Remuneration package, fees paid etc. to Directors for the year ended March 31, 2020:

(a) Non-Executive Directors:

Name of Director	Sitting Fees Paid (₹ In Lakh)	Commission Payable (₹ in Lakh)	Total Payments Paid / Payable in 2019-20 (₹ in Lakh)
Mr. Kumar Mangalam Birla[1, 2]	3.30	0.00	3.30
Mrs. Rajashree Birla[2]	1.70	109.15	110.85
Mr. A. K. Agarwala	4.70	12.48	17.18
Mr. D. Bhattacharya[6]	4.80	11.39	16.19
Mr. M. M. Bhagat[7]	3.90	12.07	17.97
Mr. K. N. Bhandari	4.45	21.05	25.50
Mr. Ram Charan	1.00	3.87	4.87
Mrs. Alka Bharucha	2.00	7.91	9.91
Mr. Y. P. Dandiwala	4.40	22.04	26.44
Mr. Girish Dave[8]	2.00	7.91	9.91
Dr. Vikas Balia	2.25	10.91	12.44
Mr. Sudhir Mital	0.50	1.94	2.44

Notes:

1. Mr. Kumar Mangalam Birla assumed the role of Executive Chairman of Aditya Birla Management Corporation Private Limited w.e.f. January 01, 2019. Accordingly he would not like to receive any commission from your Company w.e.f. January 01, 2019.
2. No Director is related to any other Director on the Board, except Mr. Kumar Mangalam Birla and Mrs. Rajashree Birla, who are son and mother respectively.
3. Your Company has a policy of not advancing any loan to its Directors except to Executive Director in the course of normal employment.
4. The Company has obtained shareholders' approval for payment of commission to its Non-Executive Directors & Independent Directors, not exceeding 1% of Net Profit of the Company.
5. Stock Options were not granted to any Non-Executive Directors.
6. In addition to above, the Board approved pension of Mr. D. Bhattacharya of ₹ 0.335 Crore per month, hence he has been paid ₹ 4.02 Crore as pension and ₹ 0.02 Crore towards reimbursement of medical expenses for his past service as Managing Director.
7. Mr. M M Bhagat (DIN: 00006245) has ceased to be an Independent Director w.e.f August 30, 2019 due to old age.
8. Mr. Girish Dave (DIN: 00036455) has resigned as Independent Director w.e.f. November 11, 2019 due to age and personal reasons.

(b) Paid to Executive Directors

Executive Director	Relationship with other Directors	Remuneration for the year 2019-20			
		All elements of remuneration package i.e., salary, benefits, bonuses, pension etc.	Fixed component & performance linked incentives, along with performance criteria	Service contracts, notice period, severance fee	Stock option details, if any
Mr. Satish Pai (Managing Director) See Note (a), (f)	None	226,938,753	92,167,000	See Note (b)	See Note (c)
Mr. Praveen Kumar Maheshwari (Whole-time Director) See Note (e), (f)	None	50,937,732	11,712,121	See Note (b)	See Note (d)

(a) Mr. Satish Pai Managing Director was paid a sum of ₹ 9,21,67,000 towards performance bonus linked to achievement of targets for FY 2018-19.

(b) The appointment is subject to termination by three months notice in writing on either side. No severance fee is payable to the Managing Director or Whole-Time Director.

(c) 782,609 Stock Options were granted on October 09, 2013 to Mr. Satish Pai. These Stock Options are vested 25% each year over a period of 4 years from the date of grant. In addition, he has been granted 956,522 Stock Appreciation Rights (SARs), of which Mr. Pai had exercised 478,261 SARs during the year FY 2018-19 and balance 478,261 SARs were exercised during FY 2019-20. Further, 1,985,292 and 264,704 Stock Options along

with 466,805 and 62,241 Restricted Stock Units (RSUs) have been granted during FY 2018-19 and FY 2019-20 respectively. These Stock Options are vested 25% each year over a period of 4 years from the date of grant and RSUs are vested at the end of 3 years from date of grant. During FY 2019-20, Mr. Satish Pai has exercised 325,653 Stock Options.

(d) 55,630 Stock Options were granted on October 09, 2013 to Mr. Praveen Kumar Maheshwari. These Stock Options are vested 25% each year over a period of 4 years from the date of grant. Mr. Praveen Kumar Maheshwari was also granted 55,667 RSU on October 09, 2013 which are vested after expiry of 3 years from the date of grant. Further, 119,116 Stock Options and 28,008 RSUs has been granted during FY 2018-19. These Stock Options are vested 25% each year over a period of 4 years from the date of grant and RSUs are vested at the end of 3 years from date of grant. During FY 2019-20, Mr. Praveen Kumar Maheshwari has exercised 111,297 Stock Options.

(e) Mr. Praveen Kumar Maheshwari was paid a sum of ₹ 1,17,12,121 towards performance bonus linked to achievement of targets for FY 2018-19.

(f) Remuneration excludes amortisation of fair value of employee share based payments under Ind AS 102 and liabilities for defined benefit plans provided on actuarial basis.

All Directors have disclosed their shareholding in the Company. None of the Directors is holding any debentures or any other convertibles of the Company. Details of shareholding of Directors as on March 31, 2020 are as follows:

NAME OF THE DIRECTORS	SHARES (₹ 1 paid up)
Mr. Kumar Mangalam Birla*	901,635
Mrs. Rajashree Birla	612,470
Mr. A. K. Agarwala	116,148
Mr. D. Bhattacharya	1,571,937
Mr. K. N. Bhandari	5,071
Mr. Y. P. Dandiwala	206
Mr. Ram Charan	NIL
Mrs. Alka Bharucha	NIL
Mr. Satish Pai	355,653
Mr. Praveen Kumar Maheshwari	111,297
Dr. Vikas Balia	325
Mr. Sudhir Mital	NIL

*Additionally he holds 648,632 equity shares as Karta of Aditya Vikram Kumar Mangalam Birla HUF.

CODE OF CONDUCT

The Hindalco Code of Conduct, as adopted by the Board of Directors, is applicable to all Directors, Senior Management of the Company. The Code is available on the Company's website viz: http://www.hindalco.com/investor-centre/code-of-conduct.

For the year under review, all Directors and Senior Management personnel of the Company have confirmed their adherence to the provisions of the said Code.

Declaration as required under Regulation 26(3) of the Listing Regulations.

We hereby confirm that all Directors and Senior Management have affirmed compliance with Code of Conduct for the financial year ended March 31, 2020.

Satish Pai
Managing Director
[DIN: 06646758]

Date : June 12, 2020
Place: Mumbai

CODE OF CONDUCT FOR PREVENTION OF INSIDER TRADING

In terms of the provisions of the Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 2015, as amended, your Company has adopted a 'Code of Conduct to regulate, monitor and report trading by designated persons in listed or proposed to be listed securities' of your Company ("the Code"). The Code aims at preserving and preventing misuse of unpublished price sensitive information. All Designated Persons (including Directors, Key Managerial Personnel and Employees) of your Company are covered under the Code, which provides inter alia for periodical disclosures and obtaining pre-clearances for trading in securities of your Company.

SUBSIDIARY COMPANIES

The Company has adopted a policy for determining 'material' subsidiaries and the policy can be accessed on your Company's website viz: http://www.hindalco.com/upload/pdf/hil-policy-on-material-subsidiary.pdf

The Company is in compliance with the requirements of Regulation 24 of Listing Regulations with respective Corporate Governance for its subsidiary companies.

DISCLOSURES

(A) Related Party Transaction's

All the related party transactions are strictly done on arm's length basis. The Company places all the relevant details of a related party transactions, entered in the normal course of business, before the Audit Committee from time to time. There was no material related party transaction, which are not in the normal course of the business, entered into by the Company during the year.

CORPORATE GOVERNANCE REPORT

Attention of the Members is drawn to the disclosures of transactions with the related parties set out in Notes to Accounts forming part of the Financial Statements. The Board of Directors have approved and adopted a policy on Related Party Transactions and the same has been uploaded on the website of the Company at http://www.hindalco.com/investor-centre/policies.

(B) Non Compliances/Strictures/penalties Imposed

No Non Compliance/strictures/penalties have been imposed on the Company by Stock Exchange(s) or SEBI or any Statutory Authority on any matters related to capital markets during the last three years.

(C) Disclosure of Accounting Treatment

Your Company has followed all relevant Accounting Standards while preparing the Financial Statements.

(D) Risk Management

Risk evaluation and management is an ongoing process within the organisation. Your Company has comprehensive Risk Management Policy and it is periodically reviewed by the Board of Directors.

(E) Proceeds from public issues, right issues, preferential issues etc:

During the year under review, the Company has not raised any proceeds from public issues, rights issues or preferential issues.

(F) Remuneration of Directors

This is included separately in this Section.

(G) Management

Management Discussion and Analysis Report is prepared in accordance with the requirements laid out under Listing Regulations forms part of this Annual Report. No material transaction has been entered into by the Company with the Promoters, Directors or the Management, their subsidiaries or relatives, etc., that may have a potential conflict with interests of the Company.

(H) Shareholders

(i) The Company has provided the details of Directors seeking appointment/re-appointment in the Annual General Meeting Notice attached with this Annual Report.

(ii) Quarterly Presentations on the Company results are available on the website of the Company (www.hindalco.com) and the Aditya Birla Group website (www.adityabirla.com).

(I) Details of total fees paid to Statutory Auditor

During the FY 2019-20, the total fees charged for audit and non-audit services provided by Price Waterhouse & Co Chartered Accountants LLP (FRN 304026E/ E300009) and other member firms of PricewaterhouseCoopers global network of firms to the Company and its subsidiaries on a consolidated basis is as follows:

₹ in Crore

Engagements	Price Waterhouse & Co Chartered Accountants LLP*	Other PricewaterhouseCoopers global network of firms*
Statutory Audit and Limited Review	3.22	48.44
Audit of special purpose financial statements of certain foreign subsidiaries	0.17	-
Tax compliance and advisory services	-	1.24
Other non-audit services- Certifications	-	1.29
Audit related services - Certifications	0.50	-
Total	**3.89**	**50.97**

*Excluding taxes and out of pocket Expenses

Whistle Blower Policy

The Company promotes ethical behaviour in all its business activities and has put in place a mechanism for reporting illegal and unethical behaviour. The Company has a Vigil Mechanism and Whistle Blower Policy under which employees are free to report violations of applicable laws and regulations and Code of Conduct. The whistle blower may send the complaint to the independent reporting mechanism - Ethics Hotline or to the respective Values Standards Committee (VSC), depending on the level at which the violation is perceived to be happening, or the seniority of the individual/s involved. Employees may also report to the Chairman of the Audit Committee. During the year under review, no employee was denied access to the Audit Committee.

Prevention of Sexual Harassment

Your Company has zero tolerance for sexual harassment at workplace and has adopted a Policy on prevention, prohibition and redressal of sexual harassment at workplace in line with the provisions of the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 and the Rules thereunder for prevention and redressal of complaints of sexual harassment at workplace.

The Company is committed to providing equal opportunities without regard to their race, caste, sex, religion, colour, nationality, disability etc. All women associates (permanent, temporary, contractual and trainees) as well as any women

visiting the Company's office premises or women service providers are covered under this policy. All employees are treated with dignity with a view to maintain a work environment free of sexual harassment whether physical, verbal or psychological.

The Details of complaints filed, disposed and pending during the FY 2019-20 is as given below:

Number of complaints filed during the financial year	Number of complaints disposed of during the financial year	Number of complaints pending as at end of the financial year
5	3	2

CEO/CFO Certification

The Managing Director and CFO have certified to the Board that:

A. They have reviewed Financial Statements and the Cash Flow Statement for the year and that to the best of their knowledge and belief:
   1. these statements do not contain any materially untrue statement or omit any material fact or contain statements that might be misleading;
   2. these statements together present a true and fair view of the Company's affairs and are in compliance with existing Accounting Standards, applicable laws and regulations.

B. There are, to the best of their knowledge and belief, no transactions entered into by the Company during the year which are fraudulent, illegal or violative of the Company's Code of Conduct.

C. They accept responsibility for establishing and maintaining internal controls for financial reporting and that they have evaluated the effectiveness of internal control systems of the Company pertaining to financial reporting and they have disclosed to the Auditors and the Audit Committee, deficiencies in the design or operation of such internal controls, if any, of which they are aware and the steps they have taken or propose to take to rectify these deficiencies.

D. They have indicated to the Auditors and the Audit Committee:
   1. that there were no significant changes in internal control over financial reporting during the year;
   2. that there were no significant changes in accounting policies during the year and that the same have been disclosed in the notes to the Financial Statements; and
   3. instances of significant fraud of which they have become aware and the involvement therein, if any, of the management or an employee having a significant role in the Company's internal control system over financial reporting.

REPORT ON CORPORATE GOVERNANCE

Your Company has complied with Corporate Governance requirements specified under Regulations 17 to 27 and clause (b) to (i) of sub regulation (2) of Regulation 46 of the Listing Regulations.

COMPLIANCE

I. A certificate from the Statutory Auditors confirming compliance with the conditions of Corporate Governance as stipulated in Listing Regulations forms part of Annual Report.

II. A Certificate by Company Secretary in practice that none of the directors have been debarred or disqualified from being appointed for continuing as directors in the companies by the Board/Ministry of Corporate Affairs or any such statutory authority forms part of Annual Report As below:-

CERTIFICATE

Pursuant to Regulation 34(3) and Schedule V Para C clause (10)(i) of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 ("SEBI Listing Regulations")

To

The Members
Hindalco Industries Limited
Ahura Centre, 1st Floor,
B Wing Mahakali Caves Road,
Mumbai – 400093

We have examined the relevant books, papers, minutes books, forms and returns filed, Notices received from the Directors during the financial year 2019-20, and other records maintained by the Company and also the information provided by the Company, its officers, agents and authorised representatives of Hindalco Industries Limited CIN.: L27020MH1958PLC011238 (hereinafter called the 'Company') having its Registered office at Ahura Centre, 1st Floor, B Wing Mahakali Caves Road, Mumbai – 400093 for the purpose of issue of a Certificate, in accordance with Regulation 34 (3) read with Schedule V Para-C Sub clause 10 (i) of the Securities Exchange Board of India (Listing Obligations and Disclosure Requirements) 2015 (LODR), as amended vide notification no. [SEBI/LAD/NRO/GN/2018/10 dated May 9, 2018 issued by SEBI.

In our opinion and to the best of our knowledge and based on such examination as well as information and explanations furnished to us, which to the best of our knowledge and belief were necessary for the purpose of issue of this certificate and based on such verification as considered necessary, we hereby certify that None of the Directors stated below

CORPORATE GOVERNANCE REPORT

who are on the Board of the Company as on 31st March 2020 have been debarred or disqualified from being appointed or continuing as Directors of the Companies by Securities Exchange Board of India or The Ministry of Corporate Affairs or any such other statutory authority.

Sl. No.	Name of the Director	DIN	Date of Appointment in the Company
1	Kumar Mangalam Birla	00012813	16/11/1992
2	Rajashree Birla	00022995	15/03/1996
3	Askaran Agarwala	00023684	11/09/1998
4	Kailash Nath Bhandari	00026078	30/01/2006
5	Debnarayan Bhattacharya	00033553	01/10/2008
6	Alka Marezban Bharucha	00114067	11/07/2018
7	Praveen Kumar Maheshwari	00174361	28/05/2016
8	Yazdi Piroj Dandiwala	01055000	14/08/2015
9	Ram Charan	03464530	12/02/2011
10	Vikas Balia	00424524	19/07/2019
11	Satish Pai	06646758	13/08/2013
12	Sudhir Mital	08314675	11/11/2019

*Date of Appointment is the date which is reflected on MCA portal.

Ensuring the eligibility for the appointment / continuity of every Director on the Board is the responsibility of the management of the Company. Our responsibility is to express an opinion on these based on our verification. This certificate is neither an assurance as to the future viability of the Company nor of the efficiency or effectiveness with which the management has conducted the affairs of the Company.

For BNP & Associates
Company Secretaries

Mr. Avinash Bagul
Partner
(FCS No. 5578 COP No. 19862)
UDIN: F005578B000332333

Place : Mumbai
Dated : June 10th, 2020

GENERAL BODY MEETINGS

Details of Annual General Meetings

Location and time, where Annual General Meetings (AGMs) in the last three years were held:-

Year	AGM	Location	Date	Time
2018-19	AGM	Nehru Centre Auditorium	August 30,2019	3.00 p.m
2017-18	AGM	Ravindra Natya Mandir	September 21, 2018	3.00 p.m
2016-17	AGM	Ravindra Natya Mandir	September 13, 2017	3.00 p.m

In the last three years special resolution as set out in the respective notices for AGM's were passed by shareholders.

Whether any special resolution passed last year through postal ballot? No

Person who conducted the postal exercise: Not Applicable

Whether any special resolution is proposed to be conducted through postal ballot: No

MEANS OF COMMUNICATION

- Quarterly Results:

Newspaper	Cities of Publication
Business Standard (English)	All editions
Navshakti (Marathi)	Mumbai Edition only

- Any website, where displayed:
  www.hindalco.com
  www.adityabirla.com
- Whether the Company Website displays:

All official news releases	Yes
Presentation made to Institutional Investors/ Analysts	Yes

General Shareholder Information

The same is provided in the 'Shareholder Information' section.

Status of compliance of Non-mandatory requirement

1. The Company maintains a separate office for the Non-Executive Chairman. All necessary infrastructure (including vehicles for business purpose) and assistance are available to enable him discharge his responsibilities effectively.
2. During the period under review, there is no audit qualification in the financial statement.
3. The post of the Non-Executive Chairman of the Board is separate from that of the Managing Director/CEO.
4. The Company has engaged internal auditors for aluminium and copper business separately and their report is reviewed by the Audit Committee.

Auditor's Certificate Regarding Compliance of Conditions of Corporate Governance

To the Members of Hindalco Industries Limited

We have examined the compliance of conditions of Corporate Governance by Hindalco Industries Limited ("the Company") , for the year ended March 31, 2020 as stipulated in Regulations 17, 17A, 18, 19, 20, 21, 22, 23, 24, 24A, 25, 26, 27 and clauses (b) to (i) of sub-regulation (2) of regulation 46 and para C , D and E of Schedule V of the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 (as amended) (collectively referred to as "SEBI Listing Regulations, 2015").

The compliance of conditions of Corporate Governance is the responsibility of the Company's management. Our examination was carried out in accordance with the Guidance Note on Certification of Corporate Governance, issued by the Institute of Chartered Accountants of India and was limited to procedures and implementation thereof, adopted by the Company for ensuring the compliance of the conditions of Corporate Governance. It is neither an audit nor an expression of opinion on the financial statements of the Company.

In our opinion and to the best of our information and according to the explanations given to us, we certify that the Company has complied with the conditions of Corporate Governance as stipulated in the SEBI Listing Regulations, 2015.

We state that such compliance is neither an assurance as to the future viability of the Company nor the efficiency or effectiveness with which the management has conducted the affairs of the Company.

For Price Waterhouse & Co Chartered Accountants LLP
Firm Registration No. 304026E/E-300009

Sumit Seth
Partner
Membership No:105869
UDIN: 20105869AAAABC4542

Place : Mumbai
Date : 14th August, 2020

SHAREHOLDER INFORMATION

1. Annual General Meeting

- Date and Time : 10th September, 2020 at 03:00 p.m.
- Mode : Video conferencing (VC) / Other audio visual means (OAVM)

2. Financial Year : April 1 to March 31

Financial calendar

Board Meetings for approval of	: Tentative Dates
- Financial results for the quarter ending June 30, 2020	: On or before 14th August, 2020
- Financial results for the half year ending September 30, 2020	: On or before 14th November, 2020
- Financial results for the quarter ending December 31, 2020	: On or before 14th February, 2021
- Financial results for the year ending March 31, 2021 (Audited)	: On or before 30th May, 2021
- Annual General Meeting for the year ended March 31, 2021	: On or before 31st August, 2021

3. Date of Book Closure : 05th September, 2020 to 10th September, 2020 (both days inclusive)

4. Dividend Payment Date : On or after 10th September, 2020

5. Registered Office : Ahura Centre, 1st Floor, B Wing, Mahakali Caves Road Andheri (East), Mumbai - 400 093. Tel: (91-22) 66917000 Fax: (91-22) 66917001 E-Mail: hilinvestors@adityabirla.com Website: www.hindalco.com CIN No. L27020MH1958PLC011238

6. a. Listing Details:

Equity Shares	Global Depository Receipts (GDRs)	Non-Convertible Debentures
BSE Limited Phiroze Jeejeebhoy Towers Dalal Street, Mumbai – 400 001.	**Luxembourg Stock Exchange** 35 A Boulevard Joseph II L-1840 Luxembourg	**National Stock Exchange of India Limited** "Exchange Plaza", Bandra Kurla Complex Bandra (East), Mumbai – 400 051.
National Stock Exchange of India Limited "Exchange Plaza", Bandra Kurla Complex Bandra (East), Mumbai – 400 051.		

Note: Listing fees has been paid to all the Stock Exchanges as per their Schedule.

b Overseas Depository for GDRs : J. P. Morgan Chase Bank N.A.
P.O. Box 64504, St. Paul, MN 55164-0504
jpmorgan.adr@eq-us.com

c Domestic Custodian of GDRs : Citibank N.A.
Custody Services
FIFC, 11th Floor, C-54 & 55, G Block, Bandra Kurla Complex,
Bandra (East), Mumbai – 400 098
Tel.: 91-22-61756895
Fax: 91-22-26532205

7. ISIN

: Fully paid up equity share: ISIN INE038A01020
GDR: ISIN US4330641022
CUSIP No. 433064300

8. Details of Debenture issued

Interest Payment Date	Interest	Series	Date of allotment	Tenure	Record Date	ISIN No.
25th April	Annually	9.55% Series (2012) –I	25th April, 2012	10 Years	7 days prior to each interest and/or redemption payment	INE038807258
27th June	Annually	9.55% Series (2012) –II	27th June, 2012	10 Years	7 days prior to each interest and/or redemption payment	INE038A07266
2nd August	Annually	9.60% Series (2012)-III	2nd August, 2012	10 Years	7 days prior to each interest and/or redemption payment	INE038A07274

9. Stock Code

Stock Code:	Scrip Code
Bombay Stock Exchange	500440
National Stock Exchange	HINDALCO

Stock Exchange	Reuters	Bloomberg
Bombay Stock Exchange	HALC.BO	HNDL IN
National Stock Exchange	HALC.NS	NHNDL IN
Luxembourg Stock Exchange (GDRs)	HALCg.LU	HDCD LI

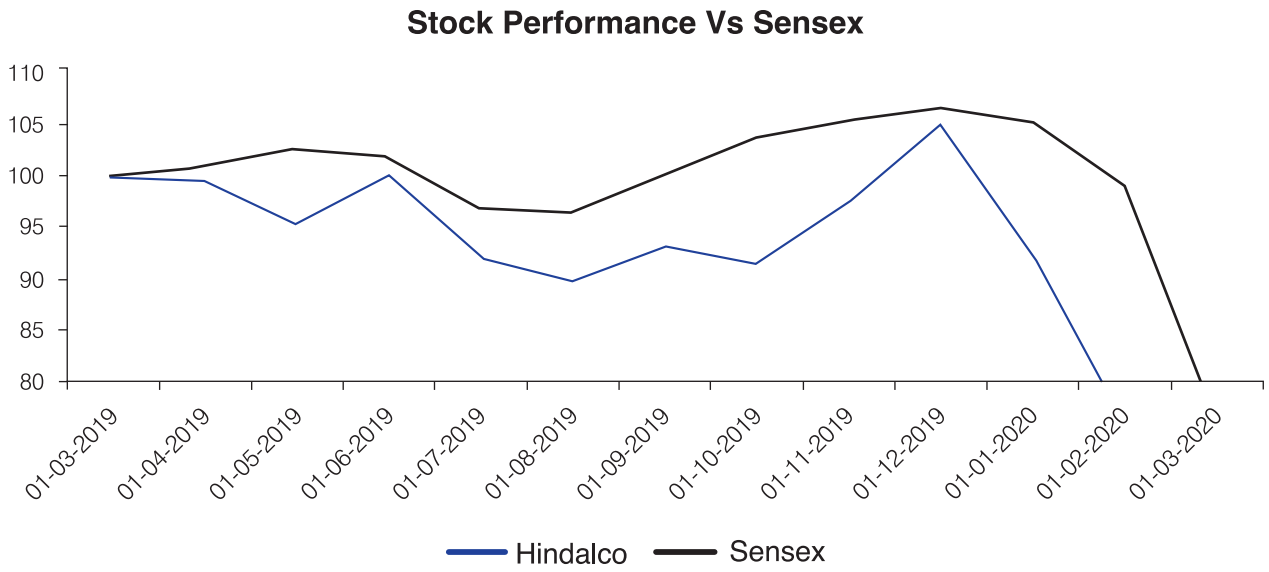
Name and Address of Debenture Trustee : IDBI Trusteeship Services Limited
Asian Building, Ground Floor, 17 R. Kamani Marg
Ballard Estate, Mumbai: 400 001

10. Stock Price Data

	Bombay Stock Exchange				National Stock Exchange				Luxembourg Stock Exchange		
	High	Low	Close	Volume	High	Low	Close	Volume	High	Low	Close
	(In ₹)			(In Nos)	(In ₹)			(In Nos)	In US$		
March-20	167.8	85.05	95.65	1,00,00,155	167.9	84.9	95.7	27,52,05,094	2.2	2.16	1.27
February-20	198.25	154.05	156.35	50,26,533	198.4	154.1	155.9	16,26,37,755	2.76	2.76	2.16
January-20	221.2	188.25	189.2	91,43,756	221.2	188.25	189.35	18,21,83,463	3.08	3.06	2.64
December-19	219.4	193	216.1	85,22,603	219.4	192.8	216.15	16,98,01,792	3.06	2.76	3.02
November-19	207.3	187.05	200.25	90,39,562	207.3	187.05	200.15	18,72,55,610	2.9	2.26	2.86
October-19	195.35	180.05	188.05	59,80,900	195.55	180	187.9	13,19,02,156	2.7	2.56	2.64
September-19	208.15	176.75	191.3	53,11,318	208.2	176.6	191.35	12,58,83,645	2.9	2.46	2.7
August-19	191	171.25	184.5	93,95,528	189.25	171.1	184.45	16,14,23,109	2.62	2.44	2.58
July-19	210.5	184.75	190.7	97,53,985	210.6	184.8	190.55	13,39,88,914	3.02	2.68	2.76
June-19	210.25	188.15	207.1	1,10,49,518	210.4	188.1	207.5	12,47,13,306	3	2.62	2.98
May-19	207.6	187.25	196.6	99,81,382	207.65	187.25	197	17,22,41,304	2.96	2.68	2.8
April-19	218.95	196.15	205.85	55,72,305	219.1	195.75	206.05	14,31,93,322	3.14	2.78	2.94

SHAREHOLDER INFORMATION

11. Stock Performance



12. Stock Performance over the past few years

Absolute Returns (in %)			
	1YR	3YR	5YR
Hindalco	-53.43%	-50.94%	-25.81%
SENSEX	-23.80%	-0.51%	5.40%
NIFTY	-26.03%	-6.28%	1.26%

Annualised Returns (in %)			
	1YR	3YR	5YR
Hindalco	-53.43%	-21.13%	-5.80%
SENSEX	-23.80%	-0.17%	1.06%
NIFTY	-26.03%	-2.14%	0.25%

13. Registrar and Transfer Agents

The Company has In-House Investors Service Department registered with SEBI as Category II Share Transfer Agent vide Registration no INR 000003910.

Investors Service Department
Hindalco Industries Limited
Ahura Centre, 1st floor,
B Wing, Mahakali Caves Road
Andheri (East), Mumbai-400 093.
Tel: (91-22) 6691 7000, Fax: (91-22) 6691 7001
E-mail: hilinvestors@adityabirla.com

14. Share Transfer System

Share transfer in physical form are registered and returned within a period of 15 days of receipt, provided the documents are clear in all respects. Officers of the Company have been authorized to approve transfers up to 10,000 Shares in physical form under one transfer deed and one Director of the Company has been authorized to approve the transfers exceeding 10,000 shares under one transfer deed. As per directives issued by SEBI, it is compulsory to trade in the Company's equity shares in dematerialised form.

The total number of shares transferred in the physical form during the year was 3,21,229.

TRANSFER SUMMARY FROM 01-04-2019 TO 31-03-2020				
Transfer Period in Days		Number of Transfers	%	Number of Shares
From	To			
0	10	157	91.28	2,42,075
11	15	13	7.56	20,034
16	20	2	1.16	59,120
Total		**172**	**100.00**	**3,21,229**

15. Investor Services

a. Complaints received during the year:

Nature of complaints	2019-20		2018-19	
	Received	Cleared	Received	Cleared
Relating to Transfers, Transmissions Dividend, Interest, Redemption, Demat – Remat, Rights Issue and Change of Address etc.	18	18	23	23

b. Shares pending for transfer : Nil

16. Distribution of Shareholding:

S. No.	Shares from	Shares to	Share Holders	% of Holders	No of Shares Held	% of Holding
1	0	1000	3,11,197	93.73	4,51,45,300	2.00
2	1001	2000	9,412	2.84	1,38,15,628	0.61
3	2001	5000	6,474	1.95	2,05,82,314	0.92
4	5001	10000	2,367	0.71	1,68,92,152	0.75
5	10001	50000	1,697	0.51	3,42,27,242	1.52
6	50001	100000	226	0.07	1,60,87,852	0.73
7	100001 and above		641	0.19	2,09,94,72,199	93.47
	Total		**3,32,014**	**100.00**	**2,24,62,22,687**	**100.00**

17. Dematerialisation of Shares and Liquidity

Around 98% of outstanding shares have been dematerialized. Trading in Hindalco Shares is permitted only in the dematerialized form 5th April, 1999 as per notification issued by Securities and Exchange Board of India.

18. Details on use of public funds obtained in 3 yrs: Not Applicable

19. Outstanding GDR/Warrants/Convertible Bonds:

14,98,18,867 GDRs are outstanding as on 31st March, 2020. Each GDR represents one underlying equity share.

20. Commodity price risk or foreign exchange risk and hedging activities:

Your Company hedges its foreign currency exposure in respect of its imports and exports as per its policies. Your Company has constituted a Risk Management Committee consisting of Directors/Executives of your Company. Your Company has commodity/foreign exchange hedging from time to time considering various factors as per the policy of the Company.

SHAREHOLDER INFORMATION

The details as required under SEBI (Listing Obligations & Disclosure Requirements) Regulations, 2015 is as below:

1. Risk management policy of the listed entity with respect to commodities including through hedging.

   The Company has a Risk Management Policy for Managing its Commodity Price Risk. The Policy captures the Objectives of Commodity Risk Management and the Treatment of Different Types of Exposures. The Policy lists down the Hedging Instruments that can be used, the Hedge Coverage ratios for different tenors and also mentions the Risk Management Structure at the Company.

2. Exposure of the listed entity to commodity and commodity risks faced by the entity throughout the year:

   a. Total Exposure of the listed entity to commodities in INR in Millions : 5,32,619

   b. Exposure of the entity to various commodities is as below:

Commodity Name	Nature of risk (Physical)	UOM	Exposure in INR towards the particular commodity (₹ In Million)	Exposure in Quantity terms towards the particular commodity	% of such exposure hedged through commodity derivatives				
					Domestic Market		International Market		Total
					OTC	Exchange	OTC	Exchange	
Aluminium	Sell	MT	1,89,170	12,94,256	-	-	12	10	22
Furnace Oil/LSHS/LDO	Buy	MT	5,012	1,44,855	-	-	69	-	69
Imported Coal	Buy	MT	6,846	10,06,710	-	-	20	-	20
Copper	Buy	MT	1,34,678	3,56,941	-	-	14	27	41
Copper	Sell	MT	1,48,399	3,35,664	-	-	8	32	40
Silver (Oz)	Buy	T/Oz	2,956	25,54,119	-	-	100	-	100
Silver (Oz)	Sell	T/Oz	2,643	19,95,788	-	-	100	-	100
Gold (KG)	Buy	KG	19,868	6,057	-	100	-	-	100
Gold (KG)	Sell	KG	23,047	6,491	-	100	-	-	100

Notes:

i. Table above includes Exposure and % Hedges for FY 2019 - 20 only. Details of hedges done for future years has not been captured here.

ii. The table above includes commodities where a liquid derivative market exists.

iii. The Company has price risk on commodities where an active derivative market does not exist, like - Caustic Soda, Aluminum Fluoride, CP Coke, Alumina, Bauxite etc. These Commodities are not included in the table above.

iv. The Company maintains offset hedge book to eliminate the “pricing” timing mismatch for buy and sell position of Copper. Accordingly, exposure of Copper Buy position and Copper Sell position naturally hedged is 48 % and 60 %, respectively. In case of Copper Buy exposure, 11% is not hedged represents unpriced transactions as at March 31, 2020 as the same will be hedged as per Company’s policy.

v. The Company has strategic view based exposure for Copper, Gold and Silver. However, the same is not included above as it is a small portion of the overall Copper, Gold & Silver volumes.

vi. The Company procures part of its Alumina requirement from its 100% subsidiary, Utkal Alumina International Limited. The same is not included in the above table.

   c. The Company faces commodity price risk on purchase of its raw material as well as on sales of its products. The Company categorizes its price risk in broadly 2 categories - Offset Hedge Exposure and Strategic View Based Exposure. Under the Offset Hedge Program, we use derivative products to eliminate the price risk arising due to timing mismatch whereas for Strategic View Based exposure, derivative instruments are used to manage the price risk for future tenor. Hedging is done for commodities where an active derivative market exists.

21. Location of Plant and Mines

Aluminium & Power

Renukoot Plant*
P.O. Renukoot-231217
Dist. Sonebhadra, Uttar Pradesh
Tel: (05446) 252077-9
Fax: (05446) 252107/426

Hirakud Power
Post Box No.12
Hirakud 768 016
Dist. Sambalpur, Orissa
Tel: (0663) 2481307
Fax: (0663) 2481342/365-2541642

Renusagar Power Division
P. O. Renusagar
Dist. Sonebhadra, Uttar Pradesh
Tel: (05446)277161-3/278592-5
Fax: (05446) 277164

Mahan Aluminum
Hindalco Industries Limited
NH-75 E, Singrauli, Sidhi Rd,
P.O. Bargawan, Pin: 486886
Dist. Singrauli MP
Tel: 0780-5281014

Hirakud Smelter
Hirakud 768 016
Dist. Sambalpur, Orissa
Tel: (0663) 2481307/1452
Fax: (0663) 2481356

Aditya Aluminium
Hindalco Industries Limited
Lapanga
Dist. Sambalpur-768212, Odisha
Tel: 0663-2114424
Fax: 0663-2590434

Chemicals

Muri Alumina
Post Chotamuri-835 101
Dist. Ranchi, Jharkhand
Tel: (06522) 244253/334
Fax: (06522) 244342

Belagavi
Village Yamanapur
Belagavi 590 010, Karnataka
Tel: (0831) 2472716
Fax: (0831) 2472728

Copper

Birla Copper Division
P.O. Dahej, Lakhigam
Dist. Bharuch – 392 130, Gujarat
Tel: (02641) 256004/06, 251009
Fax: (02641) 251002

Sheet, Foil, Wheel, Packaging & Extrusions

Belur Sheet
39, Grand Trunk Road
Belurmath 711 202
Dist. Howrah, West Bengal
Tel: (033) 2654 7210/12
Fax: (033) 2654 9982/5740

Mouda Unit
Village Dahali
Ramtek Road, Mouda
Nagpur – 441 104
Tel: (07115) 660777/786

Taloja Sheet
Plot 2, MIDC Industrial Area
Taloja A.V., Dist. Raigad
Navi Mumbai - 410 208, Maharashtra
Tel: (022) 2741 2261 66292929
Fax: (022) 2741 2430/31

Hirakud FRP
Hindalco Industries Limited
Hirakud-768016
Dist. Sambhalpur, Odisha
Tel: (0663) 6625000
Fax: (0663) 2481344

Alupuram Extrusions
Alupuram, P.B. No.30
Kalamassery - 683 104
Dist. Ernakulam, Kerala
Tel: (0484) 2532441-48
Fax: (0484) 2532468

Mines

Durgmanwadi Mines
At Post Radhanagri
Dist. Kolhapur,
Maharashtra - 416 212
Tel: (02321) 2371008
Fax: (02321) 237478

Gare Palma Coal Mines (IV/4 & IV/5)
Underground Coal Mines
Village & Post Milupura
Tehsil Tamnar, Dist. Raigarh
Chhattisgarh: 496107

Lohardaga Mines
Dist. Lohardaga 835 302
Jharkhand
Tel/Fax: (06526) 224112

Dumri Coal Mine
103, Commerce Tower
Near Mahavir Tower,
Main Road,
Ranchi-834001
Tel: (0651) 2330944/48
Fax: (0651)2330782

Samri Mines
P.O.: Kusumi 497222
Dist. Sarguja, Chattisgarh
Tel/Fax: (07778)274325

Kathautia Coal Mine
Kathautia Open Cast Coal
Mine (Koccm)
Village Kathautia
P.O. Naudiha
PS Pandwa, Dist:Palamau
Jharkhand: 822123

*Renukoot works has also manufacturing facilities of Chemicals, Sheets and Extrusions.

SHAREHOLDER INFORMATION

22. Investor Correspondence:

The Company Secretary
Hindalco Industries Limited
Ahura Centre, 1st Floor, B Wing
Mahakali Caves Road, Andheri (E)
Mumbai: 400093
Tel: (91-22) 66917000
Fax: (91-22) 66917001
Email: hilinvestors@adityabirla.com

23. Categories of Shareholding (as on 31st March):

Category of Shareholders	2020				2019			
	Number of Share Holders	% of Share Holders	Number of Shares held	% Share Holding	Number of Share Holders	% of Share Holders	Number of Shares held	% Share Holding
Promoters*	17	0.01	77,83,39,497	34.65	20	0.01	77,83,39,497	34.66
Mutual Funds & UTI	212	0.06	34,50,24,221	15.36	194	0.06	29,72,21,564	13.24
Banks/ Financial Institutions/Ins/Govt	104	0.03	25,43,26,126	11.32	94	0.03	20,49,26,345	9.13
FIIs	621	0.19	41,96,66,017	18.68	653	0.21	53,19,42,403	23.69
Corporates	2,125	0.64	12,46,75,484	5.55	2,312	0.76	11,20,94,472	4.99
Individuals/Shares In Transit/Trust	3,21,252	96.76	14,31,08,114	0.73	2,94,117	96.64	13,86,02,513	6.17
NRIs/ OCBs/Foreign Nationals	7,681	2.31	3,99,20,998	1.78	6,953	2.28	3,97,27,356	1.77
GDRs	1	0.00	13,52,76,558	6.02	1	0.00	13,82,03,847	6.15
Shares held by Employee trust	1	0.00	58,85,672	0.26	1	0.00	44,72,248	0.20
Total	**3,32,014**	**100.00**	**2,24,62,22,687**	**100.00**	**3,04,345**	**100.00**	**2,24,55,30,245**	**100.00**

**Includes GDRs held by Promoter Group Companies.*

24. Per share data

Particulars	2019-20	2018-19	2017-18	2016-17	2015-16
Net Earnings (₹ in Crore)	620	1,205	1,436	1,557	552
Cash Earnings# (₹ in Crore)	2,328	2,899	3,053	2,985	1,834
Basic EPS (₹)	2.79	5.41	6.45	7.56	(0.64)
Cash EPS (₹)**	10.47	13.01	13.70	14.49	8.95
Dividend per share (₹)	1.00@	1.20	1.20	1.10	1.00
Dividend pay out (%)##	36.23@	26.92	22.58	19.08	41.23
Book Value per share (₹)	202.54	216.24	220.28	211.00	204.16
Price to earning (x)*	34.33	37.99	33.28	25.80	(137.42)
Price to cash earning (x)*	9.14	15.80	15.66	13.46	9.83
Price to Book Value (x)*	0.47	0.95	0.97	0.92	0.43

Net Earnings plus Depreciation and Amortisation

@proposed dividend

* Stock price as on 31st March

** Cash EPS – Cash Earnings divided by Weighted average numbers of equity shares used in computing basic EPS

For calculation of dividend payout ratio of FY 2018-19, 2017-18, 2016-17 and 2015-16, dividend includes Dividend Distribution Tax.

25. LIST OF CREDIT RATINGS

CARE ratings have provided the following ratings for the financial year 2019-20

Instrument	Rating	Rating Action
Long Term Bank facilities – Term Loan	CARE AA+; Stable (Double A Plus; Outlook: Stable)	Reaffirmed
Long Term Bank facilities- Fund based	CARE AA+; Stable (Double A Plus; Outlook: Stable)	Reaffirmed
Long Term Bank facilities- Non- Fund based	CAREAA+; Stable/CARE A1+	Reaffirmed
	(Double A Plus; Outlook: Stable/ A One Plus)	
Short term Bank Facilities- Term Loan	CAREA1+ (A One Plus)	Assigned

CRISIL have reaffirmed their ratings as "CRISIL AA/POSITIVE" (pronounced as CRISIL double A rating with positive outlook) rating on the Non-convertible debentures.

26. OTHER USEFUL INFORMATION FOR SHAREHOLDERS

Shareholders who have not yet encashed their dividend warrants for the years 2012-2013 to 2018-2019 may approach the Company with a request letter quoting their Ledger Folio numbers / DP & Client ID along with dividend warrant(s) (if any) and a cancelled cheque leaf for revalidation/claim.

The details of Dividend paid by the Company and the respective due dates of transfer of unclaimed/un-encashed dividend to the designated fund of the Central Government is enumerated below:

Date of Declaration	Financial Year of Dividend	Due date of transfer to the Government	Amount in ₹
September 10, 2013	2012-2013	October 17, 2020	64,73,839.40
September 24, 2014	2013-2014	October 31, 2021	48,07,431.00
September 16, 2015	2014-2015	October 23, 2022	57,46,607.49
September 14, 2016	2015-2016	October 21, 2023	57,64,850.00
September 13, 2017	2016-2017	October 20, 2024	67,38,986.30
September 21, 2018	2017-2018	October 27, 2025	71,71,834.80
August 30, 2019	2018-2019	October 7, 2026	69,77,320.20

Pursuant to the provisions of Investor Education and Protection Fund Authority (Accounting, Audit, Transfer and Refund) Rules 2016 read with Investor Education and Protection Fund Authority (Accounting, Audit, Transfer and Refund) Amendment 2017, the Company is mandated to transfer all such shares to Investor Education and Protection Fund (IEPF) in respect of which dividend has not been claimed for seven consecutive years or more.

The unclaimed dividend amount for the financial year 2011-2012 and 3,76,418 Equity Shares related to unclaimed dividend for the financial year have been credited to Investor Education and Protection Fund (IEPF).

Shareholder can claim the unclaimed dividend amounts and shares credited to IEPF with a separate application made to the IEPF Authority, in Form IEPF-5, as prescribed under the Rules and are available at IEPF website i.e www.iepf.gov.in.

In case of any query contact –
Hindalco Industries limited
Ahura Centre, 1st floor, B Wing
Mahakali Caves Road
Andheri (East), Mumbai- 400 093.
Tel: (91-22) 6691 7000
Fax: (91-22) 6691 7001
Email ID: hilinvestors@adityabirla.com

Green Initiative in Corporate Governance – Service of Documents in Electronic Form

As you are aware, Ministry of Corporate Affairs Government of India (MCA) vide its Circular(s) Nos. 17 and 18 dated 21st April, 2011 and 29th April, 2011 respectively has now allowed the companies to send Notices of General Meetings/other Notices, Audited Financial Statements, Director's Report, Auditor's Report etc. henceforth to their shareholders electronically as a part of its Green Initiative in Corporate Governance.

SHAREHOLDER INFORMATION

Keeping in view the aforesaid green initiative of MCA, your Company shall send the Annual Report and other documents to its shareholders in electronic form at the e-mail address provided by them and made available to us by the Depository.

Further this year in view of the outbreak of COVID-19 pandemic and owing to the difficulties involved in dispatching of physical copies of Annual Report, the Ministry of Corporate Affairs ("MCA") has vide its circular no 20/2020 dated 5 May 2020 directed the Companies to send the Annual Report only by e-mail to all the Members of the Company. Therefore, the Annual Report for FY 2019-20 and notice of AGM is being sent to the Members at their registered e-mail addresses in accordance with MCA and SEBI Circulars.

Unclaimed Shares in Physical Form

Regulation 39(4) of the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 provides the manner of dealing with shares issued in physical form pursuant to public issue or any other issue which remains unclaimed with the Company. In compliance with the provisions of Listing Regulations, the Company has sent three reminders to the shareholders whose share certificates are lying unclaimed.

Disclosures pursuant to Regulation 39(4) of Listing Regulation are as below:

- Aggregate number of shareholders and outstanding shares lying in Unclaimed Suspense account lying as at 1st April, 2019:

  1,054 Shareholders holding 5,36,621 Equity Shares of the Company

- Number of shareholders who approached the issuer for transfer of shares from Unclaimed Suspense Account during the year

  15 Shareholders holding 9,520 Equity Shares of the Company

- Number of shareholders to whom shares were transferred from Unclaimed Suspense Account during the year

  14 Shareholders holding 8,840 Equity Shares of the Company and 1 case for 680 Equity Shares is under process.

  302 Shareholders holding 1,04,148 Equity Shares were transferred to Investor Education and Protection Fund Account.

- Aggregate number of shareholders and outstanding shares lying in Unclaimed Suspense Account as at 31st March, 2020

  737 shareholders holding 4,22,953 Equity Shares.

  6,140 Equity Shares in physical form for transmission/ deletion.

  6,140 Equity Shares in physical form includes above mentioned 680 Equity Shares.

INVESTOR SERVICES

(i) Equity Shares of the Company are under compulsory demat trading by all investors, with effect from April 05, 1999. Considering the advantages of scrip less trading, shareholders are requested to consider dematerialization of their shareholding so as to avoid inconvenience in future.

BSE has vide circular dated July 05, 2018 informed about amendment to Regulation 40 of Listing Regulations mandating the transfer of securities would be carried out in dematerialised form only. This restriction shall not be applicable to the request received for Deletion, Transmission or Transposition of physical shares.

(ii) Shareholders/Beneficial Owners are requested to quote their Folio No./DP & Client ID Nos., as the case may be, in all correspondence with the Company. All correspondences regarding shares & debentures of the Company should be addressed to the Investor Service Department of the Company at Ahura Centre, 1st Floor, 'B' Wing, Mahakali Caves Road, Andheri (East), Mumbai - 400 093 and not to any other office(s) of the Company.

(iii) Shareholders holding shares in physical form are requested to notify to the Company, change in their address/Pin Code number and Bank Account details promptly by written request under the signatures of sole / first joint holder. Beneficial Owners of shares in demat form are requested to send their instructions regarding change of name, change of address, bank details, nomination, power of attorney, etc. directly to their DP.

(iv) To prevent fraudulent encashment of dividend warrants, members are requested to provide their Bank Account Details (if not provided earlier) to the Company (if shares are held in physical form) or to DP (if shares are held in demat form), as the case may be, for printing of the same on their dividend warrants.

(v) Non-resident members are requested to immediately notify:-

- change in their residential status on return to India for permanent settlement;
- particulars of their NRE Bank Account with a bank in India, if not furnished earlier.

(vi) In case of loss/misplacement of share certificate, investors should immediately lodge a FIR/ Complaint with the police and inform to Company along with original or certified copy of FIR/ acknowledged copy of the complaint.

(vii) Shareholders are requested to keep record of their specimen signature before lodgment of shares with the Company to obviate possibility of difference in signature at a later date.

(viii) Shareholders(s) of the Company who have multiple accounts in identical name(s) or holding more than one Share Certificates in the same name under different Ledger Folio(s) are requested to apply for consolidation of such Folio(s) and send the relevant Share Certificates to the Company.

(ix) Shareholders are requested to give us their valuable suggestions for improvement of our investor services.

(x) Shareholders are requested to quote their E-mail Ids, Telephone/Fax numbers for prompt reply to their communication.

SOCIAL REPORT

"COVID-19 as you know, is having a devastating effect. The damage it has caused across nations is immeasurable. Our Government is working hard to patch the developmental pieces. The choice between saving lives and saving livelihoods is an excruciating one. Our Government has initiated a slew of reforms. Particularly notable is the sharp focus on the rural ecosystem and the MSMEs, besides the relief measures for the marginalised. That there is a long road ahead is undeniable.

As of now, getting out of this despair is our fervent hope. In these stressful times, we must face the reality, have the equanimity, fortitude, resilience and the faith, deep in our heart, that we shall overcome. As long as we all work together, we can, and we will overcome this pandemic. That this too shall pass.

I believe, in this hour of crisis, there is a compelling need to reach out, not in terms of physical proximity, but in terms of financial and other material support, to those afflicted directly or indirectly.

As many of you may be aware, we in the Aditya Birla Group have been reaching out to the COVID afflicted in many ways. Our initiatives include:

- Contribution of ₹ 400 crore to the PM-CARES Fund.
- Giving a grant of ₹ 50 crore to FICCI-Aditya Birla CSR Centre for Excellence for COVID relief measures.
- Activating a 100-bed COVID-19 facility at Seven Hills Hospital in Mumbai, in partnership with BMC.
- Earmarking more than 200 beds for Covid-19 Patients across locations including Ujjain, Pune, Hazaribagh, Rayagada, Solapur and Kharach.
- Allocating ₹ 50 crore towards supply of 1 million N95 masks, 280000 personal protective equipment (PPE), as well as ventilators.
- Undertaking a production of 1 million triple layer surgical masks and 1 lakh coverall garments with the support of the Textiles Ministry.
- Involving community and self-help groups in home production of lakhs of masks across several locations.
- Ongoing pro-active engagement with local communities and other stakeholders. This includes awareness camps across 200 locations and door to door campaign to reinforce prevention message as well as social distancing.
- In the hinterland of the country, we sanitized 1000 villages/urban slums and distributed 10,00,000 meals pan India.

We were also much encouraged by over 26,000 colleagues who contributed to help migrant workers recharge mobiles. This has been our humble effort towards which your company has made a significant contribution.

In the context of your Company's CSR activities for FY19-20, we continue to align our work to UNSDGs."

— Mrs. Rajashree Birla
Chairperson,
Aditya Birla Centre for Community Initiatives and Rural Development
Chairperson, Hindalco CSR Board

On Track With SDGs

Our community engagement in the five focus areas of education, healthcare, sustainable livelihood, infrastructure development and social reform, have been linked with the key nine SDGs. A number of SDGs flow into each other and hence have been clubbed. For instance, **SDG-1**, which is to end poverty, is an overarching goal that connects to all the other goals. Collectively our programmes aim at this very objective.

We are spread across 11 States, spanning 655 villages, reaching out to 11 lakh people. Over decades of unrelentingly battling with poverty, in collaboration with the District Authorities and leveraging Government Schemes. Collectively we have been able to lift the burden of poverty from the shoulders of nearly 75% of the people in the villages where we work.

The **second SDG**, is to end hunger, achieve food security, and improved nutrition and promote sustainable agriculture. Hunger issues are inextricably linked with poverty alleviation where water and agriculture play a major part. In the villages where we work, the malnutrition rate is minimal, in the range of approximately 4% to 5%. We have set for ourselves the target to lower it to 3% to 5% in the next 3-5 years, through our projects and taking Government Schemes forward as catalysts. We have had to review our targets, given the roadblocks that COVID-19 has presented.

Water positivity, within the fence and beyond, is one of the most important tasks before us. It includes water conservation, and water harvesting structures. Water is the lifeline for agriculture. The farm-based interventions, farmer training programmes, farmer producer groups, improved agriculture techniques, and animal husbandry management, take us close to the goal of sustainable agriculture.

Our farmer meetings aimed at knowledge sharing on farm related activities, boosting agriculture and horticulture and training programmes that profess the best-in-class agricultural practices and mechanism, have touched the lives of over 17,795 farmers.

Furthermore, farmers are taken to the Allahabad Agriculture University, Vegetable Seed Research Centre, Chunar, Krishi Vigyan Kendras and Demonstration farms in Uttar Pradesh, Madhya Pradesh, Chhattisgarh and Odisha to attune them to the latest cropping patterns, which they can apply to their field. Farmers with marginal holdings gain a lot of on ground knowledge through exposure to demonstration plots and agricultural technique with minimum inputs. More than 5,216 farmers were provided with agricultural tools, seeds, fertilizers and other crop protection agents.

We have developed 157 vermin compost tanks at Renukoot and Lohardaga. Here 18 farmers were persuaded to adopt organic farming methods.

To provide assured irrigation facility, we have constructed 9 check dams at Renukoot, Singrauli, Lohardaga and Samri. This enhances cash crop production over more than 1,547 acres of land.

This year 50,675 animals were immunized in veterinary camps, 7,650 were treated and 2,322 were artificially inseminated for improved milk yielding breed. This has raised the milk output and consequently there has been a surge in the income of the farmers. Aditya Birla Technology Park is successfully implementing the cattle breeding project (Godhan) at Muirpur, Uttar Pradesh. Over 266 cattle received artificial insemination, benefitting 260 farm families. We have also distributed fodder to 8,200 cattle at Belagavi in Karnataka.

Among one of our notable projects is the biodiversity park at Bagru Mine, fixated on community participation in the restoration of the mined out land and transferring it back to the community to develop means for livelihoods. The Bagru Mine is nearing closure. Here we have evolved a bio-village concept fixated on a self-sustaining ecosystem. Towards this we have created rainwater harvesting ponds. Alongside, fishponds and duck farming have been fostered. A fish breeding nursery supplies fingerlings to pisciculture ponds and others engaged in the business. Happily, the fingerlings nursery has risen to the status of a startup.

Alongside a biodiversity garden with unique plant species, a zodiac garden, a butterfly park, have been developed as a draw for people to experience nature. Going a step further a bamboo pavilion and cottages have been erected. The products created by the local artisans has also evoked considerable interest. It has become a tourist spot.

The **third SDG** pertains to ensuring, healthy lives and promoting well-being for all, in all age groups. Our engagement in catering to the basic healthcare needs of the people is indeed noteworthy. More than 9 lakh people across our units, have been the beneficiaries of our projects.

This year we held 1,312 rural medical and awareness camps and 63 specialty camps. Over 88,671 people accessed our programmes. Health check-ups were conducted for ailments such as malaria, diarrhea, diabetes, hepatitis, arthritis, skin diseases, gynecological disorders and cardiac related issues. Our rural mobile medical van services complemented these efforts.

One of the major concern issues is that even where we are working more than 70% of women, including adolescent girls are anemic. In the near future, our aim is to bring it down to less than 20%, with the support of the District Authorities.

Splendid patient care is accorded at our Company's 4 hospitals, 17 dispensaries/ clinics located at Renukoot and Renusagar (Uttar Pradesh), Belagavi (Karnataka), Muri, Lohardaga and Kathautia (Jharkhand), Samri and Garepalma (Chhattisgarh), Dahej (Gujarat) and Durgamwadi (Maharashtra). More than 1,12,197 patients were treated.

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We would also like to mention that our medical team at Kathautia, Dumri, Taloja, Singrauli, Garepalma, Lapanga and Hirakud have extended support to 11 Government/ Charity run primary health centers, where 19,041 patients' recourse to these facilities.

At our 5 surgical camps at Renukoot, 46 patients underwent surgeries. In 12 eye camps, we treated 1,301 people, performed 327 intraocular operations, and distributed 527 spectacles. Besides this, at dental checkup camps at Renukoot, Renusagar, Garepalma, Lapanga and Hirakud 1,477 persons were treated.

Over 125 patients were diagnosed with Tuberculosis and registered under the directly observed treatment (DOT) programme at 10 designated microscopic centers (DMC). These are at the Aditya Birla Rural Technology Park, Muirpur-Renukoot, Renusagar, Kathautia and Lohardaga.

Under preventive measures, we organised 46 seasonal disease camps on Malaria and Diarrhoea at Renukoot, Singrauli, Belur, Kathautia and Belagavi, where 7,616 people attended the camps. Furthermore, we distributed mosquito nets to 1,550 people at Singrauli and Samri.

Health check- up camps are carried out regularly in schools at our units. These include Lohardaga and Kathautia (Jharkhand), Renukoot (Uttar Pradesh), Belur (West Bengal), Taloja, Durgamwadi (Maharashtra), Singrauli (Madhya Pradesh) and Belagavi (Karnataka). In these 101 school health checkup camps, our medical teams examined 9,290 students on their general health, dental hygiene and eye care. At the same time, they also conducted blood grouping.

At the medical camps conducted for the physically challenged at Singrauli and Hirakud 83 people attended, 13 patients were provided with calipers, which enabled them to get back on their feet.

We counselled 6,953 persons on health matters in 93 camps organized at Singrauli, Belgavi, Lohardaga, Dahej, Renusagar Hirakud, Samri, Dumri Durgamwadi, Taloja and Renukoot. We took this opportunity to sensitize them on STD/RTI and AIDS.

Besides supporting Government health programmes, we provided a digital x-ray machine to the Red Cross Society, Daltanganj, Jharkhand. In collaboration with the District Health Department, our 25 Family Welfare Centers served 50,054 women (antenatal, post-natal care, mass immunization, nutrition and escort services for institutional delivery). Over 1,77,224 children were immunized against polio, BCG, DPT and Hepatitis-B across the Company's Units.

Nearly 32,383 women participated in 578 camps on health awareness and nutrition. These camps were organised at Renukoot, Singrauli, Belgavi, Kathautia, Samri, Renusagar, Dumri, Garepalma, Durgamwadi, Lapanga, Lohardaga. These form part of our preventive health care initiative.

Our focused programme on adolescent health care covered, 2,004 girls at 12 Government Girls High Schools and 9 Kasturba Gandhi Balika Vidyalayas.

We also addressed issues related to menstrual health and hygiene of school going adolescent girls. We have installed 5 sanitary napkin vending machines with incinerators at Dahej (Gujarat), Belur (WB) and Taloja (Maharashtra).

Our intensive motivational drive towards responsible family raising led to 176 villagers opting for planned parenthood across Hirakud, Renukoot and Dumri.

At blood donation camps in Belur, Kathautia, Samri, Belagavi, Mouda, Lapanga and Hirakud, we collected 1,038 units of blood, which were donated to the blood bank. Several of our company colleagues were among the donors.

SDG-4 Education

Inclusive and equitable quality education, and in the larger context, promoting lifelong learning opportunities, for all is the pivot of the **fourth SDG**.

Our proactive initiatives to foster education in the villages have yielded encouraging results. We would like to particularly mention our enrolment campaign titled "Shala Praveshotsav". This was popularized at Dahej (Gujarat) and the response has been truly encouraging. We had 100% enrollment at schools and the dropout rate was also stemmed. Under its aegis we distributed education material including notebooks, school bags and uniforms to 27,037 children. We leveraged the Sarva Shiksha Abhiyan. We align very well with the Kasturba Gandhi Balika Vidyalayas at Renukoot, Lohardaga, Muri Dumri, Hirakud and Samri encouraging 2,004 girls to pursue education. Through the talent search programmes, we recognized 402 bright students, giving them scholarships.

To address the issue of school dropouts, we organised 74 'meet the parent' counselling events at Renukoot, Lohardaga, Singrauli, Dumri, Lapanga and Kathautia. Through this process we managed to bring 176 students back to 49 schools.

Digitization "Smart Classes" at 7 Schools in tandem with the Government of Karnataka at Belagavi, benefitting 22,100 children was yet another exciting project that energized school children. A similar initiative at Taloja, Maharashtra enthuses 500 children at Nitalemanpada School.

To enhance the learning outcome of students, we have set up 4 science laboratories at Hirakud and Garepalma Govt. high schools.

A remarkable feature of our programme is specialised coaching classes across 17 of our plants and 13 career counselling programmes at Renukoot, Renusagar, Singrauli, Garepalma, Durgamwadi, Lohardaga and Lapanga. They cover 2,187 students.

Over 659 students from the hinterland attended the 6-month computer literacy programmes conducted by us.

At the 29 Balwadis, 1,200 pre-schoolers have taken their first steps towards informal learning processes. These centres are running at Renukoot, Lohardaga, Samri and Singrauli.

Over 6,428 children are enrolled at 162 Anganwadis that we support at Renukoot, Singrauli, Samri, Belur, Lohardaga, Renusagar, Kathautia, Durgamwadi, Dumri, Garepalma, Taloja, Lapanga and Belagavi. under the Integrated Child Development Scheme (ICDS) at Renukoot, Samri, Singrauli, Lohardaga, Kathautia, Dumri and Durgamwadi, we have reached out to 537 malnourished children and helped nurture them.

At our 11 Aditya Birla Public Schools (Renukoot, Renusagar, Dahej, Lapanga and Muri), we have enrolled 5,206 rural students. Additionally, 1,663 students have been enlisted in our 8 Aditya Birla Vidya Mandirs at Renukoot, Lohardaga, Kathautia and Samri. We are also supporting 938 students of 6 other schools at Renukoot, Lohardaga, Dumri and Durgamwadi.

To meet the shortage of teachers in the rural areas in government primary and secondary schools in Dumri, Garepalma, Lohardaga, Belagavi, Samri and Dahej, we have sponsored 65 teachers.

Facilities such as school transport and other support systems were availed of by 1,320 students.

At Garepalma and Alupuram, we arranged student trips from 5 rural schools to Kelo Dam and our Alupuram factory. Our objective was to expose students to the water reservoir and the manufacturing business.

We run 5 Adult education centers at Renusagar, Singrauli and Belur for 139 adult learners.

We constructed 4 school buildings at Garepalma and repaired 12 school buildings at Singrauli, Renukoot, Renusagar, Lohardaga and Belagavi. We have also supplied furniture to 21 schools at Lapanga, Hirakud, Renusagar, Singrauli and Dumri. School toilets at Lohardaga, Garepalma and Mahan, drinking water facilities in 9 schools at Lohardaga, Singrauli, Alupuram and Kathautia were a felt need, which we fulfilled.

In partnership with the Government of Jharkhand and the ISKCON Food Relief Foundation, we have set up a centralised kitchen at Chiri Village, in the Kuru Block of the Lohardaga District. It caters to 40,000 students spanning 250 schools. This mid-day meal centralised kitchen inclusive of state-of-the-art cooking equipment and a customized vehicle, besides quarters for the staff and other amenities, is all set to go onstream. The project cost is ₹ 5.07 crore.

SDG-5

Women empowerment and gender equality is the focus of the **fifth SDG**. We already have 1,863 self-help groups comprising of 23,225 women. We are working to broaden the base and provide the last mile linkage. Over the last couple of years, we have been very successful in getting three of our units, have the uniforms tailored by our rural poor trained in tailoring and self-help groups. In the footsteps of Utkal and Renukoot, our Dahej plant has taken this forward. Over time we will have all of the other Hindalco plants to follow suit. This entails that uniforms at the plant and schools will be tailored by SHGs/women driven tailoring units.

The Kosa Silk Rejuvenation project in the context of the Garepalma Mines is a uniquely conceptualized sustainable livelihood project linking 800 weavers. This is a long term project aiming at developing Kosa silk textiles and providing marketing linkages.

The **sixth, seventh and eighth SDGs**, can be bunched together, as they are interlinked. These SDGs call for, water and sanitation, reliable, sustainable and modern energy and decent work and economic growth.

Towards providing accessibility to safe drinking water, up until now we have installed 22 Reverse Osmosis (RO) plants. This year we have installed 6 RO plants, 63 hand pumps, repaired 446 hand pumps and dug wells. Pipelines and bore wells provide access to water, benefiting more than 90,000 villagers.

Additionally, 7,157 individual toilets and sanitation facilities were set-up and facilitated at various locations. Consequently, 90% of the villages where we operate have been declared ODF.

Imparting vocational training, skills training, coupled with our farm / non-farm based programmes and SHGs, meet with these goals. Collectively we have touched the lives of nearly 28,000 people.

At the Aditya Birla Rural Technology Park, more than 32 training batches were organised. The thrust continues to be on computer literacy, training in cosmetology, repair of electric and electronic goods, handicrafts, bag making, soft toys, tailoring and knitting, ways to enhance agricultural output, and veterinary science. This year 1,790 aspirants were trained. On capacity building, 20 additional programmes were held, registering 993 participants. Our veterinary services were availed by 466 farmers.

At Renusagar a one-month light motor driving programme was conducted for 15 youngsters. They received their driving licenses and secured employment as drivers.

SDG-9: Build resilient infrastructure

To provide better infrastructure, we are engaged in the connecting/repairing of roads, community halls and assets,

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rest places, installation of solar lights, construction of water tanks and installation of piped water supply. At Garepalma a 2-lakh liter overhead tank has been built. Clean drinking water is piped after filtration to 223 families. Our infrastructure projects touch the lives of 1,71,544 people.

Finally, on Model Villages

Of the 655 villages that we work in, we have zeroed in on 108 villages for a transformative process that raises them to become model villages. So far in a 7-year timeframe, we have been able to morph 50 villages into model villages. Impact assessment studies by external agencies have certified commended the transformation of these villages.

Our CSR spends

For FY 19 – 20, our CSR spend was ₹ 63.65 crores (Hindalco ₹ 38. 53 crores, Subsidiaries ₹ 10.12 crores and ₹15 crores to the Odisha Chief Minister's Relief Fund). In addition, we mobilized over ₹ 85.77 crore through Government Schemes.

Our Board of Directors, our Management and our colleagues across the Company are committed to inclusive growth.

INDEPENDENT AUDITOR'S REPORT ON THE STANDALONE FINANCIAL STATEMENTS

To the Members of Hindalco Industries Limited

Report on the audit of the standalone financial statements

Opinion

1. We have audited the accompanying standalone financial statements of Hindalco Industries Limited ("the Company"), which comprise the Balance Sheet as at March 31, 2020, and the Statement of Profit and Loss (including Other Comprehensive Loss), the Statement of Changes in Equity and the Statement of Cash Flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies and other explanatory information.

2. In our opinion and to the best of our information and according to the explanations given to us, the aforesaid standalone financial statements give the information required by the Companies Act, 2013 ("the Act") in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, of the state of affairs of the Company as at March 31, 2020, and total comprehensive loss (comprising of profit and other comprehensive loss), changes in equity and its cash flows for the year then ended.

Basis for opinion

3. We conducted our audit in accordance with the Standards on Auditing (SAs) specified under Section 143(10) of the Act. Our responsibilities under those Standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Company in accordance with the Code of Ethics issued by the Institute of Chartered Accountants of India together with the ethical requirements that are relevant to our audit of the financial statements under the provisions of the Act and the Rules thereunder, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

4. Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matters	How our audit addressed the key audit matters
A. Measurement of inventory quantities of coal, bauxite, copper concentrate and work in progress consisting of precious metals Refer Notes 1D (j) and 11 (d) to the standalone financial statements. Of the Company's ₹ 11,225 crores of inventory on hand at March 31, 2020, ₹ 3,255 crores of inventory comprised of coal, bauxite, copper concentrate and work in progress consisting of precious metals. This was determined a key audit matter, as the measurement of these inventory quantities lying at the Company's yards, smelters and refineries is complex and involves significant judgement and estimate resulting from measuring the surface area, dip measurement of materials in tanks/silos, etc. The Company uses internal and external experts, as applicable to perform volumetric surveys and assessments, basis which the quantity for these inventories is estimated.	Our audit procedures relating to the measurement of inventory quantities of coal, bauxite, copper concentrate and work in progress of precious metals included the following: • Understanding and evaluating the design and operating effectiveness of controls over physical count and measurement of such inventory; • Evaluation of competency and capabilities of management's experts; • Physically observing inventory measurement and count procedures carried out by management using experts, to ensure its appropriateness and completeness and performing roll back procedures; and • Obtaining and inspecting, inventory measurement and physical count results for such inventories, including assessing and evaluating the results of analysis performed by management in respect of differences between book and physical quantities. Based on the above procedures performed, we did not identify any material exceptions in the measurement of inventory quantities of coal, bauxite, copper concentrate and work in progress inventories consisting of precious metals.

INDEPENDENT AUDITOR'S REPORT ON THE STANDALONE FINANCIAL STATEMENTS

Key audit matters	How our audit addressed the key audit matters
B. Provisions recognised and contingencies disclosed with regard to certain legal and tax matters Refer Notes 1D (i), 10, 21, 25 and 45 to the standalone financial statements. As at March 31, 2020, the Company has paid deposits under protest, recognised provisions and disclosed contingent liabilities towards various legal and tax matters. There are number of legal, direct and indirect tax cases against the Company, including environmental, mining, local and state levies, income tax holidays, availing of input tax credits, etc. This is a key audit matter, as evaluation of these matters requires management judgement and estimation, interpretation of laws and regulations and application of relevant judicial precedents to determine the probability of outflow of economic resources for recognising provision and making related disclosures in the standalone financial statements.	Our audit procedures relating to provisions recognised and contingencies disclosed regarding certain legal and tax matters included the following: • Understanding and evaluating the design and operating effectiveness of controls over the recognition, measurement, presentation and disclosures made in the standalone financial statements in respect of these matters; • Obtaining details of legal and tax matters, inspecting the supporting documents to evaluate management's assessment of probability of outcome and the magnitude of potential loss, and testing related to provisions and disclosures in the standalone financial statements; • Reviewing orders and other communication from regulatory authorities and management responses thereto; • Reviewing management expert's legal advice and opinion as applicable, obtained by the Company's management for evaluating certain legal matters and evaluating competence and capabilities of the experts; and • Using auditor's experts for assistance in evaluating certain significant and complex direct and indirect tax matters. Based on the above procedures performed, we did not identify any material exceptions in the provision recognised and contingent liabilities disclosed in the standalone financial statements with regard to such legal and tax matters.
C. Accounting of derivatives and hedging transactions Refer Notes 1B (Q), 9, 20, and 50 to the standalone financial statements. Company's financial performance is significantly impacted by fluctuations in prices of aluminium, copper, gold, silver, furnace oil, coal, foreign exchange rates and interest rates. The Company takes a structured approach to the identification, quantification and hedging of such risks by using various derivatives (e.g. forwards, swaps, futures, options and embedded derivatives) in commodities and/or foreign currencies. These hedges are designated as either cash flow or fair value hedges, and in certain cases remain non-designated.	Our audit procedures related to accounting of derivative and hedging transactions included the following: • Understanding and evaluating the design and operating effectiveness of controls over accounting of derivative and hedging transactions; • Testing qualifying criteria for hedge accounting in accordance with Ind AS 109, including: √ Understanding the risk management objectives and strategies for different types of hedging programs; √ Evaluating that the hedging relationship consists only of eligible hedging instruments and hedged items; √ Using auditor's expert for assistance in verifying hedge effectiveness requirements of Ind AS 109, Financial Instruments, including the economic relationship between the hedged item and the hedging instrument.

Key audit matters	How our audit addressed the key audit matters
As at March 31, 2020, the carrying value of the Company's derivatives included derivative assets amounting to ₹ 957 crores and derivative liabilities of ₹ 630 crores. Derivative and hedge accounting is considered a key audit matter, because of its significance to the financial statements, the volume, nature and types of hedging relationships, including complexity involved in the application of hedge accounting principles in accordance with Ind AS 109, Financial Instruments.	• Evaluating competence and capabilities of the auditor's experts; • Testing appropriateness of hedge accounting to qualified hedge relationships, i.e., cash flow and fair value hedges; and • Testing related presentation and disclosures in the standalone financial statements. Based on the above procedures performed, we did not identify any material exceptions in the amounts, presentation and disclosures made in the standalone financial statements relating to accounting of derivatives and hedging transactions.
D. Assessment of indication of impairment and the recoverable amount (RA) of certain Cash-Generating Units (CGUs) within the Aluminium segment Refer Notes 1D (a), 2 and 4 to the standalone financial statements. External sources of information such as changes in the market and economic environment, including the carrying amount of the net assets of the Company being more than its market capitalisation as at March 31, 2020, decline in the Aluminium metal prices, and impact of Covid-19 pandemic required Company's management to assess whether there is any indication of impairment and therefore make a formal estimate of RA of certain CGUs within Aluminium segment having carrying value of net assets of ₹ 30,290 crores as at March 31, 2020. Based on such indications, impairment testing was performed by the management in accordance with the requirements of Ind AS 36, Impairment of Assets. Management has calculated the RA of the CGUs using value-in-use method. This is a key audit matter, because of the significant carrying value of these CGUs and the estimation uncertainty in assumptions used for calculating the RA of the CGUs such as future metal prices, foreign exchange rates, discount rate, input costs and rate of growth over the estimation period.	Our audit procedures related to assessment of indication of impairment and RA of these CGUs included the following: • Understanding and evaluating the design and operating effectiveness of controls for identification and assessment of any potential impairment, including determining the carrying amount and RA of the CGUs; • Using auditor's experts for testing appropriateness of the method and model used for determining RA, mathematical accuracy of the models' calculations and evaluating reasonableness of key assumptions used in future cash flow projections such as future metal prices, foreign exchange rates, discount rate, input costs, rate of growth over the estimation period; • Evaluating competence and capabilities of the auditor's experts; • Performing sensitivity analysis over key assumptions to corroborate that RA of these CGUs is within a reasonable range, including the impact of Covid-19 pandemic assessment; and • Testing related presentation and disclosures in the standalone financial statements. Based on the above procedures performed, we did not note any exceptions in the management's assessment of the indication of impairment and conclusion that the RA of these CGUs within the Aluminium segment were not lower than their respective carrying amounts as at March 31, 2020.

Other information

5. The Company's Board of Directors is responsible for the other information. The other information comprise the information included in the annual report, but does not include the financial statements and our auditor's report thereon. The annual report is expected to be made available to us after the date of this auditor's report.

Our opinion on the financial statements does not cover the other information, and we will not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is

INDEPENDENT AUDITOR'S REPORT ON THE STANDALONE FINANCIAL STATEMENTS

materially inconsistent with the standalone financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

When we read the annual report, if we conclude that there is a material misstatement therein, we are required to communicate the matter to those charged with governance and take appropriate action as applicable under the relevant laws and regulations.

Responsibilities of management and those charged with governance for the standalone financial statements

6. The Company's Board of Directors is responsible for the matters stated in Section 134(5) of the Act with respect to the preparation of these standalone financial statements that give a true and fair view of the financial position, financial performance, changes in equity and cash flows of the Company in accordance with the accounting principles generally accepted in India, including the Accounting Standards specified under Section 133 of the Act. This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding of the assets of the Company and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgements and estimates that are reasonable and prudent; and design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the financial statement that give a true and fair view and are free from material misstatement, whether due to fraud or error.

7. In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so. Those Board of Directors are also responsible for overseeing the Company's financial reporting process.

Auditor's responsibilities for the audit of the financial statements

8. Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

9. As part of an audit in accordance with SAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances. Under Section 143(3)(i) of the Act, we are also responsible for expressing our opinion on whether the Company has adequate internal financial controls with reference to financial statements in place and the operating effectiveness of such controls.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements

represent the underlying transactions and events in a manner that achieves fair presentation.

10. We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

11. We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence and, where applicable, related safeguards.

12. From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on other legal and regulatory requirements

13. As required by the Companies (Auditor's Report) Order, 2016 ("the Order"), issued by the Central Government of India in terms of sub-section (11) of Section 143 of the Act, we give in the "**Annexure A**" a statement on the matters specified in paragraphs 3 and 4 of the Order, to the extent applicable.

14. As required by Section 143(3) of the Act, we report that:

    (a) We have sought and obtained all the information and explanations which, to the best of our knowledge and belief, were necessary for the purposes of our audit;

    (b) In our opinion, proper books of account as required by law have been kept by the Company so far as it appears from our examination of those books;

    (c) The Balance Sheet, the Statement of Profit and Loss (including Other Comprehensive Loss), the Statement of Changes in Equity and the Statement of Cash Flows dealt with by this Report are in agreement with the books of account;

    (d) In our opinion, the aforesaid standalone financial statements comply with the Accounting Standards specified under Section 133 of the Act;

    (e) On the basis of the written representations received from the directors as on March 31, 2020, taken on record by the Board of Directors, none of the directors is disqualified as on March 31, 2020, from being appointed as a director in terms of Section 164(2) of the Act;

    (f) With respect to the adequacy of the internal financial controls with reference to financial statements of the Company and the operating effectiveness of such controls, refer to our separate Report in "**Annexure B**"; and

    (g) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, in our opinion and to the best of our information and according to the explanations given to us:

        i. The Company has disclosed the impact of pending litigations on its financial position in its financial statements – Refer Notes 21 and 45 to the standalone financial statements;

        ii. The Company has made provision, as required under the applicable law or accounting standards, for material foreseeable losses, if any, on long-term contracts including derivative contracts – Refer Notes 20 and 21 to the standalone financial statements;

        iii. There has been no delay in transferring amounts, required to be transferred, to the Investor Education and Protection Fund by the Company except amount of ₹ * crore;

        iv. The reporting on disclosures relating to Specified Bank Notes is not applicable to the Company for the year ended March 31, 2020.

        * Represents figures below the rounding convention used in this report.

15. The Company has paid/provided for managerial remuneration in accordance with the requisite approvals mandated by the provisions of Section 197 read with Schedule V of the Act.

For Price Waterhouse & Co Chartered Accountants LLP
Firm Registration Number: 304026E/E-300009

Sumit Seth
Partner
Membership Number: 105869
UDIN: 20105869AAAAAF8901

Mumbai
June 12, 2020

ANNEXURE A TO INDEPENDENT AUDITOR'S REPORT

Referred to in paragraph 13 of the Independent Auditor's Report of even date to the members of Hindalco Industries Limited on the standalone financial statements for the year ended March 31, 2020

i. (a) The Company is maintaining proper records showing full particulars, including quantitative details and situation, of fixed assets.

(b) The fixed assets are physically verified by the Management according to a phased programme designed to cover all the items over a period of 3 years, which, in our opinion, is reasonable having regard to the size of the Company and the nature of its assets. Pursuant to the programme, a portion of the fixed assets has been physically verified by the Management during the year and no material discrepancies have been noticed on such verification.

(c) The title deeds of immovable properties, as disclosed in Note 2 on Property Plant and Equipment and Note 3 on Investment Property to the standalone financial statements, are held in the name of the Company, except for the following:

i. in respect of freehold land (Birla Copper and Muri Unit) having gross block of ₹ * crore and building (Birla Copper Units, Delhi and Mumbai) having gross block of ₹ 11 crores, the title deeds of which are held in the name of erstwhile companies, which have subsequently been amalgamated with the Company.

ii. in respect of freehold land (Mahan and Kathotia Units) having gross block of ₹ 31 crores, the title deeds of which are yet to be transferred in the name of the Company; and

iii. in respect of building (Birla Copper Units, Mumbai and Delhi) having gross block of ₹ 18 crores appearing in the fixed asset register, the title deeds for such assets amounting to ₹ 15 crores are presently not readily available with the Company.

*Represents figures below the rounding off convention used in this report.

ii. The physical verification of inventory, excluding stocks with third parties, have been conducted at reasonable intervals by the Management during the year. In respect of inventory lying with third parties, these have substantially been confirmed by them. The discrepancies noticed on physical verification of inventory as compared to book records were not material.

iii. The Company has not granted any loans, secured or unsecured, to companies, firms, limited liability partnerships or other parties covered in the register maintained under Section 189 of the Act. Therefore, the provisions of Clause 3(iii), (iii)(a), (iii)(b) and (iii)(c) of the said Order are not applicable to the Company.

iv. In our opinion, and according to the information and explanations given to us, the Company has complied with the provisions of Sections 185 and 186 of the Act in respect of the loans and investments made, and guarantees and security provided by it.

v. The Company has not accepted any deposits from the public within the meaning of Sections 73, 74, 75 and 76 of the Act and the Rules framed thereunder to the extent notified.

vi. Pursuant to the rules made by the Central Government of India, the Company is required to maintain cost records as specified under Section 148(1) of the Act in respect of its products.

We have broadly reviewed the same, and are of the opinion that, prima facie, the prescribed accounts and records have been made and maintained. We have not, however, made a detailed examination of the records with a view to determine whether they are accurate or complete.

vii. (a) According to the information and explanations given to us, and the records of the Company examined by us, in our opinion, the Company is generally regular in depositing undisputed statutory dues in respect of provident fund, employees' state insurance, sales tax, income tax, service tax, duty of customs, duty of excise, value added tax, cess, goods and services tax and other material statutory dues, as applicable, with the appropriate authorities. Also refer Note 31 to the standalone financial statements regarding management's assessment on certain matters relating to provident fund.

(b) According to the information and explanations given to us, and the records of the Company examined by us, there are no dues of income tax, which have not been deposited on account of any dispute. The particulars of dues of sales tax, service tax, duty of customs, duty of excise, value added tax, and goods and services tax as at March 31, 2020, which have not been deposited on account of a dispute, are as follows:

Name of the Statute	Nature of Dues	₹ in crores*	Period to which the amount relates	Forum where the disputes are pending
Central Sales Tax Act and Local Sales Tax (including VAT) Act	Sales Tax	32	1995-2009, 2014-2016	Assistant Commissioner/Commissioner/ Deputy Commissioner/Revisionary Authorities Level/Joint Commissioner/ Additional Commissioner (A)
		*	2005-2006, 2009-2011	Tribunal
		33	1986-1987, 1989-1991, 1999-2007, 2012-2013	High Court
The Central Excise Act, 1944	Excise Duty	11	2000-2003, 2008-2009, 2012-2018	Assistant Commissioner/Commissioner/ Revisionary Authorities Level
		1,060	2001-2008	Customs, Excise and Service Tax Appellate Tribunal (CESTAT)
The Customs Act, 1962	Customs Duty	*	2004-2005	Commissioner (Appeal)
		24	2004-2005, 2009-2014, 2016-2017	Customs, Excise and Service Tax Appellate Tribunal (CESTAT)
The Service Tax under the Finance Act, 1994	Service Tax	97	2001-2002, 2011-2018	Assistant Commissioner/Commissioner/ Revisionary Authorities Level
		329	2004-2018	Customs, Excise and Service Tax Appellate Tribunal (CESTAT)
The Central Goods and Services Tax Act, 2017	Goods and Services Tax	27	2017-2018	High Court

* Represents figures below the rounding off convention used in this Report.

viii. According to the records of the Company examined by us, and the information and explanations given to us, the Company has not defaulted in repayment of loans or borrowings to any banks, financial institutions or dues to debenture holders as at the balance sheet date. The Company does not have any loans or borrowings from Government as at the balance sheet date, therefore the provisions of Clause 3(viii) of the Order, to the extent, are not applicable to the Company.

ix. In our opinion, and according to the information and explanations given to us, the moneys raised by way of term loans have been applied for the purposes for which they were obtained. The Company has not raised any moneys during the year by way of initial public offer and further public offer (including debt instruments).

x. During the course of our examination of the books and records of the Company, carried out in accordance with the generally accepted auditing practices in India, and according to the information and explanations given to us, we have neither come across any instance of material fraud by the Company or on the Company by its officers or employees, noticed or reported during the year, nor have we been informed of any such case by the Management.

xi. The Company has paid/provided for managerial remuneration in accordance with the requisite approvals mandated by the provisions of Section 197 read with Schedule V of the Act. Also refer paragraph 15 of our main audit report.

xii. As the Company is not a Nidhi Company, and the Nidhi Rules, 2014, are not applicable to it, the provisions of Clause 3(xii) of the Order are not applicable to the Company.

xiii. The Company has entered into transactions with related parties in compliance with the provisions of Sections 177 and 188 of the Act. The details of such related party transactions have been disclosed in the standalone financial statements as required under Indian Accounting Standard (Ind AS) 24, Related Party Disclosures, specified under Section 133 of the Act.

xiv. The Company has not made any preferential allotment or private placement of shares or fully or partly convertible debentures during the year under review. Accordingly, the provisions of Clause 3(xiv) of the Order are not applicable to the Company.

xv. The Company has not entered into any non-cash transactions with its directors or persons connected with them, to which Section 192 of the Act applies. Accordingly, the provisions of Clause 3(xv) of the Order are not applicable to the Company.

xvi. The Company is not required to be registered under Section 45-IA of the Reserve Bank of India Act, 1934. Accordingly, the provisions of Clause 3(xvi) of the Order are not applicable to the Company.

For Price Waterhouse & Co Chartered Accountants LLP
Firm Registration Number: 304026E/E-300009

Sumit Seth
Partner
Membership Number: 105869
UDIN: 20105869AAAAAF8901

Mumbai
June 12, 2020

ANNEXURE B TO INDEPENDENT AUDITOR'S REPORT

Referred to in paragraph 14(f) of the Independent Auditor's Report of even date to the members of Hindalco Industries Limited on the standalone financial statements for the year ended March 31, 2020

Report on the internal financial controls with reference to financial statements under Clause (i) of Sub-section 3 of Section 143 of the Act

1. We have audited the internal financial controls with reference to financial statements of Hindalco Industries Limited ("the Company") as of March 31, 2020, in conjunction with our audit of the standalone financial statements of the Company for the year ended on that date.

Management's responsibility for internal financial controls

2. The Company's management is responsible for establishing and maintaining internal financial controls based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India (ICAI). These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Act.

Auditor's responsibility

3. Our responsibility is to express an opinion on the Company's internal financial controls with reference to financial statements based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting (the "Guidance Note") and the Standards on Auditing deemed to be prescribed under Section 143(10) of the Act to the extent applicable to an audit of internal financial controls, both applicable to an audit of internal financial controls and both issued by the ICAI. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls with reference to financial statements was established and maintained and if such controls operated effectively in all material respects.

4. Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls system with reference to financial statements and their operating effectiveness. Our audit of internal financial controls with reference to financial statements included obtaining an understanding of internal financial controls with reference to financial statements, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

5. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the Company's internal financial controls system with reference to financial statements.

Meaning of internal financial controls with reference to financial statements

6. A company's internal financial controls with reference to financial statements is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal financial controls with reference to financial statements includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorisations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Inherent limitations of internal financial controls with reference to financial statements

7. Because of the inherent limitations of internal financial controls with reference to financial statements, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls with reference to financial statements to future periods are subject to the risk that the internal financial controls with reference to financial statements may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Opinion

8. In our opinion, the Company has, in all material respects, an adequate internal financial controls system with reference to financial statements and such internal financial controls with reference to financial statements were operating effectively as at March 31, 2020, based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India.

For Price Waterhouse & Co Chartered Accountants LLP
Firm Registration Number: 304026E/E-300009

Sumit Seth
Partner
Membership Number: 105869
UDIN: 20105869AAAAAF8901

Mumbai
June 12, 2020

STANDALONE BALANCE SHEET

as at March 31, 2020

₹ in Crore

	Note	As at 31/03/2020	31/03/2019
ASSETS			
Non-Current Assets			
Property, Plant and Equipment (including ROU Assets)	2	33,045	33,169
Capital Work-in-Progress	2	1,209	947
Investment Properties	3	9	9
Intangible Assets	4	314	345
Intangible Assets Under Development	4	73	35
Financial Assets			
Investment in Subsidiaries	5	16,793	16,778
Investment in Associates and Joint Ventures	6	48	28
Other Investments	7A	2,959	4,916
Loans	8	14	17
Other Financial Assets	9A	211	261
Non-Current Tax Assets (Net)	25	325	282
Other Non-Current Assets	10	717	1,178
		55,717	**57,965**
Current Assets			
Inventories	11	11,225	11,394
Financial Assets			
Other Investments	7B	4,839	3,772
Trade Receivables	12	2,093	2,125
Cash and Cash Equivalents	13	3,265	1,515
Bank Balances other than Cash and Cash Equivalents	14	15	65
Loans	8	55	58
Other Financial Assets	9B	982	1,135
Current Tax Assets (Net)	25	-	1,424
Other Current Assets	10	1,799	1,955
		24,273	**23,443**
Non-Current Assets or Disposal Groups Classified as Held For Sale	15A	68	94
		24,341	**23,537**
		80,058	**81,502**
EQUITY AND LIABILITIES			
Equity			
Equity Share Capital	16	222	222
Other Equity	17	45,272	48,336
		45,494	**48,558**
Liabilities			
Non-Current Liabilities			
Financial Liabilities			
Borrowings	18A	15,660	15,634
Lease Liabilities	51	241	-
Trade Payables	19		
(I) Outstanding dues of micro enterprises and small enterprises;		-	-
(II) Outstanding dues of creditors other than micro enterprises and small enterprises		*	2
Other Financial Liabilities	20A	149	70
Provisions	21	497	410
Deferred Tax Liabilities (Net)	22	1,975	2,179
Other Non-Current Liabilities	23	628	642
		19,150	**18,937**

₹ in Crore

	Note	As at 31/03/2020	31/03/2019
Current Liabilities			
Financial Liabilities			
Borrowings	18B	7,384	3,895
Lease Liabilities	51	76	-
Trade Payables	19		
(I) Outstanding dues of micro enterprises and small enterprises;		17	14
(II) Outstanding dues of creditors other than micro enterprises and small enterprises		3,973	5,720
Other Financial Liabilities	20B	1,491	1,885
Provisions	21	928	710
Other Current Liabilities	23	390	685
Contract Liabilities	24	158	126
Current Tax Liabilities (Net)	25	997	972
		15,414	**14,007**
Liabilities Associated with Disposal Group Classified as Held For Sale	15B	-	*
		15,414	**14,007**
		34,564	**32,944**
		80,058	**81,502**
**Amount below rounding off convention.*			
Basis of Preparation and Significant Accounting Policies	1		

The accompanying Notes are an integral part of the Standalone Financial Statements.
This is the Standalone Balance Sheet referred to in our report of even date.

For Price Waterhouse & Co Chartered Accountants LLP
Firm Registration Number: 304026E/E-300009

Sumit Seth
Partner
Membership Number: 105869

For and on behalf of the Board of Hindalco Industries Limited

Praveen Kumar Maheshwari
Whole-time Director &
Chief Financial Officer
DIN-00174361

Satish Pai
Managing Director
DIN-06646758

Anil Malik
Company Secretary

K N Bhandari
Director
DIN-00026078

Place : Mumbai
Dated : June 12, 2020

STANDALONE STATEMENT OF PROFIT AND LOSS

for the year ended March 31, 2020

₹ in Crore

	Note	Year ended 31/03/2020	Year ended 31/03/2019
INCOME			
Revenue from Operations	26	40,242	45,749
Other Income	27	739	940
Total Income		**40,981**	**46,689**
EXPENSES			
Cost of Materials Consumed	28	22,623	27,247
Trade Purchases	29	256	235
Changes in inventories of Finished Goods, Work-in-Progress and Stock-in-Trade	30	*	(382)
Employee Benefits Expense	31	1,922	1,982
Power and Fuel	32	6,994	6,937
Finance Costs	33	1,679	1,683
Depreciation and Amortization	34	1,708	1,693
Impairment Loss on Financial Assets (Net)	35	38	24
Other Expenses	36	4,745	5,460
Total Expenses		**39,965**	**44,879**
Profit/(Loss) before Exceptional Items and Tax		1,016	1,810
Exceptional Income/ (Expenses) (Net)	37	(64)	-
Profit/(Loss) before Tax		**952**	**1,810**
Tax Expenses	22		
Current Tax		137	375
Deferred Tax		195	230
Profit/(Loss) for the year		**620**	**1,205**
Other Comprehensive Income/ (Loss)			
Items that will not be reclassified to Statement of Profit and Loss	38		
Remeasurement of Defined Benefit Obligation		(152)	(4)
Change in Fair Value of Equity Instruments Designated as FVTOCI		(2,582)	(1,736)
Income Tax effect		28	2
Items that will be reclassified to Statement of Profit and Loss	39		
Change in Fair Value of Debt Instruments Designated as FVTOCI		5	3
Effective Portion of Cash Flow Hedges (including cost of Hedging)		(1,073)	84
Income Tax effect		374	(30)
Other Comprehensive Income/ (Loss) for the year		**(3,400)**	**(1,681)**
Total Comprehensive Income/ (Loss) for the year		**(2,780)**	**(476)**

₹ in Crore

	Note	Year ended 31/03/2020	31/03/2019
Earnings Per Share	40		
Basic (₹)		2.79	5.41
Diluted (₹)		2.79	5.41
**Amount below rounding off convention.*			
Basis of Preparation and Significant Accounting Policies	1		

The accompanying Notes are an integral part of the Standalone Financial Statements.
This is the Standalone Statement of Profit and Loss referred in our report of even date.

For Price Waterhouse & Co Chartered Accountants LLP
Firm Registration Number: 304026E/E-300009

Sumit Seth
Partner
Membership Number: 105869

For and on behalf of the Board of Hindalco Industries Limited

Praveen Kumar Maheshwari
Whole-time Director &
Chief Financial Officer
DIN-00174361

Satish Pai
Managing Director
DIN-06646758

Anil Malik
Company Secretary

K N Bhandari
Director
DIN-00026078

Place : Mumbai
Dated : June 12, 2020

STANDALONE STATEMENT OF CHANGES IN EQUITY

for the year ended March 31, 2020

A Equity Share Capital

₹ in Crore

Particulars	Note	Amount
Balance as at April 01, 2018	16	**223**
Changes in Equity Share Capital		(1)
Balance as at March 31, 2019	16	**222**
Changes in Equity Share Capital		*
Balance as at March 31, 2020	**16**	**222**

**Amount below rounding off convention.*

B Other Equity

₹ in Crore

Particulars	Note	Share Application Money Pending Allotment	Reserves and Surplus									Other Reserves				Total
			Capital Reserve	Capital Redemption Reserve	Business Reconstruction Reserve	Securities Premium	Debenture Redemption Reserve	Employee Stock Options	Treasury Shares held by ESOP Trust	General Reserve	Retained Earnings	Gain/ (Loss) on Equity Instruments FVTOCI	Gain/ (Loss) on Debt Instruments FVTOCI	Effective portion of Cash Flow Hedge	Cost of Hedging Reserve	
Balance as at April 01, 2018		*	**145**	**102**	**7,715**	**8,197**	**900**	**16**	**-**	**21,354**	**4,068**	**6,083**	**2**	**(1)**	**647**	**49,228**
Profit/ (Loss) for the year											1,205					1,205
Other Comprehensive Income/ (Loss) for the year		-	-	-	-	-	-	-	-	-	(3)	(1,735)	2	200	(145)	(1,681)
Total Comprehensive Income/ (Loss) for the year		-	-	-	-	-	-	-	-	-	1,202	(1,735)	2	200	(145)	(476)
Hedging (Gain)/ Loss and cost of hedging transferred to non-financial assets		-	-	-	-	-	-	-	-	-	-	-	-	(1)	-	(1)
Transfer to Debenture Redemption Reserve		-	-	-	-	-	150	-	-	-	(150)	-	-	-	-	-
Shares Acquired by the Trust		-	-	-	-	-	-	-	(123)	-	-	-	-	-	-	(123)
Transactions with owners in their capacity as owners																
Share Application Money Received during the year		*	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Employee Share-Based Transactions		*	-	-	-	9	-	(4)	-	-	-	-	-	-	-	5
Employee Share Options Expenses		-	-	-	-	-	-	10	-	-	-	-	-	-	-	10
Dividends Paid		-	-	-	-	-	-	-	-	-	(267)	-	-	-	-	(267)
Dividend Distribution Tax - (a)		-	-	-	-	-	-	-	-	-	(40)	-	-	-	-	(40)
Balance as at March 31, 2019	**17**	*	**145**	**102**	**7,715**	**8,206**	**1,050**	**22**	**(123)**	**21,354**	**4,813**	**4,348**	**4**	**198**	**502**	**48,336**

₹ in Crore

Particulars	Note	Share Application Money Pending Allotment	Reserves and Surplus									Other Reserves				Total
			Capital Reserve	Capital Redemption Reserve	Business Reconstruction Reserve	Securities Premium	Debenture Redemption Reserve	Employee Stock Options	Treasury Shares held by ESOP Trust	General Reserve	Retained Earnings	Gain/ (Loss) on Equity Instruments FVTOCI	Gain/ (Loss) on Debt Instruments FVTOCI	Effective portion of Cash Flow Hedge	Cost of Hedging Reserve	
Transition Impact - Leases											(9)					(9)
Profit/ (Loss) for the year											620					620
Other Comprehensive Income/ (Loss) for the year		-	-	-	-	-	-	-	-	-	(124)	(2,582)	3	(314)	(383)	(3,400)
Total Comprehensive Income/ (Loss) for the year		-	-	-	-	-	-	-	-	-	496	(2,582)	3	(314)	(383)	(2,780)
Hedging (Gain)/ Loss and cost of hedging transferred to non-financial assets		-	-	-	-	-	-	-	-	-	-	-	-	14	-	14
Transfer to Debenture Redemption Reserve		-	-	-	-	-	150	-	-	-	(150)	-	-	-	-	-
Shares Acquired by the Trust		-	-	-	-	-	-	-	(7)	-	-	-	-	-	-	(7)
Transactions with owners in their capacity as owners																
Share Application Money Received during the year		*	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Employee Share-Based Transactions		*	-	-	-	11	-	(5)	-	-	-	-	-	-	-	6
Employee Share Options Expenses		-	-	-	-	-	-	28	-	-	-	-	-	-	-	28
Employee Share Options Lapsed/Forfeited		-	-	-	-	-	-	-	-	-	*	-	-	-	-	*
Dividends Paid		-	-	-	-	-	-	-	-	-	(267)	-	-	-	-	(267)
Dividend Distribution Tax - (a)		-	-	-	-	-	-	-	-	-	(49)	-	-	-	-	(49)
Balance as at March 31, 2020	**17**	*	**145**	**102**	**7,715**	**8,217**	**1,200**	**45**	**(130)**	**21,354**	**4,834**	**1,766**	**7**	**(102)**	**119**	**45,272**

** Amount below rounding off convention.*

a) Dividend Distribution Tax is net of credit ₹ 6 Crore (year ended 31/03/2019 ₹ 16 Crore) being dividend distribution tax paid by subsidiaries.

Basis of Preparation and Significant Accounting Policies

The accompanying Notes are an integral part of the Standalone Financial Statements.
This is the Standalone Statement of Changes in Equity referred in our report of even date.

For Price Waterhouse & Co Chartered Accountants LLP
Firm Registration Number: 304026E/E-300009

Sumit Seth
Partner
Membership Number: 105869

For and on behalf of the Board of Hindalco Industries Limited

Praveen Kumar Maheshwari
Whole-time Director &
Chief Financial Officer
DIN-00174361

Satish Pai
Managing Director
DIN-06646758

Anil Malik
Company Secretary

K N Bhandari
Director
DIN-00026078

Place : Mumbai
Dated : June 12, 2020

STANDALONE STATEMENT OF CASH FLOWS

for the year ended March 31, 2020

₹ in Crore

	Note	Year ended 31/03/2020	Year ended 31/03/2019
A. CASH FLOW FROM OPERATING ACTIVITIES			
Profit/ (Loss) before Tax		952	1,810
Adjustment for :			
Finance Costs	33	1,679	1,683
Depreciation and Amortisation	34	1,708	1,693
Equity Settled Share-based Payments	31	27	10
Impairment Loss on Financial Assets (Net)	35	38	24
Impairment Loss on Non-Financial Assets (Net)		-	(8)
Liabilities no longer required Written-back	27	(83)	(40)
Unrealised Foreign Exchange (Gain)/ Loss (Net)		57	(18)
Unrealised (Gain)/Loss on Derivative Transactions (Net)		(116)	(127)
Fair Value (Gain) on modification of Borrowings		(19)	(50)
(Gain)/Loss on Assets Held for Sale (Net)		3	-
(Gain)/Loss on Property, Plant and Equipment and Intangible Assets Sold/Discarded (Net)	27	16	26
Interest Income	27	(176)	(411)
Dividend Income	27	(56)	(105)
Gain on withdrawal of Financial Guarantee	27	-	(62)
Exceptional Income	37	(25)	-
Realised Gain/(Loss) of Cash Flow Hedges in OCI (Net)		(412)	(71)
(Gain)/Loss on Investments measured at FVTPL (Net)	27	(345)	(282)
Operating Profit before Working Capital Changes		**3,248**	**4,072**
Changes in Working Capital:			
(Increase)/ Decrease in Inventories (Net)		(615)	(262)
(Increase)/ Decrease in Trade Receivables		1	(415)
(Increase)/ Decrease in Financial Assets		3	68
(Increase)/ Decrease in Non-Financial Assets		69	(169)
Increase/ (Decrease) in Trade Payables		(1,044)	(94)
Increase/ (Decrease) in Financial Liabilities		25	4
Increase/ (Decrease) in Non-Financial Liabilities (including Contract Liabilities)		(216)	75
Cash Generated from Operation before Tax		**1,471**	**3,279**
Refund/ (Payment) of Income Tax (Net)		1,315	(108)
Net Cash Generated/ (Used) - Operating Activities		**2,786**	**3,171**
B. CASH FLOW FROM INVESTING ACTIVITIES			
Payments to acquire Property,/Plant and Equipment and Intangible Assets		(1,395)	(1,263)
Proceeds from disposal of Property,/Plant and Equipment and Intangible Assets		30	18
Sale proceeds from Slump Sale		25	-
Investment in Subsidiaries		(15)	(181)
Investment in Associates and Joint Ventures		(2)	(6)
Investment in Equity Shares at FVTOCI		(653)	-
(Purchase)/ Sale of Other Investments (Net)		(697)	267
Loans and Deposits given		(80)	(272)
Receipt of Loans and Deposits given		347	355
Interest Received		140	166
Dividend Received		56	105
Net Cash Generated/ (Used) - Investing Activities		**(2,244)**	**(811)**

₹ in Crore

	Note	Year ended 31/03/2020	31/03/2019
C. CASH FLOW FROM FINANCING ACTIVITIES			
Proceeds from issue of Equity Shares (Including Share Application Money)		6	5
Treasury Shares acquired by ESOP Trust		(7)	(124)
Pre-Payment of Long-Term Borrowings		-	(1,575)
Principal Payments of Leases Liabilities (March 31, 2019 - Principal payments of finance lease obligations)		(63)	(5)
Proceeds from/ (Repayment of) Current Borrowings (Net) (Refer Note 44)		3,121	947
Finance Cost Paid		(1,562)	(1,598)
Dividend Paid (including Dividend Distribution Tax)		(314)	(307)
Net Cash Generated/ (Used) - Financing Activities		**1,181**	**(2,657)**
Net Increase/(Decrease) in Cash and Cash Equivalents		**1,723**	**(297)**
Add: Opening Cash and Cash Equivalents		1,508	1,805
Closing Cash and Cash Equivalents		**3,231**	**1,508**
Reconciliation of Closing Cash and Cash Equivalents with Balance Sheet:			
Cash and Cash Equivalents as per Balance Sheet	13	3,265	1,515
Less: Fair Value adjustments in Liquid Investments		(6)	(2)
Less: Temporary Overdraft Balance in Current Accounts	20B	(28)	(5)
Cash and Cash Equivalents as per Cash Flow Statement		**3,231**	**1,508**
Supplemental Information			
Non-Cash Transactions from Investing and Financing Activities:			
Acquisition of Right of Use Assets		79	-
Basis of Preparation and Significant Accounting Policies	1		

The accompanying Notes are an integral part of the Standalone Financial Statements.
This is the Standalone Statement of Cash Flows referred in our report of even date.

For Price Waterhouse & Co Chartered Accountants LLP
Firm Registration Number: 304026E/E-300009

Sumit Seth
Partner
Membership Number: 105869

For and on behalf of the Board of Hindalco Industries Limited

Praveen Kumar Maheshwari
Whole-time Director &
Chief Financial Officer
DIN-00174361

Satish Pai
Managing Director
DIN-06646758

Anil Malik
Company Secretary

K N Bhandari
Director
DIN-00026078

Place : Mumbai
Dated : June 12, 2020

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

1. Company Overview

Hindalco Industries Limited ("the Company") was incorporated in India in the year 1958 having its registered office at Ahura Centre, 1st Floor, B Wing, Mahakali Caves Road, Andheri (East), Mumbai – 400093.

The Company has two main streams of business, Aluminium and Copper. In Aluminium, the Company caters to the entire value chain starting from mining of bauxite and coal through production of value added products for various applications.

The Company along with its subsidiaries has manufacturing operations in eleven countries including India spread over four continents North America, South America, Asia and Europe. Apart from primary aluminium, the Company produces aluminium sheet, extrusion and light gauge products for use in packaging market which includes beverage and food, can and foil products as well as for use in automotive, electronics, architecture, transportation and industrial product markets.

The Company also has one of the largest single location Copper smelting facilities in India.

The equity shares of the Company are listed on the Indian Stock Exchanges (National Stock Exchange & Bombay Stock Exchange) and GDRs are listed on the Luxemburg Stock Exchange.

1A. Basis of preparation

The separate financial statements of Hindalco Industries Limited ("the Company") comply in all material aspects with Indian Accounting Standards ("Ind-AS") as prescribed under Section 133 of the Companies Act, 2013 ("the Act"), as notified under the Companies (Indian Accounting Standards) Rules, 2015 (including subsequent amendments) and other accounting principles generally accepted in India.

The financial statements for the year ended March 31, 2020 have been approved for issue by the Board of Directors of the Company in their meeting held on June 12, 2020.

The financial statements have been prepared on historical cost convention on accrual basis except for following assets and liabilities which have been measured at fair value:

- Financial instruments - measured at fair value;
- Assets held for sale - measured at fair value less cost to sell;
- Plan assets under defined benefit plans - measured at fair value; and
- Employee share-based payments.

In addition, the carrying values of recognised assets and liabilities designated as hedged items in fair value hedges that would otherwise be carried at cost are adjusted to record changes in the fair values attributable to the risks that are being hedged in effective hedge relationship.

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Company takes into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in these financial statements is determined on such a basis, except for employee share-based payment, leasing transactions, and measurements that have some similarities to fair value but are not fair value, such as net realisable value in Inventories or value in use in Impairment of Assets. The basis of fair valuation of these items are given as part of their respective accounting policies.

Company has determined current and non-current classification of its assets and liabilities in the financial statements as per the requirement of Ind AS 1 - 'Presentation of Financial Statements'. Based on its assessment, the Company has ascertained its normal operating cycle as 12 months for the purpose of current and non-current classification of its assets and liabilities.

In addition, for financial reporting purposes, fair value measurements are categorised into Level 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company can access at the measurement date;
- Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and
- Level 3 inputs are unobservable inputs for the asset or liability.

Adoption of new Accounting Standards

The Company has applied the following Accounting Standards and its amendments for the first time for annual reporting period commencing April 1, 2019:

(a) Ind AS 116 - Leases:

On March 30, 2019, the Ministry of Corporate Affairs (MCA) notified Ind AS 116, 'Leases' as part of the Companies (Indian Accounting Standards (Ind AS)) Amendment Rules, 2019. Ind AS 116 replaces existing. Ind AS 17, Leases with effect from April 1, 2019 (the effective date). Ind AS 116 sets out principles for recognition, measurement, presentation and disclosure of leases. Ind AS 116 introduces a single lessee accounting model and requires a lessee to recognise assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value. For all leases except as noted above, a lessee is required to recognise a right-of-use asset (ROU Asset) representing its right to use the underlying leased asset and a lease liability representing its obligation to make lease payments in the balance sheet. Lessee will recognise depreciation of right-of-use assets and interest on lease liabilities in the statement of profit and loss. Operating cash flows will be higher as repayments of the lease liability and related interest are classified within financing activities. However, there was no major change in accounting from a Lessor perspective.

(b) Other amendments:

On March 30, 2019, MCA has issued Companies (Indian Accounting Standards) Second Amendment Rules, 2019.

i) Ind AS 12 - Income taxes

Appendix C to Ind AS 12, Income Taxes has been inserted. The appendix provides accounting for uncertainty over income tax treatments. The appendix provides a framework to consider, recognise and measure the accounting impact of tax uncertainties. It also provides specific guidance in several areas where previously Ind AS 12 was silent. There are no new disclosure requirements in appendix However, the Company is required to add explanations on judgements and estimates made in uncertain tax treatment. New paragraph 57A has been added to Ind AS 12 to clarify that the income tax consequences of dividends on financial instruments classified as equity should be recognised according to where the past transactions or events that generated distributable profits were recognised.

ii) Ind AS 19 - Employment Benefits

This amendment requires an entity to:

1) Calculate the current service cost and net interest for the remainder of the reporting period after a plan amendment, curtailment or settlement by using the updated assumptions from the date of the change.

2) Any reduction in a surplus should be recognised immediately in profit or loss either as part of past service cost, or as a gain or loss on settlement. In other words, a reduction in a surplus must be recognised in profit or loss even if that surplus was not previously recognised because of the impact of the asset ceiling; and separately recognise any changes in the asset ceiling through other comprehensive income. This amendment is applicable for any future plan amendments, curtailments, or settlements of the Company on or after April 1, 2019.

iii) Ind AS 23 - Borrowing Costs

Amendment to Ind AS 23 - Borrowing Costs clarifies that if a specific borrowing remains outstanding after a qualifying asset is ready for its intended use or sale, it becomes part of general borrowings.

iv) Ind AS 28 - Investments in Associates and Joint Ventures

Amendment to Ind AS 28 - Investments in Associates and Joint Ventures clarifies that long-term interests (for example, preference shares or long-term loans) in an associate or joint venture that form part of the net investment in the associate or joint venture and to which the equity method is not applied should be accounted for using Ind AS 109 - Financial Instruments. The requirements of Ind AS 109 are applied to long-term interests before applying the loss allocation and impairment requirements of Ind AS 28.

v) Ind AS 103 - Business Combinations - and Ind AS 111 - Joint Arrangements

Amendment has been made to Ind AS 103 - Business Combinations - and Ind AS 111 -

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

Joint Arrangements - to clarify measurement of previously held interest in obtaining control/ joint control over a joint operation as follows:

(i) On obtaining control of a business that is a joint operation, previously held interest in joint operation is re-measured at fair value at the acquisition date;

(ii) A party obtaining joint control of a business that is joint operation should not re-measure its previously held interest in the joint operation. These amendments will apply to future transactions of the Company in which it obtains joint control of a business on or after April 1, 2019.

vi) Ind AS 109 - Financial Instruments

The narrow-scope amendments made to Ind AS 109 enable entities to measure certain pre-payable financial assets with negative compensation at amortised cost. These assets, which include some loans and debt securities, would otherwise have to be measured at fair value through profit or loss. To qualify for amortised cost measurement, the negative compensation must be reasonable compensation for early termination of the contract and the asset must be held within a held to collect business model.

The Company had to change its accounting policies following the adoption of Ind AS 116 Leases,refer note 51 for details. Most of the other amendments listed above did not have any impact on the amounts recognized in prior periods and are not expected to significantly affect the current and future periods.

The Financial Statements have been presented in Indian Rupees (INR), which is the Company's functional currency. All financial information presented in INR has been rounded off to the nearest Crore Rupees (INR 1 Crore = INR 10,000,000) without any decimal unless otherwise stated.

1B. Significant Accounting Policies

A summary of the significant accounting policies applied in the preparation of the financial statements are as given below. These accounting policies have been applied consistently to all the periods presented in the financial statements.

A. Investment in Subsidiaries and joint ventures

The investments in subsidiaries and joint ventures are carried in the financial statements at historical cost except when the investment, or a portion thereof, is classified as held for sale, in which case it is accounted for as Non-current assets held for sale and discontinued operations. When the Company is committed to a sale plan involving disposal of an investment, or a portion of an investment, in any subsidiary or joint venture, the investment or the portion of the investment that will be disposed of is classified as held for sale when the criteria described above are met. Any retained portion of an investment in a subsidiary or a joint venture that has not been classified as held for sale continues to be accounted for at historical cost.

Investments in subsidiaries and joint ventures carried at cost are tested for impairment in accordance with Ind AS 36 Impairment of Assets. The carrying amount of the investment is tested for impairment as a single asset by comparing its recoverable amount with its carrying amount, any impairment loss recognised reduces the carrying amount of the investment.

B. Investment in Associates

The investments in associates are carried in these financial statements at fair Value through Other Comprehensive Income (OCI).

C. Investment in joint operation

A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

When the Company undertakes its activities under joint operations, the Company as a joint operator recognises in relation to its interest in a joint operation:

- its assets, including its share of any assets held jointly;
- its liabilities, including its share of any liabilities incurred jointly;
- its revenue from the sale of its share of the output arising from the joint operation;
- its share of the revenue from the sale of the output by the joint operation; and
- its expenses, including its share of any expenses incurred jointly.

The Company accounts for the assets, liabilities, revenues and expenses relating to its interest in a joint operation in accordance with the standard applicable to the particular assets, liabilities, revenues and expenses.

When the Company transacts with a joint operation in which the Company is a joint operator (such as a sale or contribution of assets), the Company is considered to be conducting the transaction with the other parties to the joint operation, and gains and losses resulting from the transactions are recognised in the financial statements only to the extent of other parties' interests in the joint operation.

When the Company transacts with a joint operation in which the Company is a joint operator (such as a purchase of assets), the Company does not recognise its share of the gains and losses until it resells those assets to a third party.

D. Property, Plant and Equipment

Property, plant and equipment held for use in the production or/and supply of goods or services, or for administrative purposes, are stated in the balance sheet at cost, less any subsequent accumulated depreciation and subsequent accumulated impairment losses.

The initial cost at cash price equivalent of property, plant and equipment acquired comprises its purchase price, including import duties and non-refundable purchase taxes, any directly attributable costs of bringing the assets to its working condition and location and present value of any obligatory decommissioning costs for its intended use. Cost may also include effective portion on qualifying cash flow hedges of foreign currency purchases of property, plant and equipment transferred from hedge reserve as basis adjustment.

In case of self-constructed assets, cost includes the costs of all materials used in construction, direct labour, allocation of overheads, directly attributable borrowing costs and effective portion of cash flow hedges of foreign currency transferred from the hedge reserve as basis adjustment.

Subsequent expenditure on major maintenance or repairs includes the cost of the replacement of parts of assets and overhaul costs. Where an asset or part of an asset is replaced and it is probable that future economic benefits associated with the item will be available to the Company, the expenditure is capitalised and the carrying amount of the item replaced is derecognised. Similarly, overhaul costs associated with major maintenance are capitalised and depreciated over their useful lives where it is probable that future economic benefits will be available and any remaining carrying amounts of the cost of previous overhauls are derecognised. All other costs are charged to profit and loss during the reporting period in which they are incurred.

Capital work-in-progress

Capital work-in-progress comprises of assets in the course of construction for production or/and supply of goods or services or administrative purposes, or for purposes not yet determined, are carried at cost, less any recognised impairment loss. At the point when an asset is operating at management's intended use, the cost of construction is transferred to the appropriate category of property, plant and equipment. Costs associated with the commissioning of an asset are capitalised where the asset is available for use and commissioning has been completed.

Depreciation

Depreciation is charged so as to write off the cost or value of assets, over their estimated useful lives or, in the case of leased assets (including leasehold improvements), over the lease term if shorter. The lease period is considered by excluding any lease renewal options, unless the renewals are reasonably certain. Depreciation is recorded using the straight line basis. The estimated useful lives and residual values are reviewed at each year end, with the effect of any changes in estimate accounted for on a prospective basis. Each component of an item of property, plant and equipment with a cost that is significant in relation to the total cost of that item is depreciated separately if its useful life differs from the other components of the asset.

Depreciation commences when the assets are ready for their intended use. Depreciated assets in Property, Plant & Equipment and accumulated depreciation amounts are retained fully until they are removed/retired from active use.

The useful life of the items of Property, Plant and Equipment estimated by the management for the current and comparative period are in line with the useful life as per Schedule II of the Companies Act, 2013, refer note 2.

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

Disposal of assets
An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between net disposal proceeds and the carrying amount of the asset and is recognised in the statement of profit and loss.

E. Investment property
Investment properties held to earn rentals or for capital appreciation or both are stated in the balance sheet at cost, less any subsequent accumulated depreciation and subsequent accumulated impairment losses. Depreciation is charged on a straight line basis over their estimated useful lives. Any gain or loss on disposal of investment property is determined as the difference between net disposal proceeds and the carrying amount of the property and is recognized in the statement of profit and loss. Transfer to, or from, investment property is done at the carrying amount of the property.

F. Intangible Assets

Intangible assets acquired separately
Intangible assets acquired are reported at cost less accumulated amortization and accumulated impairment losses. Amortization is charged on a straight line basis over their estimated useful lives other than Mining rights. The estimated useful life and amortization method are reviewed at the end of each annual reporting period, with the effect of any changes in estimate being accounted for on a prospective basis.

Internally-generated intangible assets
Expenditure on research activities is recognized as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from development (or from the development phase of an internal project) is recognized if, and only if all of the following can be demonstrated:

- the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- management's intention to complete the intangible asset and use or sell it;
- the ability to use or sell the intangible asset;
- how the intangible asset will generate probable future economic benefits;
- the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- the ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognized for internally-generated intangible assets is the sum of the expenditure incurred from the date when the intangible asset is recognised. Where no internally-generated intangible asset can be recognized, development expenditure is charged to the statement of profit and loss in the period in which it is incurred.

Subsequent to initial recognition, internally-generated intangible assets are reported at cost less accumulated amortization and accumulated impairment losses, on the same basis as intangible assets acquired separately.

Mineral Reserves, Resources and Rights (Mining Rights)
Mineral reserves, resources and rights (together referred to as 'mining rights') which can be reasonably valued, are recognised in the assessment of fair values on acquisition. Exploitable mineral rights are amortised using the unit of production basis over the commercially recoverable reserves. Mineral resources are included in amortisation calculations where there is a high degree of confidence that they will be extracted in an economic manner. Commercially recoverable reserves are proved and probable reserves. Changes in the commercial recoverable reserves affecting unit of production calculations are dealt with prospectively over the revised remaining reserves.

Exploration for and evaluation of mineral resources
Expenditures associated with exploration for and evaluation of mineral resources after obtaining of legal rights to explore a specific area but before technical feasibility and commercial viability of extracting mineral resources are demonstrable are recognized as Exploration and Evaluation assets.

If a project does not prove viable, all irrecoverable exploration and evaluation expenditure associated with the project net of any related impairment allowances is written off to the statement of profit and loss.

The Company measures its Exploration and Evaluation assets at cost and classifies it as Property, Plant and Equipment or Intangible Assets according to the nature of assets acquired and applies the classification consistently.

As the asset is not available for use, it is not depreciated but is monitored for indication of impairment. An exploration and evaluation asset is no longer classified as such when the technical feasibility and commercial viability of extracting minerals resources are demonstrable and the development of the deposit is intended by the management. The carrying value of such exploration and evaluation asset is reclassified as Mining Rights.

De-recognition of intangible assets

An intangible asset is derecognised on disposal, or when no future economic benefits are expected from use or disposal. Gains or losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset are recognised in the statement of profit and loss when the asset is derecognised.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment annually, and whenever there is an indication that the asset may be impaired.

G. Stripping cost

Stripping costs incurred during the mining production phase are allocated between cost of inventory produced and the existing mine asset. The stripping ratio, as approved by the regulatory authority, for the life of the mine is obtained by dividing the estimated quantity of overburden by the estimated quantity of mineable coal / bauxite reserve to be extracted over the life of the mine. This ratio is periodically reviewed and changes, if any, are accounted for prospectively.

Stripping costs are allocated and included as a component of the mine asset when they represent significantly improved access to ore, provided all the following conditions are met:

- it is probable that the future economic benefit associated with the stripping activity will be realised;
- the component of the ore body for which access has been improved can be identified; and
- the costs relating to the stripping activity associated with the improved access can be reliably measured.

The overburden removal costs are included in Mining Rights under Intangible assets and amortised based on stripping ratio on the quantity of coal / bauxite excavated.

H. Non-current assets (or disposal groups) held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the asset (or disposal Group) is available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such asset (or disposal Group) and its sale is highly probable. Management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

Non-current assets (and disposal groups) classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell except for those assets that are specifically exempt under relevant Ind AS. Once the assets are classified as “Held for sale”, those are not subjected to depreciation till disposal.

An impairment loss is recognised for any initial or subsequent write-down of the asset (or disposal group) to fair value less costs to sell. A gain is recognised for any subsequent increases in fair value less costs to sell of an asset (or disposal group), but not in excess of any cumulative impairment loss previously recognised.

A gain or loss not previously recognised by the date of the sale of the non-current asset (or disposal group) is recognised at the date of derecognition.

Non-current assets classified as held for sale and the assets of a disposal group classified as held for sale are presented separately from the other assets in the balance sheet.

I. Impairment of Non-Financial Assets

At the end of each reporting period, the Company reviews the carrying amounts of its tangible, intangible and other non-financial assets to determine whether there is any indication that those assets have suffered an impairment loss. If

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

any such indication exists, the recoverable amount of the asset/cash generating unit is estimated in order to determine the extent of the impairment loss (if any). Recoverable amount is the higher of fair value less cost to sell and value in use. Where it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs. Where a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units, or otherwise they are allocated to the group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

Recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognised immediately in the statement of profit and loss.

Non-financial assets (other than Goodwill) that suffered an impairment are reviewed for possible reversal of the impairment at the end of each reporting period. Where an impairment loss subsequently reverses, the carrying amount of the asset (or cash-generating unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (or cash-generating unit) in prior years. A reversal of an impairment loss is recognised immediately in the statement of profit and loss.

J. Foreign Currency Transactions

In preparing the financial statements, transactions in currencies other than the Company's functional currency (foreign currencies) are recognised at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are translated at the rates prevailing at that date. Non-monetary items are measured at historical cost.

Exchange differences on monetary items are recognised in the statement of profit and loss in the period in which they arise, except for:

- eligible exchange differences on foreign currency borrowings relating to qualifying assets under construction are included in the cost of those assets when they are regarded as an adjustment to interest; and
- exchange differences on transactions entered into in order to hedge certain foreign currency risks (see below for hedge accounting policies).

Changes in the fair value of non-monetary equity instruments irrevocably classified as fair value through other comprehensive income includes gain or loss on account of exchange differences.

The fair value of financial liabilities and financial assets denominated in a foreign currency are translated at the spot rate at the end of the reporting period. The foreign exchange component forms part of its fair value gain or loss. Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was measured.

K. Provisions and contingencies

Provisions are recognized when there is a present obligation (legal or constructive) as a result of a past event and it is probable ("more likely than not") that it is required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the balance sheet date, taking into account the risks and uncertainties surrounding the obligation. Where a provision is measured using the estimated cash flows to settle the present obligation, its carrying amount is the present value of those cash flows. The discount rate used is a pre-tax rate that reflects current market assessments of the time value of money in that jurisdiction and the risks specific to the liability.

Onerous contracts

Present obligations arising under onerous contracts are recognised and measured as provisions. An onerous contract is considered to exist when a

contract under which the unavoidable costs of meeting the obligations exceed the economic benefits expected to be received from it.

Restructurings
A restructuring provision is recognised when there is a detailed formal plan for the restructuring which has raised a valid expectation in those affected that the Company will carry out the restructuring by stating to implement the plan or announcing its main feature to those affected by it. The measurement of a restructuring provision includes only the direct expenditures arising from the restructuring.

Restoration (including Mine closure), rehabilitation and decommissioning
Close-down and restoration costs are provided for in the accounting period when the obligation arising from the related disturbance occurs, based on the net present value of the estimated future costs of restoration to be incurred during the life of the mining operation and post-closure. Provisions for close-down and restoration costs do not include any additional obligations which are expected to arise from future disturbance.

The initial close-down and restoration provision is capitalised. Subsequent movements in the close-down and restoration provisions for ongoing operations, including those resulting from new disturbance related to expansions or other activities qualifying for capitalisation, updated cost estimates, changes to the estimated lives of operations, changes to the timing of closure activities and revisions to discount rates are also capitalised within "Property, plant and equipment".

Environmental liabilities
Environment liabilities are recognised when the Company becomes obliged, legally or constructively, to rectify environmental damage or perform remediation work.

Litigation
Provision relating to legal, tax and other matters is recognised once it has been established that the Company has a present obligation based on consideration of the information which becomes available up to the date on which the Company's financial statements are approved and may in some cases entail seeking expert advice in making the determination on whether there is a present obligation.

Contingent Liabilities and Assets
A contingent liability is a possible obligation that arises from a past event, with the resolution of the contingency dependent on uncertain future events, or a present obligation where no outflow is probable. Material contingent liabilities are disclosed in the financial statements unless the possibility of an outflow of economic resources is remote. Contingent assets are not recognized in the financial statements unless it is virtually certain that the future event will confirm the asset's existence and the asset will be realised.

Enterprise Social Commitment
Enterprise Social Commitment is the amount to be spent on social and economic development of the surrounding area over a period of time where any new project is set up. Such obligation arises out of conditions mentioned in the Environment Clearance Certificate given by the Government for new projects and are generally defined as a percentage of total project cost. Present value of such future cash flows discounted at appropriate and applicable discount rates are capitalised against the obligation created. Actual cash flows that happen over the period are adjusted against the obligation. The obligation is increased over a period of time and the differential is recognized in the Statement of Profit and Loss as Interest Expense.

Renewable Power Obligation
Provision towards Renewable Power Obligation is created to the extent any obligated unit is unable to source renewable energy as a replacement to carbon energy as per requirement of the applicable regulation during the reporting period and is carried in books till the obligation is discharged by purchasing Renewable Energy Certificate from any of the authorised exchanges.

L. Leases

i) Accounting policy effective April 1, 2019:

Company as lessee
The Company assesses whether a contract is or contains a lease, at inception of the contract. The Company recognises a right-of-use asset and a corresponding lease liability with respect to all lease arrangements in which it is the lessee, except for short-term leases (defined as leases with a lease term of 12 months or less) and leases of

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

low value assets. For these leases, the Company recognises the lease payments as an operating expense on a straight-line basis over the lease term, unless another systematic basis is more representative of the time pattern in which economic benefits from the leased assets are consumed. Contingent and variable rentals are recognized as expense in the periods in which they are incurred.

Lease Liability

The lease payments that are not paid at the commencement date are discounted using the interest rate implicit in the lease. If that rate cannot be readily determined, which is generally the case for leases in the Company, the lessee's incremental borrowing rate is used, being the rate that the individual lessee would have to pay to borrow the funds necessary to obtain an asset of similar value to the right-of-use asset in a similar economic environment with similar terms, security and conditions.

Lease payments included in the measurement of the lease liability comprise:

- Fixed lease payments (including in-substance fixed payments) payable during the lease term and under reasonably certain extension options, less any lease incentives;
- Variable lease payments that depend on an index or rate, initially measured using the index or rate at the commencement date;
- The amount expected to be payable by the lessee under residual value guarantees;
- The exercise price of purchase options, if the lessee is reasonably certain to exercise the options; and
- Payments of penalties for terminating the lease, if the lease term reflects the exercise of an option to terminate the lease.

The lease liability is presented as a separate line in the Consolidated Balance Sheet.

The lease liability is subsequently measured by increasing the carrying amount to reflect interest on the lease liability (using the effective interest method) and by reducing the carrying amount to reflect the lease payments made.

The Company remeasures the lease liability (and makes a corresponding adjustment to the related right-of-use asset) whenever:

- The lease term has changed or there is a change in the assessment of exercise of a purchase option, in which case the lease liability is remeasured by discounting the revised lease payments using a revised discount rate.
- A lease contract is modified and the lease modification is not accounted for as a separate lease, in which case the lease liability is remeasured by discounting the revised lease payments using a revised discount rate.

Right of Use (ROU) Assets

The ROU assets comprise the initial measurement of the corresponding lease liability, lease payments made at or before the commencement day and any initial direct costs. They are subsequently measured at cost less accumulated depreciation and impairment losses.

Whenever the Company incurs an obligation for costs to dismantle and remove a leased asset, restore the site on which it is located or restore the underlying asset to the condition required by the terms and conditions of the lease, a provision is recognised and measured under Ind AS 37 Provisions, Contingent Liabilities and Contingent Assets. The costs are included in the related right-of-use asset.

The Company applies Ind AS 36 - Impairment of Assets to determine whether a right-of-use asset is impaired and accounts for any identified impairment loss as per its accounting policy on 'property, plant and equipment'.

Extension and termination options are included in many of the leases. In determining the lease term the management considers all facts and circumstances that create an economic incentive to exercise an extension option, or not exercise a termination option.

ROU assets are depreciated over the shorter period of the lease term and useful life of the underlying asset. If the Company is reasonably certain to exercise a purchase option, the right-of-use asset is depreciated over the underlying asset's useful life. The depreciation starts at the commencement date of the lease.

Deferred tax on the deductible temporary difference and taxable temporary differences in respect of carrying value of right of use assets and lease liability and their respective tax bases are recognised separately.

The Company as Lessor
The Company enters into lease arrangements as a lessor with respect to some of its investment properties and buildings.

Leases for which the Company is a lessor are classified as finance or operating leases. Whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee, the contract is classified as finance lease. All other leases are classified as operating leases.

When the Company is an intermediate lessor, it accounts for the head lease and sub-lease as two separate contracts. The sub-lease is classified as finance or operating lease by reference to the right-of-use asset arising from the head lease.

Rental income from operating leases is recognised on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised on a straight-line basis over the lease term.

Amounts due from lessees under finance leases are recognised as receivables at the amount of the Company's net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the Company's net investment outstanding in respect of the leases.

When a contract includes lease and non-lease components, the Company applies Ind AS 115, Revenue from Contracts with Customers to allocate the consideration under the contract to each component.

ii) Accounting policy till March 31, 2019:

Leases are classified as finance leases wherever the terms of the lease transfers substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

The Company as lessor
Amounts due from lessees under finance leases are recorded as receivables at the amount of net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the Company's net investment outstanding in respect of the leases.

Rental income from operating leases is recognised on a straight-line basis over the term of the relevant lease unless the receipts are structured to increase in line with an inflation price index or another systematic basis which is more representative of the time pattern in which economic benefits from the leased asset is diminished. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised on a straight-line basis over the lease term.

The Company as lessee
Assets held under finance leases are initially recognised at their fair value at the inception of the lease or, if lower, at the present value of the minimum lease payments. The corresponding liability to the lessor is included in the balance sheet as a finance lease obligation.

Lease payments are apportioned between finance charges and reduction of the lease obligation so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are charged directly to the statement of profit and loss, unless they are directly attributable to qualifying assets, in which case they are capitalised in accordance with the Company's general policy on borrowing costs. Contingent rentals are recognised as expenses in the periods in which they are incurred.

Operating lease payments are recognised as an expense on a straight-line basis over the lease term, unless the payments

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are structured to increase in line with an inflation price index or another systematic basis is more representative of the time pattern in which economic benefits from the leased asset are consumed. Contingent rentals arising under operating leases are recognised as an expense in the period in which they are incurred.

In the event that lease incentives are received to enter into operating leases, such incentives are recognised as a liability. The aggregate benefit of incentives is recognised as a reduction of rental expense on a straight-line basis, except where another systematic basis is more representative of the time pattern in which economic benefits from the leased asset are consumed.

M. Inventories

Inventories are stated at the lower of cost and net realizable value. The cost of finished goods and work in progress includes raw materials, direct labour, other direct costs and related production overheads. Costs of inventories include the transfer from equity any gains/losses on qualifying cash flow hedges for purchases of raw materials.

Cost of raw material comprises of Cost of purchases and also include all other costs incurred in bringing the inventories to their present location and condition.

The Inventories are measured at Fair Value only in those cases where the Inventories are designated into a fair value hedge relationship.

Cost is determined using the weighted average cost basis. However, the same cost basis is applied to all inventories of a particular class. Inventories of stores and spare parts are valued at weighted average cost basis after providing for cost of obsolescence and other anticipated losses, wherever considered necessary.

Net realizable value represents the estimated selling price for inventories less all estimated costs of completion and costs necessary to make the sale.

Materials and other supplies held for use in the production of inventories (finished goods, work-in-progress) are not written down below the cost if the finished products in which they will be used are expected to sell at or above the cost.

N. Trade receivable

Trade receivables are amounts due from customers for goods sold or services performed in the ordinary course of business. If the receivable is expected to be collected within a period of 12 months or less from the reporting date (or in the normal operating cycle of the business, if longer), they are classified as Current Assets otherwise as Non-Current Assets.

Trade receivables are measured at their transaction price on initial recognition, unless it contains a significant financing component or pricing adjustments embedded in the contract in which cases, it is recognised at fair value. Trade receivables are held with the objective of collecting the contractual cash flows and therefore are subsequently measured at amortised cost less loss allowance.

Trade receivables which are subject to a factoring arrangement without recourse are de-recognized from the Balance Sheet in its entirety. Under this arrangement, the Company transfers relevant receivables to the factor in exchange for cash and does not retain late payment and credit risk.

Trade receivables which arise from contracts where the sale price is provisional and revenue model has the character of a commodity derivative are measured at fair value. The fair value is measured at forward rate and subsequent changes are recognised as Other Operating Revenue.

O. Trade and other payables

These amounts represent liabilities for goods and services provided to the Company and are unpaid at the end of the financial year. The amounts are unsecured and usually paid within time limits as contracted. Trade and other payables are presented as current liabilities unless the payment is not due within 12 months after the reporting period.

P. Financial Instruments

All financial assets are recognised on trade date when the purchase of a financial asset is under a contract whose term requires delivery of the financial asset within the timeframe established by the market concerned. Financial assets are initially measured at fair value, plus transaction costs, except for those financial assets which are classified as at fair value through profit or loss (FVTPL) at inception. All recognised financial assets are subsequently measured in their entirety at either amortised cost or fair value.

Classification of financial assets
Financial assets are classified as 'equity instrument' if it is a non-derivative and meets the definition of 'equity' for the issuer. All other non-derivative financial assets are 'debt instruments'.

Financial assets at amortised cost and the effective interest method
Debt instruments are measured at amortised cost if both of the following conditions are met:

- the asset is held within a business model whose objective is to hold assets in order to collect contractual cash flows; and
- the contractual terms of the instrument give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Debt instruments meeting these criteria are subsequently measured at amortised cost using the effective interest method less any impairment, with interest recognised on an effective yield basis in investment income.

The effective interest method is a method of calculating the amortised cost of a debt instrument and of allocating interest over the relevant period. The effective interest rate is the rate that exactly discounts the estimated future cash receipts (including all fees or and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the debt instrument, or (where appropriate) a shorter period, to the net carrying amount on initial recognition.

The Company may irrevocably elect at initial recognition to classify a debt instrument that meets the amortised cost criteria above as at FVTPL if that designation eliminates or significantly reduces an accounting mismatch had the financial asset been measured at amortised cost.

Financial assets at fair value through other comprehensive income (FVTOCI)
Debt instruments are measured at FVTOCI if both of the following conditions are met:

- the asset is held within a business model whose objective is to hold assets in order to collect contractual cash flows and selling assets; and
- the contractual terms of the instrument give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Debt instruments meeting these criteria are subsequently measured at fair value with any gains or losses arising on re-measurement recognised in other comprehensive income, except for impairment gains or losses, interest income and foreign exchange gains or losses which are recognised in profit and loss. Interest calculated using the effective interest method is recognised in the statement of profit and loss in investment income. When the debt instrument is derecognised the cumulative gain or loss previously recognised in other comprehensive income is reclassified to the statement of profit and loss as a reclassification adjustment.

At initial recognition, an irrevocable election is made (on an instrument-by-instrument basis) to designate investments in equity instruments (other than held for trading purpose) at FVTOCI.

A financial asset is held for trading if:

- it has been acquired principally for the purpose of selling it in the near term; or
- on initial recognition it is part of a portfolio of identified financial instruments that the Company manages together and has evidence of a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated in an effective hedge relationship as a hedging instrument or not a financial guarantee.

Investments in equity instruments at FVTOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognised in other comprehensive income and accumulated in the 'Gain/ (Loss) on Equity Instruments FVTOCI'. Where the asset is disposed of, the cumulative gain or loss previously accumulated in the 'Gain/ (Loss) on Equity Instruments FVTOCI' is directly reclassified to retained earnings.

For equity instruments measured at fair value through other comprehensive income, no impairments are recognised in the statement of profit and loss.

Dividends on these investments in equity instruments are recognised in the statement of profit and loss in investment income when the Company's right to receive the dividends is established, it is probable that the economic

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benefits associated with the dividend will flow to the entity; and the amount of the dividend can be measured reliably.

Financial assets at Fair Value through Profit and Loss (FVTPL)
Financial assets that do not meet the criteria of classifying as amortised cost or fair value through other comprehensive income described above, or that meet the criteria but the entity has chosen to designate as at FVTPL at initial recognition, are measured at FVTPL.

Investments in equity instruments are classified as at FVTPL, unless the Company designates an investment that is not held for trading at FVTOCI at initial recognition.

Financial assets at FVTPL are subsequently measured at fair value, with any gains or losses arising on re-measurement recognised in statement of profit and loss. Interest income from these financial assets is included in other income.

Dividend income on investments in equity instruments at FVTPL is recognised in the statement of profit and loss in investment income when the Company's right to receive the dividends is established, it is probable that the economic benefits associated with the dividend will flow to the entity; and the amount of the dividend can be measured reliably.

Impairment of financial assets
On initial recognition of the financial assets, a loss allowance for expected credit loss is recognised for debt instruments carried at amortised cost and FVTOCI. For debt instruments that are measured at FVTOCI, the loss allowance is recognised in the statement of profit and loss.

Expected credit losses of a financial instrument is measured in a way that reflects:

- an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes;
- the time value of money; and
- reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions.

At each reporting date, the Company assesses whether the credit risk on a financial instrument has increased significantly since initial recognition. When making the assessment, the Company compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition and consider reasonable and supportable information, that is available without undue cost or effort, that is indicative of significant increases in credit risk since initial recognition.

If, at the reporting date, the credit risk on a financial instrument has not increased significantly since initial recognition, the Company measures the loss allowance for that financial instrument at an amount equal to 12-month expected credit losses. If the credit risk on that financial instrument has increased significantly since initial recognition, the Company measures the loss allowance for a financial instrument at an amount equal to the lifetime expected credit losses.

For Trade Receivables and Contract Assets, the Company applies the simplified approach required by Ind AS 109, which requires expected life time losses to be recognized from initial recognition of the receivables.

The amount of expected credit losses (or reversal) that is required to adjust the loss allowance at the reporting date is recognised as an impairment gain or loss in the statement of profit and loss.

De-recognition of financial assets
The Company derecognises a financial asset on trade date only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity or when it retains contractual rights to retain contractual cash flows from financial assets, but assumes a contractual obligation to pay the cash flows to one or more recipient. If the Company neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Company recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If the Company retains substantially all the risks and rewards of ownership of a transferred financial asset, the Company continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

On de-recognition of a financial asset other than in its entirety (e.g. when the Company retains an option to repurchase part of a transferred asset), the

Company allocates the previous carrying amount of the financial asset between the part it continues to recognise under continuing involvement, and the part it no longer recognises on the basis of the relative fair values of those parts on the date of the transfer. The difference between the carrying amount allocated to the part that is no longer recognised and the sum of the consideration received for the part no longer recognised and any cumulative gain or loss allocated to it that had been recognised in other comprehensive income is recognised in the statement of profit and loss. Cumulative gain or loss that had been recognised in other comprehensive income is allocated between the part that continues to be recognised and the part that is no longer recognised on the basis of the relative fair values of those parts.

Financial liabilities and equity instruments issued by the Company

Classification as debt or equity
Debt and equity instruments are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangement.

Equity instruments
An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Company are recognised at the proceeds received, net of direct issue costs.

Compound instruments
The component parts of compound instruments (convertible instruments) issued by the Company are classified separately as financial liabilities and equity in accordance with the substance of the contractual arrangement. At the date of issue, the fair value of the liability component is estimated using the prevailing market interest rate for a similar non-convertible instrument. This amount is recorded as a liability on an amortised cost basis using the effective interest method until extinguished upon conversion or at the instrument's maturity date. The equity component is determined by deducting the amount of the liability component from the fair value of the compound instrument as a whole. This is recognised and included in equity, net of income tax effects, and is not subsequently re-measured.

Financial guarantee contract liabilities
Financial guarantee contract liabilities are initially measured at their fair values and, if not designated as at FVTPL, are subsequently measured at the higher of:

- the amount of loss allowance is determined by using expected credit loss model; and
- the amount initially recognised less, where appropriate, cumulative amount of income recognised in accordance with the revenue recognition policies.

Financial liabilities
Financial liabilities are classified as either financial liabilities 'at FVTPL' or 'other financial liabilities'.

Financial liabilities at FVTPL
Financial liabilities are classified as at FVTPL when the financial liability is either held for trading or it is designated as at FVTPL.

A financial liability is classified as held for trading if:

- it has been acquired or incurred principally for the purpose of repurchasing it in the near term; or
- on initial recognition it is part of a portfolio of identified financial instruments that the Company manages together and for which there is evidence of a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument.

A financial liability other than a financial liability held for trading may also be designated as at FVTPL upon initial recognition if:

- such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or
- the financial liability forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Company's documented risk management or investment strategy, and information about the Company is provided internally on that basis; or
- it forms part of a contract containing one or more embedded derivatives, and Ind-AS 109 Financial Instruments permits the entire combined contract to be designated as at FVTPL.

Financial liabilities at FVTPL are stated at fair value, with any gains or losses arising on re-measurement recognised in the statement of profit

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and loss, except for the amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of that liability which is recognised in other comprehensive income.

The net gain or loss recognised in the statement of profit and loss incorporates any interest paid on the financial liability.

Other financial liabilities
Other financial liabilities, including borrowings, are initially measured at fair value, net of transaction costs.

Other financial liabilities are subsequently measured at amortised cost using the effective interest method, with interest expense recognised on an effective yield basis.

The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments through the expected life of the financial liability, or (where appropriate) a shorter period, to the net carrying amount on initial recognition.

Offsetting financial instruments
Financial assets and liabilities are offset and the net amount is reported in the balance sheet when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the Company or the counterparty.

Q. Derivatives and hedge accounting
Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently re-measured at their fair value at the end of each reporting date. The method of recognising the resulting gain or loss depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged.

The Company has a policy to designate certain derivatives as either:

(a) hedges of the fair value of recognised assets or liabilities or a firm commitment (fair value hedge);

(b) hedges of a particular risk associated with the cash flow of recognised assets or liabilities or a highly probable forecast transaction (cash flow hedge); or

(c) hedges of a net investment in a foreign operation (net investment hedge).

The Company documents at the inception of the transaction the relationship between hedging instruments and hedged items, as well as its risk management objectives and strategy for undertaking various hedging transactions. The Company also documents the nature of the risk being hedged and how the Company will assess whether the hedging relationship meets the hedge effectiveness requirements (including its analysis of the sources of hedge ineffectiveness and how it determines the hedge ratio).

Change in fair value of derivatives that are not designated in any hedge relationship as mentioned above are accounted through the statement of profit and loss at each reporting date.

The Company also identifies embedded derivatives in certain transactions. These derivatives are generally segregated from the host transactions and accounted for separately. These derivatives are designated into a hedge relationship if they meet hedge accounting criteria. Change in Fair Value of such embedded derivatives are accounted in Other Comprehensive Income if they are designated in a cash flow hedge relationship. Fair Value change of all other embedded derivatives including those that are not designated in any hedge relationship are accounted through the statement of profit and loss.

The full fair value of a hedging derivative is classified as a non-current asset or liability when the residual maturity of the derivative is more than 12 months and as a current asset or liability when the residual maturity of the derivative is less than 12 months.

Fair value hedge
Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recorded in the statement of profit and loss, together with any changes in the fair value of the hedged item that are attributable to the hedged risk.

Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated, or exercised, or when it no longer qualifies for

hedge accounting. The fair value adjustment to the carrying amount of the hedged item arising from the hedged risk is amortised to the statement of profit and loss from that date except for inventory that is charged to statement of profit and loss on sale of goods.

Cash flow hedges
The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised in other comprehensive income and accumulated under the heading cash flow hedging reserve within equity. The gain or loss relating to the ineffective portion is recognised immediately in the statement of profit and loss, and is included in the '(Gain)/ Loss in Fair Value of Derivatives' line item.

Amounts previously recognised in other comprehensive income and accumulated in equity are reclassified to the statement of profit and loss in the periods when the hedged item affects the statement of profit and loss, in the same line as the recognised hedged item. However, when the hedged forecast transaction results in the recognition of a non-financial asset or a non-financial liability, the gains and losses previously recognised in other comprehensive income and accumulated in equity are transferred from equity and included in the initial measurement of the cost of the non-financial asset or non-financial liability as a basis adjustment.

If the hedge ratio for risk management purposes is no longer optimal but the risk management objective remains unchanged and the hedge continues to qualify for hedge accounting, the hedge relationship will be rebalanced by adjusting either the volume of the hedging instrument or the volume of the hedged item so that the hedge ratio aligns with the ratio used for risk management purposes. Any hedge ineffectiveness is calculated and accounted for in the statement of profit and loss at the time of the hedge relationship rebalancing.

Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated, or exercised, or when it no longer qualifies for hedge accounting. Any gain or loss recognised in other comprehensive income and accumulated in equity at that time remains in equity and is recognised when the forecast transaction is ultimately recognised in the statement of profit and loss. When a forecast transaction is no longer expected to occur, the gain or loss accumulated in equity is recognised immediately in the statement of profit and loss.

Hedges of net investments in foreign operations
Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognised in other comprehensive income and accumulated under the heading of 'Foreign Currency Translation Reserve'. The gain or loss relating to the ineffective portion is recognised immediately in the statement of profit and loss.

Gains and losses on the hedging instrument relating to the effective portion of the hedge accumulated in the foreign currency translation reserve are reclassified to the statement of profit and loss on the disposal of the foreign operation.

R. Cash and cash equivalents
Cash and cash equivalents comprise of cash at bank and on hand, short-term deposits and short term highly liquid investments with an original maturity of three months or less that are readily convertible to known amounts of cash and are subject to insignificant risk of changes in value.

For the purposes of the Cash Flow Statement, cash and cash equivalents is as defined above, net of outstanding bank overdrafts which are integral part of Cash management activities. In the balance sheet, bank overdrafts are shown within borrowings in current liabilities.

S. Borrowing cost
General and specific borrowing costs directly attributable to the acquisition, construction or production of qualifying assets are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale. The Company considers a period of twelve months or more as a substantial period of time. Qualifying assets are assets that necessarily take a substantial period of time to get ready for their intended use or sale.

Transaction costs in respect of long-term borrowings are amortised over the tenor of respective loans using effective interest method. All other borrowing costs are expensed in the period in which they are incurred.

Investment income earned on the temporary investment of specific borrowings pending their

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expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization.

T. Accounting for government grants

Government grants are recognized when there is reasonable assurance that we will comply with the conditions attached to them and that the grants will be received.

Government grants are recognised in the statement of profit and loss on a systematic basis over the periods in which the Company recognises as expenses the related costs for which the grants are intended to compensate. Government grants whose primary condition is that the Company should purchase, construct or otherwise acquire non-current assets are recognized in the balance sheet by setting up the grant as deferred income and its amortization is recognized in 'Other Income' on straight line basis over expected useful lives of related assets.

Other government grants (grants related to income) are recognized as income over the periods necessary to match them with the costs for which they are intended to compensate, on a systematic basis. Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of providing immediate financial support with no future related costs are recognized in the statement of profit and loss in the period in which they become receivable.

Grants related to income are presented under 'Other Income' or 'Other Operating Revenue' in the statement of profit and loss depending upon the nature of the underlying grant, except for grants received in the form of rebate or exemptions related to expenditures, which are deducted in reporting the related expense.

The benefit of a government loan at a below-market rate of interest is treated as a government grant, measured as the difference between proceeds received and the fair value of the loan based on prevailing market interest rates.

U. Employee Benefits

Retirement benefit and termination benefits

A defined contribution plan is a pension plan under which the Company pays fixed contributions into a separate entity. The Company has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods.

Payments to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them to the contributions.

For defined benefit retirement and medical plans, the cost of providing benefits is determined using the projected unit credit method, with actuarial valuations being carried out at the end of each annual reporting period. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using market yields of government bonds having terms approximating to the terms of related obligation.

Re-measurement, comprising of actuarial gains and losses, the effect of the changes to the asset ceiling (if applicable) and the return on plan assets (excluding interest), is reflected in the balance sheet with a charge or credit recognised in other comprehensive income in the period in which they occur. Re-measurement recognised in other comprehensive income is reflected immediately in retained earnings and will not be reclassified to the statement of profit and loss. Past service cost is recognised in the statement of profit and loss in the period of a plan amendment. Net interest is calculated by applying the discount rate at the beginning of the period to the net defined benefit liability or asset. Defined benefit costs are categorised as follows:

- service cost (including current service cost, past service cost, as well as gains and losses on curtailments and settlements);
- net interest expense or income; and
- re-measurements.

The Company presents the first two components of defined benefit costs in the statement of profit and loss in the line item employee benefits expense. Curtailment gains and losses are accounted for as past service costs.

The retirement benefit obligation recognised in the balance sheet represents the actual deficit or surplus in the Company's defined benefit plans. Any surplus resulting from this calculation is limited to the present value of any economic benefits available in the form of refunds from the plans or reductions in future contributions to the plans.

A liability for a termination benefit is recognised at the earlier of when the entity can no longer withdraw

the offer of the termination benefit and when the entity recognises any related restructuring costs. In the case of an offer made to encourage voluntary redundancy, the termination benefits are measured based on the number of employees expected to accept the offer. Benefits falling due more than 12 months after the end of the reporting period are discounted to their present value.

Short-term and other long-term employee benefits

A liability is recognised for benefits accruing to employees in respect of wages and salaries in the period the related service is rendered at the undiscounted amount of the benefits expected to be paid in exchange for that service.

Liabilities recognised in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

Liabilities recognised in respect of other long-term employee benefits such as annual leave and sick leave are measured at the present value of the estimated future cash outflows expected to be made by the Company in respect of services provided by employees up to the reporting date. The expected costs of these benefits are accrued over the period of employment using the same accounting methodology as used for defined benefit retirement plans. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to the statement of profit and loss in the period in which they arise. These obligations are valued annually by independent qualified actuaries.

V. Employee Share-based Payments

Equity-settled share-based payments to employees are measured at the fair value of the options at the grant date.

The fair value of option at the grant date is expensed over the respective vesting period in which all of the specified vesting conditions are to be satisfied with a corresponding increase in equity as "Employee Stock Options Account". In case of forfeiture of unvested option, portion of amount already expensed is reversed. In a situation where the vested option forfeited or expires unexercised, the related balance standing to the credit of the "Employee Stock Options Account" are transferred to the "Retained Earnings".

When the options are exercised, the Company issues new equity shares of the Company of ₹ 1/- each fully paid-up. The proceeds received and the related balance standing to credit of the Employee Stock Options Account, are credited to share capital (nominal value) and Securities Premium Account.

Share appreciation rights which are cash settled, are recognised as employee benefit expense over the relevant service period. The liability is fair valued at each reporting date and are presented as employee benefit obligations in the balance sheet.

W. Income Taxes

Income tax expense represents the sum of the tax currently payable and deferred tax.

Current tax

The tax currently payable is based on taxable profit for the year. Taxable profit differs from 'profit before tax' as reported in the statement of profit and loss because of items of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date.

Deferred tax

Deferred tax is recognised on differences between the carrying amounts of assets and liabilities in the balance sheet and the corresponding tax bases used in the computation of taxable profit.

Deferred tax liabilities are generally recognised for all taxable temporary differences.

Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilised. Such assets and liabilities are not recognised if the temporary difference arises from initial recognition of goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that at the time of transaction affects neither the taxable profit nor the accounting profit.

The carrying amount of deferred tax assets is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

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Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realised, based on tax rates (and tax laws) that have been enacted or substantively enacted by the balance sheet date. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Company expects, at the reporting date, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Company intends to settle its current tax assets and liabilities on a net basis.

Minimum Alternative Tax (MAT) is recognized as an asset only when and to the extent there is convincing evidence that the Company will pay normal income tax during the specified period. In the year in which the MAT credit becomes eligible to be recognized as an asset, the said asset is created by way of credit to the statement of profit and loss and included in deferred tax assets. The Company reviews the same at each balance sheet date and writes down the carrying amount of MAT entitlement to the extent there is no longer convincing evidence to the effect that the Company will pay normal income tax during the specified period.

Current and deferred tax for the period

Current and deferred tax are recognised in the statement of profit and loss, except when they relate to items that are recognised in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognised in other comprehensive income or directly in equity, respectively. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

The Company applies significant judgement in identifying uncertainties over income tax treatments. Uncertain tax positions are reflected in the overall measurement of the Company's tax expense and are based on the most likely amount or expected value that is to be disallowed by the taxing authorities whichever better predict the resolution of uncertainty. Uncertain tax balances are monitored and updated as and when new information becomes available, typically upon examination or action by the taxing authorities or through statute expiration.

The Company considers when a particular amount payable for interest and penalties on income taxes is determined to be within the scope of Ind AS 37, it is presented as part of financing cost or other expenses, respectively unless when there is an overall settlement with tax authority and the interest and penalties cannot be identified separately in which case it is determined to be part of income taxes and accounted under Ind AS 12.

X. Revenue recognition

The Company derives revenue principally from sale of hydrate, speciality alumina, aluminium and aluminium value added products, di-ammonium phosphate, copper, precious metals (gold and silver) and other materials.

The Company recognizes revenue when it satisfies a performance obligation in accordance with the provisions of contract with the customer. This is achieved when control of the product has been transferred to the customer, which is generally determined when title, ownership, risk of obsolescence and loss pass to the customer and the Company has the present right to payment, all of which occurs at a point in time upon shipment or delivery of the product. The Company considers shipping and handling activities as costs to fulfil the promise to transfer the related products and the customer payments for shipping and handling costs are recorded as a component of revenue.

In certain customer contracts, shipping and handling services are treated as a distinct separate performance obligation and the Company recognises revenue for such services when the performance obligation is completed.

The Company considers the terms of the contract in determining the transaction price. The transaction price is based upon the amount the Company expects to be entitled to in exchange for transferring of promised goods and services to the customer after deducting incentive programs, included but not limited to discounts, volume rebates, etc.

For incentives offered to customers, the Company makes estimates related to customer performance and sales volume to determine the total amounts earned and to be recorded as deductions from

"Revenue from contracts with customers". In making these estimates, the Company considers historical results that have a predictive value of the amount that the Company expects to be entitled to for the transferred goods and services. If historical results have limited predictive value or the Company has limited experience with similar types of incentives, the estimate is made in such a manner, which ensures that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur. The actual amounts may differ from these estimates and are accounted for prospectively. No element of significant financing is deemed present as the sales are made with a credit term, which is consistent with market practice. The Company's obligation to repair or replace faulty products under the standard warranty terms is recognised as a cost with a corresponding provision.

For certain customer contracts, final prices are determined based on the underlying market index of commodity prices at a future date, for example prices on the London Metal Exchange Limited (LME) or London Bullion Markets Association (LBMA). In such contracts, the Company records revenue on a provisional basis considering current market price when control is transferred to the customer. At the end of each period, prior to final settlement date, adjustments are made to the provisional sale price based on movements in the underlying market index of commodity prices up to the date of final price determination. Such variable price movement is accounted as 'Other Operating Revenue'.

Revenue from irrevocable bill and hold/ holding certificate contracts is recognised when it is probable that delivery will be made, goods have been identified and kept separately, are ready for delivery in the present condition and the Company does not have the ability to use the product or to direct it to another customer. Under these arrangements, revenue is recognised once legal title has passed and control of the asset sold is transferred to the customer.

Export incentives and subsidies are recognized when there is reasonable assurance that the Company will comply with the conditions and the incentive will be received.

Claim on insurance companies, railway authorities and others are accounted for on acceptance basis.

Revenue excludes any taxes and duties collected on behalf of the government.

Y. Dividend and Interest Income

Dividend income from investments is recognised when the shareholder's right to receive payment has been established.

Interest income from a financial asset is recognised when it is probable that the economic benefits will flow to the Company and the amount of income can be measured reliably. Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount on initial recognition.

Z. Exceptional items

Exceptional items include income or expense that are considered to be part of ordinary activities, however are of such significance and nature that separate disclosure enables the user of the financial statements to understand the impact in a more meaningful manner. Exceptional items are identified by virtue of either their size or nature so as to facilitate comparison with prior periods and to assess underlying trends in the financial performance of the Company.

1C. Measurement of fair value

a. Financial instruments

The estimated fair value of the Company's financial instruments is based on market prices and valuation techniques. Valuations are made with the objective to include relevant factors that market participants would consider in setting a price, and to apply accepted economic and financial methodologies for the pricing of financial instruments. References for less active markets are carefully reviewed to establish relevant and comparable data.

b. Marketable and non-marketable equity securities

Fair value for listed shares is based on quoted market prices as of the reporting date. Fair value for unlisted shares is calculated based on commonly accepted valuation techniques utilizing significant unobservable data, primarily cash flow based models.

c. Derivatives

Fair value of financial derivatives is estimated as the present value of future cash flows, calculated

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

by reference to quoted price curves and exchange rates as of the balance sheet date. Options are valued using appropriate option pricing models and credit spreads are applied where deemed to be significant.

d. Embedded derivatives

Embedded derivatives that are separated from the host contract are valued by comparing the forward curve at contract inception to the forward curve as of the balance sheet date. Changes in the present value of the cash flows related to the embedded derivative are recognized in the balance sheet and in the income statement.

1D. Critical accounting judgment and key sources of estimation uncertainty

In preparing the financial statements in conformity with accounting principles generally accepted in India, management is required to make estimates and assumptions that affect reported amounts of assets and liabilities and the disclosure of contingent liabilities as at the date of the financial statements and the amounts of revenue and expenses during the reported period. Actual results could differ from those estimates. Any revision to such estimates is recognised in the period in which the same is determined.

The following paragraphs explain areas that are considered more critical, involving a higher degree of judgment and complexity.

a. Impairment of non-current assets

Ind AS 36 requires that the Company assesses conditions that could cause an asset or a Cash-Generating Unit (CGU) to become impaired and to test recoverability of potentially impaired assets. These conditions include changes resulting from market and economic environment, including internal and external factors such as the Company's market capitalization, significant changes in the Company's planned use of the assets or a significant adverse change in the expected prices, sales volumes or raw material cost. The identification of CGUs involves judgment, including assessment of where active markets exist, and the level of interdependency of cash inflows. CGU is usually the individual plant, unless the asset or the Company is an integral part of a value chain where no independent prices for the intermediate products exist, a Company of plants is combined and managed to serve a common market, or where circumstances otherwise indicate significant interdependencies.

In accordance with Ind AS 36, certain intangible assets are reviewed at least annually for impairment. If a loss in value is indicated, the recoverable amount is estimated as the higher of the CGU's fair value less cost to sell, or its value in use. Directly observable market prices rarely exist for the Company's assets, however, fair value may be estimated based on recent transactions on comparable assets, internal models used by the Company for transactions involving the same type of assets or other relevant information. Calculation of value in use is a discounted cash flow calculation based on continued use of the assets in its present condition, excluding potential exploitation of improvement or expansion potential.

Determination of the recoverable amount involves management estimates on highly uncertain matters, such as commodity prices and their impact on markets and prices for upgraded products, development in demand, inflation, currency rate movements, input cost prices, operating expenses and tax and legal environment. The Company uses internal business plans, quoted market prices and the Company's best estimate of commodity prices, currency rates, discount rates and other relevant information. A detailed forecast is developed for a period of three to five years with projections thereafter.

b. Employee retirement plans

The Company provides both defined benefit employee retirement plans and defined contribution plans. Measurement of pension and other superannuation costs and obligations under such plans require numerous assumptions and estimates that can have a significant impact on the recognized costs and obligation, such as future salary level, discount rate, attrition rate and mortality.

The Company provides defined benefit plans to its employees. The discount rate is based on Government bond yield. Assumptions for salary increase in the remaining service period for active plan participants are based on expected salary increase in India. Changes in these assumptions can influence the net asset or liability for the plan as well as the pension cost, refer note 43.

c. Environmental liabilities and Asset Retirement Obligation (ARO)

Estimation of environmental liabilities and ARO require interpretation of scientific and legal data, in addition to assumptions about probability and future costs, refer note 21.

d. Taxes

The Company calculates income tax expense based on reported income. Deferred income tax expense is calculated based on the differences between the carrying value of assets and liabilities for financial reporting purposes and their respective tax basis that are considered temporary in nature. Valuation of deferred tax assets is dependent on management's assessment of future recoverability of the deferred tax benefit. Expected recoverability may result from expected taxable income in the future, planned transactions or planned tax optimizing measures. Economic conditions may change and lead to a different conclusion regarding recoverability, refer notes 25. For judgements related to adoption of lower tax rate as per Section 115BBA of the Income tax Act, refer note 22 (h).

e. Extension and termination option in a Lease

Extension and termination options are included in many of the leases. In determining the lease term, the Management considers all facts and circumstances that create an economic incentive to exercise an extension option, or not exercise a termination option. This assessment is reviewed if a significant event or a significant change in circumstances occurs which affects this assessment and that is within the control of the Group.

f. Useful lives of depreciable/ amortisable assets (tangible and intangible)

Management reviews its estimate of the useful lives of depreciable/ amortisable assets at each reporting date, based on the expected utility of the assets. Uncertainties in these estimates relate to technical and economic obsolescence that may change the utility of certain software, IT equipment and other plant and equipment.

g. Recoverability of advances/ receivables

At each balance sheet date, based on discussions with the respective counter-parties and internal assessment of their credit worthiness, the management assesses the recoverability of outstanding receivables and advances. Such assessment requires significant management judgement based on financial position of the counter-parties, market information and other relevant factors.

h. Fair value measurements

The Company applies valuation techniques to determine the fair value of financial instruments (where active market quotes are not available) and non-financial assets. This involves developing estimates and assumptions consistent with the market participants to price the instrument. The Company's assumptions are based on observable data as far as possible, otherwise on the best information available. Estimated fair values may vary from the actual prices that would be achieved in an arm's length transaction at the reporting date, refer note 47.

i. Contingent assets and liabilities, provisions and uncertain tax positions

There are various legal, direct and indirect tax matters and other obligations including environmental, mining, local and state levies, income tax holiday, availing input tax credits etc., which may impact the Company. Evaluation of uncertain liabilities and contingent liabilities and assets arising out of above matters require management judgment and assumptions, regarding the probability outflow or realization of economic resources and the timing and amount, or range of amounts, that may ultimately be determined. Such estimates may vary from the ultimate outcome as a result of differing interpretations of laws and facts, or application of relevant judicial precedents, refer notes 21, 25 and 45.

j Inventory Measurement

Measurement of bulk inventory quantities (such as coal, bauxite, copper concentrates, etc.) lying at yards and work in progress of precious metals at smelter and refinery is material, complex and involves significant judgement and estimate resulting from measuring the surface area, dip measurement of materials in tanks/silos, etc., refer note 11.

The Company performs physical counts of above inventory on a periodic basis using internal / external experts to perform volumetric surveys and assessments, basis which the estimate of quantity for these inventories is determined. The variations noted between book records and physical quantities of above inventories are evaluated and appropriately accounted in the books of account.

1E. Recent Accounting Pronouncements

There are no other new updates or standards issued through the date of issuance of these financial statements that have not yet been adopted by the Company.

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2. Property, Plant and Equipment (including ROU Assets) and Capital Work-in-Progress

₹ in Crore

	As at	
	31/03/2020	**31/03/2019**
Property, Plant and Equipment – Cost	48,614	48,177
Less: Accumulated Depreciation and Impairment	16,447	15,008
Net Carrying amount of Property, Plant and Equipment	**32,167**	**33,169**
Right of Use (ROU) Assets, refer note - 51	989	-
Less: Accumulated Depreciation and Impairment	111	-
Net Carrying amount of Right of Use Assets	878	-
Net Carrying amount of Property, Plant and Equipment (including ROU Assets)	**33,045**	**33,169**
Capital Work-in-Progress, refer note 2 (f)	1,209	947
	34,254	**34,116**

Property, Plant and Equipment

₹ in Crore

Particulars	ORIGINAL COST				ACCUMULATED DEPRECIATION				ACCUMULATED IMPAIRMENT				NET CARRYING AMOUNT	
	As at April 01, 2018	Additions	Disposal/ Adjustments	As at March 31,2019	As at April 01, 2018	Additions	Disposal/ Adjustments	As at March 31, 2019	As at April 01, 2018	Recognised/ (Reversed)	Disposal/ Adjustments	As at March 31, 2019	As at March 31, 2019	As at March 31, 2018
Freehold Land	542	37	-	579	-	4	-	4	-	-	-	-	575	542
Buildings	7,741	139	9	7,889	1,345	294	-	1,639	59	-	-	59	6,191	6,337
Plant and Machinery	38,108	569	(245)	38,432	10,989	1,207	(164)	12,032	667	-	(33)	634	25,766	26,452
Vehicles and Aircraft	404	27	(10)	421	186	22	(7)	201	-	-	-	-	220	218
Railway Sidings	489	*	*	489	121	28	-	149	17	-	-	17	323	351
Furniture and Fixtures	126	11	(9)	128	92	7	(8)	91	1	-	-	1	36	33
Office Equipment	172	13	(6)	179	128	16	(5)	139	1	-	-	1	39	43
Leased Plant & Machinery [@]	50	-	-	50	36	2	-	38	-	-	-	-	12	14
Leased Furniture & Fixtures[@]	10	-	-	10	1	2	-	3	-	-	-	-	7	9
Total	**47,642**	**796**	**(261)**	**48,177**	**12,898**	**1,582**	**(184)**	**14,296**	**745**	**-**	**(33)**	**712**	**33,169**	**33,999**

[@] refer note 2 (j)

₹ in Crore

Particulars	ORIGINAL COST				ACCUMULATED DEPRECIATION				ACCUMULATED IMPAIRMENT				NET CARRYING AMOUNT	
	As at April 01, 2019	Additions	Disposal/ Adjustments	As at March 31, 2020	As at March 31, 2019	Additions	Disposal/ Adjustments	As at March 31, 2020	As at March 31,2019	Recognised/ (Reversed)	Disposal/ Adjustments	As at March 31, 2020	As at March 31, 2020	As at March 31, 2019
Freehold Land	579	19	-	598	4	4	-	8	-	-	-	-	590	575
Buildings	7,889	153	(6)	8,036	1,639	284	(4)	1,919	59	-	-	59	6,058	6,191
Plant and Machinery[#]	38,432	454	(360)	38,526	12,032	1,211	(171)	13,072	634	-	4	638	24,816	25,766
Vehicles and Aircraft	421	28	(9)	440	201	24	(5)	220	-	-	-	-	220	220
Railway Wagons	-	-	189	189	-	9	84	93	-	-	-	-	96	-
Railway Sidings	489	1	(1)	489	149	27	-	176	17	-	-	17	296	323
Furniture and Fixtures	128	9	(1)	136	91	7	(1)	97	1	-	-	1	38	36
Office Equipment	179	31	(10)	200	139	17	(10)	146	1	-	-	1	53	39
Total	**48,117**	**695**	**(198)**	**48,614**	**14,255**	**1,583**	**(107)**	**15,731**	**712**	**-**	**4**	**716**	**32,167**	**33,150**

[#] refer notes 4 (f) and 2 (k)

Right of Use Assets

₹ in Crore

Particulars	ORIGINAL COST				ACCUMULATED DEPRECIATION				ACCUMULATED IMPAIRMENT				NET CARRYING AMOUNT	
	As at April 01, 2019	Additions	Disposal/ Adjustments	As at March 31, 2020	As at 01.04.2019	Additions	Disposal/ Adjustments	As at March 31, 2020	As at April 01, 2019	Recognised/ (Reversed)	Disposal/ Adjustments	As at March 31, 2020	As at March 31, 2020	As at March 31, 2019
Leasehold Land	712	38	-	750	-	19	-	19	-	-	-	-	731	-
Buildings	70	21	(7)	84	-	26	(1)	25	-	-	-	-	59	-
Plant and Machinery	56	6	(1)	61	38	5	-	43	-	-	-	-	18	-
Vehicles and Aircraft	8	14	*	22	-	6	*	6	-	-	-	-	16	-
Railway Wagons	41	-	-	41	-	4	-	4	-	-	-	-	37	-
Railway Sidings	21	-	*	21	-	10	(1)	9	-	-	-	-	12	-
Furniture and Fittings	10	-	-	10	3	2	-	5	-	-	-	-	5	-
Total	**918**	**79**	**(8)**	**989**	**41**	**72**	**(2)**	**111**	**-**	**-**	**-**	**-**	**878**	**-**

**Amount below rounding off convention.*

These Right of Use Assets are combined with all other tangible assets and presented through a single line item 'Property, Plant and Equipment' under Non-Current Assets on the face of the Balance Sheet.

(a) Assets for which registration is pending

Freehold Land - Original Cost ₹ 31 Crore (as at 31/03/2019 ₹ 31 Crore). Carrying Amount ₹ 29 Crore (as at 31/03/2019 ₹ 30 Crore).

(b) The Company's share in jointly owned assets has been grouped together with the relevant class of Property, Plant and Equipment. The proportion of the Original Cost and Carrying Amount included in relevant class of assets are given below:

₹ in Crore

	31/03/2020		31/03/2019	
	Original Cost	Net Carrying Amount	Original Cost	Net Carrying Amount
Freehold Land	52	52	52	52
Buildings	41	29	41	30
Plant and Machinery	41	2	41	2
Furniture & Fixtures	4	*	4	*
Vehicles and Aircraft	*	*	*	*
Office Equipment	6	1	6	1

**Amount below rounding off convention.*

(c) Assets pledged and Hypothecated against borrowings:

i All the moveable and immoveable Property, Plant and Equipment of Mahan Aluminium, both present and future, carrying value ₹ 11,976 Crore (as at 31/03/2019 ₹ 12,402 Crore) are given as security towards first ranking charge against the rupee term loans from banks of ₹ 2,948 Crore (gross) (as at 31/03/2019 ₹ 2,948 Crore). All the moveable Property, Plant and Equipment of Mahan Aluminium, both present and future are given as first paripassu charge against the foreign currency term loan from bank of ₹ 473 Crore (gross) (as at 31/03/2019 ₹ 434 Crore), refer note 18A (b).

ii. All the moveable and immovable Property, Plant and Equipment of Aditya Aluminium both present and future, carrying value of ₹ 12,397 Crore (as at 31/03/2019 ₹ 12,834 Crore) are given as security towards charge against the term loan of ₹ 6,299 Crore (gross) (as at 31/03/2019 ₹ 6,299 Crore), refer note 18A (b).

iii. All moveable items of Property, Plant and Equipment (except moveable items of Mahan Aluminium, Aditya Aluminium, Kalwa Plant, Silvassa Plant, current assets of the Company) and certain immoveable properties of the Company are given as security towards Non-convertible debentures of ₹ 6,000 Crore (as at 31/03/2019 ₹ 6,000 Crore), refer note 18A (a).

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

(d) For capital expenditures contracted but not incurred, refer note 45B.

(e) For previous year, in respect of future minimum lease payments and their present value of Property, Plant and Equipment taken under finance lease as per Ind AS 17, refer note 18A (d).

(f) CWIP comprises of various projects and expansion spread over all units. Many of these projects will be capitalized during the year ending March 31, 2021. The Company has tested the carrying value of CWIP for impairment as at reporting date. During the previous year, ₹ 9 Crore had been classified to held for sale from the CWIP.

Major CWIP are related to following Segments:

₹ in Crore

Segments	31/03/2020	31/03/2019
Aluminium	970	761
Copper	130	98
Corporate	109	88
Total	**1,209**	**947**

(g) Items of Property, Plant and Equipment — **Useful Life (Years)**

Freehold Land	Infinite^
Buildings	30 - 60
Plant and Machinery	15 - 40
Vehicles and Aircraft	8 - 20
Railway Wagons	15
Railway Sidings	15
Furniture & Fixtures	8 - 10
Office Equipment	3 - 6

^ Freehold land used for mining is depreciated over 8 - 30 years.

(h) **Note on sale of Kollur unit.**
The Company has sold its Aluminium Foil manufacturing unit at Kollur, Telangana, on slump sale basis through a Business Transfer Agreement dated 26th April, 2019, Profit on sale amounting to ₹ 25 Crore is booked under Exceptional Income. (refer note 37)

(i) Residual values and useful lives of Property, Plant and Equipment are reviewed, and adjusted if appropriate, at the end of each reporting period.

(j) Upon introduction of Ind AS 116 Leases effective 01/04/2019, all Finance Lease assets identified under the earlier Ind AS 17 Leases, have been reclassified to ROU Assets. (refer note 51).

(k) Consequent upon settlement of claim with one of the major suppliers related to our Smelters at Aditya and Mahan, the Company has recovered ₹ 87 Crore as liquidated damages during the year. The entire amount has been credited to cost of respective items of Property, Plant and Equipment.

3. Investment Properties

₹ in Crore

	As at	
	31/03/2020	31/03/2019
Cost	13	13
Less: Accumulated Depreciation and Impairment	4	4
Net Carrying Amount	**9**	**9**

₹ in Crore

Particulars	ORIGINAL COST				ACCUMULATED DEPRECIATION				ACCUMULATED IMPAIRMENT				NET CARRYING AMOUNT	
	As at April 01, 2018	Addition	Disposal/ Adjustments	As at March 31, 2019	As at April 01, 2018	Addition	Disposal/ Adjustments	As at March 31, 2019	As at April 01, 2018	Recognised/ (Reversed)	Disposal/ Adjustments	As at March 31, 2019	As at March 31, 2019	As at March 31, 2018
Freehold Land	1	-	-	1	-	-	-	-	-	-	-	-	1	1
Buildings	12	-	-	12	4	*	-	4	-	-	-	-	8	8
Total	**13**	**-**	**-**	**13**	**4**	**-**	**-**	**4**	**-**	**-**	**-**	**-**	**9**	**9**

₹ in Crore

Particulars	ORIGINAL COST				ACCUMULATED DEPRECIATION				ACCUMULATED IMPAIRMENT				NET CARRYING AMOUNT	
	As at April 01, 2019	Addition	Disposal/ Adjustments	As at March 31, 2020	As at April 01, 2019	Addition	Disposal/ Adjustments	As at March 31, 2020	As at April 01, 2019	Recognised/ (Reversed)	Disposal/ Adjustments	As at March 31, 2020	As at March 31, 2020	As at April 01, 2019
Freehold Land	1	-	*	1	-	-	-	-	-	-	-	-	1	1
Buildings	12	-	-	12	4	*	-	4	-	-	-	-	8	8
Total	**13**	**-**	**-**	**13**	**4**	**-**	**-**	**4**	**-**	**-**	**-**	**-**	**9**	**9**

**Amount below rounding off convention.*

₹ in Crore

		Year ended	
		31/03/2020	31/03/2019
(a)	Amount recognised in profit and Loss for Investment Properties are as under:		
	Rental income	3	2
	Direct operating expenses (including repairs and maintenance) on properties generating rental income	(1)	(1)
	Direct operating expenses (including repairs and maintenance) on properties not generating rental income	-	-
(b)	The Company has no contractual obligations to purchase, construct or develop Investment Properties or for repairs, maintenance and enhancements.		
(c)	The fair value of the Company's Investment Properties as at March 31, 2020 and as at March 31, 2019, have been arrived at on the basis of valuation carried out at the respective dates by an external, independent valuer registered with the authority which governs the valuer in India. The fair value measurement for all the investments properties has been categorised as Level 2 based on the inputs to the valuation technique used. Considering the type of the assets, market approach (sales comparable method) to estimate the fair value of the subject properties is adopted.		

₹ in Crore

	As at	
	31/03/2020	31/03/2019
Fair Value of Investment Properties:	**Level 2**	**Level 2**
Freehold Land $	1	40
Buildings	48	48
	49	**88**

$ During the current year, the Company has sold its Aluminium Foil manufacturing unit situated at Kollur, Telengana, refer note 2 (h).

(d)	Items of Investment Properties	Useful Life (Years)
	Freehold Land	Infinite
	Buildings	60

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

4. Intangible Assets and Intangible Assets under Development

₹ in Crore

	As at	
	31/03/2020	31/03/2019
Cost	680	709
Less: Accumulated Amortization and Impairment	366	364
Net Carrying amount	**314**	**345**
Intangible Assets under Development - (b)	73	35
	387	**380**

₹ in Crore

Particulars	ORIGINAL COST				ACCUMULATED AMORTISATION				ACCUMULATED IMPAIRMENT				NET CARRYING AMOUNT	
	As at April 01, 2018	Addition	Disposal/ Adjustments	As at March 31, 2019	As at April 01, 2018	Addition	Disposal/ Adjustments	As at March 31, 2019	As at April 01, 2018	Recognised/ (Reversed)	Disposal/ Adjustments	As at March 31, 2019	As at March 31, 2019	As at March 31, 2018
Mining rights (refer Notes (a) and (d))	421	96	-	517	105	101	-	206	-	-	-	-	311	316
Computer Software	68	4	-	72	58	6	-	64	-	-	-	-	8	10
Technological Licenses	39	-	-	39	38	1	-	39	-	-	-	-	-	1
Rights to Use Assets	81	-	-	81	52	3	-	55	-	-	-	-	26	29
Total	**609**	**100**	**-**	**709**	**253**	**111**	**-**	**364**	**-**	**-**	**-**	**-**	**345**	**356**

₹ in Crore

Particulars	ORIGINAL COST				ACCUMULATED AMORTISATION				ACCUMULATED IMPAIRMENT				NET CARRYING AMOUNT	
	As at April 01, 2019	Addition	Disposal/ Adjustments	As at March 31, 2020	As at April 01, 2019	Addition	Disposal/ Adjustments	As at March 31, 2020	As at April 01, 2019	Recognised/ (Reversed)	Disposal/ Adjustments	As at March 31, 2020	As at March 31, 2020	As at April 01, 2019
Mining rights (refer Notes (a) and (d))	517	51	-	568	206	55	-	261	-	-	-	-	307	311
Computer Software	72	2	(1)	73	64	3	(1)	66	-	-	-	-	7	8
Technological Licenses	39	-	-	39	39	-	-	39	-	-	-	-	-	-
Rights to Use Assets (refer Note (f))	81	-	(81)	-	55	-	(55)	-	-	-	-	-	-	26
Total	**709**	**53**	**(82)**	**680**	**364**	**58**	**(56)**	**366**	**-**	**-**	**-**	**-**	**314**	**345**

(a) Addition in Mining Rights includes ₹ 47 Crore and amortization expense includes ₹ 38 Crore (as at 31/03/2019, addition included ₹ 91 Crore, and amortization expense included ₹ 88 Crore) towards stripping activity assets.

(b) The Carrying Amount of Intangible Asset under Development as at 31/03/2020 is ₹ 73 Crore (as at 31/03/2019 was ₹ 35 Crore). This includes ₹ 70 Crore pertaining to Enterprise Resource Planning System implementation (as at 31/03/2019 was ₹ 34 Crore). The Company has tested the carrying value of Intangible Asset under Development for impairment as at reporting date.

(c)

Items of Intangible Assets	Useful Life (Years)
Mining Rights	11 - 41
Computer Software	3 - 6
Technological Licenses	4 - 5

(d) Remaining amortisation period of mining rights ranges between 8 - 36 years.

(e) The useful lives of Intangible assets are reviewed, and adjusted if appropriate, at the end of each reporting period.

(f) During the current year, the Company has reclassified its Right to use assets to Plant and Machinery (under Property, Plant and Equipment).

5. Investments in Subsidiaries
(Fully Paid-up, unless otherwise stated)

₹ in Crore

	Face Value Per Unit	Numbers as at 31/03/2020	Numbers as at 31/03/2019	Value as at 31/03/2020	Value as at 31/03/2019
Investments in Equity Shares - (a) and (b)					
Unquoted					
A V Minerals (Netherlands) N.V.	€ 567.83	2,376,694	2,373,472	10,174	10,159
Dahej Harbour & Infrastructure Limited	₹ 10	50,000,000	50,000,000	50	50
East Coast Bauxite Mining Company Pvt. Limited	₹ 10	7,400	7,400	*	*
Hindalco Almex Aerospace Limited	₹ 10	172,115,744	172,115,744	83	83
Lucknow Finance Company Limited	₹ 10	9,902,500	9,902,500	10	10
Minerals & Minerals Limited	₹ 10	50,000	50,000	*	*
Renuka Investments & Finance Limited	₹ 10	9,250,000	9,250,000	9	9
Renukeshwar Investments & Finance Limited	₹ 10	4,795,000	4,795,000	5	5
Suvas Holdings Limited	₹ 10	22,149,714	21,647,825	22	22
Utkal Alumina International Limited	₹ 10	6,251,482,818	6,251,482,818	6,362	6,362
				16,715	**16,700**
Other Equity Investment - (Fair Value of Financial Guarantee given for) - (c)					
Utkal Alumina International Limited	NA	NA	NA	75	75
Suvas Holdings Limited	NA	NA	NA	*	*
A V Minerals (Netherlands) N.V.	NA	NA	NA	3	3
				78	78
				16,793	**16,778**

**Amount below rounding off convention.*

(a) Aggregate carrying value of Investments in subsidiaries is ₹ 16,793 Crore (as at 31/03/2019 ₹ 16,778). None of the subsidiaries is listed on any stock exchange in India or outside India it is carried at cost. There is no accumulated impairment during as at current or previous year end.

(b) Refer Note 53 to the Consolidated Financial Statements for information on principal place of business and the Company's ownership interest in the above subsidiaries.

(c) Financial guarantees given to subsidiaries were initially recognised at fair value as Other Equity Investment until the investment in subsidiaries are derecognised or impaired, refer note 27 (d).

6. Investments in Associates and Joint Ventures

A Investments in Associates
(Fully Paid-up, unless otherwise stated)

₹ in Crore

	Face Value Per Unit	Numbers as at 31/03/2020	Numbers as at 31/03/2019	Value as at 31/03/2020	Value as at 31/03/2019
Investments in Equity Shares at FVTOCI - (a)					
Unquoted					
Aditya Birla Science and Technology Company Private Limited	₹ 10	9,800,000	9,800,000	27	23
Aditya Birla Renewables Subsidiary Limited	₹ 10	6,895,200	5,746,000	7	5
Total (A)				**34**	**28**

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

B. Investments in Joint Ventures (Fully Paid-up, unless otherwise stated)

₹ in Crore

	Face Value Per Unit	Numbers as at		Value as at	
		31/03/2020	31/03/2019	31/03/2020	31/03/2019
Investments in Equity Shares at Cost - (a) and (c)					
Unquoted					
MNH Shakti Limited	₹ 10	12,765,000	-	13	-
Hydromine Global Minerals GmbH Limited	₹ 100	66,562	-	1	-
Total (B)				**14**	**-**
Investments in Associates and Joint Ventures (A+B)				**48**	**28**

(a) Aggregate amount of investments is given below:

Aggregate cost of unquoted investments in Associates	17	16
Aggregate cost of unquoted investments in Joint Ventures	46	-
Impairment on unquoted investments in Joint Ventures	(32)	-

(b) Refer Note 53 to the Consolidated Financial Statements for information on principal place of business and the Company's ownership interest in the above Associates and Joint Ventures.

(c) During the current year, Investment of ₹ 14 Crore (net of accumulated impairment Loss of ₹ 32 Crore) in Hydromine Global Minerals GmbH Limited and MNH Shakti Limited were reclassified from Non-Current Assets or Disposal Group classified as Held For Sale, refer Note 15A.

7A. Other Investments, Non-Current (Fully Paid-up, unless otherwise stated)

₹ in Crore

	Face Value Per Unit	Numbers as at		Value as at	
		31/03/2020	31/03/2019	31/03/2020	31/03/2019
Equity Instruments at FVTOCI - (a)					
Quoted					
National Aluminium Company Limited	₹ 5	18,385,327	18,385,327	53	102
Grasim Industries Limited	₹ 2	28,222,468	28,222,468	1,344	2,421
UltraTech Cement Limited	₹ 10	1,258,515	1,258,515	408	503
Aditya Birla Fashion & Retail Limited	₹ 10	44,982,142	44,982,142	688	991
Vodafone Idea Limited - (b)	₹ 10	751,119,164	228,340,226	233	417
Aditya Birla Capital Limited	₹ 10	39,511,455	39,511,455	167	384
				2,893	**4,818**
Unquoted					
Sai Wardha Power Generation Limited	₹ 10	2,830,352	2,830,352	3	3
Birla International Limited	CHF 100	2,500	2,500	5	6
Bharuch Dahej Railway Company Limited	₹ 10	13,530,000	13,530,000	19	26
				27	**35**
Debt Instruments at FVTOCI - (a)					
Quoted					
Government Securities					
6.83% Government of India Bond, 2039		2,000,000	2,000,000	20	18
Debt Instruments at FVTPL - (a)				**20**	**18**

₹ in Crore

	Face Value Per Unit	Numbers as at		Value as at	
		31/03/2020	31/03/2019	31/03/2020	31/03/2019
Unquoted					
Mutual Funds					
Investments in Debt Schemes of Mutual Funds				19	45
				19	**45**
				2,959	**4,916**

(a) Aggregate amount of Quoted and Unquoted Investments, Market Value of Quoted Investments are given below:

₹ in Crore

	As at 31/03/2020	As at 31/03/2019
Aggregate Cost of Quoted Investments	1,174	521
Aggregate Market value of Quoted Investments	2,913	4,836
Aggregate Cost of Unquoted Investments	38	60
Aggregate Carrying value of Quoted and Unquoted Investments	2,959	4,916

(b) During the current year, the Company has subscribed to the Rights Issue of Vodafone Idea Limited in the tune of ₹ 653 Crore (522,778,938 shares at ₹ 12.50 per share).

7B. Other Investments, Current

₹ in Crore

	Face Value Per Unit	Numbers as at		Value as at	
		31/03/2020	31/03/2019	31/03/2020	31/03/2019
Investments in Government Securities at FVTOCI - (b)					
Quoted					
7.95% GOI FCI Special Bonds, 2026	₹ 100	513,000	513,000	5	5
6.65% GOI FCI Special Bonds, 2023	₹ 100	2,096,600	2,096,600	22	21
7.00% GOI FCI Special Bonds, 2022	₹ 100	3,039,500	3,039,500	31	30
6.20% GOI FCI Special Bonds, 2022	₹ 100	1,432,100	1,432,100	15	14
				73	70

Investments in Debentures and Bonds at FVTPL

₹ in Crore

	Face Value Per Unit	Numbers as at		Value as at	
		31/03/2020	31/03/2019	31/03/2020	31/03/2019
Investments in Other Entities - (b) and (c)					
Quoted					
7.18% NCD of IRFC	₹ 1,000	1,192	1,192	*	*
8.10% NCD of IRFC	₹ 1,000	30,453	30,453	3	3
7.19% NCD NHB	₹ 1,000,000	50	50	5	5
8.12% NCD of REC Limited	₹ 1,000	43,523	43,523	5	5
7.93% NCD of REC Limited	₹ 1,000	56,615	56,615	6	6
7.22% NCD of REC Limited	₹ 1,000	5,130	5,130	1	1
7.38% NCD of REC Limited	₹ 1,000	10,321	10,321	1	1
8.11% NCD of REC Limited	₹ 1,000,000	250	250	26	24

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

₹ in Crore

	Face Value Per Unit	Numbers as at		Value as at	
		31/03/2020	31/03/2019	31/03/2020	31/03/2019
8.27% NCD of REC Limited	₹ 1,000,000	250	250	26	25
7.18% NCD of PFC	₹ 1,000,000	500	500	51	47
7.19% NCD of PFC	₹ 1,000	9,565	9,565	1	1
7.36% NCD of PFC	₹ 1,000	25,187	25,187	3	3
8.20% NCD of PFC	₹ 1,000	36,862	36,862	4	4
8.30% NCD of PFC	₹ 1,000	10,163	10,163	1	1
7.77% NCD of PNB Housing Finance Ltd.	₹ 1,000,000	500	500	49	49
7.07% HUDCO Bonds	₹ 1,000,000	50	50	5	5
7.34% HUDCO Bonds	₹ 1,000	100,000	100,000	11	10
7.51% HUDCO Bonds	₹ 1,000	50,000	50,000	6	5
7.28% NHAI Bonds	₹ 1,000,000	50	50	6	5
8.63% NCD of IDFC Bank Ltd	₹ 1,000,000	-	250	-	25
				210	**225**
Investments in Mutual Funds at FVTPL - (a) and (b)					
Quoted					
Investments in Debt Schemes of Mutual Funds				4,556	3,477
				4,556	**3,477**
				4,839	**3,772**

**Amount below rounding off convention.*

(a) Investments in Debt Schemes of Mutual Funds include ₹ 161 Crore (as at 31/03/2019 ₹ 76 Crore) being deposit as margin money with counter parties for derivative transactions.

(b) Aggregate amount of Quoted and Unquoted Investments, Market Value of Quoted Investments are given below:

₹ in Crore

	As at	
	31/03/2020	31/03/2019
Aggregate Cost of Quoted Investments	4,511	3,696
Aggregate Market Value of Quoted Investments	4,839	3,772
Aggregate Cost of Unquoted Investments	-	-
Aggregate Carrying value of Quoted and Unquoted Investments	4,839	3,772

(c) NCD stands for Non Convertible Debentures

8. Loans

(Unsecured, Considered Good, unless otherwise stated)

₹ in Crore

	As at			
	31/03/2020		31/03/2019	
	Non-Current	Current	Non-Current	Current
Loan to Related Parties, (refer Note 44)	6	49	8	54
Loan to Employees	8	6	9	4
Loan to Others	-	*	-	*
	14	**55**	**17**	**58**

**Amount below rounding off convention*

9A. Other Financial Assets, Non-Current

(Unsecured, Considered Good, unless otherwise stated)

₹ in Crore

	As at	
	31/03/2020	31/03/2019
Derivative Assets, (refer Note 50)	46	96
Security Deposits - (a) and (b)	136	139
Deposit with Others - (a) and (c)	29	26
	211	**261**

(a) For related party transactions (refer Note 44).

(b) During the current year Security Deposit of ₹ 9 Crore (as at 31/03/2019 ₹ Nil) is pledged.

(c) During the current year earmarked balances with Banks is ₹ 20 Crore (as at 31/03/2019 ₹ 15 Crore).

9B. Other Financial Assets, Current

(Unsecured, Considered Good, unless otherwise stated)

₹ in Crore

	As at	
	31/03/2020	31/03/2019
Derivative Assets (refer Note 50)	862	822
Derivatives Matured Pending Realisation	49	18
Security Deposits		
Unsecured, Considered Good	36	22
Unsecured, Considered Doubtful	-	*
Less: Allowance for Doubtful amount	-	*
Deposits with Non-Banking Financial Company (NBFC) with initial maturity more than 3 months	-	215
Accrued Interest	18	28
Other Receivables		
Unsecured, Considered Good	17	30
Unsecured, Considered Doubtful	63	65
Less: Allowance for Doubtful Amount	(63)	(65)
	982	**1,135**

**Amount below rounding off convention.*

10. Other Assets

(Unsecured, Considered Good, unless otherwise stated)

₹ in Crore

	As at			
	31/03/2020		31/03/2019	
	Non-Current	Current	Non-Current	Current
Capital Advance	166	-	116	-
Advance to Employees	-	16	-	10
Deposit with Government and Other Authorities	-	39	-	34
Advance to Supplier for Goods and Services - (b)	141	805	23	980
Prepaid Expenses	8	34	7	33
Prepaid Rent for Leasehold Land (refer Note 51)	-	-	586	14
Others - (a) and (c)				
Unsecured, Considered Good	402	905	446	884
Unsecured, Considered Doubtful	10	138	10	112
Less: Allowance for Doubtful amount	(10)	(138)	(10)	(112)
	717	**1,799**	**1,178**	**1,955**

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

(a) Mainly includes unutilised tax credits and claims receivables from Indirect Tax Authorities.

(b) For related party transactions (refer Note 44).

(c) Includes ₹ 192 Crore (Garepalma ₹ 74 Crore and Kathautia ₹ 118 Crore) towards appropriation of Performance Bank Guarantee by Nominated Authority (NA), refer Note 55.

11. Inventories

₹ in Crore

	As at					
	31/03/2020			31/03/2019		
	On Hand	In Transit	Total	On Hand	In Transit	Total
Raw Materials	1,786	2,285	4,071	1,310	3,011	4,321
Work-in-Progress	4,572	23	4,595	5,262	78	5,340
Finished Goods	1,282	55	1,337	518	201	719
Stock-in-Trade	127	-	127	-	-	-
Stores and Spares	585	33	618	520	26	546
Coal and Fuel	395	82	477	362	106	468
	8,747	**2,478**	**11,225**	**7,972**	**3,422**	**11,394**

(a) Fair value hedges are mainly used to hedge the exposure to change in fair value of commodity price risks. The fair value adjustment remains part of the carrying value of inventory and taken to profit and loss when the inventory is either sold or consumed, refer Note 50 H.

The Company has extended fair value hedge accounting on its inventory which forms part of Work-in-Progress and Finished Goods during the year, refer Notes 50 A and 50 H.

(b) For Inventories hypothecated against secure short-term borrowings, refer Note 18B (a).

(c) Write downs of inventories (net of reversal) to net realizable value related to raw materials, work-in-progress and finished goods amounted to ₹ 266 Crore (as at 31/03/2019 ₹ 184 Crore). These were recognized as expense during the year and included in 'cost of raw material consumed' and 'change in value of inventories of work-in-progress and finished goods' in the Statement of Profit and Loss.

(d) Inventories include bulk materials of Coal, Bauxite and Copper Concentrate lying at yards and precious metals of Gold and Silver lying at smelter and refinery aggregating to ₹ 3,255 Crore (as at 31/03/2019 ₹ 2,286 Crore).

12. Trade Receivables

₹ in Crore

	As at	
	31/03/2020	31/03/2019
Trade Receivables:		
Secured, Considered Good	3	7
Unsecured, Considered Good	2,099	2,123
Unsecured, Credit Impaired	30	30
	2,132	**2,160**
Loss Allowances - (c)	(39)	(35)
	2,093	**2,125**

(a) For trade receivables hypothecated against borrowings, refer Note 18B(a).

(b) No trade or other receivable is due from directors or other officers of the Company either severally or jointly with any other person. Further, no trade or other receivable is due from firms or private companies, respectively, in which any director is a partner, or director or member.

(c) Loss allowances includes provision of ₹ 9 Crore (31/03/2019: ₹ 5 Crore) made on account of expected credit loss on Trade Receivables, refer Note 48 (C).

(d) Refer Note 44 for balances with related parties.

13. Cash and Cash Equivalents

₹ in Crore

	As at 31/03/2020	As at 31/03/2019
Cash on Hand	*	*
Cheques and Drafts in Hand - (a)	6	8
Balances with Banks		
Current Accounts	213	344
Deposits with Initial Maturity of less than three Months	1,974	-
Short-term Liquid Investments in Mutual Funds	1,072	1,163
	3,265	**1,515**

(a) Includes ₹ * Crore (as at 31/03/2019 ₹ * Crore) remittance in transit.

(b) There is no repatriation restriction with regard to cash and cash equivalents at the end of reporting period and prior periods.

* *Amount below rounding off convention.*

14. Bank Balances other than Cash and Cash Equivalents

₹ in Crore

	As at 31/03/2020	As at 31/03/2019
Balances with Banks		
Earmarked Balances - (a)	12	12
Deposits with Initial Maturity more than three months	3	53
	15	**65**

(a) Includes unclaimed dividend of ₹ 4 Crore (as at 31/03/2019 ₹ 5 Crore).

15A. Non-Current Assets or Disposal Group Classified as Held For Sale

₹ in Crore

	As at 31/03/2020	As at 31/03/2019
Non-Current Assets classified as Held For Sale - (a)	-	13
Assets of Disposal Group Held For Sale - (b)	68	81
	68	**94**

(a) Non-Current Assets classified as Held For Sale

Investments in Joint Ventures #

Hydromine Global Minerals GmbH Limited	-	1
MNH Shakti Limited	-	12
	-	**13**

During the current year Hydromine Global Minerals GmbH Limited and MNH Shakti Limited have been reclassified to Investment in Joint Ventures, refer Note 6B.

(b) Assets of Disposal Group Held For Sale

Land and Buildings	25	25
Plant and Machinery	41	40
Others - (ii)	2	16
Total	**68**	**81**

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(i) The Company is in the process of disposing the above assets.

(ii) Assets of Mahan Coal Limited and Tubed Coal Mines Limited, Joint Operations of the Company are included in 31/03/2019. During the current year it been presented in respective balance sheet line items as it did not continue to meet the criteria for held for sale.

(iii) The fair value of the assets held for sale approximates the carrying value.

(iv) Refer Note 53 to the Consolidated Financial Statements for information on principal place of business and the Company's ownership interest in the above Subsidiaries, Joint Ventures and Joint Operations.

15B. Liabilities Associated with Disposal Group classified as Held For Sale

₹ in Crore

	As at	
	31/03/2020	31/03/2019
Liabilities Associated with Assets Held For Sale	-	*
Liabilities Associated with Disposal Group Held For Sale	-	*
	-	*****

* *Amount below rounding off convention.*

16. Equity Share Capital

₹ in Crore

	As at	
	31/03/2020	31/03/2019
Authorised		
2,500,000,000 (as at 31/03/2019: 2,500,000,000) Equity Shares of ₹ 1/- each	250	250
25,000,000 (as at 31/03/2019: 25,000,000) Redeemable Cumulative Preference Shares of ₹ 2/- each	5	5
	255	**255**
Issued		
2,246,776,333 (as at 31/03/2019: 2,246,083,891) Equity Shares of ₹ 1/- each - (a)	225	225
	225	**225**
Subscribed and Paid-up		
2,246,768,936 (as at 31/03/2019: 2,246,076,494) Equity Shares of ₹ 1/- each fully paid-up	225	225
Less: Face Value of 546,249 (as at 31/03/2019: 546,249) Equity Shares forfeited	*	*
Add: Forfeited Shares (Amount originally Paid up)	*	*
	225	**225**
Less: Treasury Shares		
16,316,130 (as at 31/03/2019: 16,316,130) Equity Shares - (b)	(2)	(2)
5,885,672 (as at 31/03/2019: 5,558,727) Equity Shares refer Note 17 (A) (viii)	(1)	(1)
	222	**222**

* *Amount below rounding off convention.*

(a) Issued Equity Capital as at 31/03/2020 includes 7,397 Equity Shares (as at 31/03/2019 7,397 Equity Shares) of ₹ 1/- each issued on Rights basis kept in abeyance due to legal case pending.

(b) Treasury shares are held by Trident Trust which represents 16,316,130 equity shares of ₹ 1/- each fully paid-up of the Company issued, pursuant to a Scheme of Arrangement approved by the Hon'ble High Courts of Mumbai and of Allahabad, vide their Orders dated 31st October, 2002, and 18th November, 2002, respectively, to the Trident Trust, created wholly for the benefit of the Company and is being managed by trustees appointed by it. The tenure of the Trust is up to January 23, 2024.

(c) Reconciliation of shares outstanding at the beginning and at the end of the reporting period:

	As at			
	31/03/2020		31/03/2019	
	Numbers	₹ in Crore	Numbers	₹ in Crore
Equity Shares outstanding at the beginning of the period	2,223,655,388	222	2,228,646,772	223
Equity Shares allotted pursuant to exercise of Employee Stock Option Scheme	692,442	*	567,343	*
Equity Shares purchased from market pursuant to Employee Stock Option Scheme	(326,945)	*	(5,558,727)	(1)
Equity Shares outstanding at the end of the period	**2,224,020,885**	**222**	**2,223,655,388**	**222**

* *Amount below rounding off convention.*

(d) Rights, preferences and restrictions attached to Equity Shares:

The Company has one class of equity shares having a par value of ₹ 1/- per share. Each shareholder is eligible for one vote per share held. The dividend proposed by the Board of Directors is subject to the approval of the shareholders in the ensuing Annual General Meeting, except in case of interim dividend. In the event of liquidation, the equity shareholders are eligible to receive the remaining assets of the Company after distribution of all preferential amounts, in proportion to their shareholding.

(e) Details of shareholders holding more than 5% Equity Shares in the Company on reporting date:

	As at			
	31/03/2020		31/03/2019	
	Number of Shares Held	Percentage of Holding *	Number of Shares Held	Percentage of Holding *
IGH Holdings Private Limited	349,963,487	15.58	349,963,487	15.58
Birla Group Holdings Private Limited #	228,292,308	10.16	6,731,467	0.30
Life Insurance Corporation of India and its Associates	223,822,083	9.96	178,075,294	7.93
ICICI Prudential Mutual Fund and Its Associates	181,533,867	8.08	155,362,808	6.92
Morgan Guaranty Trust Company of New York	149,888,482	6.67	153,348,431	6.83
Turquoise Investment and Finance Private Limited #	-	-	124,012,468	5.52

* Percentage has been calculated on the basis of total number of shares outstanding (before adjusting shares held by Trident Trust and ESOP Trust, refer footnote (b) above and Note 17 (A) (viii).

During the current year Turquoise Investment and Finance Private Limited is merged with Birla Group Holdings Private Limited.

(f) Shares reserved for issue under options:

The Company has reserved equity shares for issue under the Employee Stock Option Schemes, refer Note 42 - Employee Share-based Payments for details of Employee Stock Option Schemes.

(g) The Company during the preceding 5 years:

i. Has not allotted shares pursuant to contracts without payment received in cash.

ii. Has not issued shares by way of bonus shares.

iii. Has not bought back any shares.

(h) The Board of Directors of the Company has recommended final dividend of ₹ 1.00 per share aggregating to ₹ 225 Crore for the year ended 31st March 2020 which has not been recognised in the financial statement.

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

17. Other Equity

₹ in Crore

	As at	
	31/03/2020	31/03/2019
Share Application Money Pending Allotment	*	*
Reserves and Surplus		
Capital Reserve	145	145
Capital Redemption Reserve	102	102
Business Reconstruction Reserve	7,715	7,715
Securities Premium	8,217	8,206
Debenture Redemption Reserve	1,200	1,050
Employee Stock Options	45	22
Treasury Shares held by ESOP Trust	(130)	(123)
General Reserve	21,354	21,354
Retained Earnings	4,834	4,813
	43,482	**43,284**
Other Reserves		
Gain/ (Loss) on Equity Instruments FVTOCI	1,766	4,348
Gain/ (Loss) on Debt Instruments FVTOCI	7	4
Effective portion of Cash Flow Hedge	(102)	198
Cost of Hedging Reserve	119	502
	1,790	**5,052**
	45,272	**48,336**

* *Amount below rounding off convention.*

(A) Brief Descriptions of items of Other Equity are given below:

(i) Share Application Money pending Allotment:
Share application money pending allotment represents amount received from employees who have exercised employee stock options for which shares are pending allotment as on balance sheet date.

(ii) Capital Reserve:
The Company has created capital reserve pursuant to past mergers and acquisitions.

(iii) Capital Redemption Reserve:
The Company has created capital redemption reserve as per the requirement of the Companies Act.

(iv) Business Reconstruction Reserve:
The Company had formulated a scheme of financial restructuring under Sections 391 to 394 of the Companies Act, 1956 ("the Scheme") between the Company and its equity shareholders approved by the High Court of judicature of Bombay to deal with various costs associated with its organic and inorganic growth plan. Pursuant to this, a separate reserve account titled as Business Reconstruction Reserve ("BRR") was created during the year 2008-09 by transferring balance standing to the credit of Securities Premium Account of the Company for adjustment of certain expenses as prescribed in the Scheme.

(v) Securities Premium:
Securities premium reserve is used to record the premium on issue of shares. The reserve is utilized in accordance with the provision of the Act.

(vi) Debenture Redemption Reserve:
The Company is required to create a debenture redemption reserve out of the profits which is available for payment of dividend, for the purpose of redemption of debentures.

(vii) Employee Stock Options:
The employee stock option account is used to recognize the grant date fair value of options/RSUs issued to employees under stock option schemes.

(viii) Treasury Shares held by ESOP Trust
The Company has created a trust. "Hindalco Employee Welfare Trust" (Trust) for providing share-based payments to its employees (including its Subsidiaries' employees). The Company uses this Trust as a vehicle for distributing

shares to employees covered under the Scheme. The Trust buys shares of the Company from the market, for giving shares to employees under the Employees Stock Option Scheme, 2018.

Shares held by Trust are treated as Treasury shares. Equity instruments that are reacquired (Treasury shares) are recognised at cost and deducted from equity. No gain or loss is recognised in statement of profit and loss on purchase, sale, issue or cancellation of Equity instruments. Share options whenever exercised, would be utilised from such treasury shares, refer Note 42.

(ix) General Reserve:
The Company has created this reserve by transferring certain amount out of the profit at the time of distribution of dividend in the past.

(x) Retained Earning:
Amount of retained earnings represents accumulated profit and losses of the Company as on reporting date. Such profits and losses are after adjustment of payment of dividend, transfer to any reserves as statutorily required and adjustment for realised gain/loss on derecognition of equity instruments measured at FVTOCI.

(xi) Other Reserves:

a) Gain/ (Loss) on equity and debt instruments accounted as FVTOCI:
The Company has elected to recognize changes in the fair value of certain investments in other comprehensive income. These changes are accumulated within the FVTOCI equity investments reserve and FVTOCI debt investment reserve within equity.

b) Effective portion of Cash Flow Hedge:
The Company uses hedging instruments as part of its risk management policy for commodity and foreign currency risk as described in Note 50. The Cash Flow hedging reserve is used to recognise the effective portion of gain or loss on designated hedging relationship, refer Notes 50 E and 50 F(i).

c) Cost of Hedging Reserve:
The Company designates the spot component of some of its derivative instruments in cash flow hedge relationship. The Company defers changes in the forward element of such instruments in the cost of hedging reserve. The deferred cost of hedging are included in the initial cost of the related hedged items when it is recognized or reclassified to the statement of profit and loss when the hedged item effects the statement of profit and loss. The Company also designates time value of option contracts which are included in the cost of hedging reserve, refer Notes 50 E and 50 F(ii)

(B) Movement of each item of other equity is presented in Statement of Changes in Equity (SOCIE)

18A. Borrowings, Non-current

₹ in Crore

Particulars	As at					
	31/03/2020			31/03/2019		
	Non-Current Portion	Current Maturities*	Total	Non-Current Portion	Current Maturities*	Total
Secured						
Debentures						
Secured Non-Convertible Debentures - (a)	5,994	-	5,994	5,991	-	5,991
Term Loans						
From Banks						
Rupee Term Loans - (b)	9,197	6	9,203	9,187	-	9,187
Foreign Currency Term Loans - (c)	469	-	469	427	-	427
Finance Lease Obligation - (d)	-	-	-	28	5	33
	15,660	6	15,666	15,633	5	15,638
Unsecured						
Deferred Payment Liabilities	-	-	-	1	-	1
	15,660	**6**	**15,666**	**15,634**	**5**	**15,639**

Current maturities of non-current borrowings have been disclosed under "Other Financial Liabilities, Current".

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

(a) Debentures comprise of following:

₹ in Crore

	As at				
	31/03/2020		31/03/2019		Redemption Date
	Gross Amount	Carrying Value	Gross Amount	Carrying Value	
15,000 9.60% Redeemable Non-Convertible Debentures of ₹ 10 lakh each	1,500	1,498	1,500	1,497	02/08/2022
15,000 9.55% Redeemable Non-Convertible Debentures of ₹ 10 lakh each	1,500	1,497	1,500	1,496	27/06/2022
30,000 9.55% Redeemable Non-Convertible Debentures of ₹ 10 lakh each	3,000	2,999	3,000	2,998	25/04/2022
	6,000	**5,994**	**6,000**	**5,991**	

All the above Debentures are secured by the moveable assets, both present and future (except moveable assets of Mahan Aluminium, Aditya Aluminium, Kalwa plant, Silvassa Plant, Current Assets of the Company) and certain immoveable properties of the Company, refer Note 2 (c) (iii).

(b) Rupee term loan from banks comprise of following:

₹ in Crore

			As at				
			31/03/2020		31/03/2019		
	Note	Rate of Interest	Gross Amount	Carrying Value	Gross Amount	Carrying Value	End of Tenure
Axis Bank	(i)	MCLR 1 Month #	619	613	619	614	31/03/2030
State Bank of India	(i)	MCLR 3 Months + 10 bps	2,239	2,227	2,239	2,222	31/03/2030
ICICI Bank	(i)	MCLR 3 Months	90	90	90	90	31/03/2030
State Bank of India	(ii)	MCLR 3 Months + 10 bps	4,672	4,657	4,672	4,645	01/09/2030
PNB Bank	(ii)	MCLR 3 Months	256	255	256	255	01/09/2030
Axis Bank	(ii)	MCLR 1 Months#	1,371	1,361	1,371	1,361	01/09/2030
			9,247	**9,203**	**9,247**	**9,187**	

Benchmark changed w.e.f. Sept 2019. Previous benchmark was MCLR 3 Months.

i. The term loans from banks of ₹ 2,948 Crore (gross) are secured by a first ranking charge/ mortgage/ security interest in respect of all the moveable fixed assets and all the immoveable properties of Mahan Aluminium Project, both present and future. ₹ 2,858 Crore (gross) is to be repaid in 16 quarterly instalments commencing from June 2026. ₹ 90 Crore (gross) is to be repaid in 40 quarterly instalments commencing from June 2020, refer Note 2 (c) (i).

ii The term loan of ₹ 6,299 Crore (gross) is secured by a first ranking charge/ mortgage/security interest in respect of all the moveable fixed assets and all the immoveable properties of Aditya Aluminium Project both present and future. ₹ 6,299 Crore (gross) is to be repaid in 26 quarterly instalments commencing from May 2024, refer Note 2 (c) (ii).

(c) Foreign currency term loans from bank comprise of following:

₹ in Crore

			As at				
			31/03/2020		31/03/2019		
	Currency	Rate of Interest	Gross Amount	Carrying Value	Gross Amount	Carrying Value	End of Tenure
Bank of Tokyo Mitsubishi (BTMU)	USD	LIBOR 3M + 135 bps	301	299	277	272	31/03/2022
Bank of Tokyo Mitsubishi (BTMU)	USD	LIBOR 3M + 135 bps	172	170	157	155	30/06/2022
			473	**469**	**434**	**427**	

Foreign currency term loan pertains to loan from Bank of Tokyo Mitsubishi (BTMU) of USD 40 Millions and USD 22.79 Millions. BTMU loan is secured by a pari-passu first charge on all movlable fixed assets of Mahan Aluminium, both present and future. The loans will be repaid in the single instalment at the end of the tenure, refer Note 2 (c) (i).

(d) Finance Lease Obligations:

In respect of finance lease obligations, future minimum lease payments and their present value are following:

₹ in Crore

	As at 31.03.2019		
	Gross Obligation	Present Value	Interest
Not later than one year	8	5	3
Later than one year and not later than five years	28	20	7
Later than five years	8	8	1
	44	**33**	**11**

Upon introduction of Ind AS 116 Leases effective 01/04/2019, all Finance Lease obligations identified under the earlier Ind AS 17 Leases, have been reclassified and included under Lease Liability against ROU Assets which is presented at the face of the Balance Sheet, refer Note 51.

(e) Net Debt Reconciliation:

₹ in Crore

	Liabilities from Financing Activities			Total
	Non-Current Borrowings	Current Borrowings	Finance Lease Obligations	
Balance as at 01/04/2018[@]	**17,697**	**3,104**	**38**	**20,839**
Cash Flows (Net)	(1,575)	947	(5)	(633)
Foreign Exchange Adjustments	26	(145)	-	(119)
Fair Value Changes, refer Note 27 - (c)	(50)	-	-	(50)
Debt Issuance Costs and Amortisation (Net)	39	-	-	39
Interest Expense **	1,414	181	3	1,598
Interest Paid **	(1,408)	(163)	(3)	(1,574)
Balance as at 31/03/2019[@]	**16,143**	**3,924**	**33**	**20,100**
Recognised on Adoption of Ind AS 116	**-**	**-**	**272**	**272**
Acquisition - Right of Use Assets	-	-	79	79
Cash Flows (Net)	-	3,121	(63)	3,058
Foreign Exchange Adjustments	39	368	-	407
Fair Value Changes, refer Note 27 (c)	(19)	-	-	(19)
Debt Issuance Costs and Amortisation (Net)	41	-	-	41
Interest Expense **	1,342	189	25	1,556
Interest Paid **	(1,347)	(183)	(22)	(1,552)
Other Changes/Reclassification - Modification/Reassessment	-	-	(7)	(7)
Balance as at 31/03/2020[@]	**16,199**	**7,419**	**317**	**23,935**

[@] Borrowings include Interest accrued on borrowings and current maturities of related borrowings.

** Interest expense and interest paid relates to borrowings and lease liabilities.

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

18B. Borrowings, Current

₹ in Crore

	As at	
	31/03/2020	31/03/2019
Secured		
Rupee Loans from Banks - (a) and (c)	1,115	108
	1,115	**108**
Unsecured		
Rupee Loans from Banks - (d)	1,302	-
Foreign currency Loans from Indian Banks	1,368	597
Foreign currency Loans from Foreign Banks - (b)	3,599	2,404
Commercial Papers	-	786
Other Borrowings	*	*
	6,269	**3,787**
	7,384	**3,895**

* *Amount below rounding off convention.*

(a) Working Capital loan for Aluminium business, granted under the Consortium Lending Arrangement, are secured by a first pari-passu charge on entire stocks of raw materials, work-in-process, finished goods, consumable stores and spares and also book debts pertaining to the Company's Aluminium business, both present and future. Working Capital loan for the Copper business is secured by a first pari-passu charge on stocks of raw materials, work-in-process, finished goods and consumable stores and spares and also book debts and other moveable assets of Copper business, both present and future. (refer Note 11 (b))

(b) Balance represents Buyers Credit from offshore branch.

(c) Secured Rupee Loan includes amount received from Banks under Special Banking Arrangement where banks pay on behalf of Government of India, amount related to Fertiliser Subsidy Receivables and Government of India pay directly to Banks.

(d) Rupee Loans from Banks represents loan taken to meet the Company's working capital requirements.

(e) Loan Details are as follow:

₹ in Crore

	Currency	Rate of Interest	As at Carrying Amount	
			31/03/2020	31/03/2019
Secured				
Rupee Loans from Banks	INR	7.85% p.a. - 8.50% p.a.	1,107	-
Rupee Loans from Banks	INR	6.15% p.a.	8	108
Unsecured				
Rupee Loans from Banks	INR	7.50% p.a. - 8.30% p.a.	1,302	-
Foreign Currency Loans from Indian Banks	USD	6 M Libor	1,368	597
Foreign Currency Loans from Foreign Banks	USD	6 M Libor	3,599	2,404
Commercial Papers	INR	7.37% p.a. #	-	786
			7,384	**3,895**

Rate of interest pertains to previous year.

19. Trade Payables

₹ in Crore

	As at			
	31/03/2020		31/03/2019	
	Non-Current	Current	Non-Current	Current
Micro and Small Enterprises - (a)	-	17	-	14
Other than Micro and Small Enterprises - (b)	*	3,973	2	5,720
	*****	**3,990**	**2**	**5,734**

* *Amount below rounding off convention.*

(a) Information related to Micro and Small Enterprises, as per the Micro, Small and Medium Enterprises Development Act, 2006 (MSME Development Act), are given below. The information given below have been determined to the extent such enterprises have been identified on the basis of information available with the Company:

₹ in Crore

		As at	
		31/03/2020	31/03/2019
(i)	Principal amount outstanding	16	14
(ii)	Interest on Principal amount due	-	*
(iii)	Interest and Principal amount paid beyond appointment day	-	-
(iv)	The amount of interest due and payable for the period of delay in making payment (which have been paid but beyond the appointed date during the year) but without adding the amount of interest specified under MSME Development Act.	1	*
(v)	The amount of interest accrued and remaining unpaid at the end of the year	1	*
(vi)	The amount of further interest remaining due and payable even in the succeeding years, until such date when the interest dues as above are actually paid to the Small enterprise, for the purpose of disallowance as a deductible expenditure under Section 23 of MSME Development Act.	1	*

(b) For details of trade payables to related parties, refer Note 44.

* *Amount below rounding off convention.*

20A. Other Financial Liabilities, Non-Current

₹ in Crore

	As at	
	31/03/2020	31/03/2019
Derivative Liabilities, (refer Note 50)	141	63
Liability for Capital Expenditure	5	4
Retention Amount Payable	3	3
Security and Other Deposits	-	*
	149	**70**

* *Amount below rounding off convention.*

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

20B. Other Financial Liabilities, Current

₹ in Crore

	As at	
	31/03/2020	31/03/2019
Derivative Liabilities (refer Note 50)	487	474
Derivatives matured, pending settlement	2	1
Current maturities of Finance Lease Obligations - (b)	-	5
Current maturities of Long-term Borrowings	6	-
Interest Accrued but not due	568	566
Liability for Capital Expenditure	259	716
Retention Amount Payable	108	85
Security and Other Deposits	29	26
Investor Education and Protection Fund		
Unclaimed Dividends - (a)	4	5
Deferred Operating Lease Obligations - (b)	-	2
Temporary Book Overdraft	28	5
	1,491	**1,885**

(a) This amount does not include any amount due and outstanding, to be credited to Investor Education and Protection Fund except ₹ * Crore (as at 31/03/2019 ₹ * Crore) which is held in abeyance due to legal cases pending.

(b) Upon introduction of Ind AS 116 Leases effective 01/04/2019, all Finance Lease obligations identified under the earlier Ind AS 17 Leases, have been reclassified and included under Lease Liability against ROU Assets which is presented at the face of the Balance Sheet. ROU assets are created for the long term lease agreements other than low value Leases and short term leases, due to this Deferred operating lease obligation is nil as at March 31, 2020, refer Note 51.

* *Amount below rounding off convention.*

21. Provisions

₹ in Crore

	As at			
	31/03/2020		31/03/2019	
	Non-Current	Current	Non-Current	Current
Employee Benefits (refer Note 43)	261	263	184	234
Asset Retirement Obligations - (a)	95	-	91	-
Environmental Liabilities - (a)	8	45	5	67
Enterprise Social Commitment - (a)	133	11	129	26
Renewable Power Obligations - (a)	-	171	-	82
Legal Cases - (a)	-	425	-	288
Other Provisions - (a)	-	13	1	13
	497	**928**	**410**	**710**

(a) The details of provisions movement are as under:

₹ in Crore

Particulars	Assets Retirement Obligations	Environmental Liabilities	Enterprise Social Commitment	Legal Cases	Renewable Power Obligations	Others	Total
Balance as at 01-Apr-18	**87**	**19**	**146**	**264**	**141**	**12**	**669**
Provision made during the year	3	60	5	-	159	9	236
Reclassified	-	-	-	24	1	-	25
Provision utilised during the year	(3)	(8)	(5)	-	(219)	-	(235)
Provision reversed during the year	-	-	-	-	-	(7)	(7)
Unwinding of discount	4	1	9	-	-	-	14
Balance as at 31-Mar-19	**91**	**72**	**155**	**288**	**82**	**14**	**702**

₹ in Crore

Particulars	Assets Retirement Obligations	Environmental Liabilities	Enterprise Social Commitment	Legal Cases	Renewable Power Obligations	Others	Total
Provision made during the year - (d)	-	18	8	3	154	-	183
Reclassified	-	-	-	190	-	-	190
Provision utilised during the year	-	(21)	(1)	(25)	(65)	(1)	(113)
Provision reversed during the year	-	(17)	(27)	(31)	-	-	(75)
Unwinding of discount	4	1	9	-	-	-	14
Balance as at 31-Mar-20	**95**	**53**	**144**	**425**	**171**	**13**	**901**

(b) Current and Non-Current bifurcation of above provisions

₹ in Crore

	As at 31/03/2020	As at 31/03/2019
Non-Current Portion	236	226
Current Portion	665	476
	901	**702**

(c) Brief Description of Provisions

i) Assets Retirement Obligations

Asset Retirement Obligation (ARO) is a legal or constructive obligation associated with the ash ponds, ash pipeline and coal transportation system at Renusagar, red mud ponds at Muri and mining lands at Chattisgarh and Jharkhand where these lands need to be restored back to usable condition after closing of activities. This is a statutory requirement in which the timing or method of settlement may be conditional on one or multiple future events, the occurrence of which may not be within the control of the entity. The outflow of economic resources is expected during FY 21 to FY 47. The same has been appropriately discounted.

ii) Environmental Liabilities

Environmental Liability associated with disposal of hazardous material generated during the course of manufacturing or mining operation e.g. disposal of spent pot lining, Gypsum, Slag etc. This disposal generally takes place as per the guidelines set by various regulatory authorities of States and Central Government. The outflow of economic resources is generally expected in the following financial year.

iii) Enterprise Social Commitments

Enterprise Social Commitment is the amount to be spent on social and economic development of the surrounding area where new project is being setup. This is generally defined as a certain percentage of the total cost of the project. The outflow of economic resources is expected during FY 21 to FY 56. This has been appropriately discounted wherever necessary.

iv) Legal Cases

There are few legal cases against which provision has been made since these events are probable to happen i.e. more likely than not but timing of occurrence of such events is uncertain as it depends on when the matter will be settled at the highest Court of Law.

v) Renewable Power Obligations

Some of our units situated in various states like Odisha, Madhya Pradesh, Maharashtra, Gujarat, Jharkhand etc. who gets power from Captive power plants or procure power from open source, are obligated to purchase certain portion of their power consumption from Renewable Energy sources both solar and non-solar. This gives rise to Renewable Power Obligation (RPO). In case the obligated units fail to procure power from such renewable sources, they may satisfy the obligation by purchasing Renewable Energy Certificates from authorised exchanges as an alternative.

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

(d) Pursuant to the issuance of notification by Odisha Electricity Regulatory Commission (OERC) dated December 31, 2019, on pegging of renewable power obligation (RPO) by obligated units based on their year of commissioning, the Company has provided for RPO during the year at the reduced rate. Pending clarification and guidance on carry over of excess Renewable Energy Certificates (RECs) purchased by the Company, arising out of retrospective application of the said notification for the period prior to April 1, 2019, no adjustments has been made for the period prior to April 1, 2019.

22. Tax Expenses and Deferred Tax Liabilities (Net)

₹ in Crore

	As at	
	31/03/2020	**31/03/2019**
Deferred Tax Liabilities	6,646	6,635
Deferred Tax Assets	(4,671)	(4,456)
Deferred Tax Liabilities (Net of Deferred Tax Assets) - (A)	**1,975**	**2,179**

₹ in Crore

		Year ended	
		31/03/2020	**31/03/2019**
(a)	**Income tax expenses recognised in Statement of Profit and Loss**		
	Current Tax		
	Current Income Tax Expenses for the year	151	375
	Tax Adjustment for earlier years	(14)	-
		137	**375**
	Deferred Tax		
	Deferred Income Tax (benefits)/expenses for the year	346	605
	MAT Credit Entitlement	(151)	(375)
		195	**230**
	Total Income Tax Expenses recognised in Statement of Profit and Loss for the year	**332**	**605**
(b)	**Reconciliation of estimated Income Tax Expenses at Indian Statutory Income Tax Rate to Income Tax Expenses reported in the Statement of Comprehensive Income**		
	Profit before Income Taxes	952	1,810
	Indian Statutory Income Tax Rate *	34.94%	34.94%
	Estimated Income Tax Expenses	**333**	**632**
	Tax effect of adjustments to reconcile expected Income Tax expenses to reported Income Tax Expenses:		
	Income Exempt from Tax	(21)	(60)
	Long-Term Capital (Gains)/Losses	(9)	2
	Expenses not deductible in determining Taxable Profit	43	31
	Tax Adjustment for earlier years	(14)	-
		(1)	**(27)**
	Income Tax Expenses recognised in the Statement of Profit and Loss	**332**	**605**

*Applicable Indian statutory tax rate for the years ended 31/03/2020 and 31/03/2019 is 34.944%. Further, the Company is required to pay Minimum Alternate Tax u/s 115JB of Income Tax Act, 1961.

		Year ended	
		31/03/2020	**31/03/2019**
(c)	**Income Tax Expenses recognised in OCI**		
	Remeasurement of Defined Benefit Obligations	(28)	(1)
	Change in Fair Value of Debt and Unquoted Equity Instruments designated at FVTOCI	2	-
	Cash Flow Hedges and Others	(376)	29
		(402)	**28**

		Year ended 31/03/2020	31/03/2019
(d)	**Income Tax Expense recognised directly in Equity**		
	Basis adjustment on Cash Flow Hedges and others	8	-
		8	**-**

(e)	**Deferred Tax Balances presented in the Balance Sheet are as follows:**		
	Deferred Tax Assets		
	Deferred Tax Assets	2,518	2,453
	MAT Credit Entitlement	2,153	2,003
		4,671	**4,456**
	Deferred Tax Liabilities		
	Deferred Tax Liabilities	(6,646)	(6,635)
		(6,646)	**(6,635)**
	Net Deferred Tax Assets/(Liabilities)	**(1,975)**	**(2,179)**

(f) Components and movement in Deferred Tax Assets and (Liabilities) as of and during the year ended:

₹ in Crore

	As at 01.04.2018	Recognised in the Statement of Profit and Loss	Recognised in Other Comprehensive Income	Deferred Tax on Basis Adjustment	As at 31.03.2019
Deferred Income Tax Assets					
Provisions deductible for tax purposes in future period	350	17	-	-	367
Tax Losses/Benefits carry forwards, Net #	2,235	(443)	-	-	1,792
Retirement Benefits and Compensated Absences	68	2	1	-	71
Deferred Income	230	(7)	-	-	223
MAT Credit Entitlement	1,628	375	-	-	2,003
	4,511	**(56)**	**1**	**-**	**4,456**
Deferred Income Tax Liabilities					
PP&E Depreciation and Intangible Amortisation	(5,963)	(200)	-	-	(6,163)
Cash Flow Hedges	(347)	-	(29)	*	(376)
Fair Value Measurements of Financial Instruments	(100)	73	*	-	(27)
Others	(22)	(47)	-	-	(69)
	(6,432)	**(174)**	**(29)**	**-**	**(6,635)**
Net Deferred Tax Assets/(Liabilities)	**(1,921)**	**(230)**	**(28)**	**-**	**(2,179)**

* *Amount below rounding off convention.*

₹ in Crore

	Balance as on 31.03.2019	Adjustment on Adoption of Ind AS 116	Opening Balance 01.04.2019	Recognised in the Statement of Profit and Loss	Recognised in Other Comprehensive Income	Deferred Tax on Basis Adjustment	As at 31/03/2020
Deferred Income Tax Assets							
Provisions deductible for tax purposes in future period	367	95	462	3	-	-	465
Tax Losses/Benefits carry forwards, Net #	1,792		1,792	(57)	-	-	1,735
Retirement Benefits and Compensated Absences	71		71	3	28	-	102
Deferred Income	223		223	(7)	-	-	216
MAT Credit Entitlement	2,003		2,003	150	-	-	2,153
	4,456	**95**	**4,551**	**92**	**28**	**-**	**4,671**

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₹ in Crore

	Balance as on 31.03.2019	Adjustment on Adoption of Ind AS 116	Opening Balance 01.04.2019	Recognised in the Statement of Profit and Loss	Recognised in Other Comprehensive Income	Deferred Tax on Basis Adjustment	As at 31/03/2020
Deferred Income Tax Liabilities							
PP&E Depreciation and Intangible Amortisation	(6,163)	(90)	(6,253)	(171)	-	-	(6,424)
Cash Flow Hedges	(376)		(376)	-	376	(8)	(8)
Fair Value Measurements of Financial Instruments	(27)		(27)	(87)	(2)	-	(116)
Others	(69)		(69)	(29)	-	-	(98)
	(6,635)	**(90)**	**(6,725)**	**(287)**	**374**	**(8)**	**(6,646)**
Net Deferred Tax Assets/(Liabilities)	**(2,179)**	**5**	**(2,174)**	**(195)**	**402**	**(8)**	**(1,975)**

Tax Losses/Benefits carry forwards represent deferred income tax asset on unabsorbed depreciation carried forward under the Income Tax Act, for which there is no expiry period.

(i) Deferred tax assets and deferred tax liabilities have been offset wherever the Company has a legally enforceable right to set-off current tax assets against current tax liabilities and where the deferred tax assets and deferred tax liabilities relates to income tax levied by the same taxation authorities.

(ii) The Company has not recognised deferred tax assets on the following long-term capital losses as presently it is not probable of recovery.

₹ in Crore

Description	AY@	Amount	Tax Impact	Year of Expiry
Long-term Capital Loss	2012-13	55	13	AY 2020-21
Long-term Capital Loss	2013-14	38	9	AY 2021-22
Long-term Capital Loss	2015-16	29	7	AY 2023-24
Long-term Capital Loss	2016-17	34	8	AY 2024-25
Long-term Capital Loss	2017-18	901	210	AY 2025-26
		1,057	**247**	

@ Assessment Year (AY).

(g) The Company has not recognised deferred tax asset in respect of deductible temporary differences related to its equity investments measured at FVTOCI, subsidiaries and associates as presently it is not probable that future taxable long-term capital gain will be available in the foreseeable future to recover such deferred tax assets.

(h) The Taxation Law (Amendments) Ordinance 2019 ('the Ordinance'), provides an option to domestic companies to pay income tax at a lower rate of 22% (plus applicable surcharge and cess) instead of the normal rate of 30% (plus applicable surcharge and cess) depending on the conditions specified in this behalf under section 115BAA of the Income-tax Act, 1961. A domestic company can avail of the lower tax rate only if it opts for not availing of certain exemptions or incentives specified in this behalf in the Ordinance. There is no time limit prescribed under the above to choose the option of lower tax rate under Section 115BBA, however, once chosen it is irreversible.

The Company is having carried forward unabsorbed depreciation, accumulated MAT credit and tax incentives to be availed/adjusted against future taxable profits. Based on the projections prepared by the management, including its plan for future capital expenditure for capacity enhancement, the Company has determined that exercising the option of lower rate will be beneficial only from April 1, 2037. The Company has assessed that the net deferred tax liability as at March 31, 2020 would get reversed within the period for which the Company is expected to continue to be in the existing tax regime Accordingly, the Company has not made any adjustments to reverse its deferred tax liability balances as at March 31, 2020.

23. Other Liabilities

₹ in Crore

	As at			
	31/03/2020		31/03/2019	
	Non-Current	Current	Non-Current	Current
Customer Refund Liabilities - [(a) & (refer Note 26)]	-	89	-	89
Statutory Dues Payable	-	256	-	455
Deferred Income - (b)	594	21	615	21
Other Payables	34	24	27	120
	628	**390**	**642**	**685**

(a) Customer refund liabilities are recognised for discount payable to customers.

(b) Represents deferred income in respect of grant related to Export Promotion Capital Goods (EPCG).

24. Contract Liabilities

₹ in Crore

	As at	
	31/03/2020	31/03/2019
Advance from Customers (refer Note 26)	158	126
	158	**126**

a)	Reconciliation of contract liabilities for the periods presented:	
	Balance at beginning of the year	**126**
	Amount received during the year against which revenue has not been recognized	146
	Revenue recognized during the year	
	a) Contract Liabilities at the beginning of the year	(114)
	b) Performance Obligations satisfied in previous years	-
	Others	*
	Foreign Exchange gains and losses	*
	Balance at end of the year	**158**

* *Amount below rounding off convention.*

25. Income Tax Assets and Liabilities

₹ in Crore

	As at	
	31/03/2020	31/03/2019
Income Tax Assets		
Non-Current Tax Assets (Net)	325	282
Current Tax Assets	-	1,424
	325	**1,706**
Income Tax Liabilities (Net)		
Current Tax Liabilities (Net)	997	972
	997	**972**

The Company is subject to tax assessments and ongoing proceedings, which are pending before various Tax Appellate Authorities. Management periodically evaluates the positions taken in tax returns with respect to such matters, including unresolved tax disputes, which involves interpretation of applicable tax regulations and judicial precedents. Current tax liability and tax asset balances are presented, after recognising as appropriate, provision for taxes payable and contingencies basis management's assessment of outcome of such ongoing proceedings and amounts that may become payable to the tax authorities. Considering the nature of such estimates and uncertainties involved, the amount of such provisions may change upon final resolution of the matters with tax authorities, refer Note 1D.

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

26. Revenue from Operations

₹ in Crore

	Year ended	
	31/03/2020	31/03/2019
Revenue from contracts with customers		
Sale of Products - (a)		
Domestic Sales - (b)	28,539	31,643
Export Sales	11,013	13,193
	39,552	**44,836**
Trade Sales	156	216
Sale of Services - (c)	122	155
	39,830	**45,207**
Other Operating Revenues - (a) and (d)	412	542
	40,242	**45,749**
Reconciliation of revenue recognised with contract price:		
Contract Price	**39,554**	**45,915**
Adjustments for:		
Refund Liabilities and discounts	(635)	(537)
Hedging Gain/ (Loss)	896	(128)
Others - Provisionally priced contracts	15	(43)
Revenue from Contracts with Customers	**39,830**	**45,207**

(a) Sales of Copper products and precious metals are accounted for provisionally pending finalization of price and quantity. Variations are accounted for in the period of settlement. Final price receivable on sale of above products for which provisional price was not finalized are realigned at year end forward LME/LMBA rate and is being presented as part of other operating revenue. Revenue from subsequent variation in price movement as at 31/03/2020 is loss of ₹ 1 Crore (as at 31/03/2019, gain of ₹ 43 Crore), including subsequent variation in price movement from trading sales of ₹ Nil Crore (as at 31/03/2019, gain of ₹ 20 Crore).

(b) Includes sale of Di-ammonium phosphate (DAP) including nutrient-based subsidy of Phosphorus (P) and Potassium (K) ₹ 234 Crore (year ended 31/03/2019 ₹ 311 Crore).

(c) Sale of services represents freight and insurance on exports which are identified as separate performance obligation under Ind AS 115.

(d) Includes Government Grant in the nature of sales related export incentives and other benefits of ₹ 318 Crore (year ended 31/03/2019 ₹ 381 Crore).

(e) The amount of its revenue from external customers analysed by the country, in which customers are located, are given below:

₹ in Crore

	Year ended	
	31/03/2020	31/03/2019
India	28,793	31,877
Outside India		
China	106	1,646
Korea	3,284	2,451
USA	1,575	1,124
Others	6,484	8,651
Total	**40,242**	**45,749**

(f) The Company recognises revenue at a point in time.

27. Other Income

₹ in Crore

	Year ended	
	31/03/2020	31/03/2019
Interest Income (refer Note 47(A)(c))		
On Non-Current Investments	1	1
On Current Investments	36	66
On Others - (a)	139	344
Dividend Income (refer Note 47(A)(c))		
On Non-Current Investments - (b)	56	105
On Current Investments	-	*
Rent Income	12	13
Gain/ (Loss) on Property, Plant and Equipment and Intangible Assets sold/ discarded (Net)	(16)	(26)
Liabilities no longer required written back	83	40
Gain/ (Loss) on Financial Investments Measured at FVTPL (Net)		
On Sale of Financial Assets	96	490
On change of Fair Value of Financial Assets	249	(208)
Other Non-Operating Income (Net) - (c) and (d)	83	115
	739	**940**

* *Amount below rounding off convention.*

(a) Interest Income on others includes ₹ 46 Crore (year ended 31/03/2019 ₹ 257 Crore) of interest received from Income Tax Department.

(b) Dividend Income on long-term investments includes ₹ 29 Crore (year ended 31/03/2019 ₹ 75 Crore) dividend received from subsidiary companies.

(c) Includes gain on modification of borrowings of ₹ 19 Crore (year ended 31/03/2019 ₹ 50 Crore) resulting from change in amount and timing of expected cash flow on term loans.

(d) Previous year number includes gain on withdrawal of Financial Guarantee given to Subsidiary of ₹ 62 Crore.

28. Cost of Materials Consumed

₹ in Crore

	Year ended	
	31/03/2020	31/03/2019
Copper Concentrate - (a)	14,243	17,692
Alumina	3,214	4,264
Bauxite	573	453
Caustic Soda	508	739
Calcined Petroleum Coke	1,469	1,758
Rock Phosphate	267	324
Others	2,349	2,017
	22,623	**27,247**

(a) Purchase of copper concentrate is accounted for provisionally pending finalization of contents in the concentrate and price. Variations are accounted for in the period of settlement. Final price payable on purchase of copper concentrate for which provisional price and quantity were not finalized during the year are realigned based on forward LME and LBMA rate. Impact on cost from subsequent variation in price movement for year ended 31/03/2020 was gain of ₹ 217 Crore (year ended 31/03/2019 loss of ₹ 158 Crore).

(b) Refer Note 36, for details of freight expenses.

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

29. Trade Purchases

₹ in Crore

	Year ended	
	31/03/2020	31/03/2019
Materials Purchase - (a)	256	235
	256	**235**

(a) Includes gain on realignment of ₹ 6 Crore for year ended 31/03/2020 (year ended 31/03/2019 loss ₹ 20 Crore) based on forward LBMA/LME rates for provisionally priced trade purchases.

30. Changes in Inventories of Finished Goods, Work-in-Progress and Stock-in-Trade

₹ in Crore

	Year ended	
	31/03/2020	31/03/2019
Opening Inventories		
Work-in-Progress	5,340	5,185
Finished Goods	719	492
Stock-in-Trade	-	-
	6,059	**5,677**
Less: Closing Inventories		
Work-in-Progress	4,595	5,340
Finished Goods	1,337	719
Stock-in-Trade	127	-
	6,059	**6,059**
Net Change	*	**(382)**

* *Amount below rounding off convention.*

Details of inventories under broad heads are given below:

₹ in Crore

	Work-in-Progress		Finished Goods		Stock-in-Trade		Total	
	As at		As at		As at		As at	
	31/03/2020	31/03/2019	31/03/2020	31/03/2019	31/03/2020	31/03/2019	31/03/2020	31/03/2019
Alumina	342	357	76	45	-	-	418	402
Aluminium and Aluminium Products	883	888	551	477	10	-	1,444	1,365
Copper and Copper Products	1,764	2,244	636	160	6	-	2,406	2,404
Precious Metals	824	856	64	9	-	-	888	865
Others	782	995	10	28	111	-	903	1,023
	4,595	**5,340**	**1,337**	**719**	**127**	**-**	**6,059**	**6,059**

(a) Others include mainly inventories of own mined coal, anode, soda in process and other materials.

(b) Changes in inventory with respect to Work in progress is ₹ (745) Crore (year ended 31/03/2019 ₹ 155 Crore), Finished Goods is ₹ 618 Crore (year ended 31/03/2019 ₹ 227 Crore) and Stock-in-Trade ₹ 127 Crore (year ended 31/03/2019 ₹ Nil).

31. Employee Benefits Expenses

₹ in Crore

	Year ended	
	31/03/2020	**31/03/2019**
Salaries and Wages	1,526	1,614
Post-Employment Benefits:		
Contribution to Provident Fund and Other Defined Contribution Funds (refer Note 43)	110	116
Gratuity and Other Defined Benefit Plans (refer Note 43)	109	68
Employee Share-Based Payments (refer Note 42)		
Equity-settled share-based payment	27	10
Cash-settled share-based payment	*	10
Employee Welfare Expenses	166	170
	1,938	**1,988**
Less: Transferred to Capital Work-in-Progress/ Intangible Assets under Development	16	6
	1,922	**1,982**

* *Amount below rounding off convention.*

Impact of Hon'ble Supreme Court judgment on computation of provident fund contribution.

The Hon'ble Supreme Court of India ("SC") by their order dated February 28, 2019, in the case of Surya Roshani Limited v/s EPFO, set out the principles based on which allowances paid to the employees should be identified for inclusion in basic wages for the purposes of computation of Provident Fund contribution.

The Company has given effect of the above judgement effective March 1, 2019. This does not have any material impact on the Financial Statements.

32. Power and Fuel

₹ in Crore

	Year ended	
	31/03/2020	**31/03/2019**
Power and Fuel Expenses - (a)	6,994	6,937
Less: Transferred to Capital Work-in-Progress/ Intangible Assets under development	*	*
	6,994	**6,937**

* *Amount below rounding off convention.*

(a) Refer Note 36, for details of freight expenses.

33. Finance Costs

₹ in Crore

	Year ended	
	31/03/2020	**31/03/2019**
Interest Expenses on Financial Liabilities not at FVTPL - (a) and (d)	1,619	1,643
(Gain)/ Loss on Foreign Currency Transactions and Translation (Net)	18	17
Interest Expenses for Leasing Arrangements - (e)	25	-
Other Borrowing Costs - (b)	18	23
	1,680	**1,683**
Less: Transferred to Capital Work-in-Progress/ Intangible Assets under Development- (c)	1	-
	1,679	**1,683**

(a) Interest expenses include ₹ * Crore (year ended 31/03/2019 ₹ 1 Crore) paid to Income Tax Department.

(b) Mainly includes unwinding of discount on Enterprise Social Commitment and Asset Retirement Obligation and Finance Lease Obligations.

(c) The capitalisation rate used to determine the amount of borrowing costs to be capitalised is the weighted average interest rate applicable to general borrowings.

(d) Includes difference between effective interest rate and contracted interest rate of ₹ 41 Crore (year ended 31/03/2019 ₹ 39 Crore) mainly from amortisation of debt issuance cost and modification of in borrowings.

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

(e) Subsequent to introduction of Ind AS 116 Leases, the Company has recognized Long-term leases as ROU Assets and created Lease Obligation representing Present Value of future minimum lease payment. The unwinding of such obligation is recognized as Interest Expenses. Following transitional provision under Ind AS 116 Leases, previous year numbers have not been reclassified.

* *Amount below rounding off convention.*

34. Depreciation and Amortisation

₹ in Crore

	Year ended	
	31/03/2020	**31/03/2019**
Depreciation on Property, Plant and Equipment	1,583	1,582
Depreciation on Right of Use Assets	72	-
Depreciation on Investment Properties	*	*
Amortisation of Intangible Assets	58	111
	1,713	**1,693**
Less: Transferred to Capital Work-in-Progress/ Intangible Assets under Development	5	-
	1,708	**1,693**

* *Amount below rounding off convention.*

35. Impairment Loss on Financial Assets (Net)

₹ in Crore

	Year ended	
	31/03/2020	**31/03/2019**
Provision for Doubtful Debts, Loans and Advances / (written back) (Net)	37	21
Bad Debts Loans and Advances / (written back) (Net)	1	3
	38	**24**

36. Other Expenses

₹ in Crore

	Year ended	
	31/03/2020	**31/03/2019**
Consumption of Stores and Spares	975	940
Repairs to Buildings	100	102
Repairs to Machinery	614	622
Rates and Taxes	21	12
Equipment and Material Handling Expenses	297	433
Rental Charges [refer note 51]	-	91
Leases Expenses - (c)	84	-
Insurance Charges	79	76
Payment to Auditors - (a)	4	3
Research and Development	29	27
Freight and Forwarding Expenses (Net) - (b) and (d)	773	872
Donation - (e)	45	17
Directors' Fees and Commission	3	5
(Gain)/Loss on Foreign Currency Transactions (Net)	81	40
(Gain)/Loss in Change in Fair Value of Derivatives (Net)	(55)	124
Premium on Coal Extraction	250	747
Miscellaneous Expenses - (f)	1,459	1,360
	4,759	**5,471**
Less: Transferred to Capital Work-in-Progress/ Intangible Assets under Development	14	11
	4,745	**5,460**

(a) Details of Payment to Auditors are given below:

₹ in Crore

	Year ended	
	31/03/2020	**31/03/2019**
Statutory Auditors:		
Statutory Audit Fees	2	2
Other Services	2	1
Reimbursement of Out-of-Pocket Expenses	*	*
Cost Auditors:		
Cost Audit Fee and Expenses	*	*
	4	**3**

(b) Freight and forwarding expenses is net of freight subsidy of ₹ 25 Crore (year ended 31/03/2019 ₹ 31 Crore) on sale of DAP.

(c) Lease payments not recognised as a ROU liability.

₹ in Crore

	Year ended
Particulars	**31/03/2020**
Short-term Leases	79
Variable Lease Payments	4
Leases of Low Value Assets	1
Total	**84**

(d) Freight expenses amounting to ₹ 156 Crore (year ended 31/03/2019 of ₹ 204 Crore) is included in Cost material consumed and ₹ 79 Crore (year ended 31/03/2019 of ₹ 175 Crore) is included in Power and Fuel. (refer Notes 28 and 32).

(e) Donation includes ₹ 29 Crore (year ended 31/03/2019 of ₹ 13 Crore) paid towards political donation, out of which ₹ 10 Crore (year ended 31/03/2019 of ₹ 13 Crore) paid to AB General Electoral Trust (erstwhile General Electoral Trust) and ₹ 19 Crore through Electoral Bond.

(f) Miscellaneous expenses include ₹ * Crore (year ended 31/03/2019 ₹ * Crore) paid to a firm of solicitors in which one of the Directors of the Company is a partner.

* *Amount below rounding off convention.*

37. Exceptional Income/ (Expenses) (Net)

₹ in Crore

	Year ended	
	31/03/2020	**31/03/2019**
Exceptional Income	25	-
Exceptional (Expenses)	(89)	-
	(64)	**-**

Details of Exceptional Income /(Expenses) as follows:

₹ in Crore

		Year ended	
Nature	**Brief Details**	**31/03/2020**	**31/03/2019**
Slump Sale	Profit on sale of aluminium foil manufacturing unit situated at Kollur, Andhra Pradesh on a slump sale basis	25	-
Restoration Expenses	Expenses incurred towards restoration of Red Mud Pond and other related expenses at alumina refinery at Muri, Jharkhand	(89)	-

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

38. Other Comprehensive Income - Items that will not be reclassified to profit and loss

₹ in Crore

	Year ended	
	31/03/2020	31/03/2019
Remeasurement of Defined Benefit Obligation	(152)	(4)
Change in Fair Value of Investments in Associates as FVTOCI - (a)	4	8
Change in Fair Value of Equity Instruments as FVTOCI - (b)	(2,586)	(1,744)
Income Tax Effect on above	28	2
	(2,706)	**(1,738)**

(a) Refer Note 6

(b) Refer Note 7A

39. Other Comprehensive Income - Items that will be reclassified to profit and loss

₹ in Crore

	Year ended	
	31/03/2020	31/03/2019
Change in Fair Value of Debt Instruments designated as FVTOCI - (a)	5	3
Effective Portion of Cash flow Hedges	(484)	307
Cost of Hedging	(589)	(223)
Income Tax Effect on above	374	(30)
	(694)	**57**

(a) Refer Notes 7A and 7B

Income Tax Expense Recognised in OCI

₹ in Crore

	Year ended	
	31/03/2020	31/03/2019
Items that will not be reclassified to profit and loss		
Remeasurement of Defined Benefit Obligations	28	1
Change in Fair Value of Equity Instruments Designated as FVTOCI	-	1
	28	**2**
Items that will be reclassified to profit and loss		
Change in Fair Value of Debt Instruments Designated as FVTOCI	(2)	(1)
Effective Portion of Cash Flow Hedges	170	(107)
Cost of Hedging	206	78
	374	**(30)**

40. Earnings Per Share (EPS)

₹ in Crore

	Year ended	
	31/03/2020	31/03/2019
Profit/ (Loss) attributable to Equity Shareholders	620	1,205
Weighted average numbers of Equity Shares for calculation of EPS:	2,223,957,744	2,227,573,655
Weighted-average numbers of Equity Shares for Basic EPS	991,162	1,126,728
Dilutive impact of Employee Stock Option Scheme	2,224,948,906	2,228,700,383
Weighted-average numbers of Equity Shares for Diluted EPS		
Face Value per Equity Share (₹)	1.00	1.00
Earnings per Share		
Basic (₹)	2.79	5.41
Diluted (₹)	2.79	5.41

Treasury shares are excluded from weighted-average numbers of Equity Shares used as a denominator in the calculation of EPS.

Stock options granted to the employees under various ESOP schemes are considered to be potential Equity Shares. They have been included in the determination of diluted earnings per share to the extent they are dilutive. The stock options have not been included in the determination of basic earnings per share. For details relating to stock options, refer Note 42.

41. Segment Reporting

The Company has presented segment information in its Consolidated Financial Statements, which are part of the same annual report. Accordingly, in terms of provisions of Accounting Standard on Segment Reporting (Ind AS 108), no disclosure related to the segment is presented in the Standalone Financial Statements.

42. Employee Share-based Payments

The Company has formulated employee share-based payment schemes with objective to attract and retain talent and align the interest of employees with the Company as well as to motivate them to contribute to its growth and profitability. The Company views employee stock options as instruments that would enable the employees to share the value they create for the Company in the years to come. At present, following employee share-based payment schemes are in operation, details of which are given below:

(I) Employee Stock Option Scheme 2006 ("ESOS 2006"):

The shareholders of the Company have approved on 23/01/2007 an Employee Stock Option Scheme 2006 ("ESOS 2006"), under which the Company may grant up to 3,475,000 stock options to its permanent employees in the management cadre, whether working in India or out of India, including Managing and the Whole-time Directors of the Company, in one or more tranches. The ESOS 2006 is administrated by the Nomination and Remuneration Committee of the Board of Directors of the Company ("the Committee"). Each stock option, when exercised, would be converted into one fully paid-up Equity Share of ₹ 1/- each of the Company. The stock options will vest in 4 equal annual instalments after completion of one year of service from the date of grant. The exercise price shall be average price of the Equity Shares of the Company in the immediate preceding seven day period on the date prior to the date on which the ESOS compensation committee finalises the specific numbers of Options to be granted to the employees discounted by such percentage not exceeding 30% (thirty percent) to be determined by ESOS Compensation Committee in the best interest of the various stake holders in the prevailing market conditions. The maximum period of exercise is 5 years from the date of vesting and these stock options do not carry rights to dividends or voting rights till the date of exercise. Further, forfeited/ expired stock options are also available for grant. Further, on 23/09/2011 the ESOS 2006 has been partially modified and by which the Company may grant 6,475,000 stock options to its eligible employees.

Under the ESOS 2006, till 31/03/2020 the Committee has granted 4,328,159 stock options (31/03/2019: 4,328,159 stock options) to its eligible employees out of which 1,819,941 stock options (31/03/2019: 1,819,941 stock options) has been forfeited/ expired and are available for grant as per term of the Scheme.

A summary of movement of the stock options and weighted average exercise price (WAEP) is given below:

₹ in Crore

	As at			
	31/03/2020		31/03/2019	
	Number	WAEP	Number	WAEP
Outstanding at beginning of the year	816,371	118.71	868,701	118.69
Granted during the year	-	-	-	-
Forfeited during the year	-	-	-	-
Exercised during the year	(359,415)	118.69	(52,330)	118.35
Expired during the year	-	-	-	-
Outstanding at year end	456,956	118.73	816,371	118.71
Vested and Exercisable at year end	456,956	118.73	816,371	118.71

Under ESOS 2006, as at 31/03/2020 the range of exercise prices for stock options outstanding was ₹ 118.73 (31/03/2019: ₹ 118.35 to ₹ 118.73) whereas the weighted average remaining contractual life of the stock options outstanding was 1.81 years (31/03/2019: 1.96 years).

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

(II) Employee Stock Option Scheme 2013 ("ESOS 2013"):

The shareholders of the Company have approved on 10/09/2013 an Employee Stock Option Scheme 2013 ("ESOS 2013"), under which the Company may grant up to 5,462,000 Options (comprising of Stock Options and/ or Restricted Stock Units (RSUs)) to the permanent employees in the management cadre and Managing and Whole-time Directors of the Company and its subsidiary companies in India and abroad, in one or more tranches. The ESOS 2013 is administered by the Nomination and Remuneration Committee of the Board of Directors of the Company ("the Committee"). The stock options exercise price would be determined by the Committee, whereas the RSUs exercise price shall be the face value of the Equity Shares of the Company as at the date of grant of RSUs. Each stock option and each RSU entitles the holders to apply for and be allotted one fully paid-up Equity Share of ₹ 1/- each of the Company upon payment of exercise price during exercise period. The stock options will vest in 4 equal annual instalments after completion of one year of the services from the date of grant, whereas RSU will vest upon completion of three years of services from the date of grant. The maximum period of exercise is 5 years from the date of vesting and these stock options/ RSUs do not carry rights to dividends or voting rights till the date of exercise. Further, forfeited/ expired stock options and RSUs are also available for grant.

In terms of ESOS 2013, till 31/03/2020 the Committee has granted 2,250,754 stock options and 2,252,254 RSUs (31/03/2019: 2,250,754 stock options and 2,252,254 RSUs) to the eligible employees of the Company and some of its subsidiary companies. Further, 216,409 stock options and 193,287 RSUs (31/03/2019: 231,224 stock options and 248,954 RSUs) have been forfeited/ expired and are available for grant as per term of the Scheme.

A summary of movement of stock options and RSUs and weighted average exercise price (WAEP) is given below:

₹ in Crore

	As at							
	31/03/2020				31/03/2019			
	Stock Options		RSUs		Stock Options		RSUs	
	Number	WAEP	Number	WAEP	Number	WAEP	Number	WAEP
Outstanding at beginning of the year	601,270	121.89	312,937	1.00	968,665	119.45	460,555	1.00
Granted during the year	-	-	-	-	-	-	-	-
Re-instated during the year	41,722	119.45	55,667	1.00	-	-	-	-
Forfeited during the year	(17,541)	119.45	-	-	-	-	-	-
Exercised during the year	(200,141)	115.37	(132,886)	1.00	(367,395)	115.45	(147,618)	1.00
Expired during the year	(9,366)	119.45	-	-	-	-	-	-
Outstanding at year end	415,944	124.82	235,718	1.00	601,270	121.89	312,937	1.00
Vested and Exercisable at year end	396,712	122.82	235,718	1.00	515,759	119.43	235,955	1.00

Under ESOS 2013, the range of exercise prices for stock options outstanding as at 31/03/2020 was ₹ 73.60 to ₹ 167.15 (31/03/2019: ₹ 73.60 to ₹ 167.15) whereas exercise price in case of RSUs was ₹ 1.00 (31/03/2019: ₹ 1.00). The weighted average remaining contractual life for the stock options and RSUs outstanding as at 31/03/2020 was 2.30 years and 2.57 years, respectively (31/03/2019: 2.78 years and 3.69 years, respectively).

(III) Employee Stock Option Scheme 2018 ("ESOS 2018"):

The shareholders of the Company have approved on 21/09/2018 an Employee Stock Option Scheme 2018 ("ESOS 2018"), formulated by the Company, under which the Company may grant not more than 13,957,302 [Stock Options and Restricted Stock Units ('RSUs')] to its permanent employees of the Company in management cadre including Managing and the Whole-time Director of the Company and its subsidiary companies in India and abroad, in one or more tranches. The ESOS 2018 is administered by the Nomination and Remuneration Committee of the Board of Directors of the Company ("the Committee") and the Hindalco Employees Welfare Trust ("Trust"). The stock options exercise price would be determined by the Committee whereas the RSU exercise price shall be the face value of the Equity Shares of the company as at the date of grant of RSUs. Each stock option and each RSU entitles the holders to apply for and be allotted one fully paid-up Equity Share of ₹ 1/- each of the Company upon payment of exercise price during the exercise period. The stock options will vest in 4 equal annual instalments after completion of one year of the services from the date of grant, whereas RSU will vest upon completion of three years of services from the date of grant. The maximum period of exercise is 5 years from the date of vesting and these stock options/RSUs do not carry rights to dividends or voting rights till the date of exercise. Further, forfeited/expired stock options and RSUs are also available for grant.

In terms of ESOS 2018, till 31/03/2020 the Committee has granted 4,607,279 stock options and 1,348,492 RSUs (31/03/2019: 4,299,563 stock options and 1,276,137 RSUs) to the eligible employees of the Company and some of its subsidiary companies. A summary of movement of stock options and RSUs and weighted average exercise price (WAEP) is given below:

₹ in Crore

	As at							
	31/03/2020				31/03/2019			
	Stock Options		RSUs		Stock Options		RSUs	
	Number	WAEP	Number	WAEP	Number	WAEP	Number	WAEP
Outstanding at beginning of the year	4,299,563	218.75	1,276,137	1.00	-	-	-	-
Granted during the year	307,716	207.21	72,355	1.00	4,299,563	218.75	1,276,137	1.00
Forfeited during the year	(158,785)	218.80	(50,986)	1.00	-	-	-	-
Exercised during the year	-	-	-	-	-	-	-	-
Expired during the year	-	-	-	-	-	-	-	-
Outstanding at year end	4,448,494	217.95	1,297,506	1.00	4,299,563	218.75	1,276,137	1.00
Vested and Exercisable at year end	1,063,724	218.74	-	-	-	-	-	-

Under ESOS 2018, the range of exercise prices for stock options outstanding as at 31/03/2020 was ₹ 159.30 to ₹ 218.80 (31/03/2019 was ₹ 205.45 to ₹ 218.80) whereas exercise price in case of RSUs was ₹ 1 (31/03/2019: ₹ 1.00). The weighted average remaining contractual life for the stock options and RSUs outstanding as at 31/03/2020 was 6.26 years and 6.81 years, respectively (31/03/2019 was 7.20 years and 7.76 years, respectively).

The fair values at grant date of stock options granted during the year ended 31/03/2020 was ₹ 53.05 to ₹ 97.09 (31/03/2019 was ₹ 83.28 to ₹ 115.23) and fair values in case of RSUs was ₹ 150.68 to ₹ 205.48 (31/03/2019 was ₹ 198.57 to ₹ 208.86), respectively. The fair valuation has been carried out by an independent valuer by applying Black and Scholes Model. The inputs to the model include the exercise price, the term of option, the share price at grant date and the expected volatility, expected dividends and the risk-free rate of interest for terms of options.

The details of options granted, the key assumptions for Fair Value on the date of grant are as under :

	FY 2019-20			
	Tranche III		Tranche IV	
	Stock Options	RSUs	Stock Options	RSUs
Grant date	27/12/2019	27/12/2019	4/3/2020	4/3/2020
Exercise price (₹)	215.00	1.00	159.30	1.00
Expected terms of options granted (years)	4.43 years - 7.43 years	8 years	4.43 years - 7.43 years	8 years
Share price on grant date (₹)	215.45	215.45	160.60	160.60
Expected volatility (%)	27.95%	27.95%	30.73%	30.73%
Expected dividend (%)	0.56%	0.56%	0.75%	0.75%
Risk-free interest rate (%)	6.44% - 6.84%	6.84%	5.62% - 6.39%	6.43%

	FY 2018-19			
	Tranche I		Tranche II	
	Stock Options	RSUs	Stock Options	RSUs
Grant date	10/12/2018	10/12/2018	26/03/2019	26/03/2019
Exercise price (₹)	218.80	1.00	205.45	1.00
Expected terms of options granted (years)	4.43 years - 7.43 years	8 years	4.43 years - 7.43 years	8 years
Share price on grant date (₹)	218.80	218.80	208.50	208.50
Expected volatility (%)	37.48%	37.48%	36.99%	36.99%
Expected dividend (%)	0.55%	0.55%	0.58%	0.58%
Risk-free interest rate (%)	7.36 % - 7.51%	7.57%	6.91% - 7.38%	7.50%

The expected volatility was determined based on the historical share price volatility over the past period depending on life of the options granted which is indicative of future periods and which may not necessarily be the actual outcome.

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(IV) Stock Appreciation Rights ('SAR 2013'):

The Company had granted 956,522 Share Appreciation Rights ("SAR 2013 ") to its eligible employee to be vested in 4 equal annual instalments after completion of one year of the service from the date of grant (i.e. 09/10/2013). The SAR 2013 is administered by the Nomination and Remuneration Committee of the Board of Directors of the Company ("the Committee"). The SAR 2013 have performance linked vesting conditions which are decided by the committee and are cash settled. The options shall lapse in case of performance-linked vesting conditions are not met. The Exercise Price of the SAR is ₹ 118.73. The SAR can be exercised within 3 years from the date of vesting or within 6 years from the date of grant, whichever is earlier.

A summary of movement of SAR and weighted average exercise price (WAEP) is given below:

₹ in Crore

	As at			
	31/03/2020		31/03/2019	
	Number	WAEP	Number	WAEP
Outstanding at beginning of the year	478,261	118.73	956,522	118.73
Granted during the year	-	-	-	-
Forfeited during the year	-	-	-	-
Exercised during the year	(478,261)	118.73	(478,261)	118.73
Expired during the year	-	-	-	-
Outstanding at year end	**-**	**-**	**478,261**	**118.73**
Vested and Exercisable at year end	**-**	**-**	**478,261**	**118.73**

The fair values per SAR as at 31/03/2019 was ₹ 90.15. The fair value has been carried out by an independent valuer by applying Black and Scholes Model. The inputs to the model include the exercise price, the term of option, the share price at grant date and the expected volatility, expected dividends and the risk-free rate of interest for terms of Option. The assumptions used for fair valuation are given below:

	Year ended
	31.03.2019
Grant date	9/10/2013
Valuation Date	31/3/2019
Exercise price (₹)	118.73
Expected volatility (%)	36.88%
Expected dividend (%)	0.58%
Risk-Free interest rate (%)	6.17%

The weighted average remaining contractual life for the SAR as at 31/03/2019 is 0.53 years.

(V) Stock Appreciation Rights ('SAR 2018'):

The Company has granted 44,668 Option SAR and 11,333 RSU SAR under the Share Appreciation Rights Scheme 2018 ("SAR 2018") to its eligible employees. Option SAR to be vested in 4 equal annual instalments after completion of one year of the service from the date of grant and RSU SAR will vest upon completion of three years of services from the date of grant. The SAR 2018 is administered by the Nomination and Remuneration Committee of the Board of Directors of the Company ("the Committee"). The SAR 2018 have performance-linked vesting conditions which are decided by the Committee and are cash settled. The options shall lapse in case of performance-linked vesting conditions are not met. The Exercise Price of the Option SAR is ₹ 218.80 and RSU SAR is ₹ 1.

A summary of movement of SAR and weighted average exercise price (WAEP) is given below:

₹ in Crore

	As at 31/03/2020			
	Option SAR		RSU SAR	
	Number	WAEP	Number	WAEP
Outstanding at beginning of the year	-	-	-	-
Granted during the year	44,668	218.80	11,333	1.00
Forfeited during the year	-	-	-	-
Exercised during the year	-	-	-	-
Expired during the year	-	-	-	-
Outstanding at year end	44,668	218.80	11,333	1.00
Vested and Exercisable at year end	11,167	218.80	-	-

The fair values per Option SAR as at 31/03/2020 was ₹ 6. 62 to ₹ 19.87 and for RSU SAR as at 31/03/2020 was ₹ 89.14 to ₹ 89.46 . The fair value has been carried out by an independent valuer by applying Black and Scholes Model. The inputs to the model include the exercise price, the term of option, the share price at grant date and the expected volatility, expected dividends and the risk-free rate of interest. The assumptions used for fair valuation for Option SAR and RSU SAR are given below:

	Year ended		
	31/03/2020		
Grant date	09/08/2019	09/08/2019	04/03/2020
Valuation Date	31/03/2020	31/03/2020	31/03/2020
Exercise price (₹)	218.80	1.00	1.00
Expected volatility (%)	41.65%	41.65%	41.65%
Expected dividend (%)	1.25%	1.25%	1.25%
Risk-Free interest rate (%)	5.29% - 6.09%	6.09%	6.31%

The weighted average remaining contractual life for the Option SAR as at 31/03/2020 is 2.70 to 5.70 years and RSU SAR as at 31/03/2020 is 4.70 to 4.99 years.

The total intrinsic value at the end of the year of the vested Option SAR and RSU SAR is ₹ Nil (31/03/2019 ₹ 4 Crore).

Effect of Employee Share-Based Payment Transactions on Profit or Loss for the period and on financial position:

For the year ended 31/03/2020, the Company recognised total expenses of ₹ 28 Crore (31/03/2019 ₹ 20 Crore) related to equity-settled and cash-settled share based transactions. During the year ended 31/03/2020, the Company has allotted 692,442 fully paid-up Equity Share of ₹ 1/- each of the Company (31/03/2019 567,343) on exercise of equity settled options for which the Company has realised ₹ 6 Crore (31/03/2019 ₹ 5 Crore) as exercise prices. The weighted average share price at the date of exercise of ESOS 2006 was ₹ 179.07 per share (31/03/2019 ₹ 234.44 per share) and ESOS 2013 was ₹ 189.67 per share (31/03/2019 ₹ 221.40 per share).

The Company has received ₹ 1 Crore (31/03/2019 ₹ * Crore) from Utkal Alumina International Limited and Hindalco - Almex Aerospace Limited (Subsidiaries) towards the grant of 88,676 Stock Options and 43,261 RSUs under ESOS 2018 which is netted off from Employee Share-Based Payments Expenses.

* *Amount below rounding off convention.*

43. Employee Benefits Obligations

A. Defined Benefit Plans:

Defined benefit plans expose the Company to actuarial risks such as: Interest Rate Risk, Salary Risk and Demographic Risk.

i. Interest Rate Risk: While calculating the defined benefit obligation a discount rate based on government bonds yields of matching tenure is used to arrive at the present value of future obligations. If the bond yield falls, the defined benefit obligation will tend to increase and plan assets will decrease.

ii. Salary Ris k: Higher than expected increases in salary will increase the defined benefit obligation.

iii. Demographic risk: This is the risk of variability of results due to unsystematic nature of decrements that include mortality, withdrawal, disability and retirement. The effect of these decrements on the defined benefit obligations is not straight forward and depends on the combination of salary increase, discount rate and vesting criteria. It is important not to overstate withdrawals because in the financial analysis the retirement benefit of a short career employee typically costs less per year as compared to a long service employee.

(I) Gratuity Plans

The Company has various schemes (funded/unfunded) for payment of gratuity to all eligible employees calculated at specified number of days (ranging from 15 days to 1 month) of last drawn salary depending upon the tenure of service for each year of completed service subject to minimum service of five years payable at the time of separation upon superannuation or on exit otherwise. These defined benefit gratuity plans are governed by Payment of Gratuity Act, 1972.

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

₹ in Crore

		Year ended	
		31/03/2020	31/03/2019
(a)	**Change in Defined Benefit Obligations (DBO)**		
	DBO at the beginning of the year	962	895
	Current service cost	52	57
	Interest Cost on the DBO	71	65
	Actuarial (gain)/ loss experience	28	(6)
	Actuarial (gain)/ loss financial assumption	44	-
	Benefits paid directly by Company	(34)	(21)
	Benefits paid from plan assets	(29)	(28)
	DBO at the end of the year	**1,094**	**962**

₹ in Crore

		Year ended	
		31/03/2020	31/03/2019
(b)	**Change in Fair Value of Plan Assets**		
	Fair Value of Plan Assets at the beginning of the year	785	724
	Interest Income on plan assets	61	55
	Employer's contributions	66	43
	Return on plan assets greater/(lesser) than discount rate	1	(9)
	Benefits Paid	(29)	(28)
	Fair Value of Plan Assets at the end of the year	**884**	**785**

₹ in Crore

		Year ended	
		31/03/2020	31/03/2019
(c)	**Development of Net Balance Sheet Position**		
	DBO, funded	(1,003)	(880)
	Fair Value of Plan Assets	884	785
	Funded Status{surplus/(deficit)}	(119)	(95)
	DBO, unfunded	(91)	(82)
	Net defined benefit asset/(liability) recognised in the Balance Sheet	**(210)**	**(177)**

₹ in Crore

		Year ended	
		31/03/2020	31/03/2019
(d)	**Reconciliation of Net Balance Sheet Position**		
	Net Defined benefit asset/(Liability)at beginning of the year	(177)	(171)
	Service cost	(52)	(57)
	Net Interest on net defined benefit liability/(asset)	(10)	(11)
	Amount recognised in OCI	(71)	(3)
	Employer's contributions	66	43
	Benefit paid directly by Company	34	22
	Net Defined benefit asset/(Liability)at the end of the year	**(210)**	**(177)**

₹ in Crore

		Year ended	
		31/03/2020	31/03/2019
(e)	**Expense recognised during the year**		
	Current Service cost	52	57
	Net Interest on net defined benefit liability/(asset)	10	11
	Net Gratuity Cost	**62**	**68**

₹ in Crore

		Year ended	
		31/03/2020	31/03/2019
(f)	**Other Comprehensive Income (OCI)**		
	Actuarial (Gain)/ Loss due to DBO experience	28	(6)
	Actuarial (Gain)/ Loss due to DBO assumption changes	44	-
	Actuarial (Gain)/ Loss arising during the period	72	(6)
	Return on Plan Assets (greater)/lesser than discount rate	(1)	9
	Actuarial (Gain)/ Loss recognised in OCI	**71**	**3**

₹ in Crore

		Year ended	
		31/03/2020	31/03/2019
(g)	**Defined Benefit Costs**		
	Service Cost	52	57
	Net Interest on net defined benefit liability/(asset)	10	11
	Actuarial (gain)/loss recognised in OCI	71	3
	Defined Benefit Cost	**133**	**71**

		Year ended	
		31/03/2020	31/03/2019
(h)	**Principal Actuarial Assumptions**		
	Discount rate (based on the market yields available on Government bonds at the accounting date with a term that matches that of the liabilities)	6.5%	7.5%
	Salary escalation rate	7.5%	8.0%
	Weighted average duration of the defined benefit obligation	9 years	9 years
	Mortality Rate	Indian Assured Lives Mortality 2006-08 Ultimate	

₹ in Crore

		Year ended	
		31/03/2020	31/03/2019
(i)	Non-Current and Current portion of Defined Benefit Obligations (Refer Note 21)		
	Current portion	(3)	(5)
	Non-current portion	(207)	(172)
		(210)	**(177)**

(j) Sensitivity analyses

Sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be co-related. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions, the same method (present value of the defined benefit obligation calculated with the projected unit credit method at the end of the reporting period) has been applied as and when calculating the defined benefit liability recognised in the balance sheet.

₹ in Crore

	Year ended	
	31/03/2020	31/03/2019
Discount Rate		
Effect on DBO due to 1% increase in discount rate	(84)	(73)
Effect on DBO due to 1% decrease in discount rate	97	90
Salary Escalation Rate		
Effect on DBO due to 1% increase in salary escalation rate	95	82
Effect on DBO due to 1% decrease in salary escalation rate	(84)	(73)

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

(k) Methodology for Defined Benefit Obligations:

The Projected Unit Credit (PUC) actuarial method has been used to assess the plan's liabilities, including those related to death-in-service and incapacity benefits.

Under PUC method, a projected accrued benefit is calculated at the beginning of the year and again at the end of the year for each benefit that will accrue for all active members of the plan. The projected accrued benefit is based on the plan's accrual formula and upon service as of the beginning or end of the year, but using a member's final compensation, projected to the age at which the employee is assumed to leave active service. The plan liability is the actuarial present value of the projected accrued benefits for active members.

₹ in Crore

	Year ended	
	31/03/2020	31/03/2019
(l) The Expected Maturity Analysis of Undiscounted Gratuity is as follows:		
Within 1 year	61	56
From 1 year to 2 years	86	56
From 2 years to 3 years	91	75
From 3 years to 4 years	100	76
From 4 years to 5 years	98	75
From 5 years to 10 years	580	390

	Year ended	
	31/03/2020	31/03/2019
(m) Composition of Plan Assets		
Major categories of Plan Assets are as under:		
Cash and Bank Balances	1.83%	2.01%
Scheme of insurance - Conventional product	0.22%	0.23%
Scheme of insurance - ULIP product	97.95%	97.76%
	100.00%	**100.00%**

Above Investments in Plan Assets are unquoted.

(n) Expected Contributions to post-employment benefit plan of Gratuity for the year ending March 31, 2021 are ₹ 65 Crore.

II Other Defined Benefit and contribution Plans

(a) Pension

The Company contributes a certain percentage of salary for all eligible employees in the managerial cadre towards Superannuation Funds with option to put certain portion in National Pension Scheme (NPS) and/or in funds managed by Birla Sunlife Insurance Company to be converted to annuity of Life Insurance Corporation of India at retirement. Junior Pension Plan provided to certain employees is in the nature of defined benefit plan which provides an annuity in the form of pension amount at retirement. The amount charged to the statement of profit and loss during the year is ₹ 60 Crore (year ended 31/03/2019 ₹ 22 Crore). Amount of actuarial (gain)/ loss recognised in Other Comprehensive Income during the year is ₹ 6 Crore (year ended 31/03/2019 ₹ * Crore).

(b) Post-Retirement Medical Benefits

The Company provides post retirement medical benefit to its certain retired employees. The scheme involves reimbursement of expenses towards medical treatment of self and dependents. The amount charged to the statement of profit and loss during the year is ₹ * Crore (year ended 31/03/2019 ₹ * Crore) and amount of actuarial (gain)/ loss recognised in Other Comprehensive Income during the year is ₹ 4 Crore (year ended 31/03/2019 ₹ 1 Crore).

(c) Leave Obligations

The leave obligation cover the Company's liability for earned and sick leave. The entire amount of the provision of ₹ 254 Crore (year ended 31/03/2019 ₹ 223 Crore) is presented as current, since the company does not have an unconditional right to defer settlement for these obligations. Expected amount towards settlement of Leave for the next 12 months are ₹ 37 Crore (year ended 31/03/2019 ₹ 34 Crore).

(d) Provident Fund

The Company contribution towards Provident Fund managed either by approved trusts or by the Central Government is debited to the statement of profit and loss. In respect of provident fund management by the approved trust, the Company has an obligation to fund any shortfall on the yield of the trust's investments over the administered interest rates on an annual basis. The Company also contributes to Coal Mines Provident Fund (CMPF) in respect of employees working in coal mines. The amount debited to the statement of profit and loss during the year was ₹ 97 Crore (year ended 31/03/2019 ₹ 94 Crore). Based on actuarial valuation, the Company has recognised obligation of ₹ 8 Crore as at 31/03/2020 (year ended 31/03/2019 ₹ 8 Crore) towards shortfall on the yield of the trust's investments over the administered interest rates. Amount of actuarial (gain)/ loss recognised in Other Comprehensive Income during the year is ₹ (2) Crore (year ended 31/03/2019 ₹ * Crore).

(e) Certain investments made by the Company's Provident Fund Trust ('AAA' rated when the investment was done) became impaired during the year. The Trust has recorded the loss in its books for the year ended March 31, 2020. The Company is obligated to make good such losses to the trust and as such has compensated the trust by ₹ 73 Crore. The amount has been accounted for in Other Comprehensive Income.

₹ in Crore

	Year ended	
	31/03/2020	31/03/2019
Sensitivity Analysis :-		
Provident Fund		
Discount Rate		
Effect on DBO due to 1% increase in discount rate	(3)	(2)
Effect on DBO due to 1% decrease in discount rate	4	2
Pension		
Discount Rate		
Effect on DBO due to 1% increase in discount rate	*	*
Effect on DBO due to 1% decrease in discount rate	*	*

* Amount below rounding off convention

Assumption use in determining the present value obligation of the interest rate guarantee under the Deterministic Approach:

	Year ended	
	31/03/2020	31/03/2019
Discount rate	6.50%	7.50%
Expected EPFO (Employees' Provident Fund Organisation) Return	8.50%	8.65%

44. Related Party Transactions

The following transactions were carried out with the Related Parties in the ordinary course of business:

(I) Subsidiaries, Associates, Joint Ventures and Others

₹ in Crore

		31/03/2020				31/03/2019			
		Subsidiaries	Associates	Joint Ventures	Others **	Subsidiaries	Associates	Joint Ventures	Others **
1	**Sales and Conversion**	**55**	**-**	**-**	**-**	**35**	**-**	**-**	**-**
	(a) Hindalco - Almex Aerospace Limited	51	-	-	-	34	-	-	-
	(b) Novelis Inc. and its Subsidiaries	3	-	-	-	1	-	-	-
	(c) Utkal Alumina International Limited	1	-	-	-	-	-	-	-

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

₹ in Crore

		31/03/2020				31/03/2019			
		Subsidiaries	Associates	Joint Ventures	Others **	Subsidiaries	Associates	Joint Ventures	Others **
2	**Services rendered**	**-**	**-**	**-**	**6**	**-**	**-**	**-**	**-**
	(a) Hydromine Global Minerals GmbH Limited (Consolidated)	-	-	*	-	-	-	*	-
	(b) Dahej Harbour & Infrastructure Limited	*	-	-	-	*	-	-	-
	(c) Utkal Alumina International Limited	*	-	-	-	*	-	-	-
	(d) Aditya Birla Management Corporation Private Limited (ABMCPL)	-	-	-	6	-	-	-	-
3	**Interest and Dividend received during the year**								
	Interest received	**1**	**3**	**-**	**-**	**-**	**4**	**-**	**-**
	(a) Aditya Birla Science & Technology Company Private Limited	-	3	-	-	-	4	-	-
	(b) Dahej Harbour & Infrastructure Limited	*	-	-	-	-	-	-	-
	(c) Hindalco - Almex Aerospace Limited	*	-	-	-	*	-	-	-
	(d) Renuka Investments & Finance Limited	*	-	-	-	-	-	-	-
	(e) Renukeshwar Investments & Finance Limited	*	-	-	-	-	-	-	-
	(f) Suvas Holdings Limited	1	-	-	-	*	-	-	-
	Dividend received	**30**	**-**	**-**	**-**	**76**	**-**	**-**	**-**
	(a) Dahej Harbour & Infrastructure Limited	18	-	-	-	35	-	-	-
	(b) Lucknow Finance Company Limited	2	-	-	-	4	-	-	-
	(c) Renuka Investments & Finance Limited	4	-	-	-	25	-	-	-
	(d) Renukeshwar Investments & Finance Limited	6	-	-	-	12	-	-	-
4	**Interest paid**	**-**	**-**	**-**	**-**	**19**	**-**	**-**	**-**
	(a) Utkal Alumina International Limited	-	-	-	-	19	-	-	-
5	**Purchase of Materials, Capital Equipment and Others**	**2,823**	**14**	**-**	**-**	**4,114**	**5**	**-**	**-**
	(a) Hindalco - Almex Aerospace Limited	1	-	-	-	1	-	-	-
	(b) Minerals & Minerals Limited	42	-	-	-	44	-	-	-
	(c) Novelis Inc. and its Subsidiaries	4	-	-	-	5	-	-	-
	(d) Suvas Holdings Limited	4	-	-	-	-	-	-	-
	(e) Utkal Alumina International Limited	2,772	-	-	-	4,064	-	-	-
	(f) Aditya Birla Renewables Subsidiary Limited	-	14	-	-	-	5	-	-
6	**Services received**	**54**	**16**	**-**	**423**	**41**	**15**	**-**	**400**
	(a) Aditya Birla Science & Technology Company Private Limited	-	16	-	-	-	15	-	-
	(b) Dahej Harbour & Infrastructure Limited	47	-	-	-	40	-	-	-
	(c) Lucknow Finance Company Limited	1	-	-	-	1	-	-	-
	(d) Novelis Inc. and its Subsidiaries	-	-	-	-	*	-	-	-
	(e) Renuka Investments & Finance Limited	*	-	-	-	*	-	-	-
	(f) Utkal Alumina International Limited	6	-	-	-	*	-	-	-
	(g) Aditya Birla Management Corporation Private Limited (ABMCPL)	-	-	-	423	-	-	-	400

₹ in Crore

		31/03/2020				31/03/2019			
		Subsidiaries	Associates	Joint Ventures	Others **	Subsidiaries	Associates	Joint Ventures	Others **
7	**Investments, Loans and Deposits made during the year**								
	Loans and Deposits made during the Year	**25**	**-**	**-**	**-**	**11**	**-**	**-**	**-**
	(a) AV Minerals (Netherlands) N.V.	-	-	-	-	*	-	-	-
	(b) Dahej Harbour & Infrastructure Limited	15	-	-	-	-	-	-	-
	(c) East Coast Bauxite Mining Company Pvt. Limited	*	-	-	-	*	-	-	-
	(d) Renuka Investments & Finance Limited	5	-	-	-	-	-	-	-
	(e) Renukeshwar Investments & Finance Limited	5	-	-	-	-	-	-	-
	(f) Suvas Holdings Limited	-	-	-	-	11	-	-	-
	Investments Made during the Year	**15**	**1**	**1**	**-**	**181**	**6**	**-**	**-**
	(a) Hydromine Global Minerals GmbH Limited (Consolidated)	-	-	1	-	-	-	-	-
	(b) AV Minerals (Netherlands) N.V.	14	-	-	-	166	-	-	-
	(c) Suvas Holdings Limited	1	-	-	-	15	-	-	-
	(d) Aditya Birla Renewables Subsidiary Limited	-	1	-	-	-	6	-	-
8	**Investments, Loans and Deposits made returned back during the year by**								
	Loans and Deposits Returned back during the Year	**26**	**5**	**-**	**-**	**-**	**-**	**-**	**-**
	(a) Aditya Birla Science & Technology Company Private Limited	-	5	-	-	-	-	-	-
	(b) Dahej Harbour & Infrastructure Limited	15	-	-	-	-	-	-	-
	(c) Renuka Investments & Finance Limited	5	-	-	-	-	-	-	-
	(d) Renukeshwar Investments & Finance Limited	5	-	-	-	-	-	-	-
	(e) Suvas Holdings Limited	1	-	-	-	-	-	-	-
9	**Investments, Deposits, Loans and Advances obtained during the year from**								
	Deposits, Loans and Advances obtained during the year from	**-**	**-**	**-**	**-**	**800**	**-**	**-**	**-**
	(a) Utkal Alumina International Limited	-	-	-	-	800	-	-	-
10	**Investments, Deposits, Loans and Advances repaid during the year to**								
	Deposits, Loans and Advances repaid during the year to	**-**	**-**	**-**	**-**	**800**	**-**	**-**	**-**
	(a) Utkal Alumina International Limited	-	-	-	-	800	-	-	-
11	**Guarantees and Collateral Securities released during the year**	**-**	**-**	**-**	**-**	**4,866**	**-**	**-**	**-**
	(a) Suvas Holdings Limited	-	-	-	-	13	-	-	-
	(b) Utkal Alumina International Limited	-	-	-	-	4,853	-	-	-
12	**Licence and Lease agreements**	**-**	**-**	**-**	**-**	-	-	-	-
	(a) Dahej Harbour & Infrastructure Limited	*	-	-	-	*	-	-	-
13	**Recovery of ESOP Expenses**	**1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
	(a) Hindalco - Almex Aerospace Limited	*	-	-	-	*	-	-	-
	(b) Utkal Alumina International Limited	1	-	-	-	*	-	-	-

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

₹ in Crore

	31/03/2020				31/03/2019			
	Subsidiaries	Associates	Joint Ventures	Others **	Subsidiaries	Associates	Joint Ventures	Others **
14 Outstanding balances #								
(i) Receivables	**11**	**-**	**-**	**139**	**8**	**-**	**-**	**16**
(a) Hydromine Global Minerals GmbH Limited (Consolidated)	-	-	-	-	-	-	*	-
(b) Dahej Harbour & Infrastructure Limited	*	-	-	-	-	-	-	-
(c) East Coast Bauxite Mining Company Pvt. Limited	*	-	-	-	*	-	-	-
(d) Hindalco - Almex Aerospace Limited	*	-	-	-	*	-	-	-
(e) Lucknow Finance Company Limited	*	-	-	-	-	-	-	-
(f) Minerals & Minerals Limited	11	-	-	-	8	-	-	-
(g) Renuka Investments & Finance Limited	*	-	-	-	-	-	-	-
(h) Renukeshwar Investments & Finance Limited	*	-	-	-	-	-	-	-
(i) Suvas Holdings Limited	*	-	-	-	-	-	-	-
(j) Utkal Alumina International Limited	*	-	-	-	*	-	-	-
(k) Aditya Birla Management Corporation Private Limited (ABMCPL)	-	-	-	139	-	-	-	16
(ii) Payables	**255**	**1**	**-**	**22**	**327**	**1**	**-**	**32**
(a) Dahej Harbour & Infrastructure Limited	3	-	-	-	7	-	-	-
(b) Lucknow Finance Company Limited	*	-	-	-	-	-	-	-
(c) Novelis Inc. and its Subsidiaries	5	-	-	-	3	-	-	-
(d) Utkal Alumina International Limited	247	-	-	-	317	-	-	-
(e) Aditya Birla Renewables Subsidiary Limited	-	1	-	-	-	1	-	-
(f) Aditya Birla Management Corporation Private Limited (ABMCPL)	-	-	-	22	-	-	-	32
(iii) Loans and Deposits (Given)	**9**	**46**	**-**	**-**	**11**	**51**	**-**	**-**
(a) Aditya Birla Science & Technology Company Private Limited	-	46	-	-	-	51	-	-
(b) AV Minerals (Netherlands) N.V.	-	-	-	-	*	-	-	-
(c) Lucknow Finance Company Limited	*	-	-	-	*	-	-	-
(d) Suvas Holdings Limited	9	-	-	-	11	-	-	-
(iv) Guarantees and Collateral Securities given	**5**	**-**	**-**	**-**	**5**	**-**	**-**	**-**
(a) Dahej Harbour & Infrastructure Limited	5	-	-	-	5	-	-	-

For details of investment in Subsidiaries, Joint Ventures and Associates (refer Notes 5, 6 and 15A of Standalone Financial Statements).

For details of Subsidiaries, Joint Ventures and Associates (refer note 53 of Consolidated Financial Statement).

* *Amount below rounding off convention.*

all outstanding balances are unsecured and are payable in cash.

** The Company is a member of Aditya Birla Management Corporation Private Limited (ABMCPL), a company limited by guarantee formed for the purpose of its members to mutually avail and share common facilities, expertise and other support on cost basis.

(II) Trusts

Contribution to Trusts:

(a) Hindalco Employee's Gratuity Fund, Kolkata, ₹ 20 Crore (year ended 31/03/2019 ₹ Nil).
(b) Hindalco Employee's Gratuity Fund, Renukoot, ₹ 46 Crore (year ended 31/03/2019 ₹ 43 Crore).
(c) Hindalco Employee's Provident Fund Institution, Renukoot, ₹ 76 Crore (year ended 31/03/2019 ₹ 72 Crore).
(d) Hindalco Superannuation Scheme, Renukoot, ₹ 7 Crore (year ended 31/03/2019 ₹ 7 Crore).
(e) Hindalco Industries Limited Employees' Provident Fund II ₹ 63 Crore (year ended 31/03/2019 ₹ 58 Crore).
(f) Hindalco Industries Limited Senior Management Staff Pension Fund II ₹ 5 Crore (year ended 31/03/2019 ₹ 5 Crore).
(g) Hindalco Jan Seva Trust ₹ 1 Crore (year ended 31/03/2019 ₹ 1 Crore).
(h) Copper Jan Seva Trust ₹ 6 Crore (year ended 31/03/2019 ₹ 6 Crore).

Outstanding balances:

Receivable

(a) Hindalco Jan Seva Trust ₹ * Crore (as at 31/03/2019 ₹ 1 Crore).

Payable

(a) Copper Jan Seva Trust ₹ 3 Crore (as at 31/03/2019 ₹ 4 Crore).

* *Amount below rounding off convention.*

(III) Key Managerial Remuneration

(i) Executive Directors

(a) Mr. Satish Pai - Managing Director
(b) Mr. Praveen Maheshwari Whole - time Director & Chief Financial Officer

(ii) Non-Executive Directors

(a) Mr. Kumar Mangalam Birla
(b) Smt. Rajashree Birla
(c) Mr. D. Bhattacharya
(d) Mr. A.K. Agarwala
(e) Mr. M.M. Bhagat (Resigned w.e.f. 30th August, 2019)
(f) Mr. K.N. Bhandari
(g) Mr. Y.P. Dandiwala
(h) Mr. Ram Charan
(i) Mr. Girish Dave (Resigned w.e.f. 11th November, 2019)
(j) Ms. Alka Bharucha
(k) Dr. Vikas Balia (w.e.f. 19th July, 2019)
(l) Mr. Sudhir Mital (w.e.f. 11th November, 2019)

₹ in Crore

		Year ended	
		31/03/2020	31/03/2019
(a)	**Remuneration of Executive Directors $@**	**38**	**33**
	Short-term employment benefit	36	31
	Post-employment benefits #	2	2
(b)	**Remuneration of Non-Executive Directors**	**7**	**9**
	Pension	4	4
	Commission and Sitting Fees	3	5

$ includes Managing Director and CFO (Whole-time Director).

As the liabilities for defined benefit plans are provided on actuarial basis for the Company as a whole, the amounts pertaining to Key Management Personnel are not included.

@ Excludes amortisation of fair value of employee share-based payments under Ind AS 102.

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

45. Contingent Liabilities and Commitments

A. Contingent Liabilities

₹ in Crore

			As at 31/03/2020	As at 31/03/2019
(a)	**Claims against Company not acknowledged as Debt:**			
	Following demands are disputed by the Company and are not provided for:			
	(i)	Demand for Stamp Duty by Collector (Stamp), Kanpur, Uttar Pradesh (U.P.) on merger of Copper Business of IndoGulf Corporation with the Company	20	20
		The matter is pending before the Hon'ble High Court of Allahabad. The Company believes that there is no substantive/computation provision for levy/calculation of stamp duty within the provisions of Uttar Pradesh Stamp Act on scheme of arrangement under the Companies Act, 1956, approved by the Court. Moreover, the properties in question are located in the State of Gujarat and, thus, the Collector (Stamp), Kanpur, has no territorial jurisdiction to make such a demand. Further, the Company has already paid the stamp duty for the same in 2003-04 which has been accepted as per the provisions of the Bombay Stamp Act, 1958.		
	(ii)	Demand towards drawal of energy during peak hours by Uttar Pradesh Power Corporation Limited (UPPCL)/ PurvanchalVidyutVitran Nigam Limited (PVVNL)	81	81
		The dispute relates to the agreement entered with UPPCL for the period 2009-14. Demand was raised by UPPCL for drawl of banked energy during peak hours. The Hon'ble Supreme Court has stayed the demand and the matter is pending with Appellate Tribunal for Electricity (APTEL).		
	(iii)	Retrospective Revision of Water Rates by UP Jal Vidyut Nigam Limited	4	4
		Writ petition pending with Lucknow Bench of Allahabad High Court. The demand for arrears stayed.		
	(iv)	Demand for Entry Tax relating to valuation dispute	28	28
		Appeals have been filed with Additional CCT, Sambalpur.		
	(v)	Interest demand on witholding of 50% payment of Entry Tax	27	28
		Appeal is pending before Hon'ble High Court of Odhisa and stay has been granted.		
	(vi)	Demand from State and Central Sales Tax authorities for various years	26	19
		At different levels of appeal.		
	(vii)	Disallowances of Cenvat Credit on inputs & capital goods & short payment of excise on additional consideration received from recipient of deemed exporter	9	26
		Matters are pending with CESTAT.		
	(viii)	Disallowances of Service Tax credit on Input services at various locations	101	132
		These matters are pending with CESTAT authorities.		
	(ix)	Demand for recovery of cenvat credit availed on service tax paid on Goods Transport Agency (outward charges)	9	7
		The matter is pending with Commissioner (Appeals), Vadodara & Commissioner, Bharuch.		
	(x)	Water Tariff revision demand for previous years	8	8
		The matter is pending in the Hon'ble High Court of Karnataka.		
	(xi)	Green Cess Provision Under Electricity Act Year-2012-13 to Year 2017-18	12	11
		The matter is pending at Hon'ble Supreme Court.		
	(xii)	Other Contingent Liabilities in respect of Excise, Customs, Sales Tax, etc. each being for less than ₹ 1 Crore	10	13
		The demands are in dispute at various legal forums.		

₹ in Crore

		As at 31/03/2020	As at 31/03/2019
(xiii)	Transitional Credit of cess	27	27
	Writ Petition filed before Odisha and MP High Court.		
(xiv)	Penalty for Unauthorised Disposal of Anode Butts	14	14
	The matter is pending with Odisha High Court.		
		376	**418**

It is not practicable for the Company to estimate the timings of cash outflows, if any, in respect of the above matters, pending resolution of the respective proceedings.

(b)	**Other money for which the Company is contingently liable**		
(i)	Customs Duty on Raw Materials imported under Advance License, against which export obligation is to be fulfilled	-	10

B. Commitments

₹ in Crore

		As at 31/03/2020	As at 31/03/2019
(a)	Estimated amount of contracts remaining to be executed on capital account and not provided for (net of advances)	701	615
(b)	The Company has given the undertakings in connection with the loan of Utkal Aluminium International Limited (UAIL), a wholly owned subsidiary to hold minimum 51% equity shares in UAIL.		
(c)	Other Commitment for purchase of Goods and Services (Net of Advance)	560	1,355

46. Offsetting Financial Liabilities and Financial Assets

Financial instruments subject to offsetting, enforceable master netting arrangement and similar arrangements.

₹ in Crore

As at 31/03/2020	Note No.	Effects on Balance Sheet			Related Amounts not Offset		
		Gross Amount	Gross amount set off in the balance sheet	Net amount presented in the balance sheet	Amounts subject to master netting arrangements	Financial Instrument collateral	Net Amount
Financial Assets							
Derivatives	9A and 9B	986	(78)	908	-	-	908
Cash and Cash Equivalents	13	3,265	-	3,265	-	-	3,265
Trade Receivables	12	2,093	-	2,093	-	-	2,093
Other Financial Assets	9A and 9B	285	-	285	-	-	285
Total Financial Assets		**6,629**	**(78)**	**6,551**	**-**	**-**	**6,551**
Financial Liabilities							
Derivatives	20A and 20B	706	(78)	628	-	(161)	467
Trade Payables	19	3,990	-	3,990	-	-	3,990
Other Financial Liabilities	20A and 20B	1,012	-	1,012	-	-	1,012
Total Financial Liabilities		**5,708**	**(78)**	**5,630**	**-**	**(161)**	**5,469**

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

₹ in Crore

As at 31/03/2019	Note No.	Effects on Balance Sheet			Related Amounts not Offset		
		Gross Amount	Gross amount set off in the balance sheet	Net amount presented in the balance sheet	Amounts subject to master netting arrangements	Financial Instrument collateral	Net Amount
Financial Assets							
Derivatives	9A and 9B	958	(40)	918	-	-	918
Cash and Cash Equivalents	13	1,515	-	1,515	-	-	1,515
Trade Receivables	12	2,125	-	2,125	-	-	2,125
Other Financial Assets	9A and 9B	478	-	478	-	-	478
Total Financial Assets		**5,076**	**(40)**	**5,036**	**-**	**-**	**5,036**
Financial Liabilities							
Derivatives	20A and 20B	577	(40)	537	-	(76)	461
Trade Payables	19	5,736	-	5,736	-	-	5,736
Other Financial Liabilities	20A and 20B	1,418	-	1,418	-	-	1,418
Total Financial Liabilities		**7,731**	**(40)**	**7,691**	**-**	**(76)**	**7,615**

47. Financial Instruments

A. Fair Value Measurement

(a) The following table shows the carrying amounts of Financial Assets and Financial Liabilities by category:

₹ in Crore

	As at					
	31/03/2020			31/03/2019		
	Amortised Cost	FVTOCI	FVTPL	Amortised Cost	FVTOCI	FVTPL
Financial Assets:						
Investments in Associate						
Unquoted Instruments	-	34	-	-	28	-
Investments in Equity Instruments						
Quoted Equity Instruments	-	2,893	-	-	4,818	-
Unquoted Equity Instruments	-	27	-	-	35	-
Investments in Debt Instruments						
Mutual Funds	-	-	4,575	-	-	3,522
Bonds and Debentures	-	-	210	-	-	225
Government Securities	-	93	-	-	88	-
Derivatives	**-**	**-**	908	**-**	**-**	918
Cash and Cash Equivalents						
Cash and Bank	2,193	-	-	352	-	-
Liquid Mutual Funds	-	-	1,072	-	-	1,163
Bank Balances other than Cash and Cash Equivalents	15	-	-	65	-	-
Trade Receivables	2,081	-	12	1,757	-	368
Loans	69	-	-	75	-	-
Other Financial Assets	285	-	-	478	-	-
	4,643	**3,047**	**6,777**	**2,727**	**4,969**	**6,196**

₹ in Crore

	As at			
	31/03/2020		31/03/2019	
	Amortised Cost	FVTPL	Amortised Cost	FVTPL
Financial Liabilities:				
Borrowings				
Non Convertible Debentures (NCDs)	5,994	-	5,991	-
Long-term Borrowings	9,666	-	9,643	-
Short-term Borrowings	7,384	-	3,895	-
Lease Liabilities	317	-	-	-
Derivatives	-	628	-	537
Trade Payables	1,779	2,211	2,763	2,973
Other Financial Liabilities	1,012	-	1,418	-
	26,152	**2,839**	**23,710**	**3,510**

The Company had acquired certain equity instruments for the purpose of holding for a longer duration and not for the purpose of selling in near term for short term profit. Such instruments have been categorized as FVTOCI.

(b) The following table shows the fair values of Financial Assets and Financial Liabilities measured at amortised cost:

₹ in Crore

	As at			
	31/03/2020		31/03/2019	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Financial Assets				
Loans	14	14	17	17
Deposits	165	165	165	165
	179	**179**	**182**	**182**

₹ in Crore

	As at			
	31/03/2020		31/03/2019	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Borrowings				
Non-Convertible Debentures (NCDs)	5,994	6,697	5,991	6,662
Long-term Borrowings #	9,672	9,745	9,614	9,731
	15,666	**16,442**	**15,605**	**16,393**

Carrying amount includes current portion of long term borrowing shown under other current financial liabilities (Refer Note 20B) but excludes finance lease obligation and deferred payment liabilities.

Fair Value of borrowings does not include interest accrued but not due.

Fair values for current financial assets and financial liabilities have not been disclosed because their carrying amount are a reasonable approximation of their fair values.

(c) Classification of finance income and finance cost by instrument category

₹ in Crore

	Year ended					
	31/03/2020			31/03/2019		
	Amortised Cost	FVTOCI	FVTPL	Amortised Cost	FVTOCI	FVTPL
Income						
Interest Income (i)	103	6	21	119	6	29
Dividend Income (ii)	-	27	-	-	30	*
	103	**33**	**21**	**119**	**36**	**29**
Expense						
Interest Expense (iii)	1,617	-	-	1,652	-	-
	1,617	**-**	**-**	**1,652**	**-**	**-**

** Amount below rounding off convention.*

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

Details of amount not included in the table above.

₹ in Crore

		As at	
		31/03/2020	31/03/2019
(i)	Interest received from Income Tax Department	46	257
(ii)	Dividend from Subsidiaries	29	75
(iii)	Interest on Income Tax and other finance cost	62	31

For amortised cost and FVTOCI instruments, interest expense is recognised at effective interest rate.

B. Fair Value Hierarchy

The following table shows the details of financial assets and financial liabilities including their levels in the fair value hierarchy:

(i) Financial assets and financial liabilities measured at fair value - recurring fair value measurements:

₹ in Crore

Financial Assets	As at 31/03/2020			As at 31/03/2019		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Investments in Associates						
Unquoted Instruments	-	-	34	-	-	28
	-	**-**	**34**	**-**	**-**	**28**
Investments in Equity Instruments						
Quoted Equity Instruments	2,893	-	-	4,818	-	-
Unquoted Equity Instruments	-	-	27	-	-	35
	2,893	**-**	**27**	**4,818**	**-**	**35**
Investments in Debt Instruments						
Mutual Funds	4,556	19	-	3,477	45	-
Bonds and Debentures	6	-	204	5	180	40
Government Securities	-	73	20	-	44	44
	4,562	**92**	**224**	**3,482**	**269**	**84**
Derivatives	**-**	**908**	**-**	**-**	**918**	**-**
Trade Receivables	**-**	**12**	**-**	**-**	**368**	**-**
Cash and Cash Equivalents						
Liquid Mutual Funds	1,072	-	-	1,163	-	-
	8,527	**1,012**	**285**	**9,463**	**1,555**	**147**
Financial Liabilities						
Derivatives	-	628	-	-	537	-
Trade Payables	-	2,211	-	-	2,973	-
	-	**2,839**	**-**	**-**	**3,510**	**-**

(ii) Fair value disclosure of Financial Assets and Financial Liabilities measured at amortised cost:

₹ in Crore

	As at 31/03/2020			As at 31/03/2019		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Financial Liabilities:						
Long-term Borrowings	-	16,442	-	-	16,393	-
	-	**16,442**	**-**	**-**	**16,393**	**-**

₹ in Crore

	As at 31/03/2020			As at 31.03.2019		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Financial Assets:						
Loans and Advances, Non-Current			14			17
Deposits, Non-Current	-	-	165	-	-	165
	-	**-**	**179**	**-**	**-**	**182**

Level 1: Hierarchy includes financial instruments valued using quoted market prices. Listed equity instruments and traded debt instruments, which are traded in the stock exchanges, are valued using the closing price at the reporting date. Mutual funds are valued using the closing NAV.

Level 2: Hierarchy includes financial instruments that are not traded in active market. This includes over the counter (OTC) derivatives, close ended mutual funds and debt instruments valued using observable market data such as yield, etc., of similar instruments traded in active market. All derivatives are reported at discounted values hence are included in Level 2. Borrowings have been fair valued using credit adjusted interest rate prevailing on the reporting date. Trade Receivables and Payables, that are realigned based on forward LME/LBMA price movements, have been included in Level 2 hierarchy.

Level 3: If one or more significant inputs is not based on observable market data, the instrument is included in Level 3. This is the case for unlisted equity instruments and certain debt instruments, which are valued using assumptions from market participants.

(iii) 31/03/2020 and 31/03/2019, respectively

₹ in Crore

	Unquoted Associates	Unquoted Equity Instruments	Unquoted Debt Instruments	Total
As at 01/04/2018	**14**	**24**	**292**	**330**
Acquisitions	6	-	-	6
Sale	-	-	(136)	(136)
Gains/(losses) recognised in Profit or loss	-	-	2	2
Gains/(losses) recognised in OCI	8	11	-	19
Transfer from Level 1 and 2	-	-	62	62
Transfer to Level 1 and 2	-	-	(136)	(136)
As at 31/03/2019	**28**	**35**	**84**	**147**
Acquisitions	1	-	-	1
Sale	-	-	-	-
Gains/(losses) recognised in Profit or Loss	-	-	1	1
Gains/(losses) recognised in OCI	5	(8)	-	(3)
Transfer from Level 1 and 2	-	-	189	189
Transfer to Level 1 and 2	-	-	(50)	(50)
As at 31/03/2020	**34**	**27**	**224**	**285**
Unrealised Gain/(loss) recognised in profit and loss relating to assets and liabilities held at the end of reporting period:				
As at 31/03/2020	**-**	**-**	**5**	**5**
As at 31/03/2019	**-**	**-**	**2**	**2**

Transfers from Level 1 and 2 to Level 3 and out of Level 3 for unquoted debt instruments is based on unavailability/ availability of market observable inputs as on the reporting date. The Company's policy is to recognise transfers into and transfers out of fair value hierarchy levels as at the end of the reporting period.

(iv) Sensitivity analysis of Level-3 Instruments:

₹ in Crore

	Unquoted Associates		Unquoted Equity Instruments		Unquoted Debt Instruments	
	Impact on Statement of Profit and Loss Post Tax	Impact on OCI Post Tax	Impact on Statement of Profit and Loss Post Tax	Impact on OCI Post Tax	Impact on Statement of Profit and Loss Post Tax	Impact on OCI Post Tax
Increase in Yield by 0.5%						
As at 31/03/2020	-	-	-	-	(2)	(1)
As at 31/03/2019	-	-	-	-	(1)	(0)
Increase in Price to Book Multiple by 10%						
As at 31/03/2020	-	1	-	1	-	-
As at 31/03/2019	-	*	-	6	-	-

* *Amount below rounding off convention.*

Sensitivity with decrease in yield and Price Book Multiplier by 0.5% and 10% will have equal and opposite impact in financial statement.

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

(v) Valuation Process

Some of the Company's assets and liabilities are measured at fair value for financial reporting purposes. The management of the Company has set up a team in the finance department which performs the valuation of financial assets and liabilities.

In estimating the fair value of an asset or a liability, the Company uses market-observable data to the extent it is available. Where Level 1 inputs are not available, the Company engages third party qualified valuers to perform the valuation. The team works closely with the qualified external valuers to establish the appropriate valuation techniques and inputs to the model. The team reports findings to the management of the Company to explain the cause of fluctuations in the fair value of the assets and liabilities.

(vi) Valuation techniques used for valuation of instruments categorised as Level 3

For valuation of investments in Equity Shares and associates, which are unquoted, peer comparison has been performed wherever available. Valuation has been primarily done by considering the net worth of the Company and price to book multiple to arrive at the fair value. In cases where income approach was feasible valuation has been arrived using the earnings capitalisation method. For inputs that are not observable for these instruments, certain assumptions are made based on available information. The most significant of these assumptions are the discount rate and credit spreads used in the valuation process.

For valuation of investments in debt securities categorised as Level 3, market polls which represent indicative yields are used as assumptions by market participants when pricing the asset.

There were no significant inter-relationships between unobservable inputs that materially affect fair values.

48. Financial Risk Management

The Company's activities expose it to various risks such as market risk, liquidity risk and credit risk. This section explains the risks, which the Company is exposed to and how it manages those risks.

A. Market Risk

(i) Market Risk : Commodity Price Risk

Hindalco's India Operations consist of two businesses – Copper Business and Aluminium Business. The Copper Business works under a "Custom Smelting" model wherein the focus is to improve the processing margin. The timing mis-match risk between the input and output price, which is linked to the same international pricing benchmark, is eliminated through use of derivatives. This off-set hedge model (through use of derivatives) is used to manage the timing mis-match risk for both Commodity (Copper and Precious Metals) and Currency Risk (primarily, USD/INR). The Copper Business also has a portion of View-Based exposure for both Commodity and Currency, beyond the above timing mis-match risk. Lower Copper Prices, Stronger USD/INR exchange rate and Higher "Other Input" Prices (e.g. Coal, furnace oil, natural gas, etc.) are the major price risks that adversely impact the business. Here, the Company may use derivative instruments, wherever available, to manage these pricing risks. A variety of factors, including the risk appetite of the business and price view, are considered while taking Hedging Decisions. Such view-based hedges are usually done for the next 1-15 quarters.

The Aluminium Business is a vertically integrated business model wherein the input and output pricing risks are independent of each other, i.e. – are on different pricing benchmarks, if any. Here, the Company may use derivative instruments, wherever available, to manage its pricing risks for both input and output products. Lower Aluminium Prices, Stronger USD/INR exchange rate and Higher Input Prices (e.g. Alumina, Furnace Oil) are the major price risks that adversely impact the business. Hedging decisions are based on a variety of factors, including risk appetite of the business and price view. Such hedge decisions are usually done for the next 1-12 quarters.

Embedded Derivatives

Copper concentrate is purchased on future pricing model based on month's average LME (in case of copper)/ LBMA (in case of gold and silver). Since, the value of the concentrate changes with response to change in commodity pricing indices, embedded derivatives (ED) is identified and segregated in the contract. The ED, so segregated, is treated like commodity derivative and qualify for hedge accounting. These derivatives are put into a Fair Value hedge relationship with respect to inventory.

(b) The table below summarises gain/(loss) impact of increase/decrease in the commodity price on the Company's equity and profit for the year:

₹ in Crore

Commodity Risk	Price Index	Increase in Price	Year ended 31/03/2020 Gain/ (Loss) in Statement of Profit and Loss Post Tax	31/03/2020 Gain/ (Loss) in Other Components of Equity Post Tax	31/03/2019 Gain/ (Loss) in Statement of Profit and Loss Post Tax	31/03/2019 Gain/ (Loss) in Other Components of Equity Post Tax
Aluminium	LME	10%	(1)	(200)	*	(180)
Copper	LME	10%	(222)	(47)	(385)	(2)
Gold	LBMA/ MCX	10%	(86)	-	154	(222)
Silver	LBMA	10%	(14)	-	(2)	(10)
Furnace Oil	AG Platts	10%	*	10	2	7
Coal	API IV	10%	*	1	*	3
Regasified Liquid Natural Gas	ICE Brent	10%	*	1	-	-

* *Amount below rounding off convention.*

Decrease in prices by 10% will have equal and opposite impact in financial statements.

Sensitivity analysis has been computed by stress testing the market price of the underlying price index on the outstanding derivative position as on the reporting date by assuming all other factors constant.

(ii) Market Risk : Foreign Currency Risk

Exchange rate movements, particularly the United States Dollar (USD) and Euro (EUR) against Indian Rupee (INR), have an impact on our operating results. In addition to the foreign exchange inflow from exports, the commodity prices in the domestic market are derived based on the landed cost of imports in India where LME prices and USD/INR exchange rate are the main factors. In case of conversion business, the objective is to match the exchange rate of outflows and related inflows through derivative financial instruments. With respect to Aluminium business where costs are predominantly in INR, the strengthening of INR against USD adversely affects the profitability of the business and benefits when INR depreciates against USD. The Company enters into various foreign exchange contracts to protect profitability. The Company also enters into various foreign exchange contracts to mitigate the risk arising out of foreign currency exchange rate movement in foreign currency contracts executed with foreign suppliers to procure capital items for its project activities.

(a) The Company's net exposure to foreign currency risk at the end of the reporting period, expressed in ₹, is given below:

Unhedged Foreign Currency Payable / (Receivable)

₹ in Crore

Currency Pair	As at 31/03/2020	As at 31/03/2019
USD	469	525
EUR	(2)	*
GBP	1	2
NOK	1	1
AUD	*	1
CHF	1	1
	470	**530**

* *Amount below rounding off convention.*

Assets and liabilities that are naturally hedged against future transactions are excluded for the purpose of above disclosure.

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(b) The table below summarises gain/(loss) impact of increase/decrease in the exchange rates on the Company's equity and profit for the year:

₹ in Crore

Currency Risk	Increase in Rate/Price	Year ended 31/03/2020		Year ended 31/03/2019	
		Gain/ (Loss) in Statement of Profit and Loss Post Tax	Gain/ (Loss) in Other Components of Equity Post Tax	Gain/ (Loss) in Statement of Profit and Loss Post Tax	Gain/ (Loss) in Other Components of Equity Post Tax
USD	10%	114	(1,293)	10	(922)
EUR	10%	4	5	5	4

Decrease in prices by 10% will have equal and opposite impact in financial statements.

Sensitivity analysis has been computed by stress testing the market price of the underlying currency index on the outstanding derivative position and unhedged exposure as on the reporting date by assuming all other factors constant.

(iii) Market Risk: Equity Securities Price Risk

The Company's exposure to equity securities price risk arises from movement in market price of related securities classified either as FVTOCI or FVTPL. The Company manages the price risk through diversified portfolio.

The table below summarises gain/(loss) impact of increase/decrease in the equity share price on the Company's equity and profit for the year:

₹ in Crore

Other Price Risk	Price Index	Increase Rate/Price	Year ended 31/03/2020		31/03/2019	
			Gain/ (Loss) in Statement of Profit and Loss Post Tax	Gain/ (Loss) in Other Components of Equity Post Tax	Gain/ (Loss) in Statement of Profit and Loss Post Tax	Gain/ (Loss) in Other Components of Equity Post Tax
Investment in Equity Securities	NSE	10%	-	256	-	426

Decrease in prices by 10% will have equal and opposite impact in financial statements.

Sensitivity analysis has been computed by stress testing the market price of the underlying price index on the investment portfolio as on the reporting date by assuming all other factors constant.

(iv) Market Risk: Interest Rate Risk

The Company is exposed to interest rate risk on financial liabilities such as borrowings, both short-term and long-term. It maintains a balance of fixed and floating interest rate borrowings, and the proportion is determined by current market interest rates, projected debt servicing capability and view on future interest rates. Such interest rate risk is actively evaluated, and interest rate swap is taken whenever considered necessary.

The Company is also exposed to interest rate risk on its financial assets that include fixed deposits, bonds, debentures, commercial papers, other mutual funds and liquid investments comprising mainly mutual funds (which are part of cash and cash equivalents). Since, majority of these are generally for short durations, the Company believes it has limited interest rate risk.

(a) The table below summarises gain/(loss) impact of increase/decrease in the interest rates on the Company's equity and profit for the year:

₹ in Crore

Interest Rate Risk	Increase in Rate year ended 31/3/2020	Increase in Rate year ended 31/3/2019	Year ended 31/03/2020		31/03/2019	
			Gain/ (Loss) in Statement of Profit and Loss Post Tax	Gain/ (Loss) in Other Components of Equity Post Tax	Gain/ (Loss) in Statement of Profit and Loss Post Tax	Gain/ (Loss) in Other Components of Equity Post Tax
Interest rate on floating rate borrowings	100 bps	50 bps	(62)	-	(40)	-

Decrease in rates by 100 bps/ 50 bps will have equal and opposite impact in financial statements.

Sensitivity analysis has been computed by stress testing the interest rates applicable (i.e. USD 3M Libor, SBI 3M MCLR, Axis 1M MCLR, etc.) on the amount of borrowings during the year by assuming all other factors constant.

B. Liquidity Risk

The Company determines its liquidity requirements in the short, medium and long term. This is done by drawing up cash forecast for short and medium-term requirements and strategic financing plans for long-term needs.

The Company manages its liquidity risk in a manner so as to meet its normal financial obligations without any significant delay or stress. Such risk is managed through ensuring operational cash flow while, at the same time, maintaining adequate cash and cash equivalents position. The management has arranged for diversified funding sources and adopted a policy of managing assets with liquidity in mind and monitoring future cash flows and liquidity on a regular basis. Surplus funds not immediately required are invested in certain financial assets (including mutual funds) which provide flexibility to liquidate at short notice, and are included in current investments and cash equivalents. Besides, it generally has certain undrawn credit facilities which can be accessed as and when required, which are reviewed periodically.

The Company has developed appropriate internal control systems and contingency plans for managing liquidity risk. This incorporates an assessment of expected cash flows and availability of alternative sources for additional funding, if required.

(i) Financing Arrangement

The Company had access to the following undrawn borrowing facilities at the end of the reporting period:

₹ in Crore

	As at	
	31/03/2020	31/03/2019
Bank Overdraft and other facilities (expiring within 1 year)	200	180
Bank Overdraft and other facilities (expiring beyond 1 year)	575	1,501

Undrawn limit has been calculated based on the available drawing power and sanctioned amount at each reporting date.

(ii) Maturity Analysis

The Company's financial liabilities into relevant maturity groupings based on their contractual maturities for all non-derivative financial liabilities and net settled derivative financial instruments. The amounts disclosed in the table are the contractual undiscounted cash flows. Balances due within 12 months equal their carrying balances as the impact of discounting is not significant.

₹ in Crore

Contractual maturities of financial liabilities as at 31/03/2020	Less than 1 Year	1 Year to 2 Years	2 Years to 5 Years	More than 5 Years	Total	Carrying Value
Non-Derivatives						
Borrowings-(a)	8,279	1,604	9,744	10,149	29,776	23,050
Lease Liabilities-(b)	97	63	87	563	810	317
Trade payables	3,990	-	-	-	3,990	3,990
Other financial liabilities	998	6	2	-	1,006	1,006
	13,364	**1,673**	**9,833**	**10,712**	**35,582**	**28,363**
Derivatives (net settled)						
Commodity Forwards/Swaps	154	5	-	-	159	159
Fx currency forwards	203	93	43	-	339	339
Fx Swaps	130	-	-	-	130	130
	487	**98**	**43**	**-**	**628**	**628**

₹ in Crore

Contractual maturities of financial liabilities as at 31/03/2019	Less than 1 Year	1 Year to 2 Years	2 Years to 5 Years	More than 5 Years	Total	Carrying Value
Non - Derivatives						
Borrowings (a)	3,913	1,375	9,958	11,974	27,220	19,501
Obligations under finance lease	8	8	20	8	44	33
Trade payables	5,734	1	1	-	5,736	5,736
Other financial liabilities	1,406	3	4	*	1,413	1,413
	11,061	**1,387**	**9,983**	**11,982**	**34,413**	**26,683**

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₹ in Crore

Contractual maturities of financial liabilities as at 31/03/2019	Less than 1 Year	1 Year to 2 Years	2 Years to 5 Years	More than 5 Years	Total	Carrying Value
Derivatives (net settled)						
Commodity Forwards/Swaps	60	-	-	-	60	60
Fx Currency forwards	46	1	*	-	47	47
Fx Swaps	369	62	-	-	431	430
	475	**63**	**-**	**-**	**538**	**537**

* *Amount below rounding off convention.*

(a) Includes Principal and interest payments, short-term borrowings, current portion of debt and excludes unamortised fees.

(b) Total cash outflow for leases for the year ended 31/03/2020 is ₹ 169 Crore.

C. Credit Risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligation.

Credit risk arises from cash and cash equivalents, contractual cash flows of debt investments, favourable derivative financial instruments and deposits with banks and financial institutions, as well as credit exposures to customers including outstanding receivables.

Credit risk is managed on an entity level basis. The Company has adopted a policy of dealing only with creditworthy counterparties and obtaining sufficient collateral, where appropriate, as a means of mitigating risk of financial loss from defaults. The Company invests only in those instruments issued by high rated banks/ institutions and government agencies. The Company assesses the credit quality of the customer, taking into account its financial position, past experience and other factors. The Company's investments in debt instruments and certain loans are considered to have low credit risk. The credit ratings of the investments are monitored for credit deterioration.

For some trade receivables the Company obtains security in the form of guarantees, deed of undertaking or letters of credit, which can be called upon if the counterparty is in default under the terms of the agreement.

The Company periodically monitors the recoverability and credit risks of its other financial assets including security deposits and other receivables. The Company evaluates 12-month expected credit losses for all the financial assets for which credit risk has not increased. In case credit risk has increased significantly, the Company considers life time expected credit losses for the purpose of impairment provisioning.

The Company has used a practical expedient by computing the expected credit loss allowance for trade receivables based on a provision matrix. The provision matrix takes into account historical credit loss experience and adjusted for forward-looking information. The expected credit loss allowance is based on the ageing of the days for which the receivables are due and the expected loss rates as given in the provision matrix. The provision matrix at the end of the reporting period is as follows:

(i) Summary of trade receivables and provision with ageing as at 31-Mar-20

₹ in Crore

Particulars	Past Due						
	Not Due	1 to 30 Days	31 to 60 Days	61 to 120 Days	121 to 180 Days	Over 180 Days	Total
Gross carrying amount - Domestic	1,271	147	77	47	54	72	1,668
Gross carrying amount - Export	351	106	4	2	0	1	464
Expected loss rate	0.03%	0.63%	0.85%	10.85%	0.00%	1.07%	0.41%
Expected credit loss provision	*	2	1	5	-	1	9
Loss allowance - Credit impaired - Export	-	-	-	-	-	1	1
Loss allowance - Credit impaired - Domestic	-	-	-	-	-	29	29
Total Provision	*	2	1	5	-	31	39
Carrying amount of trade receivables (net of impairment)	**1,622**	**251**	**80**	**44**	**54**	**42**	**2,093**

(ii) Summary of trade receivables and provision with ageing as at 31-Mar-19

₹ in Crore

Particulars	Past Due						
	Not Due	1 to 30 Days	31 to 60 Days	61 to 120 Days	121 to 180 Days	Over 180 Days	Total
Gross carrying amount - Domestic	1,381	94	59	32	53	155	1,774
Gross carrying amount - Export	340	41	4	-	-	1	386
Expected loss rate	0.05%	0.62%	3.46%	3.14%	0.19%	0.17%	0.24%
Expected credit loss provision	1	1	2	1	*	0	5
Loss allowance - Credit impaired - Export	-	-	-	-	-	1	1
Loss allowance - Credit impaired - Domestic	-	-	-	-	-	29	29
Total Provision	1	1	2	1	0	30	35
Carrying amount of trade receivables (net of impairment)	**1,720**	**134**	**61**	**31**	**53**	**126**	**2,125**

(iii) Reconciliation of Provision

₹ in Crore

Loss allowance as at 01/04/2018	**36**
changes in loss allowance	(1)
Loss allowance as at 31/03/2019	**35**
changes in loss allowance	4
Loss allowance as at 31/03/2020	**39**

Of the trade receivables balance as at 31/03/2020 ₹ 256 Crore (as at 31/03/2019 ₹ 346 Crore) is due from a single customer being the Company's largest customer. There are no other customers who represent more than 10% of the total balance of trade receivables.

Financial Assets at FVTPL and at FVTOCI:

The Company is also exposed to credit risks in relation to financial assets that are measured at FVTPL or at FVTOCI. The maximum exposure at the end of the reporting period is the carrying amount of these assets.

49. Capital Management

The Company's objective to manage its capital is to ensure continuity of business while, at the same time, provide reasonable returns to its various stakeholders, but keep associated costs under control. In order to achieve this, requirement of capital is reviewed periodically with reference to operating and business plans that take into account capital expenditure and strategic investments. Apart from internal accrual, sourcing of capital is done through judicious combination of equity and borrowing, both short-term and long-term. Net debt (total borrowings less current investments and cash and cash equivalents) to equity ratio is used to monitor capital. No changes were made to the objectives, policies or processes for managing capital during the years ended March 31, 2020 and March 31, 2019.

	As at	
	31/03/2020	31/03/2019
Debt Equity Ratio	0.51	0.40

As at March 31, 2020 and March 31, 2019, the Company was in compliance with all of its debt covenants for borrowings.

50. Derivative Financial Instruments:

The Company uses derivative financial instruments such as forwards, futures, swaps, options etc. to hedge its risks associated with foreign exchange fluctuation. Risks associated with fluctuation in the price of the products (copper, aluminium, coal, furnace oil and precious metals) are minimized by undertaking appropriate derivative instruments. Derivatives embedded in other contracts are treated as separate derivatives when their risks and characteristics are not closely related to their host contracts. In some cases, the embedded derivatives may be designated in a hedge relationship. The fair values of all such derivative financial instruments are recognized as assets or liabilities at the balance sheet date.

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The Company also applies hedge accounting using certain foreign currency non-derivative monetary items, which are used as hedging instruments for hedging foreign exchange risk.

(A) The Asset and Liability position of various outstanding derivative financial instruments is given bel

₹ in Crore

	Nature of Risk being Hedged	As at 31/03/2020 Liability	Asset	Net Fair Value	As at 31/03/2019 Liability	Asset	Net Fair Value
Current							
Cash flow hedges							
Commodity contracts	Price Risk Component	(72)	643	571	(5)	440	435
Foreign currency contracts	Exchange rate movement risk	(314)	20	(294)	(411)	341	(70)
Fair Value Hedge							
Commodity contracts	Price Risk Component	(78)	46	(32)	-	-	-
Foreign currency contracts	Exchange rate movement risk	-	46	46	-	-	-
Embedded Derivatives *	Risk of change in Fair Value of unpriced inventory	(11)	526	515	(249)	6	(243)
Non-designated hedges							
Commodity contracts		(4)	88	84	(55)	40	(15)
Foreign currency contracts		(19)	19	-	(3)	1	(2)
Embedded Derivatives *		-	14	14	-	-	-
Total		**(498)**	**1,402**	**904**	**(723)**	**828**	**105**
Non-Current Cash Flow Hedges							
Commodity contracts	Price Risk Component	(5)	37	32	-	30	30
Foreign currency contracts	Exchange rate movement risk	(136)	9	(127)	(63)	66	3
Non-designated hedges							
Commodity contracts		-	-	-	-	-	-
Foreign currency contracts		*	-	-	*	-	-
Total		**(141)**	**46**	**(95)**	**(63)**	**96**	**33**
Grand Total		**(639)**	**1,448**	**809**	**(786)**	**924**	**138**

* Fair Value gain of ₹ 529 Crore (31/03/2019 loss ₹ 243 Crore) is classified as part of Trade Payables.

The maturity profile for Commodity forwards ranges from April 2020 to March 2022, Foreign Exchange Forwards ranges from April 2020 to March 2025 and Foreign Exchange Swaps/options ranges from April 2020 to Jun 2020. Hedge Ratio of 1:1 is used by the Company except for its Natural Gas hedge program.

Derivative assets are part of other financial assets included in Notes 9A & 9B. Derivative liabilities are part of other financial liabilities included in Notes 20A & 20B.

(B) Outstanding position and fair value of various foreign exchange derivative financial instruments:

₹ in Crore

	Currency Pair	As at 31/03/2020 Average Exchange Rate	Notional Value (in Million)	Fair Value Gain/ (Loss) (₹ Crore)	As at 31/03/2019 Average Exchange Rate	Notional Value (in Million)	Fair Value Gain/ (Loss) (₹ Crore)
Foreign currency forwards							
Cash flow hedges							
Sell	USD_INR	79.85	1,557	(300)	74.18	657	88
Buy	USD_INR	-	-	-	71.65	125	(24)
Buy	EUR_INR	85.62	9	*	82.72	10	(1)
Total				**(300)**			**63**

		As at					
		31/03/2020			31/03/2019		
	Currency Pair	Average Exchange Rate	Notional Value (in Million)	Fair Value Gain/ (Loss) (₹ Crore)	Average Exchange Rate	Notional Value (in Million)	Fair Value Gain/ (Loss) (₹ Crore)
Fair Value Hedges							
Buy	USD_INR	73.18	132	46	-	-	-
Total				**46**			**-**
Non-Designated							
Buy	EUR_INR	85.44	7	*	84.86	6	(1)
Buy	GBP_INR	93.21	-	*	95.49	-	*
Buy	USD_INR	75.83	247	12	69.25	31	1
Sell	USD_INR	75.56	157	(12)	69.92	130	(2)
Total				**-**			**(2)**
Foreign Currency swaps Cash flow hedges							
Sell	USD_INR	63.51	118	(109)	63.69	589	(130)
Total				**(109)**			**(130)**
Foreign currency options							
Cash flow hedges							
Sell	USD_INR	72.79	50	(12)	-	-	-
Total				**(12)**			**-**

* *Amount below rounding off convention.*

(C) Outstanding position and fair value of various foreign exchange non-derivative financial instruments used as hedging instruments:

₹ in Crore

		As at					
		31/03/2020			31/03/2019		
	Currency Pair	Average Exchange Rate	Notional Value (in Million)	Fair Value Gain/ (Loss) (₹ Crore)	Average Exchange Rate	Notional Value (in Million)	Fair Value Gain/ (Loss) (₹ Crore)
Foreign currency monetary items Cash flow hedges							
Debt	USD_INR	71.52	659	(254)	71.87	434	114
Liability for Copper Concentrate	USD_INR	73.86	267	(47)	69.91	350	25
Total				**(301)**			**139**

(D) Outstanding position and fair value of various commodity derivative financial instruments:

(i) Outstanding position and fair value of various commodity derivative financial instruments as at March 31, 2020:

₹ in Crore

		Currency	Average Price/ Unit	Quantity	Unit	Notional Value (in Millions)	Fair Value Gain/(Loss) (₹ Crore)
Commodity Futures/Forwards/Swaps Cash Flow Hedges							
Aluminium	Sell	USD	1,864.28	265,500	MT	495	622
Copper	Sell	USD	5,261.20	19,650	MT	103	46
Furnace Oil	Buy	USD	257.24	118,867	MT	31	(65)
Coal	Buy	USD	72.00	20,000	MT	1	*
Natural Gas	Buy	USD	34.55	45,500	BBL	2	*
Total							**603**

* *Amount below rounding off convention.*

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₹ in Crore

		Currency	Average Price/ Unit	Quantity	Unit	Notional Value (in Millions)	Fair Value Gain/(Loss) (₹ Crore)
Fair Value Hedges							
Gold	Sell	INR	4,154,052	4,808	KGS	19,966	(77)
Silver	Sell	USD	17.59	1,709,254	TOZ	30	45
Total							**(32)**
Non-Designated Hedges							
Aluminium	Buy	USD	1,613.33	18,350	MT	30	(15)
Aluminium	Sell	USD	1,875.43	18,150	MT	34	50
Copper	Buy	USD	4,989.39	8,150	MT	41	(3)
Copper	Sell	USD	5,275.19	12,750	MT	67	32
Gold	Buy	INR	4,238,148	2,885	KGS	12,227	27
Silver	Buy	USD	13.06	201,115	TOZ	3	1
Silver	Sell	USD	18.28	177,427	TOZ	3	6
Furnace Oil	Buy	USD	279.34	13,962	MT	4	(12)
Furnace Oil	Sell	USD	170.58	12,830	MT	2	1
Coal	Buy	USD	75.61	50,000	MT	4	(2)
Coal	Sell	USD	68.75	50,000	MT	3	(1)
Natural Gas	Buy	USD	34.55	6,500	BBL	-	*
Total							**84**
Embedded derivatives							
Fair Value Hedges							
Copper	Sell	USD	5,726.45	84,801	MT	486	501
Gold	Sell	USD	1,595.69	42,835	TOZ	68	7
Silver	Sell	USD	16.99	294,397	TOZ	5	7
Total							**515**
Non-Designated Hedges							
Copper	Sell	USD	5,654.37	2,536	MT	14	14
Total							**14**

* *Amount below rounding off convention.*

(ii) Outstanding position and fair value of various commodity derivative financial instruments as at 31st March, 2019:

₹ in Crore

		Currency	Average Price/ Unit	Quantity	Unit	Notional Value in Millions	Fair Value Gain/(Loss) ₹ in Crore
Commodity Futures/Forwards/Swaps Cash Flow Hedges							
Aluminium	Sell	USD	2,224.09	208,600	MT	464	383
Copper	Sell	USD	6,493.34	800	MT	5	*
Gold	Sell	INR	3,279,046	6,843	KGS	22,439	66
Silver	Sell	USD	16.06	1,513,065	TOZ	24	8
Furnace Oil	Buy	USD	341.20	50,000	MT	17	12
Coal	Buy	USD	81.00	90,000	MT	7	(4)
Total							**465**
Non-Designated Hedges							
Aluminium	Buy	USD	1,881.27	33,725	MT	63	4
Aluminium	Sell	USD	1,987.75	33,725	MT	67	20
Copper	Buy	USD	6,358.94	7,075	MT	45	6
Copper	Sell	USD	6,510.95	12,625	MT	82	2
Gold	Buy	INR	3,288,031	4,474	KGS	14,711	(51)

₹ in Crore

		Currency	Average Price/ Unit	Quantity	Unit	Notional Value in Millions	Fair Value Gain/(Loss) ₹ in Crore
Silver	Buy	USD	15.43	217,134	TOZ	3	*
Silver	Sell	USD	15.55	69,015	TOZ	1	*
Furnace Oil	Buy	USD	363.67	9,998	MT	4	4
Furnace Oil	Sell	USD	417.39	9,998	MT	4	*
Total							**(15)**
Embedded derivatives							
Fair Value Hedges							
Copper	Sell	USD	6,105.30	121,896	MT	755	(246)
Gold	Sell	USD	1,306.69	33,123	TOZ	43	2
Silver	Sell	USD	15.56	351,099	TOZ	5	1
Total							**(243)**

* *Amount below rounding off convention.*

(E) Details of amount held in OCI and the period during which these are going to be released and affecting Statement of Profit & Loss:

₹ in Crore

Cash Flow Hedges	As at 31/03/2020 Closing Value in Hedging Reserve	Release In less than 12 Months	Release After 12 Months	As at 31/03/2019 Closing Value in Hedging Reserve	Release In less than 12 Months	Release After 12 Months
	Gain/ (Loss)	Gain/ (Loss)	Gain/ (Loss)	Gain/ (Loss)	Gain/ (Loss)	Gain/ (Loss)
Commodity Forwards/Futures/Swaps						
Aluminium	622	622	-	383	357	26
Copper	46	46	-	*	*	-
Gold	-	-	-	*	*	-
Silver	-	-	-	8	8	-
Furnace Oil	(64)	(63)	(1)	12	12	-
Coal	*	*	-	(4)	(4)	-
Natural Gas	*	*	-	-	-	-
	604	**605**	**(1)**	**399**	**373**	**26**
Non-Derivative Financial Instruments						
Debt	(254)	(254)	-	114	114	-
Liability for Copper Concentrate	(59)	(59)	-	20	20	-
Foreign Currency Forwards						
USD_INR	(300)	(172)	(128)	88	23	65
EUR_INR	(1)	(1)	-	(1)	*	(1)
Foreign Currency Swaps						
USD_INR	(139)	(139)	-	(317)	(252)	(65)
Foreign Currency Options						
USD_INR	(10)	(10)	-	-	-	-
	(763)	**(635)**	**(128)**	**(96)**	**(95)**	**(1)**
	(159)	**(30)**	**(129)**	**303**	**278**	**25**
Deferred Tax on above	57	10	47	(105)	(97)	(8)
Total	**(102)**	**(20)**	**(82)**	**198**	**181**	**17**

* *Amount below rounding off convention.*

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

₹ in Crore

Cost of Hedging Reserve	As at 31/03/2020				As at 31/03/2019	
	Release			Closing Value in Hedging Reserve	Release	
	Closing Value in Hedging Reserve	In less than 12 Months	After 12 Months		In less than 12 Months	After 12 Months
	Gain/(Loss)	Gain/ (Loss)	Gain/ (Loss)	Gain/ (Loss)	Gain/ (Loss)	Gain/ (Loss)
Commodity Forwards/Futures/Swaps						
Silver	1	1	-	-	-	-
Foreign currency Swaps						
USD_INR	184	184	-	772	615	157
Foreign currency Options						
USD_INR	(2)	(2)	-	-	-	-
	183	**183**	**-**	**772**	**615**	**157**
Deferred Tax on above	(64)	(64)	-	(270)	(215)	(55)
Total	**119**	**119**	**-**	**502**	**400**	**102**

(F) Gain/(loss) recognized in OCI and recycled:

i. Amount of gain/(loss) recognized in Hedging Reserve and recycled during the year 2019-20:

₹ in Crore

	Opening Balance	Recycled: Net Amount Recognised	Recycled: Net Amount to P&L	Recycled: Net Amount added to Non-Financial Assets	Recycled: Total Amount Recycled	Closing Balance before Tax
Cash Flow Hedges						
Commodity	399	805	621	(21)	600	604
Forex	(96)	(1,077)	(409)	(1)	(410)	(763)
Total	**303**	**(272)**	**212**	**(22)**	**190**	**(159)**
Deferred Tax on above	(105)	96	(74)	8	(66)	57
Total	**198**	**(176)**	**138**	**(14)**	**124**	**(102)**

₹ in Crore

	Opening Balance	Recycled: Net Amount Recognised	Recycled: Net Amount to P&L	Recycled: Net Amount added to Non-Financial Assets	Recycled: Total Amount Recycled	Closing Balance before Tax
Cost of Hedging Reserve						
Commodity	-	3	2	-	2	1
Forex	772	94	684	-	684	182
Total	**772**	**97**	**686**	**-**	**686**	**183**
Deferred Tax on above	(270)	(34)	(240)	-	(240)	(64)
Total	**502**	**63**	**446**	**-**	**446**	**119**

ii. Amount of gain/(loss) recognized in Hedging Reserve and recycled during the year 2018-19:

₹ in Crore

		Recycled				
	Opening Balance	Net Amount Recognised	Net Amount to P&L	Net Amount added to Non-Financial Assets	Total Amount Recycled	Closing Balance before Tax
Cash Flow Hedges						
Commodity	(219)	781	162	1	163	399
Forex	216	(983)	(671)	-	(671)	(96)
Total	**(3)**	**(202)**	**(509)**	**1**	**(508)**	**303**
Deferred Tax on above	2	71	178	-	178	(105)
Total	**(1)**	**(131)**	**(331)**	**1**	**(330)**	**198**

₹ in Crore

		Recycled				
	Opening Balance	Net Amount Recognised	Net Amount to P&L	Net Amount added to Non-Financial Assets	Total Amount Recycled	Closing Balance before Tax
Cost of Hedging						
Commodity	-	(42)	(42)	-	(42)	-
Forex	995	200	423	-	423	772
Total	**995**	**158**	**381**	**-**	**381**	**772**
Deferred Tax on above	(348)	(55)	(133)	-	(133)	(270)
Total	**647**	**103**	**248**	**-**	**248**	**502**

(G) Amount of gain/ (loss) recycled from Hedging Reserve and reference of the line item in Statement of Profit and Loss where those amounts are included:

₹ in Crore

			Year ended	
Note No.	Note Description	Nature of Products	31/03/2020	31/03/2019
26	Revenue From Operations	Aluminium Products	1,010	232
26	Revenue From Operations	Copper and Copper Products	2	(400)
26	Revenue From Operations	Precious Metals	(116)	40
36	Other Expenses	Gain/(Loss) on Derivatives	2	-
			898	**(128)**

(H) The adjustment as a part of the carrying value of inventories arising on account of fair value hedges is as follows:

Increase/ (Decrease) in Inventory Value

₹ in Crore

Inventory Type	Year ended					
	31/03/2020			31/03/2019		
	Raw Materials	WIP and Finished Goods	Total	Raw Materials	WIP and Finished Goods	Total
Copper	(501)	-	(501)	251	-	-
Gold	(7)	6	(1)	(2)	-	-
Silver	(7)	(43)	(50)	(1)	-	-
	(515)	**(37)**	**(552)**	**248**	**-**	**-**

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

(I) The Company's hedging policy only allows for effective hedge relationships to be established. The effectiveness portion of hedge is recognised in OCI, while ineffective portion of hedge is recognised immediately in the statement of profit and loss. The Company uses hypothetical derivative method to assess effectiveness. Ineffectiveness may arise on account of differences in critical terms and credit risk of the hedging instrument and the hedged item.

The amount of gain/ (loss) recognised in the statement of profit and loss on account of hedge ineffectiveness is as follows:

₹ in Crore

	Year ended	
Type of Hedges	**31/03/2020**	**31/03/2019**
Cash Flow Hedges	(113)	(36)
Fair Value Hedges	(12)	-
	(125)	**(36)**

51. Leases

A. Lease liabilities

₹ in Crore

	As at			
	31/03/2020		31/03/2019	
	Non- Current	Current	Non- Current	Current
Lease liabilities against ROU assets	241	76	-	-
	241	76	-	-

B. Transition Disclosures for Ind AS 116

Effective April 1, 2019 the Company has adopted Ind AS 116 Leases using modified retrospective approach in accordance with the modified retrospective transition method, the comparatives have not been retrospectively adjusted. The adoption of Ind AS 116 has the following impact.

(i) Lease Liabilities Reconciliation

₹ in Crore

Particulars	Amount
Total Operating lease commitments disclosed on 31/03/2019	**87**
Effect of discounting	(17)
Finance lease liabilities as on 31/03/2019	33
Adjustments as a result of a different treatment of extension and termination option	127
Lease commitments not included in opening	75
Total Lease Liabilities as at 01/04/2019	**305**

Effect of change in accounting policy on the Financial Statements

(ii) Impact on Financial Statements

₹ in Crore

Particulars	Increase/ (Decrease)	Amount
Property, Plant and equipment	(Decrease)	(19)
Capital Work-in-Progress	(Decrease)	(2)
Right of Use assets	Increase	877
Other Non-Financial Assets	(Decrease)	(600)
Total		**256**

₹ in Crore

Particulars	Increase/ (Decrease)	Amount
Lease Liabilities	Increase	305
Long-term Borrowings	(Decrease)	(33)
Other Financial Liabilities	(Decrease)	(2)
Retained Earnings #	(Decrease)	(14)
Total		**256**

Deferred Tax Impact recognised in Retained Earnings on transition date is ₹ 5 Crore, refer Note 22.

(iii) The Company recognized ROU assets for the following asset categories:

₹ in Crore

Right of Use Assets Category	Amount
Land	712
Buildings	70
Plant and Machinery	6
Vehicles and Aircraft	8
Railway Wagons	41
Railway Sidings	21
Total	**858**

(iv) The Company has reclassified Finance Lease Assets from property, plant and equipment to Right of use assets pursuant to adoption of Ind AS 116.

₹ in Crore

Particulars	As at 31/03/2019		
	Original Cost	Accumulated Depreciation	Carrying Value
Leased Plant and Machinery	50	38	12
Leased Furniture and Fixtures	10	3	7
Total	**60**	**41**	**19**

(v) On transition to Ind AS 116 the weighted average incremental borrowing rate applied to lease liabilities recognised under Ind AS 116 was 8.94%.

(vi) Practical expedients used by the entity in adoption of Ind AS 116

(a) The Company has not re-assessed whether a contract is or contains a lease at the date of initial application.

(b) The Company has utilised hindsight in determining the lease terms where contracts contained options to extend or terminate the lease.

(c) Except for land leases, initial direct costs are excluded from the measurement of right-of-use assets at the date of initial application.

(d) The Company has used a single discount rate to a portfolio of leases with reasonable similar characteristics based on the remaining lease term as at the date of initial application.

(e) The Company has relied on its previous assessment on whether leases are onerous.

The Company has carried forward the amount of the Finance Lease Assets (reclassified as ROU asset) and Lease Liability recognized under Ind AS 17 immediately before the date of initial application.

(vii) The operating cash flows for the year ended March 31, 2020 has increased by ₹ 77 Crore and the financing cash flows have decreased by ₹ 77 Crore as repayment of lease liabilities and related interest has been classified as cash flows from financing activities.

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

(viii) The Company leases land, buildings including storage premises, plant and machinery (including material handling equipment), vehicles and aircrafts certain furniture and fixtures, office equipment.

(ix) The Company has applied IndAS 116 using Modified Approach, with the cumulative effect of initially applying the new standard recognized at the date of initial application in the following manner:

Leasehold Land and Railway Sidings – recognized ROU asset at an amount equal to the lease liability (discounted using the Company's incremental borrowing rate at the date of initial application based on the remaining lease term as at the date of initial application), adjusted by the amount of prepayments relating to that lease recognized in the balance sheet immediately before the date of initial application.

Other Assets – recognized ROU assets at its carrying amount as if the standard had been applied since the commencement date but discounted using the Company's incremental borrowing rate at the date of initial application based on the remaining lease term as at the date of initial application.

C. Operating Lease Disclosures under earlier Ind AS 17

The Company has entered into various leasing arrangements under operating lease:

(a) As a Lessee

The Company has entered in operating leases for land, material handling facilities, storage, rental premise contracts under both cancellable and non-cancellable in nature. The rent for cancellable and non-cancellable operating leases included in the statement of profit and loss for the year ended 31/03/2019 ₹ 91 Crore.

₹ in Crore

	As at 31/03/2019
Details of future minimum lease payments	
Future aggregate minimum lease payment under Non-cancellable Operating Leases:	
No later than 1 year	18
Later than 1 year and no later than 5 years	47
Later than 5 years	22
	87

(b) Operating Lease as Lessor

The Company has entered into operating leases for certain of its premises. All of these leases are cancellable in nature (Refer Note 27).

52. There was an incident in Red Mud (Bauxite Residue) storage area connected to the Alumina plant situated at Muri, Jharkhand, on April 9, 2019. The incident involved a spillage in the red mud cake storage area. The operations of the plant remained suspended following the incident. The unit is in the business of producing and supplying Aluminium Hydrate, primarily to Aluminium smelters of the Company for captive consumption. The operation of the plant remained suspended till December 23, 2019. There was no material impact.

53. COVID-19 Impact on the Financial Statement

The spread of COVID-19 has severely impacted businesses around the globe. In many countries, including India, there has been severe disruption to regular business operations due to lock-downs, disruptions in transportation, supply chain, travel bans, quarantines, social distancing and other emergency measures. Certain plants of the Company which had shut down operations during lock down period have since resumed operations in a phased manner.

The Company has made detailed assessment of its liquidity position for a period of at least one year from the balance sheet date, of the recoverability and carrying values of its assets comprising property, plant and equipment, Intangible assets, Trade Receivables, Inventory, investments, other current and non-current assets and ability to pay its liabilities as they become due and effectiveness of internal financial controls at the balance sheet date, and has concluded that there are no material impact or adjustments required in the stand-alone financial statements.

Management believes that it has taken into account all the possible impact of known events till the date of approval of its financial statements arising from COVID-19 pandemic in the preparation of the stand-alone financial statements. Management is of the view that considering the nature of its business operations, existing customer and supplier relationships and its market position, impact on its business operations, if any, arising from COVID-19 pandemic is not expected to be significant. The impact of COVID-19 pandemic may be different from that estimated as at the date of approval of these financial results. The Company will continue to monitor any material changes to future economic conditions.

54. Note on acquisition of Aleris Corporation (Aleris)

On April 14, 2020, the Company completed the acquisition of Aleris Corporation (Aleris), a global supplier of rolled aluminium products through its wholly owned subsidiary Novelis in USA for payments made or to be made of ₹ 21,575 Crore ($2.8 Billion). By virtue of this acquisition, Aleris has now become a wholly owned subsidiary of Novelis, USA.

As a result of the antitrust review processes required for approval of the acquisition, the Company is obligated to divest Aleris' European and North American automotive assets, including its plants in Duffel, Belgium (Duffel) and Lewisport, Kentucky (Lewisport).

In November 2019, the Company entered into a definitive agreement with London based Liberty House GHG (Liberty), for the sale of Duffel, which remains subject to approval from the State Administration for Market Regulation in China (SAMR) though we received conditional antitrust approval from SAMR in December 2019.

On March 9, 2020, the arbitrator assigned to resolve the dispute ruled in favour of the United States Department of Justice (DOJ). As a consequence of that ruling, we are now required to divest Lewisport, and we are currently in discussions with the DOJ regarding the allowed timeframe to consummate this sale.

Once a buyer for Lewisport has been identified, completion of the divestiture will be conditioned on the receipt of required regulatory approvals and will be subject to other customary closing conditions. Although the Company believes that the Lewisport asset group is marketable in its current condition and we intend to run a competitive sales process, there is no assurance that it will be possible to fully recover the investment made by the Company in these assets. In addition, in light of current adverse market conditions, the Company may not be able to complete the divestiture of Lewisport on favourable terms, in a timely manner, or at all. Delays or difficulties in divesting Duffel or Lewisport may result in additional expenditures of funds and management resources which would reduce the financial benefit that is expected from acquisition of Aleris and could have an adverse effect on the financial condition, results of operations and cash flows.

The Company is legally required to hold Duffel and Lewisport assets separately from the rest of Aleris assets and maintain them as viable and competitive till the sales are completed.

Presently, Novelis is in the process of finalizing the accounting for acquisition of Aleris, including allocation of purchase consideration to identifiable assets and liabilities.

55. Gare Palma IV/4 (GP-4) and Gare Palma IV/5 (GP-5) coal mines were acquired by the Company through auction conducted by the Nominated Authority (NA) constituted under the Ministry of Coal, Government of India. The Company was required to achieve certain Efficiency Parameters and reach their Peak Rated Capacity (PRC) during 2015-16. Performance Security in the form of Performance Bank Guarantees (PBG) of ₹ 318 Crore and ₹ 369 Crore for GP-4 and GP-5, respectively, were provided by the Company to NA in this regard.

Due to the various delays on the part of NA, PRC was achieved by the Company for both the mines during FY 2016-17. Having satisfied itself about achievement of Efficiency Parameters/PRC, NA returned the PBG in respect of GP-4 on June 19, 2017. However, in a volte face action, vide a letter dated 25th April, 2018, NA imposed a penalty equal to 20% of PBG amounting to ₹ 64 Crore for GP-4 and ₹ 74 Crore (refer Note 10) for GP-5. As the PBG for GP-5 was still with NA, it also appropriated an amount equal to the penalty from the PBG.

NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

The above actions were contested by the Company and the Hon'ble Chhattisgarh High Court at Bilaspur has already given its judgment in favour of the Company in the matter related to GP-5. As per the judgment, Hon'ble High Court has asked NA to refund the amount apportioned by them and return the PBG to the Company. The Company's appeal to quash the demand raised by NA in case of GP-4 is yet to be decided and is pending before the Mines Tribunal.

The Company further received two Show-Cause Notices dated December 3, 2019 from NA for shortfall in production of coal at the above mines for FY 2017-18 and FY 2018-19 compared to their respective mining plans. Through these notices, the NA has asked the Company to show cause why action should not be taken against the Company for recovery of an amount equal to the appropriation amount for the said defaults provided in Clause 6.3 and 10.3 of the Coal Mine Development and Production Agreement.

The Company has furnished its replies to both the notices vide letters dated December 17, 2019 contesting that the NA has no right under the aforesaid clauses to recover any amount from the Performance Security.

The NA has neither issued any further letter to the Company nor raised any demand against the Company in this regard.

56. Additional Information

A. As per Section 135 of Companies Act, 2013, a Corporate Social Responsibility Committee has been formed. As per the provisions of Companies Act 2013, amount not less than ₹ 38 Crore (year ended 31/03/2019 ₹ 30 Crore) should have been incurred during the year under CSR. The Company has incurred cash expenses amounting to ₹ 39 Crore (year ended 31/03/2019 ₹ 34 Crore), in line with the CSR policy which is in conformity with the activities specified in Schedule VII of the Companies Act 2013.

B. Details of loans given, investments made and guarantee given covered under Section 186(4) of the Companies Act, 2013:

i. Details of investments made have been given as part of Note '5' Investments in Subsidiary, Note '6' Investments in Associates and Notes '7A and 7B' Other Investments.

ii. Loans and Financial Guarantees given below:

₹ in Crore

Name of the Company	Relationship	Nature of Transaction	As at 31/03/2020	As at 31/03/2019
Details of Loans				
Aditya Birla Science and Technology Company Private Limited	Associate	Loan	46	51
Suvas Holding Limited	Subsidiary	Loan	9	11
Details of Guarantee				
Dahej Harbour and Infrastructure Limited	Subsidiary	Performance Guarantee	5	5

iii. Disclosure relating to amount outstanding at year end and maximum outstanding during the year of loans and advances, in nature of loan, required under SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, are given below:

₹ in Crore

Name of the Company	As at 31/03/2020	Maximum Outstanding during 2019-20	As at 31/03/2019	Maximum Outstanding during 2018-19
Associates:				
Aditya Birla Science and Technology Company Private Limited	46	51	51	51
Suvas Holdings Limited	9	11	11	11

57. Figures for the previous year have been regrouped / reclassified, wherever necessary, to conform to the current year's presentation.

As per our report annexed.

For Price Waterhouse & Co Chartered Accountants LLP
Firm Registration No. 304026E/E-300009

Sumit Seth
Partner
Membership Number: 105869

For and on behalf of the Board of Hindalco Industries Limited

Praveen Kumar Maheshwari
Whole-time Director &
Chief Financial Officer
DIN-00174361

Satish Pai
Managing Director
DIN-06646758

Anil Malik
Company Secretary

K N Bhandari
Director
DIN-00026078

Place : Mumbai
Dated : June 12, 2020

INDEPENDENT AUDITOR'S REPORT

To the Members of Hindalco Industries Limited

Report on the Audit of the Consolidated Financial Statements

Opinion

1. We have audited the accompanying consolidated financial statements of Hindalco Industries Limited (hereinafter referred to as the 'Holding Company') and its subsidiaries (Holding Company and its subsidiaries together referred to as "the Group"), its joint ventures and associate companies (refer Note 53 to the attached consolidated financial statements), which comprise the consolidated Balance Sheet as at March 31, 2020 and the consolidated Statement of Profit and Loss (including Other Comprehensive Loss), the consolidated Statement of Changes in Equity and the consolidated Statement of Cash Flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies and other explanatory information prepared based on the relevant records (hereinafter referred to as "the consolidated financial statements").

2. In our opinion and to the best of our information and according to the explanations given to us, the aforesaid consolidated financial statements give the information required by the Companies Act, 2013 ("the Act") in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, of the consolidated state of affairs of the Group, its joint ventures and associate companies as at March 31, 2020, of consolidated total comprehensive income (comprising of profit and other comprehensive loss), consolidated changes in equity and its consolidated cash flows for the year then ended.

Basis for opinion

3. We conducted our audit in accordance with the Standards on Auditing (SAs) specified under Section 143(10) of the Act. Our responsibilities under those Standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group, its joint ventures and associate companies in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in India in terms of the Code of Ethics issued by ICAI and the relevant provisions of the Act, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained and the audit evidence obtained by the other auditors in terms of their reports referred to in sub-paragraph 16 and 17 of the Other Matters paragraph below, other than the unaudited financial statements/ financial information as certified by the management and referred to in sub-paragraph 18 of the Other Matters paragraph below, is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

4. Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matters	How our audit addressed the key audit matters
A. Measurement of inventory quantities of coal, bauxite, copper concentrate and work in progress consisting of precious metals Refer Notes 4(l) and 16 (d) to the consolidated financial statements. Of the Holding Company's ₹ 11,225 crores of inventory on hand as at March 31, 2020, ₹ 3,255 crores of inventory comprised of coal, bauxite, copper concentrate and work in progress consisting of precious metals. This was determined a key audit matter, as the measurement of these inventory quantities lying at the Holding Company's yards, smelters and refineries is complex and involves significant judgement and estimate resulting from measuring the surface area, dip measurement of materials in tanks/silos, etc.	Our audit procedures relating to the measurement of inventory quantities of coal, bauxite, copper concentrate and work in progress of precious metals included the following: • Understanding and evaluating the design and operating effectiveness of controls over physical count and measurement of such inventory; • Evaluation of competency and capabilities of management's experts; • Physically observing inventory measurement and count procedures carried out by management using experts, to ensure its appropriateness and completeness and performing roll back procedures; and

Key audit matters	How our audit addressed the key audit matters
The Holding Company uses internal and external experts, as applicable to perform volumetric surveys and assessments, basis which the quantity for these inventories is estimated.	• Obtaining and inspecting, inventory measurement and physical count results for such inventories, including assessing and evaluating the results of analysis performed by management in respect of differences between book and physical quantities. Based on the above procedures performed, we did not identify any material exceptions in the measurement of inventory quantities of coal, bauxite, copper concentrate and work in progress inventories consisting of precious metals.
B. Provisions recognised and contingencies disclosed with regard to certain legal and tax matters Refer Notes 4(k), 13, 15, 26, and 48 to the consolidated financial statements. As at March 31, 2020, the Holding Company has paid deposits under protest, recognised provisions and disclosed contingent liabilities towards various legal and tax matters. There are number of legal, direct and indirect tax cases against the Holding Company, including environmental, mining, local and state levies, income tax holidays, availing of input tax credits etc. This is a key audit matter, as evaluation of these matters requires management judgement and estimation, interpretation of laws and regulations and application of relevant judicial precedents to determine the probability of outflow of economic resources for recognising provisions and making related disclosures in the financial statements	Our audit procedures relating to provisions recognised and contingencies disclosed regarding certain legal and tax matters included the following: • Understanding and evaluating the design and operating effectiveness of controls over the recognition, measurement, presentation and disclosures made in the financial statements in respect of these matters; • Obtaining details of legal and tax matters, inspecting the supporting documents to evaluate management's assessment of probability of outcome and the magnitude of potential loss, and testing related provisions and disclosures in the financial statements; • Reviewing orders and other communication from regulatory authorities and management responses thereto; • Reviewing management expert's legal advice and opinion as applicable, obtained by the Holding Company's management for evaluating certain legal matters and evaluating competence and capabilities of the experts; and • Using auditor's experts for assistance in evaluating certain significant and complex direct and indirect tax matters. Based on the above procedures performed, we did not identify any material exceptions in the provisions recognised and contingent liabilities disclosed in the financial statements with regard to such legal and tax matters.
C. Accounting of derivatives and hedging transactions Refer Notes 2 II (R), 12, 25 and 51 to the consolidated financial statements. Holding Company's financial performance is significantly impacted by fluctuations in prices of aluminium, copper, gold, silver, furnace oil, coal, foreign exchange rates and interest rates. The Holding Company takes a structured approach to the identification, quantification and hedging of such risks by using various derivatives (e.g. forwards, swaps, futures and embedded	Our audit procedures related to accounting of derivative and hedging transactions included the following: • Understanding and evaluating the design and operating effectiveness of controls over accounting of derivative and hedging transactions; • Testing qualifying criteria for hedge accounting in accordance with Ind AS 109, including: √ Understanding the risk management objectives and strategies for different types of hedging programs;

INDEPENDENT AUDITOR'S REPORT

Key audit matters	How our audit addressed the key audit matters
derivatives) in commodities and/or foreign currencies. These hedges are designated as either cash flow or fair value hedges, and in certain cases remains non-designated. As at March 31, 2020, the carrying value of the Holding Company's derivatives included derivative assets amounting to ₹ 957 crores and derivative liabilities of ₹ 630 crores. Derivative and hedge accounting is considered a key audit matter, because of its significance to the financial statements, the volume, nature and types of hedging relationships, including complexity involved in the application of hedge accounting principles in accordance with Ind AS 109, Financial Instruments.	√ Evaluating that the hedging relationship consists only of eligible hedging instruments and hedged items; √ Using auditor's expert for assistance in verifying hedge effectiveness requirements of Ind AS 109, Financial Instruments, including the economic relationship between the hedged item and the hedging instrument. • Evaluating competence and capabilities of the auditor's experts; • Testing appropriateness of hedge accounting to qualified hedge relationships i.e. cash flow and fair value hedges; and • Testing related presentation and disclosures in the financial statements. Based on the above procedures performed, we did not identify any material exceptions in the amounts, presentation and disclosures made in the financial statements relating to accounting of derivatives and hedging transactions.
D. Assessment of indication of impairment and the recoverable amount (RA) of certain Cash Generating Units (CGUs) within the Aluminium segment Refer Notes 4(c), 6, 9 and 44 to the consolidated financial statements. External sources of information such as changes in the market and economic environment, including the carrying amount of the net assets of the Holding Company being more than its market capitalisation as at March 31, 2020, decline in the Aluminium metal prices and impact of Covid 19 pandemic required Holding Company's management to assess whether there is any indication of impairment and therefore make an estimate of RA of certain CGUs within Aluminium segment having carrying value of net assets of ₹ 30,290 crores as at March 31, 2020. Based on such indications, impairment testing was performed by the Holding Company's management in accordance with the requirements of Ind AS 36, Impairment of Assets. Management has calculated the RA of the CGUs using value in use method. This is a key audit matter, because of the significant carrying value of these CGUs and the estimation uncertainty in assumptions used for calculating the RA of these CGUs such as future metal prices, foreign exchange rates, discount rate, input costs and rate of growth over the estimation period.	Our audit procedures related to assessment of indication of impairment and RA of these CGUs included the following: • Understanding and evaluating the design and operating effectiveness of controls for identification and assessment of any potential impairment, including determining the carrying amount and RA of the CGUs; • Using auditor's experts for testing appropriateness of the method and model used for determining RA, mathematical accuracy of the model's calculations and evaluating reasonableness of key assumptions used in future cash flow projections such as future metal prices, foreign exchange rates, discount rate, input costs and rate of growth over the estimation period; • Evaluating competence and capabilities of the auditor's experts; • Performing sensitivity analysis over key assumptions to corroborate that RA of these CGUs is within a reasonable range, including the impact of Covid 19 pandemic assessment; and • Testing related presentation and disclosures in the financial statements. Based on the above procedures performed, we did not note any material exceptions in the management's assessment of the indication of impairment and conclusion that the RA of these CGUs within the Aluminium segment were not lower than their respective carrying amounts as at March 31, 2020.

5. The following information related to Key Audit Matter was included in the Memorandum of Work Performed dated June 10, 2020 issued by other auditor, whose audit report contained an unmodified audit opinion on the consolidated financial information of Novelis Inc. ("Novelis"), a subsidiary of the Holding Company, which has been reproduced by us as under:

Key audit matters	How our audit addressed the key audit matters
Goodwill impairment assessment The Company's consolidated goodwill balance was ₹ 20,113 crores (USD 2.6 Billion) at March 31, 2020. The Company conducts an impairment test as of the last day of March each year, or more frequently if events or circumstances indicate that the carrying value of goodwill may be impaired. Potential impairment is identified by comparing the recoverable value of a cash generating unit to its carrying value. The Company estimates the recoverable value based on fair value less cost to sell approach. The determination of recoverable value using the income and market approaches requires the use of estimates and assumptions related to selection of multiples and control premium for the market approach and sales volumes and prices, costs to produce, capital spending and discount rate for the income approach. Significant judgment is required by management when developing the fair value measurement of the cash generating units, which in turn led to significant auditor judgment, significant audit effort, and a high degree of auditor subjectivity in performing procedures to evaluate management's significant assumptions, including multiples, control premium for the market approach and sales volumes and prices, costs to produce, capital spending, and the discount rate for the income approach. Also, we involved professionals with specialized skill and knowledge to assist us. Refer Notes 13 and 40 in the consolidated financial information of Novelis.*	Our procedures included, among others: We tested the effectiveness of controls relating to management's goodwill impairment assessment, including controls over the valuation of the Company's cash generating units. Testing management's process for developing the fair value of the cash generating unit, evaluating the appropriateness of the discounted cash flow model used in the income approach, and evaluating the reasonableness of significant assumptions used by management in the income and market approaches. We evaluated the assumptions related to sales volumes and prices, costs to produce, and capital spending by considering the past performance of the cash generating units to forecasts, and whether they were consistent with evidence obtained both from external sources and in other areas of the audit. We utilised professionals with specialized skill and knowledge to assist in evaluating the appropriateness of the Company's discounted cash flow models, assessing the reasonableness of the discount rate and selection of multiples, developing an independent estimate of the control premium and comparing our independent estimate of the control premium to management's estimate. As a result of our procedures performed, no misstatements were noted.

* These notes are included in Note 4(b) and 8 of the consolidated financial statements.

6. The following information related to Key audit matter was included in the Memorandum of Work Performed dated May 28, 2020 along with audit report dated May 27, 2020 containing an unmodified audit opinion on the financial statements of Utkal Alumina International Limited ("Utkal"), a subsidiary of the Holding Company, issued by an independent firm of Chartered Accountants, which has been reproduced by us as under:

Key audit matters	How our audit addressed the key audit matters
Valuation of deferred tax assets, including recognised MAT credit	
The Company has significant amount of deferred tax assets, mainly resulting from net brought forward losses as per Income Tax Act. The valuation of deferred tax assets including MAT is significant to the audit because the risk exists that future taxable profits will not be sufficient to fully recover the deferred tax assets including MAT credit. Management supports	Our audit procedures included: • Evaluating Management's determination of the estimated manner in which the deferred tax asset would be utilised by comparing Management's assessment to business plans and profit forecasts based on our knowledge of the business and the industry in which the company operates;

INDEPENDENT AUDITOR'S REPORT

Key audit matters	How our audit addressed the key audit matters
the recoverability of the deferred tax assets mainly with income projections which contain estimates of and tax strategies for future taxable income. Refer Notes 9 & 36* of Utkal's financial statements.	• Critically assessing whether profit forecasts are reasonable in relation to historical trends, current year performance and future plans; • We also reperformed the calculation of deferred taxes, checking that the correct tax rate was applied. We compared the tax plans with the company's budget on a sample basis in terms of the recoverability of deferred tax assets from temporary differences and from loss carry forwards and MAT credit; and • Using our own tax team to assist us in assessing the appropriateness of the level of deferred taxes recognised in the balance sheet. We assessed the adequacy of the income tax disclosures in the financial statements, setting out the basis of the deferred tax balance and the level of estimation involved. On the above procedures performed, we did not identify any material exceptions in the recognition, measurement and disclosure of deferred taxes in the financial statements.

* These notes are included in Notes 14 and 41 of the consolidated financial statements.

Other information

7. The Holding Company's Board of Directors is responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated financial statements and our and other auditor's report thereon. The annual report is expected to be made available to us after the date of this auditor's report.

   Our opinion on the consolidated financial statements does not cover the other information and we will not express any form of assurance conclusion thereon.

   In connection with our audit of the consolidated financial statements, our responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

   When we read the annual report, if we conclude that there is a material misstatement therein, we are required to communicate the matter to those charged with governance and take appropriate action as applicable under the relevant laws and regulations.

Responsibilities of management and those charged with governance for the consolidated financial statements

8. The Holding Company's Board of Directors is responsible for the preparation and presentation of these consolidated financial statements in term of the requirements of the Act that give a true and fair view of the consolidated financial position, consolidated financial performance and consolidated cash flows, and changes in equity of the Group including its joint ventures and associate companies in accordance with the accounting principles generally accepted in India, including the Accounting Standards specified under Section 133 of the Act. The respective Board of Directors of the companies included in the Group and of its joint ventures and associate companies are responsible for maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding the assets of the Group and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and the design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring accuracy and completeness of the accounting records, relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error, which have been used for the purpose of preparation of the consolidated financial statements by the Directors of the Holding Company, as aforesaid.

9. In preparing the consolidated financial statements, the respective Board of Directors of the companies included

in the Group and of its joint ventures and associate companies are responsible for assessing the ability of the Group and of its joint ventures and associate companies to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the respective Board of Directors either intends to liquidate the Group and its joint ventures and associate companies or to cease operations, or has no realistic alternative but to do so.

10. The respective Board of Directors of the companies included in the Group and of its joint ventures and associate companies are responsible for overseeing the financial reporting process of the Group and of its joint ventures and associate companies.

Auditor's responsibilities for the audit of the consolidated financial statements

11. Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

12. As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

    - Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

    - Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances. Under Section 143(3)(i) of the Act, we are also responsible for expressing our opinion on whether the Holding Company has adequate internal financial controls with reference to financial statements in place and the operating effectiveness of such controls.

    - Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

    - Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the ability of the Group and its joint ventures and associate companies to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group and its joint ventures and associate companies to cease to continue as a going concern.

    - Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

    - Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group and its joint ventures and associate companies to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the audit of the financial statements of such entities included in the consolidated financial statements of which we are the independent auditors. For the other entities included in the consolidated financial statements, which have been audited by other auditors, such other auditors remain responsible for the direction, supervision and performance of the audits carried out by them. We remain solely responsible for our audit opinion.

13. We communicate with those charged with governance of the Holding Company and such other entities included in the consolidated financial statements of which we are the independent auditors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including

INDEPENDENT AUDITOR'S REPORT

any significant deficiencies in internal control that we identify during our audit.

14. We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

15. From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Other matters

16. We did not audit the financial statements of seven subsidiaries and consolidated financial information of one subsidiary whose financial statements/ financial information reflect total assets of ₹ 106,138 crores and net assets of ₹ 29,490 crores as at March 31, 2020, total revenue of ₹ 80,291 crores, total comprehensive income (comprising of profit after tax and other comprehensive income) of ₹ 3,902 crores and net cash inflows amounting to ₹ 10,466 crores for the year ended on that date, as considered in the consolidated financial statements. These financial statements/ financial information have been audited by other auditors whose reports have been furnished to us, and our opinion on the consolidated financial statements insofar as it relates to the amounts and disclosures included in respect of these subsidiaries and our report in terms of sub-section (3) of Section 143 of the Act including report on Other Information insofar as it relates to the aforesaid subsidiaries is based solely on the reports of the other auditors.

17. The financial statements of one subsidiary located outside India, included in the consolidated financial statements, which constitute total assets of ₹ 235 crores and net assets of ₹ 84 crores as at March 31, 2020, total revenue of ₹ 288 crores, total comprehensive loss (comprising of loss and other comprehensive loss) of ₹ 83 crores and net cash outflows amounting to ₹ 6 crores for the year then ended, have been prepared in accordance with accounting principles generally accepted in its respective country and have been audited by other auditor under generally accepted auditing standards applicable in its country. The Holding Company's management has converted the financial statements of such subsidiary located outside India from the accounting principles generally accepted in their respective country to the accounting principles generally accepted in India. We have audited these conversion adjustments made by the Holding Company's management. Our opinion in so far as it relates to the balances and affairs of such subsidiary located outside India, including other information, is based on the report of other auditor and the conversion adjustments prepared by the management of the Holding Company and audited by us.

18. We did not audit the financial statement of five subsidiaries, whose financial information reflect total assets of ₹ 77 crores and net assets of ₹ 43 crores as at March 31, 2020, total revenue of ₹ 57 crores, total comprehensive income (comprising of profit after tax and other comprehensive income) of ₹ 2 crores and net cash outflows amounting to ₹ 1 crore for the year ended on that date, as considered in the consolidated financial statements. The consolidated financial statements also include the Group's share of total comprehensive income (comprising of profit after tax and other comprehensive loss) of ₹ 4 crores for the year ended March 31, 2020 as considered in the consolidated financial statements, in respect of two joint ventures and three associate companies respectively, whose financial statements have not been audited by us. These financial statements are unaudited and have been furnished to us by the Management, and our opinion on the consolidated financial statements insofar as it relates to the amounts and disclosures included in respect of these subsidiaries, joint ventures and associate companies and our report in terms of sub-section (3) of Section 143 of the Act including report on Other Information insofar as it relates to the aforesaid subsidiaries, joint ventures and associate companies, is based solely on such unaudited financial statements. In our opinion and according to the information and explanations given to us by the Holding Company's Management, these financial statements are not material to the Group.

19. The following other matter paragraph was included in the audit report on the financial statement of Utkal Alumina International Limited, a subsidiary of the Holding Company, issued by an independent firm of Chartered Accountants vide its report dated May 27, 2020, which has been reproduced by us as under:

"Our attendance at the year- end physical inventory verification done by the management was impracticable under the lock down restrictions imposed by the Government

of India and we have, therefore, performed alternate audit procedure as per the guidance provided in SA 501 'Audit Evidence- Specific Consideration for selected Items' and have obtained comfort over the existence and conditions of the inventory at the year end. Our opinion is not modified in respect of the above matter"

Our opinion on the consolidated financial statements, and our report on other legal and regulatory requirements below, is not modified in respect of the above matters with respect to our reliance on the work done and the reports of the other auditors and the financial statements certified by the Management.

Report on other legal and regulatory requirements

20. As required by Section 143(3) of the Act, we report, to the extent applicable, that:

    (a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit of the aforesaid consolidated financial statements.

    (b) In our opinion, proper books of account as required by law relating to preparation of the aforesaid consolidated financial statements have been kept so far as it appears from our examination of those books and the reports of the other auditors.

    (c) The consolidated Balance Sheet, the consolidated Statement of Profit and Loss, consolidated Statement of Changes in Equity and the consolidated Statement of Cash Flows dealt with by this Report are in agreement with the relevant books of account and records maintained for the purpose of preparation of the consolidated financial statements.

    (d) In our opinion, the aforesaid consolidated financial statements comply with the Accounting Standards specified under Section 133 of the Act.

    (e) On the basis of the written representations received from the directors of the Holding Company as on March 31, 2020 taken on record by the Board of Directors of the Holding Company and the reports of the statutory auditors of its subsidiary companies, none of the directors of the Group companies incorporated in India is disqualified as on March 31, 2020 from being appointed as a director in terms of Section 164(2) of the Act.

    (f) With respect to the adequacy of internal financial controls with reference to financial statements of the Group and the operating effectiveness of such controls, refer to our separate report in "**Annexure A".**

    (g) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditor's) Rules, 2014, in our opinion and to the best of our information and according to the explanations given to us:

        i. The consolidated financial statements disclose the impact, if any, of pending litigations on the consolidated financial position of the Group, its joint ventures and associate companies – Refer Notes 26 and 48 to the consolidated financial statements.

        ii. Provision has been made in the consolidated financial statements, as required under the applicable law or accounting standards, for material foreseeable losses, if any, on long-term contracts including derivative contracts as at March 31, 2020 – Refer Note 25 and 26 to the consolidated financial statements in respect of such items as it relates to the Group, its joint ventures and associate companies.

        iii. There has been no delay in transferring amounts, required to be transferred, to the Investor Education and Protection Fund by the Holding Company and its subsidiary companies, its joint ventures and associate companies incorporated in India except amount of ₹ * crores.

        iv. The reporting on disclosures relating to Specified Bank Notes is not applicable to the Group for the year ended March 31, 2020.

        * represent figures below the rounding convention used in this report

21. The Group, its joint ventures and associate companies has paid/ provided for managerial remuneration in accordance with the requisite approvals mandated by the provisions of Section 197 read with Schedule V to the Act.

For Price Waterhouse & Co Chartered Accountants LLP
Firm Registration Number: 304026E/ E-300009

Sumit Seth
Partner
Membership Number: 105869
UDIN 20105869AAAAAG9068

Mumbai
June 12, 2020

ANNEXURE A TO INDEPENDENT AUDITOR'S REPORT

Referred to in paragraph 20 (f) of the Independent Auditor's Report of even date to the members of Hindalco Industries Limited on the consolidated financial statements for the year ended March 31, 2020

Report on the internal financial controls with reference to financial statements under Clause (i) of Sub-section 3 of Section 143 of the Act

1. In conjunction with our audit of the consolidated financial statements of the Holding Company as of and for the year ended March 31, 2020, we have audited the internal financial controls with reference to financial statements of Hindalco Industries Limited (hereinafter referred to as "the Holding Company") and its subsidiary companies, its joint ventures and associate companies, which are companies incorporated in India, as of that date.

Management's responsibility for internal financial controls

2. The respective Board of Directors of the Holding Company, its subsidiary companies, its joint ventures and associate companies, to whom reporting under clause (i) of sub Section 3 of Section 143 of the Act in respect of the adequacy of the internal financial controls with reference to financial statements is applicable, which are companies incorporated in India, are responsible for establishing and maintaining internal financial controls based on, "internal control over financial reporting criteria established by the Holding Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India (ICAI)". These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to the respective company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Act.

Auditor's responsibility

3. Our responsibility is to express an opinion on the Holding Company's internal financial controls with reference to financial statements based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting (the "Guidance Note") issued by the ICAI and the Standards on Auditing deemed to be prescribed under Section 143(10) of the Companies Act, 2013, to the extent applicable to an audit of internal financial controls, both applicable to an audit of internal financial controls and both issued by the ICAI. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls with reference to financial statements was established and maintained and if such controls operated effectively in all material respects.

4. Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls system with reference to financial statements and their operating effectiveness. Our audit of internal financial controls with reference to financial statements included obtaining an understanding of internal financial controls with reference to financial statements, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

5. We believe that the audit evidence we have obtained and the audit evidence obtained by the other auditors in terms of their reports referred to in the Other Matters paragraph below, is sufficient and appropriate to provide a basis for our audit opinion on the Holding Company's internal financial controls system with reference to financial statements.

Meaning of internal financial controls with reference to financial statements

6. A company's internal financial control with reference to financial statements is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal financial control with reference to financial statements includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorisations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Inherent limitations of internal financial controls with reference to financial statements

7. Because of the inherent limitations of internal financial controls with reference to financial statements, including

the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls with reference to financial statements to future periods are subject to the risk that the internal financial control with reference to financial statements may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Opinion

8. In our opinion, the Holding Company and its subsidiary companies which are companies incorporated in India, have, in all material respects, an adequate internal financial controls system with reference to financial statements and such internal financial controls with reference to financial statements were operating effectively as at March 31, 2020, based on the internal control over financial reporting criteria established by the Holding Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India.

Other matters

9. Our aforesaid reports under Section 143(3)(i) of the Act on the adequacy and operating effectiveness of the internal financial controls with reference to financial statements insofar as it relates to six subsidiary companies, which are companies incorporated in India, is based on the corresponding reports of the auditors of such companies incorporated in India. Our opinion is not qualified in respect of this matter.

For Price Waterhouse & Co Chartered Accountants LLP
Firm Registration Number: 304026E/ E-300009

Sumit Seth
Partner
Membership Number: 105869
UDIN 20105869AAAAAG9068

Mumbai
June 12, 2020

CONSOLIDATED BALANCE SHEET

as at March 31, 2020

₹ in Crore

	Note	As at 31.03.2020	As at 31.03.2019
ASSETS			
Non-Current Assets			
Property, Plant and Equipment (including ROU Assets)	6	66,067	64,185
Capital Work-in-Progress	6	7,610	3,975
Investment Property	7	22	23
Goodwill	8	20,098	18,575
Other Intangible Assets	9	3,008	3,077
Intangible Assets under Development	9	111	122
Equity Accounted Investments	53	41	21
Financial Assets			
Investments	10A	3,091	5,136
Trade Receivables	17	56	-
Loans	11	12	15
Other Financial Assets	12A	341	347
Non-Current Tax Assets (Net)	13	329	283
Deferred Tax Assets (Net)	14	910	876
Other Non-Current Assets	15	1,550	2,179
		103,246	**98,814**
Current Assets			
Inventories	16	22,384	22,194
Financial Assets			
Investments	10B	6,279	3,855
Trade Receivables	17	9,345	11,389
Cash and Cash Equivalents	18	21,303	9,119
Bank Balances other than Cash and Cash Equivalents	19	266	668
Loans	11	55	58
Other Financial Assets	12B	3,192	1,993
Current Tax Assets (Net)	13	255	1,553
Other Current Assets	15	3,093	3,076
		66,172	53,905
Non-Current Assets or Disposal Group Classified as Held For Sale	20	110	129
		66,282	**54,034**
		169,528	**152,848**
EQUITY AND LIABILITIES			
Equity			
Equity Share Capital	21	222	222
Other Equity	22	58,095	57,279
		58,317	**57,501**
Non-Controlling Interest		10	9
		58,327	**57,510**

₹ in Crore

	Note	As at 31.03.2020	As at 31.03.2019
Liabilities			
Non-Current Liabilities			
Financial Liabilities			
Borrowings	23A	58,379	48,032
Lease Liabilities	54	872	-
Trade Payables	24		
(I) Outstanding Dues of Micro Enterprises and Small Enterprises		-	-
(II) Outstanding Dues other than Micro Enterprises and Small Enterprises		*	2
Other Financial Liabilities	25A	334	179
Provisions	26	8,337	7,244
Contract Liabilities	28	14	19
Deferred Tax Liabilities (Net)	14	4,671	4,526
Other Non-Current Liabilities	27	1,377	1,311
		73,984	**61,313**
Current Liabilities			
Financial Liabilities			
Borrowings	23B	8,717	4,226
Lease Liabilities	54	270	-
Trade Payables	24		
(I) Outstanding Dues of Micro Enterprises and Small Enterprises		20	15
(II) Outstanding Dues other than Micro Enterprises and Small Enterprises		18,280	20,708
Other Financial Liabilities	25B	5,066	4,093
Provisions	26	2,211	1,924
Other Current Liabilities	27	889	1,456
Contract Liabilities	28	188	178
Current Tax Liabilities (Net)	13	1,576	1,425
		37,217	**34,025**
Liability Associated with Disposal Group Classified as Held For Sale	20	-	*
		37,217	**34,025**
		111,201	**95,338**
		169,528	**152,848**
Basis of Preparation and Significant Accounting Policies	2		

* *Amount below rounding off convention.*

The accompanying Notes are an integral part of the Consolidated Financial Statements.
This is the Consolidated Balance Sheet referred in our report of even date.

For Price Waterhouse & Co Chartered Accountants LLP
Firm Registration Number: 304026E/E-300009

Sumit Seth
Partner
Membership Number: 105869

For and on behalf of the Board of Hindalco Industries Limited

Praveen Kumar Maheshwari
Whole-time Director &
Chief Financial Officer
DIN-00174361

Satish Pai
Managing Director
DIN-06646758

Anil Malik
Company Secretary

K N Bhandari
Director
DIN-00026078

Place : Mumbai
Dated : June 12, 2020

CONSOLIDATED STATEMENT OF PROFIT AND LOSS

for the year ended March 31, 2020

₹ in Crore

	Note	Year ended 31.03.2020	Year ended 31.03.2019
INCOME			
Revenue from Operations	29	118,144	130,542
Other Income	30	1,186	1,127
Total Income		**119,330**	**131,669**
EXPENSES			
Cost of Materials Consumed	31	68,032	78,068
Trade Purchases	32	256	235
Changes in Inventories of Finished Goods, Work-in-Progress and Stock-in-Trade	33	(17)	386
Employee Benefits Expenses	34	8,832	9,043
Power and Fuel	35	9,695	9,618
Finance Costs	36	4,197	3,778
Depreciation and Amortization	37	5,091	4,777
Impairment Loss/ (Reversal) of Non-Current Assets (Net)	38	44	(11)
Impairment Loss on Financial Assets (Net)	39A	56	29
Other Expenses	39B	16,940	17,663
Total Expenses		**113,126**	**123,586**
Profit/ (Loss) before Share in Profit/ (Loss) in Equity Accounted Investments, Exceptional Items and Tax		6,204	8,083
Share in Profit/ (Loss) in Equity Accounted Investments (Net of Tax)	53	4	*
Profit/ (Loss) before Exceptional Items and Tax		6,208	8,083
Exceptional Income/ (Expenses) (Net)	40	(284)	-
Profit/ (Loss) before Tax		**5,924**	**8,083**
Tax Expenses	41		
Current Tax		1,541	1,910
Deferred Tax		616	678
Profit/ (Loss) for the year		**3,767**	**5,495**
Other Comprehensive Income/ (Loss)	42		
Items that will not be reclassified to Statement of Profit and Loss			
Remeasurement of Defined Benefit Obligation		(651)	(161)
Change in Fair Value of Equity Instruments Designated as FVTOCI		(2,676)	(1,776)
Share in Equity Accounted Investments		*	*
Income Tax effect		175	50
Items that will be reclassified to Statement of Profit and Loss			
Change in Fair Value of Debt Instruments Designated as FVTOCI		5	2
Effective Portion of Cash Flow Hedges (including cost of Hedging)		(1,229)	(349)
Foreign Currency Translation Reserve		1,214	(325)
Income Tax effect		439	93
Other Comprehensive Income/ (Loss) for the year		**(2,723)**	**(2,466)**
Total Comprehensive Income/ (Loss) for the year		**1,044**	**3,029**

₹ in Crore

	Note	Year ended 31.03.2020	Year ended 31.03.2019
Profit/ (Loss) attributable to:			
Owners of the Company		3,767	5,496
Non-Controlling Interests		*	(1)
Other Comprehensive Income/ (Loss) attributable to:			
Owners of the Company		(2,723)	(2,466)
Non-Controlling Interests		-	-
Total Comprehensive Income/ (Loss) attributable to:			
Owners of the Company		1,044	3,030
Non-Controlling Interests		*	(1)
Earnings Per Share:	43		
Basic (₹)		16.94	24.67
Diluted (₹)		16.93	24.66
Basis of Preparation and Significant Accounting Policies	2		

* *Amount below rounding off convention.*

The accompanying Notes are an integral part of the Consolidated Financial Statements.
This is the Consolidated Statement of Profit and Loss referred in our report of even date.

For Price Waterhouse & Co Chartered Accountants LLP
Firm Registration Number: 304026E/E-300009

Sumit Seth
Partner
Membership Number: 105869

For and on behalf of the Board of Hindalco Industries Limited

Praveen Kumar Maheshwari
Whole-time Director &
Chief Financial Officer
DIN-00174361

Satish Pai
Managing Director
DIN-06646758

Anil Malik
Company Secretary

K N Bhandari
Director
DIN-00026078

Place : Mumbai
Dated : June 12, 2020

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

for the year ended March 31, 2020

A. Equity Share Capital

₹ in Crore

Particulars	Note	Amount
Balance as at April 01, 2018	21	223
Changes in Equity Share Capital		(1)
Balance as at March 31, 2019	21	222
Changes in Equity Share Capital		*
Balance as at March 31, 2020	21	222

B. Other Equity

₹ in Crore

Particulars	Note	Share Application Money Pending Allotment	Equity Component of Other Financial Instruments	Reserves and Surplus										Other Reserves					Attributable to Owners of the Company	Attributable to Non Controlling Interests	Total Other Equity
				Capital Reserve	Capital Redemption Reserve	Business Reconstruction Reserve	Securities Premium	Debenture Redemption Reserve	Employees Stock Options	Treasury Shares held by ESOP Trust	Special Reserve	General Reserve	Retained Earnings	Gain/ (Loss) on Equity Instruments FVTOCI	Gain/ (Loss) on Debt Instruments FVTOCI	Effective portion of Cash Flow Hedge	Cost of Hedging Reserve	Foreign Currency Translation Reserve			
Balance as at April 01, 2018		*	4	147	104	5,799	8,197	900	16	-	17	21,370	11,095	4,764	2	262	647	1,304	54,628	9	54,637
Profit/ (Loss) for the year		-	-	-	-	-	-	-	-	-	-	-	5,496	-	-	-	-	-	5,496	(1)	5,495
Other Comprehensive Income/(Loss) for the year		-	-	-	-	-	-	-	-	-	-	-	(114)	(1,773)	2	(111)	(145)	(325)	(2,466)	-	(2,466)
Total Comprehensive Income/(Loss) for the year		-	-	-	-	-	-	-	-	-	-	-	5,382	(1,773)	2	(111)	(145)	(325)	3,030	(1)	3,029
Hedging (gain)/ loss and cost of hedging transferred to non-financial assets		-	-	-	-	-	-	-	-	-	-	-	-	-	-	29	-	-	29	-	29
Transfer to Debenture Redemption Reserve		-	-	-	-	-	-	150	-	-	-	-	(150)	-	-	-	-	-	-	-	-
Transfer to Special Reserve		-	-	-	-	-	-	-	-	-	2	-	(2)	-	-	-	-	-	-	-	-
Transactions with owners in their capacity as owners																					
Issue of Equity Share Capital		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Share Application Money Received during the year		*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*	-	*
Shares Acquired by the Trust		-	-	-	-	-	-	-	-	(123)	-	-	-	-	-	-	-	-	(123)	-	(123)
Employee Share Based Transactions		*	-	-	-	-	9	-	(5)	-	-	-	-	-	-	-	-	-	4	-	4
Employee Share Options Expenses		-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	10	-	10
Dividend Paid		-	-	-	-	-	-	-	-	-	-	-	(283)	-	-	-	-	-	(283)	-	(283)
Dividend Distribution Tax		-	-	-	-	-	-	-	-	-	-	-	(40)	-	-	-	-	-	(40)	-	(40)
Change in Ownership Interest in Subsidiaries		-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	4	-	4
Other Changes		-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	20	-	20
Balance as at March 31, 2019	22	*	4	147	104	5,799	8,206	1,050	21	(123)	19	21,370	16,006	2,991	4	200	502	979	57,279	9	57,288
Transition Impact - Leases		-	-	-	-	-	-	-	-	-	-	-	(9)	-	-	-	-	-	(9)	-	(9)
Profit/ (Loss) for the year		-	-	-	-	-	-	-	-	-	-	-	3,767	-	-	-	-	-	3,767	*	3,767
Other Comprehensive Income/(Loss) for the year		-	-	-	-	-	-	-	-	-	-	-	(486)	(2,666)	3	(405)	(383)	1,214	(2,723)	-	(2,723)
Total Comprehensive Income/(Loss) for the year		-	-	-	-	-	-	-	-	-	-	-	3,281	(2,666)	3	(405)	(383)	1,214	1,044	*	1,044

B. Other Equity

₹ in Crore

Particulars	Note	Share Application Money Pending Allotment	Equity Component of Other Financial Instruments	Reserves and Surplus										Other Reserves					Attributable to Owners of the Company	Attributable to Non Controlling Interests	Total Other Equity
				Capital Reserve	Capital Redemption Reserve	Business Reconstruction Reserve	Securities Premium	Debenture Redemption Reserve	Employees Stock Options	Treasury Shares held by ESOP Trust	Special Reserve	General Reserve	Retained Earnings	Gain/ (Loss) on Equity Instruments FVTOCI	Gain/ (Loss) on Debt Instruments FVTOCI	Effective portion of Cash Flow Hedge	Cost of Hedging Reserve	Foreign Currency Translation Reserve			
Hedging (gain)/ loss and cost of hedging transferred to non-financial assets		-	-	-	-	-	-	-	-	-	-	-	-	-	-	77	-	-	77	-	77
Transfer to Debenture Redemption Reserve		-	-	-	-	-	-	150	-	-	-	-	(150)	-	-	-	-	-	-	-	-
Transfer to Special Reserve		-	-	-	-	-	-	-	-	-	*	-	*	-	-	-	-	-	*	-	*
Transactions with owners in their capacity as owners																					
Issue of Equity Share Capital		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*	*
Share Application Money Received during the year		*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*	-	*
Share in Equity Accounted Investments		-	-	-	-	-	-	-	-	-	-	-	*	-	-	-	-	-	*	-	*
Shares Acquired by the Trust		-	-	-	-	-	-	-	-	(7)	-	-	-	-	-	-	-	-	(7)	-	(7)
Employee Share-Based Transactions		*	-	-	-	-	12	-	(5)	-	-	-	-	-	-	-	-	-	7	-	7
Employee Share Options Expenses		-	-	-	-	-	-	-	28	-	-	-	-	-	-	-	-	-	28	-	28
Employee Share Options Lapsed/ Forfeited		-	-	-	-	-	-	-	-	-	-	-	*	-	-	-	-	-	*	-	*
Dividend Paid		-	-	-	-	-	-	-	-	-	-	-	(267)	-	-	-	-	-	(267)	-	(267)
Dividend Distribution Tax		-	-	-	-	-	-	-	-	-	-	-	(55)	-	-	-	-	-	(55)	-	(55)
Change in Ownership Interest in Subsidiaries		-	-	-	-	-	-	-	-	-	-	-	*	-	-	-	-	-	-	-	-
Other Changes		-	-	-	-	-	-	-	-	-	-	-	-	-	-	(2)	-	-	(2)	-	(2)
Balance as at March 31, 2020	22	*	4	147	104	5,799	8,218	1,200	44	(130)	19	21,370	18,806	325	7	(130)	119	2,193	58,095	10	58,105
Basis of Preparation and Significant Accounting Policies	2																				

* *Amount below rounding off convention.*

The accompanying Notes are an integral part of the Consolidated Financial Statements.
This is the Consolidated Statement of Changes in Equity referred in our report of even date.

For Price Waterhouse & Co Chartered Accountants LLP
Firm Registration Number: 304026E/E-300009

Sumit Seth
Partner
Membership Number: 105869

For and on behalf of the Board of Hindalco Industries Limited

Praveen Kumar Maheshwari
Whole-time Director &
Chief Financial Officer
DIN-00174361

Anil Malik
Company Secretary

Satish Pai
Managing Director
DIN-06646758

K N Bhandari
Director
DIN-00026078

Place : Mumbai
Dated : June 12, 2020

CONSOLIDATED STATEMENT OF CASH FLOWS

for the year ended March 31, 2020

₹ in Crore

	Note	Year ended 31.03.2020	Year ended 31.03.2019
A. CASH FLOW FROM OPERATING ACTIVITIES			
Profit/ (Loss) before Tax		5,924	8,083
Adjustment for :			
Finance Costs	36	4,197	3,778
Depreciation and Amortization	37	5,091	4,777
Impairment Loss/ (Reversal) of Non-current Assets (Net)	6, 9	109	(11)
Impairment Loss on Financial Assets (Net)	39A	56	29
Impairment Loss on Non Financial Assets (Net)		-	(8)
Equity Settled Share-based Payment	34	28	10
Liabilities no Longer required Written-back		(83)	(40)
Share in (Profit)/ Loss in Equity Accounted Investments (Net of Tax)	53	(4)	*
Unrealised Foreign Exchange (Gain)/ Loss (Net)		47	(18)
Unrealised (Gain)/ Loss on Derivative Transactions (Net)		(182)	(58)
Fair Value (Gain)/ Loss on modification of borrowings		(20)	(75)
(Gain)/ Loss on Assets Held for Sale (Net)	39B	3	-
(Gain)/Loss on Property, Plant and Equipment and Intangible Assets Sold/ Discarded (Net)	30	7	67
Interest Income	30	(289)	(543)
Dividend Income	30	(35)	(45)
(Gain)/ Losses on Investments measured at FVTPL (Net)	30	(456)	(323)
Exceptional Income		(25)	-
Realised Gain/ (Loss) of Cash Flow Hedges in OCI (Net)		(412)	(71)
Other Non-operating (Income)/ Expenses (Net)		(11)	(4)
Operating Profit before Working Capital Changes		**13,945**	**15,548**
Changes in Working Capital:			
(Increase)/ Decrease in Inventories (Net)		(347)	(9)
(Increase)/ Decrease in Trade Receivables		2,424	(1,362)
(Increase)/ Decrease in Financial Assets		(365)	317
(Increase)/ Decrease in Non Financial Assets		(78)	(407)
Increase/ (Decrease) in Trade Payables		(2,523)	(143)
Increase/ (Decrease) in Financial Liabilities		262	(159)
Increase/(Decrease) in Non Financial Liabilities (incl. contract liabilities)		(551)	80
Cash Generation from Operation before Tax		**12,767**	**13,865**
Refund/ (Payment) of Income Tax (Net)		(102)	(1,888)
Net Cash Generated/ (Used) - Operating Activities		**12,665**	**11,977**
B. CASH FLOW FROM INVESTMENT ACTIVITIES			
Payments to acquire Property, Plant and Equipment and Intangible Assets		(6,791)	(6,001)
Proceeds from disposal of Property, Plant and Equipment and Intangible Assets		59	33
Sale proceeds from Slump Sale		25	-
Investment in equity accounted investees		(3)	(6)
Investment in Equity Shares at FVTOCI		(653)	-
(Purchase)/ Sale of Other Investments (Net)		(1,578)	(308)
Loans and Deposits given		(55)	(261)
Receipt of Loans and Deposits given		321	355
Interest Received		283	508
Dividend Received		48	32
Receipts of government grants		33	-
Lease payments received from finance lease		10	-
Net Cash Generated/ (Used) - Investing Activities		**(8,301)**	**(5,648)**

₹ in Crore

	Note	Year ended 31.03.2020	Year ended 31.03.2019
C. CASH FLOW FROM FINANCING ACTIVITIES			
Proceeds from issue of Equity Shares (Including Share Application Money)		7	6
Treasury Shares acquired by ESOP Trust		(7)	(124)
Redemption of Debenture		(3)	(3)
Proceeds from Long-Term Borrowings		15,537	7
Pre-Payment of Long-Term Borrowings		-	(1,575)
Repayment of Long-Term Borrowings		(8,308)	(818)
Principal Payments of Lease Liabilities (March 31, 2019 - Principal payments of finance lease obligations)		(334)	(27)
Proceeds from/ (Repayment of) Current Borrowings (Net)		4,054	972
Finance Cost Paid		(4,016)	(3,581)
Dividend Paid (including Dividend Distribution Tax)		(320)	(323)
Net Cash Generated/ (Used) - Financing Activities		**6,610**	**(5,466)**
Net Increase/ (Decrease) in Cash and Cash Equivalents		10,974	863
Add : Opening Cash and Cash Equivalents		9,095	8,040
Add : Effect of exchange variation on Cash and Cash Equivalents		1,200	192
Closing Cash and Cash Equivalents		**21,269**	**9,095**
Reconciliation of Closing Cash and Cash Equivalents with Balance Sheet:			
Cash and Cash Equivalents as per Balance Sheet	18	21,303	9,119
Less: Fair Value adjustments in Liquid Investments		(6)	(19)
Less: Temporary Overdraft Balance in Current Accounts		(28)	(5)
Cash and Cash Equivalents as per Cash Flow Statement		**21,269**	**9,095**
Supplemental Information			
Non Cash Transactions from Investing and Financing Activities:			
Acquisition of Right of Use Assets		447	-
Capitalised interest paid included in Investing activities		102	18
Basis of Preparation and Significant Accounting Policies	2		

* *Amount below rounding off convention.*

The accompanying Notes are an integral part of the Consolidated Financial Statements.
This is the Consolidated Statement of Cash Flows referred in our report of even date.

For Price Waterhouse & Co Chartered Accountants LLP
Firm Registration Number: 304026E/E-300009

Sumit Seth
Partner
Membership Number: 105869

For and on behalf of the Board of Hindalco Industries Limited

Praveen Kumar Maheshwari
Whole-time Director &
Chief Financial Officer
DIN-00174361

Satish Pai
Managing Director
DIN-06646758

Anil Malik
Company Secretary

K N Bhandari
Director
DIN-00026078

Place : Mumbai
Dated : June 12, 2020

NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

1. Company Overview

Hindalco Industries Limited ("the Company/ Parent") was incorporated in India in the year 1958 having its registered office at Ahura Centre, 1st Floor, B Wing, Mahakali Caves Road, Andheri (East), Mumbai - 400093.

The Company has two main stream of business Aluminium and Copper.

In Aluminium, the Company caters to the entire value chain starting from mining of bauxite and coal through production of value added products for various application.

The Company along with its subsidiaries has manufacturing operations in eleven countries including India spread over four continents North America, South America, Asia and Europe. Apart from primary aluminium, the Company produces aluminium sheet, extrusion and light gauge products for use in packaging market which includes beverage and food, can and foil products as well as for use in automotive, electronics, architecture, transportation and industrial product markets.

The Company also has one of the largest single location Copper smelting facility in India.

The equity shares of the Company are listed on the Indian Stock Exchanges (National Stock Exchange and Bombay Stock Exchange) and GDRs are listed on the Luxemburg Stock Exchange.

2. Basis of Preparation and Significant Accounting Policies

I. Basis of Preparation

The Consolidated Financial Statements ("the financial statements") relate to the Company and its subsidiaries (collectively "the Group") and certain unstructured entities consolidated by the Group and its interest in associates and joint ventures. The consolidated financial statements comply in all material aspects with Indian Accounting Standards ("Ind-AS") as prescribed under Section 133 of the Companies Act 2013 ("the Act"), as notified under the Companies (Indian Accounting Standards) Rules, 2015, (including subsequent amendments) and other accounting principles generally accepted in India.

The Group's consolidated financial statements for the year ended March 31, 2020 have been approved for issue by the Board of Directors of the Company in their meeting held on June 12, 2020.

The financial statements have been prepared under the historical cost convention on accrual basis except for following assets and liabilities which have been measured at fair value:

- Financial instruments - measured at fair value;
- Assets held for sale - measured at fair value less cost to sell;
- Plan assets under defined benefit plans - measured at fair value;
- Inventory designated in fair value hedge relationship: and
- Employee share-based payments.

In addition, the carrying values of recognised assets and liabilities designated as hedged items in fair value hedges that would otherwise be carried at cost are adjusted to record changes in the fair values attributable to the risks that are being hedged in effective hedge relationship.

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Group take into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in the financial statements is determined on such a basis, except for employee share-based payment, leasing transactions and measurements that have some similarities to fair value but are not fair value, such as net realisable value in Inventories or value in use in Impairment of Assets. The basis of fair valuation of these items are given as part of their respective accounting policies.

The Group has determined current and non-current classification of its assets and liabilities in the financial statements as per the requirement of Ind AS 1 - 'Presentation of Financial Statements'. Based on its assessment, the Group has ascertained its normal operating cycle as 12 months for the purpose of current and non-current classification of its assets and liabilities.

In addition, for financial reporting purposes, fair value measurements are categorised into Level 1, 2 or 3 based on the degree to which the inputs to the fair value

measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the Group can access at the measurement date;
- Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and
- Level 3 inputs are unobservable inputs for the asset or liability.

Adoption of new Accounting Standards

The Group has applied the following Accounting Standards and its amendments for the first time for annual reporting period commencing April 1, 2019:

a) Ind AS 116 - Leases :

On March 30, 2019, the Ministry of Corporate Affairs (MCA) notified Ind AS 116, 'Leases' as part of the Companies (Indian Accounting Standards (Ind AS)) Amendment Rules, 2019. Ind AS 116 replaces existing Ind AS 17, Leases with effect from April 1, 2019 (the effective date). Ind AS 116 sets out principles for recognition, measurement, presentation and disclosure of leases. Ind AS 116 introduces a single lessee accounting model and requires a lessee to recognise assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value. For all leases except as noted above, a lessee is required to recognise a right-of-use asset (ROU Asset) representing its right to use the underlying leased asset and a lease liability representing its obligation to make lease payments in the balance sheet. Lessee will recognise depreciation of right-of-use assets and interest on lease liabilities in the statement of profit and loss. Operating cash flows will be higher as repayments of the lease liability and related interest are classified within financing activities. However, there was no major change in accounting from a Lessor perspective.

(b) Other amendments

On March 30, 2019, MCA has issued Companies (Indian Accounting Standards) Second Amendment Rules, 2019.

i) Ind AS 12 - Income taxes

Appendix C to Ind AS 12, Income Taxes has been inserted. The appendix provides accounting for uncertainty over income tax treatments. The appendix provides a framework to consider, recognise and measure the accounting impact of tax uncertainties. It also provides specific guidance in several areas where previously Ind AS 12 was silent. There are no new disclosure requirements in appendix. However, the Group is required to add explanations on judgements and estimates made in uncertain tax treatment. New paragraph 57A has been added to Ind AS 12 to clarify that the income tax consequences of dividends on financial instruments classified as equity should be recognised according to where the past transactions or events that generated distributable profits were recognised.

ii) Ind AS 19 - Employment Benefits

This amendment requires an entity to:

1) Calculate the current service cost and net interest for the remainder of the reporting period after a plan amendment, curtailment or settlement by using the updated assumptions from the date of the change.

2) Any reduction in a surplus should be recognised immediately in profit or loss either as part of past service cost, or as a gain or loss on settlement. In other words, a reduction in a surplus must be recognised in profit or loss even if that surplus was not previously recognised because of the impact of the asset ceiling; and separately recognise any changes in the asset ceiling through other comprehensive income. This amendment is applicable for any future plan amendments, curtailments, or settlements of the group on or after April 1, 2019.

iii) Ind AS 23 - Borrowing Costs

Amendment to Ind AS 23 - Borrowing Costs clarify that if a specific borrowing remains outstanding after a qualifying asset is ready for its intended use or sale, it becomes part of general borrowings.

iv) Ind AS 28 - Investments in Associates and Joint Ventures

Amendment to Ind AS 28 - Investments in Associates and Joint Ventures clarifies that long-term interests (for example, preference shares or long-term loans) in an associate or joint venture that form part of the net investment in the associate or joint venture and to which the equity method is not applied should be accounted for using Ind AS 109 - Financial Instruments. The requirements of Ind AS 109 are applied to long-term interests before applying the loss allocation and impairment requirements of Ind AS 28.

v) Ind AS 103 - Business Combinations and Ind AS 111 - Joint Arrangements

Amendment has been made to Ind AS 103 - Business Combinations and Ind AS 111 - Joint Arrangements

NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

to clarify measurement of previously held interest in obtaining control/joint control over a joint operation as follows:

(i) On obtaining control of a business that is a joint operation, previously held interest in joint operation is re-measured at fair value at the acquisition date;

(ii) A party obtaining joint control of a business that is joint operation should not re-measure its previously held interest in the joint operation. These amendments will apply to future transactions of the Group in which it obtains joint control of a business on or after April 1, 2019.

vi) Ind AS 109 - Financial Instruments

The narrow-scope amendments made to Ind AS 109 enable entities to measure certain pre-payable financial assets with negative compensation at amortised cost. These assets, which include some loan and debt securities, would otherwise have to be measured at fair value through profit or loss. To qualify for amortised cost measurement, the negative compensation must be 'reasonable compensation for early termination of the contract and the asset must be held within a held to collect business model.

The Group had to change its accounting policies following the adoption of Ind AS 116 Leases (refer Note 54 for details). Other amendments listed above did not have any impact on the amounts recognized in prior periods and are not expected to significantly affect the current and future periods.

The Consolidated Financial Statements are presented in Indian Rupees (INR/₹) which is also the Parent's Functional Currency. All financial information presented in INR has been rounded off to nearest Crore Rupees (INR 1 Crore = INR 10,000,000) without any decimal, unless otherwise stated.

II. Significant Accounting Policies:

A. Principles of Consolidation

Subsidiaries

Subsidiaries are the entities (including structured and unstructured entities) over which the Group has control. The Group controls an entity when the group is exposed to or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power to direct the relevant activities of the entity. Consolidation of subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated financial statements from the date the Group gains the control until the date the Group ceases to control the subsidiary.

The Group combines the financial statements of the parent and its subsidiaries line by line adding together like items of assets, liabilities, equity, income and expenses. Intra-group transactions, balances and unrealised profits on transactions between group companies are eliminated in full. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the transferred assets. Appropriate adjustments for deferred taxes are made for temporary differences that arise from the elimination of unrealised profits and losses from intra-group transactions or undistributed earnings of Group's entity included in consolidated profit and loss, if any.

The consolidated financial statements are prepared using uniform accounting policies for like transactions and other events in similar circumstances. If any entity within the Group uses accounting policies other than those adopted in the consolidated financial statements for like transactions and events in similar circumstances, appropriate adjustments are made to that group entity's financial statements to ensure conformity with the Group's accounting policies. The financial statements of all entities used for the purpose of consolidation are drawn up to the same reporting date as that of the parent company. When the end of the reporting period of the parent is different from that of a subsidiary, the subsidiary prepares additional financial information as of the same date as the financial statements of the parent to enable the parent to consolidate the financial information of the subsidiary, unless it is impractical to do so.

Non-controlling interest in the profit / loss and equity of the subsidiaries are shown separately in the consolidated statement of profit and loss and the consolidated balance sheet, respectively.

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction. This results in an adjustment between the carrying amounts of the controlling and non-controlling interests to reflect their relative interests in the subsidiary. Any difference between the amount of the adjustment to non-controlling interests and any consideration paid or received is recognised within equity attributable to owners of the parent.

In case the Group ceases to consolidate a subsidiary because of a loss of control, any retained interest in the entity is re-measured to its fair value. This fair value becomes the initial carrying amount for the purpose

of subsequently accounting for the retained interest as an associate, joint venture or financial assets. When the Group loses control over a subsidiary, it derecognises the assets, including goodwill, and liabilities of the subsidiary, carrying amount of any non-controlling interests, cumulative translation differences recorded in equity and recognise resulting difference between the fair value of the investment retained and the consideration received and total of amount derecognised as gain or loss attributable to the Parent. In addition, amounts, if any, previously recognised in other comprehensive income in relation to that entity are reclassified to profit or loss as would be required if the parent had directly disposed of the related assets or liabilities.

Interest in Associates and Joint Ventures

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies, generally accompanying a shareholding between 20% and 50% of the voting rights.

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The Group's interest in its associates or joint ventures are accounted for using the equity method from the date on which the investee becomes an associate or a joint venture. Under equity method, the investment in an associate or a joint venture is initially recognised at cost and adjusted thereafter to recognise the changes in the Group's share of net assets of the associate or joint venture since the acquisition date. Dividends received or receivable from associates and joint ventures are recognised as a reduction in the carrying amount of the investment. On acquisition of the investment in an associate or a joint venture, any excess of the cost of the investment over the Group's share of the net fair value of the identifiable assets and liabilities of the investee is recognised as Goodwill, which is included within the carrying amount of the investment. Any excess of the Group's share of the net fair value of the identifiable assets and liabilities over the cost of the investment is recognised in equity as Capital Reserve in the period in which the investment is acquired.

The consolidated statement of profit and loss reflects the Group's share of the results of operations of the associate or joint venture. Any change in other comprehensive income (OCI) is presented as part of the Group's OCI. In addition, when there has been a change recognised directly in the equity of the associate or joint venture, the Group recognises its share of that changes, when applicable, in the consolidated statement of changes in equity. Unrealised gains or losses resulting from transactions between the Group and the associate or joint venture are eliminated to the extent of the interest in the associate or joint venture.

When the Group's share of losses of an associate or a joint venture equals or exceeds its interest in that associate or joint venture (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate or joint venture), the Group discontinues recognising its share of further losses. Additional losses are recognised only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate or joint venture. If the associate or joint venture subsequently reports profits, the group resumes recognising its share of those profits only after its share of the profit equals the share of losses not recognised.

At each reporting date, the Group determines whether there is objective evidence that the investment in the associate or joint venture is impaired. If there is such evidence, the Group calculates the amount of impairment as the difference between the recoverable amount of the associate or joint venture and its carrying value, and then recognises the impairment loss in the consolidated statement of profit and loss. Any reversal of that impairment loss is recognised to the extent that the recoverable amount of the investment subsequently increases. Goodwill relating to associate or joint venture is included in the carrying amount of the investment and is not separately tested for impairment.

The Group continues to use the equity method when an investment in an associate becomes an investment in a joint venture or an investment in a joint venture becomes an investment in an associate.

If ownership interest in an associate or a joint venture is reduced but significant influence or joint control is retained, the Group continues to use the equity method, and only proportionate share of the amount previously recognised in other comprehensive income are reclassified to consolidated statement of profit and loss where appropriate.

When the Group classified its investments, or a portion thereof, in associate or joint venture as held for sale, it discontinues the use of the equity method in relation to the portion that is classified as held for sale. Any retained portion of an investment in an associate or a joint venture that has not been classified as held for sale

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continues to be accounted for using the equity method. The Group discontinues the use of the equity method at the time of disposal when the disposal results in the Group losing significant influence over the associate or joint venture.

Upon loss of significant influence over the associate or joint venture, the group measures and recognises any retained investment at its fair value. Any difference between the carrying amount of the associate or joint venture and the fair value of retained investment and proceeds from disposal is recognised in the consolidated statement of profit and loss.

B. Business Combination

Business combinations are accounted for using the acquisition method. The consideration transferred in a business combination comprises the fair values of the assets transferred, liabilities incurred to the former owners of the acquired business, equity interests issued by the Group and fair value of any assets or liability resulting from a contingent consideration arrangement. Acquisition-related costs are expensed as incurred.

At the acquisition date, the identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured at their acquisition date fair values. However, certain assets and liabilities i.e. deferred tax assets or liabilities, assets or liabilities related to employee benefit arrangements, liabilities or equity instruments related to share-based payment arrangements, lease liabilities under Ind AS 116 and assets or disposal groups that are classified as held for sale, acquired or assumed in a business combination are measured as per the applicable Ind-AS.

The Group recognises any non-controlling interest in the acquired entity on an acquisition-by-acquisition basis either at fair value or at the non-controlling interest's proportionate share of the acquired entity's net identifiable assets.

The excess of the sum of the consideration transferred the amount of any non-controlling interests in the acquired entity and the acquisition-date fair value of any previous equity interest in the acquired entity over the acquisition-date fair value of the net identifiable assets acquired is recognised as goodwill. Any gain on a bargain purchase is recognised is in other comprehensive income and accumulated in equity as Capital Reserve if there exists clear evidence of the underlying reasons for classifying the business combination as resulting in a bargain purchase, otherwise the gain is recognised directly in equity as Capital Reserve.

Where settlement of any part of cash consideration is deferred, the amounts payable in future are discounted to their present value as at the date of exchange. The discount rate used is entity's incremental borrowing rate, being the rate at which similar borrowing could be obtained from an independent financier under comparable terms and conditions.

Any contingent consideration is measured at fair value at the date of acquisition. If an obligation to pay contingent consideration that meets the definition of a financial instrument is classified as equity, then it is not re-measured subsequently and settlement is accounted for within equity. Other contingent consideration is re-measured at fair value at each reporting date and changes in the fair value of contingent consideration are recognised in profit or loss.

When a business combination is achieved in stages, any previously held equity interest in the acquiree is re-measured at its acquisition-date fair value and the resulting gain or loss, if any, is recognised in the consolidated statement of profit and loss or other comprehensive income, as appropriate.

Where it is not possible to complete the determination of fair values by the end of the reporting period in which the combination occurs, a provisional assessment of fair values is made and any adjustments required to those provisional values, and the corresponding adjustments to goodwill, are finalised within 12 months of the acquisition date.

C. Interest in Joint Operations

A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

When a Group entity undertakes its activities under joint operations, the Group as a joint operator recognises in relation to its interest in a joint operation:

- its assets, including its share of any assets held jointly;
- its liabilities, including its share of any liabilities incurred jointly;
- its revenue from the sale of its share of the output arising from the joint operation;
- its share of the revenue from the sale of the output by the joint operation; and
- its expenses, including its share of any expenses incurred jointly.

The Group accounts for the assets, liabilities, revenues and expenses relating to its interest in a joint operation in accordance with the standard applicable to the particular assets, liabilities, revenues and expenses.

When a Group entity transacts with a joint operation in which a group entity is a joint operator (such as a sale or contribution of assets), the Group is considered to be conducting the transaction with the other parties to the joint operation, and gains and losses resulting from the transactions are recognised in the financial statements only to the extent of other parties' interests in the joint operation.

When a group entity transacts with a joint operation in which a group entity is a joint operator (such as a purchase of assets), the Group does not recognise its share of the gains and losses until it resells those assets to a third party.

D. Property, Plant and Equipment

Property, plant and equipment held for use in the production or/and supply of goods or services, or for administrative purposes, are stated in the consolidated balance sheet at cost, less any subsequent accumulated depreciation and subsequent accumulated impairment losses.

The initial cost at cash price equivalent of property, plant and equipment acquired comprises its purchase price, including import duties and non-refundable purchase taxes, any directly attributable costs of bringing the assets to its working condition and location and present value of any obligatory decommissioning costs for its intended use. Cost may also include effective portion on qualifying cash flow hedges of foreign currency purchases of property, plant and equipment recycled from hedge reserve as basis adjustment.

In case of self-constructed assets, cost includes the costs of all materials used in construction, direct labour, allocation of overheads, directly attributable borrowing costs and effective portion of cash flow hedges of foreign currency transferred from the hedge reserve as basis adjustment.

Subsequent expenditure on major maintenance or repairs includes the cost of the replacement of parts of assets and overhaul costs. Where an asset or part of an asset is replaced and it is probable that future economic benefits associated with the item will be available to the Group, the expenditure is capitalised and the carrying amount of the item replaced is derecognised. Similarly, overhaul costs associated with major maintenance are capitalised and depreciated over their useful lives where it is probable that future economic benefits will be available and any remaining carrying amounts of the cost of previous overhauls are derecognised. All other costs are charged to profit and loss during the reporting period in which they are incurred.

Capital work-in-progress

Capital work-in-progress comprise of assets in the course of construction for production or/and supply of goods or services or administrative purposes, or for purposes not yet determined, are carried at cost, less any recognised impairment loss. At the point when an asset is operating at management's intended use, the cost of construction is transferred to the appropriate category of property, plant and equipment. Costs associated with the commissioning of an asset are capitalised where the asset is available for use and commissioning has been completed.

Depreciation

Depreciation is charged so as to write off the cost or value of assets, over their estimated useful lives or, in the case of leased assets (including leasehold improvements), over the lease term if shorter. The lease period is considered by excluding any lease renewals options, unless the renewals are reasonably certain. Depreciation is recorded using the straight line basis. The estimated useful lives and residual values are reviewed at each year end, with the effect of any changes in estimate accounted for on a prospective basis. Each component of an item of property, plant and equipment with a cost that is significant in relation to the total cost of that item is depreciated separately if its useful life differs from the others components of the asset.

Depreciation commences when the assets are ready for their intended use. Depreciated assets in property and accumulated depreciation accounts are retained fully until they are removed/retired from active use.

The useful life of the items of Property, Plant and Equipment estimated by the management for the current and comparative period are in line with the useful life as per Schedule II of the Companies Act, 2013. (refer Note 6)

Disposal of assets

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between net disposal proceeds and the carrying amount of the asset and is recognised in the consolidated statement of profit and loss.

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E. Investment Property

Investment properties held to earn rentals or for capital appreciation or both are stated in the consolidated balance sheet at cost, less any subsequent accumulated depreciation and subsequent accumulated impairment losses. Depreciation is charged on a straight line basis over their estimated useful lives. Any gain or loss on disposal of investment property is determined as the difference between net disposal proceeds and the carrying amount of the property and is recognised in the consolidated statement of profit and loss. Transfer to, or from, investment property is at the carrying amount of the property.

F. Intangible Assets (Other than goodwill)

Intangible assets acquired separately

Intangible assets acquired are reported at cost less accumulated amortization and accumulated impairment losses. Amortization is charged on a straight line basis over their estimated useful lives other than Mining Rights. The estimated useful life and amortization method are reviewed at the end of each annual reporting period, with the effect of any changes in estimate being accounted for on a prospective basis.

Internally-generated intangible assets

Expenditure on research activities is recognized as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from development (or from the development phase of an internal project) is recognized if, and only if, all of the following have been demonstrated:

- the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- management's intention to complete the intangible asset and use or sell it;
- the ability to use or sell the intangible asset;
- how the intangible asset will generate probable future economic benefits;
- the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- the ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognized for internally-generated intangible assets is the sum of the expenditure incurred from the date when the intangible asset is recognised. Where no internally-generated intangible asset can be recognized, development expenditure is charged to the consolidated statement of profit and loss in the period in which it is incurred.

Subsequent to initial recognition, internally-generated intangible assets are reported at cost less accumulated amortization and accumulated impairment losses, on the same basis as intangible assets acquired separately.

Intangible assets acquired in a business combination

Identified intangible assets acsquired in a business combination and recognised separately from goodwill are initially recognised at their fair values at the acquisition date.

Subsequent to initial recognition, intangible assets acquired in a business combination are reported at cost less accumulated amortization and accumulated impairment losses, on the same basis as intangible assets acquired separately.

Mining Reserves, Resources and Rights (Mining Rights)

Mineral reserves, resources and rights (together referred to as 'mining rights') which can be reasonably valued, are recognised in the assessment of fair values on acquisition. Exploitable mineral rights are amortised using the unit of production basis over the commercially recoverable reserves. Mineral resources are included in amortisation calculations where there is a high degree of confidence that they will be extracted in an economic manner. Commercially recoverable reserves are proved and probable reserves. Changes in the commercial recoverable reserves affecting unit of production calculations are dealt with prospectively over the revised remaining reserves.

Exploration for and evaluation of mineral resources

Expenditures associated with exploration for and evaluation of mineral resources after obtaining of legal rights to explore a specific area but before technical feasibility and commercial viability of extracting mineral resources are demonstrable are recognized as Exploration and Evaluation assets.

If a project does not prove viable, all irrecoverable exploration and evaluation expenditure associated with the project net of any related impairment allowances is written off to the consolidated statement of profit and loss.

The Group measure its Exploration and Evaluation assets at cost and classifies it as Property, Plant and Equipment or Intangible Assets according to the nature of assets acquired and applies the classification consistently.

As the assets is not available for use, it is not depreciated but are monitored for indication of impairment. An exploration and evaluation asset is no longer classified as such when the technical feasibility and commercial viability of extracting minerals resources are demonstrable and the development of the deposit is intended by the management. The carrying value of such exploration and evaluation asset is reclassified as Mining Rights.

Derecognition of intangible assets

An intangible asset is derecognised on disposal, or when no future economic benefits are expected from use or disposal. Gains or losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset are recognised in the consolidated statement of profit and loss when the asset is derecognised.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment annually, and whenever there is an indication that the asset may be impaired.

G. Stripping cost

Stripping costs incurred during the mining production phase are allocated between cost of inventory produced and the existing mine asset. The stripping ratio, as approved by the regulatory authority, for the life of the mine is obtained by dividing the estimated quantity of overburden by the estimated quantity of mineable coal / bauxite reserve to be extracted over the life of the mine. This ratio is periodically reviewed and changes, if any, are accounted for prospectively.

Stripping costs are allocated and included as a component of the mine asset when they represent significantly improved access to ore, provided all the following conditions are met:

- it is probable that the future economic benefit associated with the stripping activity will be realised;
- the component of the ore body for which access has been improved can be identified; and
- the costs relating to the stripping activity associated with the improved access can be reliably measured.

The overburden removal costs are included in Mining Rights under Intangible assets and amortised based on stripping ratio on the quantity of coal / bauxite excavated.

H. Non-Current assets (or disposal groups) held for sale

Non-Current assets and disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the asset (or disposal group) is available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such asset (or disposal group) and its sale is highly probable. Management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

Non-Current assets (and disposal groups) classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell except for those assets that are specifically exempt under relevant Ind AS. Once the assets are classified as “Held for sale”, those are not subjected to depreciation till disposal.

An impairment loss is recognised for any initial or subsequent write-down of the asset (or disposal group) to fair value less costs to sell. A gain is recognised for any subsequent increases in fair value less costs to sell of an asset (or disposal group), but not in excess of any cumulative impairment loss previously recognised.

A gain or loss not previously recognised by the date of the sale of the non-current asset (or disposal group) is recognised at the date of derecognition.

Non-current assets classified as held for sale and the assets of a disposal group classified as held for sale are presented separately from the other assets in the balance sheet.

I. Goodwill

Goodwill arising on acquisition is carried at cost as established at the date of acquisition of the business less accumulated impairment losses, if any.

For the purpose of impairment testing, goodwill is allocated to each of the Group’s cash-generating units expected to benefit from the synergies of the combination.

Cash-generating units to which goodwill has been allocated are tested for impairment annually, or more frequently when there is an indication that the unit may be impaired. If the recoverable amount of the cash-generating unit is less than the carrying amount of the unit, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit pro-rata on

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the basis of the carrying amount of each asset in the unit. An impairment loss recognised for goodwill is not reversed in a subsequent period.

On disposal of a subsidiary the attributable amount of goodwill is included in the determination of the profit or loss on disposal.

The Group's policy for goodwill arising on the acquisition of an associate is described above.

J. Impairment

Impairment of Non-financial assets excluding Goodwill
At the end of each reporting period, the Group reviews the carrying amounts of its tangible, intangible and other non-financial assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset/ cash-generating unit is estimated in order to determine the extent of the impairment loss (if any). Where it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs. Recoverable amount is the higher of fair value less cost to sell and Value in use. Where a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units, or otherwise they are allocated to the group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

Recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognised immediately in the consolidated statement of profit and loss.

Non-financial assets (other than Goodwill) that suffered an impairment are reviewed for possible reversal of the impairment at the end of each reporting period. Where an impairment loss subsequently reverses, the carrying amount of the asset (or cash-generating unit) is increased to the revised estimate of its recoverable amount, so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (or cash-generating unit) in prior years. A reversal of an impairment loss is recognised immediately in the consolidated statement of profit and loss.

Refer accounting policy on "Goodwill" for impairment of goodwill.

K. Foreign Currency Transactions and Translation
Transactions in foreign currencies are recorded by the group entities at their respective functional currency at the exchange rates prevailing at the date of the transaction first qualifies for recognition. Monetary assets and liabilities denominated in foreign currency are translated to the functional currency at the exchange rates prevailing at the reporting date.

Exchange differences arising on settlement or translation of monetary items are recognised in the consolidated statement of profit and loss with the exception of the following:

- eligible exchange differences on foreign currency borrowings relating to qualifying assets under construction are included in the cost of those assets when they are regarded as an adjustment to interest costs;
- exchange differences on transactions entered into in order to hedge certain foreign currency risks (see below for hedge accounting policies); and
- exchange differences on monetary items receivable from or payable to a foreign operation for which settlement is neither planned nor likely to occur (therefore forming part of the net investment in the foreign operation), which are recognised initially in other comprehensive income and reclassified from equity to the consolidated statement of profit and loss on repayment of the monetary items.

Non-monetary items that are measured at historical cost in a foreign currency are translated using the exchange rates at the date of initial transactions. Non-monetary items measures at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined. The gain or loss arising on translation of non-monetary items measured at fair value is treated in line with the recognition of gain or loss on change in fair value of the item (i.e. translation differences on items whose fair value gain or loss is recognised in OCI or profit or loss are also recognised in OCI or profit or loss, respectively).

For the purposes of presenting consolidated financial statements, the assets, liabilities and equity (except retained earnings) of foreign operations are translated into Indian Rupees at the rate of exchange prevailing at the reporting date and their income and expenses are translated at the exchange rates prevailing at the date of transactions. For practical reason, the Group uses an average rate to translate income and expense items, if the average rate approximates the exchange rates at the dates of the transactions. The exchange differences arising on translation for consolidation are recognised in other comprehensive income and accumulated in equity. Accumulated exchange differences arising from translation and attributable to non-controlling interests are allocated to, and recognised as part of, non-controlling interests in the consolidated balance sheet.

On the disposal of a foreign operation all of the exchange differences accumulated in OCI relating to that particular foreign operation attributable to the owners of the Group is reclassified in the consolidated statement of profit and loss.

In addition, in relation to a partial disposal of a subsidiary that includes a foreign operation that does not result in the Group losing control over the subsidiary, the proportionate share of accumulated exchange differences are re-attributed to non-controlling interests and are not recognised in the consolidated statement of profit and loss. For partial disposals of investment in associates or joint arrangements that do not result in the Group losing significant influence or joint control, the proportionate share of the accumulated exchange differences is reclassified in the consolidated statement of profit and loss.

Any goodwill and fair value adjustments arising in business combinations or acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the exchange rates prevailing at the reporting date and resulting exchange differences are recognised in other comprehensive income.

L. Provisions and Contingencies

Provisions are recognized when there is a present obligation (legal or constructive) as a result of a past event and it is probable ("more likely than not") that it is required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the balance sheet date, taking into account the risks and uncertainties surrounding the obligation. Where a provision is measured using the estimated cash flows to settle the present obligation, its carrying amount is the present value of those cash flows. The discount rate used is a pre-tax rate that reflects current market assessments of the time value of money in that jurisdiction and the risks specific to the liability.

Onerous contracts

Present obligations arising under onerous contracts are recognised and measured as provisions. An onerous contract is considered to exist when a contract under which the unavoidable costs of meeting the obligations exceed the economic benefits expected to be received from it.

Restructurings

A restructuring provision is recognised when there is a detailed formal plan for the restructuring which has raised a valid expectation in those affected that the Company will carry out the restructuring by stating to implement the plan or announcing its main feature to those affected by it. The measurement of a restructuring provision includes only the direct expenditures arising from the restructuring.

Contingent liabilities acquired in a business combination

Contingent liabilities acquired in a business combination are initially measured at fair value at the acquisition date. At the end of subsequent reporting periods, such contingent liabilities are measured at the higher of the amount that would be recognised in accordance with Ind-AS 37 and the amount initially recognised less cumulative amortisation recognised in accordance with Ind AS 115 - Revenue from contracts with customers. This does not apply to financial guarantee contracts or otherwise to those contracts that are within the scope of Ind AS 109.

Restoration (including Mine closure), rehabilitation and decommissioning

Close-down and restoration costs are provided for in the accounting period when the obligation arising from the related disturbance occurs, based on the net present value of the estimated future costs of restoration to be incurred during the life of the mining operation and post closure. Provisions for close-down and restoration costs do not include any additional obligations which are expected to arise from future disturbance.

The initial close-down and restoration provision is capitalised. Subsequent movements in the close-down and restoration provisions for ongoing operations, including those resulting from new disturbance related to expansions or other activities qualifying for capitalisation, updated cost estimates, changes to the estimated lives of operations, changes to the timing of

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closure activities and revisions to discount rates are also capitalised within "Property, plant and equipment".

Environmental liabilities
Environment liabilities are recognised when the group becomes obliged, legally or constructively to rectify environmental damage or perform remediation work.

Litigation
Provision relating to legal, tax and other matters is recognised once it has been established that the group has a present obligation based on consideration of the information which becomes available up to the date on which the consolidated financial statements of the Group are approved and may in some cases entail seeking expert advice in making the determination on whether there is a present obligation.

Contingent Liabilities and Assets
A contingent liability is a possible obligation that arises from a past event, with the resolution of the contingency dependent on uncertain future events, or a present obligation where no outflow is probable. Material contingent liabilities are disclosed in the consolidated financial statements unless the possibility of an outflow of economic resources is remote. Contingent assets are not recognized in the consolidated financial statements unless it is virtually certain that the future event will confirm the asset's existence and the asset will be realised.

Enterprise Social Commitment
Enterprise Social Commitment is the amount to be spent on social and economic development of the surrounding area over a period of time where any new project is set up. Such obligation arises out of conditions mentioned in the Environment Clearance Certificate given by the Government for new projects and are generally defined as a percentage of total project cost. Present value of such future cash flows discounted at appropriate and applicable discount rates are capitalised against the obligation created. Actual cash flows that happen over the period are adjusted against the obligation. The obligation is increased over a period of time and the differential is recognized in the Statement of Profit and Loss as Interest Expense.

Renewable Power Obligation
Provision towards Renewable Power obligation is created to the extent any obligated unit is unable to source renewable energy as a replacement to carbon energy as per requirement of the applicable regulation during the reporting period and is carried in books till the obligation is discharged by purchasing Renewable Energy Certificate from any of the authorised exchanges.

M. Leases

i) Accounting policy effective from April 1, 2019:

The Group as lessee
The Group assesses whether a contract is or contains a lease, at inception of the contract. The Group recognises a right-of-use asset and a corresponding lease liability with respect to all lease arrangements in which it is the lessee, except for short-term leases (defined as leases with a lease term of 12 months or less) and leases of low value assets. For these leases, the Group recognises the lease payments as an operating expense on a straight-line basis over the lease term, unless another systematic basis is more representative of the time pattern in which economic benefits from the leased assets are consumed. Contingent and variable rentals are recognized as expense in the periods in which they are incurred.

Lease Liability
The lease payments that are not paid at the commencement date are discounted using the interest rate implicit in the lease. If that rate cannot be readily determined, which is generally the case for leases in the Group, the lessee's incremental borrowing rate is used, being the rate that the individual lessee would have to pay to borrow the funds necessary to obtain an asset of similar value to the right-of-use asset in a similar economic environment with similar terms, security and conditions.

Lease payments included in the measurement of the lease liability comprise:

- Fixed lease payments (including in-substance fixed payments) payable during the lease term and under reasonably certain extension options, less any lease incentives;
- Variable lease payments that depend on an index or rate, initially measured using the index or rate at the commencement date;
- The amount expected to be payable by the lessee under residual value guarantees;
- The exercise price of purchase options, if the lessee is reasonably certain to exercise the options; and
- Payments of penalties for terminating the lease, if the lease term reflects the exercise of an option to terminate the lease.

The lease liability is presented as a separate line in the consolidated Balance Sheet.

The lease liability is subsequently measured by increasing the carrying amount to reflect interest on the

lease liability (using the effective interest method) and by reducing the carrying amount to reflect the lease payments made.

The Group remeasures the lease liability (and makes a corresponding adjustment to the related right-of-use asset) whenever:

- The lease term has changed or there is a change in the assessment of exercise of a purchase option, in which case the lease liability is re-measured by discounting the revised lease payments using a revised discount rate.
- A lease contract is modified and the lease modification is not accounted for as a separate lease, in which case the lease liability is re-measured by discounting the revised lease payments using a revised discount rate.

Right of Use (ROU) Assets

The ROU assets comprise the initial measurement of the corresponding lease liability, lease payments made at or before the commencement day and any initial direct costs. They are subsequently measured at cost less accumulated depreciation and impairment losses.

Whenever the Group incurs an obligation for costs to dismantle and remove a leased asset, restore the site on which it is located or restore the underlying asset to the condition required by the terms and conditions of the lease, a provision is recognised and measured under Ind AS 37- Provisions, Contingent Liabilities and Contingent Assets. The costs are included in the related right-of-use asset.

The Group applies Ind AS 36 - Impairment of Assets to determine whether a right-of-use asset is impaired and accounts for any identified impairment loss as per its accounting policy on 'property, plant and equipment'.

Extension and termination options are included in many of the leases. In determining the lease term the management considers all facts and circumstances that create an economic incentive to exercise an extension option, or not exercise a termination option.

ROU assets are depreciated over the shorter period of the lease term and useful life of the underlying asset. If the Group is reasonably certain to exercise a purchase option, the right-of-use asset is depreciated over the underlying asset's useful life. The depreciation starts at the commencement date of the lease.

Deferred tax on the deductible temporary difference and taxable temporary differences in respect of carrying value of right of use assets and lease liability and their respective tax bases are recognised separately.

Sale and Leaseback

When Group (seller-lessee) sells an asset to another entity (the buyer-lessor) and leases it back from the buyer lessor, the Group determines if the transaction qualifies as a sale under Ind AS 115 or whether the transaction is a collateralised borrowing.

A sale and leaseback qualifies as a sale if the buyer-lessor obtains control of the underlying asset. The Group measures a right-of-use asset arising from the leaseback as the proportion of the previous carrying amount of the asset that relates to the right of use retained. The gain/ (loss) that the Group recognises is limited to the proportion of the total gain/ (loss) that relates to the rights transferred to the buyer-lessor.

Any difference between the sale consideration and the fair value of the asset is either a prepayment of lease payments (if the purchase price is below market terms) or an additional financing (if the purchase price is above market terms), and this is applied if the lease payments are not at market rates.

If the transfer does not qualify as a sale under Ind AS 115, the Group does not derecognise the transferred asset, and it accounts for the cash received as a financial liability.

The Group as lessor

The Groupenters into lease arrangements as a lessor with respect to some of its investment properties and buildings.

Leases for which the Group is a lessor are classified as finance or operating leases. Whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee, the contract is classified as finance lease. All other leases are classified as operating leases.

When the Group is an intermediate lessor, it accounts for the head lease and sub-lease as two separate contracts. The sub-lease is classified as finance or operating lease by reference to the right-of-use asset arising from the head lease.

Rental income from operating leases is recognised on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised on a straight-line basis over the lease term.

Amounts due from lessees under finance leases are recognised as receivables at the amount of the Company's net investment in the leases. Finance lease income is allocated to accounting periods so

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as to reflect a constant periodic rate of return on the Company's net investment outstanding in respect of the leases.

When a contract includes lease and non-lease components, the Group applies Ind AS 115, Revenue from Contracts with Customers to allocate the consideration under the contract to each component.

ii) Accounting policy till March 31, 2019:

Leases are classified as finance leases whenever the terms of the lease transfers substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

The Group as lessor

Amounts due from lessee under finance leases are recorded as receivables at the amount of net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the Group's net investment outstanding in respect of the leases.

Rental income from operating leases is recognised on a straight-line basis over the term of the relevant lease, unless the receipts are structured to increase in line with an inflation price index or another systematic basis which is more representative of the time pattern in which economic benefits from the leased asset is diminished. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised on a straight-line basis over the lease term.

The Group as lessee

Assets held under finance leases are initially recognised at their fair value at the inception of the lease or, if lower, at the present value of the minimum lease payments. The corresponding liability to the lesser is included in the consolidated balance sheet as a finance lease obligation.

Lease payments are apportioned between finance charges and reduction of the lease obligation so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are charged directly to the consolidated statement of profit and loss, unless they are directly attributable to qualifying assets, in which case they are capitalised in accordance with the Group's general policy on borrowing costs. Contingent rentals are recognised as expenses in the periods in which they are incurred.

Operating lease payments are recognised as an expense on a straight-line basis over the lease term, unless the payments are structured to increase in line with an inflation price index or another systematic basis is more representative of the time pattern in which economic benefits from the leased asset are consumed. Contingent rentals arising under operating leases are recognised as an expense in the period in which they are incurred.

In the event that lease incentives are received to enter into operating leases, such incentives are recognised as a liability. The aggregate benefit of incentives is recognised as a reduction of rental expense on a straight-line basis, except where another systematic basis is more representative of the time pattern in which economic benefits from the leased asset are consumed.

N. Inventories

Inventories are stated at the lower of cost and net realizable value. The cost of finished goods and work in progress includes raw materials, direct labour, other direct costs and related production overheads. Costs of inventories include the transfer from equity any gains/ losses on qualifying cash flow hedges for purchases of raw materials.

Cost of raw material comprises of Cost of purchases and also include all other costs incurred in bringing the inventories to their present location and condition.

The Inventories are measured at Fair Value only in those cases where the Inventories are designated into a fair value hedge relationship.

Cost is determined using the weighted average cost basis. However, the same cost basis is applied to all inventories of a particular class. Inventories of stores and spare parts are valued at weighted average cost basis after providing for cost of obsolescence and other anticipated losses, wherever considered necessary.

Net realizable value represents the estimated selling price for inventories less all estimated costs of completion and costs necessary to make the sale.

Materials and other supplies held for use in the production of inventories (finished goods, work-in-progress) are not written down below the cost if the finished products in which they will be used are expected to sell at or above cost.

O. Trade Receivable

Trade receivables are amounts due from customers for goods sold or services performed in the ordinary course of business. If receivable is expected to be collected within a period of 12 months or less from the reporting date (or in the normal operating cycle of

the business if longer), they are classified as Current Assets otherwise as Non-Current Assets.

Trade receivables are measured at their transaction price on initial recognition, unless it contains a significant financing component or pricing adjustments embedded in the contract. Trade receivables are held with the objective of collecting the contractual cash flows and therefore are subsequently measured at amortised cost less loss allowance.

Trade receivables which are subject to a factoring arrangement without recourse are de-recognized from the consolidated balance sheet. Under this arrangement, the Group transfers relevant receivables to the factor in exchange for cash and does not retain late payment and credit risk.

Trade receivables which arise from contracts where the sale price is provisional and revenue model have the character of a commodity derivative are measured at fair value. The fair value is measured at forward rate and subsequent changes are recognised as Other Operating Revenue.

P. Trade and Other Payables

These amounts represent liabilities for goods and services provided to the Company and are unpaid at the end of the financial year. The amounts are unsecured and usually paid within time limits as contracted. Trade and other payables are presented as current liabilities unless the payment is not due within 12 months after the reporting period.

Q. Financial Instruments

All financial assets are recognised on trade date when the purchase of a financial asset is under a contract whose term requires delivery of the financial asset within the timeframe established by the market concerned. Financial assets are initially measured at fair value, plus transaction costs, except for those financial assets which are classified as at fair value through profit or loss (FVTPL) at inception. All recognised financial assets are subsequently measured in their entirety at either amortised cost or fair value.

Classification of financial assets

Financial assets are classified as 'equity instrument' if it is a non-derivative and meets the definition of 'equity' for the issuer. All other non-derivative financial assets are 'debt instruments'.

Financial assets at amortised cost and the effective interest method

Debt instruments are measured at amortised cost if both of the following conditions are met:

- the asset is held within a business model whose objective is to hold assets in order to collect contractual cash flows; and
- the contractual terms of the instrument give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Debt instruments meeting these criteria are subsequently measured at amortised cost using the effective interest method less any impairment, with interest recognised on an effective yield basis in investment income.

The effective interest method is a method of calculating the amortised cost of a debt instrument and of allocating interest over the relevant period. The effective interest rate is the rate that exactly discounts the estimated future cash receipts (including all fees or points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the debt instrument, or (where appropriate) a shorter period, to the net carrying amount on initial recognition.

The Group may irrevocably elect at initial recognition to classify a debt instrument that meets the amortised cost criteria above as at FVTPL if that designation eliminates or significantly reduces an accounting mismatch had the financial asset been measured at amortised cost.

Financial assets at fair value through other comprehensive income (FVTOCI)

Debt instruments are measured at FVTOCI if both of the following conditions are met:

- the asset is held within a business model whose objective is to hold assets in order to collect contractual cash flows and selling assets; and
- the contractual terms of the instrument give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Debt instruments meeting these criteria are subsequently measured at fair value with any gains or losses arising on re-measurement recognised in other comprehensive income, except for impairment gains or losses, interest gain and foreign exchange gains or losses which are recognised in the Consolidated statement of profit and loss. Interest calculated using the effective interest method is recognised in the Consolidated statement of profit and loss as investment income. When the debt instrument is derecognised the cumulative gain or loss

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previously recognised in other comprehensive income is reclassified to the Consolidated statement of profit and loss as a reclassification adjustment.

At initial recognition, an irrevocable election is made (on an instrument-by-instrument basis) to designate investments in equity instruments (other than held for trading purpose) at FVTOCI.

A financial asset is held for trading if:

- it has been acquired principally for the purpose of selling it in the near term; or
- on initial recognition it is part of a portfolio of identified financial instruments that the Group manages together and has evidence of a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated in an effective hedge relationship as a hedging instrument or a financial guarantee.

Investments in equity instruments at FVTOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognised in other comprehensive income and accumulated in the 'Gain/ (Loss) on Equity Instruments FVTOCI'. Where the asset is disposed of, the cumulative gain or loss previously accumulated in the 'Gain/ (Loss) on Equity Instruments FVTOCI' is directly reclassified to retained earnings.

For equity instruments measured at fair value through other comprehensive income no impairments are recognised in the Consolidated statement of profit and loss.

Dividends on these investments in equity instruments are recognised in the Consolidated statement of profit and loss in investment income when the Group's right to receive the dividends is established, it is probable that the economic benefits associated with the dividend will flow to the entity; and the amount of the dividend can be measured reliably.

Financial assets at fair value through profit and loss (FVTPL)

Financial assets that do not meet the criteria of classifying as amortised cost or fair value through other comprehensive income described above, or that meet the criteria but the entity has chosen to designate as at FVTPL at initial recognition, are measured at FVTPL.

Investments in equity instruments are classified as at FVTPL, unless the Group designates an investment that is not held for trading at FVTOCI at initial recognition.

Financial assets at FVTPL are subsequently measured at fair value, with any gains or losses arising on re-measurement recognised in the Consolidated statement of profit and loss. Interest income from these financial assets is included in other income.

Dividend income on investments in equity instruments at FVTPL is recognised in the Consolidated statement of profit and loss in investment income when the Group's right to receive the dividends is established, it is probable that the economic benefits associated with the dividend will flow to the entity, and the amount of the dividend can be measured reliably.

Impairment of financial assets

On initial recognition of the financial assets, a loss allowance for expected credit loss is recognised for debt instruments at amortised cost and FVTOCI. For debt instruments that are measured at FVTOCI, the loss allowance is recognised in the Consolidated statement of profit and loss.

Expected credit losses of a financial instrument is measured in a way that reflects:

- an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes;
- the time value of money; and
- reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions.

At each reporting date, the Group assesses whether the credit risk on a financial instrument has increased significantly since initial recognition.

When making the assessment, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition and consider reasonable and supportable information, that is available without undue cost or effort, that is indicative of significant increases in credit risk since initial recognition.

If, at the reporting date, the credit risk on a financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instrument at an amount equal to 12-month expected credit losses. If, the credit risk on that financial instrument has increased significantly since initial recognition, the Group measures the loss allowance for a financial instrument at an amount equal to the lifetime expected credit losses.

For Trade Receivables and Contract Assets, the Group applies the simplified approach required by Ind AS 109, which requires expected life time losses to be recognized from initial recognition of the receivables.

The amount of expected credit losses (or reversal) that is required to adjust the loss allowance at the reporting date is recognised as an impairment gain or loss in the Consolidated statement of profit and loss.

De-recognition of financial assets

The Group derecognises a financial asset on trade date only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity or when it retains contractual rights to retain contractual cash flows from financial assets, but assumes a contractual obligation to pay the cash flows to one or more recipient. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

On de-recognition of a financial asset other than in its entirety (e.g. when the Group retains an option to repurchase part of a transferred asset), the Group allocates the previous carrying amount of the financial asset between the part it continues to recognise under continuing involvement and the part it no longer recognises on the basis of the relative fair values of those parts on the date of the transfer. The difference between the carrying amount allocated to the part that is no longer recognised and the sum of the consideration received for the part no longer recognised and any cumulative gain or loss allocated to it that had been recognised in other comprehensive income is recognised in the Consolidated statement of profit and loss. A cumulative gain or loss that had been recognised in other comprehensive income is allocated between the part that continues to be recognised and the part that is no longer recognised on the basis of the relative fair values of those parts.

Financial liabilities and equity instruments issued by the Group

Classification as debt or equity

Debt and equity instruments are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangement.

Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Group are recognised at the proceeds received, net of direct issue costs.

Compound instruments

The component parts of compound instruments (convertible instruments) issued by the Group are classified separately as financial liabilities and equity in accordance with the substance of the contractual arrangement. At the date of issue, the fair value of the liability component is estimated using the prevailing market interest rate for a similar non-convertible instrument. This amount is recorded as a liability on an amortised cost basis using the effective interest method until extinguished upon conversion or at the instrument's maturity date. The equity component is determined by deducting the amount of the liability component from the fair value of the compound instrument as a whole. This is recognised and included in equity, net of income tax effects, and is not subsequently re-measured.

Financial guarantee contract liabilities

Financial guarantee contract liabilities are initially measured at their fair values and, if not designated as at FVTPL, are subsequently measured at the higher of:

- the amount of loss allowance is determined by using expected credit loss model ; and
- the amount initially recognised less, where appropriate, cumulative amount of income recognised in accordance with the revenue recognition policies.

Financial liabilities

Financial liabilities are classified as either financial liabilities 'at FVTPL' or 'other financial liabilities'.

Financial liabilities at FVTPL

Financial liabilities are classified as at FVTPL when the financial liability is either held for trading or it is designated as at FVTPL.

A financial liability is classified as held for trading if:

- it has been acquired or incurred principally for the purpose of repurchasing it in the near term; or
- on initial recognition it is part of a portfolio of identified financial instruments that the Group manages together and for which there is evidence of a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument.

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A financial liability other than a financial liability held for trading may also be designated as at FVTPL upon initial recognition, if:

- such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or
- the financial liability forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Group's documented risk management or investment strategy, and information about the Group is provided internally on that basis; or
- it forms part of a contract containing one or more embedded derivatives, and Ind-AS 109 Financial Instruments permits the entire combined contract to be designated as at FVTPL.

Financial liabilities at FVTPL are stated at fair value, with any gains or losses arising on re-measurement recognised in the Consolidated statement of profit and loss, except for the amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of that liability which is recognised in other comprehensive income.

The net gain or loss recognised in the Consolidated statement of profit and loss incorporates any interest paid on the financial liability.

Other financial liabilities

Other financial liabilities, including borrowings, are initially measured at fair value, net of transaction costs.

Other financial liabilities are subsequently measured at amortised cost using the effective interest method, with interest expense recognised on an effective yield basis.

The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments through the expected life of the financial liability, or (where appropriate) a shorter period, to the net carrying amount on initial recognition.

Offsetting financial instruments

Financial assets and liabilities are offset and the net amount reported in the Consolidated balance sheet when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the Group or the counterparty.

R. Derivatives and Hedge Accounting

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently re-measured at their fair value at the end of each reporting date. The method of recognising the resulting gain or loss depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged.

The Group designates certain derivatives as either:

- hedges of the fair value of recognised assets or liabilities or a firm commitment (fair value hedge);
- hedges of a particular risk associated with the cash flow of recognised assets or liabilities or a highly probable forecast transaction (cash flow hedge); or
- hedges of a net investment in a foreign operation (net investment hedge).

The Group documents at the inception of the transaction the relationship between hedging instruments and hedged items, as well as its risk management objectives and strategy for undertaking various hedging transactions. The Group also documents the nature of the risk being hedged and how the Group will assess whether the hedging relationship meets the hedge effectiveness requirements (including its analysis of the sources of hedge ineffectiveness and how it determines the hedge ratio).

Change in Fair value of derivatives that are not designated in any hedge relationship as mentioned above are accounted through the Consolidated Statement of Profit and Loss at each reporting date.

The Group also identifies embedded derivatives in certain transactions. These derivatives are generally segregated from the host transactions and accounted for separately. These derivatives are designated into a hedge relationship if they meet hedge accounting criteria. Change in fair value of such embedded derivatives are accounted in Other Comprehensive Income if they are designated in a cash flow hedge relationship. Fair Value change of all other embedded derivatives including those that are not designated in any hedge relationship are accounted through the Consolidated Statement of Profit and Loss.

The full fair value of a hedging derivative is classified as a Non-Current asset or liability when the residual

maturity of the derivative is more than 12 months and as a current asset or liability when the residual maturity of the derivative is less than 12 months.

Fair value hedge
Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recorded in the Consolidated statement of profit and loss, together with any changes in the fair value of the hedged item that are attributable to the hedged risk.

Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated, or exercised, or when it no longer qualifies for hedge accounting. The fair value adjustment to the carrying amount of the hedged item arising from the hedged risk is amortised to the Consolidated Statement of Profit and Loss from that date except for inventory that is charged to the Consolidated Statement of Profit and Loss on sale of goods.

Cash flow hedges
The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised in other comprehensive income and accumulated under the heading cash flow hedging reserve within equity. The gain or loss relating to the ineffective portion is recognised immediately in the Consolidated statement of profit and loss, and is included in the '(Gain) / Loss in Fair Value of Derivatives' line item.

Amounts previously recognised in other comprehensive income and accumulated in equity are reclassified to the Consolidated statement of profit and loss in the periods when the hedged item affects the Consolidated statement of profit and loss, in the same line as the recognised hedged item. However, when the hedged forecast transaction results in the recognition of a non-financial asset or a non-financial liability, the gains and losses previously recognised in other comprehensive income and accumulated in equity are transferred from equity and included in the initial measurement of the cost of the non-financial asset or non-financial liability as a basis adjustment.

If the hedge ratio for risk management purposes is no longer optimal but the risk management objective remains unchanged and the hedge continues to qualify for hedge accounting, the hedge relationship will be rebalanced by adjusting either the volume of the hedging instrument or the volume of the hedged item so that the hedge ratio aligns with the ratio used for risk management purposes. Any hedge ineffectiveness is calculated and accounted for in the Consolidated statement of profit and loss at the time of the hedge relationship rebalancing.

Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated, or exercised, or when it no longer qualifies for hedge accounting. Any gain or loss recognised in other comprehensive income and accumulated in equity at that time remains in equity and is recognised when the forecast transaction is ultimately recognised in the Consolidated statement of profit and loss. When a forecast transaction is no longer expected to occur, the gain or loss accumulated in equity is recognised immediately in the Consolidated statement of profit and loss.

Hedges of net investments in foreign operations
Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognised in other comprehensive income and accumulated under the heading of foreign currency translation reserve. The gain or loss relating to the ineffective portion is recognised immediately in the Consolidated statement of profit and loss.

Gains and losses on the hedging instrument relating to the effective portion of the hedge accumulated in the Foreign Currency Translation Reserve are reclassified to the Consolidated statement of profit and loss on the disposal of the foreign operation.

S. Cash and Cash Equivalents

Cash and cash equivalents comprise of cash at bank and on hand, short-term deposits and short term highly liquid investments with an original maturity of three months or less that are readily convertible to known amounts of cash and are subject to insignificant risk of changes in value.

For the purposes of the consolidated statement of cash flow, cash and cash equivalents is as defined above, net of outstanding bank overdrafts which are integral part of Cash management activities. In the consolidated balance sheet, bank overdrafts are shown within borrowings in current liabilities.

T. Borrowing cost

General and specific borrowing costs directly attributable to the acquisition, construction or production of qualifying assets are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale. The Group considers a period of twelve months or more as a substantial period of time. Qualifying assets are assets that necessarily take a substantial period of time to get ready for their intended use or sale.

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Transaction cost in respect of long-term borrowings are amortised over the tenure of respective loans using effective interest method. All other borrowing costs are expensed in the period in which they are incurred.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization.

U. Accounting for Government Grants

Government grants are recognized when there is reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received.

Government grants are recognised in the consolidated statement of profit and loss on a systematic basis over the periods in which the Group recognises as expenses the related costs for which the grants are intended to compensate. Government grants whose primary condition is that the Group should purchase, construct or otherwise acquire Non-Current assets are recognized in the consolidated balance sheet by setting up the grant as deferred income and its amortization is recognised in 'Other Income' on straight line basis over expected useful lives of related assets.

Other government grants (grants related to income) are recognized as income over the periods necessary to match them with the costs for which they are intended to compensate, on a systematic basis. Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of providing immediate financial support with no future related costs are recognized in the Consolidated statement of profit and loss in the period in which they become receivable.

Grants related to income are presented under Other Income or Other Operating Revenue in the Consolidated statement of profit and loss depending upon the nature of the underlying grant, except for grants received in the form of rebate or exemptions related to expenditures, which are deducted in reporting the related expense.

The benefit of a government loan at a below-market rate of interest is treated as a government grant, measured as the difference between proceeds received and the fair value of the loan based on prevailing market interest rates.

Emission allowances are initially recognised as an intangible asset measured at fair value when the Group is granted the allowances and able to exercise control with a corresponding recognition of a grant at the same amount under deferred income. As carbon dioxide is emitted, the corresponding tons of emission allowances initially recognised under deferred income is reclassified and recognized in the Consolidated statement of profit and loss on a systematic basis.

Emission allowances are not amortised as their carrying value equals their residual value and therefore the depreciable basis zero, as their value is constant until delivery to the authorities. Emission allowances are subject to impairment test.

The provision for the liability to deliver allowances is recognised based on actual emission. The provision is measured at the carrying amount of allowances to the extent that the provision will be settled using allowances on hand with any excess emission being measured at the market value of the allowances at the period end. The group records the expense in the Consolidated statement of profit and loss under other expenses.

When the emission allowances for the carbon dioxide emitted are delivered to the authorities, the intangible asset as well as the corresponding provision are de-recognized from the Consolidated balance sheet without any effect on the Consolidated statement of profit and loss.

V. Employee Benefits

Retirement benefit, medical costs and termination benefits

A defined contribution plan is a pension plan under which the group pays fixed contributions into a separate entity. The Group has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods. Payments to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them to the contributions.

For defined benefit retirement and medical plans, the cost of providing benefits is determined using the projected unit credit method, with actuarial valuations being carried out at the end of each annual reporting period. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using market yields of government bonds having terms approximating to the terms of related obligation. In countries where there is a deep market in high-quality corporate bonds, the market rate on those bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related pension obligation are used.

Re-measurement, comprising of actuarial gains and losses, the effect of the changes to the asset ceiling (if applicable) and the return on plan assets (excluding interest), is reflected in the Consolidated balance sheet with a charge or credit recognised in other comprehensive income in the period in which they occur. Re-measurement recognised in other comprehensive income is reflected immediately in retained earnings and will not be reclassified to the Consolidated statement of profit and loss. Past service cost is recognised in the Consolidated statement of profit and loss in the period of a plan amendment. Net interest is calculated by applying the discount rate at the beginning of the period to the net defined benefit liability or asset. Defined benefit costs are categorised as follows:

- service cost (including current service cost, past service cost, as well as gains and losses on curtailments and settlements);
- net interest expense or income; and
- re-measurement.

The Group presents the first two components of defined benefit costs in the Consolidated statement of profit and loss in the line item employee benefits expense. Curtailment gains and losses are accounted for as past service costs.

The retirement benefit obligation recognised in the Consolidated balance sheet represents the actual deficit or surplus in the Group's defined benefit plans. Any surplus resulting from this calculation is limited to the present value of any economic benefits available in the form of refunds from the plans or reductions in future contributions to the plans.

A liability for a termination benefit is recognised at the earlier of when the Group can no longer withdraw the offer of the termination benefit and when the entity recognises any related restructuring costs. In the case of an offer made to encourage voluntary redundancy, the termination benefits are measured based on the number of employees expected to accept the offer. Benefits falling due more than 12 months after the end of the reporting period are discounted to their present value.

Short-term and other long-term employee benefits

A liability is recognised for benefits accruing to employees in respect of wages and salaries in the period the related service is rendered at the undiscounted amount of the benefits expected to be paid in exchange for that service.

Liabilities recognised in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

Liabilities recognised in respect of other long-term employee benefits such as annual leave and sick leave are measured at the present value of the estimated future cash outflows expected to be made by the Group in respect of services provided by employees up to the reporting date. The expected costs of these benefits are accrued over the period of employment using the same accounting methodology as used for defined benefit retirement plans. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to the Consolidated statement of profit and loss in the period in which they arise. These obligations are valued annually by independent qualified actuaries.

W. Employee Share-based Payments

Equity-settled share-based payments to employees are measured at the fair value of options at the grant date.

The fair value of options at the grant is expensed over the respective vesting period in which all of the specified vesting conditions are to be satisfied with a corresponding increase in equity as "Employee Stock Options Account". In case of forfeiture of unvested option, portion of amount already expensed is reversed. In a situation where the vested options are forfeited or expires unexercised, the related balance standing to the credit of the "Employee Stock Options Account" are transferred to the "Retained Earnings".

When the options are exercised, the Company issues new equity shares of the Company of ₹ 1/- each fully paid-up. The proceeds received and the related balance standing to credit of the Employee Stock Options Account are credited to share capital (nominal value) and Securities Premium Account.

Share appreciation rights which are cash settled, are recognised as employee benefit expense over the relevant service period. The liability is fair valued at each reporting date and are presented as employee benefit obligations in the consolidated balance sheet.

X. Income Taxes

Income tax expense represents the sum of the tax currently payable and deferred tax.

Current tax

The tax currently payable is based on taxable profit for the year. Taxable profit differs from 'profit before

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tax' as reported in the Consolidated statement of profit and loss because of items of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the Group's entities operate and generate taxable income using tax rates that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax

Deferred tax is recognised on differences between the carrying amounts of assets and liabilities in the consolidated balance sheet and the corresponding tax bases used in the computation of taxable profit. Where the local currency is not the functional currency, deferred tax is recognised on temporary difference arising from exchange rate changes between the closing rate and the historical purchase price of non-monetary assets translated at the exchange rate at the date of purchase if those non-monetary assets have tax consequences.

Deferred tax liabilities are generally recognised for all taxable temporary differences.

Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilised. Such assets and liabilities are not recognised if the temporary difference arises from initial recognition of goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

Deferred tax liabilities are recognised for taxable temporary differences associated with investments in subsidiaries and associates, and interests in joint arrangements, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognised to the extent that it is probable that there will be sufficient taxable profits against which to utilise the benefits of the temporary differences and they are expected to reverse in the foreseeable future. Generally, the Group is unable to control the reversal of the temporary difference for associates.

The carrying amount of deferred tax assets is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realised, based on tax rates (and tax laws) that have been enacted or substantively enacted by the balance sheet date. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the reporting date, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis.

Minimum Alternative Tax (MAT) is recognized as an asset only when and to the extent there is convincing evidence that the Group will pay normal income tax during the specified period. In the year in which the MAT credit becomes eligible to be recognized as an asset, the said asset is created by way of credit to the consolidated statement of profit and loss and included in deferred tax assets. The Group reviews the same at each balance sheet date and writes down the carrying amount of MAT entitlement to the extent there is no longer convincing evidence to the effect that Group will pay normal income tax during the specified period.

Current and deferred tax for the period

Current and deferred tax are recognised in the Consolidated statement of profit and loss, except when they relate to items that are recognised in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognised in other comprehensive income or directly in equity, respectively. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

The Group applies significant judgement in identifying uncertainties over income tax treatments. Uncertain tax positions are reflected in the overall measurement of tax expense of respective group entities and are based on the most likely amount or expected value that is to be disallowed by the taxing authorities in respective group entities, whichever better predict the resolution of uncertainty. Uncertain tax balances are monitored

and updated as and when new information becomes available, typically upon examination or action by the taxing authorities or through statute expiration.

The Group considers when a particular amount payable for interest and penalties on income taxes is determined to be within the scope of Ind AS 37, it is presented as part of financing cost or other expenses, respectively, unless when there is an overall settlement with tax authority and the interest and penalties cannot be identified separately in which case it is determined to be part of income taxes and accounted under Ind AS 12.

Y. Revenue Recognition

The Group derives revenue principally from sale of hydrate, speciality alumina, aluminium and aluminium value added products, di-ammonium phosphate, copper, precious metals (gold & silver) and other materials.

The Group recognizes revenue when it satisfies a performance obligation in accordance with the provisions of contract with the customer. This is achieved when control of the product has been transferred to the customer, which is generally determined when title, ownership, risk of obsolescence and loss pass to the customer and the Group has the present right to payment, all of which occurs at a point in time upon shipment or delivery of the product. The Group considers shipping and handling activities as costs to fulfil the promise to transfer the related products and the customer payments for shipping and handling costs are recorded as a component of revenue.

In certain customer contracts, shipping and handling services are treated as a distinct separate performance obligation and the Group recognises revenue for such services when the performance obligation is completed.

The Group considers the terms of the contract in determining the transaction price. The transaction price is based upon the amount the Group expects to be entitled to in exchange for transferring of promised goods and services to the customer after deducting incentive programs, included but not limited to discounts, volume rebates, etc.

For incentives offered to customers, the Group makes estimates related to customer performance and sales volume to determine the total amounts earned and to be recorded as deductions from "Revenue from contracts with customers". In making these estimates, the Group considers historical results that have a predictive value of the amount that the Group expects to be entitled to for the transferred goods and services. If historical results have limited predictive value or the Group has limited experience with similar types of incentives, the estimate is made in such a manner, which ensures that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur. The actual amounts may differ from these estimates and are accounted for prospectively. No element of significant financing is deemed present as the sales are made with a credit term, which is consistent with market practice. The Group's obligation to repair or replace faulty products under the standard warranty terms is recognised as a cost with a corresponding provision.

For certain customer contracts, final prices are determined based on the underlying market index of commodity prices at a future date, for example prices on the London Metal Exchange Limited (LME) or London Bullion Markets Association (LBMA). In such contracts, the Group records revenue on a provisional basis considering current market price when control is transferred to the customer. At the end of each period, prior to final settlement date, adjustments are made to the provisional sale price based on movements in the underlying market index of commodity prices up to the date of final price determination. Such variable price movement is accounted as other operating revenue.

Revenue from irrevocable bill and hold/ holding certificate contracts is recognised when it is probable that delivery will be made, goods have been identified and kept separately, are ready for delivery in the present condition and usual payment terms for such contracts applies. Under these arrangements, revenue is recognised once legal title has passed and all significant risks and rewards of ownership of the asset sold are transferred to the customer.

Export incentives and subsidies are recognized when there is reasonable assurance that the Group will comply with the conditions and the incentive will be received.

Claim on insurance companies, railway authorities and others are accounted for on acceptance basis.

Revenue excludes any taxes and duties collected on behalf of the government.

Z. Dividend and Interest Income

Dividend income from investments is recognised when the Group's right to receive payment has been established.

Interest income from a financial asset is recognised when it is probable that the economic benefits will flow to the Group and the amount of income can be measured reliably. Interest income is accrued on a time

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basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount on initial recognition.

AA. Segment Reporting

An operating segment is a component of the Group that engages in business activities from which it may earn revenues and incur expenses, whose operating results are regularly reviewed by the Group's Chief Operating Decision Maker ("CODM") to make decisions for which discrete financial information is available. The Group prepares its segment information in conformity with the accounting policies adopted for preparing and presenting the financial statements of the Group as a whole. The CODM assesses the financial performance and position of the Group and makes strategic decisions. Operating segments are reported in a Manner consistent with the internal reporting provided to the CODM.

Allocation of common costs:

Common allocable costs are allocated to each segment according to the relative contribution of each segment to the total common costs.

Inter-segment transfers:

Inter-segment revenue has been accounted for based on the transaction price agreed to between segments which is based on current market prices.

Unallocated items:

Revenue, expenses, assets and liabilities which relate to the Group as a whole and not allocable to segments on reasonable basis have been included under 'unallocated revenue / expenses / assets / liabilities'.

AB. Exceptional Items

Exceptional items include income or expense that are considered to be part of ordinary activities, however are of such significance and nature that separate disclosure enables the user of the financial statements to understand the impact in a more meaningful manner. Exceptional items are identified by virtue of either their size or nature so as to facilitate comparison with prior periods and to assess underlying trends in the financial performance of the Group.

3. Measurement of fair value

a. Financial Instruments

The estimated fair value of the Group's financial instruments is based on market prices and valuation techniques. Valuations are made with the objective to include relevant factors that market participants would consider in setting a price, and to apply accepted economic and financial methodologies for the pricing of financial instruments. References for less active markets are carefully reviewed to establish relevant and comparable data.

b. Marketable and non-marketable Equity Securities

Fair value for listed shares is based on quoted market prices as of the reporting date. Fair value for unlisted shares is calculated based on commonly accepted valuation techniques utilizing significant unobservable data, primarily cash flow based models.

c. Derivatives

Fair value of financial derivatives is estimated as the present value of future cash flows, calculated by reference to quoted price curves and exchange rates as of the balance sheet date. Options are valued using appropriate option pricing models and credit spreads are applied where deemed to be significant.

d. Embedded Derivatives

Embedded derivatives that are separated from the host contract are valued by comparing the forward curve at contract inception to the forward curve as of the balance sheet date. Changes in the present value of the cash flows related to the embedded derivative are recognized in the Consolidated Balance Sheet and in the Consolidated Statement of Profit and Loss.

4. Critical accounting judgment and key sources of estimation uncertainty

In preparing the financial statements in conformity with accounting principles generally accepted in India, management is required to make estimates and assumptions that affect reported amounts of assets and liabilities and the disclosure of contingent liabilities as at the date of the financial statements and the amounts of revenue and expenses during the reported period. Actual results could differ from those estimates. Any revision to such estimates is recognised in the period in which the same is determined.

The following paragraphs explain areas that are considered more critical, involving a higher degree of judgment and complexity.

(a) Joint Operation

We invest in certain consortiums which are accounted for as joint operation. A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant

activities require unanimous consent of the parties sharing control. When a group entity undertakes its activities under joint operations, the Group as a joint operator recognizes assets, liabilities, income and expenses in relation to its interest in a joint operation. (refer Note 53 C)

(b) Impairment of Goodwill

Goodwill represents the excess of the purchase price over the fair value of the identifiable net assets of acquired companies. Goodwill is not amortized; instead, it is tested for impairment at least annually. The recoverable amount is determined based on value in use or fair value less cost to sell calculations which require the use of assumptions as directly observable market prices are generally not exist for the Group's assets. However, fair value may be estimated based on recent transactions on comparable assets, internal models used by the Group for transactions involving the same type of assets or other relevant information. Calculation of value in use is a discounted cash flow calculation based on continued use of the assets in its present condition, excluding potential exploitation of improvement or expansion potential. (refer Note 8)

(c) Impairment of Non-Current Assets

Ind AS 36 requires that the Group assesses conditions that could cause an asset or a Cash Generating Unit (CGU) to become impaired and to test recoverability of potentially impaired assets. These conditions include changes resulting from market and economic environment, including internal and external factors such as the Group's market capitalization, significant changes in the Group's planned use of the assets or a significant adverse change in the expected prices, sales volumes or raw material cost. The identification of CGUs involves judgment, including assessment of where active markets exist, and the level of interdependency of cash inflows. CGU is usually the individual plant, unless the asset or asset group is an integral part of a value chain where no independent prices for the intermediate products exist, a group of plants is combined and managed to serve a common market, or where circumstances otherwise indicate significant interdependencies.

In accordance with Ind AS 36, certain intangible assets are reviewed at least annually for impairment. If a loss in value is indicated, the recoverable amount is estimated as the higher of the CGU's fair value less cost to sell, or its value in use. Directly observable market prices rarely exist for the Group's assets, however, fair value may be estimated based on recent transactions on comparable assets, internal models used by the Group for transactions involving the same type of assets or other relevant information. Calculation of value in use is a discounted cash flow calculation based on continued use of the assets in its present condition, excluding potential exploitation of improvement or expansion potential.

Determination of the recoverable amount involves management estimates on highly uncertain matters, such as commodity prices and their impact on markets and prices for upgraded products, development in demand, inflation, operating expenses and tax and legal environment. The Group uses internal business plans, quoted market prices and the Group's best estimate of commodity prices, currency rates, discount rates and other relevant information. A detailed forecast is developed for a period of three to five years with projections thereafter.

(d) Employee retirement plans

The Group provides both defined benefit employee retirement plans and defined contribution plans. Measurement of pension and other superannuation costs and obligations under such plans require numerous assumptions and estimates that can have a significant impact on the recognized costs and obligation, such as future salary level, discount rate, attrition rate and mortality.

The Group provides defined benefit plans to its employees. The discount rate is based on Government bond yield. Assumptions for salary increase in the remaining service period for active plan participants are based on expected salary increase in India. Changes in these assumptions can influence the net asset or liability for the plan as well as the pension cost. (refer Note 47)

(e) Environmental liabilities and Asset Retirement Obligation (ARO)

Estimation of environmental liabilities and ARO require interpretation of scientific and legal data, in addition to assumptions about probability and future costs. (refer Note 26)

(f) Taxes

The Group calculates income tax expense based on reported income. Deferred income tax expense

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is calculated based on the differences between the carrying value of assets and liabilities for financial reporting purposes and their respective tax basis that are considered temporary in nature. Valuation of deferred tax assets is dependent on management's assessment of future recoverability of the deferred tax benefit. Expected recoverability may result from expected taxable income in the future, planned transactions or planned tax optimizing measures. Economic conditions may change and lead to a different conclusion regarding recoverability. (refer Notes 13 and 14). For judgements related to adoption of lower tax rate as per Section 115BBA of the Income tax Act, refer Note 14 D.

(g) Extension and termination option in a Lease

Extension and termination options are included in many of the leases. In determining the lease term the Management considers all facts and circumstances that create an economic incentive to exercise an extension option, or not exercise a termination option. This assessment is reviewed if a significant event or a significant change in circumstances occurs which affects this assessment and that is within the control of the Group. (refer Note 54)

(h) Useful lives of depreciable/ amortisable assets (tangible and intangible)

Management reviews its estimate of the useful lives of depreciable/ amortisable assets at each reporting date, based on the expected utility of the assets. Uncertainties in these estimates relate to technical and economic obsolescence that may change the utility of certain software, IT equipment and other plant and equipment.

(i) Recoverability of advances/ receivables

At each balance sheet date, based on discussions with the respective counter-parties and internal assessment of their credit worthiness, the management assesses the recoverability of outstanding receivables and advances. Such assessment requires significant management judgement based on financial position of the counter-parties, market information and other relevant factors.

(j) Fair Value Measurements

The Group applies valuation techniques to determine the fair value of financial instruments (where active market quotes are not available) and non-financial assets. This involves developing estimates and assumptions consistent with the market participants to price the instrument. The Group's assumptions are based on observable data as far as possible, otherwise on the best information available. Estimated fair values may vary from the actual prices that would be achieved in an arm's length transaction at the reporting date. (refer Note 50)

(k) Contingent Assets and Liabilities, Provisions and Uncertain Tax Positions

There are various legal, direct and indirect tax matters and other obligations including environmental, mining, local and state levies, income tax holiday, availing input tax credits, etc., which may impact the Group. Evaluation of uncertain liabilities and contingent liabilities and assets arising out of above matters require management judgment and assumptions, regarding the probability of outflow or realization of economic resources and the timing and amount, or range of amounts, that may ultimately be determined. Such estimates may vary from the ultimate outcome as a result of differing interpretations of laws and facts, or application of relevant judicial precedents. (refer Notes 13, 26 and 47)

(l) Inventory Measurement

Measurement of bulk inventory quantities (such as coal, bauxite, copper concentrates, etc.) lying at yards and work in progress of precious metals at smelter and refinery is material, complex and involves significant judgement and estimate resulting from measuring the surface area, dip measurement of materials in tanks/silos, etc.

The Group performs physical counts of above inventory on a periodic basis using internal / external experts to perform volumetric surveys and assessments, basis which the estimate of quantity for these inventories is determined. The variations noted between book records and physical quantities of above inventories are evaluated and appropriately accounted in the books of account. (refer Note 16)

5. Recent Accounting Pronouncements

There are no other new updates or standards issued through the date of issuance of these financial statements that have not yet been adopted by the Group.

6. Property, Plant and Equipment (including ROU Assets) and Capital Work-in-Progress

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
Property, Plant and Equipment - Cost	108,938	103,240
Less: Accumulated Depreciation and Impairment	(44,629)	(39,055)
Net carrying amount of Property, Plant and Equipment	**64,309**	**64,185**
Right of Use (ROU) Assets - Cost (refer Note 54)	2,109	-
Less: Accumulated Depreciation and Impairment	(351)	-
Net carrying amount of Right of Use Assets	**1,758**	**-**
Net carrying amount of Property, Plant and Equipment (including ROU Assets)	**66,067**	**64,185**
Capital Work-in-Progress - (f) & (g)	7,610	3,975
	73,677	**68,160**

Property, Plant and Equipment

₹ in Crore

Particulars	ORIGINAL COST					ACCUMULATED DEPRECIATION AND IMPAIRMENT					NET CARRYING AMOUNT		
	As at April 01, 2018	Additions	Disposal/ Adjustments	Exchange differences	As at March 31, 2019	As at April 01, 2018	Depreciation	Impairment/ (Reversal)	Disposal/ Adjustments	Exchange differences	As at March 31, 2019	As at March 31, 2019	As at March 31, 2018
Freehold Land	2,467	158	(30)	10	2,605	152	3	-	(1)	7	161	2,444	2,315
Leasehold Improvements	314	-	-	9	323	98	3	-	-	4	105	218	216
Buildings	18,315	627	(82)	271	19,131	5,157	794	-	(86)	99	5,964	13,167	13,158
Plant and Machinery	75,513	3,135	(1,163)	785	78,270	28,421	3,195	(11)	(1,008)	381	30,978	47,292	47,092
Vehicles and Aircraft	627	45	(28)	7	651	335	49	-	(23)	5	366	285	292
Railway Wagons	-	-	-	-	-	-	-	-	-	-	-	-	-
Railway Sidings	489	-	-	-	489	138	28	-	-	-	166	323	351
Furniture and Fixtures	1,097	87	(29)	(8)	1,147	752	79	-	(28)	(6)	797	350	345
Office Equipment	600	38	(31)	17	624	483	50	-	(28)	13	518	106	117
Total	**99,422**	**4,090**	**(1,363)**	**1,091**	**103,240**	**35,536**	**4,201**	**(11)**	**(1,174)**	**503**	**39,055**	**64,185**	**63,886**

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₹ in Crore

Particulars	ORIGINAL COST					ACCUMULATED DEPRECIATION AND IMPAIRMENT						NET CARRYING AMOUNT	
	Revised As at April 01, 2019**	Additions	Disposal/ Adjustments	Exchange differences	As at March 31, 2020	Revised As at April 01, 2019**	Depreciation	Impairment/ (Reversal)	Disposal/ Adjustments	Exchange differences	As at March 31, 2020	As at March 31, 2020	Revised As at March 31, 2019**
Freehold Land	2,605	31	(3)	105	2,738	101	4	48	-	11	164	2,574	2,504
Leasehold Improvements	320	9	79	22	430	104	17	-	43	12	176	254	216
Buildings	19,127	432	(49)	731	20,241	6,024	743	5	(65)	316	7,023	13,218	13,103
Plant and Machinery #	78,040	2,167	(685)	2,512	82,034	30,860	3,290	22	(415)	1,293	35,050	46,984	47,180
Vehicles and Aircraft	649	72	(21)	21	721	365	52	-	(14)	12	415	306	284
Railway Wagons	123	23	190	-	336	39	17	-	84	-	140	196	84
Railway Sidings	489	1	-	-	490	166	27	-	-	-	193	297	323
Furniture and Fixtures	1,108	70	(16)	59	1,221	780	72	6	(15)	40	883	338	328
Office Equipment	622	80	(13)	38	727	517	49	-	(12)	31	585	142	105
Total	**103,083**	**2,885**	**(518)**	**3,488**	**108,938**	**38,956**	**4,271**	**81**	**(394)**	**1,715**	**44,629**	**64,309**	**64,127**

Refer Note 9 (i)

Right-of-use Assets

₹ in Crore

Particulars	ORIGINAL COST					ACCUMULATED DEPRECIATION AND IMPAIRMENT						NET CARRYING AMOUNT
	As at April 01, 2019	Additions	Disposal/ Adjustments	Exchange differences	As at March 31, 2020	As at April 01, 2019	Depreciation	Impairment/ (Reversal)	Disposal/ Adjustments	Exchange differences	As at March 31, 2020	As at March 31, 2020
Leasehold Land	847	170	-	14	1,031	-	27	-	-	1	28	1,003
Buildings	362	142	(102)	23	425	1	77	-	(1)	3	80	345
Stadium Suit	19	-	-	2	21	-	3	-	-	-	3	18
Plant and Machinery	136	8	(18)	6	132	92	8	-	(14)	4	90	42
Vehicles and Aircraft	155	58	(25)	9	197	2	81	-	(16)	2	69	128
Boats	2	59	(2)	-	59	-	10	-	-	-	10	49
Railway Wagons	159	5	-	7	171	-	33	-	-	2	35	136
Railway Sidings	22	-	(1)	-	21	-	10	-	(1)	-	9	12
Waterfront	1	-	-	-	1	-	-	-	-	-	-	1
Furniture and Fixtures	39	3	(3)	3	42	17	8	-	(3)	-	22	20
Office Equipment	8	2	(2)	1	9	2	4	-	(1)	-	5	4
Total	**1,750**	**447**	**(153)**	**65**	**2,109**	**114**	**261**	**-**	**(36)**	**12**	**351**	**1,758**

** Upon introduction of Ind AS 116 Leases effective April 1, 2019, all Finance Lease assets identified under the earlier Ind AS 17 Leases, have been reclassified to ROU Assets. (refer Note 54)

These Right of Use Assets are combined with all other tangible assets and presented through line item 'Property, Plant and Equipment' under Non-Current Assets on the face of the Consolidated Balance Sheet.

(a) Group's share in jointly owned assets has been grouped together with the relevant class of property, plant and equipment. The cost and net carrying amounts included in relevant class of assets are given below:

₹ in Crore

	31.03.2020		31.03.2019	
	Original Cost	Net Carrying Amount	Original Cost	Net Carrying Amount
Freehold Land	52	52	52	52
Buildings	41	29	41	30
Plant and Machinery	41	2	41	2
Furniture and Fixtures	4	*	4	*
Vehicles and Aircraft	*	*	*	*
Office Equipment	6	1	6	1

**Amount below rounding off convention.*

(b) For assets pledged and Hypothecated against borrowings, refer Note 23A.

(c) For impairment charges or reversal, refer Note 38.

(d) For capital expenditures contracted but not incurred, refer to Note 48 (B).

(e) For previous year, in respect of future minimum lease payments and their present value of Property, Plant and Equipment taken under finance lease as per Ind AS 17 Leases, refer to Note - 23A (g).

(f) Capital Work-in-Progress (CWIP) comprise of various routine, non-routine projects and expansion spread over across the Group.

(g) The Group has tested the carrying value of CWIP for impairment as at reporting date and recorded an impairment charge of ₹ 14 Crore (31/03/2019 ₹ Nil). During the previous year, ₹ 9 Crore had been classified to held for sale from the CWIP.

(h)

Items of Property, Plant and Equipment	Useful life (Years)
Freehold Land	Infinite #
Leasehold Improvements	7 - 90
Buildings	3 - 60
Plant and Machinery	2 - 40
Vehicles and Aircraft	2 - 25
Railway Wagons	15
Railway Sidings	15
Furniture and Fixtures	3 - 10
Office Equipment	2 - 25

Freehold land used for mining is depreciated over 8 - 30 years.

(i) The Property, Plant and Equipment residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

(j) Assets for which registration is pending:

Freehold Land: Original Cost ₹ 31 Crore (31/03/2019 ₹ 31 Crore). Carrying Amount ₹ 29 Crore (31/03/2019 ₹ 30 Crore).

(k) The Company has sold its Aluminium Foil manufacturing unit at Kollur, Telangana on slump sale basis through a Business Transfer Agreement dated April 26, 2019, Profit on sale amounting to ₹ 25 Crore is booked under Exceptional Income. (refer Note 40)

(l) Consequent upon settlement of claim with one of the major suppliers related to our Smelters at Aditya and Mahan, the Company has recovered ₹ 87 Crore as liquidated damages during the year. The entire amount has been credited to cost of respective items of Property, Plant and Equipment.

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7. Investment Property

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
Cost	34	34
Less: Accumulated Depreciation and Impairment	(12)	(11)
Net Carrying amount	**22**	**23**

₹ in Crore

Particulars	ORIGINAL COST					ACCUMULATED DEPRECIATION AND IMPAIRMENT						NET CARRYING AMOUNT	
	As at April 01, 2018	Additions	Disposal/ Adjustments	Exchange differences	As at March 31, 2019	As at April 01, 2018	Depreciation	Impairment/ (Reversal)	Disposal/ Adjustments	Exchange differences	As at March 31, 2019	As at March 31, 2019	As at March 31, 2018
Freehold Land	1	-	-	-	1	-	-	-	-	-	-	1	1
Buildings	33	-	-	-	33	10	1	-	-	-	11	22	23
Total	**34**	**-**	**-**	**-**	**34**	**10**	**1**	**-**	**-**	**-**	**11**	**23**	**24**

₹ in Crore

Particulars	ORIGINAL COST					ACCUMULATED DEPRECIATION AND IMPAIRMENT						NET CARRYING AMOUNT	
	As at April 01, 2019	Additions	Disposal/ Adjustments	Exchange differences	As at March 31, 2020	As at April 01, 2019	Depreciation	Impairment/ (Reversal)	Disposal/ Adjustments	Exchange differences	As at March 31, 2020	As at March 31, 2020	As at March 31, 2019
Freehold Land	1	-	*	-	1	-	-	-	-	-	-	1	1
Buildings	33	-	-	-	33	11	1	-	-	-	12	21	22
Total	**34**	**-**	**-**	**-**	**34**	**11**	**1**	**-**	**-**	**-**	**12**	**22**	**23**

**Amount below rounding off convention.*

(a) Amount recognised in profit and loss for Investment Properties are as under:

₹ in Crore

	Year ended 31.03.2020	Year ended 31.03.2019
Rental Income	7	6
Direct operating expenses (including repair and maintenance) on properties generating rental income	(1)	(1)
Direct operating expenses (including repair and maintenance) on properties not generating rental income	-	-

(b) All of the Investment Properties of the Group are held under freehold interest.

(c) The Group has no contractual obligations to purchase, construct or develop investment properties or for repairs, maintenance and enhancements.

(d) The fair value of the Group's investment properties as at March 31, 2020 and March 31, 2019 have been arrived on the basis of valuation carried out at the respective dates by an external, independent valuer registered with the authority which governs the valuers in India. The fair value measurement for all the investments properties has been categorised as Level 2 fair value based on the inputs to the valuation technique used. Considering the type of the assets, market approach (sales comparable method) to estimate the fair value of the subject properties is adopted.

Fair value of investment properties and their fair value hierarchy given below:

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
	Level 2	Level 2
Freehold Land #	4	42
Buildings	95	96

During the year, the Company has sold assets of one of its manufacturing unit situated at Kollur, Telengana. (refer Note 6 (k))

₹ in Crore

(e) Items of Investment Property	Useful life (Years)
Freehold Land	Infinite
Buildings	60 Years

8. Goodwill

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
Cost	20,098	18,575
Less: Accumulated Impairment	-	-
Net Carrying amount	**20,098**	**18,575**

(₹ Crore)

	Cost	Accumulated Impairment	Net carrying amount
Balance as at April 01, 2018	17,829	-	17,829
Exchange differences	746	-	746
Balance as at March 31, 2019	**18,575**	**-**	**18,575**
Exchange differences	1,523	-	1,523
Balance as at March 31, 2020	**20,098**	**-**	**20,098**

(a) Impairment testing of Goodwill

Goodwill acquired in business combinations has been allocated to following cash generating units (CGU) of Aluminium and Novelis segment. However, there were no goodwill acquired with regard to Copper segment.

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
Novelis segment		
Novelis - North America	8,048	7,390
Novelis - Europe	7,755	7,277
Novelis - South America	2,757	2,532
Novelis - Asia	1,428	1,266
Aluminium segment		
Utkal Alumina International Limited (Utkal)	110	110
All other segments	*	*
Minerals and Minerals Limited (M&M)	20,098	18,575

**Amount below rounding off convention.*

NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

Goodwill is not amortized, instead, it is tested for impairment annually or more frequently if indicators of impairment exist. The recoverable amount of a cash generating unit (CGU) is determined based on value-in-use or fair value less cost to sell calculations which require the use of certain assumptions. The calculations use cash flow projections based on financial budgets approved by management covering three to five years period depending upon segment/ CGU's financial budgeting process. Cash flow beyond these financial budget period are extrapolated using the estimated growth rates.

The key assumptions used in the estimation of the recoverable amount of CGUs are set out below. The values assigned to the key assumptions represent management's assessment of future trends in the relevant industries and economic environment and have been based on historical data from both external and internal sources.

	Aluminium segment		Novelis segment	
	31.03.2020	**31.03.2019**	**31.03.2020**	**31.03.2019**
Discount rate (i)	13.20%	11.22%	7.96%	9.00%
Terminal growth rate (ii)	5.00%	3.73%	2.25%	2.00%
EV/EBITDA multiple in times (in Novelis segment)	-	-	6 to 10	6.5 to 9.5

i. For Novelis segment, the estimate of fair value (Level 3) less cost to sell for each cash generating unit is based on average of discounted cash flows (the income approach) and guideline public company method which considers enterprise Value ("EV")/EBITDA multiples of comparable companies adjusted with control premium (the market approach).

Under the income approach, the fair value of each cash generating unit is based on the present value of estimated future cash flows. The income approach is dependent on a number of significant management assumptions including markets and market share, sales volumes and prices, costs to produce, capital spending, working capital changes and the discount rate. Novelis estimate future cash flows for each of its cash generating units based on its projections for the respective reporting unit. These projected cash flows are discounted to the present value using a weighted average cost of capital (discount rate). The discount rate is commensurate with the risk inherent in the projected cash flows and reflects the rate of return required by an investor in the current economic conditions. The projections are based on both past performance and the expectations of future performance and assumptions used in Novelis's current operating plan.

The Group uses the trailing and forward EV/EBITDA multiples. EV is defined as the total of equity capital plus debt capital. The trailing multiples have been based on the EBITDA of the trailing twelve months preceding the valuation date and the forward multiples have been based on the one-year and two-year forward consensus analyst EBITDA estimates as on the valuation date and has been adjusted for control premium.

For Aluminium segment, the recoverable amount is determined based on value in use and the projected cash flows are discounted to the present value using pre-tax weighted average cost of capital (discount rate). The discount rate commensurate with the risk inherent in the projected cash flows and reflects the rate of return required by an investor in the current economic conditions.

Minerals and Minerals Limited (M&M) is part of 'All other segments' is immaterial, hence no impairment testing for the same is performed by the Group.

ii. The Group use's specific revenue growth assumptions for each cash generating unit based on history and economic conditions.

As a result of goodwill impairment test for the year ended March 31, 2020 and year ended March 31, 2019, no goodwill impairment was identified as the recoverable value of the CGUs to whom goodwill was allocated exceeded their respective carrying amounts at all the periods reported above.

(b) Impact of possible changes in key assumptions

Goodwill in the Consolidated Financial Statements primarily consists of goodwill in Novelis segment, wherein goodwill has been allocated in four CGUs. The recoverable amount of each of these four CGU would equal its carrying amount if the key assumptions were to change as follows:

	As at 31.03.2020		As at 31.03.2019	
	From	**To**	**From**	**To**
i. Long-term growth rate (%)				
Novelis - North America	2.25%	**	2.25%	**
Novelis - Europe	2.25%	0.36%	2.25%	0.98%
Novelis - South America	2.25%	**	2.25%	**
Novelis - Asia	2.25%	**	2.25%	**
ii. Post-tax discount rate (%)				
Novelis - North America	7.96%	**	9.00%	**
Novelis - Europe	7.96%	9.36%	9.00%	9.93%
Novelis - South America	7.96%	**	9.00%	**
Novelis - Asia	7.96%	**	9.00%	**
iii. EV/EBITDA multiple (in times)				
Novelis - North America	6 - 8	**	6.5 - 8	**
Novelis - Europe	8 - 10	7.03	8 - 9.5	6.97
Novelis - South America	8 - 10	**	6.5 - 8	**
Novelis - Asia	6 - 8	**	6.5 - 8	**

** Management believes that no reasonably possible change in any of the above key assumptions (including assumptions related to Goodwill of Utkal) would cause the recoverable amount to fall below the carrying value of any of the CGU having allocated goodwill.

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9. Other Intangible Assets and Intangible Assets under Development

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
Cost	9,155	8,293
Less: Accumulated Amortisation and Impairment	(6,147)	(5,216)
Net Carrying amount	**3,008**	**3,077**
Intangible Assets under Development - (d), (e)	111	122
	3,119	**3,199**

₹ in Crore

Particulars	ORIGINAL COST					ACCUMULATED AMORTISATION AND IMPAIRMENT						NET CARRYING AMOUNT	
	As at April 01, 2018	Additions	Disposal/ Adjustments	Exchange differences	As at March 31, 2019	As at April 01, 2018	Amortisation	Impairment/ (Reversal)	Disposal/ Adjustments	Exchange differences	As at March 31, 2019	As at March 31, 2019	As at March 31, 2018
Mining Rights	580	97	-	(6)	671	172	104	-	-	(5)	271	400	408
Trade Name	954	-	-	58	1,012	531	50	-	-	31	612	400	423
Technology and Software	3,002	107	(1)	108	3,216	2,096	262	-	-	92	2,450	766	906
Customer related Intangible Assets	2,967	-	-	121	3,088	1,608	156	-	-	64	1,828	1,260	1,359
Right to Use Assets	81	-	-	-	81	52	3	-	-	-	55	26	29
Carbon Emission Rights	225	154	(169)	15	225	-	-	-	-	-	-	225	225
Total	**7,809**	**358**	**(170)**	**296**	**8,293**	**4,459**	**575**	**-**	**-**	**182**	**5,216**	**3,077**	**3,350**

₹ in Crore

Particulars	ORIGINAL COST					ACCUMULATED AMORTISATION AND IMPAIRMENT						NET CARRYING AMOUNT	
	As at April 01, 2019	Additions	Disposal/ Adjustments	Exchange differences	As at March 31, 2020	As at April 01, 2019	Amortisation	Impairment/ (Reversal)	Disposal/ Adjustments	Exchange differences	As at March 31, 2020	As at March 31, 2020	As at March 31, 2019
Mining Rights	671	51	-	(7)	715	271	59	-	-	(9)	321	394	400
Trade Name	1,012	-	-	88	1,100	612	50	-	-	55	717	383	400
Technology and Software	3,216	263	(2)	270	3,747	2,450	296	-	-	207	2,953	794	766
Customer related Intangible Assets	3,088	-	-	270	3,358	1,828	158	-	-	170	2,156	1,202	1,260
Right to Use Assets	81	-	(81)	-	-	55	-	-	(55)	-	-	-	26
Carbon Emission Rights	225	-	(10)	20	235	-	-	-	-	-	-	235	225
Total	**8,293**	**314**	**(93)**	**641**	**9,155**	**5,216**	**563**	**-**	**(55)**	**423**	**6,147**	**3,008**	**3,077**

(a) Trade name and customer related intangible assets were established in purchase accounting during acquisition of Novelis Inc. by the Company, whereas Technology and software mainly related to products we license and internally developed software.

(b) For impairment charges or reversal on above Intangible assets and intangible assets under development, refer Note 38.

(c) Addition in Mining Rights includes ₹ 47 Crore and amortization expense includes ₹ 38 Crore (31/03/2019, addition included ₹ 91 Crore, and amortization expense included ₹ 88 Crore) towards stripping activity assets.

(d) The Carrying Amount of Intangible Asset under Development includes ₹ 70 Crore (31/03/2019 ₹ 34 Crore) pertaining to Enterprise Resource Planning System implementation.

(e) The Group has tested the carrying value of Intangible Asset under Development for impairment as at reporting date and recorded an impairment charge of ₹ 14 Crore (31/03/2019 ₹ Nil) on the same.

(f)

Items of Intangible Assets	Useful life (Years)	Remaining useful life (Years)
Trade Name	3 - 20	7.05
Technology and Software	3 - 10.6	1.91
Customer related Intangible Assets	20	7.05
Mining Rights	11 - 50	8 - 44

(g) For assets pledged and Hypothecated against borrowings, refer Note 23A.

(h) The Intangible assets useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

(i) During the year, the Group has reclassified its Right to use assets to Plant and Machinery (under Property, Plant and Equipment).

10A. Investments, Non-Current

(Fully paid-up, unless otherwise stated)

₹ in Crore

	Face value per Unit	Numbers - As at		Value - As at	
		31.03.2020	31.03.2019	31.03.2020	31.03.2019
Equity Instruments at FVTOCI - (a)					
Quoted					
National Aluminium Company Limited	₹ 5	47,618,555	47,618,555	139	264
Grasim Industries Limited	₹ 2	28,464,653	28,464,653	1,355	2,442
UltraTech Cement Limited	₹ 10	1,258,515	1,258,515	408	503
Vodafone Idea Limited (b)	₹ 10	751,119,164	228,340,226	233	417
Aditya Birla Fashion and Retail Limited	₹ 10	44,982,142	44,982,142	688	991
Gujarat Narmada Valley Fertilizers & Chemicals Limited	₹ 10	100	100	*	*
Gujarat State Fertilizers & Chemicals Limited	₹ 2	500	500	*	*
Southern Petrochemical Industries Limited	₹ 10	100	100	*	*
Madras Fertilizer Limited	₹ 10	100	100	*	*
Rashtriya Chemicals and Fertilizers Limited	₹ 10	100	100	*	*
Aditya Birla Capital Limited	₹ 10	39,850,514	39,850,514	168	387
				2,991	**5,004**
Unquoted					
Sai Wardha Power Generation Limited	₹ 10	2,830,352	2,830,352	3	3
Birla International Limited	CHF 100	2,500	2,500	5	6
Bharuch-Dahej Railway Company Limited	₹ 10	13,530,000	13,530,000	19	26
Birla Management Centre Services Limited	₹ 10	9,500	9,500	8	10
				35	**45**

NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

₹ in Crore

	Face value per Unit	Numbers - As at		Value - As at	
		31.03.2020	31.03.2019	31.03.2020	31.03.2019
Debt Instruments at FVTOCI - (a)					
Quoted					
Government Securities					
6.83% Government of India Bond, 2039		2,000,000	2,000,000	20	18
				20	**18**
Debt Instruments at FVTPL - (a)					
Unquoted					
Preference Shares					
Aditya Birla Health Services Limited - 7% Redeemable Non Cumulative - (c)	₹ 100	2,500,000	2,500,000	25	24
Birla Management Centre Services Limited - 9% Redeemable Cumulative	₹ 10	300	300	*	*
				25	**24**
Unquoted					
Mutual Funds					
Investments in Debt Schemes of Mutual Funds				20	45
				20	**45**
				100	**132**
				3,091	**5,136**

* *Amount below rounding off convention.*

(a) Aggregate amount of Quoted and Unquoted Investments, Market value of Quoted Investments are given below:

Aggregate Cost of Quoted Investments	1,213	560
Aggregate Market value of Quoted Investments	3,011	5,022
Aggregate Cost of Unquoted Investments	66	88

(b) During the current year, the Company has subscribed to the Rights issue of Vodafone Idea Limited to the tune of ₹ 653 Crore (522,778,938 shares at ₹ 12.50 per share).

(c) These are Non-Cumulative Non-Convertible Preference Shares and Redeemable within 15 years from the allotment date i.e. March 29, 2019.

10B. Investments, Current

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
Quoted		
Investment in Government Securities at FVTOCI	73	70
Investment in Debentures and Bonds at FVTPL	210	225
Investment in Debt Schemes of Mutual Funds at FVTPL - (a)	5,996	3,560
	6,279	**3,855**

(a) Includes ₹ 161 Crore (31/03/2019: ₹ 76 Crore) being deposit as margin money with counterparties for derivative transactions.

(b) Details of each of the category of investment mentioned above are available in separate financial statements of respective group entities.

(c) Aggregate amount of Quoted and Unquoted Investments, Market value of Quoted investments are given below:

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
Aggregate cost of Quoted Investments	5,882	3,773
Aggregate Market value of Quoted Investments	6,279	3,855
Aggregate Cost of Unquoted Investments	-	-

11. Loans

(Unsecured, Considered Good, unless otherwise stated)

₹ in Crore

	As at 31.03.2020		As at 31.03.2019	
	Non-Current	Current	Non-Current	Current
Loan to Related Parties - (refer Note 45)	-	46	-	51
Loan to Employees	10	9	13	7
Loan to Others	2	*	2	*
	12	**55**	**15**	**58**

* Amount below rounding off convention.

12A. Other Financial Assets, Non-Current

(Unsecured, Considered Good, unless otherwise stated)

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
Derivative Assets - (refer Note 51)	49	107
Security Deposits - (a), (b)	140	143
Deposit with Others - (a), (c)	127	97
Other Receivables - (d)	25	-
	341	**347**

(a) Refer Note 45 for balances with related parties.

(b) During the current year Security Deposit of ₹ 13 Crore (31/03/2019 ₹ 4 Crore) is pledged.

(c) During the current year earmarked balances with Banks is ₹ 102 Crore (31/03/2019 ₹ 84 Crore).

(d) Mainly represents finance lease receivable.

12B. Other Financial Assets, Current

(Unsecured, Considered Good, unless otherwise stated)

₹ in\ Crore

	As at 31.03.2020	As at 31.03.2019
Derivative Assets - (refer Note 51)	2,382	1,307
Derivative matured pending realisation	501	204
Security Deposits - (a)		
Unsecured, Considered Good	37	22
Unsecured, Considered Doubtful	*	*
Less : Allowance for Doubtful amount	*	*
Deposits with Non-Banking Financial Company (NBFC) with initial maturity more than 3 months	-	215
Accrued Interest	34	44
Other Receivables - (a)		
Unsecured, Considered Good	238	201
Unsecured, Considered Doubtful	63	65
Less : Allowance for Doubtful amount	(63)	(65)
	3,192	**1,993**

** Amount below rounding off convention.*

(a) Refer Note 45 for balances with related parties.

NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

13. Income Tax Assets and Liabilities

₹ in Crore

		As at 31.03.2020	As at 31.03.2019
A.	**Income Tax Assets (Net)**		
	Non-Current Tax Assets (Net)	329	283
	Current Tax Assets (Net)	255	1,553
		584	**1,836**
B.	**Income Tax Liabilities (Net)**		
	Current Tax Liabilities	1,576	1,425
		1,576	**1,425**

The Group is subject to tax assessments and ongoing proceedings, which are pending before various Tax Authorities. Management periodically evaluates the positions taken in tax returns with respect to such matters, including unresolved tax disputes, which involves interpretation of applicable tax regulations and judicial precedents. Current tax liability and tax asset balances are presented, after recognising as appropriate, provision for taxes payable and contingencies basis Management's assessment of outcome of such ongoing proceedings and amounts that may become payable to the tax authorities. Considering the nature of such estimates and uncertainties involved, the amount of such provisions may change upon final resolution of the matters with tax authorities. Also refer Note 4.

14. Deferred Tax Balances

A. Deferred Tax Assets (Net)

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
Deferred Tax Assets	1,736	2,966
Deferred Tax Liabilities	(826)	(2,090)
	910	**876**

Major components of Deferred Tax Assets (Net) arising on account of temporary timing differences and movement thereof are given below:

₹ in Crore

	As at 01.04.2018	Recognised in Statement of Profit and Loss	Recognised in OCI	Recognised directly in Equity	Exchange Differences	As at 31.03.2019
Deferred Tax Assets						
Provisions deductible for tax purposes in future period	1,137	(89)	46	-	14	1,108
PP&E Depreciation and Intangible Amortisation	80	(29)	-	-	-	51
Tax (losses)/benefits carry forwards, net #	383	778	-	-	9	1,170
Inventory valuation reserves	59	(26)	-	-	-	33
Cash Flow Hedges	-	-	58	*	(1)	57
Retirement Benefits and Compensated Absences	-	1	-	-	-	1
MAT Credit entitlement	-	402	-	-	-	402
Fair value measurements of financial instruments	3	1	2	-	-	6
Trade name	91	8	-	-	5	104
Others	70	(40)	-	-	4	34
	1,823	**1,006**	**106**	**-**	**31**	**2,966**

₹ in Crore

	As at 01.04.2018	Recognised in Statement of Profit and Loss	Recognised in OCI	Recognised directly in Equity	Exchange Differences	As at 31.03.2019
Deferred Tax Liabilities						
PP&E Depreciation and Intangible Amortisation	413	1,259	-	-	11	1,683
Inventory valuation reserves	233	(45)	-	-	(32)	156
Fair value measurements of financial instruments	-	5	-	-	-	5
Cash Flow Hedges	61	-	(65)	-	4	-
Others	250	7	-	-	(11)	246
	957	**1,226**	**(65)**	**-**	**(28)**	**2,090**
Net Deferred Tax Assets	**866**	**(220)**	**171**	**-**	**59**	**876**

₹ in Crore

	As at 01.04.2019	Recognised in Statement of Profit and Loss	Recognised in OCI	Recognised directly in Equity	Exchange Differences	Reclass (DTL/DTA)	As at 31.03.2020
Deferred Tax Assets							
Provisions deductible for tax purposes in future period	1,108	(315)	137	-	128-		1,058
PP&E Depreciation and Intangible Amortisation	51	16	-	-	10-		77
Tax (losses)/benefits carry forwards, net #	1,170	(223)	-	-	34(746)		235
Inventory valuation reserves	33	(15)	-	-	--		18
Cash Flow Hedges	57	-	66	(6)	8-		125
Retirement Benefits and Compensated Absences	1	1	-	-	-(2)		-
MAT Credit entitlement	402	89	-	-	-(491)		-
Lease liabilities	-	54	-	-	6-		60
Fair value measurements of financial instruments	6	-	10	-	--		16
Trade name	104	(4)	-	-	9-		109
Others	34	52	-	-	2(50)		38
	2,966	**(345)**	**213**	**(6)**	**197(1,289)**		**1,736**
Deferred Tax Liabilities							
PP&E Depreciation and Intangible Amortisation	1,683	(44)	-	-	50(1,294)		395
Inventory valuation reserves	156	(28)	-	-	23-		151
Right-of-use assets	-	52	-	-	6-		58
Fair value measurements of financial instruments	5	17	-	-	-(22)		-
Cash Flow Hedges	-	-	-	-	--		-
Others	246	(13)	-	-	28(39)		222
	2,090	**(16)**	**-**	**-**	**107(1,355)**		**826**
Net Deferred Tax Assets	**876**	**(329)**	**213**	**(6)**	**9066**		**910**

Tax Losses/Benefits carry forwards represents deferred income tax asset on unabsorbed depriciation carried forward under tax laws for which there is no expiry period.

* *Amount below rounding off convention.*

NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

B. Deferred Tax Liabilities (Net)

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
Deferred Tax Liabilities	11,858	9,920
Deferred Tax Assets	(7,187)	(5,394)
	4,671	**4,526**

Major components of Deferred Tax Liabilities (Net) arising on account of temporary timing differences and movement therein are given below:

₹ in Crore

	As at 01.04.2018	Recognised in Statement of Profit and Loss	Recognised in OCI	Recognised directly in Equity	Exchange Differences	As at 31.03.2019
Deferred Tax Liabilities						
PP&E Depreciation and Intangible Amortisation	7,907	27	-	-	123	8,057
Inventory Valuation Reserves	305	98	-	-	18	421
Exchange Differences on Foreign Operations	632	130	-	-	38	800
Fair value measurements of financial instruments	102	(73)	-	-	-	29
Deferred tax on Undistributed earnings	-	6	-	-	-	6
Cash Flow Hedges	347	-	29	-	-	376
Others	164	57	-	-	10	231
	9,457	**245**	**29**	**-**	**189**	**9,920**
Deferred Tax Assets						
Tax (losses)/benefits carry forwards, net #	2,631	(778)	-	-	28	1,881
Retirement Benefits and Compensated Absences	68	2	1	-	-	71
Cash Flow Hedges	-	-	-	-	-	-
Provisions deductible for tax purposes in future period	983	196	-	-	37	1,216
MAT Credit entitlement	1,628	375	-	-	(1)	2,002
PP&E Depreciation and Intangible Amortisation	3	(1)	-	-	-	2
Others	230	(7)	-	-	(1)	222
	5,543	**(213)**	**1**	**-**	**63**	**5,394**
Net Deferred Tax Liabilities	**3,914**	**458**	**28**	**-**	**126**	**4,526**

₹ in Crore

	As at 01.04.2019	Recognised in Statement of Profit and Loss	Recognised in OCI	Recognised directly in Equity	Exchange Differences	Reclass (DTL/DTA)	As at 31.03.2020
Deferred Tax Liabilities							
PP&E Depreciation and Intangible Amortisation	8,057	194	-	91	136	1,294	9,772
Inventory Valuation Reserves	421	(23)	-	-	36	-	434
Exchange Differences on Foreign Operations	800	266	-	-	88	-	1,154
Fair value measurements of financial instruments	29	87	2	-	-	22	140
Right-of-use assets	-	38	-	-	2	-	40

₹ in Crore

	As at 01.04.2019	Recognised in Statement of Profit and Loss	Recognised in OCI	Recognised directly in Equity	Exchange Differences	Reclass (DTL/DTA)	As at 31.03.2020
Deferred tax on Undistributed earnings	6	17	-	-	-	-	23
Cash Flow Hedges	376	-	(375)	8	-	-	9
Others	231	4	-	-	12	39	286
	9,920	**583**	**(373)**	**99**	**274**	**1,355**	**11,858**
Deferred Tax Assets							
Tax (losses)/benefits carry forwards, net #	1,881	(121)	-	-	4	746	2,510
Retirement Benefits and Compensated Absences	71	3	28	-	-	2	104
Provisions deductible for tax purposes in future period	1,216	216	-	95	79	-	1,606
MAT Credit entitlement	2,002	151	-	-	-	491	2,644
Lease liabilities	-	55	-	-	2	-	57
PP&E Depreciation and Intangible Amortisation	2	(2)	-	-	-	-	-
Others	222	(6)	-	-	-	50	266
	5,394	**296**	**28**	**95**	**85**	**1,289**	**7,187**
Net Deferred Tax Liabilities	**4,526**	**287**	**(401)**	**4**	**189**	**66**	**4,671**

Net deferred tax liability incudes ₹ 66 Crore pertaining to Utkal Alumina International Limited including MAT Credit entitlement of ₹ 491 Crore.

C. Unrecognised Deferred Taxes

(a) As at March 31, 2020 the Group had cumulative earnings in respect of certain Group entities of approximately ₹ 23,904 Crore (31/03/2019: ₹ 19,472 Crore) for which the Group has not provided deferred tax liability as the Group believes that the reversal of such temporary difference is not probable in the foreseeable future.

(b) The following Deferred Tax Assets have not been recognised at the reporting date as it is not probable of recovery.

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
Unexpiring		
i. Unabsorbed Depreciation and other expenses not deductible for tax	640	520
ii. Tax losses carry forwards	50	56
iii. Unused tax credits	553	495
Expiring		
i. Carried forward Tax losses	4,032	3,691
Period of expiry	FY 2027 - 2039	FY 2027 - 2039
ii. Unused tax credits	422	388
Period of expiry	FY 2020 - 2033	FY 2020 - 2033
iii. Tax on long-term capital loss carry forward	246	259
Period of expiry	FY 2020 - 2025	FY 2019 - 2025
iv. Unabsorbed Depreciation and other expenses not deductible for tax	8	-
Period of expiry	FY 2029	-

The Group has not recognised deferred tax asset in respect of deductible temporary differences related to its equity investments measured at FVOCI as presently it is not probable that future taxable long-term capital gain will be available in the foreseeable future to recover such deferred tax assets.

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Deferred tax assets and deferred tax liabilities have been offset wherever the Group has a legally enforceable right to set-off current tax assets against current tax liabilities and where the deferred tax assets and deferred tax liabilities relate to income tax levied by the same taxation authority. The Group has not recognised deferred tax on temporary differences relating to depreciation which originate and reverse during the tax holiday period.

D. The Taxation Law (Amendments) Ordinance 2019 ('the Ordinance'), in India provides an option to domestic companies to pay income tax at a lower rate of 22% (plus applicable surcharge and cess) instead of the normal rate of 30% (plus applicable surcharge and cess) depending on the conditions specified in this behalf under section 115BAA of the Income-tax Act, 1961. A domestic company can avail of the lower tax rate only if it opts for not availing of certain exemptions or incentives specified in this behalf in the Ordinance. There is no time limit prescribed under the above to choose the option of lower tax rate under section 115BBA, however, once chosen it is irreversible.

The Group has carried forward unabsorbed depreciation, accumulated MAT credit and tax incentives to be availed/ adjusted against future taxable profits. Based on the projections prepared by the management, including its plan for future capital expenditure for capacity enhancement, the Group has determined that exercising the option of lower rate will be beneficial only from April 1, 2037. The Group has assessed that the net deferred tax liability as at March 31, 2020 would get reversed within the period for which the Group is expected to continue to be in the existing tax regime. Accordingly, the Group has not made any adjustments to reverse its deferred tax liability balances as at March 31, 2020.

15. Other Assets

(Unsecured, Considered Good, unless otherwise stated)

₹ in Crore

	As at 31.03.2020		As at 31.03.2019	
	Non-Current	Current	Non-Current	Current
Capital Advance	436	-	550	-
Trade Advances and Deposits - (a)	150	861	38	1,039
Deposits with Government and Other Authorities	168	38	129	34
Prepaid Expenses	59	554	109	474
Prepaid Rent for Leasehold Land - (refer Note 54)	-	-	682	16
Others - (b)				
Unsecured, Considered Good	737	1,640	671	1,513
Unsecured, Considered Doubtful	10	138	10	113
Less : Allowance for Doubtful amount	(10)	(138)	(10)	(113)
	1,550	**3,093**	**2,179**	**3,076**

(a) Refer Note 45 for balances with related parties.

(b) Mainly includes unutilised tax credits and claims with Indirect Tax Authorities.

16. Inventories

₹ in Crore

	As at 31.03.2020			As at 31.03.2019		
	On Hand	In Transit	Total	On Hand	In Transit	Total
Raw Materials	2,813	2,402	5,215	2,711	3,145	5,856
Work-in-Progress	10,033	69	10,102	10,612	136	10,748
Finished Goods	4,383	117	4,500	3,057	247	3,304
Stock-in-Trade	127	-	127	-	-	-
Stores and Spares	1,869	35	1,904	1,721	29	1,750
Coal and Fuel	449	87	536	411	125	536
Packing Materials	*	-	*	*	-	*
	19,674	**2,710**	**22,384**	**18,512**	**3,682**	**22,194**

** Amount below rounding off convention.*

(a) For Inventories hypothecated against secured short-term borrowings, refer Note 23B.

(b) Fair value hedges are mainly used to hedge the exposure to change in fair value of commodity price risks. The fair value adjustment remains part of the carrying value of inventory and taken to profit and loss when the inventory is sold or consumed. Refer Note 51(B)(i)

The Group has extended fair value hedge accounting on its inventory which forms part of Work-in-Progress and Finished Goods during the year. Refer Notes 51(A) and 51(B)(i)

(c) The Group write downs inventories (net of reversal) to net realizable value amounted to ₹ 267 Crore (31/03/2019: ₹ 156 Crore). These were recognized as expense and included in 'Cost of Material Consumed' and 'Changes in Inventories of Finished Goods, Work-in-Progress and Stock-in-Trade' in the Consolidated Statement of Profit and Loss.

(d) Inventories include bulk material of coal, bauxite and copper concentrate lying at yards, precious metals of gold and silver lying at smelter and refinery aggregating to ₹ 3,255 Crore pertains to Parent.

17. Trade Receivables

₹ in Crore

	As at 31.03.2020		As at 31.03.2019	
	Non-Current	Current	Non-Current	Current
Trade Receivables:				
Secured, Considered Good	-	746	-	21
Unsecured, Considered Good	56	8,613	-	11,378
Unsecured, Credit Impaired	-	95	-	78
	56	**9,454**	**-**	**11,477**
Loss Allowances - (c)	-	(109)	-	(88)
	56	**9,345**	**-**	**11,389**

(a) No trade or other receivable are due from directors or other officers of the Company either severally or jointly with any other person. Further, no trade or other receivable are due from firms or private companies, respectively, in which any director is a partner, or director or member.

(b) For trade receivables hypothecated against borrowings, refer Note 23B.

(c) Loss allowances includes provision of ₹ 14 Crore (31/03/2019: ₹ 10 Crore) made on account of expected credit loss on Trade Receivables. Refer Note 51(A)(a).

(d) Refer Note 45 for balances with related parties.

18. Cash and Cash Equivalents

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
Cash on Hand	*	*
Cheques and Drafts on Hand - (a)	**6**	**7**
Balance with Banks		
Current Accounts	16,927	5,170
Deposits with Initial Maturity of less than three months	3,266	1,764
Short-term Liquid Investments in Mutual Funds	1,104	2,178
	21,303	**9,119**

** Amount below rounding off convention.*

(a) Includes ₹ * Crore (31/03/2019: ₹ * Crore) remittance in transit.

(b) There is no repatriation restriction with regard to cash and cash equivalents as the end of reporting period and prior periods.

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19. Bank Balances other than Cash and Cash Equivalents

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
Balances with Banks		
Earmarked balances - (a)	12	12
Deposits with Initial Maturity more than three months	254	656
	266	**668**

(a) Includes unclaimed dividend of ₹ 5 Crore (31/03/2019: ₹ 5 Crore).

20. Non-Current Assets of Disposal Group Classified as Held for Sale

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
A. Assets of Disposal Group Classified as Held for Sale		
Non-Current Assets classified as held for sale (a & b) - (refer Note 53 E)	-	13
Assets of Disposal Group classified as held for sale - (refer Note 53 C)	110	116
	110	**129**
(a) During the Current year Hydromine Global Minerals GmbH Limited and MNH Shakti Limited have been reclassified to Investment in Joint Ventures. Accordingly, during the current year equity accounting has been applied on these investment in the Consolidated Financial Statements. (refer Note 53 E)		
(b) During the Previous year subsidiaries Hindalco Guinea SARL and Mauda Energy Limited which were classified as Non-current assets held for sale have been dissolved.		
(c) Details of Assets and Liabilities of Disposal Group classified as held for sale		
Freehold Land	25	25
Plant and Equipment - (i)	83	75
Other Assets - (ii)	2	16
	110	**116**
(i) As at March 31, 2020 assets held for sale includes ₹ 42 Crore related to one of the hydroelectric power generation facilities in South America, Brecha, land and building of Binh Duong plant in Vietnam, as well as foil related plant and machinery in Ludensheid, Germany.		
(ii) Assets of Mahan Coal Limited and Tubed Coal Mines Limited, Joint Operations of the Company are included in 31/03/2019. During the current year, it has been presented in respective line items in the Consolidated Balance Sheet as it did not continue to meet the criteria for held for sale.		
(iii) The Group is in the process of disposing the above assets.		
(iv) The fair value of the assets held for sale approximates the carrying value.		
B. Liability Associated with Disposal Group Classified as Held for Sale		
Liabilities associated with assets held for sale - (refer Note 53 E)	-	*
Liabilities associated with Disposal Group classified as held for Sale - (refer Note 53 C)	-	*
	-	*****
(a) Liabilities of Disposal Group classified as held for sale:		
Liabilities associated with disposal group held for sale	-	*
	-	*****

** Amount below rounding off convention.*

21. Equity Share Capital

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
Authorized		
2,500,000,000 (31/03/2019: 2,500,000,000) Equity Shares of ₹ 1/- each	250	250
25,000,000 (31/03/2019: 25,000,000) Redeemable Cumulative Preference Shares of ₹ 2/- each	5	5
	255	**255**
Issued		
2,246,776,333 (as at 31/03/2019: 2,246,083,891) Equity Shares of ₹ 1/- each - (a)	225	225
	225	**225**
Subscribed and Paid-up		
2,246,768,936 (as at 31/03/2019: 2,246,076,494) Equity Shares of ₹ 1/- each fully paid-up	225	225
Less: Face value of 546,249 (31/03/2019: 546,249) Equity Shares forfeited	*	*
Add: Forfeited Shares (Amount originally Paid-up)	*	*
	225	**225**
Less: Treasury Shares		
16,316,130 (31/03/2019: 16,316,130) Equity Shares held as Treasury Shares - (b)	(2)	(2)
5,885,672 (31/03/2019: 5,558,727) Equity Shares held as Treasury Shares by ESOP Trust - (refer Note 22 (A) (vii))	(1)	(1)
	222	**222**

* Amount below rounding off convention.

(a) Issued Equity Share Capital as at 31/03/2020 includes 7,397 Equity Shares (31/03/2019: 7,397) of ₹ 1/- each issued on Rights basis kept in abeyance due to legal case pending.

(b) Treasury shares are held by Trident Trust which represents 16,316,130 Equity Shares of ₹ 1/- each fully paid-up of the Company issued, pursuant to a Scheme of Arrangement approved by the Hon'ble High Courts of Mumbai and of Allahabad, vide their Orders dated October 31, 2002, and November 18, 2002, respectively, to the Trident Trust, created wholly for the benefit of the Company and is being managed by trustees appointed by it. The tenure of the Trust is up to January 23, 2024.

(c) Reconciliation of shares outstanding at the beginning and at the end of the reporting period:

	As at 31.03.2020		As at 31.03.2019	
	Numbers	₹ in Crore	Numbers	₹ in Crore
Equity Shares outstanding at the beginning of the period	2,223,655,388	222	2,228,646,772	223
Equity Shares allotted pursuant to exercise of Employee Stock Option Scheme	692,442	*	567,343	*
Equity Shares purchased from market pursuant to Employee Stock Option Scheme	(326,945)	-	(5,558,727)	(1)
Equity Shares outstanding at the end of the period	**2,224,020,885**	**222**	**2,223,655,388**	**222**

** Amount below rounding off convention.*

(d) Rights, preferences and restrictions attached to Equity Shares:

The Company has one class of equity shares having a par value of ₹ 1/- per share. Each shareholder is eligible for one vote per share held. The dividend proposed by the Board of Directors is subject to the approval of the shareholders in the ensuing Annual General Meeting, except in case of interim dividend. In the event of liquidation, the equity shareholders are eligible to receive the remaining assets of the Company after distribution of all preferential amounts, in proportion to their shareholding.

NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

(e) Details of shareholders holding more than 5% Equity Shares in the Company on reporting date:

	As at 31.03.2020		As at 31.03.2019	
	Numbers of Shares held	Percentage of Holding**	Numbers of Shares held	Percentage of Holding**
IGH Holdings Private Limited	349,963,487	15.58	349,963,487	15.58
Birla Group Holdings Private Limited #	228,292,308	10.16	6,731,467	0.30
Life Insurance Corporation of India and its Associates	223,822,083	9.96	178,075,294	7.93
ICICI Prudential Mutual Fund and its Associates	181,533,867	8.08	155,362,808	6.92
Morgan Guaranty Trust Company of New York	149,888,482	6.67	153,348,431	6.83
Turquoise Investment and Finance Private Limited #	-	-	124,012,468	5.52

** Percentage have been calculated on the basis of total number of shares outstanding before adjusting shares held by Trident Trust and ESOP Trust. Refer footnote (b) above and Note 22 (A) (viii).

During the current year, Turquoise Investment and Finance Private Limited is merged with Birla Group Holdings Private Limited.

(f) Shares reserved for issue under options:

The Company has reserved equity shares for issue under the Employee Stock Option Schemes. (Refer Note 46 for details of Employee Stock Option Scheme).

(g) The Company during the preceding 5 years:

i. Has not allotted shares pursuant to contracts without payment received in cash.

ii. Has not issued shares by way of bonus shares.

iii. Has not bought back any shares.

(h) The Board of Directors of the Company has recommended final dividend of ₹ 1.00 per share aggregating to ₹ 225 Crore for the year ended March 31, 2020, which has not been recognised in the Consolidated Financial Statement.

22. Other Equity

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
Share Application Money pending Allotment	*	*
Equity Component of Other Financial Instruments	4	4
Reserves and Surplus		
Capital Reserve	147	147
Capital Redemption Reserve	104	104
Business Reconstruction Reserve	5,799	5,799
Securities Premium	8,218	8,206
Debenture Redemption Reserve	1,200	1,050
Employees Stock Options	44	21
Treasury Shares held by ESOP Trust	(130)	(123)
Special Reserve	19	19
General Reserve	21,370	21,370
Retained Earning	18,806	16,006
	55,577	**52,599**
Other Reserves		
Gain/ (Loss) on Equity Instruments FVTOCI	325	2,991
Gain/ (Loss) on Debt Instruments FVTOCI	7	4
Effective portion of Cash Flow Hedge	(130)	200
Cost of Hedging Reserve	119	502
Foreign Currency Translation Reserve	2,193	979
	2,514	**4,676**
	58,095	**57,279**

** Amount below rounding off convention.*

(A) Brief description of items of other equity are given below:

(i) Share Application Money Pending Allotment:
Share application money pending allotment represents amount received from employees who has exercised Employee Stock Option Scheme (ESOS) for which shares are pending allotment as on balance sheet date.

(ii) Capital Reserve:
The Group has created capital reserve pursuant to past mergers and acquisitions.

(iii) Capital Redemption Reserve:
The Group has created capital redemption reserve as per the requirement of the Companies Act.

(iv) Business Reconstruction Reserve
The Company had formulated a scheme of financial restructuring under Sections 391 to 394 of the Companies Act, 1956 ("the Scheme") between the Company and its equity shareholders approved by the High Court of judicature of Bombay to deal with various costs associated with its organic and inorganic growth plan. Pursuant to this, a separate reserve account titled as Business Reconstruction Reserve ("BRR") was created during the year 2008-09 by transferring balance standing to the credit of Securities Premium Account of the Company for adjustment of certain expenses as prescribed in the Scheme.

(v) Securities Premium:
Securities premium reserve is used to record the premium on issue of shares. The reserve is utilized in accordance with the provision of the Act.

(vi) Debenture Redemption Reserve:
The Group is required to create a debenture redemption reserve out of the profits which is available for payment of dividend, for the purpose of redemption of debentures.

(vii) Employees Stock Options:
The employee stock option account is used to recognize the grant date fair value of options issued to employees under stock option schemes.

(viii) Treasury Shares held by ESOP Trust:
The Company has created a trust. "Hindalco Employee Welfare Trust" (Trust) for providing share-based payments to its employees (including its Subsidiaries' employees). The Company uses this Trust as a vehicle for distributing shares to employees covered under Scheme. The Trust buys shares of the Company from the market for giving shares to employees under the Employees Stock Option Scheme, 2018.

Shares held by the Trust are treated as Treasury shares. Equity instruments that are reacquired (treasury shares) are recognised at cost and deducted from equity. No gain or loss is recognised in the Consolidated Statement of Profit and Loss on purchase, sale, issue or cancellation of Equity instruments. Share options whenever exercised, would be utilised from these treasury shares. Refer Note 46.

(ix) Special Reserve:
Certain subsidiaries of the Group are registered as non-banking financial company and as per requirement of Section 45-IC of the Reserve Bank of India Act, 1934 every non-banking financial company shall create a reserve fund and transfer therein a sum not less than twenty per cent of its net profit every year as disclosed in the profit and loss account and before any dividend is declared.

(x) General Reserve:
The Group has created this reserve by transferring certain amount out of the profit at the time of distribution of dividend in the past.

(xi) Retained Earnings:
Amount of retained earnings represents accumulated profit and losses of the Group as on reporting date. Such profits and losses are after adjustment of payment of dividend, transfer to any reserves as statutorily required and adjustment for realised gain/loss on derecognition of equity instruments measured at FVTOCI.

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(xii) Other Reserve:

a) Gain/(Loss) on equity and debt instruments accounted as FVTOCI

The Group has elected to recognize changes in the fair value of certain investments in other comprehensive income. These changes are accumulated within the FVTOCI equity investments reserve and FVTOCI debt investment reserve within equity.

b) Effective portion of Cash Flow Hedge

The Group uses hedging instruments as part of its risk management policy for commodity and foreign currency risk as described in Note 51. The Cash Flow hedging reserve is used to recognise the effective portion of gain or loss on designated hedging relationship. (Refer Notes 51 (E) and 51 (F) (i)).

c) Cost of Hedging Reserve

The Group designates the spot component of cross currency interest rate swap as hedging instruments in cash flow hedge relationship. The Group defers changes in the forward element of cross currency interest rate swap in the cost of hedging reserve. The deferred cost of hedging are included in the initial cost of the related hedged items when it is recognized or reclassified to the consolidated statement of profit or loss when the hedged item effects the consolidated statement of profit and loss. The Group also designates time value of option contracts which are included in the cost of hedging reserve. (Refer Notes 51 (E) and 51 (F) (ii)).

d) Foreign Currency Translation Reserve

Foreign Currency Translation reserve includes all resulting exchange differences arising from (a) translating the assets and liabilities of the Group's foreign operations into Indian Rupees using exchange rates prevailing at the end of each reporting period and (b) translating income and expense items of the foreign operations at the average exchange rates for the period.

(B) Movement of each item of other equity is presented in Consolidated Statement of Changes in Equity (SOCE).

23A. Borrowings, Non-Current

₹ in Crore

Particulars	As at 31.03.2020			As at 31.03.2019		
	Non-Current Portion	Current Maturities *	Total	Non-Current Portion	Current Maturities *	Total
Secured						
Debentures						
Secured Non-Convertible Debentures - (a)	5,994	-	5,994	5,991	-	5,991
Term Loans:						
From Banks						
Rupee Term Loans - (b)	11,613	6	11,619	11,588	-	11,588
Foreign Currency Term Loans - (c)	17,465	136	17,601	12,249	128	12,377
Finance Lease Obligations - (g)	-	-	-	39	12	51
	35,072	**142**	**35,214**	**29,867**	**140**	**30,007**
Unsecured						
Senior Notes - (d)	22,997	-	22,997	18,114	-	18,114
Term Loans:						
From Banks						
Foreign Currency Term Loans - (e)	270	2	272	5	1	6
Deferred Payment Liabilities - (f)	40	17	57	46	16	62
	23,307	**19**	**23,326**	**18,165**	**17**	**18,182**
	58,379	**161**	**58,540**	**48,032**	**157**	**48,189**

* Current maturities of non-current borrowings have been disclosed under "Other Financial Liabilities, Current".

(a) Debentures comprise of following:

₹ in Crore

	31.03.2020		31.03.2019		
	Gross Amount	Carrying Value	Gross Amount	Carrying Value	Redemption Date
15,000 9.60% Redeemable Non-Convertible Debentures of ₹ 10 lakhs each	1,500	1,498	1,500	1,497	02/08/2022
15,000 9.55% Redeemable Non-Convertible Debentures of ₹ 10 lakhs each	1,500	1,497	1,500	1,496	27/06/2022
30,000 9.55% Redeemable Non-Convertible Debentures of ₹ 10 lakhs each	3,000	2,999	3,000	2,998	25/04/2022
	6,000	**5,994**	**6,000**	**5,991**	

All the above Debentures are secured by all the moveable both present and future (except moveable assets of Mahan Aluminium Project, Aditya Aluminium Project, Kalwa plant, Silvassa Plant and Current Assets) and certain immoveable properties of the Company.

(b) Secured Rupee Term Loans from Banks comprise of following:

i. The term loans from banks of ₹ 2,948 Crore (carrying amount: ₹ 2,930 Crore) are secured by a first ranking charge/ mortgage/ security interest in respect of all the moveable fixed assets and all the immoveable properties of Mahan Aluminium Project, both present and future. ₹ 2,858 Crore (carrying value: ₹ 2,840 Crore) is to be repaid in 16 quarterly instalments commencing from June 2026. ₹ 90 Crore (carrying value: ₹ 90 Crore) is to be repaid in 40 quarterly instalments commencing from June 2020.

The rate of interest of this loans is based on SBI MCLR 3 Months with spread of 0.10%/ Axis Bank MCLR 1* Month/ ICICI Bank MCLR 3 Months.

* rate changed w.e.f. Sept. 2019. Previous rate of Interest was MCLR 3 Months.

ii The term loans from banks of ₹ 6,299 Crore (carrying value: ₹ 6,273 Crore) is secured by a first ranking charge/ mortgage/security interest in respect of all the moveable and immovable fixed assets of Aditya Aluminium Project both present and future. ₹ 6,299 Crore is to be repaid in 26 quarterly instalments commencing from May 2024.

The rate of interest of this loans is based on SBI MCLR 3 Months with spread of 0.10%/ Axis Bank MCLR 1* Month/ PNB MCLR 3 Months.

* rate changed w.e.f. Sept. 2019. Previous rate of Interest was MCLR 3 Months.

iii. The term loan from banks in Group's subsidiary Utkal Alumina International Limited (Utkal) of ₹ 2,424 Crore (carrying value ₹ 2,416 Crore), is secured by (a) first ranking pari-passu mortgage/ Security Interest in respect of all the immovable properties (excluding the forest land and land surrendered for rehabilitation and resettlement colony), (b) first ranking charge on movable assets (including movable machinery, machinery spares, tools and accessories) both present and future, pertaining to the project, and (c) second charge on the current assets of Utkal (excluding cash, cash equivalents and investments) both present and future.

This term loans are repayable in 60 quarterly instalments as per the agreed repayment schedule commenced from December 31, 2015. During the year ended March 31, 2018, Utkal has prepaid all instalments of the loan due up to June & September 30, 2025 to respective banks. The balance principal would be paid as per remaining schedule in quarterly instalments up to September 30, 2030.

The rate of interest of this rupee term loans is based on SBI MCLR 3 months with spread of 0.10% /Axis Bank MCLR 1 month.

(c) Secured Foreign Currency Term Loans from Banks comprise of following:

i. Foreign currency term loan from Bank of Tokyo Mitsubishi (BTMU)

Foreign currency term loan includes term loan from Bank of Tokyo Mitsubishi (BTMU) of USD 40 Million (gross ₹ 301 Crore, carrying value ₹ 299 Crore) and USD 22.79 Million (gross ₹ 172 Crore, carrying value ₹ 170 Crore). BTMU loan is secured by a pari-passu first charge on all movable fixed assets of Mahan Aluminium Project,

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both present and future. Both BTMU loans have a bullet repayment to be made at the end of the tenor which is March 31, 2022 and June 30, 2022, respectively. The interest rate of this BTMU loans is LIBOR 3 Months with spread of 1.35%.

ii. Brazil BNDES loans

Novelis Brazil entered into loan agreements with Brazil's National Bank for Economic and Social Development (the BNDES loans) related to the plant expansion in Pindamonhangaba, Brazil (Pinda). As of March 31, 2020, there is USD 0.10 Million (₹ * Crore) of BNDES loans due within one year. The interest rate on the BNDS loans is 6.17%.

iii. Floating rate Term Loan facility

The senior secured credit facilities of Novelis Inc. consists of a) USD 1.7 Billion (₹ 13,121 Crore) five-year secured term loan credit facility (Term Loan Facility) and (ii) a USD 1.5 Billion (₹ 11,301 Crore) five-year asset based loan facility (ABL Revolver). As at March 31, 2020 the outstanding amount on its Term loan is ₹ 12,952 Crore ($1,719 Million) net of debt issuance cost of ₹ 169 Crore ($22 Million). The interest rate of this floating rate term loan facility is 3.30% and on ABL Revolver it is 1.87%.

The senior secured credit facilities contain various affirmative covenants, including covenants with respect to Novelis Inc. (Novelis) financial statements, litigation and other reporting requirements, insurance, payment of taxes, employee benefits and (subject to certain limitations) causing new subsidiaries to pledge collateral and guaranty its obligations. The senior secured credit facilities also include various customary negative covenants and events of default, including limitations on Novelis's ability to (1) incur additional indebtedness, (2) sell certain assets, (3) enter into sale and leaseback transactions, (4) make investments, loans and advances, (5) pay dividends or returns of capital and distributions beyond certain amounts, (6) engage in mergers, amalgamations or consolidations, (7) engage in certain transactions with affiliates, and (8) prepay certain indebtedness. The Term Loan Credit Agreement also contains a financial maintenance covenant, prohibiting Novelis's senior secured net leverage ratio as of the last day of each fiscal quarter period and measured on a rolling four quarter basis from exceeding 3.50 to 1.00, subject to customary equity cure rights. The senior secured credit facilities include a cross-default provision under which lenders could accelerate repayment of the loans if a payment or non-payment default arises under any other indebtedness with an aggregate principal amount of more than ₹ 753 Crore (USD 100 Million) (or, in the case of the Term loan Facility, under the ABL Revolver regardless of the amount outstanding). Substantially all of Novelis's assets are pledged as collateral under the senior secured credit facilities.

As of March 31, 2020, the facility was a senior secured revolver bearing an interest rate of LIBOR plus a spread of 1.25% to 1.75% or a prime rate plus a prime spread of 0.25% to 0.75% based on excess availability. The ABL Revolver had a provision that allowed the facility to be increased by an additional ₹ 5,651 Crore (USD 750 Million), subject to lenders providing commitments for the increase.

ABL Revolver

In April 2019, Novelis entered into an amendment (the "ABL Amendment") to our existing ABL Revolver. Pursuant to the terms of the amendment, the commitments under the pre-existing ₹ 7,534 Crore ($1 Billion) facility increased by ₹ 3,767 Crore ($500 Million) on October 15, 2019. Aleris and certain of its U.S. subsidiaries will become borrowers under the ABL Revolver upon closing of the acquisition, and the ABL Amendment includes additional changes to facilitate the acquisition of Aleris (including permitting borrowings under the Short Term Credit Agreement) and the inclusion of certain Aleris assets in the borrowing base following the acquisition, if consummated. The Amendment also includes additional changes to increase our operating flexibility.

As of March 31, 2020, Novelis had ₹ 4,181 Crore (USD 555 Million) in borrowings under our ABL revolver. Novelis utilized ₹ 136 Crore (USD 18 Million) of its ABL for letters of credit. Novelis had availability of ₹ 1,405 Crore (USD 186 Million) on the ABL Revolver, including ₹ 806 Crore (USD 107 Million) of remaining availability which can be utilized for letters of credit. While general ABL Revolver borrowings are made for short-term cash management purposes, this draw of ₹ 4,180 Crore (USD 555 Million) was made to ensure the Group had sufficient liquidity available for funding needs through the Aleris acquisition transaction. This amount is classified as a non-current liability due to the nature of the borrowing.

iv. Term Loan Facility for the proposed Aleris acquisition

In the second quarter of fiscal 2019, the Group, through Novelis, signed a definitive agreement to acquire Aleris, a global supplier of rolled aluminum products for USD 2.6 Billion (₹ 17,988 Crore), including the assumption of

debt. In February 2020, Novelis entered into a short term credit agreement (the "Short Term Credit Agreement"). The Short Term Credit Agreement provides commitments of certain financial institutions to provide, subject to closing conditions (including the concurrent closing of our acquisition of Aleris), up to ₹ 8,288 Crore (USD 1.1 Billion) of short term loans for purposes of funding a portion of the consideration payable in connection with the acquisition of Aleris, which closed on April 14, 2020, or repaying certain indebtedness of Aleris and its subsidiaries. These commitments replaced the commitments of the same financial institutions under the prior ₹ 11,301 Crore (USD 1.5 Billion) Short Term Credit Agreement entered into in December 2018, which expired in January 2020. The short term loans, once borrowed, will be unsecured, will mature one year from the date on which they are borrowed, will not be subject to any amortization payments, and will accrue interest at LIBOR (as defined in the Short Term Credit Agreement) plus 0.95%, this facility was drawn when the acquisition deal was closed on April 14, 2020. The short term loans will be guaranteed by the same entities that have provided guarantees under the Term Loan Facility and ABL Revolver.

The existing loans under Novelis's Term Loan Facility mature on June 2, 2022, and are subject to 0.25% quarterly amortization payments. The loans under the Term Loan Facility accrue interest at LIBOR plus 1.85%.

Novelis will be required to apply the net cash proceeds it receive on or after the borrowing date from asset sales required by regulatory approvals related to the acquisition of Aleris to repay the existing and incremental term loans under the Term Loan Facility and the short term loans under the Short Term Credit Agreement (as defined above) on a pro rata basis, subject to certain re-investment rights. The Term Loan Facility requires customary mandatory prepayments with excess cash flow, other asset sale proceeds, casualty event proceeds and proceeds of prohibited indebtedness, all subject to customary re-investment rights and exceptions. The loans under the Term Loan Facility may be prepaid, in full or in part, at any time at Novelis' election without penalty or premium. The Term Loan Facility allows for additional term loans to be issued in an amount not to exceed ₹ 2,260 Crore (USD 300 Million) (or its equivalent in other currencies) plus an unlimited amount if, after giving effect to such incurrences on a pro forma basis, the secured net leverage ratio does not exceed 3.00 to 1.00. The lenders under the Term Loan Facility have not committed to provide any such additional term loans other than the commitments under the 2020 Term Loan Increase Joinder Amendment, as described below.

Term Loan Facility Amendments:
In November 2018, Novelis amended the existing Term Loan Facility to, among other things, allow the incurrence of the financing contemplated to close the Aleris acquisition. Novelis also secured financing by entering into a commitment letter with certain financial institutions, which was subsequently superseded by the agreements detailed below.

In December 2018, Novelis entered into an increase joinder amendment (the "2018 Term Loan Increase Joinder Amendment") to its existing Term Loan Facility. The 2018 Term Loan Increase Joinder Amendment governed the commitments of certain financial institutions to provide, subject to closing conditions, up to ₹ 5,839 Crore ($775 Million) of incremental term loans under the terms of its existing term loan credit agreement. The commitments under the 2018 Term Loan Increase Joinder Amendment expired in January 2020.

In February 2020, Novelis entered into an amendment (the "Term Loan Amendment") to its Term Loan Facility. The Term Loan Amendment modifies the Term Loan Facility by amending certain terms to facilitate the closing of the acquisition of Aleris.

In February 2020, Novelis entered into an increase joinder amendment (the "2020 Term Loan Increase Joinder Amendment") to its existing Term Loan Facility. The 2020 Term Loan Increase Joinder Amendment provides commitments of certain financial institutions to provide up to ₹ 5,839 Crore ($775 Million) of incremental term loans under its existing term loan credit agreement. These commitments replaced the commitments of the same financial institutions under the 2018 Term Loan Increase Joinder Amendment. The proceeds of the incremental term loans were used to pay a portion of the consideration payable in the acquisition of Aleris, which closed on April 14, 2020, as well as fees and expenses related to the acquisition, the incremental term loans, and short term loans. The incremental term loans will mature five years after the date on which they are borrowed, subject to 0.25% quarterly amortization payments. The incremental term loans will, once borrowed, accrue interest at LIBOR (as defined in the Term Loan Facility) plus 1.75%. The incremental term loans will be subject to the same voluntary and mandatory prepayment provisions, affirmative and negative covenants and events of default as

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those applicable to the existing term loans outstanding under its Term Loan Facility. The incremental term loans will be guaranteed by the same entities that have provided guarantees under its Term Loan Facility and secured on a pari passu basis with its existing term loans by security interests in substantially all of the assets of Novelis and the guarantors, subject to its existing inter-creditor agreement.

(d) Unsecured Senior Notes comprise of following:

On September 14, 2016, Novelis Corporation, an indirect wholly owned subsidiary of Novelis Inc., issued USD 1.5 Billion (₹ 11,301 Crore) in aggregate principal amount of 5.875% Senior Notes Due 2026 (the "2026 Senior Notes"). The 2026 Notes are guaranteed, jointly and severally, on a senior unsecured basis, by Novelis Inc. and certain of its subsidiaries. As of March 31, 2020 the outstanding amount on 2026 Senior Notes is ₹ 11,181 Crore ($1.5 Billion) net of debt issuance cost of ₹ 121 Crore ($16 Million). The interest rate on the 2026 Notes is 5.875% and are due in September 2026.

In January 2020, Novelis Corporation, issued ₹ 12,055 Crore (USD 1.6 Billion) in aggregate principal amount of 4.75% Senior Notes due 2030 (the "2030 Senior Notes" together with the 2026 Senior Notes, the "Senior Notes"). As of March 31, 2020 the outstanding amount on 2030 Senior Notes is ₹ 11,816 Crore (USD 1.6 Billion) net of debt issuance cost of ₹ 239 Crore (USD 32 Million). The proceeds were used to refinance all of Novelis Corporation's 6.25% Senior Notes due 2024 and the remainder was utilized to pay a portion of the consideration for the acquisition of Aleris, which closed on April 14, 2020. The 2030 Senior Notes are subject to semi-annual interest payments and mature on January 30, 2030.

(e) Unsecured Foreign Currency Term Loan from Banks comprise of following:

Korean Bank Loans

As of March 31, 2020, Novelis Korea had ₹ 2 Crore (USD 0.2 Million) of outstanding long-term loans with various banks due within one year. All these loan carries interest rates of 1.75%.

Bank of China Term Loan

In September 2019, Novelis entered into a credit agreement with the Bank of China to provide up to ₹ 565 Crore (USD 75 Million) in unsecured loans to support previously announced capital expansion projects in China. As of March 31, 2020 the outstanding amount of this loan is ₹ 270 Crore (USD 35.78 Million). This loan carries interest rates of 4.90%.

(f) Deferred Payment Liabilities

Deferred payment liabilities include deferred purchase payments on Acquisition of AluInfra Asset at Novelis. On July 23, 2018, Novelis, Switzerland, an indirectly wholly owned subsidiary of Novelis Inc. acquired real and personal property from Constellium Valais SA for USD 249 Million (₹ 1,876 Crore). Out of total purchase price, USD 7.6 Million (₹ 57 Crore) is to be paid over a period of 4 years through July 2023. This facility carries interest rates of 7.5%.

(g) Finance Lease Obligations

The Group's finance lease obligations, future minimum lease payments and their present value are following:

₹ in Crore

	As at 31.03.2019		
	Gross Obligation	Present Value	Interest
Not later than 1 year	16	12	4
Later than 1 year and not later than 5 years	37	31	6
Later than 5 years	10	8	2
	63	**51**	**12**

During the year ended March 31, 2019, Novelis acquired real and personal property that was initially leased from Constellium at Sierre rolling facility, Switzerland. This transaction resulted in decrease in finance lease liabilities by ₹ 80 Crore (USD 11.59 Million). (refer Note 6 (b))

Upon introduction of Ind AS 116 Leases effective 01/04/2019, all Finance Lease obligations identified under the earlier Ind AS 17 Leases, have been reclassified and included under Lease Liability against ROU Assets which are presented on the face of the Consolidated Balance Sheet. (refer Note 54)

(h) Net Debt Reconciliation

₹ in Crore

	Liabilities from financing activities			Total
	Non-Current Borrowings	Current Borrowings	Lease Obligations $	
Balance as at April 01, 2018 *	**49,369**	**3,417**	**135**	**52,921**
Cash Flows (Net)	(2,320)	971	(93)	(1,442)
Acquisition - finance leases	-	-	6	6
Foreign Exchange Adjustments	1,631	(87)	3	1,547
Fair Value Changes - (refer Note 30 (c))	(75)	-	-	(75)
Debt Issuance Costs and Amortisation (Net)	55	-	-	55
Interest Expense **	3,305	265	6	3,576
Interest Paid **	(3,159)	(248)	(6)	(3,413)
Other Changes/Reclassification	185	(57)	-	128
Balance as at March 31, 2019 *	**48,991**	**4,261**	**51**	**53,303**
Recognised on Adoption of Ind AS 116	-	-	956	956
Cash Flows (Net)	7,226	4,054	(334)	10,946
Acquisition - Right of Use Assets	-	-	447	447
Foreign Exchange Adjustments	3,121	431	131	3,683
Fair Value Changes - (refer Note 30 (c))	(20)	-	-	(20)
Debt Issuance Costs and Amortisation (Net)	56	-	-	56
Interest Expense **	3,785	242	55	4,082
Interest Paid **	(3,703)	(232)	(49)	(3,984)
Disposal/Modification/Reassessment	-	-	(115)	(115)
Other Changes/Reclassification	3	6	-	9
Balance as at March 31, 2020 *	**59,459**	**8,762**	**1,142**	**69,363**

* Borrowings include Interest accrued on borrowings and current maturities of related borrowings.

** Interest expenses and interest paid relates to borrowings and lease liabilities.

$ Amounts for the year ended March 31, 2019 represents movement in Finance Lease Obligations as per earlier Ind AS 17 Leases.

23B. Borrowings, Current

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
Secured		
Loans from Banks		
Rupee Loans - (a), (b), (c) & (e)	1,118	123
Foreign Currency Loans	6	-
Loans from Others		
Foreign Currency Loans - (d)	3	4
	1,127	**127**
Unsecured		
Loans from Banks		
Rupee Loans - (e)	1,302	-
Foreign Currency Loans - (f), (g)	6,288	3,313
Loans from Others		
Rupee Loans	-	786
	7,590	**4,099**
	8,717	**4,226**

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(a) Working Capital Loan for Aluminium Business, granted under the Consortium Lending Arrangement, are secured by a first pari-passu charge on entire stocks of raw materials, work-in-process, finished goods, consumable stores and spares and also book debts pertaining to the Company's Aluminium business, both present and future. Working Capital Loan of State Bank of India for the Copper business is secured by a first pari-passu charge stocks of raw materials, work-in-process, finished goods and consumable stores and spares and also book debts and other moveable assets of Copper business, both present and future.

(b) Cash Credit facilities for Utkal Alumina International Limited (Utkal) with banks are availed under the consortium lending arrangement and are secured by (a) first pari-passu charge by hypothecation of investments classified as "held for trading", entire stocks of raw materials, semi-finished and finished goods, consumable stores and spares, investments classified as "available for sale", stock-in-trade and book debts pertaining to Utkal's business, both present and future and (b) second charge on Utkal's fixed assets. The borrowings carry floating interest rate at MCLR (ranging from 3 months to one year) + Spread (ranging from 25 bps to 55 bps).

(c) Secured Rupee Loan includes amount received from Banks under Special Banking Arrangement where banks pay on behalf of Government of India, amount related to Fertiliser Subsidy Receivables and Government of India pay directly to Banks.

(d) Payable under trade financing arrangements in Novelis Inc.

(e) Represents loan taken to meet the Company's working capital requirements. The borrowings carry interest rate between 7.50% p.a. and 8.50% p.a.

(f) Balance as at 31/03/2019 includes ₹ 4,967 Crore Buyers Credit from offshore branch of a Foreign Bank with rate of interest of 6 M LIBOR.

(g) As of March 31, 2020, Novelis's borrowings were related to ₹ 452 Crore of Brazil loans (Interest rate 5.68%), ₹ 1 Crore in Ulsan (Interest rate 2%); ₹ 128 Crore in China (Interest rate 3.69%) and ₹ 740 Crore in Korea (Interest rate 2.22%).

24. Trade Payables

₹ in Crore

	As at 31.03.2020		As at 31.03.2019	
	Non-Current	Current	Non-Current	Current
Micro and Small Enterprises	-	20	-	15
Other than Micro and Small Enterprises	*	18,280	2	20,708
	*****	**18,300**	**2**	**20,723**

** Amount below rounding off convention.*

(a) Refer Note 45 for balances with related parties.

25. Other Financial Liabilities

A. Other Financial Liabilities, Non-Current

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
Derivative Liabilities - (refer Note 51(B))	255	110
Liability for Capital Expenditure	5	4
Security and Other Deposits	2	2
Others - (a)	72	63
	334	**179**

(a) Mainly includes Employee Liabilities of ₹ 68 Crore (31/3/2019: ₹ 60 Crore).

B. Other Financial Liabilities, Current

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
Derivative Liabilities - (refer Note 51(B))	2,100	1,081
Derivative matured, pending settlement	433	86
Current maturities of Finance Lease Obligations - (a)	-	12
Current maturities of Long-term Borrowings	161	146
Interest Accrued but not due	964	888
Liability for Capital Expenditure	1,222	1,741
Security and other Deposits	30	27
Investor Education and Protection Fund		
Unclaimed Dividends - (b)	5	5
Debentures - (c)	3	3
Others	148	104
	5,066	**4,093**

(a) Upon introduction of Ind AS 116 Leases effective 01/04/2019, all Finance Lease obligations identified under the earlier Ind AS 17 Leases, have been reclassified and included under Lease Liability against ROU Assets which is presented on the face of the Consolidated Balance Sheet. ROU assets are created for the long term lease agreements other than low value Leases and short term leases, due to this Deferred operating lease obligation is Nil as at March 31, 2020. (refer Note 54)

(b) These amounts do not include any amount, due and outstanding, to be credited to "Investor Education and Protection Fund" except ₹ * Crore (31/03/2019: ₹ * Crore) which is held in abeyance due to legal cases pending.

(c) In terms of Debenture Subscription Agreement between Utkal Alumina International Limited ('UAIL'), a wholly owned subsidiary of the Group, and Orissa Mining Corporation Limited ('OMCL'), UAIL issued during the year, a Zero Coupon Unsecured Redeemable Non-Convertible Debentures of ₹ 3 Crore to OMCL towards its obligation to pay OMCL an amount equivalent to 15% per annum on ₹ 20 Crore as return up to March 31, 2020 which is due for redemption at par on September 30, 2020.

** Amount below rounding off convention.*

26. Provisions

₹ in Crore

	As at 31.03.2020			As at 31.03.2019		
	Non-Current	Current	Total	Non-Current	Current	Total
Employee Benefits	**7,697**	**854**	**8,551**	**6,481**	**1,031**	**7,512**
Assets Retirement Obligation	302	75	377	410	4	414
Environmental Liability	10	56	66	8	84	92
Enterprise Social Commitment	188	55	243	220	38	258
Renewable Power Obligation	-	186	186	-	99	99
Legal Cases	-	612	612	-	475	475
Other Provisions	140	373	513	125	193	318
	640	**1,357**	**1,997**	**763**	**893**	**1,656**
	8,337	**2,211**	**10,548**	**7,244**	**1,924**	**9,168**

(a) The Group has made provisions towards environmental, asset retirement, social responsibility, renewable power, restructuring, rehabilitation, carbon emission, legal and other obligations at various locations involving considerable uncertainties towards amount and timing of outflow of economic resources. The provisions are discounted over the management expected timing of related cash flows.

NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

(b) Movements in each class of provisions are set out below:

₹ in Crore

	Assets Retirement Obligation	Environmental Liability	Enterprise Social Commitment	Renewable Power Obligation	Legal Cases	Other Provisions *	Total
Balance as at April 01, 2018	**416**	**50**	**146**	**152**	**473**	**754**	**1,991**
Recognised/ (Reversed)	(7)	64	108	165	26	168	524
Reclassified	-	-	-	-	-	(280)	(280)
Used/Paid	(5)	(22)	(5)	(220)	(31)	(293)	(576)
Unwinding of discounts	25	1	9	-	-	-	35
Exchange adjustment	(16)	-	-	-	(13)	(35)	(64)
Other	1	(1)	-	2	20	4	26
Balance as at March 31, 2019	**414**	**92**	**258**	**99**	**475**	**318**	**1,656**
Recognised/ (Reversed) - (d)	19	2	(20)	152	9	229	391
Reclassified	-	-	-	-	190	-	190
Used/Paid	(31)	(29)	(12)	(65)	(36)	(44)	(217)
Unwinding of discounts	(20)	1	17	-	-	-	(2)
Exchange adjustment	(5)	-	-	-	(26)	10	(21)
Other	-	-	-	-	-	-	-
Balance as at March 31, 2020	**377**	**66**	**243**	**186**	**612**	**513**	**1,997**

* Primarily includes provisions towards restructuring, rehabilitation, carbon emission, etc.

(c) Brief Description of Provisions:

i) Assets Retirement Obligations:
Asset Retirement Obligation (ARO) is a legal or constructive obligation associated with the ash ponds, red mud ponds, ash pipeline and coal transportation system in refineries and mining lands where these lands need to be restored back to usable condition after closing of activities. This is a statutory requirement in which the timing or method of settlement may be conditional on one or multiple future events, the occurrence of which may not be within the control of the entity. The outflow of economic resources is expected during FY 2021 to FY 2047. The same has been appropriately discounted.

ii) Environmental Liability:
Environmental Liability is associated with disposal of hazardous material generated during the course of manufacturing or mining operation, e.g. disposal of spent pot lining, Gypsum, Slag, etc. This disposal generally takes place as per the guidelines set by various regulatory authorities of States and Central Government. The outflow of economic resources is generally expected in following financial year.

iii) Enterprise Social Commitment:
Enterprise Social Commitment is the amount to be spent on social and economic development of the surrounding area where new project is being setup. This is generally defined as a certain percentage of the total cost of the project. The outflow of economic resources is expected during FY 2021 to FY 2056. This has been appropriately discounted wherever necessary.

iv) Legal Cases:
There are certain legal cases (including revenue matters) against which provision has been made since these events are probable to happen, i.e. more likely than not but timing of occurrence of such events is uncertain as it depends on when the matter will be settled at the highest Court of law.

v) Renewable Power Obligation:
Obligations have been imposed on captive power producing units in certain group entities to purchase energy from renewable sources by various state electricity regulatory commissions based on each state's varying renewable energy potentials. Known as Renewable Purchase Obligations (RPOs), captive power plants are bound to meet them by purchasing a certain percentage of their requirements from renewable energy sources.

vi) Other Provisions:

Restructuring charges include employee severance and benefit costs and other costs associated with exit activities. Severance costs are recognized when management with the proper level of authority has committed to a restructuring plan and communicated those actions to employees. Other exit costs include environmental remediation costs and contract termination costs, primarily related to equipment and facility lease obligations. At each reporting date, we evaluate the provisions for restructuring costs to ensure the provisions are still appropriate.

Provision for carbon emission represents estimated liabilities towards emissions for operations in Europe and Asia. The provision is measured at the carrying amount of allowances to the extent that the provision will be settled using allowances on hand, with any excess emission being measured at the market value of the allowances at the period end.

We believe we have made reasonable estimates for the costs that are reasonably possible for these provisions.

Based on the estimates of the timing of the cash outflows related to provisions, discounting will not have a material impact.

(d) Pursuant to the issuance of notification by Odisha Electricity Regulatory Commission (OERC) dated December 31, 2019, on pegging of renewable power obligation (RPO) by obligated units based on their year of commissioning, the Group has provided for RPO during the year at the reduced rate. Pending clarification and guidance on carry over of excess Renewable Energy Certificates (RECs) purchased by the Group, arising out of retrospective application of the said notification for period prior to April 1, 2019, no adjustments has been made for period prior to April 1, 2019.

27. Other Liabilities

₹ in Crore

	As at 31.03.2020		As at 31.03.2019	
	Non-Current	Current	Non-Current	Current
Customer Refund Liability - (a) (refer Note 29)	-	89	-	89
Statutory Dues Payables	170	708	60	1,159
Deferred Income - (b) & (c)	1,173	71	1,167	93
Other Payables	34	21	84	115
	1,377	**889**	**1,311**	**1,456**

(a) Customer refund liability are recognised for discount payable to customers.

(b) Mainly includes deferred income in respect of grant related to Export Promotion Capital Goods (EPCG) ₹ 628 Crore (31/03/2019: ₹ 615 Crore) in non-current portion and ₹ 21 Crore (31/03/2019: ₹ 21 Crore) in current portion.

(c) Mainly includes deferred government grant income of ₹ 545 Crore (31/03/2019: ₹ 531 Crore) in non-current portion and ₹ 44 Crore (31/03/2019: ₹ 63 Crore) in current portion.

28. Contract Liabilities

₹ in Crore

	As at 31.03.2020		As at 31.03.2019	
	Non-Current	Current	Non-Current	Current
Advance from Customers - (refer Note 29)	14	188	19	178
	14	**188**	**19**	**178**

NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

(a) Reconciliation of contract liabilities for the periods presented:

₹ in Crore

	As at 31.03.2020
Balance at beginning of the year	197
Amount received during the year against which revenue has not been recognized	142
Revenue recognized during the year	-
Less: Contract liabilities at the beginning of the year	(141)
Less: Performance obligations satisfied in previous years	-
Less: Others	-
Foreign exchange gains and losses	4
Balance at end of the year	**202**

29. Revenue from Operations

₹ in Crore

	Year ended 31.03.2020	Year ended 31.03.2019
Revenue from Contract with Customers		
Sale of Products - (a) & (b)	116,159	128,557
Traded Sales	156	216
Sale of Services - (c)	825	839
	117,140	**129,612**
Other Operating Revenues - (a) & (d)	1,004	930
	118,144	**130,542**
Reconciliation of revenue recognised with contract price:		
Contract Price	116,541	129,960
Adjustments for:		
Refund Liabilities and Discounts	(699)	(564)
Hedging Gain/ (Loss)	1,283	241
Others - Provisionally priced contracts	15	(25)
Revenue from Contracts with Customers	**117,140**	**129,612**

(a) Includes sale of Di-ammonium phosphate (DAP) including nutrient based subsidy of Phosphorus (P) & Potassium (K) ₹ 234 Crore (year ended 31/03/2019 ₹ 311 Crore).

(b) Sales of Copper products and precious metals are accounted for provisionally, pending finalization of price and quantity. Variations are accounted for in the period of settlement. Final price receivable on sale of above products for which provisional price was not finalized are realigned at year end forward LME/LMBA rate and is being presented as part of other operating revenue. Revenue from subsequent variation in price movement as at 31/03/2020 is loss of ₹ 1 Crore (31/03/2019: gain of ₹ 43 Crore), including subsequent variation in price movement from trading sales of ₹ Nil (31/03/2019: gain of ₹ 20 Crore).

(c) Sale of Services represents Freight and Insurance on certain Export contracts as well as shipping and handling charges related to FOB shipping point, which are identified as separate performance obligation and have been accounted for as service revenue.

(d) Includes Government grant in the nature of sales related export incentives and other benefits of ₹ 318 Crore (31/03/2018: ₹ 393 Crore).

(e) Group's revenue from external customers as analysed by the country, in which customers are located is given below:

₹ in Crore

	Year ended 31.03.2020	Year ended 31.03.2019
India	28,872	31,961
Outside India		
United States	28,290	32,189
Brazil	13,260	14,221
Korea	6,745	5,536
United Kingdom	5,812	7,567
Germany	4,456	4,488
China	1,682	3,502
Others	29,027	31,078
	118,144	**130,542**

(f) The Group recognises revenue at a point in time.

30. Other Income

₹ in Crore

	Year ended 31.03.2020	Year ended 31.03.2019
Interest Income		
On Non-Current Investments	1	1
On Current Investments	36	66
On Others - (a)	252	476
Dividend Income		
On Non-Current Investments	35	45
On Current Investments	-	*
Rent Income	15	15
Gains/ (Loss) on Property, Plant and Equipment and Intangibles Assets sold/ discarded (Net)	(7)	(67)
Liabilities no longer required written back	83	40
Gains/(Loss) on Financial Investments Measured at FVTPL (Net)		
On sale of Financial Assets	157	518
On change of Fair Value of Financial Assets	299	(195)
Government Grants - (b)	79	85
Other Non-Operating Income (Net) - (c), (d)	236	143
	1,186	**1,127**

** Amount below rounding off convention.*

(a) Interest Income on others includes ₹ 46 Crore (year ended 31/03/2019 ₹ 257 Crore) of interest received from Income Tax Department.

(b) Grant income mainly includes carbon emission credit allotments of ₹ 77 Crore (31/03/2019: ₹ 84 Crore) for certain operations in Europe and Asia and grant income associated with fixed assets investments in North America, South America and Asia of Group's subsidiary Novelis Inc.

(c) Includes gain on modification of borrowings ₹ 19 Crore (31/03/2019: ₹ 75 Crore) resulting from change in amount and timing of expected cash flow payments on term loans. It also includes gain recognised on account of change in loan amortisation schedule ₹ 1 Crore (31/03/2019: ₹ Nil) due to change in benchmark rate.

(d) Current year amount includes gain of ₹ 63 Crore on Brazil tax litigation where the Group has received multiple favorable rulings during the fiscal years ended March 31, 2020 and 2019 from the Brazilian court that recognized the right to exclude certain taxes related to contributions to the social integration program and social security contributions on gross revenues, also known as PIS and COFINS.

NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

31. Cost of Materials Consumed

₹ in Crore

	Year ended 31.03.2020	Year ended 31.03.2019
Raw Materials - (a)	68,030	78,066
Packing Materials	2	2
	68,032	**78,068**

(a) Purchase of copper concentrate is accounted for provisionally pending finalization of contents in the concentrate and price. Variations are accounted for in the period of settlement. Final price payable on purchase of copper concentrate for which provisional price and quantity were not finalized during the year are realigned based on forward LME and LBMA rate. Impact on cost from subsequent variation in price movement for year ended 31/03/2020 was gain of ₹ 217 Crore (year ended 31/03/2019 loss of ₹ 158 Crore).

32. Trade Purchases

₹ in Crore

	Year ended 31.03.2020	Year ended 31.03.2019
Materials Purchase - (a)	256	235
	256	**235**

(a) Includes gain on realignment of ₹ 6 Crore (31/03/2019 loss ₹ 20 Crore) based on forward LBMA/LME rates for provisionally priced trade purchases.

33. Changes in Inventories of Finished Goods, Work-in-Progress and Stock-in-Trade

₹ in Crore

	Year ended 31.03.2020	Year ended 31.03.2019
Opening Inventories		
Work-in-Progress	10,748	10,620
Finished Goods	3,304	3,327
Stock-in-Trade	-	-
	14,052	**13,947**
Less: Closing Inventories		
Work-in-Progress	10,102	10,748
Finished Goods	4,500	3,304
Stock-in-Trade	127	-
	14,729	**14,052**
	(677)	**(105)**
Currency Translation Adjustment (Net)	660	491
Net Change	**(17)**	**386**

34. Employee Benefits Expenses

₹ in Crore

	Year ended 31.03.2020	Year ended 31.03.2019
Salaries and Wages	6,298	6,371
Post-Employment Benefits:		
Contribution to Provident Fund and Other Defined Contribution Funds (refer Note 47)	699	612
Gratuity and Other Defined Benefit Plans (refer Note 47)	603	643
Employee Share-Based Payment (refer Note 46)		
Equity-Settled Share-Based Payment	28	10
Cash-Settled Share-Based Payment	(7)	135
Employee Welfare Expenses	1,263	1,306
	8,884	**9,077**
Less: Transferred to Capital Work-in-Progress/ Intangible Assets under development	(52)	(34)
	8,832	**9,043**

Impact of Hon'ble Supreme Court judgment on computation of provident fund contribution:

The Hon'ble Supreme Court of India ("SC") by their order dated February 28, 2019, in the case of Surya Roshani Limited v/s EPFO, set out the principles based on which allowances paid to the employees should be identified for inclusion in basic wages for the purposes of computation of Provident Fund contribution. The Group have given effect of the above judgement effective March 1, 2019. This does not have any material impact on the Consolidated Financial Statements.

35. Power and Fuel

₹ in Crore

	Year ended 31.03.2020	Year ended 31.03.2019
Power and Fuel Expenses	9,696	9,618
Less: Transferred to Capital Work-in-Progress/Intangible Assets under development	(1)	*
	9,695	**9,618**

* Amount below rounding off convection.

36. Finance Costs

₹ in Crore

	Year ended 31.03.2020	Year ended 31.03.2019
Interest Expenses on Financial Liabilities not at FVTPL - (a)	3,555	3,607
Interest expense for lease arrangements - (b)	55	-
(Gain) /Loss on Foreign Currency Transactions and Translation (Net)	9	12
(Gain)/ Loss on Extinguishment of Debt - (c), (d)	568	-
Other Borrowing Costs - (e)	159	182
	4,346	**3,801**
Less: Transferred to Capital Work-in-Progress/ Intangible Assets under development - (e)	(149)	(23)
	4,197	**3,778**

(a) Includes difference between effective interest rate and contracted interest rate of ₹ 41 Crore (31/03/2019: ₹ 39 Crore) mainly from amortisation of debt issuance cost and modification of in borrowings.

(b) Subsequent to introduction of Ind AS 116 'Leases', the Group has recognized Long Term leases as ROU Assets and created Lease Obligation representing Present Value of future minimum lease payment. The unwinding of such obligation is recognized as Interest Expenses. Following transitional provision under Ind AS 116 'Leases', previous year numbers have not been reclassified.

(c) As a result of entering into increase in "2020 Term Loan Increase Joinder Amendment" and "Short Term Credit Agreement" in February 2020, the Group has recognized ₹ 106 Crore ($15 Million) of "Loss on extinguishment of debt" relating to Aleris acuisition, pertaining to unamortized balance of commitment fees and other costs for earlier commitments entered in December 2018. refer Note 23A.

(d) Additionally, the Group has recognised ₹ 462 Crore ($65 Million) of "Loss on extinguishment of debt" pertaining to Senior Notes. refer Note 23A.

(e) Includes unwinding of discount on Enterprise Social Commitment and Asset Retirement Obligation.

(f) The capitalisation rate used to determine the amount of borrowing costs to be capitalised is the weighted average interest rate applicable to general borrowings.

37. Depreciation and Amortisation

₹ in Crore

	Year ended 31.03.2020	Year ended 31.03.2019
Depreciation of Property, Plant and Equipment	4,271	4,201
Depreciation of ROU Assets	261	-
Depreciation of Investment Properties	1	1
Amortisation of Intangible Assets	563	575
	5,096	**4,777**
Less: Transferred to Capital Work-in-Progress	(5)	-
	5,091	**4,777**

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38. Impairment Loss/ (Reversal) of Non-Current Assets (Net)

₹ in Crore

	Year ended 31.03.2020	Year ended 31.03.2019
Impairment Loss	44	-
Impairment Reversal	-	(11)
	44	**(11)**

The Group assess the recoverability of property, plant and equipment and intangible assets whenever events or changes in circumstances indicate that we may not be able to recover the asset's carrying amount. Such events or circumstances include, but are not limited to, a significant decrease in the fair value of the underlying business, change in utilization of property and equipment and intangible assets, or market factors such as metal price and input costs.

If any indication exists and an impairment testing for an asset is required, the Group estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's (CGU) fair value less costs of disposal and its value in use. Recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount and it will be its new cost basis. For a depreciable asset, the new cost basis will be depreciated over the remaining useful life of that asset. For an amortizable intangible asset, the new cost basis will be amortized over the remaining useful life of the asset.

Impairment loss calculations require management to apply judgments in estimating future cash flows to determine asset fair values, including forecasting useful lives of the assets and selecting the discount rate that represents the risk inherent in future cash flows. Impairment charges are recorded in "Impairment Loss/ (Reversal) of Non-Current Assets (Net)" in the Consolidated statement of profit and loss.

For the year ended March 31, 2020, Novelis Inc. has recognised impairments its certain property, plant and equipment due to portfolio optimization efforts resulting in the upcoming closure of certain non-core operations in Europe.

During the year ended March 31, 2019, Novelis Inc. reversed ₹ 10.75 Crore ($1.5 Million) of impairment in its property, plant and equipment at our Gottingen, Germany, facility due to the availability of a buyer for its litho line facility. During the year ended March 31, 2020, it was sold.

Break up of Impairment Loss/ (Reversal) recognised during the year:

₹ in Crore

	Note	Year ended 31.03.2020	Year ended 31.03.2019
(i) Impairment Loss/ (Reversal) on items of Property, Plant and Equipment	6	81	(11)
(ii) Impairment Loss on CWIP	6 (g)	14	-
(iii) Impairment Loss on Intangible Assets under Development	9 (e)	14	-
		109	**(11)**
(iv) Less: Amounts of Impairment Loss recognised under Exceptional Income/ (Expenses) (Net)	40 (b)	(65)	-
		44	**(11)**

39A. Impairment Loss on Financial Assets (Net)

₹ in Crore

	Year ended 31.03.2020	Year ended 31.03.2019
Allowance for Doubtful Loans, Advances and Debts / (written back) (Net)	55	22
Bad Loans, Advances and Receivables Written off/ (Written back) (Net)	1	7
	56	**29**

39B. Other Expenses

₹ in Crore

	Year ended 31.03.2020	Year ended 31.03.2019
Consumption of Stores and Spares	2,915	2,804
Repairs to Buildings	250	236
Repairs to Machinery	1,883	1,912
Rates and Taxes	127	116
Rental Charges (refer Note 54)	-	321
Leases Expenses - (a)	177	-
Insurance Charges	203	157
Payments to Auditors	56	53
Research and Development	625	531
Freight and Forwarding Expenses (Net) - (b)	4,097	4,487
Donation - (c)	111	32
Directors' Fees and Commission	8	10
(Gain)/ Loss on assets held for sale	3	-
(Gain)/ Loss on Change in Fair Value of Derivatives (Net)	(203)	(14)
(Gain) /Loss on Foreign Currency Transactions and Translation (Net)	108	54
Premium on Coal Extraction	250	747
Miscellaneous Expenses - (d), (e)	6,345	6,344
	16,955	**17,790**
Less: Transferred to Capital Work-in-Progress/ Intangible Assets under development	(15)	(127)
	16,940	**17,663**

(a) Details of lease expenses not included in the measurement of lease liabilities:

Short Term Leases	131	-
Variable Lease Payments	35	-
Leases of Low Value Assets	11	-
	177	**-**

(b) Freight and forwarding expenses are net of freight subsidy of ₹ 25 Crore (year ended 31/03/2019 ₹ 31 Crore) on sale of DAP.

(c) Donation includes ₹ 68 Crore (year ended 31/03/2019 of ₹ 13 Crore) paid towards political donation, out of which ₹ 10 Crore (year ended 31/03/2019 of ₹ 13 Crore) paid to AB General Electoral Trust (erstwhile General Electoral Trust) and ₹ 58 Crore paid through Electoral Bonds.

(d) Miscellaneous expenses include ₹ * Crore (31/03/2019: ₹ * Crore) paid to a firm of solicitors in which one of the Directors of the Company is a partner.

(e) Includes ₹ 292 Crore (31/03/2019: ₹ 165 Crore) towards acquisition of Aleris.

** Amount below rounding off convention.*

40. Exceptional Income/ (Expenses) (Net)

₹ in Crore

	Year ended 31.03.2020	Year ended 31.03.2019
Exceptional Income - (a)	25	-
Exceptional Expenses - (b), (c)	(309)	-
	(284)	**-**

Details of Exceptional Items are given below:

(a) Slump Sale:

During the year ended March 31, 2020, the Company sold its aluminium foil manufacturing unit situated at Kollur, Andhra Pradesh. The transaction resulted in profit of ₹ 25 Crore on its sale on a slump sale basis.

NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

(b) Restructuring Expenses:

During the year ended March 31, 2020, Novelis announced its plans to cease operations at a foil plant in Germany to further optimize its product portfolio, which led to the recognition of ₹ 220 Crore in severance and other related expenses. The total amount of all costs related to the restructuring includes ₹ 149 Crore related to employee severance, ₹ 65 Crore related to the impairment of property, plant, and equipment and ₹ 6 Crore to write offs of inventories.

(c) Restoration Expenses:

During the year ended March 31, 2020, the Company has incurred expenses of ₹ 89 Crore towards restoration of Red Mud Pond and other related expenses at alumina refinery at Muri, Jharkhand.

41. Tax Expenses

The Group's income tax expenses and effective tax rate reconciliation given below:

(a) Amount recognised in Statement of Profit and Loss

₹ in Crore

	Year ended 31.03.2020	Year ended 31.03.2019
Current Tax		
Current Tax Expenses for the year	1,556	1,910
Adjustments for current tax of prior periods (Net)	(15)	-
	1,541	**1,910**
Deferred Tax		
Deferred Income Tax Expenses - (ii)	857	1,455
MAT Credit Entitlement	(241)	(777)
	616	**678**
Total Income Tax Expenses	**2,157**	**2,588**

i. Applicable Indian Statutory Income Tax rate for the year ended March 31, 2020 and March 31, 2019 is 34.944% and 34.944%, respectively.

ii. Deferred income tax expenses during the year ended March 31, 2020 includes the effect of change in tax rates - benefit of ₹ 44 Crore primarily related to Swiss tax reform and the substantive enactment of a statutory rate change in the United Kingdom. In fiscal year 2019, the effect of change in tax rates - expense of ₹ 6 Crore primarily related to a state legislative change in the United States.

iii. MAT Credit entitlement includes ₹ 89 Crore (31/03/2019: ₹ 402 Crore) pertains to Utkal Alumina International Limited.

(b) Reconciliation of Effective Tax Rate

₹ in Crore

	Year ended 31.03.2020	Year ended 31.03.2019
Profit/ (Loss) before Tax	5,924	8,083
Indian Statutory Income Tax Rate (%)	34.944%	34.944%
Tax expenses using the Company's domestic tax rate	2,070	2,825
Tax effect of adjustments to reconcile reported income tax expense:		
Tax credits and other concessions	(120)	(110)
Income exempt from tax	(120)	(32)
Expenses not deductible in determining taxable profit	197	59
Tax on income (domestic and foreign) at rates different from statutory income tax rate	(202)	(193)
Adjustments pertaining to prior years	(15)	-
Change in previously unrecognised tax loss, tax credit or temporary difference of a prior period	-	(301)
Uncertain tax positions	24	24
Tax on Undistributed Earnings	17	6
Deferred tax not recognised on carry forward losses and benefits	110	164
Foreign exchange translation and remeasurement	212	162
Others	(16)	(16)
Total Tax expenses recognised in the Consolidated Statement of Profit and Loss	**2,157**	**2,588**

42. Other Comprehensive Income/ (Loss)

The disaggregation of changes to other comprehensive income (OCI) by each class is given below:

₹ in Crore

	Year ended 31.03.2020			Year ended 31.03.2019		
	Gross	Tax	Net	Gross	Tax	Net
(i) Items that will not be reclassified to Statement of Profit and Loss (Net)						
Remeasurement of Defined Benefit Obligation	(651)	165	(486)	(161)	47	(114)
Change in Fair Value of Equity Instruments designated as FVTOCI	(2,676)	10	(2,666)	(1,776)	3	(1,773)
Share in Equity Accounted Investments	*	-	-	*	-	-
	(3,327)	**175**	**(3,152)**	**(1,937)**	**50**	**(1,887)**
(ii) Items that will be reclassified to Statement of Profit and Loss (Net)						
Change in Fair Value of Debt Instruments designated as FVTOCI	5	(2)	3	2	-	2
Effective portion of Cash Flow Hedges	(640)	235	(405)	(126)	15	(111)
Cost of Hedging Reserve	(589)	206	(383)	(223)	78	(145)
Foreign Currency Translation Reserve	1,214	-	1,214	(325)	-	(325)
	(10)	**439**	**429**	**(672)**	**93**	**(579)**
Total Other Comprehensive Income	**(3,337)**	**614**	**(2,723)**	**(2,609)**	**143**	**(2,466)**

** Amount below rounding off convention.*

43. Earnings Per Share (EPS)

₹ in Crore

	Year ended 31.03.2020	Year ended 31.03.2019
Profit/ (Loss) for the year		
As per Consolidated Statement of Profit and Loss	3,767	5,495
Less: Non-Controlling Interests in Profit/ (Loss)	*	(1)
Profit/ (Loss) attributable to Owners of the Company	**3,767**	**5,496**
Weighted average number of equity shares for calculation of EPS:		
Weighted average number of equity shares for Basic EPS	2,223,957,744	2,227,573,655
Dilutive impact of Employee Stock Options Scheme	991,162	1,126,728
Weighted average number of equity shares for Diluted EPS	**2,224,948,906**	**2,228,700,383**
Face value of per Equity Share (₹)	1.00	1.00
Earnings Per Share		
Basic (₹)	16.94	24.67
Diluted (₹)	16.93	24.66

** Amount below rounding off convention.*

Treasury shares are excluded from weighted-average numbers of equity shares used as a denominator in the calculation of EPS.

Stock options granted to the employees under various ESOP schemes are considered to be potential equity shares. They have been included in the determination of diluted earnings per share to the extent to which they are dilutive. The stock options have not been included in the determination of basic earnings per share. The details relating to stock options are under Note 46.

NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

44. Segment Information:

During the year, in line with the changes in the internal structure for reporting financial information to the entity's chief operating decision maker (CODM), the Group has changed its Segment disclosures in the consolidated financial statements as per Ind AS 108 "Operating Segments", from previously reported segments being Aluminium, Copper and Novelis to revised segments being 'Aluminium', 'Copper', 'Novelis' and 'All Other Segments'. The corresponding segment information of previous year have been restated accordingly. Description of each of the reporting segments is as under:

i. Aluminium Segment: This segment represents Aluminium Business of the Company and Utkal Alumina International Limited, a wholly owned subsidiary of the Company, which includes manufacturing and selling of Hydrate and Alumina, Aluminium and Aluminium Products.

ii. Copper Segment: This segment represents Copper Business of the Company and Dahej Harbour and Infrastructure Limited, a wholly owned subsidiary of the Company that operates a captive Jetty of the Group, and in the business of manufacturing and selling of Copper Cathode, Continuous Cast Copper Rods, Sulphuric Acid, DAP & Complexes, Gold, Silver and other precious metals.

iii. Novelis Segment: This segment represents Novelis Inc., a wholly owned foreign subsidiary, engaged in producing and selling aluminium sheet and light gauge products and operating in all four continents viz. North America, South America, Europe and Asia. This is identified as a separate reportable segment based on its geographical area and regulatory environment.

iv. All Other Segment: This segment represents remaining subsidiaries of the Group and the segment information of which was previously included either as part of Aluminium segment and/or as part of unallocable items.

The chief operating decision maker (CODM) primarily uses earnings before interest, tax, depreciation and amortisation (EBITDA) as performance measure to assess the performance of the operating segments. However, the CODM also receives information about the segment's revenues, segment assets and segment liabilities on regular basis.

A. Segment Profit or Loss:

Segment's performance are measured based on Segment EBITDA. Segment EBITDA is defined as under:

For Aluminium segment and Copper segment:

Segment EBITDA is "Earnings before Finance Costs, Exceptional Income / (Expenses), Tax Expenses, Depreciation and Amortization, certain un-allocable corporate expenses which are not related to the performance of the segment, Impairment of Non-Current Assets, Investment income, Fair value gains or losses on financial assets and share in profit/ loss in equity accounted investments".

Further, in line with the changes in the internal structure for reporting financial information to the entity's chief operating decision maker (CODM), the Group has changed the basis of allocation of corporate expenses between Aluminium and Copper segment. Instead of the earlier allocation on the basis of Revenue of each segment, a weighted average ratio has been determined considering Revenue, Capital Employed, Cash Profit and Net Block of each segment. Due to this change, segment results for Copper Segment has increased with a corresponding decrease in the segment results of Aluminium Segment. The corresponding segment information of previous year have been restated accordingly.

For Novelis segment:

During the year, the Group has changed its Segment income mesurement for Novelis segment from EBITDA to adjusted EBITDA. Adjusted EBITDA is earnings before (a) Depreciation and amortization expenses; (b) Finance cost - net; (c) Interest income; (d) Unrealized gains or losses on change in fair value of derivative instruments, net, except for foreign currency remeasurement hedging activities, which are included in segment income; (e) Realized (gains)/losses on derivative instruments; (f) Impairment loss or reversal, net; (g) Gain or loss on extinguishment of debt; (h) non controlling interest's share; (i) Exceptional income or cost; (j) Restructuring costs; (k) Profit or loss on plant, property and equipment and intangibles sold or discarded, net; (l) Other costs/income, net; (m) litigation settlement, net of insurance recoveries; (n) sale transaction fees; (o) cumulative effect of accounting change, net of tax; (p) metal price lag; and (q) Business acquisition and other integration related costs; which is in line with the segment information for Novelis that has been reported in accordance with its quarterly US GAAP financial information filed with the Securities Exchange Commission of the United States of America. Recognition and measurement differences between US GAAP and Ind AS accounting policies have been separately identified as part of reconciliation in the segment information. The corresponding segment information of earlier periods have been restated accordingly.

For All Other segments:

This segment represents remaining subsidiaries of the Group which are the separate legal entities. For this Segment EBITDA is "Earnings before Finance Costs, Exceptional Income / (Expenses), Tax Expenses, Depreciation and Amortization and Impairment of Non-Current Assets".

Segment EBITDA are as follows:

₹ in Crore

	Year ended 31.03.2020	Year ended 31.03.2019
Novelis	10,435	9,565
Aluminium	3,729	5,096
Copper	1,276	1,683
All Other Segments	(16)	(76)
Total Segment EBIDTA	**15,424**	**16,268**

Segment EBITDA reconciles to Profit/ (Loss) before Tax from Continuing Operations as follows:

₹ in Crore

	Year ended 31.03.2020	Year ended 31.03.2019
Total Segment EBIDTA	15,424	16,268
Finance Costs	(4,197)	(3,778)
Depreciation and Amortization	(5,091)	(4,777)
Impairment Loss/ (Reversal) of Non-current Assets (Net)	(44)	11
Share in Profit/ (Loss) in Equity Accounted Investments (Net of Tax)	4	*
Exceptional Items (Net)	(284)	-
Interest and Dividend Income	239	502
Gains/ (losses) on Financial Assets Measured at fair value through Profit and Loss (Net)	454	320
Adjustment on account of different accounting policies for Novelis Segment	287	20
Other Unallocated Income/ (Expenses) (Net)	(868)	(483)
Profit/ (Loss) before Tax	**5,924**	**8,083**

Following amount are either included in the measure of segment profit or loss reviewed by the CODM or are regularly provided to the CODM:

₹ in Crore

	Year ended 31.03.2020				
	Novelis	Aluminium	Copper	All Others	Total
Interest Income - (a)	-	26	59	-	85
Gains/ (losses) on Financial Assets Measured at fair value through Profit and Loss (Net)	-	-	-	2	2
Depreciation and Amortization - (b)	3,039	1,818	175	24	5,056
Impairment Loss/ (Reversal) of Non-Current Assets (Net) - (b)	44	-	-	-	44

₹ in Crore

	Year ended 31.03.2019				
	Novelis	Aluminium	Copper	All Others	Total
Interest Income - (a)	-	21	64	1	86
Gains/ (losses) on Financial Assets Measured at fair value through Profit and Loss (Net)	-	-	-	3	3
Depreciation and Amortization - (b)	2,763	1,804	172	15	4,754
Impairment Loss/ (Reversal) of Non-Current Assets (Net) - (b)	(11)	-	-	-	(11)

(a) Represents interest income from customers/ security deposits, etc., which are included in the measure of segment profit or loss.

(b) Does not included in the measure of segment profit or loss but provided to the CODM.

NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

B. Segment Revenue:

For all reportable segments except Novelis, the segment revenue is measured in the same way as measured in the Statement of Profit and Loss.

In case of Novelis segment, CODM reviews its financial performance as those are reported under US GAAP, accordingly Novelis segment revenue is measured as the revenue reported under US GAAP financial reporting. The difference between 'Segment Revenue' reported under USGAAP and 'Revenue' reported under Ind AS together with any adjustment item identified between US GAAP and Ind AS is shown as "Adjustment on account of different accounting policies for Novelis Segment".

Sales between operating segments are eliminated on consolidation. Segment Revenue and reconciliation of the same with total revenue as follows:

₹ in Crore

	Year ended 31.03.2020			Year ended 31.03.2019		
	Segment Revenue	Inter -segment Revenue	Revenue from external customers	Segment Revenue	Inter -segment Revenue	Revenue from external customers
Novelis	79,527	-	79,527	86,144	-	86,144
Aluminium	21,749	48	21,701	23,775	38	23,737
Copper	18,533	13	18,520	22,198	20	22,178
All Other Segments	434	47	387	463	46	417
Adjustment on account of different accounting policies for Novelis Segment	(1,991)	-	(1,991)	(1,934)	-	(1,934)
Total	**118,252**	**108**	**118,144**	**130,646**	**104**	**130,542**

During the year ended March 31, 2020, there is one customer having more than 10% of the Group's total revenue or more than 10% of either of the reportable segments revenue.

Novelis's ten largest customers accounted for approximately 66% and 65% of Novelis segment's total "Revenue from operations" for the year ended March 31, 2020 and 2019, respectively, out of which two major customer contributes to 21% (₹ 16,550 Crore) (31/03/2019: 23%, ₹ 14,460 Crore) and 10% (₹ 8,081 Crore) (31/03/2019: 11%, ₹ 6,731 Crore) of the Novelis segment's total "Revenue from Operations", respectively.

The Group's operations are located in India and outside India. The amount of its revenue from external customers analysed by the country in which customers are located irrespective of origin of the goods or services are given below:

₹ in Crore

	Year ended 31.03.2020	Year ended 31.03.2019
India	28,872	31,961
Outside India	89,272	98,581
	118,144	**130,542**

C. Segment Assets:

For Aluminium segment and Copper segment, segment assets are measured in the same way as in the consolidated financial statements. These assets are allocated based on the operations of the segment and the physical location of the asset. However, certain assets like investments, equity accounted investments, loans, assets classified as held for sale, current and deferred tax assets are not considered to be segment assets as they are managed at corporate level. Further, corporate administrative assets of an entity having operation which are part of more than one reporting segments are not allocated to individual segments as they also managed at corporate levels and does not linked to any specific segment.

For Novelis segment, segment assets of are measured at the amount of total assets of Novelis Inc. as reported under US GAAP financial reporting. The difference between 'Segment Assets' reported under USGAAP and 'Total Assets' reported under Ind AS together with any adjustment items identified between US GAAP and Ind AS is shown as "Adjustment on account of different accounting policies for Novelis Segment".

In case of All Other segments, Segment assets are measured in the same way as in the financial statements and all the assets are part of this segment as this segments represents the aggregation of subsidiaries which are the separate legal entities and not part of any of above reportable segments.

Segment assets and reconciliation of the same with total assets as follows:

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
Novelis	82,797	66,195
Aluminium	50,036	51,777
Copper	10,148	9,898
All Other Segments	559	721
Total Segment Assets	**143,540**	**128,591**
Investment Property	8	9
Investments (Non-Current and Current)	9,219	8,758
Equity Accounted Entities	41	21
Adjustment on account of different accounting policies for Novelis Segment	12,505	11,476
Other Corporate Assets	4,215	3,993
Total Assets	**169,528**	**152,848**

Following amount are either included in the measure of segment assets reviewed by the CODM or are regularly provided to the CODM:

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
Investment Property	14	14
Investments (Non-Current and Current)	151	233

During the year ended 31/03/2020, capital expenditure relating to Novelis, Aluminium, Copper and All Other Segments are ₹ 4,462 Crore, ₹ 1,987 Crore, ₹ 109 Crore and ₹ 32 Crore, respectively (31/03/2019: ₹ 2,670 Crore, ₹ 1,350 Crore, ₹ 206 Crore and ₹ 61 Crore, respectively).

The total of Non-Current assets excluding goodwill, financial assets, equity accounted investments and deferred tax assets analysed by the country in which assets are located are given below.

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
India	44,050	43,547
Outside India - (a)	34,647	30,297
	78,697	**73,844**

a) Geographical area-wise break-up of non-current asset located outside India:

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
United States	15,832	13,660
Asia and Other Pacific	4,230	3,299
Brazil	6,635	6,020
Canada	505	455
Germany	2,012	1,873
Other Europe	5,433	4,990
	34,647	**30,297**

D. Segment Liabilities:

For Aluminium segment and Copper segment, Segment liabilities are measured in the same way as in the financial statements. These liabilities are allocated based on the operations of the segment. In measurement of Aluminium and Copper segment's liabilities, items like borrowings, current and deferred tax liabilities, liabilities associated with assets

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classified as held for sale, etc., are not considered to be segment liabilities as they are managed at corporate level. Further, corporate administrative liabilities of an entity having operation which are part of more than one reporting segments are not allocated to individual segments as they also managed at corporate levels and does not linked to any specific segment.

In case of Novelis segment, segment liabilities are measured at the amount of all the liabilities of Novelis Inc., except borrowings, as reported under US GAAP financial reporting. The difference between 'Segment Liabilities' reported under US GAAP and 'Total Liabilities' reported under Ind AS together with any adjustment items identified between US GAAP and Ind AS is shown as "Adjustment on account of different accounting policies for Novelis Segment".

In the case of All Other Segments, Segment liabilities are measured in the same way as in the financial statements and all the liabilities except borrowings are part of this segment.

Segment liabilities and reconciliation of the same with total liabilities as follows:

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
Novelis	30,815	28,444
Aluminium	5,516	5,574
Copper	2,930	4,394
All Other Segments	174	201
Total Segment Liabilities	**39,435**	**38,613**
Adjustment on account of different accounting policies for Novelis Segment	849	621
Borrowings (Non-Current and Current, including current Maturity)	67,257	52,416
Other Corporate Liabilities	3,660	3,688
Total Liabilities	**111,201**	**95,338**

45. Related party transactions

The Group's related parties principally consist of its associates, joint ventures, trusts and its key managerial personnel. The Group routinely enters into transactions for sale and purchase of products and rendering and receiving services with these related parties. Transactions and balances between the Company and its subsidiaries, which are related parties of the Company, have been eliminated on consolidation. Details of transactions and balances between the Group and other related parties, included in the financial statements, are disclosed below.

A. Associates, Joint Ventures and Others:

(a) Transactions

₹ in Crore

		Year ended 31.03.2020			Year ended 31.03.2019		
		Associates	Joint Ventures	Others #	Associates	Joint Ventures	Others #
i.	**Services rendered**	**-**	*****	**9**	**-**	*****	**-**
	Hydromine Global Minerals GmbH Limited (Consolidated)		*	-	-	*	-
	Aditya Birla Management Corporation Private Limited	-	-	9	-	-	-
ii.	**Interest and dividend received**						
	Interest received	**3**	**-**	**-**	**4**	**-**	**-**
	Aditya Birla Science & Technology Company Pvt. Ltd.	3	-	-	4	-	-
iii.	**Purchase of Materials, Capital Equipment and Others**	**15**	**-**	**-**	**5**	**-**	**-**
	Aditya Birla Renewables Subsidiary Ltd.	14	-	-	5	-	-
	Aditya Birla Renewables Utkal Ltd.	1	-	-	-	-	-

₹ in Crore

		Year ended 31.03.2020			Year ended 31.03.2019		
		Associates	Joint Ventures	Others #	Associates	Joint Ventures	Others #
iv.	**Services received**	**17**	**-**	**471**	**15**	**-**	**429**
	Aditya Birla Science & Technology Company Pvt. Ltd.	17	-	-	15	-	-
	Aditya Birla Management Corporation Private Limited	-	-	471	-	-	429
v.	**Investments, Deposits and Loans**						
	Investments made during the year	**2**	**1**	**-**	**6**	**-**	**-**
	Hydromine Global Minerals GmbH Limited (Consolidated)	-	1	-	-	-	-
	Aditya Birla Renewables Subsidiary Ltd.	1	-	-	6	-	-
	Aditya Birla Renewables Utkal Ltd.	1	-	-	-	-	-
	Deposits and Loans, received back during the year	**5**	**-**	**-**	**-**	**-**	**-**
	Aditya Birla Science & Technology Company Pvt. Ltd.	5	-	-	-	-	-

(b) Outstanding Balances

₹ in Crore

		As at 31.03.2020			As at 31.03.2019		
		Associates	Joint Ventures	Others #	Associates	Joint Ventures	Others #
i.	**Receivables**						
	Debit Balances	**-**	**-**	**160**	**-**	*****	**19**
	Hydromine Global Minerals GmbH Limited	-	-	-	-	*	-
	Aditya Birla Management Corporation Private Limited	-	-	160	-	-	19
	Deposits and Loans (given)	**46**	**-**	**-**	**51**	**-**	**-**
	Aditya Birla Science & Technology Company Pvt. Ltd.	46	-	-	51	-	-
ii.	**Payables**						
	Credit Balances	**2**	**-**	**28**	**1**	**-**	**32**
	Aditya Birla Science & Technology Company Pvt. Ltd.	-	-	-	-	-	-
	Aditya Birla Renewables Subsidiary Ltd.	1	-	-	1	-	-
	Aditya Birla Renewables Utkal Ltd.	1	-	-	-	-	-
	Aditya Birla Management Corporation Private Limited	-	-	28	-	-	32
	Deposits and Loans (taken)	**-**	**-**	*****	**-**	**-**	**-**
	Aditya Birla Management Corporation Private Limited	-	-	*	-	-	-

All outstanding balances are unsecured and are payable in cash.

The Company is a member of Aditya Birla Management Corporation Private Limited (ABMCPL), a company limited by guarantee formed for the purpose of its members to mutually avail and share common facilities, expertise and other support on cost basis.

** Amount below rounding off convention.*

B. Trusts

(a) Contribution to Trusts

Hindalco Employee's Gratuity Fund, Kolkata ₹ 20 Crore (year ended 31/03/2019 ₹ Nil).

Hindalco Employee's Gratuity Fund, Renukoot ₹ 46 Crore (year ended 31/03/2019 ₹ 43 Crore).

Hindalco Employee's Provident Fund Institution, Renukoot ₹ 76 Crore (year ended 31/03/2019 ₹ 72 Crore).

Hindalco Superannuation Scheme, Renukoot ₹ 7 Crore (year ended 31/03/2019 ₹ 7 Crore).

Hindalco Industries Limited Employees' Provident Fund II ₹ 63 Crore (year ended 31/03/2019 ₹ 58 Crore).

Hindalco Industries Limited Senior Management Staff Pension Fund II ₹ 5 Crore (year ended 31/03/2019 ₹ 5 Crore).

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C. Key Managerial Remuneration

(i) Executive Directors

(a) Mr. Satish Pai - Managing Director

(b) Mr. Praveen Maheshwari - Whole-time Director & Chief Financial Officer

(ii) Non-Executive Directors

(a) Mr. Kumar Mangalam Birla

(b) Smt. Rajashree Birla

(c) Mr. D. Bhattacharya

(d) Mr. A.K. Agarwala

(e) Mr. M.M. Bhagat (Resigned w.e.f. 30th August, 2019)

(f) Mr. K.N. Bhandari

(g) Mr. Y.P. Dandiwala

(f) Mr. Ram Charan

(i) Mr. Girish Dave (Resigned w.e.f. 11th November, 2019)

(j) Ms. Alka Bharucha

(k) Dr. Vikas Balia (w.e.f. 19th July, 2019)

(l) Mr. Sudhir Mital (w.e.f. 11th November, 2019)

₹ in Crore

		Year ended 31.03.2020	Year ended 31.03.2019
(a)	**Remuneration of Executive Directors $ @**	**38**	**33**
	Short-term employment benefit	36	31
	Post-employment benefits #	2	2
(b)	**Remuneration of Non-Executive Directors**	**10**	**12**
	Pension	4	4
	Commission and Sitting Fees	6	8

$ includes Managing Director and CFO (Whole-time Director)

@ Excludes amortisation of fair value of employee share-based payments under Ind AS 102.

As the liabilities for defined benefit plans are provided on actuarial basis for the Company as a whole, the amounts pertaining to Key Management Personnel are not included.

46. Employee Share-Based Payments

The Group has formulated employee share-based payment schemes with objective to attract and retain talent and align the interest of employees with the Group as well as to motivate them to contribute to its growth and profitability. The Group views employee stock options as instruments that would enable the employees to share the value they create for the Group in the years to come. At present two employee share-based payment schemes are in operation at Hindalco Industries Limited, the Parent, whereas three employee share-based payment schemes are in operation at Novelis Inc., a subsidiary of the Group. Details of these employee share-based schemes are given below:

A. Employee share-based payments at Parent

Employee Stock Option Scheme 2006 ("ESOS 2006"):

The shareholders of the Company has approved on 23/01/2007 an Employee Stock Option Scheme 2006 ("ESOS 2006") under which the Company may grant 3,475,000 stock options to its permanent employees in the

management cadre, whether working in India or out of India, including Managing and the Whole-time Directors of the Company, in one or more tranches. The ESOS 2006 is administrated by the Nomination and Remmuneration Committee of the Board of Directors of the Company ("the Committee"). Each stock option when exercised would be converted into one fully paid-up equity share of ₹ 1/- each of the Company. The stock options will vest in 4 equal annual instalments after completion of one year of service from the date of grant. The exercise price shall be average price of the equity shares of the Company in the immediate preceding seven-day period on the date prior to the date on which the ESOS compensation committee finalises the specific numbers of Options to be granted to the employees discounted by such percentage not exceeding 30% (thirty per cent) to be determined by ESOS Compensation Committee in the best interest of the various stake holders in the prevailing market conditions. The maximum period of exercise is 5 years from the date of vesting and these stock options do not carry rights to dividends or voting rights till the date of exercise. Further, forfeited/ expired stock options are also available for grant. Further, on 23/09/2011 the ESOS 2006 has been partially modified and by which the Company may grant 6,475,000 stock options to its eligible employees.

Under the ESOS 2006, till 31/03/2020 the Committee has granted 4,328,159 stock options (31/03/2019: 4,328,159 stock options) to its eligible employees out of which 1,819,941 stock options (31/03/2019: 1,819,941 stock options) has been forfeited/ expired and are available for grant as per term of the Scheme. A summary of movement of the stock options and weighted average exercise price (WAEP) is given below:

	Year ended 31.03.2020		Year ended 31.03.2019	
	Number	WAEP (₹)	Number	WAEP (₹)
Outstanding at beginning of the year	816,371	118.71	868,701	118.69
Granted during the year	-	-	-	-
Forfeited during the year	-	-	-	-
Exercised during the year	(359,415)	118.69	(52,330)	118.35
Expired during the year	-	-	-	-
Outstanding at year end	**456,956**	**118.73**	**816,371**	**118.71**
Vested and Exercisable at year end	**456,956**	**118.73**	**816,371**	**118.71**

Under ESOS 2006, as at 31/03/2020 the range of exercise prices for stock options outstanding was ₹ 118.73 (31/03/2019: ₹ 118.35 to ₹ 118.73) whereas the weighted average remaining contractual life for the stock options outstanding was 1.81 years (31/03/2019: 1.96 years).

Employee Stock Option Scheme 2013 ("ESOS 2013"):

On 10/09/2013, the shareholders of the Company has approved another Employee Stock Option Scheme 2013 ("ESOS 2013"), under which the Company may grant up to 5,462,000 Options (comprising of Stock Options and/ or Restricted Stock Units (RSU)) to the permanent employees in the management cadre and Managing and Whole-time Directors of the Company and its subsidiary companies in India and abroad, in one or more tranches. The ESOS 2013 is administered by the Nomination and Remmuneration Committee of the Board of Directors of the Company ("the Committee"). The stock options exercise price would be determined by the Committee whereas the RSUs exercise price shall be the face value of the equity shares of the Company as at the date of grant of RSUs. Each stock option and each RSU entitles the holders to apply for and be allotted one fully paid-up equity share of ₹ 1/- each of the Company upon payment of exercise price during exercise period. The stock options will vest in 4 equal annual instalments after completion of one year of the services from the date of grant, whereas RSU will vest upon completion of three years of services from the date of grant. The maximum period of exercise is 5 years from the date of vesting and these stock options/ RSUs do not carry rights to dividends or voting rights till the date of exercise. Further, forfeited/ expired stock options and RSUs are also available for grant.

In terms of ESOS 2013, till 31/03/2020 the Committee has granted 2,250,754 stock options and 2,252,254 RSUs (31/03/2019: 2,250,754 stock options and 2,252,254 RSUs) to the eligible employees of the Company and some of its subsidiary companies. Further, 216,409 stock options and 193,287 RSUs (31/03/2019: 231,224 stock options and 248,954 RSUs) has been forfeited/ expired and are available for grant as per term of the Scheme. A summary of movement of stock options and RSUs and weighted average exercise price (WAEP) is given below:

NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

	Year ended 31.03.2020				Year ended 31.03.2019			
	Stock Options		RSUs		Stock Options		RSUs	
	Number	WAEP (₹)	Number	WAEP (₹)	Number	WAEP (₹)	Number	WAEP (₹)
Outstanding at beginning of the year	601,270	121.89	312,937	1.00	968,665	119.16	460,555	1.00
Granted during the year	-	-	-	-	-	-	-	-
Forfeited during the year	(17,541)	119.45	-	1.00	-	-	-	1.00
Re-instated during the year	41,722	119.45	55,667	1.00	-	-	-	-
Exercised during the year	(200,141)	115.37	(132,886)	1.00	(367,395)	115.45	(147,618)	1.00
Expired during the year	(9,366)	119.45	-	-	-	-	-	-
Outstanding at year end	**415,944**	**124.82**	**235,718**	**1.00**	**601,270**	**121.89**	**312,937**	**1.00**
Vested and Exercisable at year end	**396,712**	**122.82**	**235,718**	**1.00**	**515,759**	**119.43**	**235,955**	**1.00**

Under ESOS 2013, the range of exercise prices for stock options outstanding as at 31/03/2020 was ₹ 73.60 to ₹ 167.15 (31/03/2019: ₹ 73.60 to ₹ 167.15) whereas exercise price in case of RSUs was ₹ 1 (31/03/2019: ₹ 1). The weighted average remaining contractual life for the stock options and RSUs outstanding as at 31/03/2020 was 2.30 years and 2.57 years, respectively (31/03/2019: 2.78 years and 3.69 years, respectively).

Employee Stock Option Scheme 2018 ("ESOS 2018"):

The shareholders of the Company has approved on 21/09/2018 an Employee Stock Option Scheme 2018 ("ESOS 2018"), formulated by the Company, under which the Company may grant not more than 13,957,302 (Stock Options and Restricted Stock Units) to its permanent employees of the Company in management cadre including Managing and the Whole-time Director of the Company and its subsidiary companies in India and abroad, in one or more tranches. The ESOS 2018 is administered by the Nomination and Remuneration Committee of the Board of Directors of the Company ("the Committee") and the Hindalco Employees Welfare Trust ("Trust"). The Stock options exercise price would be determined by the Committee whereas the RSU exercise price shall be the face value of the equity shares of the Company as at the date of grant of RSUs. Each stock option and each RSU entitles the holders to apply for and be allotted one fully paid-up equity share of ₹ 1/- each of the Company upon payment of exercise price during the exercise period. The stock options will vest in 4 equal annual instalments after completion of one year of the services from the date of grant, whereas RSU will vest upon completion of three years of services from the date of grant. The maximum period of exercise is 5 years from the date of vesting and these stock options/RSUs do not carry rights to dividends or voting rights till the date of exercise. Further, forfeited/expired stock options and RSUs are also available for grant.

In terms of ESOS 2018, till 31/03/2020 the Committee has granted 4,607,279 stock options and 1,348,492 RSUs (31/03/2019: 4,299,563 stock options and 1,276,137 RSUs) to the eligible employees of the Company and some of its subsidiary companies. A summary of movement of stock options and RSUs and weighted average exercise price (WAEP) is given below:

	Year ended 31.03.2020				Year ended 31.03.2019			
	Stock Options		RSUs		Stock Options		RSUs	
	Number	WAEP (₹)	Number	WAEP (₹)	Number	WAEP (₹)	Number	WAEP (₹)
Outstanding at beginning of the year	4,299,563	218.75	1,276,137	1.00	-	-	-	-
Granted during the year	307,716	207.21	72,355	1.00	4,299,563	218.75	1,276,137	1.00
Forfeited during the year	(158,785)	218.80	(50,986)	1.00	-	-	-	-
Re-instated during the year	-	-	-	-	-	-	-	-
Exercised during the year	-	-	-	-	-	-	-	-
Expired during the year	-	-	-	-	-	-	-	-
Outstanding at year end	**4,448,494**	**217.95**	**1,297,506**	**1.00**	**4,299,563**	**218.75**	**1,276,137**	**1.00**
Vested and Exercisable at year end	**1,063,724**	**218.74**	**-**	**-**	**-**	**-**	**-**	**-**

Under ESOS 2018, the range of exercise prices for stock options outstanding as at 31/03/2020 was ₹ 159.30 to ₹ 218.80 (31/03/2019: ₹ 205.45 to ₹ 218.80) whereas exercise price in case of RSUs was ₹ 1 (31/03/2019: ₹ 1). The weighted average remaining contractual life for the stock options and RSUs outstanding as at 31/03/2020 was 6.26 years and 6.81 years (31/03/2019: 7.20 years and 7.76 years), respectively.

The fair values at grant date of stock options granted during the year ended 31/03/2020 was ₹ 53.05 to ₹ 97.09 (31/03/2019: ₹ 83.28 to ₹ 115.23) and fair values in case of RSUs was ₹ 150.68 to ₹ 205.48 (31/03/2019: ₹ 198.57 to ₹ 208.86), respectively. The fair value has been carried out by an independent valuer by applying Black and Scholes Model. The inputs to the model include the exercise price, the term of option, the share price at grant date and the

expected volatility, expected dividends and the risk free rate of interest. The assumptions used for fair valuation of awards are given below:

	Year ended 31.03.2020				Year ended 31.03.2019			
	Tranche III		Tranche IV		Tranche I		Tranche II	
	Stock Option	RSU	Stock Option	RSU	Stock Option	RSU	Stock Option	RSU
Grant date	27/12/2019	27/12/2019	04/03/2020	04/03/2020	10/12/2018	10/12/2018	26/03/2019	26/03/2019
Exercise price (₹)	215.00	1.00	159.30	1.00	218.80	1.00	205.45	1.00
Expected terms of options granted (years)	4.43-7.43 yrs.	8 yrs.	4.43-7.43 yrs.	8 yrs.	4.43-7.43 yrs.	8 yrs.	4.43-7.43 yrs.	8 yrs.
Share price on grant date (₹)	215.45	215.45	160.60	160.60	218.80	218.80	208.50	208.50
Expected volatility (%)	27.95%	27.95%	30.73%	30.73%	37.48%	37.48%	36.99%	36.99%
Expected dividend (%)	0.56%	0.56%	0.75%	0.75%	0.55%	0.58%	0.55%	0.58%
Risk free interest rate (%)	6.44%-6.84%	6.84%	5.62%-6.39%	6.43%	7.36 %-7.51%	7.57%	6.91%-7.38%	7.50%

The expected dividend is based on last year data and is not necessarily indicative. The expected volatility was determined based on the historical share price volatility over the past period depending on life of the options granted which is indicative of future periods and which may not necessarily be the actual outcome.

Stock Appreciation Rights 2013 ('SAR 2013'):

The Company had granted 956,522 Share Appreciation Rights 2013 ("SAR 2013 ") to its eligible employee to be vested in 4 equal annual instalments after completion of one year of the service from the date of grant (i.e. 09/10/2013). The SAR 2013 is administered by the Nomination and Remuneration Committee of the Board of Directors of the Company ("the Committee"). The SAR 2013 have performance linked vesting conditions which are decided by the Committee and are cash settled. The options shall lapse in case of performance linked vesting conditions are not met. The Exercise price of the SAR is ₹ 118.73. The SAR 2013 can be exercised within 3 years from the date of vesting or within 6 years from the date of grant, whichever is earlier.

A Summary of movement of SAR 2013 and weighted average exercise price (WAEP) is given below:

	Year ended 31.03.2020		Year ended 31.03.2019	
	Number	WAEP (₹)	Number	WAEP (₹)
Outstanding at beginning of the year	478,261	118.73	956,522	118.73
Granted during the year	-	-	-	-
Forfeited during the year	-	-	-	-
Re-instated during the year	-	-	-	-
Exercised during the year	(478,261)	118.73	(478,261)	118.73
Expired during the year	-	-	-	-
Outstanding at year end	**-**	**-**	**478,261**	**118.73**
Vested and Exercisable at year end	-	-	478,261	118.73

The fair value as at 31/03/2019 was ₹ 90.15. The fair value has been carried out by an independent valuer by applying Black and Scholes Model. The inputs to the model include the exercise price, the term of option, the share price at grant date and the expected volatility, expected dividends and the risk free rate of interest. The assumptions used for fair valuation are given below:

	Year ended 31.03.2019
Grant date	09/10/2013
Valuation Date	31/03/2019
Exercise price (₹)	118.73
Expected volatility (%)	36.88%
Expected dividend (%)	0.58%
Risk free interest rate (%)	6.17%

The weighted average remaining contractual life for the SAR 2013 as at 31/03/2019 was 0.53 years.

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Stock Appreciation Rights 2018 ('SAR 2018'):

The Company had granted 44,668 Option SAR and 11,333 RSU SAR under the Share Appreciation Rights Scheme 2018 ("SAR 2018") to its eligible employees. Option SAR to be vested in 4 equal annual instalments after completion of one year of the service from the date of grant and RSU SAR will vest upon completion of three years of services from the date of grant. The SAR 2018 is administered by the Nomination and Remuneration Committee of the Board of Directors of the Company ("the Committee"). The SAR 2018 have performance linked vesting conditions which are decided by the committee and are cash settled. The options shall lapse in case of performance linked vesting conditions are not met. The Exercise price of the Option SAR is ₹ 218.80 and RSU SAR is ₹ 1.

A Summary of movement of SAR 2018 and weighted average exercise price (WAEP) is given below:

	Year ended 31.03.2020			
	Option SAR		RSU SAR	
	Number	WAEP (₹)	Number	WAEP (₹)
Outstanding at beginning of the year	-	-	-	-
Granted during the year	44,668	218.80	11,333	1.00
Forfeited during the year	-	-	-	-
Re-instated during the year	-	-	-	-
Exercised during the year	-	-	-	-
Expired during the year	-	-	-	-
Outstanding at year end	**44,668**	**218.80**	**11,333**	**1.00**
Vested and Exercisable at year end	11,167	218.80	-	-

The fair values per Option SAR as at 31/03/2020 was ₹ 6.62 to ₹ 19.87 and for RSU SAR as at 31/03/2020 was ₹ 89.14 to ₹ 89.46. The fair value has been carried out by an independent valuer by applying Black and Scholes Model. The inputs to the model include the exercise price, the term of option, the share price at grant date and the expected volatility, expected dividends and the risk free rate of interest. The assumptions used for fair valuation are given below:

	Year ended 31.03.19		
Grant date	09/08/2019	09/08/2019	04/03/2020
Valuation Date	31/03/2020	31/03/2020	31/03/2020
Exercise price (₹)	218.80	1.00	1.00
Expected volatility (%)	41.65%	41.65%	41.65%
Expected dividend (%)	1.25%	1.25%	1.25%
Risk free interest rate (%)	5.29% - 6.09%	6.09%	6.31%

The weighted average remaining contractual life for the Option SAR as at 31/03/2020 is 2.70 to 5.70 years and RSU SAR as at 31/03/2020 is 4.70 to 4.99 years.

The total intrinsic value at the end of the year of the vested Option SAR and RSU SAR is ₹ Nil (31/03/2019 ₹ 4 Crore).

B. Employee share-based payments schemes at Novelis Inc. ("Novelis"), a subsidiary of the Group:

The Novelis's Board of Directors has authorized long term incentive plans (LTIPs), under which Hindalco stock appreciation rights (Hindalco SARs), Novelis stock appreciation rights (Novelis SARs), phantom restricted stock units (Phantom RSUs), and Novelis Performance Units (Novelis PUs) are granted to certain executive officers and key employees.

The Hindalco and Novelis SARs vest at the rate of 25% or 33% per quarter, subject to the achievement of an annual performance target, and expire seven years from their original grant date. The performance criterion for vesting of the Hindalco and Novelis SARs is based on the actual overall Novelis operating EBITDA compared to the target established and approved each fiscal year. The minimum threshold for vesting each year is 75% of each annual target operating EBITDA. Each Hindalco SAR is to be settled in cash based on the difference between the market value of one Hindalco share on the date of grant and the market value on the date of exercise. Each Novelis SAR is to be settled

in cash based on the difference between the fair value of one Novelis phantom share on the original date of grant and the fair value of a phantom share on the date of exercise. The amount of cash paid to settle Hindalco and Novelis SARs are limited to two and a half or three times the target payout, depending on the plan year. The Hindalco and Novelis SARs do not transfer any shareholder rights of Hindalco or Novelis to a participant. The Hindalco and Novelis SARs are classified as liability awards and are re-measured at each reporting period until the SARs are settled or cancelled. Novelis expenses each fiscal year's SAR tranche(s) over the employee requisite service period, which results in the expense being recorded on an accelerated basis.

The Phantom RSUs are based on Hindalco's stock price. The Phantom RSUs vest either in full three years from the grant date or 33% per year over three years, subject to continued employment with Novelis, but are not subject to performance criteria. Each Phantom RSU is to be settled in cash equal to the market value of one Hindalco share. The payout on the Phantom RSUs is limited to three times the market value of one Hindalco share measured on the original date of grant. The Phantom RSUs are classified as liability awards and expensed over the employee requisite service period based on the Hindalco stock price as of each balance sheet date.

In May 2016, the Novelis's board of directors approved the issuance of Novelis PUs which have a fixed USD 100 value per unit and will vest in full three years from the grant date, subject to specific performance criteria compared to the established target. The Novelis PUs awards are not based on the Hindalco or Novelis stock prices and therefore are accounted for in accordance with Ind AS 19 - Employee Benefits.

(a) Hindalco Stock Appreciation Rights (Hindalco SARs)

	Year ended 31.03.2020		Year ended 31.03.2019	
	Number	WAEP (₹)	Number	WAEP (₹)
Outstanding at beginning of the year	10,643,730	161.80	11,197,974	134.32
Granted during the year	3,475,995	198.88	2,359,347	230.95
Forfeited during the year	(176,537)	173.98	(185,640)	137.96
Exercised during the year	(1,501,222)	119.36	(2,727,951)	123.80
Expired during the year	-	-	-	-
Outstanding at year end	**12,441,966**	**177.11**	**10,643,730**	**161.80**
Vested and Exercisable at year end	**6,742,807**	**149.92**	**4,244,193**	**141.77**

(b) Novelis Stock Appreciation Rights (Novelis SARs)

	Year ended 31.03.2020		Year ended 31.03.2019	
	Number	WAEP (₹)	Number	WAEP (₹)
Outstanding at beginning of the year	73,948	5,956.99	92,225	5,546.45
Granted during the year	-	-	-	-
Forfeited during the year	(7,838)	6,584.23	(12,819)	6,017.53
Exercised during the year	(32,717)	5,946.30	(5,458)	4,928.59
Expired during the year	-	-	-	-
Outstanding at year end	**33,393**	**6,532.36**	**73,948**	**5,956.99**
Vested and Exercisable at year end	**33,393**	**3,820.46**	**67,674**	**6,090.09**

(c) Phantom Restricted Stock Units (Phantom RSUs)

	Year ended 31.03.2020		Year ended 31.03.2019	
	Number	WAEP (₹)	Number	WAEP (₹)
Outstanding at beginning of the year	5,306,623	-	7,114,057	-
Granted during the year	2,685,744	-	2,273,078	-
Forfeited during the year	(175,752)	-	(70,067)	-
Exercised during the year	(3,069,299)	-	(4,010,445)	-
Expired during the year	-	-	-	-
Outstanding at year end	**4,747,316**	-	**5,306,623**	-

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(d) Particulars of share-based payment

i. Carrying amount and intrinsic value of liabilities given below:

	Year ended 31.03.2020		Year ended 31.03.2019	
	Total carrying amount at the end of the period for liabilities	Total intrinsic value at the end of the period of liabilities (vested portion)	Total carrying amount at the end of the period for liabilities	Total intrinsic value at the end of the period of liabilities (vested portion)
Hindalco SAR	16.11	0.35	74.44	56.87
Novelis SAR	7.00	7.31	3.51	3.11
Phantom RSU	34.70	-	83.41	-
	57.81	**7.66**	**161.36**	**59.98**

ii. Number of options exercised and the weighted average exercise price given below:

	Year ended 31.03.2020		Year ended 31.03.2019	
	Number of options exercised	Weighted average exercise price	Number of options exercised	Weighted average exercise price
Hindalco SAR (price in ₹)	1,501,222	119.36	2,727,951	123.80
Novelis SAR (price in ₹)	32,717	5,946.30	5,458	4,928.59
Phantom RSU (price in ₹)	3,069,299	-	4,010,445	-

(e) Unrecognised compensation expense

	Year ended 31.03.2020		Year ended 31.03.2019	
	₹ in Crore	Period over which expense will be recognised (in years)	₹ in Crore	Period over which expense will be recognised (in years)
Hindalco SAR	3	1.46	9	1.33
Novelis SAR	-	-	*	0.08
Phantom RSU	15	1.41	29	1.36

* *Amount below rounding off convention.*

(f) Inputs to the model used to determine fair value are as under:

	Year ended 31.03.2020		Year ended 31.03.2019	
	Hindalco SAR	Novelis SAR	Hindalco SAR	Novelis SAR
Risk free interest rate (%)	4.73% - 6.89%	0.00% - 0.35%	6.24% - 7.22%	2.19% - 2.46%
Dividend yield (%)	1.27%	-	0.58%	-
Volatility (%)	36.33% - 84.50%	24.0% - 40.0%	27% - 39%	17% - 25%
Source of historical volatility	Hindalco historical volatility	Comparable companies	Hindalco historical volatility	Comparable companies
Model used	Monte Carlo Simulation Model	Monte Carlo Simulation Model	Monte Carlo Simulation Model	Monte Carlo Simulation Model

The weighted average remaining contractual life for the Hindalco SAR as at 31/03/2020 is 3 years and Novelis SAR as at 31/03/2020 is 1 year.

C. Effect of employee share-based payment transactions on profit or loss for the year and on financial position:

For the year ended 31/03/2020, the Group recognised expenses of ₹ 28 Crore (31/03/2019: ₹ 10 Crore) related to equity-settled share based transactions, whereas ₹ 7 Crore as income (31/03/2019: expense ₹ 135 Crore) towards cash-settled share based transactions accounted for as part of Employee Benefits Expenses. (refer Note 34)

During the year ended 31/03/2020, the Company has allotted 692,442 fully paid-up equity share of ₹ 1/- each of the Company (31/03/2019: 567,343) on exercise of equity settled options for which the Group has realised ₹ 7 Crore (31/03/2019: ₹ 5 Crore) as exercise prices. The weighted average share price at the date of exercise of ESOS 2006 was ₹ 179.07 per share (31/03/2018: ₹ 234.44 per share) and ESOS 2013 was ₹ 189.67 per share (31/03/2019: ₹ 221.40) per share.

47. Employee Benefit Obligations

A. Defined Benefit Plans

Defined benefit plans expose the Group to actuarial risks such as Interest Rate Risk, Salary Risk and Demographic Risk.

i. Interest Rate Risk: The defined benefit obligation calculated uses a discount rate based on government bonds. If the bond yield falls, the defined benefit obligation will tend to increase.

ii. Salary Risk: Higher than expected increases in salary will increase the defined benefit obligation.

iii. Demographic Risk: This is the risk of variability of results due to unsystematic nature of decrements that include mortality, withdrawal, disability and retirement. The effect of these decrements on the defined benefit obligations is not straight forward and depends on the combination of salary increase, discount rate and vesting criteria. It is important not to overstate withdrawals because in the financial analysis the retirement benefit of a short career employee typically costs less per year as compared to a long service employee.

(I) Gratuity Plans

The Group has various schemes (funded/unfunded) for payment of gratuity to all eligible employees calculated at specified number of days (ranging from 15 days to 1 month) of last drawn salary depending upon the tenure of service for each year of completed service subject to minimum service of five years payable at the time of separation upon superannuation or on exit otherwise. These defined benefit gratuity plans are governed by Payment of Gratuity Act, 1972.

₹ in Crore

		Year ended 31.03.2020	Year ended 31.03.2019
(a)	**Change in Defined Benefit Obligation (DBO)**		
	Defined Benefit Obligation at beginning of the year	972	904
	Current Service cost	52	58
	Interest Cost on the DBO	72	66
	Actuarial (gain)/ loss experience	29	(6)
	Actuarial (gain)/ loss financial assumption	44	-
	Benefits paid directly by Company	(34)	(21)
	Benefits paid from plan assets	(28)	(29)
	Defined Benefit Obligation at the end of the year	**1,107**	**972**
(b)	**Change in Fair Value of Plan Assets**		
	Fair value of assets at the beginning of the year	794	734
	Interest Income on plan assets	61	55
	Employer's contributions	66	43
	Return on plan assets greater/(lesser) than discount rate	1	(9)
	Benefits Paid	(28)	(29)
	Fair value of assets at the end of the year	**894**	**794**
(c)	**Development of Net Balance Sheet Position**		
	Defined Benefit Obligation, Funded	(1,107)	(972)
	Fair Value of Plan Assets	894	794
	Funded Status (surplus/(deficit))	**(213)**	**(178)**
	Defined Benefit Obligation, Unfunded	-	-
	Net defined benefit asset/(liability)	**(213)**	**(178)**
(d)	**Reconciliation of Net Balance Sheet Position**		
	Net Defined benefit asset/(Liability) at beginning of the year	(178)	(170)
	Service cost	(52)	(58)
	Net Interest on net defined benefit liability/(asset)	(11)	(11)
	Amount recognised in OCI	(72)	(3)
	Employer's contributions	66	43
	Benefit paid directly by Company	34	21
	Net Defined benefit asset/(Liability) at the end of the year	**(213)**	**(178)**

NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

₹ in Crore

		Year ended 31.03.2020	Year ended 31.03.2019
(e)	**Expense recognised during the year**		
	Current Service cost	52	58
	Net Interest on net defined benefit liability/(asset)	11	11
	Net Gratuity Cost	**63**	**69**
(f)	**Other Comprehensive Income(OCI)**		
	Actuarial (gain)/loss due to DBO experience	29	(6)
	Actuarial (gain)/loss due to DBO assumption changes	44	-
	Actuarial (gain)/loss arising during the period	**73**	**(6)**
	Return on Plan Assets (greater)/lesser than discount rate	(1)	9
	Actuarial (gain)/loss recognised in OCI	**72**	**3**
(g)	**Defined Benefit Cost**		
	Service Cost	52	58
	Net Interest on net defined benefit liability/(asset)	11	11
	Actuarial (gain)/loss recognised in OCI	72	3
	Defined Benefit Cost	**135**	**72**
(h)	**Principal Actuarial Assumptions**		
	Discount rate (based on the market yields available on Government bonds at the accounting date with a term that matches that of the liabilities)	6.50%	7.50%
	Salary escalation rate	7.50%	8.00%
	Weighted average duration of the defined benefit obligation	9 Years	9 Years
	Mortality Rate	Indian Assured Lives Mortality 2006-08	

₹ in Crore

		As at 31.03.2020	As at 31.03.2019
(i)	**Non-Current and Current portion of Defined Benefit Obligation**		
	Current portion	-	(5)
	Non-Current portion	(213)	(173)
		(213)	**(178)**

(j) Sensitivity Analyses

Sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions the same method (present value of the defined benefit obligation calculated with the projected unit credit method at the end of the reporting period) has been applied as and when calculating the defined benefit liability recognised in the balance sheet.

₹ in Crore

	Year ended 31.03.2020	Year ended 31.03.2019
Discount Rate		
Discount rate as at end of the year	6.50%	7.50%
Effect on Defined Benefit Obligation due to 1% Increase in Discount Rate	(86)	(74)
Effect on Defined Benefit Obligation due to 1% Decrease in Discount Rate	98	91
Salary Escalation Rate		
Salary Escalation Rate as at end of the year	7.50%	8.00%
Effect on Defined Benefit Obligation due to 1% Increase in Salary Escalation Rate	96	83
Effect on Defined Benefit Obligation due to 1% Decrease in Salary Escalation Rate	(86)	(74)

(k) Methodology for defined benefit obligation:

The Projected Unit Credit (PUC) actuarial method has been used to assess the plan's liabilities, including those related to death-in-service and incapacity benefits.

Under PUC method a projected accrued benefit is calculated at the beginning of the year and again at the end of the year for each benefit that will accrue for all active members of the plan. The projected accrued benefit is based on the plan's accrual formula and upon service as of the beginning or end of the year, but using a member's final compensation, projected to the age at which the employee is assumed to leave active service. The plan liability is the actuarial present value of the projected accrued benefits for active members.

₹ in Crore

		As at 31.03.2020	As at 31.03.2019
(l)	**The Expected Maturity Analysis of Undiscounted Gratutiy is as follows:**		
	Within 1 year	61	57
	From 1 year to 2 years	87	56
	From 2 years to 3 years	92	76
	From 3 years to 4 years	101	77
	From 4 years to 5 years	99	76
	From 5 years to 10 years	589	398

₹ in Crore

		As at 31.03.2020	As at 31.03.2019
(m)	**Plan Assets Information**		
	Major categories of Plan Assets are as under:		
	Cash and Bank Balances	1.81%	1.99%
	Scheme of insurance - conventional product	1.37%	1.43%
	Scheme of insurance - ULIP Product	96.82%	96.58%
		100.00%	**100.00%**

Above Investment in Plan Assets are unquoted.

(n) Expected Contributions to post-employment benefit plan of Gratuity for the year ended March 31, 2021 are ₹ 67 Crore.

(II) Pension and Post-Employment Medical Benefits of Novelis Inc., the Group's overseas subsidiary

Obligations related to the Group's overseas operations, relate to: (1) funded defined benefit pension plans in the U.S., Canada, Switzerland, and the U.K.; (2) unfunded defined benefit pension plans in Germany; (3) unfunded lump sum indemnities payable upon retirement to employees in France, Malaysia and Italy; and (4) partially funded lump sum indemnities in South Korea. These defined benefit plans provide a benefit to eligible employees based on plan provisions, including but not limited to, years of service, compensation, or other vesting criteria. Each of the funded pension plans is governed by an Investment Fiduciary. Other post-retirement obligations include unfunded health care and life insurance benefits provided to eligible retired employees in the U.S., Canada, and Brazil.

₹ in Crore

		Year ended 31.03.2020	Year ended 31.03.2019
a.	**Change in obligation over the year**		
	Present Value of defined benefit obligations at the beginning of the year	14,493	13,678
	Exchange (gain)/loss on translation	1,060	241
	Current Service Cost	394	383
	Interest Cost	417	427
	Curtailment cost/(credit)	-	9
	Settlement cost/(credit)	(91)	(3)
	Plan Participants Contribution	33	31
	Plan Amendments	-	11
	Net actuarial(gain)/loss	544	248

NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

₹ in Crore

		Year ended 31.03.2020	Year ended 31.03.2019
	Benefits Paid	(639)	(532)
	Present Value of defined obligations at the end of the year	**16,211**	**14,493**
b.	**Change in plan Assets (Reconciliation of opening and closing Balance)**		
	Fair Value of plan Assets at the beginning of the year	8,336	7,957
	Exchange gain/ (loss) on translation	581	259
	Plan Settlements	(72)	(3)
	Re-measurements	(23)	3
	Interest Income	256	260
	Employers' Contributions	556	361
	Plan participants contribution	33	31
	Benefits Paid	(639)	(532)
	Fair value of assets at the end of the year	**9,028**	**8,336**
c.	**Reconciliation of fair value of assets & obligations**		
	Present value of defined benefit obligations at the end of the year	16,211	14,493
	Fair Value of Plan assets at the end of the year	9,028	8,336
	Amount recognized in the consolidated balance sheet	**7,183**	**6,157**
	Recognized prepaid pension	138	29
	Recognized pension liability	7,321	6,186
d.	**Expenses recognized during the year**		
	Current service cost	394	383
	Past service cost/ Curtailment costs/(gain)	(19)	19
	Interest cost (net)	161	167
		536	**569**

Details of special events during the year:

Novelis Europe

Novelis Switzerland: Following the court ruling in September 2019, settlement accounting was triggered for the Pension Kasse Sierre plan with respect to the Alcan pensioners, Present value of defined benefit obligation being settled was ₹ 91.2 Crore ($12.9 Million) as compared to actual settlement liability of ₹ 72.34 Crore ($10.2 Million) resulting in a settlement gain of ₹ 18.86 Crore ($2.7 Million).

Novelis Italy: The lump sum distributions of ₹ 4.36 Crore ($0.6 Million) exceeded the threshold of service cost and interest cost.

The settlement distributions resulted in accelerated loss recognition of ₹ 0.78 Crore ($0.1 Million) in pension expense.

₹ in Crore

		Year ended 31.03.2020	Year ended 31.03.2019
e.	**Remeasurement of net defined benefit liability/(asset) (OCI)**		
	Actuarial (gains)/ losses arising from changes in demographic assumptions	(86)	37
	Actuarial (gains)/ losses arising from changes in financial assumptions	694	283
	Actuarial (gains)/ losses arising from changes in experience adjustments	(64)	(72)
	Remeasurement of net defined benefit liability	**544**	**248**
	Remeasurement return on plan assets excluding amount included in interest income	24	(3)
	Exchange Gain/ (Loss)	(70)	(87)
		498	**158**

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
f. Composition of Plan Assets		
Equity	3,100	2,591
Fixed Income	4,597	4,314
Real Estate	215	190
Cash and cash equivalents	98	86
Other	1,018	1,155
	9,028	**8,336**

g. Sensitivity analysis for each significant actuarial assumption

₹ in Crore

	31.03.2020 Approximate (increase)/ decrease		31.03.2019 Approximate (increase)/ decrease	
	Defined Benefits obligation	Post-Employment Medical Benefits	Defined Benefits obligation	Post-Employment Medical Benefits
Discount Rate				
Increase of 1 percentage	2,218	77	2,106	70
Decrease of 1 percentage	(2,716)	(91)	(2,205)	(83)
Salary Growth Rate				
Increase of 1 percentage	(473)	-	(479)	-
Decrease of 1 percentage	448	-	456	-
Expected future lifetimes (in years) for employees				
Participants assumed to have the mortality rates of individuals who are one year older	(463)	(4)	(387)	(3)
Participants assumed to have the mortality rates of individuals who are one year younger	464	4	385	3
Medical cost trend rates				
Increase of 1 percentage	-	(94)	-	(46)
Decrease of 1 percentage	-	102	-	47

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions the same method (present value of the defined benefit obligation calculated with the projected unit credit method at the end of the reporting period) has been applied as and when calculating the defined benefit liability recognised in the balance sheet.

The methods and types of assumptions used in preparing the sensitivity analysis did not change compared to the prior period.

h. The principal actuarial assumptions at the reporting dates (expressed as weighted averages) for defined benefit plans

	As at 31.03.2020	As at 31.03.2019
Discount Rate	0.89% - 3.43%	1.24% - 3.80%
Salary growth Rate	2.53% - 4.00%	2.59% - 4.00%
Expected future lifetimes (in years) for employees		
Pensioners	16.94	17.55
Current employees	7.52 - 11.53	7.81 - 12.00

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i. The principal actuarial assumptions at the reporting dates (expressed as weighted averages) for post-employment medical benefits

	As at 31.03.2020	As at 31.03.2019
Long term increase in health costs	2.50% - 4.84%	2.31% - 5.04%
Discount rate	2.20% - 8.30%	2.30% - 8.50%

j. Weighted average duration of the defined benefit obligation in years

	As at 31.03.2020	As at 31.03.2019
Weighted average duration of the defined benefit obligation in years	9 - 15.20 yrs.	9 - 17.45 yrs.

k. Expected maturity analysis of undiscounted defined befit plan and post-employment medical benefit plans

₹ in Crore

	As at 31.03.2020				As at 31.03.2019			
	Within 1 year	Between 1-2 years	Between 2-5 years	5 to 10 years	Within 1 year	Between 1-2 years	Between 2-5 years	5 to 10 years
Defined benefit plan	588	1,278	2,022	3,743	548	1,230	1,970	3,668
Post-employment medical benefit plant	36	77	128	253	36	74	125	257

l. Expected contributions to the defined benefit plans for the year ended March 31, 2021 are ₹ 496 Crore.

B. Other Defined Benefit and contribution Plans

(a) Pension

The Group contributes a certain percentage of salary for all eligible employees in India in the managerial cadre towards Superannuation Funds with option to put certain portion in National Pension Scheme (NPS) and/or in funds managed by approved trusts of by Life Insurance Corporation of India. Junior Pension Plan provided to certain employees is in the nature of defined benefit plan which provides an annuity in the form of pension amount at retirement. The amount charged to the Consolidated Statement of Profit and Loss during the year is ₹ 61 Crore (previous year ₹ 23 Crore) and amount of actuarial gain/ (loss) recognised in Other Comprehensive Income during the year is ₹ 6 Crore (previous year ₹ (*) Crore).

(b) Post-Retirement Medical Benefit

The Group provides post-retirement medical benefit to its certain employees in India. The scheme involves reimbursement of expenses towards medical treatment of self and dependents. The amount charged to the Profit and Loss during the year is ₹ * Crore (previous year ₹ * Crore) and amount of actuarial gain/ (loss) recognised in Other Comprehensive Income during the year is ₹ 4 Crore (previous year ₹ 1 Crore).

(c) Leave Obligation

The leave obligation cover the Group's liability for earned leave. The entire amount of the provision of ₹ 452 Crore (year ended 31/03/2019 ₹ 408 Crore) is presented as current, since the Group does not have an unconditional right to defer settlement for these obligations.

(d) Provident Fund

The Company and certain Indian subsidiaries in the Group contributes 12% of salary for all eligible employees in India towards Provident Fund managed either by approved trusts or by the Central Government of India which is debited to the Consolidated Statement of Profit and Loss. In respect of provident fund management by the approved trust, these entities have an obligation to fund any shortfall on the yield of the trust's investments over the administered interest rates on an annual basis. The Company and certain subsidiaries in India also contributes to Coal Mines Provident Fund (CMPF) in respect of employees working in coal mines.

The amount debited to the Consolidated Statement of Profit and Loss during the year was ₹ 100 Crore (previous year ₹ 97 Crore).

Based on actuarial valuation considering this to be in the nature of a defined benefit plan, the Group has recognised obligation of ₹ 8 Crore as at March 31, 2020 (previous year ₹ 9 Crore) towards shortfall on the yield of the trust's investments over the administered interest rates. Amount of actuarial (gain)/ loss recognised in Other Comprehensive Income during the year is ₹ (2) Crore (previous year ₹ * Crore).

(e) Certain investments made by Company's Provident Fund Trust ('AAA' rated when the investment was done) became impaired during the year. The Trust has recorded the loss in its books for the year ended March 31, 2020. The Company is obligated to make good such losses to the trust and as such has compensated the trust by ₹ 73 Crore. The amount has been accounted for in Other Comprehensive Income.

Assumption use in determining the present value obligation of the interest rate guarantee under the Deterministic Approach:

	As at 31.03.2020	As at 31.03.2019
Discount rate	6.50%	7.50%
Expected EPFO (Employees' Provident Fund Organisation) Return	8.50%	8.65%

The Group also contributes to Coal Mines Provident Fund (CMPF) in respect of employees working in coal mines.

* *Amount below rounding off convention.*

48. Contingent Liabilities and Commitments

A. Contingent Liabilities

The Group are party to, and may in the future be involved in, or subject to, disputes, claims and proceedings arising in the ordinary course of our business, including some we assert against others, such as environmental, health and safety, product liability, employee, tax, personal injury and other matters. The Group has established a liability with respect to contingencies for which a loss is probable and estimable. While the ultimate resolution of and liability and costs related to these matters cannot be determined with certainty, the Management does not believe any of these pending actions, individually or in the aggregate, will materially impact our operations or materially affect our financial condition or liquidity.

The Group's estimates involve significant judgment, and therefore, the estimate will change from time to time and actual losses may differ from the current estimate. Management review the status of, and estimated liability related to, pending claims and civil actions on a quarterly basis. The evaluation model includes all asserted and unasserted claims that can be reasonably identified including claims relating to our responsibility for compliance with environmental, health and safety laws and regulations in the jurisdictions in which we operate or formerly operated. The estimated costs in respect of such reported liabilities are not offset by amounts related to insurance or indemnification arrangements unless otherwise noted.

The amount for which the Group is contingently liable are given below:

(a) Claims against the Group not acknowledged as debt

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
Tax matters - Direct Taxes - (i)	12	34
Tax matters - Indirect Taxes - (ii)	685	763
Legal and Other matters - (iii)	261	269

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₹ in Crore

		As at 31.03.2020	As at 31.03.2019
(i)	Tax matters - Direct Taxes:		
	The Group has ongoing disputes with direct tax authorities in various tax jurisdictions relating to tax treatment of certain items in the Company and some of its subsidiaries. These mainly include claims disallowed, tax treatment of certain items of income/expense, use of certain tax incentives or allowances, etc. in their tax computation.		
(ii)	Tax matters - Indirect Taxes:		
	There are pending litigations for various matters relating to customs, excise duty and service tax, VAT across various entities in the Group involving demands, including interest and penalties.		
(iii)	Legal and Other matters:		
	In addition to above matters certain Group companies are involved in several other legal claims including revenue matters, environmental matters, civil and Labour matters.		
(b)	**Other money for which the Group is contingently liable:**		
(i)	Customs Duty on Raw Materials imported under Advance License, against which export obligation is to be fulfilled.	-	10.09

(c) For contingent liabilities relating to associates and joint ventures, if any, are given in Notes 53 D and 53 E.

B. Commitments

₹ in Crore

		As at 31.03.2020	As at 31.03.2019
The Group's commitments with regard to various items in respect of:			
(a)	Estimated amount of contracts remaining to be executed on capital account and not provided for	1,179	1,588
(b)	Purchase commitments in relation to Materials and Services (net of advances)	67,051	54,009
(c)	The Company has given the following undertakings in connection with the loan of Utkal Aluminium International Limited (UAIL), a wholly owned subsidiary:		
	i. To hold minimum 51% equity shares in UAIL.		

49. Capital Management

The Group's objective to manage its capital is to ensure continuity of business while at the same time provide reasonable returns to its various stakeholders but keep associated costs under control. In order to achieve this, requirement of capital is reviewed periodically with reference to operating and business plans that take into account capital expenditure and strategic investments. Apart from internal accrual, sourcing of capital is done through judicious combination of equity and borrowing, both short term and long term. Net debt (total borrowings less current investment and cash & cash equivalents) to equity ratio is used to monitor capital. No changes were made to the objectives, policies or processes for managing capital during the years ended March 31, 2020 and March 31, 2019.

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
Debt Equity ratio	1.15	0.91

As at March 31, 2020 and March 31, 2019, the Group was in compliance with all of its debt covenants for borrowings.

50. Financial Instruments

A. Fair Value Measurements

(a) The following table shows the carrying amount of financial assets and financial liabilities by category.

₹ in Crore

	As at 31.03.2020			As at 31.03.2019		
	Amortised Cost	Fair value through OCI	Fair value through P&L	Amortised Cost	Fair value through OCI	Fair value through P&L
Financial Assets						
Investments in Equity Instruments						
Quoted Equity Instruments	-	2,991	-	-	5,004	-
Unquoted Equity Instruments	-	35	-	-	45	-
Investments in Preference Shares	-	-	25	-	-	24
Investments in Debt Instruments						
Mutual Funds	-	-	6,016	-	-	3,605
Bonds & Debentures	-	-	210	-	-	225
Government Securities	-	93	-	-	88	-
Derivatives	-	-	2,431	-	-	1,414
Cash & Cash Equivalents						
Cash & Bank	20,199	-	-	6,941	-	-
Liquid Mutual Funds	-	-	1,104	-	-	2,178
Bank Balances other than cash & cash equivalents	266	-	-	668	-	-
Trade receivables	9,389	-	12	11,021	-	368
Loans	67	-	-	73	-	-
Other financial assets	1,102	-	-	926	-	-
Total Financial Assets	**31,023**	**3,119**	**9,798**	**19,629**	**5,137**	**7,814**
Financial Liabilities						
Borrowings						
Long term Borrowings	58,379	-	-	48,032	-	-
Short term Borrowings	8,717	-	-	4,226	-	-
Lease Liabilities	1,142	-	-	-	-	-
Derivatives	-	-	2,355	-	-	1,191
Trade Payables	16,089	-	2,211	17,752	-	2,973
Other financial Liabilities	3,045	-	-	3,080	-	-
Total Financial Liabilities	**87,372**	**-**	**4,566**	**73,090**	**-**	**4,164**

(b) The following table shows fair value for financial assets and financial liabilities measured at amortised cost.

₹ in Crore

	As at 31.03.2020		As at 31.03.2019	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Financial Assets				
Loans and Deposits	304	304	255	255
Financial Liabilities				
Long term Borrowings #	58,483	58,548	48,076	49,769

Carrying amount includes current portion of debt shown under other current financial liabilities but excludes finance lease obligation and deferred payment liabilities.

Fair values for current financial assets and financial liabilities have not been disclosed because their carrying amount are a reasonable approximation of their fair values.

Fair Value of borrowings does not include interest accrued but not due.

The Company had acquired certain equity instruments for purpose of holding for a longer duration and not for the purpose of selling in near term for short term profit. Such instruments have been categorized as FVTOCI.

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B. Fair Value Hierarchy

The following table shows the details of financial assets and financial liabilities, including their levels in the fair value hierarchy.

(a) Financial assets and liabilities measured at fair value - Recurring fair value

₹ in Crore

	As at 31.03.2020			As at 31.03.2019		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Financial Assets						
Investments in Equity Instruments						
Quoted Equity Instruments	2,991	-	-	5,004	-	-
Unquoted Equity Instruments	-	-	35	-	-	45
Investments in Preference Shares	-	25	-	-	24	-
Investments in Debt Instruments						
Mutual Funds	5,996	20	-	3,560	45	-
Bonds & Debentures	6	-	204	5	180	40
Government Securities	-	73	20	-	44	44
Derivatives	-	2,431	-	-	1,414	-
Cash & Cash Equivalents						
Liquid Mutual Funds	1,104	-	-	2,178	-	-
Trade Receivables	-	12	-	-	368	-
Total Financial Assets	**10,097**	**2,561**	**259**	**10,747**	**2,075**	**129**
Financial Liabilities						
Derivatives	-	2,307	48	-	1,171	20
Trade Payables	-	2,211	-	-	2,973	-
Total Financial Liabilities	**-**	**4,518**	**48**	**-**	**4,144**	**20**

(b) Financial assets and liabilities measured at amortised cost for which fair value disclosure is given

₹ in Crore

	As at 31.03.2020			As at 31.03.2019		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Financial Assets						
Loans and Deposits	-	-	304	-	-	255
Financial Liabilities						
Long term Borrowings	-	58,548	-	-	49,769	-

Level 1: Hierarchy includes financial instruments valued using quoted market prices. Listed equity instruments and traded debt instruments which are traded in the stock exchanges are valued using the closing price at the reporting date. Mutual funds are valued using the closing NAV.

Level 2: Hierarchy includes financial instruments that are not traded in active market. This includes over the counter (OTC) derivatives, close ended mutual funds and debt instruments valued using observable market data such as yield, etc., of similar instruments traded in active market. Borrowings have been fair valued using credit adjusted interest rate prevailing on the reporting date. Trade Receivables and Payables that are realigned based on forward LME/LBMA price movements have been included in Level 2 hierarchy.

Level 3: If one or more significant inputs is not based on observable market data, the instrument is included in Level 3. This is the case for unlisted equity instruments and certain debt instruments which are valued using assumptions from market participants. Valuations for certain derivatives for which forward prices are not observable, have been valued using forward prices for a nearby geographical market and adjusted for historical spreads between cash prices of the two markets.

(c) Disclosure of changes in Level 3 items for the period ended 31/03/2020 and 31/03/2019, respectively

₹ in Crore

	Unquoted Equity Instruments	Unquoted Debt Instruments	Total
As at April 01, 2018	**24**	**292**	**316**
Acquisitions	3	-	3
Sale	-	(136)	(136)
Gain/(losses) recognised in Profit or loss	-	2	2
Gain/(losses) recognised in OCI	18	-	18
Transfer from Level 1 & 2	-	62	62
Transfer to Level 1 & 2	-	(136)	(136)
As at March 31, 2019	**45**	**84**	**129**
Acquisitions	-	-	-
Sale	-	-	-
Gain/(losses) recognised in Profit or loss	-	1	1
Gain/(losses) recognised in OCI	(10)	-	(10)
Transfer from Level 1 & 2	-	189	189
Transfer to Level 1 & 2	-	(50)	(50)
As at March 31, 2020	**35**	**224**	**130**
Unrealised Gain/(loss) recognised in profit and loss relating to assets and liabilities held at the end of reporting period:			-
As at March 31, 2020	**-**	**5**	**5**
As at March 31, 2019	**-**	**2**	**2**

Valuation Process

Some of the Group's assets and liabilities are measured at fair value for financial reporting purposes. The Management of the Group has set up a team in the finance department which performs the valuation of financial assets and liabilities.

In estimating the fair value of an asset or a liability, the Group uses market-observable data to the extent it is available. Where Level 1 inputs are not available, the Group engages third party qualified valuers to perform the valuation. The team works closely with the qualified external valuers to establish the appropriate valuation techniques and inputs to the model. The team reports findings to the Management of the Group to explain the cause of fluctuations in the fair value of the assets and liabilities.

Valuation techniques used for valuation of instruments categorised as Level 3

For valuation of investments in equity shares which are unquoted, peer comparison has been performed wherever available. Valuation has been primarily done by considering the net worth of the Company and price to book multiple to arrive at the fair value. In cases where income approach was feasible valuation has been arrived using the earnings capitalisation method. For inputs that are not observable for these instruments, certain assumptions are made based on available information. The most significant of these assumptions are the discount rate and credit spreads used in the valuation process.

For valuation of investments in debt securities categorised as Level 3, market polls which represent indicative yields are used as assumptions by market participants when pricing the asset.

51. Financial Risk Management and Derivative Financial Instruments

A. Financial Risk Management

The Group's activities exposes it to various risks such as market risk, liquidity risk and credit risk. This section explains the risks which the Group is exposed to and how it manages the risks.

(a) Credit Risk

Credit risks is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligation, and arises principally from the Group's receivables from customers.

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Credit risk arises from cash and cash equivalents, contractual cash flows of debt investments, favourable derivative financial instruments and deposits with banks and financial institutions, as well as credit exposures to customers including outstanding receivables.

Credit risk is managed on an group basis. The Group has adopted a policy of dealing only with creditworthy counterparties and obtaining sufficient collateral, where appropriate, as a means of mitigating risk of financial loss from defaults. The Group invests only in those instruments issued by high rated banks/ institutions and government agencies. The Group assesses the credit quality of the customer, taking into account its financial position, past experience and other factors. The Group's investments in debt instruments and certain loans are considered as low risk investments. The credit ratings of the investments are monitored for credit deterioration.

For some trade receivables the Group obtains security in the form of guarantees, deed of undertaking or letters of credit which can be called upon if the counterparty is in default under the terms of the agreement.

For other financial assets, the Group assesses and manages credit risk based on the credit rating. The Group has assessed its other financial assets as high quality, negligible credit risk. The Group periodically monitors the recoverability and credit risks of its other financials assets including security deposits and other receivables. The Group evaluates 12 months expected credit losses for all the financial assets for which credit risk has not increased. In case credit risk has increased significantly, the Group considers life time expected credit losses for the purpose of impairment provisioning.

The Group has used a practical expedient by computing the expected credit loss allowance for trade receivables based on a provision matrix. The provision matrix takes into account historical credit loss experience and adjusted for forward-looking information.

Movement in the allowance for doubtful debts :

₹ in Crore

	Year ended 31.03.2020	Year ended 31.03.2019
Balance at beginning of the year	(88)	(86)
Impairment losses (recognised)/ reversed on receivables	(21)	(2)
Amounts written off during the period as uncollectible	*	*
Foreign exchange translation gains and losses	*	*
Balance at end of the year	**(109)**	**(88)**

* *Amount below rounding off convention.*

(b) Market Risk

i. Commodity Price Risk

Hindalco's India Operations consist of two businesses – Copper Business and Aluminium Business. The Copper Business works under a "Custom Smelting" model wherein the focus is to improve the processing margin. The timing mis-match risk between the input and output price, which is linked to the same international pricing benchmark, is eliminated through use of derivatives. This off-set hedge model (through use of derivatives) is used to manage the timing mis-match risk for both Commodity (Copper and Precious Metals) and Currency Risk (primarily, USD/INR). The Copper Business also has a portion of View Based exposure for both Commodity and Currency, beyond the above timing mis-match risk. Lower Copper Prices, Stronger USD/INR exchange rate and Higher "Other Input" Prices (e.g., Coal, furnace oil, natural gas, etc.) are the major price risks that adversely impact the business. Here, the Company may use derivative instruments, wherever available, to manage these pricing risks. A variety of factors, including the risk appetite of the business and price view, are considered while taking Hedging Decisions. Such View based hedges are usually done for the next 1-8 quarters.

The Aluminium Business is a vertically integrated business model wherein the input and output pricing risks are independent of each other, i.e. – are on different pricing benchmarks, if any. Here, the Company may use derivative instruments, wherever available, to manage its pricing risks for both input and output products. Lower Aluminium Prices, Stronger USD/INR exchange rate and Higher Input Prices (e.g. Alumina, Furnance Oil) are the major price risks that adversely impact the Business. Hedging decisions are based on a variety of factors, including risk appetite of the business and price View. Such Hedge decisions are usually done for the next 1-12 quarters.

Embedded Derivatives

Copper concentrate is purchased on future pricing model based on month's average LME (in case of copper)/ LBMA (in case of gold and silver). Since, the value of the concentrate changes with response to change in commodity pricing indices, embedded derivatives (ED) is identified and segregated in the contract. The ED so segregated, is treated like commodity derivative and qualify for hedge accounting. These derivatives are put into a Fair Value hedge relationship with respect to inventory.

Novelis business model is conducted under a conversion model which allows us to pass through increases or decreases in the price of aluminium to our customers . Derivative instruments are used to preserve conversion margins and manage timing differences associated with metal price lag related to base aluminium price. Novelis also uses several sources of energy such as natural gas, electricity, fuel oil and transport oil in manufacturing and delivery of its products.

The table below summarises the gain/(loss) impact on account of increase/decrease in the commodity prices on the Group's equity and profit for the period.

₹ in Crore

			Year ended 31.03.2020		Year ended 31.03.2019	
	Price Index	Increase in Rate/Price	Change in Statement of Profit & Loss	Change in Other Components of Equity	Change in Statement of Profit & Loss	Change in Other Components of Equity
Aluminium	LME	10%	(19)	(491)	19	(647)
Copper	LME	10%	(218)	(47)	(379)	(2)
Gold	LBMA/ MCX	10%	(86)	-	154	(222)
Silver	LBMA	10%	(14)	-	(2)	(10)
Coal	API IV	10%	*	1	-	3
Furnace Oil	AG Platts	10%	*	10	2	7
Electricity	National Grid/ NYMEX	10%	-	9	-	21
Natural Gas	ICE Brent/ Henry NYMEX	10%	1	19	1	26
Diesel Fuel	EIA Flat Tax On-Highway	10%	-	9	-	17

Decrease in prices by 10% will have equal and opposite impact in financial statements.

Sensitivity analysis has been computed by stress testing the market price of the underlying price index on the outstanding derivative position as on the reporting date by assuming all other factors constant.

ii. Foreign Currency Risk

Exchange rate movements, particularly the United States Dollar (USD) and Euro (EUR) against Indian Rupee (INR) and Euro, the Swiss Franc, the Brazilian Real and the Korean Won against the U.S. Dollar have an impact on our operating results.

In India in addition to the foreign exchange inflow from exports, the commodity prices in the domestic market are derived based on the landed cost of imports where LME prices and USD/INR exchange rate are the main factors. In case of conversion business, the objective is to match the exchange rate of outflows and related inflows through derivative financial instruments. With respect to Aluminium business where costs are predominantly in INR, the strengthening of INR against USD adversely affects the profitability of the business and benefits when INR depreciates against USD. The Group enters into various foreign exchange contracts to protect profitability. The Group also enters into various foreign exchange contracts to mitigate the risk arising out of foreign currency exchange rate movement in foreign currency contracts executed with foreign suppliers to procure capital items for its project activities.

In Europe, where we have predominantly local currency selling prices and operating costs, we benefit as the Euro strengthens, but are adversely affected as the Euro weakens. For our Swiss operations, where operating costs are incurred primarily in the Swiss Franc and a large portion of revenues are denominated in the Euro, we benefit as the Franc weakens but are adversely affected as the Franc strengthens. In South Korea, where we have local currency operating costs and U.S. Dollar denominated selling prices for exports, we benefit as

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the Won weakens but are adversely affected as the Won strengthens. In Brazil, where we have predominately U.S. Dollar selling prices and local currency manufacturing costs, we benefit as the Real weakens, but are adversely affected as the Real strengthens.

The Group's exposure to foreign currency risk at the end of the reporting period expressed in INR, is as follows:

₹ in Crore

Unhedged Foreign Currency Payable / (Receivable)	As at 31.03.2020	As at 31.03.2019
Currency		
USD	589	378
EUR	(3)	(43)
GBP	28	2
NOK	*	1
CAD	12	19
AUD	1	1
CHF	1	1
BRL	*	112
Total	**628**	**471**

* *Amount below rounding off convention.*

The table below summarises the gain/(loss) impact on account of increase/decrease in the exchange rates on the Group's equity and profit for the period.

₹ in Crore

Currency Pair	Increase in Rate/Price	Year ended 31.03.2020		Year ended 31.03.2019	
		Change in Statement of Profit & Loss	Change in Other Components of Equity	Change in Statement of Profit & Loss	Change in Other Components of Equity
USD_INR	10%	105	(1,293)	14	(921)
EUR_INR	10%	3	5	7	10
EUR_USD	10%	30	15	(96)	(23)
BRL_USD	10%	20	102	5	188
KRW_USD	10%	43	157	115	158
CAD_USD	10%	(10)	(15)	7	18
GBP_USD	10%	(221)	-	(11)	-
CHF_USD	10%	37	122	-	-
CNY_USD	10%	(12)	(18)	(18)	-
GBP_CHF	10%	4	-	-	-
EUR_CHF	10%	152	53	104	41
EUR_GBP	10%	117	11	65	-
EUR_CNY	10%	-	6	1	-

Decrease in prices by 10% will have equal and opposite impact in financial statements.

Sensitivity analysis has been computed by stress testing the market price of the underlying currency index on the outstanding derivative position and unhedged exposure as on the reporting date by assuming all other factors constant.

iii. Interest Rate Risk

The Group is exposed to interest rate risk on financial liabilities such as borrowings, both short-term and long-term. It maintains a balance of fixed and floating interest rate borrowings and the proportion is determined by current market interest rates, projected debt servicing capability and view on future interest rates. Such interest rate risk is actively evaluated and interest rate swap is taken whenever considered necessary.

The Group is also exposed to interest rate risk on its financial assets that include fixed deposits, bonds, debentures, commerical paper, mutual funds and liquid investments comprising mainly mutual funds (which are part of cash and cash equivalents). Since, all these are generally for short durations, the Company believes it has manageable and limited interest rate risk.

The table below summarises the (gain)/loss impact on account of decrease/increase in the benchmark interest rates on the Group's equity and profit for the period.

₹ in Crore

	Increase in Rate/Price	Year ended 31.03.2020		Year ended 31.03.2019	
		Change in Statement of Profit & Loss	Change in Other Components of Equity	Change in Statement of Profit & Loss	Change in Other Components of Equity
Interest rate on floating rate borrowings	50 bps	-	-	(50)	-
	100 bps	(244)	-	(123)	-

Decrease in rates by 100 bps/ 50 bps will have equal and opposite impact in financial statements.

iv. Equity Price Risk

The Group's exposure to equity securities price risk arises from movement in market price of related securities classified either as fair value through OCI or as fair value through profit and loss. The Group manages the price risk through diversified portfolio.

The table below summarises the gain/(loss) impact on account of increase/decrease in the equity share prices on the Group's equity and profit for the period.

₹ in Crore

	Increase in Rate/Price	Year ended 31.03.2020		Year ended 31.03.2019	
		Change in Statement of Profit & Loss	Change in Other Components of Equity	Change in Statement of Profit & Loss	Change in Other Components of Equity
Investment in Equity securities	10%	-	266	-	479

Decrease in prices by 10% will have equal and opposite impact in financial statements.

Sensitivity analysis has been computed by stress testing the market price of the underlying price index on the investment portfolio as on the reporting date.

(c) Liquidity Risk

The Group determines its liquidity requirements in the short, medium and long term. This is done by drawing up cash forecast for short and medium term requirements and strategic financing plans for long term needs.

The Group manages its liquidity risk in a manner so as to meet its normal financial obligations without any significant delay or stress. Such risk is managed through ensuring operational cash flow while at the same time maintaining adequate cash and cash equivalent position. The management has arranged for diversified funding sources and adopted a policy of managing assets with liquidity in mind and monitoring future cash flows and liquidity on a regular basis. Surplus funds not immediately required are invested in certain investments (including mutual fund) which provide flexibility to liquidate at short notice and are included in current investments and cash and cash equivalents. Besides, it generally has certain undrawn credit facilities which can be accessed as and when required; such credit facilities are reviewed periodically.

The Group has developed appropriate internal control systems and contingency plans for managing liquidity risk. This incorporates an assessment of expected cash flows and availability of alternative sources for additional funding, if required.

(i) Financing Arrangement

The Group had access to the following undrawn borrowing facilities at the end of the reporting period:

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
Bank Overdraft and other facilities	2,317	8,338

Undrawn limit has been calculated based on the available drawing power and sanctioned amount at each reporting date.

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(ii) Maturity Analysis

The table below shows the Group's financial liabilities into relevant maturity groupings based on their contractual maturities for all non-derivative financial liabilities and net settled derivative financial instruments. The amounts disclosed in the table are the contractual undiscounted cash flows. Balances due within 12 months equal their carrying balances as the impact of discounting is not significant.

₹ in Crore

	Less than 1 Year	1-2 Years	2- 5 Years	More Than 5 Years	Total	Carrying Value
Contractual maturities of financial liabilities as at March 31, 2020						
Non-Derivatives						
Borrowings #	11,521	4,777	29,908	40,343	86,549	67,257
Lease Liabilities	309	236	421	725	1,691	1,142
Trade payables	18,300	-	-	-	18,300	18,300
Other financial liabilities	2,805	7	2	70	2,884	2,884
Total Non-Derivative liabilities	**32,935**	**5,020**	**30,331**	**41,138**	**109,424**	**89,583**
Derivatives	2,100	209	46		2,355	2,355
Total Derivative liabilities	**2,100**	**209**	**46**	**-**	**2,355**	**2,355**

₹ in Crore

	Less than 1 Year	1-2 Years	2- 5 Years	More Than 5 Years	Total	Carrying Value
Contractual maturities of financial liabilities as at March 31, 2019						
Non-Derivatives						
Borrowings #	5,962	3,120	26,122	34,696	69,900	52,364
Obligations under finance lease	16	17	20	10	63	51
Trade payables	20,723	1	1	-	20,725	20,725
Other financial liabilities	2,854	4	-	65	2,923	2,923
Total Non-Derivative liabilities	**29,555**	**3,142**	**26,143**	**34,771**	**93,611**	**76,063**
Derivatives	1,081	92	18	-	1,191	1,191
Total Derivative liabilities	**1,081**	**92**	**18**	**-**	**1,191**	**1,191**

Includes Principal and interest payments, short term borrowings, current portion of debt and excludes unamortised fees.

Total cash outflow for leases for year ended 31/03/2020 is ₹ 558 Crore.

B. Derivative Financial Instruments

The Group uses derivative financial instruments such as forwards, futures, swaps, options, etc., to hedge its risks associated with foreign exchange fluctuation. Risks associated with fluctuation in the price of the products (copper, aluminium, coal, furnace oil, natural gas, electricity, diesel and precious metals) are minimized by undertaking appropriate derivative instruments. Derivatives embedded in other contracts are treated as separate derivatives when their risks and characteristics are not closely related to their host contracts. In some cases, the embedded derivatives may be designated in a hedge relationship. The fair values of all such derivative financial instruments are recognized as assets or liabilities at the balance sheet date.

The Group also applies hedge accounting using certain foreign currency non-derivative monetary items which are used as hedging instruments for hedging foreign exchange risk.

(a) The Asset and Liability position of various outstanding derivative financial instruments is given below:

₹ in Crore

	Nature of Risk being Hedged	As at 31.03.2020		As at 31.03.2019	
		Liability	Asset	Liability	Asset
Current					
Cash flow hedges					
- Commodity contracts	Price Risk	(239)	1,277	(79)	484
- Foreign currency contracts	Exchange rate movement risk	(833)	36	(518)	370
Fair value Hedges		-	-	-	-
- Commodity contracts	Price Risk	(78)	46	-	-
- Foreign currency contracts	Exchange rate movement risk	-	46	-	-
- Embedded derivatives	Price Risk	(11)	526	(249)	6
Non-designated hedges		-	-	-	-
- Commodity contracts	Price Risk	(699)	862	(293)	301
- Foreign currency contracts	Exchange rate movement risk	(251)	115	(191)	152
- Embedded derivatives	Price Risk	-	14	-	-
Total		**(2,111)**	**2,922**	**(1,330)**	**1,313**
Non-current					
Cash flow hedges		-	-		
- Commodity contracts	Price Risk	(63)	39	(29)	31
- Foreign currency contracts	Exchange rate movement risk	(184)	8	(73)	67
Non-designated hedges		-	-	-	-
- Commodity contracts		(6)	2	(1)	2
- Foreign currency contracts		(2)	-	(7)	7
Total		**(255)**	**49**	**(110)**	**107**
Grand Total		**(2,366)**	**2,971**	**(1,440)**	**1,420**

Fair Value Gain of Embeded Derivatives of ₹ 529 Crore previous year Loss ₹ (242) Crore accounted for as part of Trade Payables.

Derivative assets are part of other financial assets included in Note 12. Derivative liabilities are part of other financial liabilities included in Note 25.

(b) Outstanding position and fair value of various foreign exchange derivative financial instruments:

	Currency Pair	As at 31.03.2020			As at 31.03.2019		
		Average exchange rate	Notional Value (in Million)	Fair Value Gain/ (Loss) (₹ in Crore)	Average exchange rate	Notional Value (in Million)	Fair Value Gain/ (Loss) (₹ in Crore)
Foreign Currency Forwards							
Cash flow hedges							
Buy	CHF_EUR	0.92	50	8	0.88	76	9
Buy	USD_CHF	0.96	4	*	0.98	3	*
Buy	BRL_USD	0.24	236	(468)	0.26	316	(36)
Buy	EUR_USD	1.12	18	2	1.15	16	1
Buy	USD_CAD	1.32	22	(12)	1.30	29	(4)
Buy	USD_KRW	1,174.47	328	(82)	1,099.02	262	(51)
Buy	USD_CNY	7.01	19	2	-	-	-
Buy	EUR_CNY	8.12	8	(2)	-	-	-
Buy	EUR_INR	85.62	9	*	82.72	19	(6)
Buy	USD_INR	-	-	-	71.65	128	(25)
Sell	USD_INR	79.85	1,557	(300)	74.18	657	88
				(852)			**(24)**

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	Currency Pair	As at 31.03.2020			As at 31.03.2019		
		Average exchange rate	Notional Value (in Million)	Fair Value Gain/ (Loss) (₹ in Crore)	Average exchange rate	Notional Value (in Million)	Fair Value Gain/ (Loss) (₹ in Crore)
Fair value hedges							
Buy	USD_INR	73.18	132	46	-	-	-
				46			**-**
Foreign Currency Swaps							
Cash flow hedges							
Sell	USD_INR	63.51	118	(109)	63.69	589	(130)
				(109)			**(130)**
Foreign Currency Options							
Cash flow hedges							
Sell	USD_INR	72.79	50	(12)	-	-	-
				(12)			**-**
Non-Designated							
Buy	AUD_INR	45.74	0	*	-	-	-
Buy	EUR_INR	85.44	9	(1)	84.86	7	(3)
Buy	GBP_INR	93.21	0	*	95.49	-	*
Buy	USD_INR	75.83	248	12	69.25	31	1
Buy	GBP_EUR	1.15	171	(22)	1.33	186	*
Buy	USD_KRW	1,174.47	90	(48)	1,117.96	191	(20)
Buy	EUR_USD	1.14	36	8	1.02	68	(1)
Buy	GBP_USD	1.30	16	6	1.27	20	*
Buy	USD_CHF	0.96	1	(1)	0.95	3	(1)
Buy	CAD_USD	0.75	14	(7)	0.78	15	(5)
Buy	USD_BRL	4.35	46	(82)	3.13	27	(42)
Buy	EUR_KRW	-	2	*	-	-	-
Buy	CHF_GBP	0.85	5	1	0.75	1	-
Buy	CHF_EUR	0.94	221	9	0.78	191	20
Buy	USD_CNY	7.20	12	(1)	6.67	35	15
Buy	EUR_CNY	-	-	-	8.33	1	(1)
Sell	USD_INR	75.56	157	(12)	69.92	130	(2)
				(138)			**(39)**

* *Amount below rounding off convention.*

(c) Outstanding position and fair value of various foreign exchange non-derivative financial instruments used as heding instruments:

₹ in Crore

	Currency Pair	As at 31.03.2020			As at 31.03.2019		
		Average exchange rate	Notional Value (in Million)	Fair Value Gain/ (Loss) (₹ Crore)	Average exchange rate	Notional Value (in Million)	Fair Value Gain/ (Loss) (₹ in Crore)
Foreign currency monetary items							
Cash flow hedges							
Debt	USD_INR	71.52	659	(254)	71.87	434	114
Liability for Copper Concentrate	USD_INR	73.86	267	(47)	69.91	350	25
				(301)			**139**

(d) Outstanding position and fair value of various commodity derivative financial instruments

(i) Outstanding position and fair value of various commodity derivative financial instruments as at March 31, 2020:

	Transaction	Currency	Average Price/ Unit	Quantity	Unit	Notional value (in Million)	Fair Value Gain/(Loss) (₹ in Crore)
Commodity Futures/Forwards/Swaps							
Cash Flow Hedge							
Aluminium	Sell	USD	1,642	660,058	MT	1,084	1,256
Aluminium	Buy	USD	1,492	62,690	MT	94	(108)
Copper	Sell	USD	5,261	19,650	MT	103	46
Furnace Oil	Buy	USD	257	118,867	MT	31	(65)
Coal	Buy	USD	72	20,000	MT	1	*
Regasified Liquid Natural gas	Buy	USD	35	45,000	BBL	2	*
Diesel Fuel	Buy	USD	3	6,552,000	Gallons	17	(29)
Natural gas	Buy	USD	2	14,730,000	MMBtu	25	(39)
Electricity	Buy	USD	28	498,124	Mwh	14	(47)
Total							**1,014**
Fair Value Hedge							
Gold	Sell	INR	4,152,737	4,808	KGS	19,966	(77)
Silver	Sell	USD	18		TOZ	30	45
Total							**(32)**
Non-Designated							
Aluminium	Buy	USD	1,522	74,992	MT	114	(134)
Aluminium	Sell	USD	1,565	95,524	MT	150	254
Copper	Buy	USD	4,965	9,350	MT	47	(9)
Copper	Sell	USD	5,275	12,750	MT	67	32
Gold	Buy	INR	4,238,148	2,885	KGS	12,227	27
Silver	Buy	USD	13	201,115	TOZ	3	1
Silver	Sell	USD	18	177,427	TOZ	3	6
Furnace Oil	Buy	USD	279	13,962	MT	4	(12)
Furnace Oil	Sell	USD	171	12,830	MT	2	1
Coal	Buy	USD	76	50,000	MT	4	(2)
Coal	Sell	USD	69	50,000	MT	3	(1)
Regasified Liquid Natural gas	Buy	USD	34	6,500	BBL	0	*
Natural Gas	Buy	USD	2	510,000	MMBtu	1	(4)
Total							**159**
Embedded derivatives							
Fair Value Hedge							
Copper	Sell	USD	5,726	84,801	MT	486	501
Gold	Sell	USD	1,596	42,835	TOZ	68	7
Silver	Sell	USD	17	294,397	TOZ	5	7
Total							**515**
Non-Designated							
Copper	Sell	USD	5,654	2,536	MT	14	14
Total							**14**

NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

(ii) Outstanding position and fair value of various commodity derivative financial instruments as at 31 March, 2019:

	Transaction	Currency	Average Price/ Unit	Quantity	Unit	Notional value (in Million)	Fair Value Gain/(Loss) (₹ in Crore)
Commodity Futures/Forwards/Swaps							
Cash Flow Hedge							
Aluminium	Sell	USD	2,016	561,594	MT	1,132	361
Gold	Sell	INR	3,279,046	6,843	KGS	22,439	66
Silver	Sell	USD	16	1,513,065	TOZ	24	8
Copper	Sell	USD	6,488	800	MT	5	*
Furnace Oil	Buy	USD	341	50,000	MT	17	12
Coal	Buy	USD	81	90,000	MT	7	(4)
Diesel Fuel	Buy	USD	3	8,064,000	Gallons	26	(4)
Natural gas	Buy	USD	3	15,160,000	MMBtu	43	(12)
Electricity	Buy	USD	47	769,828	Mwh	36	(20)
Total							**407**
Non-Designated							
Aluminium	Buy	USD	1,890	136,315	MT	258	(36)
Aluminium	Sell	USD	1,912	122,755	MT	235	79
Copper	Buy	USD	6,377	8,275	MT	53	11
Copper	Sell	USD	6,511	12,625	MT	82	2
Gold	Buy	INR	3,288,031	4,474	KGS	14,711	(51)
Silver	Buy	USD	15	217,134	TOZ	3	*
Silver	Sell	USD	16	69,015	TOZ	1	*
Furnace Oil	Buy	USD	364	9,998	MT	4	4
Furnace Oil	Sell	USD	417	9,998	MT	4	*
Natural Gas	Buy	USD	3	440,000	MMBtu	1	*
Total							**9**
Embedded derivatives							
Fair Value Hedge							
Copper	Sell	USD	6,105	121,896	MT	755	(246)
Gold	Sell	USD	1,307	33,123	TOZ	43	2
Silver	Sell	USD	16	351,099	TOZ	5	1
Total							**(243)**

(e) The following table presents details of amount held in Effective portion of Cash Flow Hedge and the period during which these are going to be released and affecting Statement of Profit and Loss.

₹ in Crore

	Products/ Currency Pair	As at 31.03.2020			As at 31.03.2019		
			Release			Release	
		As at March 31, 2020	In less than 12 Months	After 12 Months	As at March 31, 2019	In less than 12 Months	After 12 Months
		Gain/ (Loss)	Gain/(Loss)	Gain/(Loss)	Gain/(Loss)	Gain/(Loss)	Gain/(Loss)
Cash Flow Hedges							
Hedge Instrument Type							
Commodity Forwards	Aluminium	1,190	1,209	(19)	459	433	26
	Gold	-	-	-	*	*	-
	Silver	-	-	-	8	8	-
	Copper	46	46	-	*	*	-

₹ in Crore

	Products/ Currency Pair	As at 31.03.2020	Release		As at 31.03.2019	Release	
		As at March 31, 2020	In less than 12 Months	After 12 Months	As at March 31, 2019	In less than 12 Months	After 12 Months
		Gain/ (Loss)	Gain/(Loss)	Gain/(Loss)	Gain/(Loss)	Gain/(Loss)	Gain/(Loss)
Cash Flow Hedges							
	Furnace Oil	(64)	(63)	(1)	12	12	-
	Coal	-	-	-	(4)	(4)	-
	Diesel Fuel	(30)	(25)	(5)	(2)	(2)	*
	Electricity	(64)	(34)	(30)	(24)	(8)	(16)
	Natural Gas	(45)	(28)	(17)	(17)	(2)	(15)
	Total	**1,033**	**1,105**	**(72)**	**432**	**437**	**(5)**
Non-derivative financial instruments							
Debt	USD_INR	(254)	(254)	-	114	114	-
Liability for Copper	USD_INR	(59)	(59)	-	20	20	-
	Total	**(313)**	**(313)**	**-**	**134**	**134**	**-**
Hedge Instrument Type							
Currency Forwards	Total	(300)	(172)	(128)	88	22	66
	EUR_INR	(1)	(1)	-	(8)	(7)	(1)
	USD_EUR	2	2	-	2	2	-
	USD_BRL	(498)	(346)	(152)	(37)	(13)	(24)
	USD_CAD	(12)	(12)	-	(4)	(4)	-
	EUR_KRW	-	-	-	*	*	-
	USD_KRW	(82)	(82)	-	(51)	(51)	-
	EUR_CHF	9	9	-	10	10	-
	EUR_CNY	1	-	1	-	-	-
Currency Swaps	USD_INR	(139)	(139)	-	(317)	(252)	(65)
Currency Opti ons	USD_INR	(10)	(10)	-	-	-	-
	Total	**(1,030)**	**(751)**	**(279)**	**(317)**	**(293)**	**(24)**
	Grand Total	**(310)**	**41**	**(351)**	**249**	**278**	**(29)**
Deferred Tax on above		180	9	171	(49)	(103)	54
Total		**(130)**	**50**	**(180)**	**200**	**175**	**25**

₹ in Crore

	Products/ Currency Pair	As at 31.03.2020	Release		As at 31.03.2019	Release	
		As at March 31, 2020	In less than 12 Months	After 12 Months	As at March 31, 2019	In less than 12 Months	After 12 Months
		Gain/ (Loss)	Gain/(Loss)	Gain/(Loss)	Gain/(Loss)	Gain/(Loss)	Gain/(Loss)
Cost of Hedging Reserve							
Hedge Instrument Type							
Commodity Forwards	Silver	1	1	-	-	-	-
Currency Swaps	USD_INR	184	184	-	772	616	156
Currency Options	USD_INR	(2)	(2)	-	-	-	-
	Total	**183**	**183**	**-**	**772**	**616**	**156**
Deferred Tax on above		(64)	(64)	-	(270)	(215)	(55)
		119	**119**	**-**	**502**	**401**	**101**

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(g) The following table presents the amount of gain/(loss) recognized in Effective portion of Cash Flow Hedge and recycled during the year 2019-20:

₹ in Crore

	Opening Balance	Net Amount recognised	Net Amount To P&L	Amount added to Non-Financial Assets	Total Amount recycled	CTA	As at 31.03.2020
Cash Flow Hedges							
Commodity	432	1,657	1,108	(26)	1,082	26	1,033
Forex	(183)	(1,821)	(632)	(65)	(697)	(36)	(1,343)
Total	**249**	**(164)**	**476**	**(91)**	**385**	**(10)**	**(310)**
Deferred Tax on above	(49)	94	(141)	14	(127)	8	180
Total	**200**	**(70)**	**335**	**(77)**	**258**	**(2)**	**(130)**
Cost of Hedging Reserve							
Commodity	-	3	2	-	2	-	1
Forex	772	94	684	-	684	-	182
Total	**772**	**97**	**686**	**-**	**686**	**-**	**183**
Deferred Tax on above	(270)	(34)	(240)	-	(240)	-	(64)
Total	**502**	**63**	**446**	**-**	**446**	**-**	**119**

The following tables presents the amount of gain/(loss) recognized in Effective portion of Cash Flow Hedge and recycled during the year 2018-19:

₹ in Crore

	Opening Balance	Net Amount recognised	Net Amount to P&L	Amount added to Non-Financial Assets	Total Amount recycled	CTA	As at 31.03.2019
Cash Flow Hedges							
Commodity	112	908	610	2	612	24	432
Forex	210	(1,296)	(872)	(31)	(903)	-	(183)
Interest	-	-	-	-	-	-	-
Total	**322**	**(388)**	**(262)**	**(29)**	**(291)**	**24**	**249**
Deferred Tax on above	(60)	105	90	-	90	(4)	(49)
Total	**262**	**(283)**	**(172)**	**(29)**	**(201)**	**20**	**200**
Cost of Hedging Reserve							
Commodity	-	(41)	(41)	-	(41)	-	-
Forex	995	201	424	-	424	-	772
Total	**995**	**160**	**383**	**-**	**383**	**-**	**772**
Deferred Tax on above	(348)	(56)	(134)	-	(134)	-	(270)
Total	**647**	**104**	**249**	**-**	**249**	**-**	**502**

(h) The following table presents the amount of gain/ (loss) recycled from Effective portion of Cash Flow Hedge and Cost of Hedging Reserve and reference of the line item in the Statement of Profit and Loss where those amounts are included:

₹ in Crore

	Year ended 31.03.2020	Year ended 31.03.2019
Revenue from Operations	1,283	241
Cost of Materials Consumed	(117)	(103)
Depreciation and Amortization	-	(7)
Finance Costs	-	-
Other Expenses	(4)	(10)
	1,162	**121**

(i) The adjustment as part of the carrying value of inventories arising on account of fair value hedges is as follows:

₹ in Crore

	Year ended 31.03.2020			Year ended 31.03.2019		
	Raw Material	WIP and Finished Goods	Total	Raw Material	WIP and Finished Goods	Total
Increase/ (Decrease) in Inventory Value						
Copper	(501)	-	(501)	251	-	251
Gold	(7)	6	(1)	(2)	-	(2)
Silver	(7)	(43)	(50)	(1)	-	(1)
Total	**(515)**	**(37)**	**(552)**	**248**	**-**	**248**

The Group's hedging policy only allows for effective hedge relationships to be established. The effective portion of hedge is recognised in OCI, while ineffective portion of hedge is recognised immediately in the Statement of Profit and Loss. The Group uses hypothetical derivative method to assess effectiveness. Ineffectiveness may arise on account of differences in critical terms and credit risk of the hedging instrument and the hedged item.

52. Offsetting

Financial instruments subject to offsetting, enforceable master netting arrangement and similar arrangement.

i. As at March 31, 2020:

₹ in Crore

	Effects on Balance sheet			Related amounts not offset		
	Gross amount	Gross amount set off in the balance sheet	Net amount in the balance sheet	Amounts subject to master netting	Financial Instrument collateral	Net Amount
Financial Assets						
Derivatives	2,509	(78)	2,431	(540)	-	1,891
Cash and cash equivalents	21,303	-	21,303	-	-	21,303
Trade Receivables	9,401	-	9,401	-	-	9,401
Other financial assets	1,102	-	1,102	-	-	1,102
Total Financial Assets	**34,315**	**(78)**	**34,237**	**(540)**	**-**	**33,697**
Financial Liabilities						
Derivatives	2,433	(78)	2,355	(540)	(161)	1,654
Trade Payables	18,300	-	18,300	-	-	18,300
Other financial Liabilities	3,045	-	3,045	-	-	3,045
Total Financial Liabilities	**23,778**	**(78)**	**23,700**	**(540)**	**(161)**	**22,999**

ii. As at March 31, 2019:

₹ in Crore

	Effects on Balance sheet			Related amounts not offset		
	Gross amount	Gross amount set off in the balance sheet	Net amount in the balance sheet	Amounts subject to master netting	Financial Instrument collateral	Net Amount
Financial Assets						
Derivatives	1,454	(40)	1,414	(249)	-	1,165
Cash and cash equivalents	9,119	-	9,119	-	-	9,119
Trade Receivables	11,389	-	11,389	-	-	11,389
Other financial assets	926	-	926	-	-	926
Total Financial Assets	**22,888**	**(40)**	**22,848**	**(249)**	**-**	**22,599**
Financial Liabilities						
Derivatives	1,231	(40)	1,191	(249)	(76)	866
Trade Payables	20,725	-	20,725	-	-	20,725
Other financial Liabilities	3,080	-	3,080	-	-	3,080
Total Financial Liabilities	**25,036**	**(40)**	**24,996**	**(249)**	**(76)**	**24,671**

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53. Interest in Other Entities

A. Subsidiaries:

The Group's wholly-owned subsidiaries along with country of incorporation, place of operation and principal activities for the year ended March 31, 2020 and March 31, 2019 are set out below.

Name of Entity	Principal Activity	Country of Incorporation	Place of Operation
Minerals & Minerals Limited	Mining	India	India
Renukeshwar Investments & Finance Limited	Investment	India	India
Renuka Investments & Finance Limited	Investment	India	India
Lucknow Finance Company Limited	Investment	India	India
Dahej Harbour and Infrastructure Limited	Cargo services	India	India
Utkal Alumina International Limited	Manufacturing	India	India
Utkal Alumina Technical & General Services Limited #	Technical Services	India	India
Utkal Alumina Social Welfare Foundation	Welfare	India	India
Mauda Energy Limited #	Power Generation	India	India
Hindalco Guinea SARL #	Dormant	South Africa	South Africa
AV Minerals (Netherlands) N.V.	Investment	Netherlands	Netherlands
Hindalco Do Brasil Industria Comercia de Alumina Ltda.	Subsidiary	Brazil	Brazil
AV Metals Inc.	Investment	Canada	Canada
Novelis Inc.	Manufacturing	Canada	Canada
Novelis do Brasil Ltda.	Manufacturing	Brazil	Brazil
Brecha Energetica Ltda.	Distribution Services	Brazil	Brazil
4260848 Canada Inc.	Management Company	Canada	Canada
4260856 Canada Inc.	Management Company	Canada	Canada
8018227 Canada Inc.	Management Company	Canada	Canada
Novelis (China) Aluminum Products Co. Ltd.	Manufacturing	China	China
Novelis (Shanghai) Aluminum Trading Company	Import and export aluminum	China	China
Novelis Lamines France S.A.S.	Distribution Services	France	France
Novelis PAE S.A.S.	Engineering	France	France
Novelis Aluminum Beteiligungs GmbH	Dormant	Germany	Germany
Novelis Deutschland GmbH	Manufacturing	Germany	Germany
Novelis Sheet Ingot GmbH	Manufacturing	Germany	Germany
Novelis (India) Infotech Ltd.	Dormant	India	India
Novelis Aluminum Holding Unlimited Company	Intermediate Subsidiary	Ireland	Ireland
Novelis Italia SpA	Manufacturing	Italy	Italy
Novelis de Mexico S.A. de C.V.	Dormant	Mexico	Mexico
Novelis Korea Limited	Manufacturing	South Korea	South Korea
Novelis AG	Management Company	Switzerland	Switzerland
Novelis Switzerland S.A.	Manufacturing	Switzerland	Switzerland
Novelis MEA Ltd.	Import and export aluminum	UAE	UAE
Novelis Europe Holdings Limited	Intermediate Subsidiary	UK	UK
Novelis UK Ltd.	Manufacturing	UK	UK
Novelis Services Limited	Management Company	UK	UK
Novelis Corporation	Manufacturing	USA	USA
Novelis South America Holdings LLC	Intermediate Subsidiary	USA	USA
Novelis Acquisitions LLC	Management Company	USA	USA
Novelis Holdings Inc.	Intermediate Subsidiary	USA	USA
Novelis Services (North America) Inc.	Cash management Service	USA	USA
Novelis Global Employment Organization, Inc.	Management Company	USA	USA
Novelis Services (Europe) Inc.	Management Company	USA	USA
Novelis Vietnam Company Limited	Manufacturing	Vietnam	Vietnam

De-registered/Dissolved/Liquidated, etc., during the year ended March 31, 2019.

B. Non-Controlling Interests (NCI)

The Group has following non-wholly owned subsidiaries:

Name of Entity	Principal Activity	Country of incorporation	Ownership interest held by the Group	
			31.03.2020	31.03.2019
Suvas Holdings Limited	Power Generation	India	74.00%	74.00%
Hindalco-Almex Aerospace Limited	Manufacturing	India	97.18%	97.18%
East Coast Bauxite Mining Company Private Limited	Mining	India	74.00%	74.00%

None of above non-wholly owned subsidiary is material to the Group, therefore financial information about these non-wholly owned subsidiary are not disclosed separately.

C. Joint Operations

The Group is engaged in various arrangements on a joint basis with other companies. In assessing whether joint control exists for these arrangements, management evaluates the structure and legal framework and contracts governing the arrangement combined with an assessment of which decisions that significantly influence the return from the arrangement. The Group assesses whether joint arrangements are joint operations where the Group has rights to the assets and obligations for the liabilities related to the arrangement, or a joint venture where the Group has an interest in the net assets of the joint arrangement. Accordingly, the Group has identified following joint arrangements as joint operations:

Name of the Joint Operations	Principal Activity	Country of Incorporation	Group's proportion of ownership interest and voting power	
			31.03.2020	31.03.2019
Mahan Coal Limited - (a)	Mining	India	50.00%	50.00%
Tubed Coal Mines Limited - (a)	Mining	India	60.00%	60.00%
Aluminium Norf GmbH - (b)(i)	Rolling and recycling	Germany	50.00%	50.00%
Logan Aluminium Inc. - (b)(ii)	Rolling and finishing	USA	40.00%	40.00%
Ulsan Aluminium Limited - (b) (iii)	Rolling and recycling	South Korea	50.00%	50.00%
AluInfra Services SA - (b) (iv)	Service Company	Switzerland	50.00%	50.00%

(a) During previous year Mahan Coal Limited and Tubed Coal Mines Limited were classified as held for sale. During the current year these entities are reclassified as Joint operations and accordingly share in assets, liabilities, income and expenses in these entities are included in respective line items of the financial statements.

(b) Novelis Inc., a subsidiary of the Group, is engaged in following arrangements that are concluded to be joint operations.

i. Aluminium Norf GmbH ("Alunorf"), a large rolling mill in Germany, is a joint operation between Novelis and Hydro Aluminium Deutschland GmbH ("Hydro"). Both Novelis and Hydro hold a 50% interest in equity, profits and losses, shareholder voting and management control. Novelis shares control of the management of Alunorf with Hydro through a jointly-controlled shareholders' committee and supervisory board. Management of Alunorf is led jointly by two managing executives, one nominated by Novelis and one nominated by Hydro. The primary objective of Alunorf is to provide tolling services (output) exclusively to Novelis and Hydro as the total output capacity is allocated between Novelis and Hydro. This indicates that both Novelis and Hydro get substantially all of the economic benefits from the assets of the joint arrangement. The major or sole sources of cash inflows for Alunorf are Novelis and Hydro, who are legally obliged to cover production costs.

ii. Logan Aluminium Inc. ("Logan"), an aluminum rolling mill in Kentucky, is a joint operation between Novelis and Tri-Arrows Aluminium Inc. ("Tri-Arrows"). Logan processes metal exclusively received from Novelis and Tri-Arrows and charges the respective partner a fee to cover expenses. This indicates that both Novelis and Tri-Arrows get substantially all of the economic benefits from the assets of the joint arrangement. Logan is thinly capitalized and relies on the regular reimbursement of costs and expenses by Novelis and Tri-Arrows to fund its operations, indicating that Novelis and Tri-Arrows have an obligation for the liabilities of the arrangement. Other than these contractually required reimbursements, Novelis does not provide other material support to Logan. Logan's creditors do not have recourse to our general credit. Novelis has

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a 40% voting interest; however, our participating interest in operations ranges from greater that 50% to approximately 55% depending on output. Novelis has joint ability to make decisions regarding Logan's production operations and take our share of production and associated costs.

iii. In May 2017, Novelis Korea Ltd., a subsidiary of Novelis Inc., entered into definitive agreements with Kobe Steel Ltd. ("Kobe"), an unrelated party, under which Novelis Korea and Kobe Steel Ltd. will jointly own and operate Ulsan Aluminum, Ltd. (UAL), the joint arrangement. UAL is controlled by an equally represented Board of Directors in which neither entity has sole decision-making ability regarding production operations or other significant decisions. Furthermore, neither entity has the ability to take the majority share of production or associated costs over the life of the joint venture. UAL currently produces flat rolled aluminum products exclusively for Novelis and Kobe. As of March 31, 2020 each of the parties to the joint arrangement hold a 50% interest in the equity, profits and losses, shareholder voting, management control and rights to use the production capacity of the facility.

iv. In July 2018, Novelis Switzerland SA (Novelis Switzerland), a subsidiary of Novelis, entered into definitive agreements with Constellium Valais SA (Constellium), an unrelated party, under which Novelis Switzerland and Constellium will jointly own and operate AluInfra Services SA (AluInfra), the joint arrangement. Each of the parties to the joint arrangement hold a 50% interest in the equity, profits and losses, shareholder voting, management control and rights to use the production capacity of the facility.

D. Investments in Associates:

Details of Associates of the Group are set out below. The country of incorporation is also their principal place of business and the proportion of ownership interest is the same as the proportion of voting rights held. The Group's interests in these entities are accounted for using equity method in the Consolidated Financial statements.

Name of Entity	Country of incorporation	Proportion of Ownership Interests (%)		Carrying Amount (₹ in Crore)	
		31.03.2020	31.03.2019	31.03.2020	31.03.2019
Aditya Birla Science & Technology Company Pvt. Limited (ABSTCPL)	India	49.00%	49.00%	19	15
Aditya Birla Renewable Subsidiary Limited (ABRSL)	India	26.00%	26.00%	7	6
Aditya Birla Renewable Utkal Limited (ABRUL)	India	26.00%	-	1	-
Deutsche Aluminum Verpachung Recycling GmbH #	Germany	30.00%	30.00%	-	-
France Aluminum Recyclage SPA. #	France	20.00%	20.00%	-	-
				27	**21**

No existing operations, hence not included in consolidation.

(a) Summarised financial information in respect of the Group's associates are set out below. These information is based on their Ind-AS financial statements after alignment of Group's accounting policies.

₹ in Crore

	As at 31.03.2020			As at 31.03.2019	
	ABSTCL	ABRSL	ABRUL	ABSTCL	ABRSL
Summarised Balance Sheet					
Non-current Assets	102	119	20	104	110
Current Assets	51	8	4	47	7
Non-current Liabilities	(7)	(99)	(16)	(6)	(89)
Current Liabilities	(107)	(2)	(3)	(114)	(6)
Net Assets	**39**	**26**	**5**	**31**	**22**
Group's share of Net Assets of Associates	19	7	1	15	6
Dividend Received	-	-	-	-	-
Carrying Amount	**19**	**7**	**1**	**15**	**6**
Contingent Liabilities					
Share of Contingent Liabilities of the associate	6	-	-	3	-

₹ in Crore

	Year ended 31.03.2020			As at 31.03.2019	
	ABSTCL	ABRSL	ABRUL	ABRSL	ABRSL
Summarised Statement of Profit and Loss					
Total Revenues	66	14	1	54	5
Total Profit/ (Loss) for the year	7	(3)	*	1	1
Other comprehensive income for the year	*	-	-	*	-
Group's share of Profit/ (Loss) of Associates	4	-	*	-	-
Group's share of Other comprehensive income of Associates	*	-	-	*	-
Reconciliation to carrying amounts					
Opening net assets	31	23	-	30	-
Increase on account of acquisition during the year	-	4	5	-	22
Profit/(Loss) for the year	7	(3)	*	1	1
Other comprehensive income	*	-	-	*	-
Amounts directly recognised in equity	-	-	-	-	-
Closing net assets	**38**	**24**	**5**	**31**	**23**
Group's share (%)	49.00%	26.00%	26.00%	49.00%	26.00%
Group's share (Amount)	19	7	1	15	6
Dividend Received	-	-	-	-	-
Carrying amount	**19**	**7**	**1**	**15**	**6**

* *Amount below rounding off convention.*

E. Interests in Joint Ventures:

Details of Joint Ventures of the Group are set out below. The joint ventures listed below have share capital consisting solely equity shares, which are directly held by the Group. The country of incorporation is also their principal place of business and the proportion of ownership interest is the same as the proportion of voting rights held. No entity listed below is listed on any public stock exchange.

	Country of Incorporation	Proportion of Ownership Interests		Carrying Amount (₹ in Crore)	
		31.03.2020	31.03.2019	31.03.2020	31.03.2019
MNH Shakti Limited (MNH Shakti)	India	15.00%	15.00%	13	13
Hydromine Global Minerals (GmbH) Limited (Hydromine)	British Virgin Islands	45.00%	45.00%	1	1
				14	**14**

During previous year investments in Hydromine Global Minerals GmbH Limited and MNH Shakti Limited were classified as held for sale and were accounted for accordingly in the Consolidated Financial Statements. During the current year, these investments are reclassified as Investment in Joint Ventures and accordingly equity accounting has been applied in the Consolidated Financial Statements.

F. Interest in Trusts:

The Group has following Trusts which are consolidated in these financial statements.

Name of the Trust	Principal Activity	Country of Incorporation	Place of Operation
Hindalco Jan Seva Trust	Welfare	India	India
Copper Jan Seva Trust	Welfare	India	India
Utkal Alumina Jan Seva Trust	Welfare	India	India

NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

54. Leases

A. Lease Liabilities against ROU Assets

₹ in Crore

	As at 31.03.2020	As at 31.03.2019
Lease Liabilities - Non-Current	872	-
Lease Liabilities - Current	270	-
	1,142	**-**

B. Transition Disclosures for Ind AS 116

Effective April 1, 2019, the Group has adopted Ind AS 116 "Lease " using modified retrospective approach in accordance with the modified retrospective transition method, the comparatives comparitives have not been retrospectively adjusted. The adoption of Ind AS 116 has the following impact.

(i) Lease Liabilities Reconciliation

₹ in Crore

Particulars	Amount
Total Operating lease commitments disclosed at March 31, 2019	822
Effect of Discounting	(125)
Finance lease Liabilities as at March 31, 2019	51
Recognition exemptions:	
Leases of Low value assets	(24)
Lease with remaining lease term less than 12 months	(20)
Variable Lease payments	-
Adjustments as a result of a different treatment of extension and termination option	131
Lease commitments not included in opening	172
Total Lease Liabilities as at April 1, 2019	**1,007**

Effect of change in accounting policy on the Financial Statements

(ii) Impact on Financial Statements

₹ in Crore

Particulars	Increase/ (Decrease)
Property, Plant and Equipment	(41)
Property, Plant and Equipment - Leasehold Land Reclass	(3)
Capital Work-in-Progress	(7)
Right-of-Use Assets	1,637
Other Financial Assets	36
Other Non-Financial Assets	(698)
Total	**924**
Lease Liabilities	1,007
Long Term Borrowings	(51)
Other Financial Liabilities	(2)
Other Non-Financial Liabilities	(15)
Retained Earnings #	(15)
Total	**924**

Deferred Tax impact recognised in Retained Earnings on transition date is ₹ 6 Crore.

(iii) The Group recognized ROU assets for the following asset categories

₹ in Crore

Right-of-Use Assets Category	Amount
Leasehold Land	844
Waterfront	1
Railway Sidings	21
Stadium Suite	16
Buidlings	362
Plant and Machinery	30
Boats	2
Railway Wagons	159
Vehicles and Aircraft	152
Furniture and Fuxtures	*
Office Equipment	5
Total	**1,593**

* *Amount below rounding off convention.*

(iv) The Group has reclassified Finance Lease Assets from Property, plant & equipment to Right of use assets pursuant to adoption of Ind AS 116

₹ in Crore

Particulars	Original Cost	Accumulated Depreciation	Carrying Amount
Leasehold Improvements	3	-	3
Buidlings	4	(1)	3
Plant and Machinery	106	(92)	14
Vehicles and Aircraft	2	(2)	-
Furniture and Fuxtures	40	(17)	23
Office Equipment	2	(2)	-
Total	**157**	**(114)**	**43**

(v) On transition to Ind AS 116 the weighted average incremental borrowing rate applied to lease liabilities recognised under Ind AS 116 was 8.94% in case of the Company and all its subsidiaries in India and 3.6% in case of Novelis and its subsidiaries.

(vi) Practical expedients used by the entity in adoption of Ind AS 116

a. The Group has not re-assessed whether a contract is or contains a lease at the date of initial application.

b. The Group has utilised hindsight in determining the lease terms where contracts contained options to extend or terminate the lease.

c. Except for land leases, Initial direct costs are excluded from the measurement of right-of-use assets at the date of initial application.

d. The Group has used a single discount rate to a portfolio of leases with reasonable similar characteristics based on the remaining lease term as at the date of initial application.

e. The Group has relied on its previous assessment on whether leases are onerous.

f. The Group has carried forward the amount of the Finance Lease Assets (reclassified as ROU asset) and Lease Liability recognized under Ind AS 17 immediately before the date of initial application.

g. The Group has availed practical expedient of exempting re-assessment of previous sale and lease-back transactions.

NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

(vii) The operating cash flows for the year ended March 31, 2020 has increased by ₹ 367 Crore and the financing cash flows have decreased by ₹ 367 Crore as repayment of lease liabilities and related interest has been classified as cash flows from financing activities.

(viii) The Group leases land, buildings including storage premises, plant and machinery (including material handling equipment), vehicles, boats and aircrafts certain furniture and fixtures, office equipment.

The Group has applied Ind AS 116 using Modified Approach, with the cumulative effect of initially applying the new standard recognized at the date of initial application in the following manner:

Leasehold Land and Railway Sidings – recognized ROU asset at an amount equal to the lease liability (discounted using the Company's incremental borrowing rate at the date of initial application based on the remaining lease term as at the date of initial application), adjusted by the amount of prepayments relating to that lease recognized in the balance sheet immediately before the date of initial application.

Other Assets – recognized ROU assets at its carrying amount as if the standard had been applied since the commencement date but discounted using the Company's incremental borrowing rate at the date of initial application based on the remaining lease term as at the date of initial application.

C. Operating Lease Disclosures under earlier Ind AS 17

The Group has entered into various leasing arrangements under operating lease.

(i) As a Lessee

The Group has entered in operating leases for land, buildings and equipment under both cancellable and non-cancelable operating leases. During the previous year ended March 31, 2019, the Group paid ₹ 321 Crore towards minimum lease payment.

Details of future aggregate minimum lease payments under non-cancellable operating leases:

₹ in Crore

	As at 31.03.2019
Not later than 1 year	219
Later than 1 year and not later than 5 years	461
Later than 5 years	142
	822

55. There was an incident in Red Mud (Bauxite Residue) storage area connected to the Alumina plant situated at Muri, Jharkhand, on April 9, 2019. The incident involved a spillage in the red mud cake storage area. The operations of the plant remained suspended following the incident. The unit is in the business of producing and supplying Aluminium Hydrate primarily to Aluminium smelters of the Company for captive consumption. The operation of the plant remained suspended till December 23, 2019. There was no material impact.

56. COVID-19 Impact on the Financial Statement:

The spread of COVID-19 has severely impacted businesses around the globe. In many countries, including India, there has been severe disruption to regular business operations due to lock-downs, disruptions in transportation, supply chain, travel bans, quarantines, social distancing and other emergency measures. Certain plants of the Group which had shut down operations during lock-down period have since resumed operations in a phased manner.

The Group has made detailed assessment of its liquidity position for a period of at least one year from the balance sheet date, of the recoverability and carrying values of its assets comprising property, plant and equipment, Intangible assets, Trade Receivables, Inventory, investments, other current and non-current assets and ability to pay its liabilities as they become due and effectiveness of internal financial controls at the balance sheet date, and has concluded that there are no material impact or adjustments required in the consolidated financial statements.

Management believes that it has taken into account all the possible impact of known events till the date of approval of its financial statements arising from COVID-19 pandemic in the preparation of the consolidated financial statements. Management is of the view that considering the nature of its business operations, existing customer and supplier

relationships and its market position, impact on its business operations, if any, arising from COVID-19 pandemic is not expected to be significant. The impact of COVID-19 pandemic may be different from that estimated as at the date of approval of these financial results. The Group will continue to monitor any material changes to future economic conditions.

57. Acquisition of Aleris Corporation (Aleris):

On April 14, 2020, the Group completed the acquisition of Aleris Corporation (Aleris), a global supplier of rolled aluminium products through its wholly owned subsidiary Novelis in USA for payments made or to be made of ₹ 21,575 Crore ($2.8 Billion). By virtue of this acquisition, Aleris has now become a wholly owned subsidiary of Novelis, USA.

As a result of the antitrust review processes required for approval of the acquisition, the Group is obligated to divest Aleris' European and North American automotive assets, including its plants in Duffel, Belgium (Duffel) and Lewisport, Kentucky (Lewisport).

In November 2019, the Group entered into a definitive agreement with London-based Liberty House GHG (Liberty), for the sale of Duffel, which remains subject to approval from the State Administration for Market Regulation in China (SAMR) though the Group received conditional antitrust approval from SAMR in December 2019.

On March 9, 2020, the arbitrator assigned to resolve the dispute ruled in favour of the United States Department of Justice (DOJ). As a consequence of that ruling, we are now required to divest Lewisport, and we are currently in discussions with the DOJ regarding the allowed timeframe to consummate this sale.

Once a buyer for Lewisport has been identified, completion of the divestiture will be conditioned on the receipt of required regulatory approvals and will be subject to other customary closing conditions. Although the Group believes that the Lewisport asset group is marketable in its current condition and we intend to run a competitive sales process, there is no assurance that it will be possible to fully recover the investment made by the Group in these assets. In addition, in light of current adverse market conditions, the Group may not be able to complete the divestiture of Lewisport on favourable terms, in a timely manner, or at all. Delays or difficulties in divesting Duffel or Lewisport may result in additional expenditures of funds and management resources which would reduce the financial benefit that is expected from acquisition of Aleris and could have an adverse effect on the financial condition, results of operations and cash flows.

The Group is legally required to hold Duffel and Lewisport assets separately from the rest of Aleris assets and maintain them as viable and competitive till the sales are completed.

Presently, Novelis is in the process of finalizing the accounting for acquisition of Aleris, including allocation of purchase consideration to identifiable assets and liabilities.

The Group expects the acquisition to deliver a number of significant benefits by:

- Establishing a more diverse product portfolio, which will now include aerospace, beverage can, automotive, building and construction, commercial transportation and specialty products;
- Integrating complementary assets in Asia to include recycling, casting, rolling and finishing capabilities and allowing Novelis to more efficiently serve the growing Asia market; and
- Leveraging Novelis' deep manufacturing and recycling expertise to optimize Aleris' assets and unlock valuable synergies.

For acquisition related expenses, refer Note 39B (e) and Note 36 (c).

58. Gare Palma IV/4 (GP-4) and Gare Palma IV/5 (GP-5) coal mines were acquired by the Company through auction conducted by the Nominated Authority (NA) constituted under the Ministry of Coal, Government of India. The Company was required to achieve certain Efficiency Parameters and reach their Peak Rated Capacity (PRC) during 2015-16. Performance Security in the form of Performance Bank Guarantees (PBG) of ₹ 318 Crore and ₹ 369 Crore for GP-4 and GP-5, respectively, were provided by the Company to NA in this regard.

NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

Due to the various delays on the part of NA, PRC was achieved by the Company for both the mines during 2016-17. Having satisfied itself about achievement of Efficiency Parameters/PRC, NA returned the PBG in respect of GP-4 on June 19, 2017. However, in a volte face action, vide a letter dated 25th April, 2018, NA imposed a penalty equal to 20% of PBG amounting to ₹ 64 Crore for GP-4 and ₹ 74 Crore (refer Note15) for GP-5. As the PBG for GP-5 was still with NA, it also appropriated an amount equal to the penalty from the PBG.

The above actions were contested by the Company and the Hon'ble Chhattisgarh High Court at Bilaspur has already given its judgment in favour of the Company in the matter related to GP-5. As per the judgment, Hon'ble High Court has asked NA to refund the amount apportioned by them and return the PBG to the Company. Company's appeal to quash the demand raised by NA in case of GP-4 is yet to be decided and is pending before the Mines Tribunal.

The Company further received two Show-Cause Notices dated December 3, 2019 from NA for shortfall in production of coal at the above mines for FY 2017-18 and FY 2018-19 compared to their respective mining plans. Through these notices, the NA asked the Company to show cause why action should not be taken against the Company for recovery of an amount equal to the appropriation amount for the said defaults provided in Clause 6.3 and 10.3 of the Coal Mine Development and Production Agreement.

The Company has furnished its replies to both the notices vide letters dated December 17, 2019 contesting that the NA has no right under the aforesaid clauses to recover any amount from the Performance Security.

The NA have neither issued any further letter to the Company nor raised any demand against the Company in this regard.

59. During the financial year ended March 31, 2020, the Group has reclassified following comparatives which do not have material impact on the Consolidated Financial Statements.

₹ in Crore

Note No.	Note Description	Previously reported amount	Revised amount	Change
Consolidated Balance Sheet				
Assets				
Note 11	Loans (Non-Curent)	73	15	(58)
Note 13	Current Tax Asset (Net)	1,440	1,553	113
Note 14	Deferred Tax Asset (Net)	803	876	73
Note 12A	Other Financial Assets (Non-Current)	361	347	(14)
Note 12B	Other Financial Assets (Current)	1,995	1,993	(2)
Note 15	Other Assets (Non-Current)	2,004	2,179	175
Note 17	Trade receivables	11,460	11,389	(71)
				216
Liabilities				
Note 13	Current Tax Liabilities (Net)	1,312	1,425	(113)
Note 14	Deferred Tax Liabilities (Net)	4,453	4,526	(73)
Note 26	Provisions (Non-current)	7,440	7,244	196
Note 26	Provisions (Current)	1,978	1,924	54
Note 28	Contract Liabilities (Non Current)	-	19	(19)
Note 27	Other Liabilities (Non Current)	1,276	1,311	(35)
Note 27	Other Liabilities (Current)	1,230	1,456	(226)
				(216)

60. Additional information required under Schedule III of the Companies Act, 2013

A. Information regarding subsidiaries, associates and joint ventures included in the consolidated financial statements for the year ended March 31, 2020:

₹ in Crore

	Net Assets i.e. total Assets minus total Liabilities		Share in Profit/ (Loss)		Share in Other Comprehensive Income		Share in total Comprehensive Income	
	As % of Consolidated Net Assets	Amount	As % of Consolidated Profit/ (Loss)	Amount	As % of Other Comprehensive Income	Amount	As % of Total Comprehensive Income	Amount
Parent:								
Hindalco Industries Limited	78.00%	45,494	16.46%	620	124.86%	(3,400)	-266.28%	(2,780)
Subsidiaries:								
Indian:								
Minerals & Minerals Limited	0.02%	11	0.05%	2	0.00%	-	0.19%	2
Utkal Alumina International Limited	12.66%	7,387	8.42%	317	0.07%	(2)	30.17%	315
Utkal Alumina Social Welfare Foundation	0.00%	-	0.00%	-	0.00%	-	0.00%	-
Suvas Holdings Limited	0.05%	29	0.03%	1	0.00%	-	0.10%	1
Renuka Investments & Finance Limited	0.15%	89	0.03%	1	1.80%	(49)	-4.60%	(48)
Renukeshwar Investments & Finance Limited	0.08%	48	-0.03%	(1)	1.10%	(30)	-2.97%	(31)
Dahej Harbour and Infrastructure Limited	0.15%	89	0.56%	21	0.00%	-	2.01%	21
Lucknow Finance Company Limited	0.03%	16	0.05%	2	0.00%	-	0.19%	2
Hindalco-Almex Aerospace Limited	0.16%	93	0.24%	9	0.00%	-	0.86%	9
East Coast Bauxite Mining Company Private Ltd.	0.00%	-	0.00%	-	0.00%	-	0.00%	-
Foreign:								
AV Minerals (Netherlands) N.V.	22.03%	12,848	-0.03%	(1)	0.81%	(22)	-2.20%	(23)
AV Metals Inc.	20.20%	11,781	0.00%	-	0.07%	(2)	-0.19%	(2)
Novelis Inc. (Consolidated)	37.47%	21,857	76.13%	2,868	6.65%	(181)	257.38%	2,687
Hindalco Do Brasil Industria Comercia de Alumina Ltda	0.14%	84	-1.51%	(57)	3.75%	(102)	-15.23%	(159)
Non-controlling Interest	0.02%	10	0.00%	-	0.00%	-	0.00%	-
Associates								
Indian:								
Aditya Birla Renewable Subsidiary Limited	0.01%	7	-0.03%	(1)	0.00%	-	-0.10%	(1)
Aditya Birla Renewable Utkal Limited	0.00%	1	0.00%	-	0.00%	-	0.00%	-
Aditya Birla Science and Technology Company Private Limited	0.03%	19	0.08%	3	0.00%	-	0.29%	3
Joint Ventures								
Indian:								
MNH Shakti Limited (MNH Shakti)	0.02%	13	0.03%	1	0.00%	-	0.10%	1
Foreign:								
Hydromine Global Minerals (GmbH) Limited	0.00%	1	0.00%	-	0.00%	-	0.00%	-
Trusts								
Indian:								
Hindalco Jan Seva Trust	0.00%	2	0.00%	-	0.00%	-	0.00%	-
Copper Jan Seva Trust	0.01%	3	-0.03%	(1)	0.00%	-	-0.10%	(1)
Utkal Alumina Jan Seva Trust	0.00%	-	0.00%	-	0.00%	-	0.00%	-
	171.24%	**99,882**	**100.45%**	**3,784**	**139.11%**	**(3,788)**	**-0.38%**	**(4)**
Consolidation Adjustments	-71.24%	(41,555)	-0.45%	(17)	-39.11%	1,065	100.38%	1,048
	100.00%	**58,327**	**100.00%**	**3,767**	**100.00%**	**(2,723)**	**100.00%**	**1,044**

NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

B. Information regarding subsidiaries, associates and joint ventures included in the consolidated financial statements for the year ended March 31, 2019:

	Net Assets i.e. total Assets minus total Liabilities		Share in Profit/ (Loss)		Share in Other Comprehensive Income		Share in total Comprehensive Income	
	As % of Consolidated Net Assets	Amount	As % of Consolidated Profit/ (Loss)	Amount	As % of Other Comprehensive Income	Amount	As % of Total Comprehensive Income	Amount
Parent:								
Hindalco Industries Limited	84.43%	48,558	21.93%	1,205	68.17%	(1,681)	-15.71%	(476)
Subsidiaries:								
Indian:								
Minerals & Minerals Limited	0.01%	8	0.02%	1	0.00%	-	0.03%	1
Utkal Alumina International Limited	12.29%	7,066	25.93%	1,425	0.20%	(5)	46.88%	1,420
Utkal Alumina Technical & General Services Limited	0.00%	-	0.00%	-	0.00%	-	0.00%	-
Suvas Holdings Limited	0.05%	27	-0.04%	(2)	0.00%	-	-0.07%	(2)
Renuka Investments & Finance Limited	0.25%	142	0.18%	10	0.69%	(17)	-0.23%	(7)
Renukeshwar Investments & Finance Limited	0.15%	87	0.15%	8	0.53%	(13)	-0.17%	(5)
Dahej Harbour and Infrastructure Limited	0.15%	89	0.58%	32	0.00%	-	1.06%	32
Lucknow Finance Company Limited	0.03%	16	0.04%	2	0.00%	-	0.07%	2
Hindalco-Almex Aerospace Limited	0.15%	84	0.07%	4	0.00%	-	0.13%	4
East Coast Bauxite Mining Company Private Ltd.	0.00%	-	0.00%	-	0.00%	-	0.00%	-
Mauda Energy Limited	0.00%	-	0.00%	-	0.00%	-	0.00%	-
Foreign:								
AV Minerals (Netherlands) N.V.	20.49%	11,784	-0.02%	(1)	0.57%	(14)	-0.50%	(15)
AV Metals Inc.	18.81%	10,818	0.00%	-	0.08%	(2)	-0.07%	(2)
Novelis Inc. (Consolidated)	31.55%	18,142	54.14%	2,975	55.23%	(1,362)	53.25%	1,613
Hindalco Do Brasil Industria Comercia de Alumina Ltda	0.25%	145	-2.42%	(133)	2.43%	(60)	-6.37%	(193)
Hindalco Guinea SARL	0.00%	-	0.00%	-	0.00%	-	0.00%	-
Non-controlling Interest	0.02%	9	-0.02%	(1)	0.00%	-	-0.03%	(1)
Associates								
Indian:								
Aditya Birla Renewable Subsidiary Limited	0.01%	6	0.00%	-	0.00%	-	0.00%	-
Aditya Birla Science and Technology Company Private Limited	0.03%	15	0.00%	-	0.00%	-	0.00%	-
Trusts								
Indian:								
Hindalco Jan Seva Trust	0.00%	1	0.00%	-	0.00%	-	0.00%	-
Copper Jan Seva Trust	0.01%	3	0.02%	1	0.00%	-	0.03%	1
	168.67%	**97,000**	**100.56%**	**5,526**	**127.90%**	**(3,154)**	**78.31%**	**2,372**
Consolidation Adjustments	-68.67%	(39,490)	-0.56%	(31)	-27.90%	688	21.69%	657
	100.00%	**57,510**	**100.00%**	**5,495**	**100.00%**	**(2,466)**	**100.00%**	**3,029**

As per our report annexed.

For Price Waterhouse & Co Chartered Accountants LLP
Firm Registration Number: 304026E/E-300009

Sumit Seth
Partner
Membership Number: 105869

For and on behalf of the Board of Hindalco Industries Limited

Praveen Kumar Maheshwari
Whole-time Director &
Chief Financial Officer
DIN-00174361

Satish Pai
Managing Director
DIN-06646758

Anil Malik
Company Secretary

K N Bhandari
Director
DIN-00026078

Place : Mumbai
Dated : June 12, 2020

Form AOC-1

Pursuant to first proviso to sub-section (3) of Section 129 read with Rule 5 of Companies (Accounts) Rules, 2014, Statement containing salient features of the financial statement of subsidiaries/associate companies/joint ventures

Part "A" - Subsidiaries

Figures INR in Crore & Foreign Currency in Million

Sr. No.	Name of the Subsidiary Company	Country	Reporting currency	Capital	Reserves	Total Assets	Total Liabilities	Investments: Shares, Debnture, Bonds & Others	Turnover/ Revenues	Profit/ (Loss) before Tax	Provision for Tax	Profit/ (Loss) after Tax	Proposed Dividend	% of Share Holding
1	Minerals and Minerals Limited {}	India	INR	0.05	10.57	29.27	18.65	-	42.47	3.15	0.88	2.27		100
2	Renuka Investments and Finance Limited {}	India	INR	9.25	80.06	89.99	0.68	75.27	6.22	0.91	0.02	0.89		100
3	Renukeshwar Investsment and Finance Limted {}	India	INR	4.80	43.38	48.18	0.00	41.68	3.78	(1.24)	(0.11)	(1.13)		100
4	Suvas Holding Limited {}	India	INR	29.93	(1.02)	39.31	10.40	1.19	3.79	1.04	0.20	0.84		74
5	Utkal Alumina International Limited {}	India	INR	6,251.48	1,135.83	10,579.01	3,191.70	1,345.59	2,807.82	504.10	186.69	317.41		100
6	Hindalco-Almex Aerospace Limited {}	India	INR	88.56	3.97	99.63	7.10	24.20	101.29	9.79	0.96	8.84		97.18
7	Lucknow Finance Company Limited {}	India	INR	9.90	5.91	16.89	1.08	7.61	2.67	2.19	0.51	1.69		100
8	Dahej Harbour and Infrastructure Limited {}	India	INR	50.00	39.15	153.05	63.91	75.23	76.89	29.26	7.64	21.62		100
9	East Coast Bauxite Mining Co.Pvt.Ltd. {}	India	INR	0.01	(0.04)	0.01	0.04	-	-	(0.01)	-	(0.01)		74
10	Utkal Alumina Social Welfare Foundation@	India	INR	0.10	(0.01)	0.10	0.01	-	-	(0.01)	-	(0.01)		100
11	A V Minerals (Netherlands) N.V. *	Netherlands	INR	13,115.25	(1,118.36)	11,997.11	0.23	-	-	(0.75)	-	(0.75)		100
			USD	1,740.74	(148.44)	1,592.33	0.03	0.00	0.00	(0.11)	0.00	(0.11)		
12	A V Metals Inc. #*	Canada	INR		11,781.09	11,781.10	0.01	-	-	-	-	-		100
			USD	-	1,563.66	1,563.66	0.00	0.00	0.00	0.00	0.00	-		
13	Novelis Inc. ##*	Canada	INR	11,904.18	(5,013.68)	26,233.26	19,342.76	0.00	4,163.86	3,333.31	29.31	3,304.01	0.00	100
			USD	1,580.00	(665.45)	3,481.84	2,567.29	0.00	587.29	470.15	4.13	466.01	0.00	
14	4260848 Canada Inc.*	Canada	INR	924.03	(627.01)	303.22	6.20	0.00	0.00	87.97	5.19	82.78	0.00	100
			USD	122.64	(83.22)	40.25	0.82	0.00	0.00	12.41	0.73	11.68	0.00	
15	4260856 Canada Inc.*	Canada	INR	1,386.09	(951.72)	443.62	9.25	0.00	0.00	131.24	7.74	123.50	0.00	100
			USD	183.97	(126.32)	58.88	1.23	0.00	0.00	18.51	1.09	17.42	0.00	
16	Novelis South America Holdings LLC *	USA	INR	0.01	(0.01)	-	-	-	-	-	0.00	-	-	100
			USD	0.00	(0.00)	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	
17	Novelis (India) Infotech Ltd.	India	INR	1.00	1.05	2.36	0.31	-	0.06	0.27	(0.01)	0.28	-	100
18	Novelis Corporation (Texas) *	USA	INR	-	(6,660.56)	36,817.32	43,477.89	-	31,415.09	1,142.89	253.50	889.38	-	100
			USD	0.00	(884.03)	4,886.63	5,770.66	0.00	4,430.95	161.20	35.76	125.44	0.00	
19	Novelis de Mexico SA de CV *	Mexico	INR	0.05	(0.05)	-	-	-	-	-	0.00	-	-	100
			USD	0.01	(0.01)	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	
20	Novelis do Brasil Ltda. *	Brazil	INR	1,388.71	3,670.33	11,814.70	6,755.66	-	13,370.30	2,592.31	1,291.57	1,300.74	-	100
			BRL	958.53	2,533.37	8,154.86	4,662.96	0.00	7,737.05	1,500.10	747.40	752.71	0.00	
21	Novelis Korea Limited *	Korea	INR	108.41	3,231.60	8,533.25	5,193.24	0.00	13,036.27	463.30	121.43	341.87	0.00	100
			KRW	17,536.00	5,22,740.00	13,80,329.00	8,40,053.00	0.00	21,73,599.00	77,248.00	20,246.00	57,002.00	0.00	

Figures INR in Crore & Foreign Currency in Million

Sr. No.	Name of the Subsidiary Company	Investments												
		Country	Reporting currency	Capital	Reserves	Total Assets	Total Liabilities	Shares, Debnture, Bonds & Others	Turnover/ Revenues	Profit/ (Loss) before Tax	Provision for Tax	Profit/ (Loss) after Tax	Proposed Dividend	% of Share Holding
22	Novelis UK Ltd. *	England	INR	1,367.16	1,007.73	3,153.93	779.03	-	3,346.03	99.35	7.47	91.88	-	100
			GBP	146.10	107.69	337.03	83.25	0.00	371.20	11.02	0.83	10.19	0.00	
23	Novelis Services Limited *	England	INR	1,514.47	2,229.08	3,751.30	7.75	-	239.99	262.06	22.48	239.58	-	100
			USD	201.01	295.86	497.90	1.03	0.00	33.85	36.96	3.17	33.79	0.00	
24	Novelis Deutschland GmbH *	German	INR	1,001.67	37.07	6,865.49	5,826.75	-	21,048.22	181.79	0.00	181.79	-	100
			EUR	120.80	4.47	827.94	702.67	0.00	2,671.71	23.08	0.00	23.08	0.00	
25	Novelis Aluminium Beteiligungs GmbH *	England	INR	0.21	0.18	0.39	-	-	-	(0.00)	-	(0.00)	-	100
			EUR	0.03	0.02	0.05	-	-	-	(0.00)	-	(0.00)	-	
26	Novelis Switzerland SA *	Switzerland	INR	39.08	3,385.25	4,598.37	1,174.04	0.00	5,055.07	106.13	22.78	83.35	0.00	100
			CHF	5.00	433.07	588.26	150.19	0.00	703.06	14.76	3.17	11.59	0.00	
27	Novelis Laminés France SAS *	France	INR	25.71	26.20	54.14	2.23	-	4.71	0.20	0.11	0.09	-	100
			EUR	3.10	3.16	6.53	0.27	0.00	0.60	0.03	0.01	0.01	0.00	
28	Novelis Italia SPA *	Italy	INR	446.59	53.77	1,106.68	606.32	-	1,837.80	(26.68)	0.59	(27.27)	-	100
			EUR	53.86	6.48	133.46	73.12	0.00	233.28	(3.39)	0.07	(3.46)	0.00	
29	Novelis Aluminium Holding Company *	Ireland	INR	1,800.22	488.85	7,163.83	4,874.75	-	204.18	(6.47)	113.49	(119.96)	-	100
			EUR	217.10	58.95	863.92	587.87	0.00	25.92	(0.82)	14.41	(15.23)	0.00	
30	Novelis PAE SAS *	France	INR	33.50	93.21	222.93	96.22	-	113.90	5.29	0.95	4.34	-	100
			EUR	4.04	11.24	26.88	11.60	0.00	14.46	0.67	0.12	0.55	0.00	
31	Novelis Europe Holdings Limited *	Wales	INR	369.91	1,887.13	5,688.11	3,431.07	-	-	(327.01)	0.00	(327.01)	-	100
			USD	49.10	250.47	754.96	455.39	0.00	0.00	(46.12)	0.00	(46.12)	0.00	
32	Novelis AG (Switzerland) *	Switzerland	INR	7.82	1,521.14	7,028.70	5,499.75	-	5,827.93	105.63	0.61	105.02	-	100
			CHF	1.00	194.60	899.17	703.57	0.00	810.55	14.69	0.08	14.61	0.00	
33	Novelis Holdings Inc. *	USA	INR	0.00	1,362.70	2,503.21	1,140.51	-	-	(550.69)	(81.49)	(469.19)	-	100
			USD	0.00	180.87	332.24	151.38	-	-	(77.67)	(11.49)	(66.18)	-	
34	8018227 Canada Inc. *	France	INR	0.00	(684.55)	1,911.20	2,554.09	0.00	0.00	(33.13)	6.07	(39.20)	0.00	100
			USD	0.00	(90.86)	253.67	344.53	0.00	0.00	(4.67)	0.86	(5.53)	0.00	
35	Novelis Acquisitions LLC *	USA	INR	-	-	(0.00)	(0.00)	-	-	-	0.00	-	-	100
			USD	0.00	0.00	(0.00)	(0.00)	0.00	0.00	0.00	0.00	-	0.00	
36	Novelis Sheet Ingot GmbH (Germany) *	German	INR	165.85	-	1,370.57	1,204.72	-	680.47	(33.11)	0.00	(33.11)	-	100
			EUR	20.00	0.00	165.28	145.28	0.00	86.37	(4.20)	0.00	(4.20)	0.00	
37	Novelis MEA Ltd (Dubai) *	USA	INR	6.87	427.65	1,124.75	690.22	-	3,322.08	247.56	0.00	247.56	-	100
			USD	0.91	56.76	149.28	91.61	0.00	468.56	34.92	0.00	34.92	0.00	
38	Novelis (Shanghai) Aluminum Trading Company *	China	INR	23.56	98.17	131.62	9.88	-	50.95	5.00	1.45	3.55	-	100
			CNY	22.14	92.29	123.72	9.29	0.00	50.06	4.92	1.42	3.49	0.00	
39	Novelis (China) Aluminum Products Co. Ltd. *	China	INR	901.36	214.95	2,485.60	1,369.29	-	1,448.63	149.23	37.55	111.68	-	100
			CNY	847.31	202.06	2,336.55	1,287.18	0.00	1,423.26	146.62	36.90	109.72	0.00	
40	Novelis Vietnam Company Limited (Vietnam) *	Vietnam	INR	6.62	25.72	43.88	11.53	0.00	0.00	(3.93)	(0.03)	(3.97)	0.00	100
			VND	20,820.00	80,873.89	1,37,955.88	36,261.99	0.00	0.00	(12,941.02)	113.64	(13,054.66)	0.00	

Figures INR in Crore & Foreign Currency in Million

Sr. No.	Name of the Subsidiary Company	Country	Reporting currency	Capital	Reserves	Total Assets	Total Liabilities	Investments: Shares, Debnture, Bonds & Others	Turnover/ Revenues	Profit/ (Loss) before Tax	Provision for Tax	Profit/ (Loss) after Tax	Proposed Dividend	% of Share Holding
41	Novelis Services (North America) Inc. *	USA	INR	0.00	0.00	0.04	0.04	0.00	0.00	0.00	0.00	-	0.00	100
			USD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	
42	Novelis Services (Europe) Inc. *	USA	INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	100
			USD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	
43	Brecha Energetica Ltda *	Brazil	INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	99.99
			BRL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	
44	Novelis Global Employement, Organization, Inc	USA	INR	2.45	(0.11)	28.74	26.40	-	-	0.73	0.15	0.57	-	100
			USD	0.33	(0.01)	3.81	3.50	0.00	0.00	0.10	0.02	0.08	0.00	
45	Hindalco Do Brazil Industria Comercia de Alumina LTDA	Brazil	INR	1,037.66	(953.95)	235.36	151.66	-	288.81	(56.95)	0.00	(56.95)		100
			Reais	26.48	(24.35)	6.01	3.87	0.00	9.94	(1.96)	0.00	(1.96)		

Deutsche Aluminium Verpackung Recycling GmbH

France Aluminium Recyclage SA

Subsidiary of AV Minerals (Netherlands) N.V.

Subsidiary of AV Metals Inc.

@ Subsidiary of Utkal Alumina Interanational Limited

% De-registered/Dissolved/Liquidated etc.

$ Under Liquidation

* Balance sheet items are translated at closing exchange rate and Profit/(Loss) items are translated at average exchange rate.

{} For Indian Entities Revenue includes Turnover + Other Income

List of Subsidiaries which have been liquidated / amalgameted / sold during FY 19-20
NA

From Ccy	To Ccy	Avg spot rate for the year	Closing rate for 31st March 2019
AUD	INR	48.3164	46.2455
BRL	INR	17.2809	14.4879
CAD	INR	53.3089	53.3969
CHF	INR	71.9006	78.1688
CNY	INR	10.1783	10.6379
EUR	INR	78.7817	82.9225
GBP	INR	90.1416	93.5798
JPY	INR	0.6522	0.6995
NOK	INR	7.8663	7.2373
SEK	INR	7.4030	7.5807
SGD	INR	51.6894	52.9969
ZAR	INR	4.8020	4.2318
KRW	INR	0.0600	0.0618
VND	INR	0.0030	0.0032
USD	INR	70.8991	75.3430

From Ccy	To Ccy	Avg spot rate for the year	Closing rate for 31st March 2019
BRL	USD	0.2440	0.1923
CHF	USD	1.0151	1.0375
CNY	USD	0.1436	0.1412
EUR	USD	1.1113	1.1006
GBP	USD	1.2716	1.2421
JPY	USD	0.0092	0.0093
SEK	USD	0.1044	0.1006
SGD	USD	0.7292	0.7034

List of Subsidiaries which are yet to commence operations.
East Coast Bauxite Mining Co.Pvt.Ltd

Part "B" Statement pursuant to Section 129 (3) of the Companies Act, 2013 related to Associate Companies and Joint Ventures

Sr. No.	Name of Associates / Joint Ventures	Shares of Associate/Joint Ventures held by the company on the year end				Profit/Loss for the year				
		Latest Audited Balance Sheet Date	Number of shares	Amount of investment (₹ in crore)	Extent of Holding% attributable	Networth to Shareholding as per latest audited balance sheet (₹ in Crore)	Considered in consolidation (₹ in Crore)	Not considered in consolidation	Description of how there is significant influence	Base on why the associate/ joint venture is not considered
Associates										
1	Aditya Birla Science and Technology Company Private Limited	31-Mar-20	98,00,000	9.80	49.00	18.38	3.43		Note A	
2	Aditya Birla Renewables Subsidiary Ltd	31-Mar-20	68,95,200	6.90	26.00	6.34	(0.69)		Note A	
3	Aditya Birla Renewable Utkal Limited (ABRUL)	31-Mar-20	12,74,000	1.27	26.00	1.30	0.01		Note A	
4	Associates of Novelis Inc.@	31-Dec-19	3,001.00	2.09		(1.62)	(0.01)			
Joint Ventures										
1	Hydromine Global Minerals (GMBH) Limited	31-Mar-18	66,562	1.37	45.00	30.45			Note B & C	
2	MNH Shakti Limited	31-Mar-20	1,27,65,000	12.77	15.00	13.41	0.82		Note C	
Joint Operations										
1	Mahan Coal Limited	31-Mar-20	4,12,50,000	19.25	50.00	11.57	1.19			
2	Tubed Coal Mines Limited	31-Mar-20	1,52,96,700	0.00	60.00	1.72	(0.08)			
3	Associates of Novelis Inc. ©		10,041.00	1842.73		(273.32)	15.84			
@ - Associates of Novelis Inc.										
Deutsche Aluminium VerpackungReccling GMBH		31-Dec-19	1	1.72	30%	(1.51)	0.00	Equity		
France Aluminium Recyclage SA		31-Dec-19	3,000	0.37	20%	(0.11)	(0.01)	Equity		
@ - Joint Operations of Novelis Inc.										
Aluminium Norf GmbH		31-Dec-19	1	1	50%	(0)	0	Equity		
Ulsan Aluminium Limited		31-Mar-20	5,000	1,819	50%	37	15	Equity		
Logan Aluminium Inc.		31-Mar-20	40	0.00	40%	(310)	0	Consolidated		
AluInfra Services SA		31-Dec-19	5,000	23	50%	0	0.2	Equity		

Note A: There is significant influence due to percentage holding of share capital

Note B: Non-availability of financial statements

Note C: The Group has joint control over the joint arrangements

For and on behalf of the Board of Hindalco Industries Limited

Praveen Kumar Maheshwari
Whole-time Director & Chief Financial Officer
DIN-00174361

Satish Pai
Managing Director
DIN-06646758

Anil Malik
Company Secretary

K N Bhandari
Director
DIN-00026078

Place : Mumbai
Dated : June 12, 2020

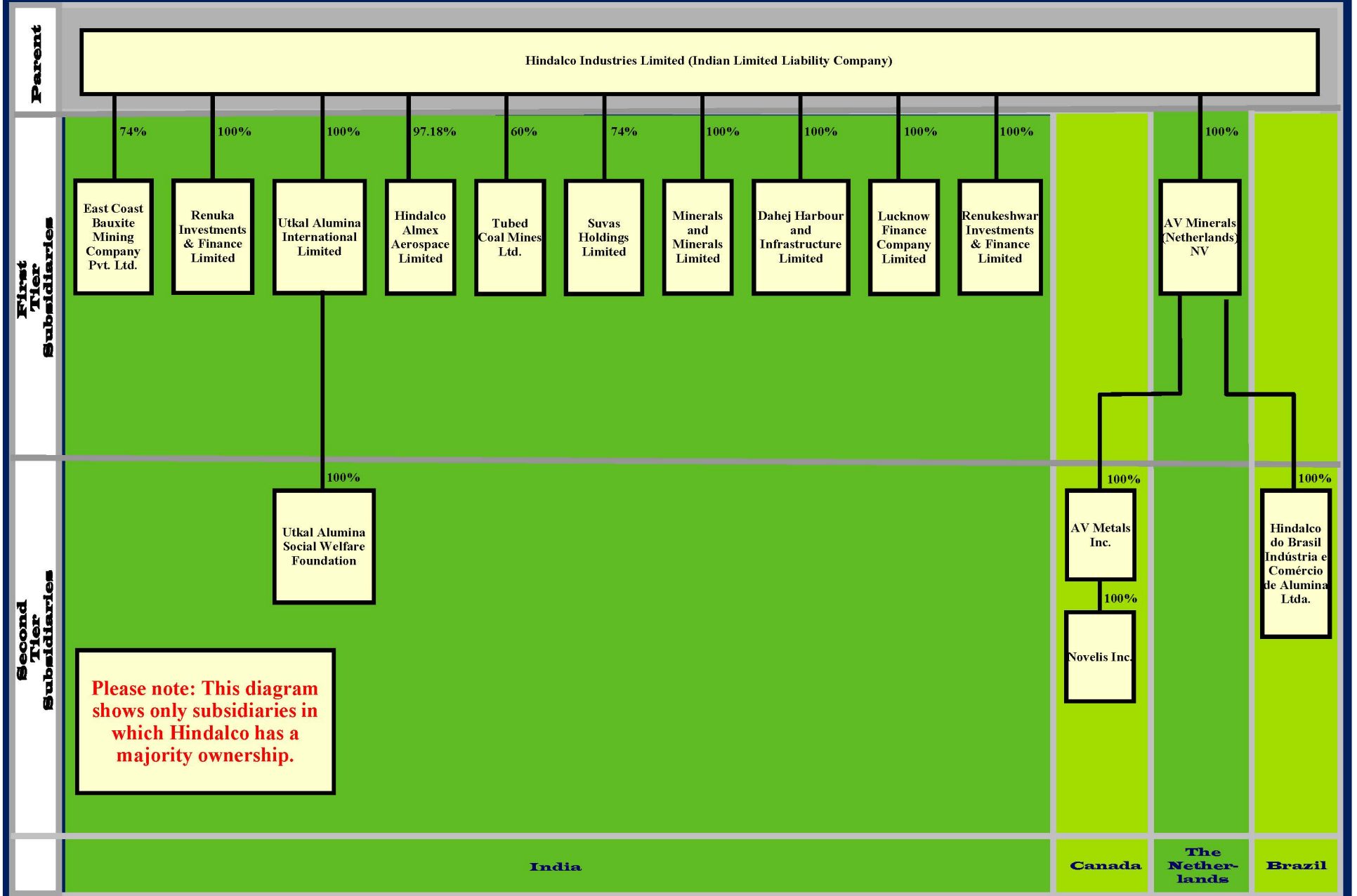
GLOSSARY OF TERMS

$	–	United States Dollar
ABG	–	Aditya Birla Group
Al/AL	–	Aluminium
BEE	–	Bureau of Energy Efficiency
Bn	–	Billion
CAGR	–	Compounded Annual Growth Rate
CCR	–	Copper Continuous Cast Rods
CII	–	Confederation of Indian Industry
CIL	–	Coal India Limited
CSR	–	Corporate Social Responsibility
Cu	–	Copper
CY	–	Calendar Year
DAP	–	Di Ammonium Phosphate
EBITDA	–	Earnings Before Interest, Tax, Depreciation and Amortisation
EV	–	Electric Vehicles
FICCI	–	Federation of Indian Chambers of Commerce & Industry
FRP	–	Flat Rolled Products
FY	–	Financial Year
GHG	–	Green House Gas
GJ/t	–	GigaJoule
GW	–	Giga Watt
HIL	–	Hindalco Industries Limited
HR	–	Human Resource
IIT	–	Indian Institute of Technology
kA	–	Kilo Ampere
Kt	–	Kilo Tonnes
LME	–	London Metal Exchange
LTISR	–	Loss Time Injury Severity Rate
M^3/t	–	Cubic Meters per tonne
Mn	–	Million
Mtpa	–	Million Tonnes per Annum
Mt	–	Million Tonnes
MW	–	Mega Watt
PAT	–	Profit After Tax
PBT	–	Profit Before Tax
R&D	–	Research & Development
SWOT	–	Strength, Weakness, Opportunities and Threats
Tc/Rc	–	Treatment Charge and Refining Charge
US	–	The United States of America
VAP	–	Value Added Products
IMF	–	International Monetary Fund
GDP	–	Gross Domestic Product
NITI	–	National Institute for Transforming India
JNARDDC	–	Jawaharlal Nehru Aluminium Research Development and Design Centre
IMMT	–	Institute of Minerals and Materials Technology
ARAI	–	Automobile Research Association of India
ISRO	–	Indian Space Research Organisation
EPS	–	Earning per Share
ZLD	–	Zero Liguid Discharge
DSIR	–	Department of Scientific & Industrial Research
M&A	–	Mergers and Acquisitions
WAH	–	Women's Conclave for Hindalco
HTU	–	Hindalco Technical University
AR	–	Augmented Reality
VR	–	Virtual Reality
AI	–	Artificial Intelligence
INCAL	–	International Conference on Aluminium and Exhibition
MoU	–	Memorandum of Understanding
HFQ	–	Hot Form Quench
RAV	–	Recreational Active Vehicle
SG&A	–	Selling General and Administrative
NPS	–	Net Promoter Score
OTIF	–	On time in Full
SME	–	Small and Medium Enterprises
SDG	–	Sustainable Development Goals
CIGRE	–	Conseil International des Grands Réseaux Électriques
UNDP	–	United Nations Development Programme
NAMC	–	National Award for Manufacturing Competitiveness

Notes

Hindalco Corporate Structure Diagram

thinking ©2020



March 2020

Hindalco Industries Limited

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Tel: (91-22) 6691 7000 I Fax: (91-22) 6691 7001
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CIN No. L27020MH1958PLC011238

21st August, 2020

BSE Limited Phiroze Jeejeebhoy Towers Dalal Street Mumbai: 400 001 **Scrip Code: 500440**	**National Stock Exchange of India Limited** Exchange Plaza, 5th Floor Plot No. C/1, G Block Bandra Kurla Complex Bandra (East) Mumbai – 400 051 **Scrip Code: HINDALCO**
Mr. Daniel Schammo Banque Internationale A Luxembourg Societe Anonyme, 69, Route d'Esch L-2953 Luxembourg Fax No. 00 352 4590 2010 Tel. No. 00 352 4590-1	

Sub: Sustainability report of Hindalco Industries Limited ('the Company')

Ref: Regulation 30 of Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 ('Listing Regulations')

Dear Sir/ Madam,

Pursuant to Regulation 30 of Listing Regulations, please find attached the Sustainability report for the FY 2019-20 of the Company.

Achieving another milestone in its journey towards sustainable development, the Company is releasing 10th Sustainability report for FY 2019-20. The report showcases an overview of Hindalco's sustainability performance and plans. The report is prepared in accordance with the GRI Standards – Comprehensive Option and is aligned with key global reporting standards and frameworks such as UNGC and SDGs.

The theme of the report entitled 'Building a Resilient, Responsible and Reliable future' describes its journey on the path of transformation while focussing on key areas of stakeholder engagement, environment stewardship, responsible mining, community development, health & safety and product development. Hindalco's sustainability report is an effort towards long-term value creation and demonstrates its commitment towards its people, communities and the environment.

Following are key highlights of the report:

- Achieved 66% of bauxite residue utilisation across three out of its four plant locations and a cumulative 27% utilisation considering all four plant locations.
- Reduction of 15% in specific GHG emissions of aluminium operations with respect to the base year of FY 2010-11.
- Rainwater harvesting of 9.4 million M3 during FY 2019-20.
- Formation of special task forces for water and waste management to strengthen approach towards water and waste related risk management.
- Commissioning of 15.2 MW renewable power generation capacity, taking cumulative installed renewable energy capacity to 45.2 MW during FY 2019-20.
- By way of its community-led initiatives, Hindalco made a difference to the lives of 1.13 million people from 714 villages across 11 Indian states through its strategic focus areas of education, healthcare, social reforms, sustainable livelihood and infrastructure.
- Hindalco's workforce comprises of 6.81% of females at its management positions reiterating its commitments towards gender inclusivity.
- Launched India's first all-aluminium freight trailer, thereby providing a sustainable alternative to the logistic industry.
- Launched aluminium foil-laminated jute bag substituting plastic bags used at Tirumala Tirupati Devasthanams (TTD), Andhra Pradesh for carrying prasadam. This added to its innovative range of value-added product portfolio.
- As a response to the global COVID-19 pandemic, Hindalco undertook several measures such as providing the employees remote working options, sanitising and cleaning workplaces and spreading awareness among its communities. In order to continue the supply of essentials to the people, some of the plants were kept functional thereby serving its people during these critical times of need.

The above is for your information and record.

Thanking you

Yours faithfully

For HINDALCO INDUSTRIES LIMITED

ANIL MALIK
President & Company Secretary
Encl: as above

ADITYA BIRLA

HINDALCO

Building a Resilient, Responsible and Reliable Future

Sustainability Report FY 2019-20

Transforming towards a Resilient, Responsible and Reliable Future

We, at Hindalco, are on a path of transformation. As stakeholder expectations evolve and resources become scarce, adopting sustainable business practices has become an imperative to future-proof the Company.

We operate with an integrated business model, ranging from bauxite and coal mining to the production of value-added aluminium and copper products. This involves exposure to an ever-evolving business environment at both national and global levels. Considering these variations in the business environment, we have continued our focus on strengthening systems and frameworks. This helps us in improving the business performance, while developing resilient corporate governance and risk management practices.

Since we belong to a resource-intensive industry involving complex operations, the focus on environment, society, and health and safety is of paramount importance for us. We understand our responsibility in addressing the environmental and social impacts of our operations and take necessary steps to minimise them. In order to ensure a safe workplace, we constantly strive to improve our health and safety performance. Our initiatives in the areas of environment, community stewardship, and health and safety as outlined in this report demonstrate our approach towards operating in a responsible manner.

Our operations are supported by strong employee-centric policies catering to the needs and requirements of our workforce, consisting of 23,751 permanent employees. In addition to this, our focus on research and development, customer centricity and efficient supply chain operations has contributed to us becoming a reliable organisation.

This report presents an outline of the initiatives and efforts undertaken on our path of transformation towards a resilient, responsible and reliable future.

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Message from the Chairman

The world is at a stage where industrial growth needs to be synonymous with sustainable development. In the last few years, industries across the globe have stepped up and synergised their efforts to address the pressing issues of climate change and resource criticalities.

We recognise the challenges ahead of us, as the world deals with the COVID-19 pandemic and its impact on global economies. We are confident our Resilience-backed business operations and Responsible business strategy will help us embrace the changing world and emerge a winner through these critical times. At Hindalco, development of sustainable business practices with increased environmental accountability has been a consistent priority.

Changing business dynamics and evolving customer needs call for agile and creative actions. For Hindalco, innovation forms the backbone of all its business endeavours. This is evident in the way we have continually built up our range of value-added products portfolio globally, a vertical that contributes strongly to our organic growth.

In our efforts to reduce environmental footprints, Hindalco aligns its sustainable initiatives with the UN Sustainable Development Goals (SDGs). We operate with a sense of responsibility towards our communities and actively mitigate the impact of our resource-intensive operations on the surroundings. Our community-led initiatives are aimed at sustainable socioeconomic development of underserved and underprivileged communities.

It is a matter of pride for Hindalco to be honoured with the National CSR Award this year for its contribution in the domains of skill development and livelihoods. It reaffirms our belief in our core value of giving back to society, and strengthens our commitment towards building a Resilient, Responsible and Reliable future.

Hindalco's 10th sustainability report presents the progress of its sustainability initiatives in FY 2019-20. Our belief and efforts have brought us a long way and we aim to set a benchmark for the industry through exemplary business practices. Sustainable development is a long-term mission, and we will continue our journey with a promise of building a Greener, Stronger and Smarter world.

Kumar Mangalam Birla
Chairman

About the Report

This is the 10th Sustainability Report of Hindalco Industries Limited, covering reporting period from 1st April, 2019 to 31st March, 2020. This report has been prepared in accordance with the GRI Standards: Comprehensive option. The reporting principles therein have been applied to define the content and quality of the report to align with GRI Standards. All disclosures have been reported as per GRI Standards 2016, except for GRI 303: Water and Effluents and GRI 403: Occupational Health and Safety for which 2018 standards have been referred. This report is also aligned with the Government of India's National Voluntary Guidelines (NVGs) for responsible businesses and the principles of the United Nations Global Compact (UNGC).

Through this report, we provide a brief summary of our sustainability approach and the initiatives we have taken in the reporting period. We have also presented our goals for the coming years.

The report covers our India operations, including the aluminium, copper and mining businesses. Indian operations contribute 34% to our total revenue. Our wholly owned subsidiary, Novelis, publishes its own sustainability report with material topics specific to its operations, and has therefore been omitted from the boundary of this report. Novelis contributes 66% to our total revenue, as per the FY 2019-20 consolidated financial statement.

This report has been independently assured by Ernst & Young Associates LLP. The assurance is based on International Standard on Assurance Engagements (ISAE) 3000 and AccountAbility 1000 Assurance Standard (AA1000AS) 2008. The Assurance Statement is provided as part of this report.

We publish our sustainability reports annually. All our sustainability reports, including the most recent one published in July 2019, are available on our website http://www.hindalco.com/sustainability/sustainabilityreport. We welcome any feedback on the content and approach of this report at hindalco.sustainability@adityabirla.com

Message from the Managing Director

Hindalco's business strategy is to create value sustainably and operate responsibly. Our focussed approach towards sustainability is backed by strong policies and institutional frameworks that help us track our progress, fuel innovation and build strong ties with stakeholders. This is our Resilient, Responsible and Reliable model, and we present our progress in the Annual Sustainability Report for FY 2019-20.

Our approach towards responsibility and future-proofing is exemplified in how we deal with tough issues. During April 2019, we faced a challenging situation with an incident of bauxite residue (red mud) spillage at our storage facility in Muri, Jharkhand. Within a very short span of time, our team at the site was able to clear more than 0.75 million MT of bauxite residue. We carried out a detailed investigation to gauge the impact of the incident on the environment. Expert inputs were taken to develop a robust plan to prevent future incidents.

Bauxite residue disposal is a challenge and concern globally, and we have been exploring solutions to the issue. We are driving a collaborative solution that can reduce environment load and create value for the bauxite residue. We now supply bauxite residue to 40 cement plants in India, where it replaces mined minerals such as laterite and lithomarge. We are the first aluminium company in the world to have enabled such large-scale commercial application for bauxite residue.

Another example of our sustainability thinking is our proactive and pioneering development of all-aluminium commercial vehicles for the logistics and freight industries. In FY 2019-20, we launched India's first all-aluminium freight trailer, which is a big draw because of its light weight, fuel-saving, low maintenance and low life-cycle cost benefits. An interesting sidebar is our focus on reducing plastic waste -- we launched India's first aluminium foil-laminated jute bag to replace the thousands of plastic bags used at Tirumala Tirupati Devasthanams (TTD), Andhra Pradesh.

In early 2020, the COVID-19 pandemic placed nations, societies and industries across the globe under pressure from an unprecedented crisis. We were prompt in implementing a series of measures to protect the safety and health of our 54,118-strong workforce, and our communities. These included providing the work-from-home option to a majority of the employees in our metropolitan offices, running our plant operations with reduced staff capacity, instituting virtual meetings, and ensuring regular and rigorous cleaning and sanitisation of all our locations. We also took on the responsibility of sanitising villages around our plants, providing health support and supplying essentials to communities through our CSR teams.

The criticality of our aluminium metal supplies to the pharma and other essential industries made it necessary for us to keep some plants running, despite severe operational challenges of the lockdown. Our plants ran with specific permissions from authorities, and with all necessary safety precautions in place. Our courageous Hindalco warriors were at the forefront of this battle. They kept going against all odds, and we are proud of them.

During the reporting period, our India operations delivered a steady performance with full-year revenue of INR 40,324 crore, EBITDA of INR 5,483 crore and Profit After Tax of INR 958 crore. The India business achieved record aluminium metal production of 1.31 million tons and record Continuous Cast (CC) copper rods production of 0.263 million tons.

Our business strategies backed by a strong R&D team with technical expertise have enabled us to cater to emerging market needs through our advanced product development approach. We have built strong customer relationships through after-sales services for our B2B segment products. Going ahead, we plan to strengthen our profile in downstream products. Our acquisition of aluminium rolled products maker, Aleris Corporation, is a big step in this direction, as it raises our profile as the world's biggest aluminium value-added player in the world.

Beyond business, our social investments have led us to touch the lives of 1.13 million people belonging to 714 villages in 11 Indian states.

Our journey of clean and responsible manufacturing includes several initiatives. We are a part of Xynteo - a Norway-based environmental advisory platform - that helps us partner with several industry leaders globally to consolidate our efforts towards sustainable development.

With resource-intensive operations, we are aware of our impacts on the environment and strive to ensure that our approach is environmentally responsible. Limited availability of natural resources has led us to take initiatives for water and energy conservation to the next level. For instance, we have achieved Zero Liquid Discharge (ZLD) for 11 of our 15 manufacturing plants, with the remaining four plants well on their way. We are adopting renewables by commissioning around 15.2 MW of renewable energy projects during the reporting period and aim to install a 100 MW solar plant by FY 2020-21.

Employees constitute one of the strongest pillars of our business. We continue to focus on our talent management process, with initiatives towards workplace diversity, equal opportunity and overall well-being of our employees. We aim to bridge the gender gap at our workplace by bringing more women employees on board. During the reporting period, women constituted 6% of our management and staff employees.

Beyond business, our social investments have led us to touch the lives of 1.13 million people belonging to 714 villages in 11 Indian states. Our CSR spend for FY 2019-20 stands at INR 38.53 crore, and our CSR strategies are aligned with the UN Sustainable Development Goals. We were indeed proud to receive the Government of India's National CSR Award in recognition of our initiatives in skilling and livelihoods.

We believe recognition of our sustainability initiatives has helped us secure the third position among Materials Sector-Aluminium Industry peers, as we debuted in the Dow Jones Sustainability Emerging Markets Index 2019 edition. This has also helped us identify areas that require attention.

I would like to thank our team for performing to the best of their abilities and contributing to our continuous and all-inclusive growth. I believe our holistic commitment towards people, environment and business will carry us forward towards a Responsible, Resilient and Reliable future.

We are pleased to share our FY 2019-20 Sustainability Report with you and welcome your feedback and suggestions.

Satish Pai
Managing Director

Message from Chief Sustainability Officer

With a constantly evolving market landscape and disruptive challenges being faced by businesses across the globe, importance of incorporating sustainable practices in all aspects of business decisions, across the value chain, has been increasing every day. Transitioning to a sustainable business has become central to Hindalco's business strategy over last many years.

As we move forward on path of transformation towards a Resilient, Responsible and Reliable future, Hindalco's approach encompasses several focus areas - responsible mining operations, resource conservation in operations, innovative product development, upliftment of local communities, further empowering our employees, among others. We have been working to integrate sustainability into every facet of our operations. To do so, we place utmost emphasis on understanding and meeting stakeholder expectations. In our process to safeguard the interests of our stakeholders, we engage with them through various platforms and modes, on a regular basis. We used the findings from these interactions to arrive at the material issues and these have helped us shape our business goals. Further, we have redefined our sustainability SOPs wherein we increased involvement of our leadership in the decision-making processes to strengthen our sustainability efforts. As a result of our efforts, we were able to make it to DJSI Emerging Markets Index as part of DJSI Corporate Sustainability Assessment 2019. We are now at 3rd position Globally and the only company from India to have achieved this benchmark in Materials Sector - Aluminium Industry.

As a responsible corporate citizen, we aim to minimise the impacts of our resource-intensive operations on the environment at every key step. We are equally focused on all aspects pertaining to our environmental stewardship agenda, such as energy & emissions management, water conservation, waste management and biodiversity. Our efforts towards effluent management have helped 11 of our 15 manufacturing plants achieve zero liquid discharge (ZLD) status. We also have dedicated task forces in place for waste and water management initiatives at each plant. Formation of these task forces involve employees from each unit separately thereby driving collective efforts at every stage of operation. These task forces are responsible for streamlining the efforts focusing both on resource conservation and risk mitigation processes.

At Hindalco, service to our people and society is central to our value system. To contribute towards bridging the socioeconomic gap, we have taken a strategic approach to our corporate social responsibility (CSR) initiatives. Our community development programmes span across five focus areas of education, healthcare, social reform, sustainable livelihoods and infrastructure. Our efforts in the areas of skill development and livelihood generation, having been recognised nationally under the CSR category, are testament to our perennial efforts of serving underserved and underprivileged communities.

Further, in our efforts to build a resilient future, we offer a wide range of innovative products to meet the expectations of our customer base globally. Our recent launch of India's first all-aluminium freight trailer has provided the logistics industry with an innovative transport solution with much lower carbon footprint as compared to the conventional freight trailers.

Our goal of being a reliable employer remains a priority, with commitment to human capital deemed as one of our biggest assets. Our workforce policies not only help us nurture inclusive growth, but also empower employees by creating sustainable livelihood opportunities through skill development and training initiatives.

Our workforce policies not only help us nurture inclusive growth, but also empower employees by creating sustainable livelihood opportunities through skill development and training initiatives.

Taking a holistic business approach, we aim to build resilience through our risk management frameworks to mitigate business, environmental and operational risks. This robust and resilient structure, built through our expertise and experience, will help us become a greener, stronger and smarter organisation. Furthering our efforts towards this end, we continue to serve the country during these critical times of the global COVID-19 pandemic, which has affected people and economies the world over. Despite a country-wide lockdown, Hindalco resumed its operations to continue supplying essential products, such as packaging material for medicines.

Viewing every aspect through a sustainability lens has set us on a path of transformation towards a resilient, responsible and reliable tomorrow. With a promise to continue on this journey, we bring to you our 10th annual Sustainability Report, showcasing our progress and improvements on this front.

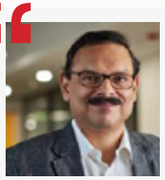
We look forward to your feedback and suggestions.

Deeksha Vats
Chief Sustainability Officer
Aditya Birla Group

Leaders Speak

With focus on value creation for our stakeholders, we aim at leveraging sustainability initiatives to improve business performance through robust risk management, productivity of capital and growth through innovation and digitization. In the process of moving towards a resilient, responsible and reliable future, we are committed to support the decision making process by enhancing business intelligence systems, quality risk reward analysis and other relevant analytical tools.

Praveen Maheshwari
Chief Financial Officer and CEO (Copper Business)



At Hindalco we are committed to a culture that supports a Responsible, Reliable and Resilient business through empowered, capable and responsible people who deliver consistent results in all situations. Responsibility starts with living up to our ABG Values of Integrity, Commitment, Passion, Speed and Seamlessness. We expect and encourage employees to manage their time effectively and to ensure that they consistently get work done to agreed quality and deadlines at the least possible cost. We also expect employees to take initiative and be trusted to work on their own without constant supervision. We believe that the true measure of any leader or manager is his or her ability to act based on knowledge, past experience and gut feelings, respond in real time to current circumstances, and then to recover quickly and move on with new lessons learned. Our performance management and reward systems and processes measure and reward the above behaviours

Samik Basu
Chief Human Resource Officer, Hindalco

Manufacturing Centre of Excellence has selected appropriate technologies for SO_x and NO_x reduction in Hindalco. These projects are being implemented progressively in various power plants. Technological solutions for bauxite residue utilisation in cement plants and mine backfilling are other areas where we are partnering with private companies and Government agencies. These steps are going to mitigate risks in alumina production. In smelters, we are implementing in-house technologies to reduce energy intensity in aluminium production. We are systematically increasing our non-carbon energy portfolio with projects that harness energy from solar and hydrocarbon resources.

Bibhu Mishra
Head - Manufacturing Centre of Excellence, Hindalco

Our mining operations are committed towards the guiding principles of Sustainable Mining initiatives through development of sustainable mining charter with focus on sustainable land use, water stewardship, emission reductions, biodiversity management, local economic development, health and safety, and waste management.

Pramod Unde
Senior President - Mining and Minerals, Hindalco

As a leading player in aluminium we are committed to promote the adoption and use of aluminium for light-weighting, packaging, electrical applications in key segments like transportation, power and pharmaceuticals - which in in line with our philosophy of sustainable growth. Usage of aluminium for light-weighting for example, will lead to lower consumption of fossil fuels and while consuming a perennially recyclable resource.

Devotosh K Das
Chief Marketing Officer (Aluminium), Hindalco

To survive and thrive in a VUCA world, Hindalco needs to build RESILIENCE to face adversities and crisis. To achieve this, we must build capability to:

- *REDUCE unfavourable events by taking clues from leading indicators and proactively acting on it*
- *Be better prepared to RESPOND to crisis and disasters when they occur*
- *RECOVER from such disasters and continue operations with minimal or no interruption*

The Risk Management team is committed to build resilience through Enterprise Risk Management, Crisis Management and Business Continuity Management

Anil Mathew
Chief Risk Officer, Hindalco

At Hindalco Chemicals, we are committed to a Responsible, Reliable and Resilient future for Hindalco by manufacturing Alumina and Hydrates that help our customers have the leading edge in making water potable, in electrification of the nation, in producing steel and other materials efficiently and in offering smarter solutions to electronics, all doing so by efficiently managing the by-products and taking care of the environment.

A Krishna Kumar
Head - Chemicals, Hindalco

Laws and regulations are dynamic. So is technology, macro/micro economic scenario and market demand/ needs. To ensure business keeps pace with these changes and needs, change in laws and regulations or seeking proactive intervention from the Central/State Governments on policy issues, it is important for the legal and advocacy to play a head start role. Anticipating and acting quickly is the key.

VR Shankar
Chief Legal Officer, Hindalco

Hindalco Downstream is committed to Sustainable Growth of the Business with 3R philosophy. Aluminium Downstream focuses on Energy and Water Conservation. Taloja plant started receiving power from the 4 MW Hydroelectric Power station which is a Joint Venture between Hindalco and a partner. This serves about 15% of Taloja's Power requirement. Alupuram plant is expanding its Solar Power capacity from 1 MW to 3 MW and the expanded capacity will be commissioned by second quarter of this financial year. This capacity expansion will make this factory 30% dependent on renewable energy. Business will be increasing its renewable energy consumption further. Also several water conservation efforts are yielding results including water harvesting facilities at Mouda and Taloja plants. Downstream business recycles 100% of run around aluminium scrap (RAA) generated during the manufacturing of products in plants . Business is also focussing on collecting process scrap from customers to increase recycling content in products. Last year, Taloja plant collected recycling amounting to 4,316 MT from the customers.

Arun Kumar B
Head - Downstream Operations, Hindalco

Integrating sustainability in our operations, we have continued to achieve newer milestones while transforming towards a Resilient, Responsible & Reliable Future. We started disclosing our sustainability performance in FY 2010-11 and have been on the forefront to align our initiatives with the Sustainable Development Goals (SDGs) to improve our sustainability performance. This has helped us in being transparent with our stakeholders including investors and analysts. The Sustainability Report serves as a platform to share our performance, achievements and best practices on Environment, Social and Governance aspects.

Vaishali Surawar
Head - Sustainability and Environment, Hindalco

Key Highlights

Waste Management

27% of bauxite residue (Red mud) utilised as a raw material for cement and construction industry and which includes 66% of bauxite residue utilised cumulatively at three out of four plant locations.

173% of phosphogypsum re-used for various applications. 100% of phosphogypsum generated in FY 2019 -20, and 73% of previous year's phosphogypsum has been utilised.

135% of copper slag utilised for useful applications. 100% of Copper Slag generated in FY 2019 -20, and 35% of previous year's Copper Slag has been utilised.

Formation of special Waste Management Task Force (WaMTF) for each plant location.

Dow Jones Sustainability Index

Hindalco was able to make it to DJSI Emerging Markets Index and was ranked at 3rd position Globally in Materials Sector - Aluminium Industry.

Water Availability

Zero liquid discharge status achieved at 11 of the 15 operational units.

Special Task Forces for Water Management formed for each plant location.

9.4 million m^3 rain water Harvested in FY 2019-20

Techplast

TECHPLAST (Ready Mix Plaster) is GreenPro IGBC Certified Eco Friendly Product

Energy Security

INR 90.98 crore invested in energy conservation equipment and projects.

Commissioning of 15.2 MW capacity renewable power generation across three locations, taking cumulative installed renewable energy capacity to 45.2 MW.

Reduced specific process energy consumption by 17% in aluminium production, as compared to the base year FY 2011-12.

Emissions

Achieved 15% reduction in specific GHG emissions in aluminium production from the base year of FY 2011-12.

Purchased 3,86,695 Renewable Energy Certificates (REC), equivalent to GHG offset of 3,17,090 tCO_2e.

Reduction in particulate matter emissions by 8.62% from FY 2018-19 with various initiatives including upgrading rectifiers of Electrostatic Precipitator with High Frequency Transformer Rectifier (HFTR)

Community Development

Touched lives of 1.13 million people belonging to 714 villages across 11 Indian states through community led initiatives

Green Belt Development

4,373 acres of green belt developed.

Employee Stewardship

40% female recruitment at GET level

Training hours increased from 45 to 60 hours per employee

Occupational Health & Safety

Developed Fatality Prevention Plan to achieve zero fatalities.

Developed Crisis Management Plan in association with National Disaster Response Force (NDRF).

R&D Innovation & Technology

Launched India's first all-aluminium freight trailer.

Launched India's first aluminium foil-laminated jute bags for Tirumala Tirupati Devasthanams (TTD).

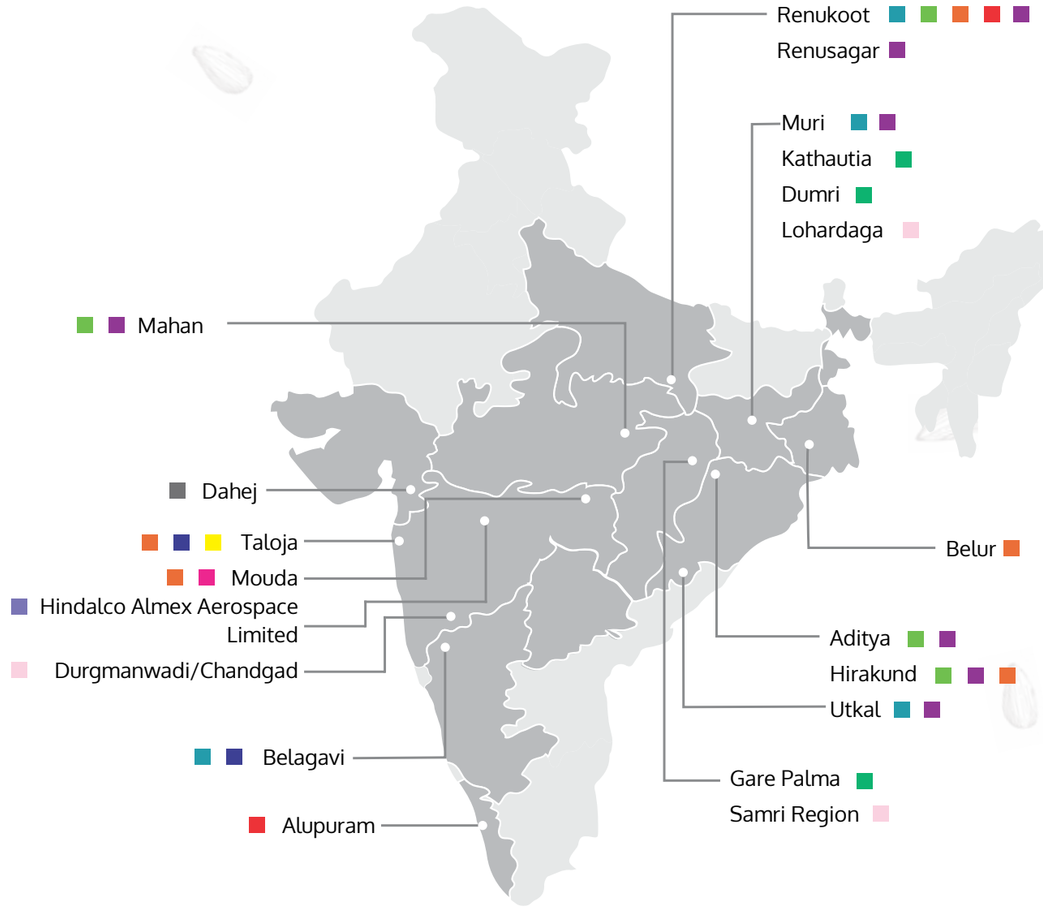
About Hindalco

Hindalco Industries Limited , a flagship company of the Aditya Birla Group (ABG), is an industry leader in aluminium and copper business. Our business is built on our values and guided by our vision to be a global leader in the metals and mining sector, excelling in everything we do and creating value for our stakeholders.

Established in the year 1958, we are the world's largest aluminium rolling company and one of Asia's biggest primary aluminium producers. Headquartered in Mumbai, our mining and manufacturing operations are spread across nine states in India and the global footprint spans 50 units in 11 countries.

VALUES

Geographical Spread of our operations across India



- Alumina Refinery
- Aluminium Smelter
- Aluminium Rolled Products
- Aluminium Extrusion Plant
- Power Plant
- Innovation Centre
- Aluminium Foil Plant
- Recycling Facility
- Coal Mines
- Bauxite Mines
- Integrated Copper Complex
- D. C. Cast Aluminium hard Alloys

Map is not to the scale

Aluminium Business

- One of the top five global aluminium producers.
- Integrated approach, with low-cost base and dynamic presence across the value chain propels diverse aluminium product offerings that include extrusions, flat rolled products, foils, wire rods and billets, among others.
- Customer base spread across the following markets:
  - Automotive and transport
  - Building and construction
  - Defence
  - Electricals and electronics
  - Industrial applications
  - Pharmaceuticals and packaging
  - White goods

Copper Business

- Operate one of the largest single-location customs copper smelters in the world.
- Produce copper cathodes and continous cast copper rods of various sizes.
- Birla Copper manufactures continuous copper rods, copper tubes and other applications in the form of alloys and sheets.
- Markets served by the copper products:
  - Agrochemical
  - Automotive and transport
  - Consumer durables
  - Electrical equipment
  - Railways
  - Wire and cable industry

Our Business Verticals

Chemical Business

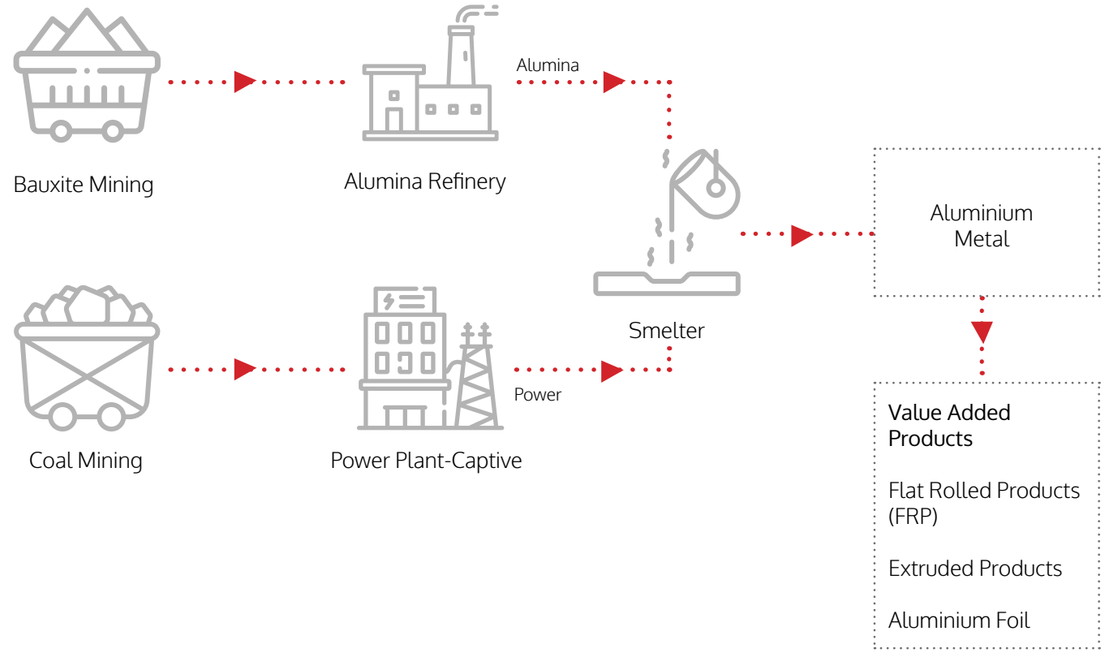
- Chemical business involves manufacturing chemical grade specialty alumina and hydrates.
- Operations in Belagavi alumina refinery and Muri alumina refinery are significant contirbutors to the chemical business.
- The chemical business serves the following markets:
  - Ceramics
  - Refractories
  - Polishing
  - Glass
  - Water treatment
  - Fire retardent fillers

Aluminium

We are industry leaders in Asia for manufacturing aluminium and aluminium products. We own and operate bauxite mines in Jharkhand, Chhattisgarh, Maharashtra and Odisha, serving as raw material for our alumina refineries at Utkal, Muri, Renukoot and Belagavi. The alumina refineries use state-of-the-art technology smelters to produce a range of high-quality alloys. Our refineries are fuelled by the captive power plants supported by coal from captive coal mines in Chhattisgarh and Jharkhand.

The Utkal Alumina International Limited (UAIL) refinery is strategically placed near the Baphlimali bauxite mines, ensuring access to superior quality bauxite ore. UAIL supplies alumina to our new-age smelters placed at Mahan Aluminium in Madhya Pradesh and Aditya Aluminium in Odisha. The ingots and sows produced from these smelters are accredited by the London Metal Exchange as good delivery brands against its high-grade primary aluminium contracts.

Our finished products include alumina and primary aluminium in the form of ingots, billets and wire rods. The value-added products include rolled products, extrusions and foils. Some of our brands include Eternia Windows, Maxloader and Hindalco Extrusions under the extrusions segment; Lithographic Sheets and Everlast Roofing under the flat rolled products segment; and Freshwrapp and Superwrap under the aluminium foil segment.



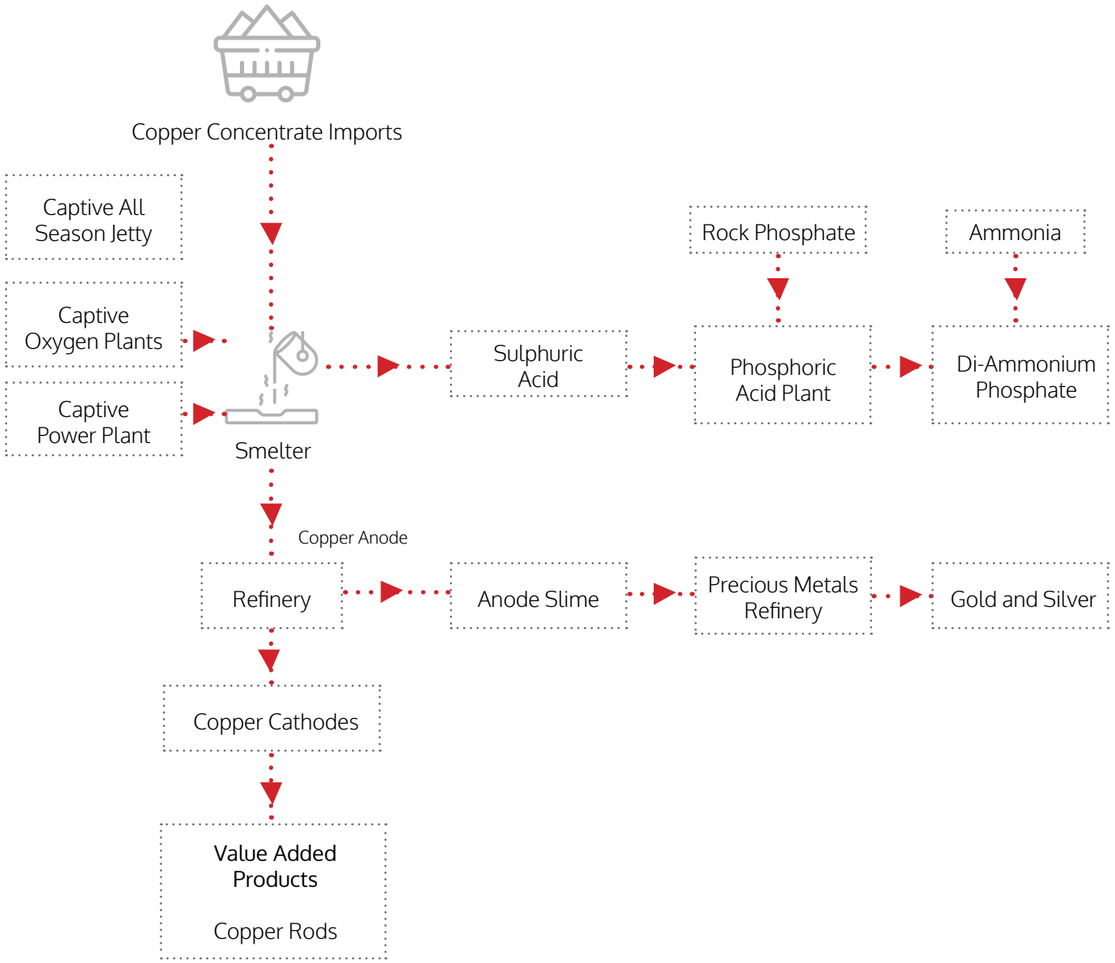
Chemical

Our growing chemical business deals with producing chemical-grade hydrates and alumina from our refineries in Belagavi and Muri. Our products find use in fire retardants, ceramics, polishing, refractories and other markets.

Copper

Our copper operations take pride in operating one of the largest single-location custom copper smelters in the world, at Dahej. The complex houses smelter, sulphuric acid plant, refinery, rod plant, a jetty and a captive power plant, besides other utilities. The sulphuric acid is partly utilised to produce phosphoric acid and fertilisers like di-ammonium phosphate (DAP). The copper brands, namely Birla Copper and Birla Copper-II, are recognised for purity and consistency in quality, and are registered on the London Metal Exchange as Grade-A copper brands.

We produce LME grade copper cathodes and continuous cast copper rods in various sizes, and precious metals like gold and silver. We are a major manufacturer of 19.6 mm diameter copper rods, used in railway electrification.



Stakeholder Engagement and Materiality Analysis

Stakeholders' expectations, needs and aspirations are at the core of our business strategy. We firmly believe in growth, while ensuring interests and addressing concerns of stakeholders. The materiality assessment helps us focus on topics that have direct and indirect impacts on our business and ability to create long-term value for our stakeholders.

During the reporting period, we had a relook at our stakeholder engagement and materiality assessment mechanism from the point of view of completeness, relevance and inclusivity. We took steps to strengthen the existing mechanism to suit current business needs. The exercise was carried out in collaboration with the enterprise risk management function to ensure that the topics identified through materiality assessment are instrumental in helping us move towards a resilient, responsible and reliable future.

Stakeholder Engagement

Engaging with stakeholders offer us the opportunity to understand their concerns and subsequently focus on addressing them. Our group-level stakeholder engagement policy acts as a guiding principle for stakeholder engagement at Hindalco.

Stakeholders were identified from respective stakeholder groups relevant for our business. These include shareholders, employees, customers, suppliers, regulatory authorities, media, industry associations, communities, NGOs and peer companies. A comprehensive stakeholder engagement exercise was carried out to engage with prioritised stakeholders from each of these groups. The exercise helped us understand their concerns and feedback.

On the basis of feedback received from respective stakeholder groups, appropriate action plans are developed to address their expectations. These concerns and expectations form a vital input for our materiality assessment and for developing short and long-term business goals. The relevant concerns are then updated in monthly review meetings chaired by the MD. Some of these concerns are presented by the MD to the Board of Directors during Board Meetings.

The summary of responses received from our stakeholders is given below:

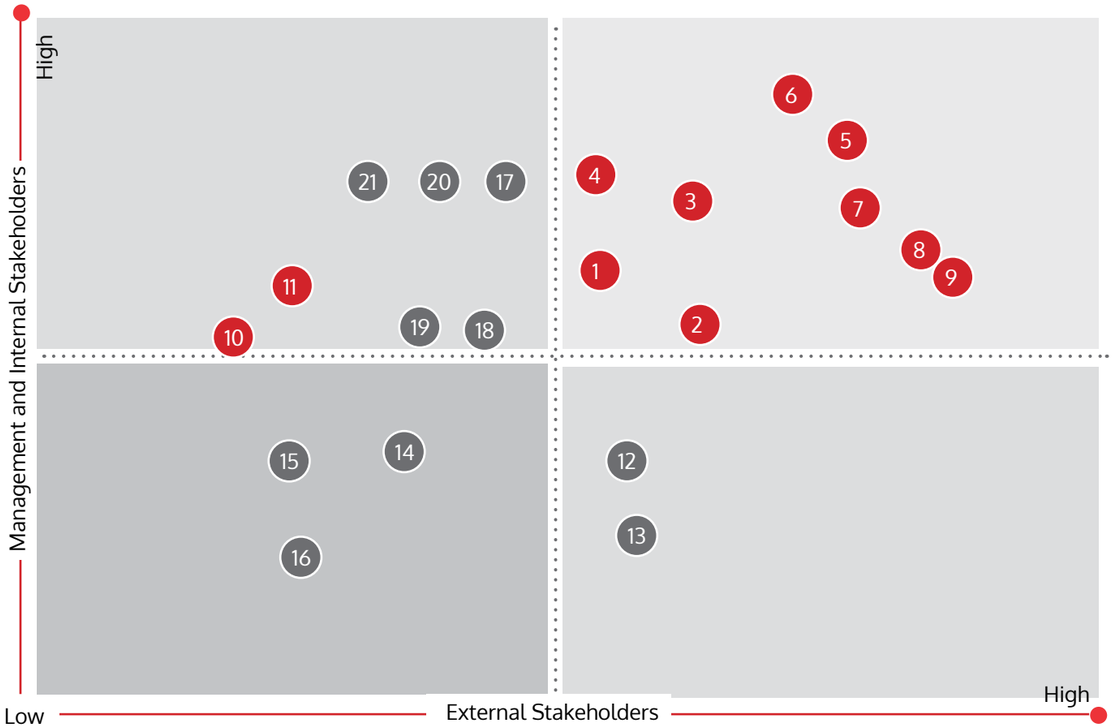
Stakeholder Group	Engagement Channels	Frequency of Engagement	Key Issues of Interest	Our Approach
Employees	• Emails and meetings • Intranet portals • Employee satisfaction surveys • Training programmes • Performance appraisal reviews • Grievance redressal mechanism	Continuous	Fair wages and rewards	About 65% of the workforce is covered under the provisions of collective bargaining.
				100% compliant in terms of payment of minimum wages.
			Training and skill development; and Career Growth	Technical and behavioural trainings.
				Hindalco Technical University focusing on technical skill development of employees.
			Work-life balance	'A World of Opportunities' campaign for employees and their families.
			Occupational health and safety	Fatality prevention programme in place.
				Disaster management plan.
			Transparent communication	Sufficient notice regarding significant operational changes to management, staff and other employees.
Customers	• Emails and meetings • Customer satisfaction surveys • Grievance redressal mechanism	Continuous	Post-sales support	Net Promoter Score model is a combination of top-down and bottom-up approach.
			Chinese and local competition	Aluminium and copper manufactured as per LME specifications.
Suppliers	• Emails and meetings • Vendor assessment & review • Supplier audits • Training workshops and seminars • Stakeholder engagement surveys	Continuous	Continuity of orders	Supply chain and procurement policy.
			Capacity building	Supplier Code of Conduct.
			Pricing and negotiation	Supplier risk assessment.
				Contractor safety management system.
				Ethics and transparency is part of the management framework.
Communities	• Stakeholder engagement surveys • Training and workshops • Regular meetings • Need assessment and satisfaction surveys • CSR reports	Continuous	Infrastructure development	Development of community Infrastructure such as village approach roads, check dams and bus stops.
			Training and livelihood programs Local Employment	Focus on livelihood and skill development programmes.
				Skill development programmes for women.
			Participation in social services	Social awareness camps.
				Focus on societal reforms.
Investors and Shareholders	• Board meetings • Annual reports • Newsletters • Regular business interaction	Quarterly	Sustainable growth and returns	Stable operational performance.
			Market share	Focus on cost optimisation.
			Operational performance	Focus on value-added products.
			Risk management	Enterprise Risk Management framework
			Corporate governance	Robust corporate governance framework
Regulatory Bodies	• Annual reports • Communication with regulatory bodies • Formal dialogues	As per requirement, at least once a year	Tax and royalties	Regular payment of applicable taxes and royalties.
			Pollution prevention	Strengthening of emissions monitoring.
				Adoption of renewable energy.
Media	• Social media • Press releases • Interviews • Website	As per requirement	Community relations	Transparent communication.
				Communicating business and sustainability initiatives through annual report and sustainability reports.
Industry Associations	Meetings	As per requirement	Regulations, compliance with industry standards	Participation in meetings and discussions related to the industry.

Materiality Analysis

Materiality analysis is a detailed analysis that helps us identify critical economic, environmental and social issues that are significant to business performance and stakeholder interest. The analysis showcases the significance of Environmental, Social and Governance (ESG) topics with reference to influence on stakeholders' assessments and decisions.

Material topics are identified based on the results of stakeholder engagement survey. Additionally, industry research, benchmarks and internal & external conventions, including the United Nations Global Compact Principles on Environment, Human Rights and Corruption are also considered to identify these topics. The outcome is then used to develop a materiality matrix, which showcases high priority sustainability topics. To build a stronger company, we align our business to focus on these topics.

During the reporting period, materiality analysis was carried out considering views and feedback received from stakeholders (including the senior management). The following matrix represents the outcome of this exercise:



1. Market Presence 2. Waste and Hazardous Materials Management 3. Energy & GHG Emissions Management 4. Air Emissions 5. Compliance Management 6. Water Management 7. Occupational Health and Safety 8. Product Stewardship 9. Macro-Economic Fluctuations 10. Diversity and Inclusion 11. Employee Well-Being

12. Material Management 13. R&D Innovation and Technology 14. Supply Chain Transformation 15. Land Use 16. Biodiversity Impacts 17. Ethics and Integrity 18. Community Relations 19. Security and Human Rights 20. Artisanal and Small-Scale Mining 21. Economic Performance

Topics that are rated of high importance by external stakeholders as well as by internal stakeholders (including management) are considered as material topics. The topics reflecting in top right quadrant of the above matrix represent these material topics. Being an organisation with a workforce of 23,751, we have also considered employee well being and, diversity and inclusion as material topics. Following table provide details of material topics and respective section in this report where we have presented how we respond to the topic.

Material Topic	GRI Material Topic	Report Section
Market Presence	Non-GRI Topic	Product Stewardship
Waste and Hazardous Materials Management	Effluents and Waste	Environmental Stewardship
Energy & GHG Emissions Management	Energy	Environment Stewardship
Air Emissions	Emissions	Environmental Stewardship
Compliance Management	Environmental Compliance	Environmental Stewardship Community Stewardship
Water Management	Water	Environmental Stewardship
Occupational Health and Safety	Occupational Health and Safety	Health & Safety
Product Stewardship	Marketing and Labeling	Product Stewardship
Macro-Economic fluctuations	Economic Performance	Economic Stewardship
Diversity and Inclusion	Diversity and Equal Opportunity	Employee Stewardship
Employee Well-Being	Employment	Employee Stewardship

Resilient

25 Corporate Governance
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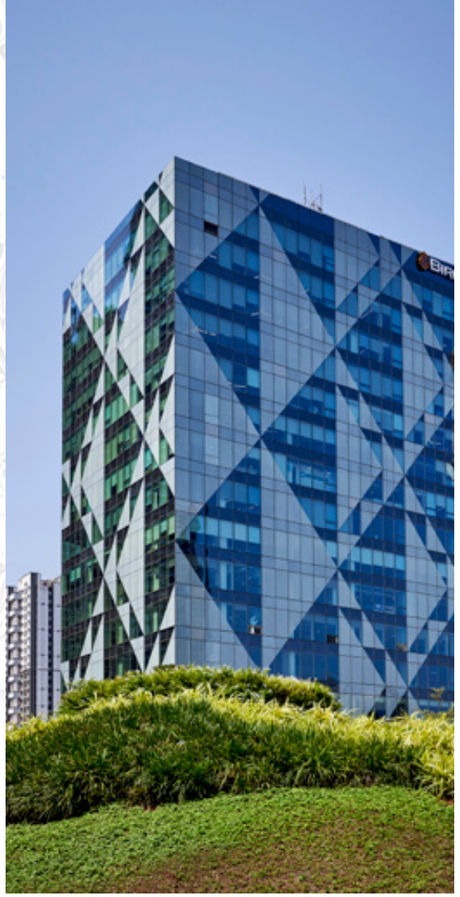
34 Economic Stewardship



Corporate Governance

Our corporate governance philosophy finds its roots in the rich legacy of ethical corporate governance practices laid down by the Aditya Birla Group, and forms a keystone of our business operations. We strive to adopt best governance and ethical practices and adhere to their true spirit. Our cardinal principles of board accountability to the Company and shareholders, strategic guidance and effective monitoring by the Board, protection of minority interests and rights, equitable treatment of all shareholders as well as superior transparency and timely disclosures serve as means for implementing the philosophy of corporate governance. In line with this philosophy, the Company, as a continuous process, strengthens the quality of disclosures on the Board composition and its functioning, remunerations paid and level of compliance with various corporate governance codes and regulatory compliances

.

We believe that to accomplish a successful business, we must exhibit highest standards of corporate behaviour towards everyone we work with, the environment we function in, and the communities we operate in. This paves the way for consistently creating value for our stakeholders by being competitive and profitable in a responsible manner. Our governance structure is built to be resilient and compliant to all regulatory requirements. Our Board of Directors and the committees play a key role in identifying, mitigating and managing key risks, reviewing the policies, setting goals and monitoring performance.

We believe that to accomplish a successful business, we must exhibit highest standards of corporate behaviour towards everyone we work with, the environment we function in, and the communities we operate in.

We ensure compliance to all the requirements under Securities and Exchange Board of India's (SEBI) Listing Obligations and Disclosure Requirements Regulations, 2015 and amendments made thereafter.

The Board of Directors

Hindalco's Board of Directors plays a primary role in ensuring good governance and functioning of the Company. Our Board of Directors, chaired by Mr. Kumar Mangalam Birla, Non-Executive Chairman, comprises of 11 Non-Executive Directors as on March 31, 2020. The Board periodically meets to review performance, address major operational concerns, vet new initiatives and suggest improvements in implementation. The details of our Board of Directors are given below:

Name of Director[1]	Nature	Category
Mr. Kumar Mangalam Birla[2]	Non-executive	Chairman, Non-Independent Director
Mrs. Rajashree Birla	Non-executive	Non-Independent Director
Mr. A.K Agarwala[3]	Non-executive	Non-Independent Director
Mr. D. Bhattacharya	Non-executive	Non-Independent Director
Mr. K. N Bhandari	Non-executive	Independent Director
Mrs. Alka Bharucha	Non-executive	Independent Director
Mr. Y. P Dandiwala	Non-executive	Independent Director
Mr. Ram Charan	Non-executive	Independent Director
Mr. Sudhir Mittal[4]	Non-executive	Independent Director
Dr. Vikas Balia[5]	Non-executive	Independent Director
Mr. Satish Pai	Executive	Managing Director
Mr. Praveen Kumar Maheshwari	Executive	Whole-Time Director

There is a formal evaluation framework in place for measuring the performance of the Board, Committees, Individual Directors and Chairman of the Board, reference to which is given in the Annual Report. All our Board of Directors attended at least 1 out of the 6 (i.e. 17%) total meetings held during the reporting period, thus, adhering to the meeting attendance criteria as per Section 167-1 (b) of Companies Act 2013.

Adhering to various corporate governance codes ensures resilience of our governance structures, while strengthening the Board's effectiveness, transparency and accountability.

1. *Mr. Girish Dave has resigned as Independent Director w.e.f. November 2019 due to age and personal reasons.*
2. *Mr. M M Bhagat has ceased to be an Independent Director w.e.f August 30, 2019 due to old age.*
3. *Mr. A. K. Agarwala was an Executive Director till September 10, 2003. Thereafter, he has moved to other responsibilities in the Aditya Birla Group.*
4. *Mr. Sudhir Mital was appointed as an Independent Director w.e.f November 11, 2019.*
5. *Dr. Vikas Balia was appointed as an Independent Director w.e.f July 19, 2019.*

Committees of the Board of Directors

The Board delegates responsibilities to different types of committees, constituted to deal with matters and monitor the activities falling within the respective terms of reference. There are three types of committees based on the level and nature of responsibility - Committees of the Board of Directors, Business Committees, and Executive Committees.

The committees to the Board include

- Corporate Social Responsibility (CSR) committee
- Sustainability Board
- Apex Safety Board
- Value Standards Committee
- Remuneration Committee

The Corporate Social Responsibility Committee is responsible for formulating the CSR policy, recommending the key activities to be undertaken by the company and the amount of expenditure to be incurred in the activities suggested, providing guidance on carrying out these activities and monitoring its progress. The CSR committee is constituted of the following members:

- Mrs. Rajashree Birla
  Chairman
- Mr. Satish Pai
  Member
- Mr. A.K. Agarwala
  Member
- Mr.D. Bhattacharya
  Member
- Mr. Y. P. Dandiwala
  Member
- Dr. Pragnya Ram
  Permanent Invitee

Sustainability Committee is involved in developing the Company's sustainability policy, institutionalising clear goals and targets for the company, and setting out frameworks for monitoring performance across diverse aspects of business operations. These include mining practices, energy conservation, recycling, environment-friendly disposal of industrial waste, safety practices, socioeconomic development of the communities around the plant, and empowerment of our employees. The committee is a part of the Business Committee, which is led by our Managing Director.

The Apex Safety Board holds the responsibility of evaluating the safety performance of all the businesses of the Company at regular intervals. It reviews performance and suggests different interventions for business units to mitigate risks.

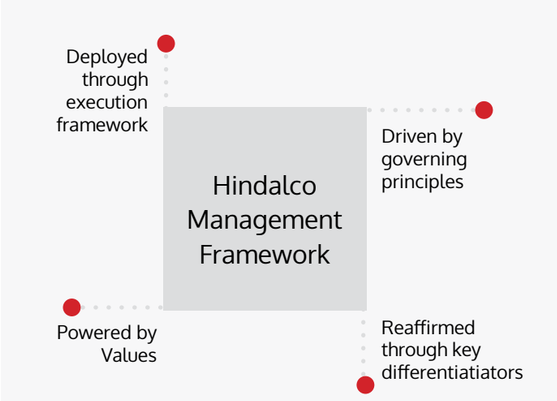
Ethical behaviour is imperative to the Company's business. The Value Standards Committee handles all matters related to whistle blower cases, sexual harassment and other matters of illegal and unethical behaviour. The Company has a Vigil Mechanism and Whistle Blower Policy, under which employees are free to report violations of applicable laws and regulations and Code of Conduct.

The Nomination and Remuneration Committee identifies and recommends to the Board individuals from the company qualified to become a Director or part of the Senior Management. It gives the Board approval on inducting or removing a person from the Senior Management. It is also responsible for devising the Board Diversity Policy, evaluating the performance of every Director, and recommending the remuneration for the Directors, managerial positions and other employees. Under the Clawback clause of our Remuneration Policy, the excess remuneration received, of what is payable to the executive, would be recovered as per the restated financial statements in case of any fraud or non-compliance with any requirement of the Companies Act, 2013.

Our annual compensation ratio for FY 2019-20 is 520.15. The corresponding ratio for percentage increase in annual compensation is 1.2.

Code of Conduct

The Hindalco Code of Conduct, as adopted by the Board of Directors, is applicable to all Directors and the Senior Management of the Company. The Code is available on the Company's website: http://www.hindalco.com/investor-centre/codeof-conduct. It is based on Hindalco's values of Integrity, Commitment, Passion, Seamlessness and Speed. All Directors, Senior Management members and employees adhere to the Company's Code of Conduct, and no complaints of its violation were received during the reporting period. As part of our corporate governance structure and the Code of Conduct, we have placed necessary safeguards to avoid any conflicts of interest. As per regulatory requirements, we maintain necessary registers for recording interests of all Directors, with reference to conflicts of interest. The management is also required to confirm that they have not entered into any material transaction that could have potential conflict of interest with our business. Any incident of conflict of interest is brought to the notice of management, as per the provisions of Code of Conduct. During the reporting year, there were no incidents of violation of the Code of Conduct. No cases on the grounds of anti-competitive behaviour or anti-trust legislations have been filed. No non-compliance strictures/penalties have been imposed on the Company by Stock Exchange(s) or SEBI or any Statutory Authority on any matters related to capital markets during the last three years.



Sustainability Framework

Hindalco endeavours to become a leading metals company for sustainable business practices across global operations, balancing its economic growth with environmental and societal interests.

At Hindalco, we have adopted a well-structured sustainable business model, based on our three guiding principles of resilience, reliability and responsibility. We strive to emerge a leader in the sphere of sustainable business practices by meeting the national and international legal requirements, leveraging our technologies and enhancing our stakeholder engagements.

Building on our principle of reliability, we focus on our operations, stakeholder engagement and product stewardship. Our work towards environmental sustainability and well-being of our people and community forms the basis of our principle of responsibility. Steady economic performance and a balanced product portfolio contributes towards building resilience in the backdrop of ever-changing market dynamics.

To achieve this, we have a set of policies in place for our respective sustainability focus areas. These policies help us in developing our systems and processes that, in turn, help us enhance our sustainable business model.

Key sustainability policies are as follows

- Environment Policy
- CSR Policy
- Human Rights Policy
- Energy and Carbon Policy
- Safety and Occupational Health Policy
- Governance and Compliance policy
- People Policy
- Technology Policy
- Information Technology Policy
- Quality Policy
- Sustainability Policy
- Policy on Prevention, Prohibition, and Redressal of Sexual Harassment at the Workplace

Our associations with key Industry and Trade Associations

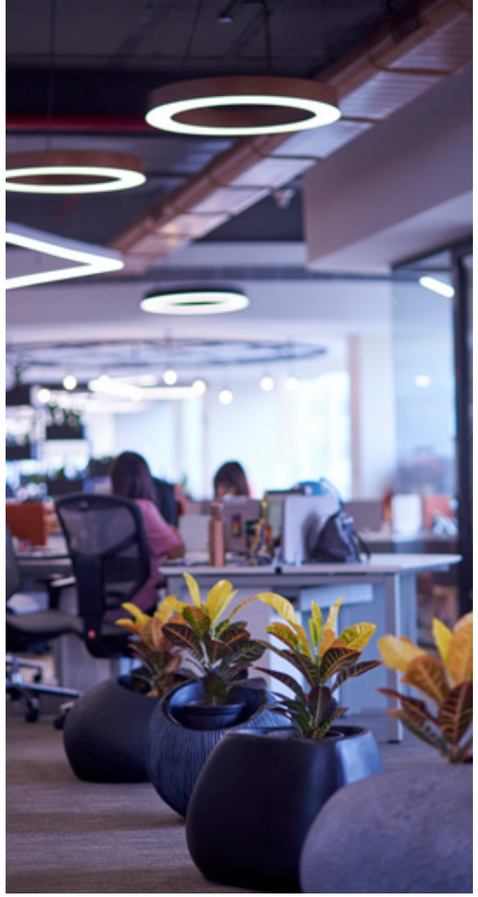
- Aluminium Association of India
- Confederation of Indian Industry
- Winding Wire Association
- Federation of Indian Chambers of Commerce & Industry
- International Copper Association India
- Indian Copper Development Centre
- Maharashtra Chamber of Commerce, Industry & Agriculture
- Automotive Research Association of India
- Indian Electrical and Electronics Manufacturers' Association
- Primary Copper Producers Association

Sustainability Coordinators Meet 2019

A Sustainability Meet was held in September 2019 where various keynote speakers and experts from the industry met to discuss the way forward of integrating sustainability measures into operational aspects of Hindalco's business. Insights on various dimensions of climate change, resource utilization, and growing importance of sustainability among dynamic market trends were shared by the experts during this meet.

The two-day long meet commenced with an opening speech by Mr. Satish Pai wherein he spoke about sustainability at Hindalco and emphasized on measures like achieving water balance at all sites, adequate emissions management, involvement of all employees to drive sustainability and launch of a hot line to capture environment related incidents within Hindalco. This was followed by panel discussions on topics such as Hindalco's strategy of diversified portfolio, rapid changing regulatory landscape, growing need for transparency and ownership, EHS challenges, aspects related to capacity expansion at Muri. Some of the other topics covered were carbon pricing for Hindalco, bauxite residue (BR) and spent pot lining (SPL) management, integration of zero freshwater consumption and wastewater management and Hindalco's sustainability performance among others. A group activity was conducted to identify sustainability challenges and its associated solutions, which was used to develop an action plan in the following session.

As part of this meet, an action plan was developed taking inputs from the previous discussions. Formation of Water and Waste Task Forces at plant levels, reduction of GHG and air emissions, and way forward for compliance related aspects were some of the action points included in this plan of action.



The massive scale of our operations, along with the interdependencies involved at multiple levels, requires us to become resilient to deal with the dynamic external environment. Robust integration across the value chain (from mining to metal to market) protects us from supply-demand related vagaries. Additionally, we have a strong risk management framework in place, which helps us become resilient to deal with dynamic external environment. It helps us to protect and, at the same time, stretch our resources within well-defined risk limits and, in turn, enhance the return from Hindalco's assets. With the philosophy of 'Predict, Plan, Prevent and Be Prepared', the framework inspires a disciplined and proactive approach to identify, monitor and mitigate risks. The Risk Management Committee is responsible for the approval and regular review of the risk management plan. Consequently, we have developed a comprehensive risk management policy, which is authorised by the Risk Management Committee. This policy forms the backbone of our risk management framework and institutionalises a holistic risk management approach encompassing operations such as mining, production, energy generation and waste disposal, while ensuring the health and safety of our employees, procurement of resources and community relations. Our risk management process is based on three main steps:

Risk Management Framework

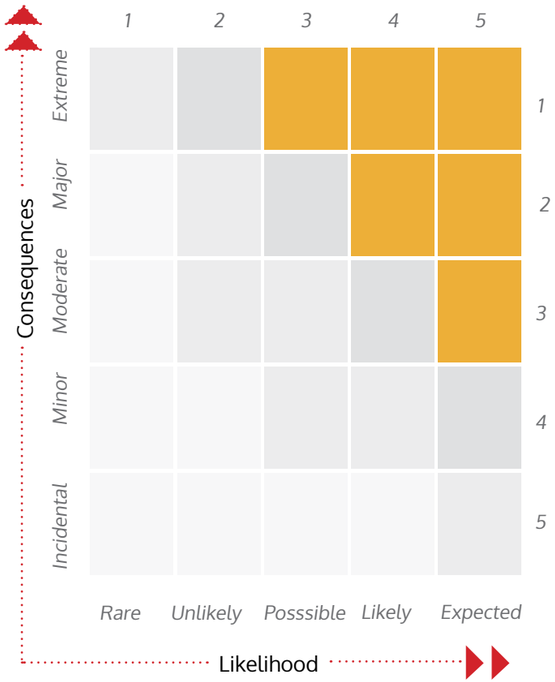
Such an approach helps us foresee different short-term risks like business risks, operational risks, technological risks as well as long-term risks such as strategy risks, reputational risk or business model risk. All the known risks are captured within risk registers at various levels (Department level, Site level, Business level, Company level etc.); a reasonable attempt is made to identify unknown risks as well, through scenario planning exercises. The identified risks are categorised based on their severity and a mitigation strategy is developed keeping in mind the short term and long-term implications of the risks on the organisation. These are incorporated in our governance and business strategy to achieve success in our overall business performance. Our risk management framework is given below.

Risk Management Framework

Responsibility for risk management is percolated down the line through a well-designed governance structure. At the helm of this governance is Risk Management Committee of the Board of Directors, including the Managing Director; this committee is mandated to review our risk management processes. The site-level risk teams help us understand the relevant operational challenges and identify our operational risks. The risk management framework is reviewed periodically by the senior management through the Risk Management Committee. Thus, we ensure having a robust risk reviewing framework that is in line with our vision of future-proofing our business

We are cognizant of the fact that the business ecosystem continues to evolve, which exposes us to new volatilities in the market. Therefore, it is vital for us to not only investigate risks through a monetary lens, but also regulatory and reputational lenses. This aids in devising the immediate and long-term remedial measures to be taken by the company. For a leading metals and mining business like us, transparency in our operations and objectivity in reporting them is of vital importance. An evolved risk monitoring and reporting mechanism helps us in triggering timely actions at various echelons of management.

Our risk evaluation methodology is based on gauging the likelihood of a risk event and the severity of its impact. Risk reporting is facilitated by a set of well-chosen leading and lagging risk indicators.



Snapshot of Risk Reporting Tool

We have adopted an Enterprise Risk Management (ERM) system across the Company to become more forward-looking and effective at evaluating, embracing and managing the uncertainties we face. The ERM is oriented towards an integrated approach to address a broad spectrum of risks in an interrelated portfolio that enables the entire organisation to view the risks in a similar context as that by a risk manager. Thus, as an organisation, we can cohesively work towards mitigating risks and drive better results. The ERM is embedded within our governance setup to ensure participation at a board and apex management level. This robust review mechanism thus establishes a system of assigning risk ownership from the operational level to strategic leadership. It has evolved into an overarching framework that encompasses all other frameworks for health and safety, financial risk assessment, compliance and others.

We anchor a risk management culture in the whole process while building a culture and risk management capabilities across the ranks. We ensure that identification, mitigation planning, execution and reporting are used to augment employees' risk management capabilities at the corporate, business unit and plant level. Additionally, we have invested in developing risk response capabilities of the organisation to respond to any unfortunate occurrences by preparing emergency response plans, crisis management action plans and business continuity strategies.

Towards the end of the reporting year, the world faced the COVID-19 pandemic, which led to a nationwide lockdown. Due to the nature of our operations, we were granted special permission to operate our mines and plants during the lockdown. However, we faced operational challenges in terms of labour, logistics and resource flow, in addition to those related to the demand of our products. The agility and resilience of our operations enabled us to mount an effective response to the pandemic. We were able to continue our operations in a fairly uninterrupted manner, on the basis of availability of customer orders.

The trade war between the US and China has also led to an increase in export of downstream products by Chinese manufacturers to India, due to the massive tariffs introduced in the US on Chinese products. These products have a low cost, due to which our domestic as well as international markets were affected. We have undertaken several operational changes and increased the focus on value-added products to mitigate this emerging risk. We are also working with industry associations to avoid the dumping of foreign products, and practice fair trade in India by increasing import duties on primary, scrap and downstream products.

The current production of copper by primary producers in India meets the need of the estimated domestic demand of refined copper. However, as more and more countries sign the Free Trade Agreement (FTA) with India, they are allowed to supply duty-free metal to the country. One-third of the current domestic demand is met by metal imported from such countries (majority through ASEAN FTA), reducing demand for domestic copper due to the low cost of foreign metal. We have strategised our sourcing to maximise cost benefits and increased focus on high product quality as a differentiating factor for Hindalco. Moreover, a few of our products are already approved by the Bureau of Indian Standards (BIS), and we are working with governmental agencies to establish a standard practice of streamlining the copper scrap recycling process in India, protect the market, and assure quality of end products, safety and environment.

We have strategised our sourcing to maximise cost benefits and increased focus on high product quality as a differentiating factor for Hindalco.

The Global Risks Report 2020 by the World Economic Forum highlights the likelihood and impact of environmental risks. As a metals and mining company, our business operations are dependent on the natural resource flow and these operations have certain implications on the environment. Our risk management framework also considers the identified environmental vulnerabilities related to climate change , water availability, land degradation, land availability and extreme weather events. We have formulated plans to minimise our impacts on the environment and mitigate environmental risks.

Economic Stewardship

Despite challenges such as strong competition from Chinese markets, subdued consumption, and lower demands from user industries like automotive and construction, we continue to deliver a strong economic performance in FY 2019-20. Strategising our business approach in line with the dynamic market and catering to diverse customer needs has proved to be a significant growth factor for us. Our array of value-added products and customer centricity are our key focus areas. We also aim at value creation for all our stakeholders through robust mechanisms and a well-defined business model.

Through our operational activities, we strive to bring in change in the lives of our communities by providing them with livelihood opportunities. We believe in all-inclusive growth and continue to bring changes in the lives of our people through our economic contributions. Providing fair compensation to our employees, procuring locally manufactured resources for our operations (wherever feasible), investing in community-centric initiatives and timely payment of statutory taxes are some of the ways in which we strive to contribute towards the economic growth of the geographies we operate in. However, this is subject to various factors, viz. nature of our operations, business environment, customer preferences and regulatory requirements.

In our endeavour to build a resilient organisation, we delivered strong economic performance in FY 2019-20 through our operational practices and risk mitigation strategies. For the reporting period, revenue with profits are recorded to be at INR 40,324 crore and EBITDA stood at INR 5,483 crore. Our PAT stood at INR 958 crore.

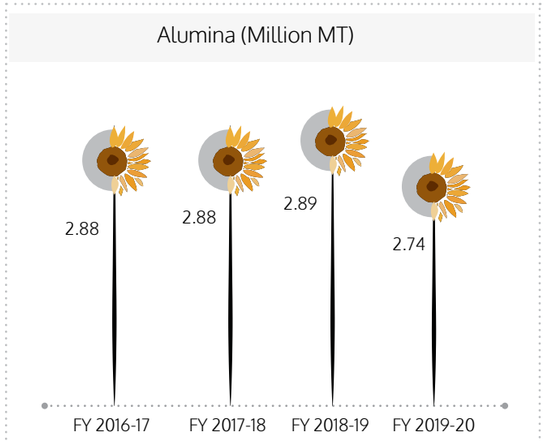
We believe in all-inclusive growth and continue to bring changes in the lives of our people through our economic contributions.

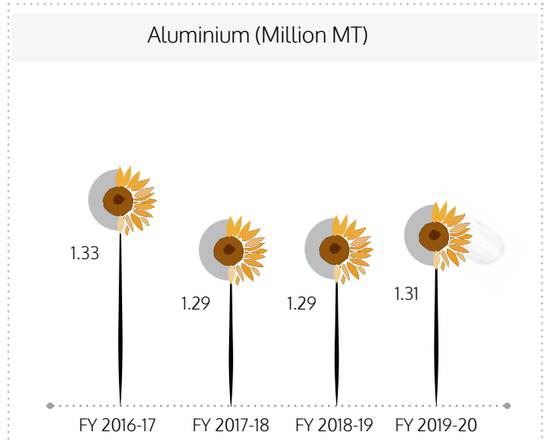
Our aluminium and copper business have witnessed stable growth during the reporting period. Highlights of these have been provided below in a tabular form:

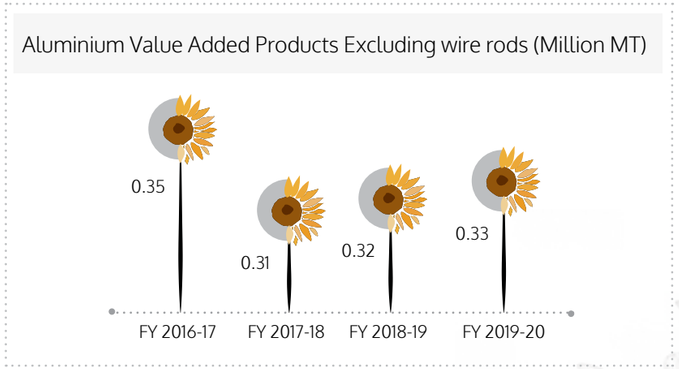
India Operations (Hindalco standalone and Utkal)	Aluminium (including Utkal)		Copper	
	FY 2018-19	FY 2019-20	FY 2018-19	FY 2019-20
Revenue from operations (INR crore)	23,775	21,749	22,198	18,533
Segment EBITDA (INR crore)	5,096	3,729	1,683	1,276

With an innovative approach towards product stewardship, we succeed in offering our customers a unique array of products keeping environmental needs at the forefront. We launched India's first all-aluminium freight trailer in 2019, providing an environment-friendly solution for the logistics industry. Despite challenges on account of the COVID-19 pandemic, we recorded a 2% YOY increase for aluminium value-added product sales.

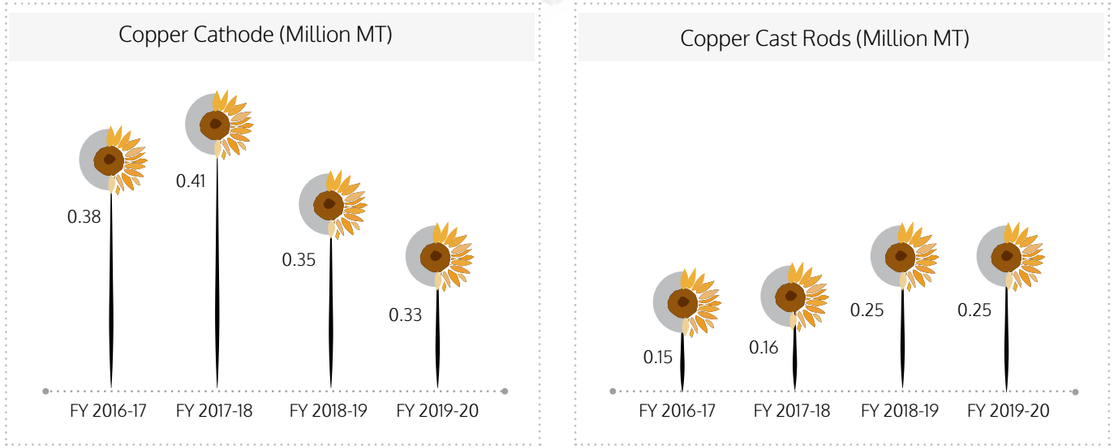
Trends in terms of production for aluminium products have been presented graphically as under:







Given below is a graphical representation of the production trends of our copper business:



Stakeholder value creation is fundamental to strategic planning of our operational activities. This has helped us grow holistically, thereby assuring our benefits reach our stakeholders.

In continuation, we have presented the details of the economic value generated, distributed and retained for the reporting period in a tabular form below . Additionally, during the reporting period we contributed INR 36 lakhs towards various trade associations, industry associations and business associations in the form of their membership fees. Donations of INR 29 crore (which includes INR 10 crore paid to AB General Electoral Trust and INR 19 crore through Electoral Bond) were also made towards political contributions during FY 2019-20.

	Hindalco India-Aluminium	Hindalco India-Copper	Hindalco India-Corporate	Utkal Alumina International Ltd.
Economic value generated (INR crores)				
Net sales by business	21,747.09	18,495.40	-	0.78
Revenue from financial instruments	79.73	134.41	521.34	158.21
Revenue from sale of assets	(19.16)	2.93	0.14	0.02
Total generated	21,807.66	18,632.74	521.49	159.01
Economic value distributed (INR crores)				
Operating costs	17,437.46	17,270.17	(67.46)	1,752.36
Employee wages and benefits	1,571.35	152.19	198.16	67.11
Payments to providers of capital	900.68	133.30	645.54	229.88
Payments to government	-	-	332.02	186.69
Community investments	0.75	-	15.07	-
Depreciation and other exceptional income	1,578.34	158.98	35.06	304.32
Total distributed	21,488.59	17,714.65	1,158.39	2,540.37
Economic Value retained (INR crores)				
Total retained	339	924	(643)	317

With an aim to serve society through our contributions, we take efforts to fulfil all our regulatory obligations in a timely manner. We ensure regular payment of taxes and procure benefits as a result of various governmental schemes and policies.

Significant financial assistance received from the government has been presented here for the reporting period :

Significant Financial Assistance from Government Subsidies	Hindalco India – Aluminium (INR crore)	Hindalco India – Copper (INR crore)
a) Export	279.72	-
b) Domestic	10.62	-

We offer our employees various benefits through our initiatives. Medical benefits, post retirement and provision for liabilities towards earned leaves are some of the benefits we provide our employees with.

Our contributions are also made towards the provident fund through the government and approved trusts. We contribute a certain percentage of salaries for all managerial employees in superannuation funds such as the National Pension Scheme (NPS).

Details of our spending related to defined benefit plan obligations and other retirement plans are presented as below:

Defined Benefit Plan Obligations	Hindalco - India - Corporate (INR crore)	Utkal Alumina International Ltd. (INR crore)
Present value of Defined Benefit Obligations at the beginning of the year	962	8
Current Service Cost	52	1
Interest Cost	71	1
Actuarial (Gain) or Loss	72	1
Benefits Paid	(63)	(0)
Present value of Defined Benefit Obligations at the end of the year	1,094	10

Responsible

39 Responsible Mining
44 Environmental Stewardship
74 Health and Safety
80 Community Stewardship

Responsible Mining

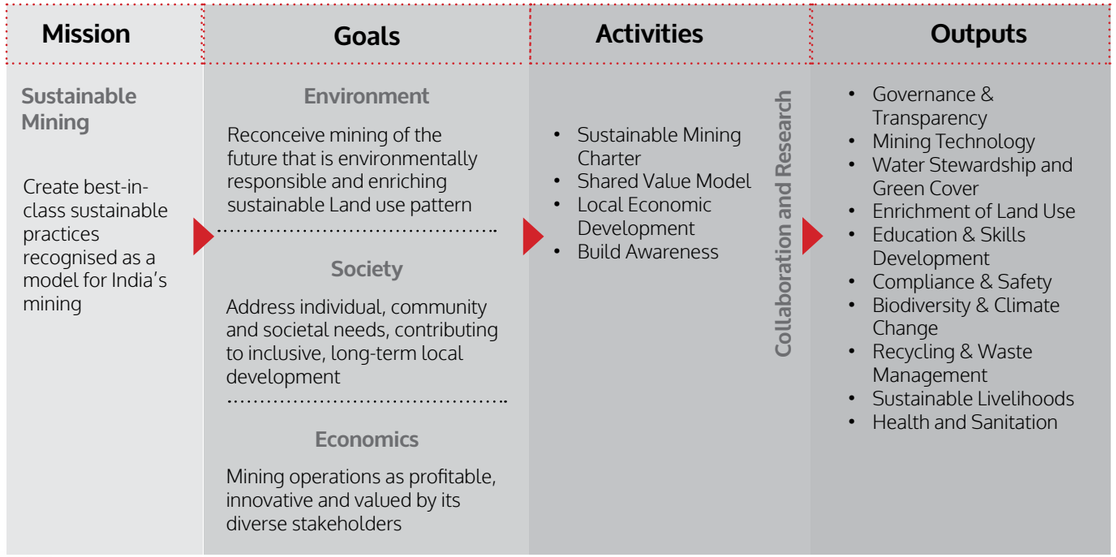
Responsible mining is an integral part of our business imperatives. We are focussed on achieving operational excellence and ensuring the well-being of our people and the environment. We have our mines spanning across four states in India viz. Jharkhand, Odisha, Chhattisgarh and Maharashtra. We are operating a total of 35 mining sites across India, 29 of which are in the operational state at present. Of these 29 mines, 25 are bauxite mines and 4 are coal mines.

Our primary operational activities at mining locations involve the extraction of natural resources, and we recognise the impact of this on the environment and our communities. This leads us to work with a sense of responsibility towards our environment and its resources through all stages of our operational activities. To realise our vision of inclusive growth, we undertake several initiatives to preserve and restore our ecosystems and empower our communities through our contributions. A responsible and resilient approach to our mining activities leads us towards economic development, backed by community empowerment.

Our approach to responsible mining is defined by three key parameters viz., watershed management, mine design and plans, and monitoring parameters. In view of this, we focus on reducing water consumption, rainwater harvesting, minimising land disturbance, preventing pollution and reclaiming land to an equivalent condition post-closure. In addition to this, we also focus on biodiversity management, proper rehabilitation and resettlement of the impacted communities.

01 Monitoring parameters	• Ambient air quality • Noise level • Water quality
02 Mine design and plans	• Implementation of progressive and final mine closure plan • Systematic mine planning and material extraction
03 Watershed management	• Rainwater harvesting ponds • Gully plugs • Bunds • Contours and terraces

Sustainable Mining Approach



Developing sustainable mining practices is one of our focus areas. We aim to create best-in-class sustainable practices that can be recognised as a model for the mining industry in India. Environment, society and economics of mining operations are the three most important building blocks of our sustainable mining framework. The framework is designed keeping mind the need of integrated, comprehensive and practical-to-implement initiatives across mining operations. With the help of this framework, we ensure that the operational expansion and economic benefits are balanced with the focus on environmental sustainability, upliftment of local communities and safety at mining locations.

We take various initiatives as part of our sustainable mining programme. This includes deploying advanced mining equipment like surface miners and ripper dozers, which result in minimum dust emissions and reduced levels of noise pollution through drilling and blast-free features of functioning. This equipment also helps in improving operational efficiency on account of continuous and pre-crushed production. Further, in our efforts to minimise our impacts, we use ropeways and conveyors for transportation of more than 60% of the total bauxite extracted (nearly 8.5 million MT) in a year. This further helps us to reduce our environmental footprints due to reduced fuel consumption. In addition to this, we make use of solar energy at our mines for ancillary purposes, which not only helps us increase our share of clean energy but also reduces our environmental footprint.

Eco-Restoration for aesthetics and sustainable livelihood at Bagru Bauxite Mine

As part of our soil conservation initiatives, we use topsoil in reclaimed areas and plant trees to prevent erosion of soil. We also make efforts towards water conservation by harvesting rainwater in our mining areas and utilise the same to minimise consumption of groundwater in our activities.

We recognise the impact of mining operations on our biodiversity, and hence, we conduct biodiversity impact assessment studies in collaboration with environmental experts. As one of the initiatives towards biodiversity conservation, we have developed biodiversity parks at Bagru mines in Jharkhand, as a step towards the land reclamation process in mine closure dump sites. The project has been developed in 5.5-hectare area of mine closure dump with the themes of Nakshatra Garden, Butterfly Garden, Rose Garden, Panchavati Garden and Medicinal and Spice Garden. The park also has a bamboo pavilion and a pisciculture and duck rearing pond. Details of our biodiversity management plans have been provided in a separate section on Biodiversity Management.

To restore the mined-out areas, we take measures such as planting of native species, and forming of slope and drainage in the affected areas. Extending our efforts in this direction, we carry out tree plantation activities at our mining sites and in the neighbouring villages regularly in a scientific manner. Ecosystem conservation efforts are also taken with the help of our volunteer task force, which patrols forests and helps local forest departments. We also make use of Vesicular-Arbuscular Mycorrhiza (VAM) biofertilizers for rehabilitation of mine closure sites. This helps in restoration and enhancement of soil fertility of the mine closure sites. Our environment management cell is responsible for ensuring proper implementation of sustainable mining operations at all our mining sites. We operated about 254.28 ha of area, which falls under the distributed and unrehabilitated categories of land. During the reporting period 14.41 million MT of overburden was generated as a result of our mining operations.

Year	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Total mining area leased (operational) (Ha)	11,337	10,159	9,977	9,278
Total area mined out (Ha)	126	159	155	132
Total area reclaimed (Ha)	108	127	156	112
Total area disturbed (Ha)	126	154	155	95
Total area rehabilitated (Ha)	95	118	94	102

Mine Closure

Plantation

- Soil bio-regeneration
- Biodiversity conservation park
- Medicinal plants and bamboo garden
- Kosa farm - Terminalia Elliptica

Renewable energy

- Solar/ wind farm

Water reservoir

- Pisciculture

Sustainable livelihoods

- Capacity building
- Alternate employment Enterprise development

We also take efforts to minimise our impacts on our surrounding communities. Based on the risks identified through our risk management framework due to mining activities, rehabilitation and resettlement plans are developed for these communities affected by our operational activities. These rehabilitation plans also form a part of the mines closure plan. As part of the rehabilitation plans, the indigenous and local communities are provided with job opportunities, monetary compensation or sustainable livelihood opportunities, thereby meeting the local regulatory requirements. Our Rehabilitation plans are aligned with the National Rehabilitation and Resettlement Policy, 2007. Some of the initiatives for improving livelihood opportunities include programmes involving integrated agriculture and aquaculture activities.

Fulfilling our responsibilities towards our surrounding and our industry, we ensure compliance to all statutory regulations pertaining to our mining operations. During the reporting period, we did not witness any strike, lockouts or disputes related to land use or customary rights of local communities and indigenous people surrounding our mining operations. No Artisanal and Small-Scale Mining (ASM) operations were conducted on our mining sites or in the neighbouring areas. Periodic reviews of our mining operations are done by internal and external agencies. Sustainability audits of our mines are conducted by the Federation of Indian Mineral Industries (FIMI) periodically. In addition to this, regular internal audits are also conducted. Due consideration is given to the findings and recommendations of these internal audits, in order to incorporate them in our future endeavours.

Fulfilling our responsibilities towards our surrounding and our industry, we ensure compliance to all statutory regulations pertaining to the mining operations.

Sustainable Mining Charter (Xynteo India 2022)

Since our inception, we have focused on striking a balance between our social and environmental performances. Socioeconomic development is central to our growth approach. Xynteo, a Norway-based environmental advisory platform, leads efforts in this direction and acts as catalyst to connect leaders from across the globe.

The Xynteo India2022 programme provides us with an opportunity to collaborate with world leaders to work towards the common goal of building a sustainable environment and healthcare systems. It focuses on the development of a business model that factors in socioeconomic considerations for various sectors, including mining. The aim is to develop solutions for a sustainable environment and healthcare systems.

Moving forward, the India2022 global business coalition is taking collaborative steps to address some of the pressing issues facing the world. Through this coalition, Hindalco is facilitating global efforts to tackle the challenges due to COVID pandemic. Leaders world over are thriving to bring a change and collaborating across sectors to enable conducive work processes to continue serving the economies.

Our endeavours have always prioritised sustainable and responsible growth. Focussed on inclusive development, we adopt mining practices that are sustainable in nature and responsive to our business needs. In order to carry out the same, we have prepared a Sustainable Mining Charter, which serves as an actionable framework to undertake responsible mining operations, ensure social leadership efforts and lead environmental stewardship initiatives. The charter is built around three prime objectives, as described here:

- To move beyond regulatory compliance for creating positive impact on the environment
- To enhance resilience and prosperity of the communities in mining regions
- To build profitable and responsible mining operations

This charter is in alignment with NITI Aayog's 'Strategy for New India @ 75', which focusses on systematic and sustainable growth of the mining and minerals sector. Realising a long-term growth potential, we have adopted a sustainable mining model, identifying seven thematic areas to achieve our goals of responsible operations, social leadership and environmental stewardship. These focus areas are:

Sustainable land use | Water stewardship
Emission reduction | Biodiversity management | Local economic development
Health and safety | Waste Management

We are working closely with various stakeholders including the Government of India to ensure the resilient, reliable and responsible growth of our mining operations.

Environmental Stewardship

Key Performance Highlights

Target | Achieved | Achievement additional to the target

Aluminium

25%

17%

Reduction in Specific Energy Consumption (Energy Intensity)

Base year: FY 2011-12 | Target year: FY 2024-25

Aluminium

25%

15%

Reduction in Specific GHG Emissions

Base year: FY 2011-12 | Target year: FY 2024-25

Aluminium

40%

40% | 2.26% | 42.26%

Reduction in Specific Water Consumption

Base year: FY 2011-12 | Target year: FY 2024-25
Additional target to achieve 5% reduction up to 2022 is committed.

Copper

40%

9.66%

Reduction in Specific Water Consumption

Base year: FY 2011-12 | Target year: FY 2024-25

Aluminium

70%

66%*

Bauxite Residue Utilization

Base year: FY 2011-12 | Target year: FY 2024-25
All four operational locations cummulatively have achieved 27% bauxite residue utilization and the remaining is stored in approved structures.
* Achievement for three out of four operational locations

Aluminium

100%

89%

Dross Utilization

Base year: FY 2011-12 | Target year: FY 2024-25

Target | Achieved | Achievement additional to the target

Aluminium

100%

76% | 24% | 100%

Fly Ash Utilization

76% utilisation for useful applications, such as in cement manufacturing, construction industry, brick manufacturing, backfilling of low-lying areas etc. and the remaining 24% is stored in approved structures.

Copper

100%

100% | 73% | 173%

Phospho-gypsum Utilization

100% of phosphogypsum generated in FY 2019 -20, and 73% of previous year's phosphogypsum has been utilised

Copper

100%

100%

Fly Ash Utilization

100% of fly ash is utilized in FY 2019-20

Copper

100%

100% | 35% | 135%

Slag Utilization

100% of Copper Slag generated in FY 2019 -20, and 35% of previous year's Copper Slag has been utilised.

15.15% Percentage of recycled raw material (external scrap) as percentage of production in Copper business

Environmental Stewardship

Environmental stewardship is central to our business strategy, which is why we integrate sustainability into each stage of our operations. We recognise the resource-intensive nature of our operations; hence, we operate in a manner that minimises our environmental footprints and mitigates risks of resource criticality.

We work with a well-formulated strategy to deal with operational challenges in terms of the environment and have implemented an environmental management system at all our operational locations for this purpose. Involving our workforce right from the top management to line management staff, we work collectively to address the environmental aspects at every stage of our operations. We streamline our approach with our business goals to achieve balanced growth. In doing so, we adhere to all statutory environmental regulations and comply with the requisite standards. We have also started integrating various management systems at our operational locations through a collaborative initiative. The approach to review, certify and improve any management system across our plant locations will involve a standardised process driven by the corporate office. This will provide our units with access to best practices being followed across other locations and strengthen existing management systems.

Our environmental commitments are showcased by the efforts and equal involvement of our top leadership, which forms the Hindalco Sustainability Committee, headed by the Managing Director. This committee assists in assessing environmental performance at the company and unit levels by conducting reviews on a monthly basis.

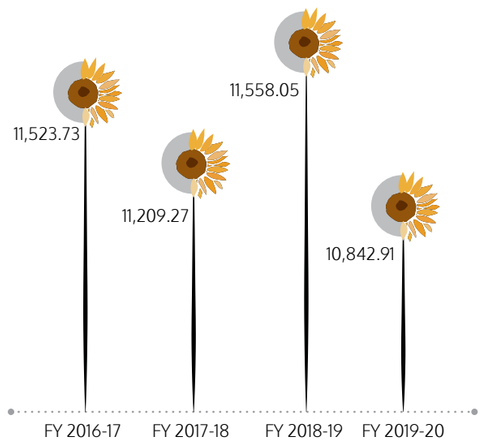
Material Management

Material Consumption

Non-renewable natural resources are a primary source for a major component of our input raw materials. For us, environment conservation is a critical aspect of our business strategy; we, therefore, try to integrate the objectives of environmental stewardship into our business objectives. Our value chain is designed to meet the goals of resource sustainability by following a multi-dimensional approach.

Our alumina refineries are situated in the vicinity of our bauxite mines, which helps us reduce our environmental footprints due to reduced transportation. We witnessed stable consumption of raw materials in terms of our aluminium production. The table below illustrate details of raw material consumed for aluminium and copper production. Trends show a reduction in bauxite, aluminium fluoride and caustic soda consumption for this year. The values for total packaging material consumption stood at 32,205.44 MT, out of which 3,032.25 MT was wood, 875.1 MT was paper and 28,298.09 MT were other packaging materials.

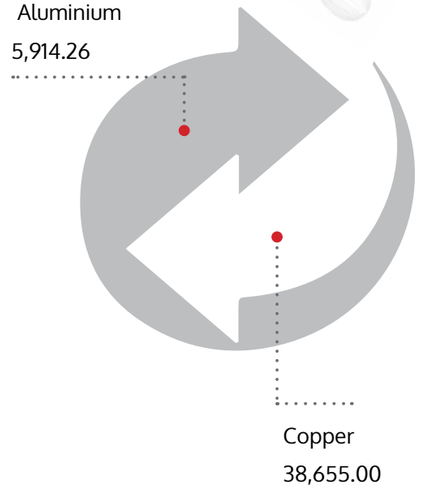
Total Material Consumption (000'MT)



Material Type (000' MT)	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Bauxite	8,828.43	8,966.37	8,987.99	8,511.77
Aluminium Fluoride	18.59	18.96	21.2	19.44
Calcined Petroleum Coke	490.79	491.81	473.73	518.99
Caustic Soda	289.39	297.88	276.88	222.49
Pitch	108.29	109.01	105.74	113.05
Ammonia	71.53	47.04	77.11	56.10
Rock phosphate	461.68	317. 59	480.57	363.77
Copper Concentrate	1,255.03	1,278.20	1,134.83	1,037.30

Material Recycling

On account of its inherent properties, aluminium proves to be valuable resource for recycling, with options available to recycle it numerous times. To utilise the resource at hand, we explored various opportunities to improve our recycling capabilities, backed by significant investment. Along with aluminium, copper production also forms a major part of our operations and we have taken measures for recycling the residues. During the reporting period, scrap copper as a recycled input material constituted 2.58% of the total input materials for copper production. Details of recycled input materials in our aluminium and copper operations are represented in a tabular form:



Recycled Material Consumption (MT)

Hot Rolling Mill Lubricant Development for FRP Plant at Taloja

Our Hindalco Innovation Centre Semi Fab based in Taloja is the centralised R&D centre for Aluminium Flat Rolled Products (FRP) business. Their major focus areas include tribology (oils and lubricants), metallurgy & process modelling. Our tribology team actively works on new product development (oils & lubricants), process improvements, and analytical support in rolling lubricants, engineering oil, transformer oils & fuels across all our plants.

Hot rolling mill lubricant strongly influences both mill productivity and metal quality. Consistent aluminium rolling lubrication performance is required to ensure effective cooling and protection of the freshly generated aluminium surface, whilst minimising roll wear and avoiding slippage and refusals. Our tribology team has started developing aluminium hot rolling lubricant indigenously, for our Taloja plant. We have observed certain advantages due to the indigenous development of aluminium hot rolling mill lubricant; these can be seen below:

- Decrease in generation of non-conforming products, due to decrease in quality issues
- High sales returns
- Savings in terms of Business Value of Rs 5.6 crore / annum
- Savings in terms of Lubricant Cost of 0.9 crore/ annum
- Regaining customer confidence
- Increase in business volume by 12KTP/300 crore/ annum.

Recycling of Aluminium Beverage Cans at Lucknow

Recognising the relevance of resource criticality, we constantly undertake initiatives towards resource conservation and recycling. Our efforts are focussed around minimising energy consumption and emissions, including GHG emissions. Our subsidiary Novelis recycles a large volume of aluminium scrap.

Channelling our efforts in this direction, we undertook a pilot project on used beverage can collection in Lucknow. The lack of recycling structure did not deter us from carrying out this project. We developed an on-ground network of ragpickers and scrap dealers for the collection of these cans. With their help, we successfully collected close to 4 million used beverage cans in and around Lucknow in a period of 7 months. The collected cans were responsibly recycled using state-of-the-art technology at our plant situated in Korea operating under Novelis and recycled can aluminium sheets were produced as a result of this recycling process.

Eco-Friendly Cold Tamping/Ramming Paste for Smelting Operation

The normal coal tar pitch and anthracene oil-based material liberate volatile organic compounds like benzo pyrene, dibenzo anthracene, benzo fluoranthene that cause health and environmental hazards. An eco-friendly cold ramming paste has been developed by Hindalco Innovation Centre- Alumina, in collaboration with the Carbon Paste Plant of Belagavi to increase the life span of pot. The newly developed product does not liberate such types of hazardous gases, making it very safe to use in smelters as well as in ferro-alloy industries. The strength of this material is also found to be higher, while other required properties are like the presently used material. It is planned to be tested in one of Hindalco's smelters.

Our Future-Looking Development in Chemical Business: A Nano-Hydrate Developed in Our Lab

We have successfully developed a nano-hydrate in lab, as well as in pilot scales. This product has also been approved by one of our domestic customers, who has decided to conduct plant-scale production trial at their end. This value-added product has a wide range of applications in fire-retardant polymeric compounds. The demand of such type of material is expected to go up with the prevailing market and legislative situation. Therefore, its development is a step in the right direction for the growth of specialty hydrate business.

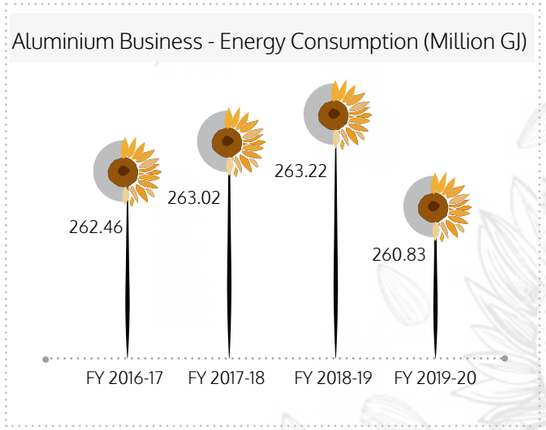
Energy Management

Resource conservation is central to our operational strategies. We understand the exhaustive nature of non-renewable resources and constantly strive to meet our needs through renewable sources throughout our operations. We stay committed with our efforts towards reduction in overall energy consumption, improvement through energy efficiency and integration of clean energy sources. We have adopted a well-formulated strategy to meet our goals of energy management. To reach these goals, we set well-defined targets for energy efficiency, which is followed by regular performance reviews by the top management. Our commitments towards energy conservation helped us draw closer to our target of renewable energy consumption of 100 MW by 2021. In addition to the 30 MW solar power plant commissioned at Aditya Aluminium in November 2018, we have installed and commissioned 4.2 MW solar plant at GP Mines and 7 MW solar plant at Utkal. Also, a 4 MW hydro plant (under JV model) was commissioned for captive consumption at Taloja during this year. With this, our current achievement of renewable energy stands at 45.2 MW for FY 19-20. For both our major businesses viz. copper and aluminium, we have well-structured energy and carbon management plans in place. During the year, three large units viz. Renukoot complex, Mahan Aluminium & Hirakud Power & Smelter were certified as ISO 50001 compliant.

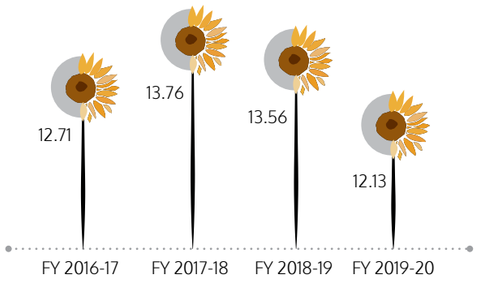
Our employees are constantly encouraged to undertake qualifications of Energy Managers and Energy Auditors. These efforts have led to additional 15 of our professionals being qualified as Energy Managers and Energy Auditors through an examination conducted by the Bureau of Energy Efficiency (BEE) during the reporting period. We also motivate our staff and create awareness among them to make efforts towards energy efficiency, thereby contributing in their own way to the larger picture of our sustainable energy use.

Energy Consumption

We meet our energy consumption needs through a mix of renewable and non-renewable sources. Throughout our business operations, we aim to reduce our energy consumption; and set yearly targets to keep a check on those. Our annual energy consumption target for FY 2019-20 was 274.14 GJ. The reporting period witnessed a total consumption of 273.46 million GJ of energy, including 0.51 million GJ energy consumption for our mining activities . The following graphs represent gate-to-gate energy consumption trends for aluminium and copper businesses .



Copper Business - Energy consumption (Million GJ)



Our energy consumption needs are mostly met through fossil fuels. We also consume renewable power from our captive solar and hydro power plants, in addition to third-party purchases. Our energy consumption details are represented in the table below.

Fossil Fuels	273.79 million GJ
Purchased Electricity	3.03 million GJ
Renewable Energy	0.23 million GJ
Steam / Heating / Cooling and Other Energy (Non-Renewable) Purchased	0.002 million GJ
Total Non-Renewable Energy (Electricity and Heating & Cooling) Sold	4.10 million GJ

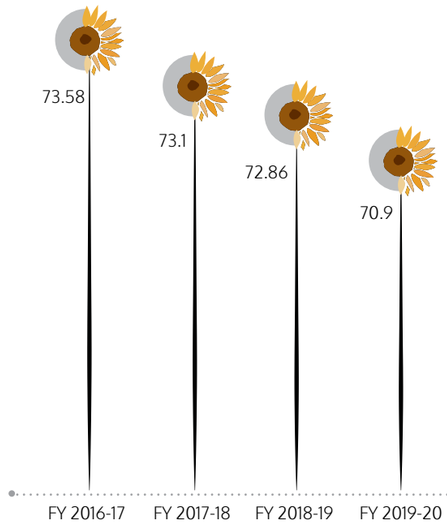
Parameter	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Renewable Energy (Million GJ)	0	0.01	0.14	0.23
Non-Renewable Energy (Million GJ)	275.17	276.77	276.64	272.73
Total Energy (Million GJ)	275.17	276.78	276.78	272.96

Energy Intensity

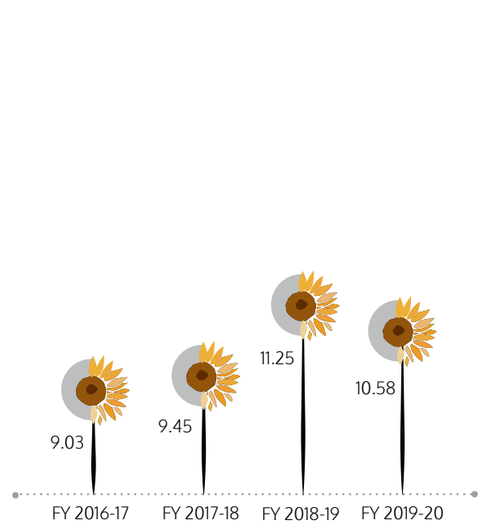
We continue to take efforts to reduce our impact on the environment in every possible way. Our focus on reduction in energy intensity is one such domain. As illustrated through the graphs, we have witnessed a decline in the value of energy intensity for our aluminium business. Major reasons for decline in energy intensity are the execution of a number of energy-saving projects and operational improvements.

Trends of energy intensity for aluminium and copper businesses are represented graphically below:

Aluminium Business - Energy Intensity (GJ/MT)



Copper Business - Energy Intensity (GJ/MT)



For aluminium, the energy intensity is reported for process energy consumed for primary aluminium production, which includes energy consumed in the aluminium refinery, aluminium smelter and carbon anode plants in their ratio of use per ton of metal. For copper, energy intensity is reported for process energy consumption for copper production, which includes energy consumed in the copper smelter and copper refinery per ton of copper produced from copper concentrate.

Solar Power Plant at Aditya Birla

Energy Conservation

Energy efficiency holds a significant place in our energy management program. We are constantly taking efforts to enhance our energy efficiency by exploring various methods to integrate in our operational activities.

As part of our energy conservation agenda, we undertake various energy efficiency and renewable energy projects at our plant locations. During FY 19-20, we completed a total of 130 projects, comprising of 125 energy efficiency projects and 5 renewable energy projects; which resulted in saving of 2.45 million GJ of energy and 0.25 million tCO_2 of emissions. These projects have additionally resulted in a cost saving of INR 3,194 lakhs.

The highlights of some of our energy efficiency initiatives taken during the reporting period are:

I. New generation economiser, replacement of pump seals and various actions to reduce steam consumption in aluminium refinery
II. Reduction in aluminium smelter energy consumption through phased implementation of copper insert collector bar, clamp modification, step stub-anode, pot noise control, etc.
III. Power plant efficiency improvement by improving condenser vacuum through improvised tube cleaning, TG overhauling, duct modification through CFD study, etc.
IV. Replacement of cooling tower fan blade with E-glass epoxy FRP blade
V. Installation of fan-less cooling tower
VI. Auxiliary power reduction through automation & process optimisation
VII. Rationalisation of motor, pump & fan capacities and replacement of inefficient pumps & motors with high efficiency pumps & motors
VIII. Energy efficient & corrosion-resistant coating in pumps
IX. Revamping of preheating/annealing furnaces
X. Phased replaced of conventional lights with energy efficient LED lights
XI. Installation of VFD in variable load application
XII. Compressed air system efficiency improvement through replacement of inefficient compressors, arresting leakages, process optimisation, etc.
XIII. Power factor improvement

Some examples of our energy conservation initiatives are presented in the following section.

Reduction in Power Consumption Through Modification of Busbar of Smelter Pots at Renukoot

A plant at Renukoot was commissioned in 1962. At present, the Renukoot smelter has 11 pot lines that were commissioned years ago. These smelters consumed nearly 14 thousand units per tonne, which is high compared to modern smelters operating at less than 13.4 thousand units per tonne. This difference in power consumption makes this smelter less cost-efficient than modern smelters, and increasing coal prices further add to the power cost.

Aluminium busbars are used in pot lines to carry the current. Power consumption of the smelter depends on two factors, viz. the pot voltage and current efficiency. Current efficiency of Renukoot smelter (94.5%) is comparable to most modern smelters. Total voltage drop in the Renukoot smelter pots is about 4.410 V per pot, which is about 200 mV higher than modern smelters. It was observed that the busbar voltage drop was 200 mV/pot.

In order to resolve this issue of higher power consumption, cross section of busbars was increased to reduce the voltage drop by 50-60 mV/ pot. Through this initiative, a reduction in power consumption of 158 kWh/T was achieved.

Energy Conservation at Renusagar Thermal Plant Through Installation of Capacitor Bank

For the purpose of crushing and conveying coal from mines, crusher and Belt Pipe Conveyor (BPC) is installed. Process water requirement of Renusagar Power Division (RPD) is met from Rihand Reservoir. For this, RPD has installed a make-up pump at the reservoir bank, which is approximately 2 km from the location.

At RPD, coal transportation is carried by the BPC, and its switchgear is powered by 6.6 KV through HT cables from the RPD, having length of approximately 7 km. These motors draw reactive power from the source at RPD through cables, which leads to losses in these cables. This reactive power is ultimately supplied with the help of the generators. In order to save this reactive power and reduce losses in cables, it was proposed to install capacitor banks near the load, so that reactive power can be supplied locally. The capacitor banks led to reduction of high reactance of the HV lines which, in turn, helped in power reduction.

This initiative resulted in a saving of about 1.33 million units of electricity, along with reduction in emissions.

Installation of Solar Power Plant in Mines Area at Gare Palma

Hindalco is committed to increase the use of green energy in the Company's total energy consumption across various operations in the country.

As a part of these initiatives and as a measure of sustainable mining, a 4.2 MWp (3 MW AC) solar power plant was planned in the coal mines at Gare Palma. The project was installed and commissioned in a phased manner. At the first stage, 1.5 MW was commissioned in September 2019 and 2.7 MW was commissioned at the second stage in December 2019.

This is a first-of-its-kind solar plant in a coal mine in India. The project is built over 17 acres of mine land, which is a very difficult terrain to build such a plant.

Many challenges of additional statutory approval for using mine land and land levelling against all odds were overcome.

The project is expected to meet 21% of the total power requirement of the Gare Palma Mines, save 4,100 tons CO2 emission and also save Rs 2.92 Cr annually. The project is also aligned with Hindalco's major initiative on "Sustainable Mining".

Overview of Solar Power Plant at Gare Palma Mines

Emissions Management

GHG Emissions

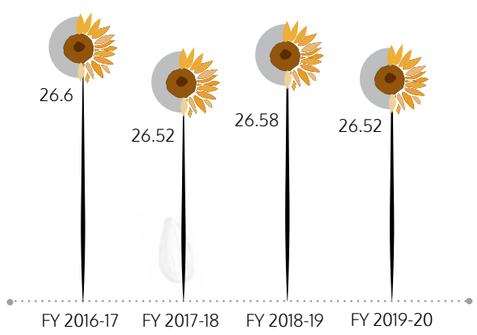
Our aim is to reduce GHG emissions and maximise the share of renewable energy in the overall energy mix of our operations. During this year, solar PV power plant for captive consumption was installed and commissioned at three locations, including 4.2 MW at GP Mines and 7 MW at Utkal Alumina. In addition to these, one 4 MW hydro project (under JV Model) was commissioned for captive consumption of Taloja unit. This contributed to our efforts towards environmental sustainability.

We have a target to reach a collective capacity of 100MW by FY 2020-21, and to move ahead in this direction, we have initiated solar projects at six locations. Further, we have renewable energy capacity addition of close to 55 MW planned to be commissioned during the coming year. We have also initiated a feasibility study for renewable hybrid power project.

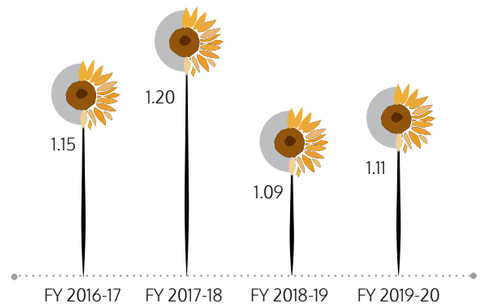
Graphical representations have been given here for the total GHG emissions from our aluminium and copper operations. Details of our scope 1 and scope 2 GHG emissions for Aluminium and Copper have been given in a tabular form. Our targets for scope 1 and scope 2 emissions for FY 2019-20 was 26.76 million tCO_2e and 0.69 million tCO_2e respectively. Further, development of a mechanism for measuring, reporting and monitoring our scope 3 emissions is in process.

	Scope 1 GHG Emissions (million tCO_2)		Scope 2 GHG Emissions (million tCO_2)	
Year	**Aluminium**	**Copper**	**Aluminium**	**Copper**
FY 2016-17	26.07	1.09	0.53	0.06
FY 2017-18	26.09	1.18	0.43	0.02
FY 2018-19	26.07	1.15	0.51	0.04
FY 2019-20	25.94	1.00	0.58	0.10

Aluminium - Total GHG Emissions (million tCO_2)



Copper - Total GHG Emissions (million tCO_2)



Our GHG offset through REC purchase for Aluminium and Copper has been presented in the following table:

Year	Aluminium (million tCO_2)	Copper (million tCO_2)
FY 2018-19	1.01	1.07
FY 2019-20	0.39	0.32

To meet our regulatory obligations, a purchase of 386,695 renewable energy certificates (REC) was made for the reporting year, which is equivalent to a GHG offset of 3,17,090 tCO_2e.

To estimate our GHG emissions, we follow guidelines defined by the World Resource Institute's (WRI) Greenhouse Gas (GHG) Protocol. To determine our GHG emission estimates, we adhere to relevant industry standard factors and factors prescribed by Intergovernmental Panel on Climate Change (IPCC).

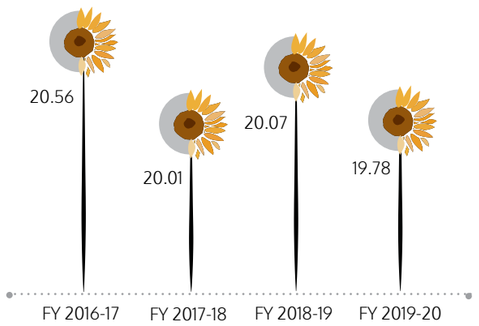
GHG Emissions Intensity

GHG emissions intensity for aluminium is reported for process energy consumed for primary aluminium production, which includes GHG emissions from aluminium refinery, aluminium smelter & carbon anode plant in their ratio of use per ton of metal. Similarly, GHG emission intensity for copper is reported for process energy consumed for Copper production, which includes GHG emissions from Copper Smelter & Copper Refinery per ton of copper produced from copper concentrate.

The graphs below show GHG emissions intensity index and trend for aluminium and copper business.

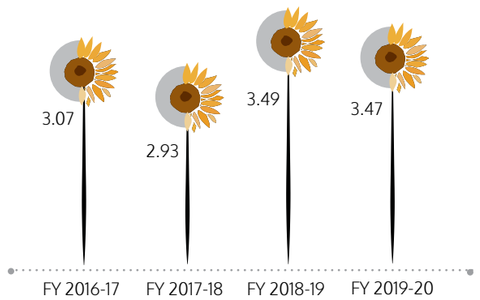
GHG Emissions Intensity Index				
Base Year : FY 2015-16	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Aluminium Business	88.38 %	84.30 %	87.73 %	85.27 %
Copper Business	92.21 %	94.73 %	101.83 %	108.70 %

Aluminium business - GHG Emissions Intensity (tCO_2 /MT)



Aluminium business GHG Emission Intensity includes emission from Power Plant, Aluminium Refinery, Aluminium Smelter and downstream operation

Copper Business - GHG Emissions Intensity (tCO_2 /MT)



Copper business GHG Emission Intensity includes emission from Power Plant, Copper Smelting and downstream operation

NOx, SOx and Other Significant Air Emissions

We keep a check on our significant air emissions such as SOx, NOx, particulate matter (PM) and fluorides, in addition to GHG emissions. We comply with the National Ambient Air Quality Standards (NAAQS) 2009 to ensure ambient air quality parameters. All our plants are equipped with necessary controls to manage these emissions within the permissible limits. We have started monitoring these emissions through Continous Emissions Monitoring System (CEMS) complying with the statutory requirements. The CEMS captures round the clock data and is more precise than the off-line monitoring. Data thus captured is automatically shared the Central pollution control board (CPCB) and state pollution control boards (SPCBs).

Stack emissions intensity for aluminium is reported for process energy consumed for primary aluminium production, which includes stack emissions from aluminium refinery, aluminium smelter & carbon anode plant in their ratio of use per ton of metal. The values for the specific emissions for our aluminium process stood at 9.59 kg/MT for SOx, 5.28 kg/MT for NOx, 3.92 kg/MT for Particulate Matter and 0.18 kg/MT for fluorides for FY 2019-20. 1.92 MT of alumina is indexed to 1.0 MT of smelted aluminium for refining.

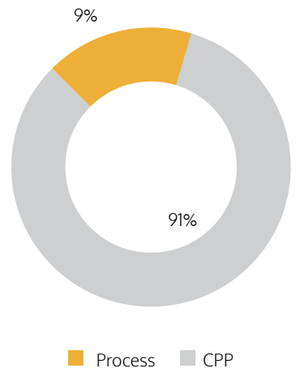
Further, as part of our NOx and SOx emission control measures, we have undertaken pilot studies at two of our plants and also plan to replicate the same across all plants in the near future. In our efforts to reduce SOx emissions, we plan to install Flue Gas Desulphurization (FGD) at our plant locations. For reduction of our PM emissions, we are upgrading the rectifiers of Electrostatic Precipitator with High Frequency Transformer Rectifier (HFTR). Currently, we have installed HFTR at two of our power plants and work is under progress for the remaining locations.

The table below give details of SOx, NOx, particulate matter and fluoride emissions during FY 2019-20.

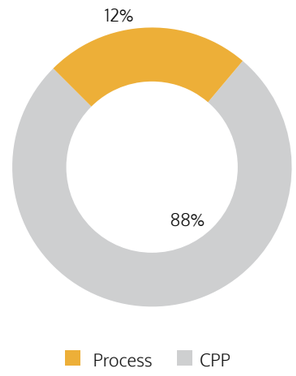
Type of Air Emission (000' MT)	Aluminium Business	Copper Business
SOx	64.22	0.62
NOx	29.55	0.04
Particulate Matter	8.69	0.24
Fluoride	0.12	0.00

The graphical representation indicates emissions for the aluminium business as per source.

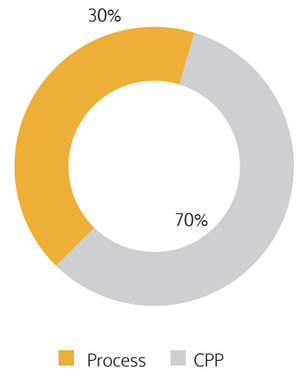
Aluminium Business - SOx Emissions (FY 2019-20)



Aluminium Business - NOx Emissions (FY 2019-20)



Aluminium Business - Particulate Matter (FY 2019-20)



Our ODS emissions in CFC 11-eq were 0.36 MT for the reporting period. The emissions of ozone depleting substances and PFC emissions have been given in a tabular form as under:

ODS Emissions (kg of CFC-11 Eq.)

Year	2016-17	2017-18	2018-19	2019-20
ODS Emissions (kg of CFC-11 Eq.)	0.16	0.23	0.43	0.36

PFC Emissions (kg CO_2e/ metric tonne produced)

Parameter	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Direct PFC Emissions	1,122	293	215	310	269

Reduction in PM Stack Emissions by Installation of HFTR & Pulse Power Transformer in Boiler ESPs at Muri

The Muri co-generation power plant has 3 CFBC boilers with a capacity of 140 TPH each. During normal plant operation, two boilers are kept in running condition, whereas the third one is kept on standby mode. These two running boilers are sufficient to fulfil the steam requirements for generation of power as well as the process steam of alumina refinery. Electro-Static Precipitator (ESP) are installed in each of the boiler outlet to collect the dust from flue gas, considering the environmental norms prescribed by the Ministry of Environment, Forest and Climate Change (MoEFCC). Each ESP consists of 4 fields with 2-phase Transformer Rectifier (TR) sets of capacity 56KVA & rating 90KVP/ 600mA. The performance of these ESPs since commissioning was found to be inadequate to meet the stipulated statutory norms.

In FY17 and FY18, the first two fields of each ESP transformer were upgraded with advanced 3-Phase TR set of capacity 107 KVA & 95KVP/ 800mA. After installation of the 3-Phase TR sets, there was an increase of 20-30% in ESP collection efficiency, but that was not adequate to meet the new stringent MoEFCC environmental norms and guidelines that mandated the SPM limit to not exceed 50 mg/Nm3.

Our thorough analysis concluded that our emission requirements could be met by installing High Frequency Transformer Rectifier (HFTR) Pulse Power TR set and upgrading the ESP internals. HFTR helps convert the AC input power into pure DC output and Pulse Power transformer injects high voltage pulse into the field at certain intervals. The injection of pure DC Power and high voltage pulse in ESP results in very few sparks in the field and increases collection efficiency of the ESP. EPS upgradation work was started in February 2019 for the second boiler, whereas installation for the third is under progress.

This initiative resulted in substantial reduction in particulate matter stack emission. The same can be replicated at all units to lower stack emissions, with the help of testing and analysing the performance results in all boilers.

SO_2 Emission Reduction from Boilers at Muri

Muri CGPP has three Circulating Fluidised Bed Combustion (CFBC) boilers. During normal operation, SO_2 emissions exceed the MoEFCC norms. SO_2 emission from the power plants or boilers depends largely upon the percentage of sulphur in the fired coal, which is around 0.5% in the case of Muri power plant. Blending of coal with limestone or pure lime for firing in the boilers is one of the most viable option for Muri and a proven alternative to reduce the SO_2 emissions from the stack.

Trial runs were carried out at Muri, wherein powdered lime (CaO) was dozed manually by mixing with coal in calculated ratio, thereby feeding the boiler bunkers. Powdered pure lime was used instead of limestone powder for manual feeding, as the quantity required for feeding was lesser and the same was readily available. We could successfully achieve SO_2 emission well below 600 mg/nm^3.

In order to meet the prescribed emission norms, lime (CaO) dozing was started in boilers to curb SO_2 emission. Pure lime powder consisting of approximately 70% CaO is being dozed manually by contract labour into the main coal feed grizzly hopper of the coal handling plant. In this method, lime is mixed with coal in a predefined calculated ratio on a shift-wise basis, thereby feeding the boiler bunkers along with coal. This initiative helped us achieve the desired results.

Water Management

Water is one of the most important substances for running our operations. We source water from various sources, including surface water, ground water and supply from municipal authorities, to name a few. In addition to this, we have developed significant capacity to harness rainwater across our operational locations. In order to address water-related risks, we have adopted a strategic approach in our operations. As part of the approach, we have taken a holistic view of our water management to encompass fresh and recycled water consumption, water conservation efforts, and efforts on water reusing and recycling, including moving towards zero liquid discharge.

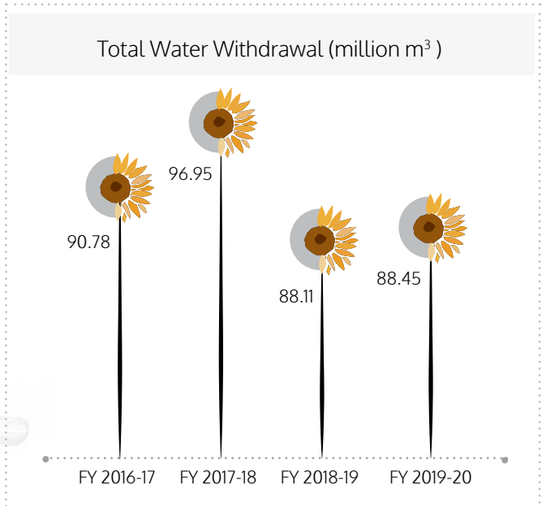
Considering the evolving water risk globally and in India, we have developed a Water Task Force for each of our units. It comprises of a cross-functional team and works on three key risks related to water-physical risk, regulatory risk and risks related to stakeholders.

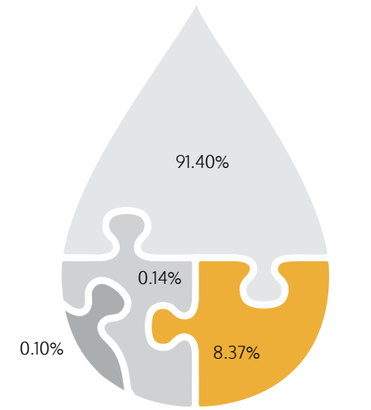
We use water situation assessment tools such as the World Business Council for Sustainable Development's India Water Tool and WRI Aqueduct for assessment of physical water risks across the locations. We have conducted a scenario analysis using the India Water Tool wherein we estimated seasonal variability in availability of water by considering scenarios such as occurrence of floods, draughts, declining ground water table etc. For instance, the risk of seasonal variability was found to be high for most of our operating sites. Based on these findings we have taken mitigation actions to prevent an adverse impact on our operations such as construction of rainwater harvesting ponds, reservoirs, desalination project, reuse of treated effluent, constitution of a monsoon committee and emergency preparedness plans. Action plans and projects are developed for all risks and form part of the water risk mitigation plan. ABG technical standards on water and wastewater management provide the necessary guidance for assessing risks and developing mitigation plans.

Last year, we have witnessed the highest-ever rainfall and heavy downpour for a shorter duration in some of our units, which has impacted our operations and led to temporary shutdowns. Based on these experiences, we have reviewed topography of the plants and the water evacuation capacities of existing storm drains.

Water Withdrawal

Our figure for water withdrawal stood at 88.45 million m^3 for the reporting period, with the maximum share of surface water (water sourced through a river) and negligible share of ground water extraction. Following our responsible resource consumption principles in practice, we take care that the water sources are least affected by water withdrawal at our operations. The details of our total water withdrawal, along with the breakup as per the source, is given below:

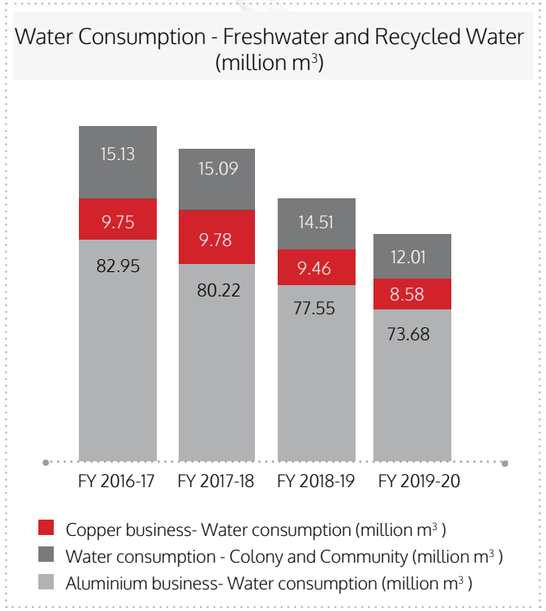


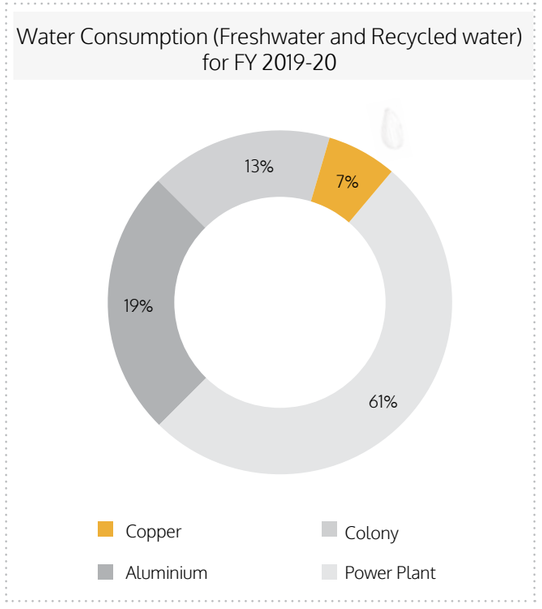


Water Withdrawal from Source (%)

Water Consumption

Extending our efforts towards the well-being and needs of our communities, we supply water to our colonies and nearby communities for drinking and other domestic use. We try to minimise the consumption of freshwater throughout our operational activities by substituting it with recycled water wherever feasible. In case of lack of adequate quantity and required quality of recycled water, we resort to freshwater consumption. Process and power generation are the two major areas of water consumption, with power generation consuming maximum quantity of water. Most of our plants, which account to our major production, consume water which is less than 2% of the total storage capacity of the source. Graphical representation of total water consumption and the water consumption segregated business wise is given below:





Our efforts in water conservation are evident through our results due to rainwater harvesting. Our value of rainwater harvesting stood at resulted in 9.4 million m^3 during the reporting period. We are also working towards reducing our water consumption; our target for total net water consumption for the year was 53.9 million m^3. Our total freshwater consumption from various sources and the quantum of harvested rainwater during the last four years is as provided in the table below (in million m^3). This includes water consumption across aluminium operations, copper operations and mines. The data presented in the table does not include water consumed in colonies and communities:

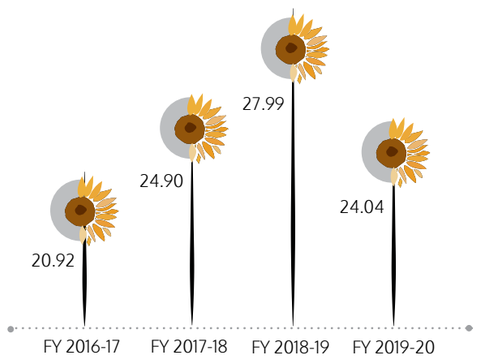
Total Freshwater Consumption (Aluminium operations, Copper operations and Mines)

	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Surface Water (million m^3)	71.28	65.74	60.76	61.11
Ground Water (million m^3)	0.09	0.00	0.77	0.07
Rainwater Consumed (million m^3)	0.12	3.43	2.14	0.09
Total Municipal Water Supplies (million m^3)	0.13	0.11	0.38	5.60
Total Freshwater Consumption (million m^3)	71.62	69.27	64.05	66.86

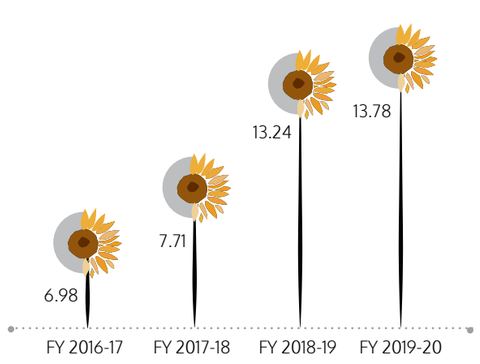
Water Recycling

Recycled water forms a significant portion of water consumed in our aluminium and copper operations. The graphs below illustrate the trends of our water recycling percentage over the years.

Aluminium Business - Water Recycled (%)



Copper Business - Water Recycled (%)

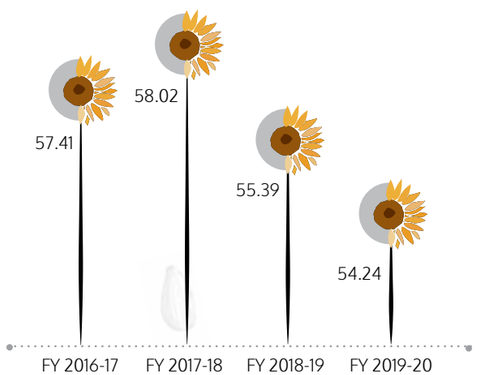


Water Intensity

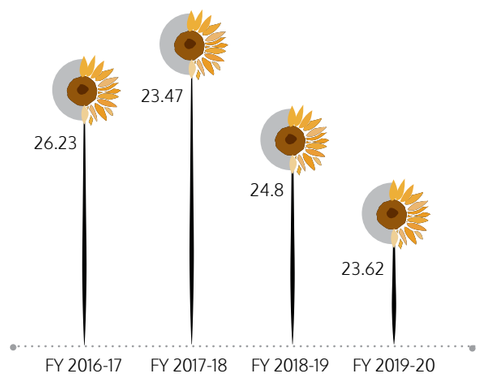
We adopt a process-based approach to arrive at the values for water intensity. We aim to accomplish the target of reducing specific water consumption by 5% year-on-year till 2022. The water intensity for our aluminium operations is combined impact of refining, smelting, rolling and extrusion operations indexed to the production of primary aluminium in MT. During the reporting period, we were able to reduce water intensity of our aluminium operations by about 11%. The water intensity of our aluminium operations during the reporting period was 11.37 m^3/MT. 1.92 MT of alumina is indexed to 1.0 MT of smelted aluminium for refining.

The trends for specific water consumption for aluminium and copper operations (gate to gate including power plants and other utilities) for last four years is presented here. The specific freshwater consumption for aluminium business also includes mines and colonies consumption values.

Aluminium Business -Specific Fresh water consumption - (m^3 /MT)



Copper Business -Specific Fresh water consumption - (m^3 /MT)



Hindalco has always focused on responsible water consumption and has taken various positive initiatives. With the help of these initiatives, we achieved substantial reduction in water consumption through an innovative approach at our plants located in Renukoot, Taloja, Hirakud and Alupuram. The following case studies provide details of some of these initiatives undertaken during the reporting period.

Water Conservation Initiative at Renukoot

We have achieved substantial reduction in freshwater consumption through in-house innovative design, engineering, modification and execution at our Renukoot plant. These are some of the initiatives aimed at reducing consumption:

- Modification in condensate handling system for segregating and utilising good condensate having conductivity (< 100 micro mho) as DM feed water to boiler
- Reuse of freshwater in Hammelmann pump operation
- Reuse of ACF/MGF back wash, conductivity meter testing water and gland seal water as DM feed water in boiler
- Water pressure optimisation in drinking water supply by installation of orifice and local pump in high elevation area
- Replaced drinking water with ETP-treated water for utilisation in toilets as well as in gardening across the Plants 1 and 2
- Replaced all bibcocks in the plants and toilets with push cocks
- Cleaning of toilet floor with ETP-treated water by providing separate tap connection from the same
- Awareness programme on water conservation conducted through quiz, nukkad natak, posters and slogan competitions
- Water tap survey across the plant is conducted on a quarterly basis.
- Daily water consumption record, plant-wise and section-wise, is prepared and shared with the concerned team with remarks for unusual consumption, if any

These measures helped in reduction of water consumption by 6.49%, compared to the base year FY16-17.

Reduction of Freshwater Consumption at Alupuram

Hindalco has always focussed on aspects of resource criticalities. Water, being a scarce resource, Hindalco takes various initiatives to reduce its freshwater consumption. This is evident through the initiatives taken at Alupuram plant, which are described below:

1. Replacement of all underground water lines by:
   - Successfully replacing the underground line to overhead line in labour quarters, as pipeline leakage was a major reason of large water consumption.
2. Increased accountability for individual activities by:
   - Creating a team for daily monitoring of water consumption is assigned and WhatsApp is used for creating groups to report water-related issues.
   - Assigning the mechanical supervisor with the responsibility of monitoring the meter readings, analysing the consumption and taking corrective actions on a daily basis.
3. Implemented engineering solutions such as:
   - Daily checking of meter accuracy
   - Sub-metering
   - Leak detection
   - Modification in plumping practices
   - SOP for water supply
   - Controlling the system pressure
4. End-plugged pipelines outside the plant.
5. Disconnected the water connection in all vacant quarters.

This initiative of freshwater reduction has been recognised under our downstream business units category.

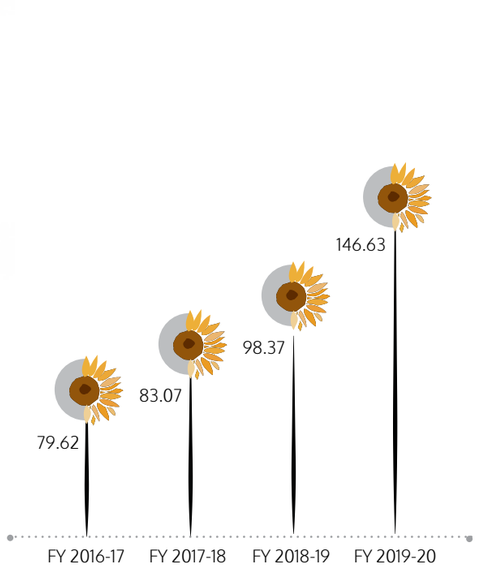
Effluent Management

Furthering our efforts towards environmental stewardship, we have adopted a strategised approach of effluent discharge at our sites. To ensure that water quality parameters such as pH, Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), colour, fluorides and Total Soluble Solids (TSS) are kept within permissible limits, we monitor our waste quality on a regular basis. The figures for our effluent discharge from aluminium operations stood at 146,629.7 m^3 and those from copper manufacturing operations are 223,738 m^3. We have seen a rise in the value of effluent discharge for our aluminium business this year. This can be attributed to improved monitoring, maintenance of zero liquid discharge units and change in water treatment mechanism.

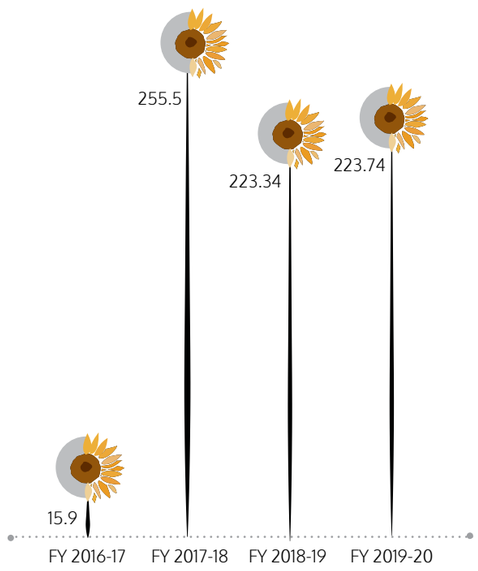
We are nearing our target of achieving the status of Zero Liquid Discharge (ZLD) for all our plants by FY 2020-21, with 11 out of 15 plants having met the target this year. Effluents from the remaining plants are properly treated meeting the requirements specified by Central and/or State Pollution Control Boards. Effluents discharged from our plants do not significantly affect any water bodies in our surroundings.

Trends of effluent discharge from our operations are presented graphically as follows:

Aluminium Business - Effluent Discharged (000'm^3)



Copper Business - Effluent Discharged (000'm^3)



Reduction of Water Consumption at Mahan CPP

Various initiatives have been taken at our plant situated at Mahan CPP for reduction in water consumption. This plant has a reservoir for water storage having capacity of 7.5 million m^3. The makeup water requirement for the project is approximately 0.04 million m^3/day and hence, there is a challenge in the procurement of water for almost three months, between April and June, as the water from Gopad River is not available during this period.

The measures taken to minimise water consumption at our plant at Mahan CPP have been listed here:

- To find the root cause for identification of increasing the silica in drum makeup, water various water sampling and testing from DM plant outlet to DM storage tank till boiler blowdown water were done. It was found that the colloidal silica is increasing in boiler drum and there was turbidity in stored DM Water in DM storage tank. To eliminate the colloidal silica, we controlled the turbidity at DMF within 4 NTU and ACF within 2 NTU, by increasing the dosage of ferric alum in the pre-treatment plant itself. By doing this, we have decreased the turbidity from 3.5 to 0.5 NTU.
- Nanofiltration plant of capacity 294 m^3/hour is provided at the station to treat the cooling tower blow down. This led to a reduction of the cooling tower makeup water by approximately 1500 m^3/day by using nanofiltration to permeate water.
- In order to reuse wastewater i.e. decanted water from ash dyke, the station is equipped with an ash water recovery system (AWRS), which is provided for pumping the water recovered from ash pond to recovery sump to plant ash water sump. There are 2 AWRS pumps in parallel with one standby and two working pumps with capacity of 410 m^3/hr each.
- Condenser debris filter backwash water is being routed to a reservoir through drain trench. This has resulted in reuse of close to 180 m^3/day.
- A water loss of 1.2 TPH DM water i.e. approximately 28 m^3/day was identified due to the opening of ejectors drain to atmosphere, as the steam trap was chocked, an alternate steam trap bypass drain line is provided in unit 2 to prevent the loss of water

These initiatives proved beneficial in many ways such as DM water savings of 25,185 m^3/year is achieved. Also, an estimated reduction in cooling tower makeup water of 5.47 lakhs m^3/year approx. by operating nanofiltration system would be done. Service water consumption would be reduced by 25,915 m^3/year. Conservation of condenser debris drain discharge water figure would be 65,700 m^3/year. The figure for reuse of DMF/ACF/DMFP backwash water is estimated to be at 91,250 m^3/year, and the reuse of High-Rated Solid Contact Clarifier (HRSCC) desludging water would be at 3.65 lakhs m^3/year.

Waste Management

On account of our production activities, a large quantity of mineral, non-mineral and hazardous waste is generated. We have been making consistent efforts to apply the waste management hierarchy to all our waste. It is meant to reduce the quantity of waste produced through our operations, by following techniques to reuse and recycle generated waste in an environmentally friendly manner.

Refining our management governance structure to further strengthen our waste management, we have formed Waste Management Task Forces. These task forces serve the purpose of developing a structured approach for prevention and reduction of waste generation. Further, they also take efforts towards creating some value from the generated waste, which is an extension of our 'Value from Waste' initiative that aims at achieving 100% utilisation of key wastes by 2025. These task forces are formed separately for each plant location. The line managers are responsible for strategising waste reduction and waste disposal methods, following the waste management hierarchy for increased recycling and reusing of waste produced. Following a collective approach, tasks such as management of waste inventory (hazardous and other wastes), categorisation, benchmarking and target-setting are carried out by these task forces under the guidance of the line managers.

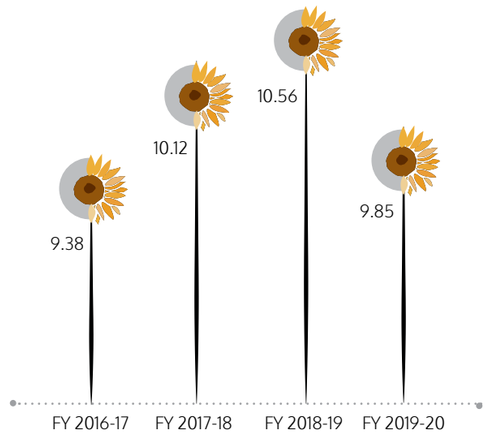
We are focussed on minimizing waste generation and maximizing waste utilisation. To realise our goals of efficient waste management, we set yearly targets for waste disposal. Our target for total waste disposal for this year was 11.15 million MT.

Non-Hazardous Waste

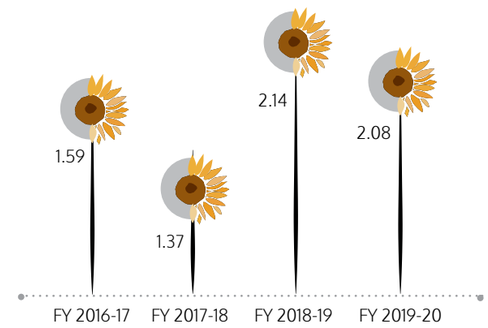
Our total waste generation during the reporting period was 12.29 million MT, which consists of 11.93 million MT of non-hazardous waste. We have achieved a reduction in our waste generation for our aluminium and copper operations, as seen in the following graphs.

43% of the non-hazardous waste from our aluminium operations was disposed off in landfills and ash ponds, 52% was recycled/reused, 5% was sold to an authorised waste recyclers.

Aluminium Business - Non-Hazardous Waste Generated (million MT)

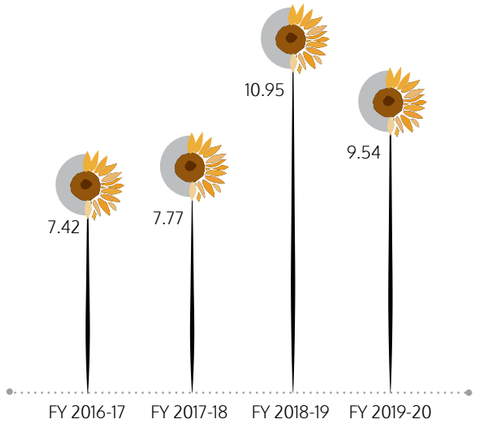


Copper Business - Non-Hazardous Waste Generated (million MT)

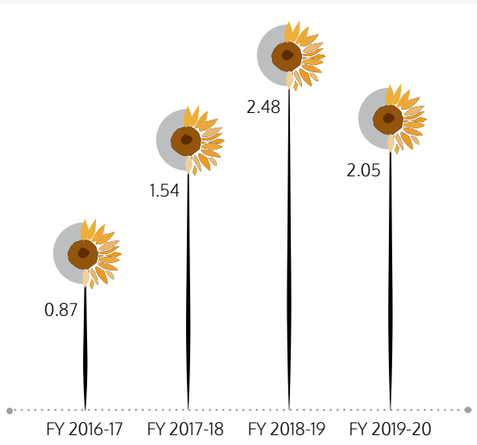


100% of the non-hazardous waste from our copper operations in FY 2019-20 was sold to the recycler. 43% of the non-hazardous waste from our aluminium operations was disposed off in landfills and ash ponds, 52% was recycled/reused, 5% was sold to an authorised waste recycler and no waste material was disposed off in a municipal landfill For aluminium dross utilisation, we have a target of 100% for FY 2024-25; during the reporting period, we have achieved 89% utilisation. Trends of last four years for non-hazardous waste disposal from our aluminium and copper operations are presented here through graphs:

Aluminium Business - Non-Hazardous Waste Disposed (million MT)



Copper Business - Non-Hazardous Waste Disposed (million MT)



Bauxite Residue Utilisation

Driving our efforts for effective waste utilisation, we have undertaken many initiatives for bauxite residue (also known as red mud) utilisation, we are leading among top companies of the aluminium industry in the world by undertaking a large-scale commercial application of red mud. Recognising long-term sustainable solutions for utilisation of red mud, we are making use of the filtration technology. This technology helps reduce the moisture content in it by using pressure filters. Further, we have also conducted a study on red mud utilisation for backfilling of mines in FY 2017-18. This study was instrumental in exploring additional areas for disposal of bauxite residue. Our bauxite residue is sold to cement industries as useful raw material and for manufacturing of paver blocks. At present, we supply red mud to 40 cement plants in India. Our Belagavi refinery is a notable example in this area, as it has utilised maximum bauxite residue generated in cement plants during FY20 and it supplies red mud to more than 14 cement plants. Additionally, three of our plants cumulatively contribute to nearly 66% of bauxite residue utilisation in cement plants. Alternate ways are being explored for bauxite residue utilisation at one of our plants, as use in the cement industry is challenging due to geographical constraints.

We adopt a resilient approach in our operations and take efforts to minimise our impact on our surroundings, which is evident in every step we take. During April 2019, an incident of bauxite residue spillage occurred at a storage facility at the alumina plant situated at Muri, Jharkhand. Restoration work was started at the site with immediate effect. For removal of debris, Hyvas excavators, dozers and pay loaders were deployed at the site within one day of the incident's occurrence. Within a short span of 2.5 months, more than 7.5 lakhs MT of red mud was cleared. Special care was taken to prevent contamination of local water bodies in the vicinity. To ascertain the impact of the incident on the environment and to remediate it at the earliest ERM conducted an environmental risk & vulnerability study. All the areas affected by the incident have been cleared of the spillage, and studies are in progress with agricultural universities to restore the agricultural properties of the land.

Going forward, a special working group has been formed for the proper management of bauxite residue. As part of this task force, separate teams are further formed to take care of the storage, stabilisation and utilisation of bauxite residue. Standard Operating Procedures (SOPs) are in place for effective management of red mud at each of our locations.

Utilisation of Bauxite Residue in Cement Industry

Given the composition of bauxite residue, we recognise its utilisation as a raw material in the cement industry. Owing to its components like iron, alumina and alkali content, it can be successfully used as prime raw material for cement manufacturing. In the cement manufacturing process, clinkers are formed from the raw materials, viz. limestone, clay, laterite & bauxite.

Use of bauxite residue proves beneficial in the process to replace virgin materials like laterite /lithomarge, along with the neutralisation of excess sulphur oxides. The unwashed soda in the bauxite residue reacts with these acidic oxides to form stable sodium sulphate, which is directly fed into the clinker, thereby reducing the recirculation & jamming frequencies. With this unique advantage, bauxite residue proved to be a leap forward raw material for cement industries, with its composition and alkali presence eliminating the difficulties faced by the cement industries, while using pet coke as a fuel. Further, to eliminate the challenges of moisture content in the bauxite residue, we make use of vacuum-based pressure filters that help us reduce the moisture content by 10%. We have cement manufacturing technical experts within our team to gain more insights about the cement industries and serve them in a better way.

We have adopted a cluster-based approach, through which we have mapped all the clinker manufacturing units of all the cement players across India. Our refineries located at diverse locations of India have provided us with a strategic advantage for expansion of our presence. This cluster-based approach proved to be commercially viable for us as well as cement companies in utilization of major quantities with limited spending.

Going forward, we have signed long-term contracts with major cement companies in India. Despite the challenges posed by the COVID-19 pandemic, we have set an ambitious evacuation target of 2.5 million tonnes for FY 20-21

Fly Ash Utilisation

Following the waste mitigation hierarchy, we adopt an on-site management strategy for the fly ash generated during the operations. To streamline our fly ash utilisation process, we have formed five working groups for our plant locations. They are responsible for various processes, such as storage, transportation, utilisation and formulating preparedness plans for emergency situations. Currently, we are in the process of drafting guidelines for fly ash management. Site-specific SOPs are also being strengthened for all of the locations. These are being updated considering international best practices and guidelines to enhance our process of fly ash management.

During the reporting period, 100% of fly ash from our aluminium operations was utilised. Additionally, fly ash from our copper operations has also witnessed 100% utilisation in FY 2019-20.

Hazardous Waste

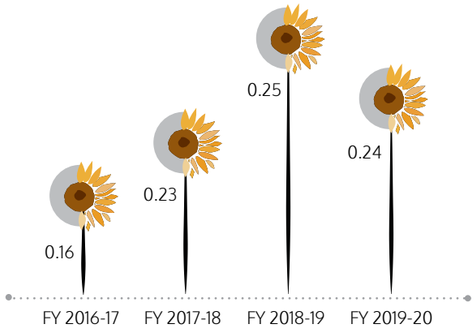
Throughout our operations, we try to reduce the volume of hazardous wastes and take measures to reuse and recycle our hazardous waste. Our total waste generation during the reporting period was 12.29 million MT, out of which 0.37 million MT was hazardous waste.

83% of the hazardous waste from our aluminium operations in FY 2019-20 was recycled or reused, 17% was secured in a landfill/TSDF and 0.2% was disposed of by incineration.

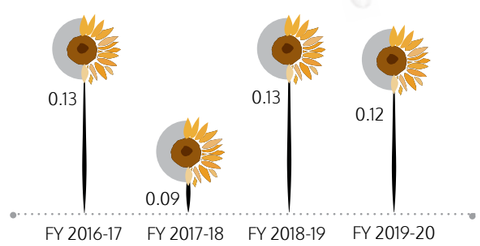
68% of the hazardous waste from our copper operations in FY 2019-20 was disposed of in secured landfill/TSDF, while 32% was sold to the recycler.

In addition to this, we undertake collection, storage and disposal of spent pot lining, aluminium dross, vanadium sludge, copper slag and phospho-gypsum. We have achieved spent pot lining and vanadium sludge utilisation of 99% and 127% against targets of 80% and 100%, respectively. We have achieved 100% utilisation of our copper phospho-gypsum and 73% is achieved from the previous year. We have achieved a reduction in waste generation for our aluminium and copper operations, as can be seen in the following graphs.

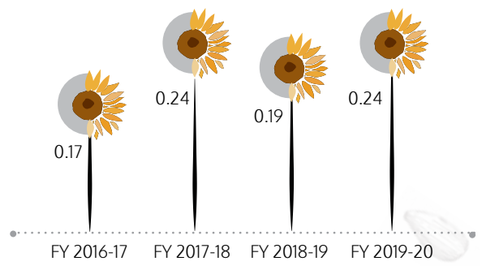
Aluminium Business & Mines -Hazardous Waste Generated (million MT)



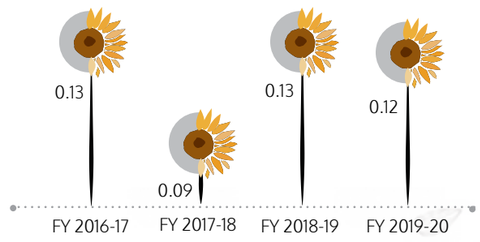
Copper Business - Hazardous Waste Generated (million MT)



Aluminium Business - Hazardous Waste Disposed (million MT)



Copper Business - Hazardous Waste Disposed (million MT)



Reduction of Hazardous Waste Generation (Waste Filter Paper) at Hirakud FRP

For emulsion, 5% oil & 95% DM water is used in hot rolling of aluminium. Filter paper is used at emulsion filtration unit in both HRM & HFM for maintaining the quality of emulsion by removal of sludge through the filtration unit. Due to this filtration process, waste filter paper is generated. This waste filter paper is contaminated oil and categorised as hazardous waste. To reduce our waste filter paper generation, we have taken the following initiatives, in terms of installation of equipment in our filtration system:

- Filter skimmer of the filtration unit has been modified & connected with tramp oil unit for skimming of sludge from filter. Due to this, maximum sludge goes to ETP directly, instead of on the filter paper.
- We started using one-side filtration system instead of both sides, as a result of which all filter pumps of dirty tanks could operate regularly. This prevented further deterioration of the quality of emulsion.
- Installed magnetic rod maintaining for collection of MS particle.
- Installed pipe skimmer at dirty tank for removal of oily sludge & connected to sump pit for ETP.
- Modified the waste filter paper collection box by fixing of grating plate in the box for removal of wastewater from the filter. This wastewater is sent to the ETP.

These initiatives resulted in a 50% reduction in waste filter paper generation, compared to FY 2018-19. These results are presented in a tabular form here.

Year	Waste Filter Paper (MT)	Hot Mill Prod. (MT)	Specific Waste Generation (Kg/MT of Prod.)
FY 2017-18	32.99	97236	0.34
FY 2018-19	50.44	105960	0.48
FY 2019-20	21.58	93484	0.23

Environmental Compliance

We ensure compliance with all relevant legislations and environmental norms, and meet all regulatory requirements in a timely manner. All our operational activities adhere to applicable environmental laws and regulations. However, during the reporting period, we faced two issues of environmental non-compliance that resulted in payment of compensation and penalties to the respective authorities as a corrective measure. A total fine of INR 1.25 crore was paid, which included an interim environmental compensation of INR 1 crore paid to the state government of Jharkhand for the red mud spillage incident at Muri.

As part of our efforts towards reducing the environmental impact of our operations, we take various initiatives towards environment protection. The value for total expenditure on environment protection for the reporting period stood at INR 231.95 crore.

Biodiversity Management

Equitable consumption and resource conservation are fundamental to the Aditya Birla Group. As the metal flagship company of the Group, Hindalco continues to lead with its efforts towards building a sustainable ecosystem. In our endeavour to be a responsible and reliable organisation, we try to integrate the principles of biodiversity management to address ecological concerns. Our efforts for ecosystem and biodiversity management contribute towards the achievement of UN's SDG 15 -"Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss".
We have adopted the Group-wide Biodiversity Policy and Technical Standards on Biodiversity Management since 2018. We strive to achieve "No Net Loss" (NNL) of biodiversity and prevent ourselves from operating in critical habitats. The technical standard, built upon the policy, assists us in carrying out biodiversity risk assessment and integrating ecosystem concerns into the decision-making process. We have partnered with the International Union for Conservation of Nature (IUCN) with the aim of integrating biodiversity concerns into operations, strategic planning and environmental management at identified operational sites.

International Union for Conservation of Nature (IUCN)

IUCN is a global union connecting more than 1,400 organisations worldwide. This democratic union brings together the world's most influential organisations and top experts in a combined effort to conserve nature and accelerate the transition to sustainable development. Hindalco, through its partnership with IUCN, aims at streamlining its biodiversity strategies and planning, along with conducting biodiversity assessments at its operational sites.

Through this partnership, we assess ecosystem services and biodiversity in and around our mining sites. In addition to this, trainings and capacity-building workshops are conducted with concerned stakeholder groups to improve their understanding of biodiversity-related issues. Further, as part of this partnership, we use globally recognised tools such as the Integrated Biodiversity Assessment Tool (IBAT), Ecosystem Services Review (ESR), and Business Ecosystems Training (BET) during the implementation process of our projects. IBAT enables us to prioritise sites. Analyses of the sites are conducted in a structured manner that categorises areas of high biodiversity importance. These points of consideration are the presence of protected areas, key biodiversity areas and threatened species, as per the IUCN Red List.

This engagement helps us streamline these processes at our sites:

- Biodiversity management plans for the identified sites in India
- Capacity-building workshop for Hindalco staff at corporate as well as site level
- Dissemination of project outcomes to the wider community.

Biodiversity Study at our Mines and Units

Our major business operations include bauxite mining, alumina refineries and aluminium smelting processes. Most of our sites are located in the states of Odisha and Chhattisgarh. A Memorandum of Understanding has been signed with the IUCN to conduct biodiversity assessments and develop biodiversity management plans for our operational sites. Selection of the sites is done based on priority. The following operational representative locations were identified for conducting biodiversity study and developing biodiversity management plans:

- Aditya Aluminium (Smelter Plant), Village Lapanga, Tehsil Rengali, District Sambalpur, Odisha;
- Utkal Alumina International Limited, Village Doraguda, Tehsil Kashipur, District Rayagada, Odisha
- Baphlimali Mines, Baphlimali Plateau, District Rayagada/Kalahandi, Odisha
- Gare Palma Coal Mines Block IV/4&5, Tehsil Tamnar, District Raigarh, Chhattisgarh

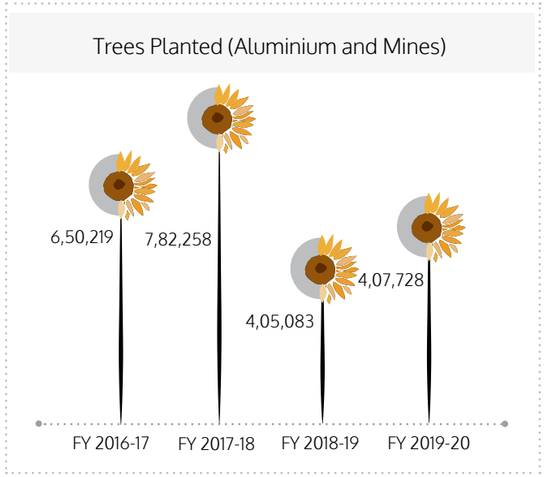
IUCN conducted biodiversity assessments at Gare Palma coal mines, Baphlimali bauxite mines, Utkal Alumina and Aditya Aluminium . All the four seasons - winter, summer, monsoon and post-monsoon - were covered to conduct this study.

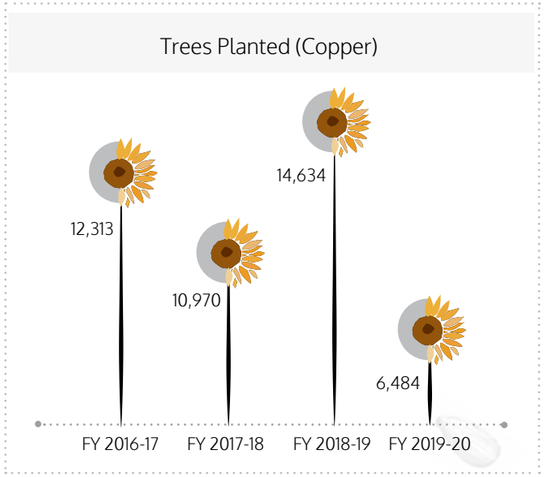
For the purpose of conducting the winter survey at Gare Palma mine, a total of 50 points were sampled for flora and fauna in core and buffer areas. A total of 87 species of birds, 53 species of butterflies, 2 species of frogs, 6 species of reptiles, 11 species of mammals and 147 species of wild plants were recorded within the study area. In addition to this, 27 species of ornamental plants. from gardens and parks, and 35 major and minor crop species from agricultural fields were also recorded.

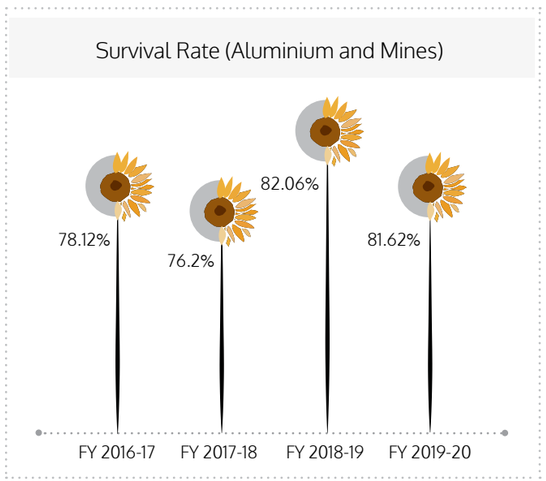
Green Belt Development

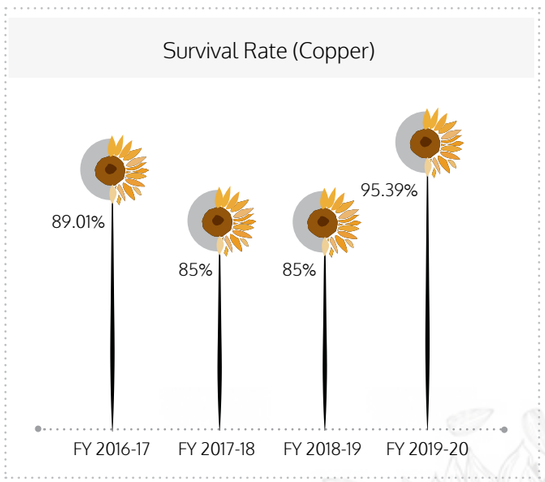
Our environment centric approach throughout our endeavours helps us contribute towards our biodiversity and create a positive impact on the ecosystem in our own ways. Our commitment towards preserving our biodiversity led us to start a green belt development programme. Through this, we plan to increase the green cover across our operating geographies. For this purpose, we prepare detailed plantation plans in consultation with the MoEFCC and IUCN to undertake plantation at our geographies. As part of these plans, native plant species are identified for a particular geography considering the climatic conditions and soil horizon of the location. This results in sustainable plantation at our locations and increases our green cover. At present, we foster nearly 27 lakh trees at our sites. Our efforts have led to us creating a green belt area spanning over 4,372.74 acres.

These graphical illustrations show trend of tree plantation along with survival rates for the past four years.









Health and Safety

We at Hindalco are committed to protecting human health and ensuring a safe working environment for all our employees and contractual workers. The three-pronged approach involving felt leadership for safety, embracing world-class processes and practices, and right organisation for implementation has helped us embed the safety culture with an objective of "Zero Harm". This approach also helps us become a responsible corporate citizen. Our safety efforts also contribute in meeting the UN Sustainable Development Goal (SDG) of Decent Work and Economic Growth.

Our safety culture is guided by a robust health and safety framework encompassing all activities across the organisation. A definite H&S organisation structure helps in implementing the framework in true spirits. The H&S management system is an integral part of the framework. We are proud that all our operational facilities are certified with OHSAS 18001 and other applicable international occupational health and safety management systems. To strengthen the framework, we introduced unit-level safety boards during the reporting period, in addition to the pre-existing Apex Safety Board. A new safety committee, Contractor Safety Management Committee, has also been introduced, bringing the total to six safety sub-committees at the unit level. Complete details of the H&S framework are provided in our sustainability report for FY 2018-19.

The robust framework, guided by our commitment to ensuring a reliable workplace, equips us to deal with setbacks that we face. During April 2019, we faced a major challenge in terms of bauxite residue spillage incident at our Muri facility in Jharkhand. Immediate action was taken to minimise the impact by removing debris and isolating spillage area using sandbags. We are glad to inform that there were no fatalities due to the incident; however, we understand that it had the potential to cause damage. We enlisted field experts and top-tier institutions to identify the root cause of the incident, so we can take the necessary steps to avoid any such incident at any of our facilities in the future.

We at Hindalco are committed to protecting human health and ensuring a safe working environment for all our employees and contractual workers. The three-pronged approach involving felt leadership for safety, embracing world-class processes and practices, and right organisation for implementation has helped us embed the safety culture with an objective of "Zero Harm"

In order to equip ourselves to deal with such incidents in future, a crisis management programme was developed in association with the National Disaster Response Force (NDRF). This comprehensive crisis management programme has been implemented at each of our operational locations. As part of the crisis management programme, expert agencies are working on all sites to avoid any fatal incidents.

While approaching the start of year 2020, the world was exposed to a challenging situation in the form of the COVID-19 global pandemic. We, at Hindalco, were not immune to its impact and consequences. The nature of our operations and application of our products provided us with the opportunity to serve the nation by supplying our products to key industry segments such as defence, pharmaceuticals, food packaging and transportation. These critical operations were running with minimum manpower, and our staff ensured adherence to required safety norms like social distancing. All our plants, facilities, colonies and offices were being sanitised on a regular basis. Further, the option to work from home was provided to a majority of our employees, minimising exposure to the infection. All our employees, including contractual workers, and families living in the colonies had access to trainings and awareness sessions related to COVID-19.

With a resilient approach towards future proofing, we are proactive in adopting to the dynamic business environment. One such important step was the development of Standard Implementation Task Forces at each of the units. These task forces include about 9 to 17 task persons, representing line officials from different disciplines. The key objective of these task forces is to support safety sub-committees and ensure safety in all types of operations. This arrangement is in addition to the health and safety committees in each unit, providing equal participation from workmen and management.

With contract employees forming about 56% of our total workforce, we have introduced a Contractor Safety Management System (CSMS) during the reporting period. This system is managed by the Contractor Safety Management Committee, which is responsible for carrying out regular safety checks and monitoring performance of the contractors. As part of the implementation strategy, all the contactors at each unit are classified as major and minor contractors. It is mandatory for major contractors to score more than the minimum threshold during the assessment to continue working with Hindalco. The threshold has been decided as 60% for the first year, and will gradually be increased to 85% in the years to come. Additionally, the contractors are mandatorily required to sign and abide by the safety policies at respective locations.

As part of the framework, we continuously track the safety performance against industry standard indicators. Safety performance during the reporting period can be summarised as follows:

Year	Aluminium & Mines 2019-20		Copper 2019-20	
	Employees	Contractor	Employees	Contractor
Total no. of lost time accidents (Reportable Accidents)	24	23	1	4
Total no. of fatal accidents	1	3	0	2
Total no. of man-days lost	13,361	22,328	62	12,063
Lost Time Injury Frequency Rate (LTIFR)	0.51	0.29	0.34	0.45
Lost Time Injury Severity Rate (LTISR)	285.47	284.47	20.85	1347.1
Total no. of Minor Injuries (Non-reportable Accidents)	267	365	20	80
Total Man-hours worked (in Million)	46,804,117	78,490,201	2,973,712	8,954,822

We are determined towards an ambitious but attainable goal of zero fatalities and life-threatening occupational diseases. Most of the safety professionals in each plant have undergone a NEBOSH certification to enhance competency and skills. We continue working towards our target of reducing LTIFR to be less than 0.25 and LTISR below 100 by FY 2021-22. Various initiatives and programmes implemented had a positive impact on our injury rates; however, the severity of these injuries was higher, leading to an increase in the severity rate. Unfortunately, there have been 6 fatalities in the reporting period. The investigations revealed that most of the fatalities occurred at peripheral activities. There was only one fatality recorded in a core activity of our operations.

With commitment to reduce fatal incidents, we have developed a fatality prevention plan. The plan stresses the need to identify any blind spots in operational activities and take corrective actions to remove them by improved monitoring. In order to remove the blind spots, observation rounds are conducted, encompassing the complete operational premises. As an additional measure towards robust data management, we have started maintaining a digital database for safety information and incidents.

In addition to the fatality management plan, provisions are made in the health and safety policy for disciplinary actions against people responsible for fatal accidents. Involvement of any employee with any fatal accidents and/or reportable accidents now results in de-rating of their performance rating by one grade.

Parameter	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
LTISR	157.00	138.00	253.73	348.44
Fatalities	3	2	4	6
LTIFR	0.29	0.36	0.48	0.38
Lost Time Accidents	37	46	63	52
Number of Mandays Lost	20,061	17,460	32,728	47,814

Adopting the safety monitoring systems in synchronisation with international standards, we started measuring the Total Recordable Injury Frequency Rate (TRIFR) from FY 2018-19. The TRIFR for employees and contractors is measured per million hours worked. The TRIFR for the reporting period can be seen in the table below:

Total Recordable Injury Frequency Rate (per Million hours worked)		
	Employees	Contractors
FY 2018-19	0.13	0.10
FY 2019-20	0.13	0.06

Safety Trainings

Being aware of the safety-related risks associated with our operations, capacity-building of our employees is one of the key priorities for us. Trainings, being a key factor of these controls, are provided to all our employees and contractual staff in order to increase the competency in identifying and preventing the H&S risks . Key training topics during the reporting period included job safety, home safety and fire prevention, and road and driving safety.

Our supply chain partners including transporters and warehouse operators are also part of the safety training schedule.

	UOM	Aluminium & Mines 2019-20	Copper 2019-20
Training on Safety - Management Staff	Numbers	5,957.00	435.00
	Manhours	193,903.61	11,598.00
Training on Safety - Permanent Workmen	Numbers	12,961.00	1,051.00
	Manhours	382,125.06	25,494.00
Training on Safety - Contract Employees	Numbers	23,049.00	2,414.00
	Manhours	781,578.97	80,513.00

Safety Training Sessions at Renusagar

Occupational Health

We have adopted Group Occupational Health technical standards which are in line with the International Finance Corporation (IFC) General Environment, Health and Safety (EHS) and International Labour Organization (ILO) guidelines and recommendations from the World Health Organisation. The standards set expectations on occupational health risk assessments in terms of qualitative and quantitative exposure risk management incorporating a hierarchy of controls, health surveillance including return to work and specific management of areas such as ergonomics, ventilation, respiratory protection and stress. The technical standards are also adopted for first aid and emergency medical care as well as the management of HIV, TB and Malaria in the workplace.

Qualitative Exposure Assessments (QLEA) have been completed at all our mining and plant locations. Based on input from QLEA, Quantitative Exposure Assessment (QNEA) have been conducted to measure occupational health hazards in the workplace through application of established sampling and monitoring protocols. QNEA have been completed at all our mining and plant locations, except for couple of them for which surveys are lined up and will be conducted after lockdown restrictions are eased. The QNEA has helped to establish baseline for exposure levels and satisfy statutory requirement. Based on the QNEA reports, action plans have been developed and are in place to implement control measures and appropriate respiratory protection is provided. Implementation of recommendations arising out of assessment are being monitored in apex safety meet and presented at safety summit annually.

We have taken initiative towards standardization of practices and processes in the field of Occupational Health. In this regards, standardized process on occupational health monitoring and first-aid and emergency medical care have been released for all sites to adopt with site specific customization, as required. Regular trainings on first aid and occupational health have been conducted while focusing on the occupational health standards at all our locations. Thirty-three personnel including occupational health physicians, safety and human resource professionals have undergone specialized three days training workshop, "H.Amplifier" organized by group to enable them in implementing world class occupational health management systems at respective sites. Moreover, awareness programmes on health issues such as TB, HIV and malaria are also conducted at these locations.

Message from Mrs. Rajashree Birla

Progressing with our vision of inclusive development, the Aditya Birla Group is transforming towards a sustainable way of life for the communities it operates in. The notion of giving back to our society is embedded in the community engagement of our Group. To realise our vision of a sustainable world, we also continue to align our community engagement agenda with the universally adopted UN SDGs. Our work for upliftment of the communities from the remotest regions of the country is presented as part of our community stewardship engagements. These initiatives are a positive step we take towards building a Resilient, Responsible and Reliable future.

Focussing on the areas of education, healthcare, sustainable livelihood, infrastructure development and social reform, we have linked our initiatives to the first 9 SDGs. Working towards SDG-1, which focuses on poverty alleviation, we collaborate with the government to lift the burden of poverty from the shoulders of people living in our nearby villages. Aligning our efforts with SDG-2, emphasising on achieving zero hunger and improving nutrition, we have set a target to lower malnutrition rate in the villages where we work. Our engagements in line with SDG-3, which talks about promoting good health and well-being, has benefitted more than 9 lakh people across our units. Our facilities such as mobile medical vans, and health check-up camps ensure healthcare services are more accessible and affordable for our people living in the remote areas. With our proactive initiatives aligned with SDG-4, focussed on promoting quality education, we launched enrolment campaigns and conducted literacy programmes in rural areas.

Our objective of women's empowerment aligns with SDG-5 - Gender Equality, and we contribute towards this goal by imparting vocational training, skill-building and agriculture-related programmes to create livelihood opportunities. Synchronising our efforts collectively with SDG-6, SDG-7 and SDG-8 – which are related to water and sanitation, sustainable energy and economic growth, respectively – we have taken several measures in these areas. Realising the goal of providing better infrastructure in line with SDG-9, we engaged in various projects by constructing community halls, rest places as well as water tanks. Reiterating our resilience through these critical times of the COVID-19 pandemic, our Group has been reaching out to many afflicted people. We contributed significantly to COVID relief measures by way of our contributions to the PM Care Fund and FICCI Aditya Birla CSR Centre Excellence. Sanitising villages and urban slums and assigning bed facilities for COVID-19 patients were some of the other measures undertaken during this period. We also extended support to our local communities, by providing them with livelihood opportunities through our production activities undertaken to produce masks and coverall garments.

Our CSR endeavours, in line with the SDGs, reaffirm our beliefs of achieving socioeconomic growth of our communities. Our commitment towards creating shared value through our engagements has set us on this transformational path of sustainable development.

Rajashree Birla
Chairperson
Aditya Birla Centre for Community Initiatives and Rural Development

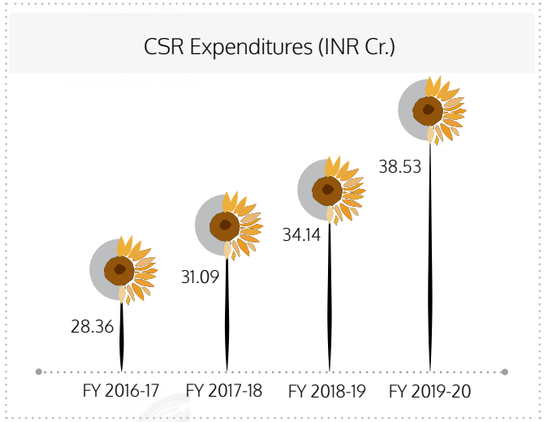
Community Stewardship

The Aditya Birla Group is known for its legacy of more than 50 years of serving the underserved and underprivileged communities. Being part of the Group, empathy towards people and responsibility towards the well-being of local communities is engraved in our value system at Hindalco. As a resource-intensive industry, we understand the inherent impacts that our operations have on communities. Some of our operations are in remote areas of Chhattisgarh and Jharkhand, where overall socioeconomic development is not at par with other regions in the country. We recognise that impacts of our operations are significant and long-lasting in such areas. Our developmental programmes in these regions have been instrumental in mitigating these impacts, helping in transformation towards a socially responsible future.

We adopt a strategic approach while designing the community development programmes that are part of our Corporate Social Responsibility (CSR) approach. These programmes are designed to achieve long-term goals while contributing towards the achievement of UN Sustainable Development Goals. The programmes are developed to cater to five strategic focus areas, such as education, healthcare, social reforms, sustainable livelihoods and infrastructure. These focus areas are carefully chosen to address the core developmental gaps in the society.

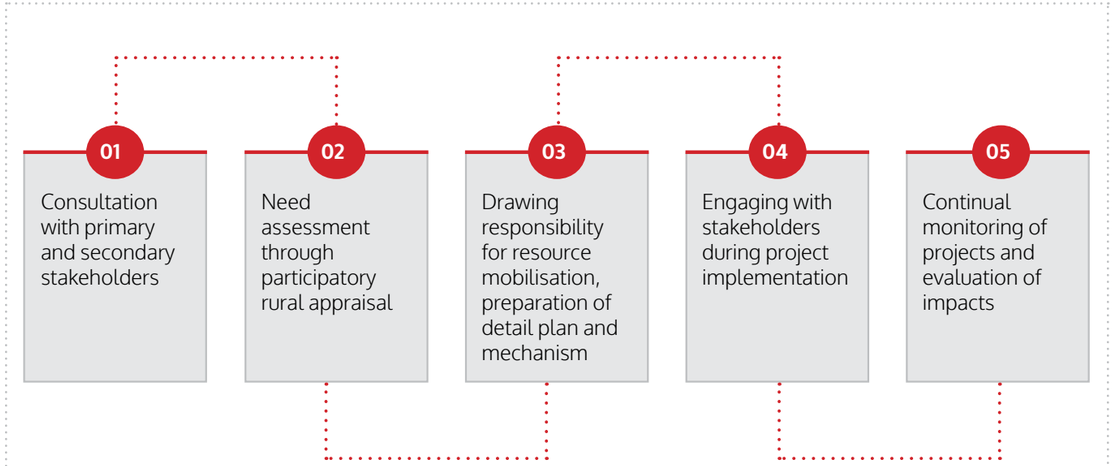
We continue to strengthen our CSR governance structure to bring our ideas of community stewardship into practice. The governance structure involves a CSR committee at the apex level. This is followed by business verticals that are headed by the respective CSR Heads and Cluster Heads for various geographical cluster within the purview of our operations. The structure also includes separate teams catering to each focus area to channel efforts in a focused manner. The CSR committee conducts meetings periodically to understand the progress and decide the way forward.

We contribute significantly towards community development through our CSR initiatives. The CSR expenditure exceeds the regulatory requirement of a minimum of 2% of the average net profit for the preceding three years. Our CSR spending for the reporting period stands at INR 38.53 crore, which is equivalent to 2.05% of our net profit. Further, as part of our Enterprise Social Commitment (Hirakud, Aditya and Utkal), we have spent INR 11.70 crore. Expenditure on community initiatives by our subsidiaries stands at INR 10.12 crore. Extending our support to various governmental schemes and initiatives, we contributed INR 15 crore towards the Odisha Flood Relief Fund set up by the Honourable Chief Minister of Odisha. The following table shows a four-year trend of our CSR spending.



We have a well-formulated CSR Policy, which forms the backbone of our community stewardship approach. The policy acts as a guiding principle to engage with our communities regularly. We conduct baseline studies to assess the needs of our communities. These encompass various parameters, such as health indicators, literacy levels, sustainable livelihood processes, population data - below and above the poverty line, and the state of infrastructure, among others. We design and implement various development programmes/projects based on the results of this study. In order to make these projects self-sustaining, we conduct capacity-building sessions for the communities and associated stakeholders. Further, 1-year and a 3-year rolling plans are developed to ensure integrated development of the communities. These plans are assessed and monitored every quarter against the set targets and budget. These are also presented to the CSR Committee at the CSR Annual Planning and Budgeting Meet. Apart from this, we also have specialised frameworks in place to carry out monitoring and evaluation periodically for each of our focus areas. Inputs and feedbacks drawn through these evaluations are incorporated into the implementation plan of each focus area to better our community development process. Additionally, social audits and impact assessments are carried out at various operational locations to gauge our impact and identify areas of improvement.

The following diagram illustrates the steps of our community engagement process in detail.



We also undertake community consultation for our development projects and production assets. Through our effective community consultation process, we engage in continuous dialogue with the communities surrounding our plant and mines. With the aim to design and implement our development projects catering to the needs of our communities, we keep our communities informed about the progress of business operations and work closely in collaboration with them throughout the lifecycle of our projects. This includes initial planning, operations and site closure after completion of the project. Currently, 44 production assets across 21 locations in India are under consultation, along with 105 of our development activities for 24 projects based on our five focus areas.

We have a comprehensive community consultation framework in place for UAIL. This framework comprises of the following four segments:

- **Community Consultation:** A step-by-step approach is undertaken as part of our community consultation process as illustrated by the following diagram.

- **Communicating Information:** Relevant information is communicated through various channels. To bring transparency in the operations, gain trust of the community and ensure hassle free operations, effective ways of communication are utilised.

- **Stakeholder Management:** We follow a proactive way of engaging with our stakeholders; our mechanism is guided by our group-level policy. Informing our stakeholders about the project, periodically listening to their views and suggestions, and responding to their concerns are integral parts of the stakeholder engagement plan.

- **Grievance Management:** An effective grievance redressal mechanism (GRM) has been adopted at Utkal. This mechanism is backed by an SOP that defines the procedures for managing the concerns, issues, complaints, demands and grievances of the external stakeholders in a systematic and a transparent manner.

We are in the process of developing a consultation framework for all our locations to ensure the smooth functioning of our business operations and maintain a trustworthy relationship with our communities.

We have always strived to contribute towards the development of our communities, despite the challenges we encounter throughout the process. Dealing with such vast geographical diversity, we must grapple with increased expectations of locals, lack of youth engagement and time constraints. To overcome these, we take several measures to improve our community experience. To cater to the livelihood needs of the local communities, we provide them with employment opportunities at our organisation. Due consideration is given to project affected families and families losing land. This has resulted in recruitment of many individuals from the local communities at our organisation. We also impart these individuals with training on skill building in order to enhance their employability and provide them with more livelihood opportunities. Further, we also adhere to the laws and regulations pertaining to employment of local people prescribed by the respective local government.

Geographic Spread of Our Initiatives

We not only aim at a positive community impact throughout our operational activities but also work towards responsible resource consumption. Our vast geographical spread makes it important for us to take adaptable community efforts; for this, we act on our focus areas to bridge existing developmental gaps.

We follow a village adoption model, wherein we support a village through our development projects. The adoption of villages is done as per the allocated CSR budget decided by our CSR committee. These projects are designed as per the needs of the villagers. Also, initiatives are taken to make the villages sustainable by providing them with the requisite training and education. Focus groups, which are formed within the villages, set priorities and work in accordance with them. The ownership of these village-level projects is passed on to the village development committee, which leads them at a later stage.

Presently, we selected 108 villages, out of a total of 714 villages, for a transformative process that raises them to become model villages. In the past seven years, we have been able to transform 55 villages into model villages. Impact assessment studies by external agencies have commended the transformation of these villages.

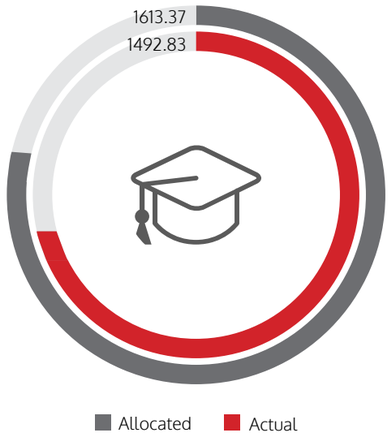
Spanning a vast geographical horizon, we strive to meet needs of our communities with the help of these developmental programmes. We touched the lives of 1.13 million people by extending our support to 714 villages across 11 states within India.

Our Initiatives and their Impact

Education

With our initiatives, we aim to drive a change by empowering our society. Our belief in the power of knowledge is showcased through our efforts in the area of education. We see education as a means to socioeconomic development, and therefore, promote a learning environment for all through our initiatives. Pre-school education, educational support program, vocational and technical education training and infrastructure of the school are some of the key areas that we focus on as part of our education initiatives. Our Shala Pravesh Utsav help us improve the retention rate at government schools. Our project at Dahej has been successful in achieving 100% enrolment of students in government schools. We have seen participation of more than 513 students in our digital education programme. We have partnered with the Department of Education and NIIT Foundation to conduct capacity-building of rural youth through computer education. Through our initiatives, 60% of our youth participants received employment opportunities during the year.

Expenditure on Education (INR Lakhs)



Impact of Initiatives - Educational Sector

Initiatives	Unit	FY 2019-20
Anganwadis and Balwadis	No. of Centres	191
Students in Anganwadis and Balwadis	No.	7,628
Rehabilitation of Malnutrition children (number)	No.	537
Adult Literacy Program	No. of Adults	139
Schools (Aditya Birla Public and Aditya Birla Vidya Mandirs)	No.	19
Students	No.	6,869
Distribution of Educational materials and uniforms	No. of Students	14,562
Construction, repair and maintenance of schools and Fixtures	No. of Schools	37
Scholarships	No. of Students	402
Teacher support to schools	No. of teachers	65
Mid-day meal Program (infrastructure set up at Lohardaga)	No. of Students	40,000

An impact assessment study of CSR activities of Utkal Alumina International Ltd. carried out by NABARD Consultancy Services during FY 2018-19 for our education sector initiatives indicated the following impact:

Data from Impact Assessment

Key Performance Indicator	Unit	Baseline (FY 2010-11)	Impact (FY 2018-20)
Total literacy rate	%	37.74*	51.56**
Women literacy rate	%	22.51*	36.51**
School enrolment	%	92.06***	97.85**
School attendance	%	65%	100%#
School dropouts	%	4.75%	2.65%#

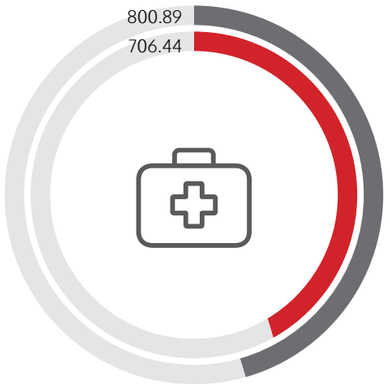
** Indicates 2011 census data.*
*** Indicates NABCONs study data, 2018*
**** Indicates Child Tracking System Data of the operational Gram Panchayats, Odisha Primary Education Programme Authority, Government of Odisha, Bhubaneswar, 2009-10.*
 # Impact assessment study conducted by Xavier Institute of Social services Ranchi at Dahej in 2016-17

Healthcare

Living through these challenging times, we recognise the relevance of healthcare facilities for sustainable and healthy living. Through our initiatives, we strive to provide best-in-class healthcare services to the people of our local communities. Through these initiatives, we aim to cover a range of services, viz. preventive health care programmes, curative healthcare, mother and childcare, quality/support programmes and development of healthcare infrastructure. Our ambulance services were availed by 5,271 patients during the reporting period and our Jeevan Mitra Seva Yojana has helped us provide 21 ambulance facilities including Muri.

Taking positive steps towards improving safe and drinking water accessibility across our communities, we collaborate with gram panchayats to work at the grassroots level. During the reporting period, 9 RO plants and 63 new handpumps were installed, and 446 handpumps and wells were repaired. In our efforts to improve water accessibility, we also supplied fresh drinking water with the help of water tankers and by laying of water pipelines, to ensure constant water supply. This year, we supplied water to 14 villages through pipelines and 58 villages using water tankers. Our programmes aimed at healthcare facilities for adolescent girls benefitted 1,004 girls. During this period, we conducted 21 adolescent health check-up camps aimed at spreading awareness about importance of health and hygiene. Through our site-specific initiatives, we also installed sanitary napkin-vending machines at 4 schools in Dahej and 1 school in Taloja.

Expenditure on Healthcare (INR Lakhs)



Impact of our Initiatives in Healthcare

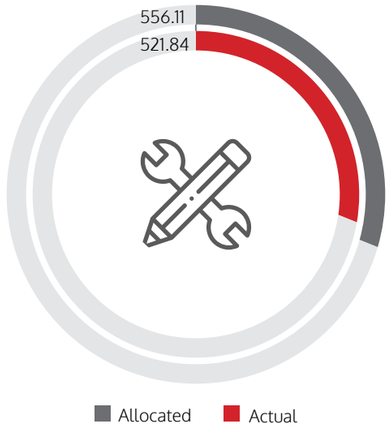
Initiatives	Unit	FY 2019-20
Hospitals	No.	4
Dispensaries/Clinics	No.	17
Patients benefitted from hospitals/ Dispensaries/Clinics	No.	1,62,251
Medical Camps Organised	No. of camps	1,312
	No. of beneficiaries	82,932
Children Immunised	No. of children	26,210
Adolescence Health care	No. of girls registered	1,004
19 Family welfare centres to provide safe motherhood and child survival services	No. of mothers	50,054
Mothers Registered for Antenatal / Postnatal Care (ANC / PNC)	No.	5,935
TB Cases Released from Treatment	No.	125
Eye Camps	No. of camps	12
	No. of cases (IOL) operated	327
	No. of beneficiaries	1301
Child immunisation (Base line: 79% in FY 2014-15)	%	100%
Institutional delivery (Base line: 43% in FY 2014-15)	%	79.8%
Villages free from Tuberculosis	No.	20

Sustainable Livelihood

We work with a sense of responsibility towards our local communities and thrive to make them self-reliant through our efforts. The livelihoods of our communities mainly depend on farming and agricultural activities. To assist and enhance their means of sustenance, we provide our support through capacity-building sessions on agriculture and allied activities. Through these, we make them aware about modern techniques and use of pesticides and fertilizers on the crops. We foster collective growth of these farmer groups by conducting farmer camps, where they share their knowledge on procurement of inputs and economies of scale.

During the reporting period, we successfully conducted vocational and technical skill development training, benefitting 2,583 and 637 people respectively. We cover a diverse range of categories as part of our training sessions, viz. motor-repairing, shoemaking, carpentry, poultry training, bag-making, repair of electronic goods and sanitary napkin-making. These trainings impart knowledge amongst the community members and provide them with a source of livelihood. During the reporting period, we trained 626 aspirants and conducted capacity-building programmes for 993 people. Our initiative at Aditya Birla Rural Technology Park helped us organise trainings for more than 32 batches.

Expenditure on Sustainable Livelihood Projects (INR Lakhs)

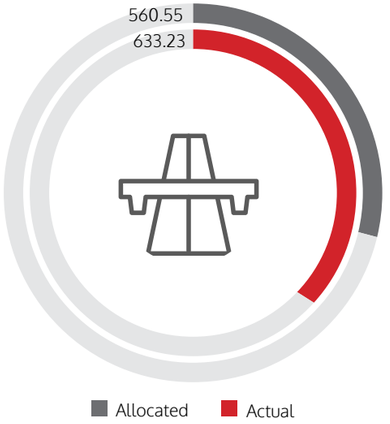


Impact of Initiatives - Educational Sector		
Initiatives	**Unit**	**FY 2019-20**
Vocational Job-Oriented Skill Training Programme	No. of Beneficiaries	5,498
Technical Skill Training	No. of Beneficiaries	637
Farmers meeting / Melas	No. of Farmers	20,913
Distribution of Agriculture Tools, seeds, fertilisers and insecticides	No. of Farmers	5,216
Animal Immunisation	No. of Cattles	50,676
Self-Help Groups Formed	No. of Groups	82

Infrastructure Development

With an aim to contribute towards raising the standard of living of our people, we focus on infrastructure development. Lack of proper road connectivity and infrastructural amenities have been perennial concerns for the rural population. To improve on these areas, we assist in development and construction of village approach roads, culvert, panchayat bhawan, ponds, bathrooms, protection walls, channels, rural houses, check dams and bus stops, among much more.

Expenditure on Infrastructure Development Projects (INR Lakhs)

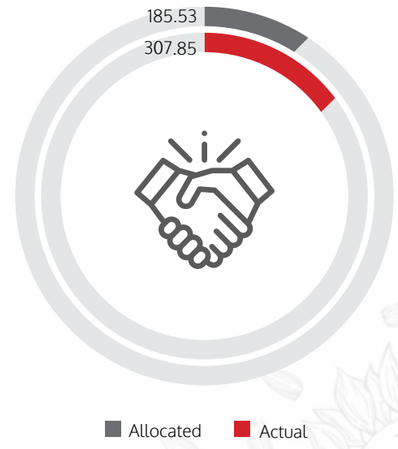


Supporting Social Causes

Our 50 years of working for the underprivileged is a testament of our efforts. We believe social reforms are the instruments of change for our society. With this thought, we focus on bringing a behavioural change through our efforts. We work towards eradicating child labour, child marriage, women abuse, dowry and illiteracy. We also take steps to curb alcoholism and eliminate poor hygienic practices. To bring in positive change, we extend our support by conducting and participating in cultural programmes and sporting events.

We successfully conducted 286 social awareness camps, thereby benefitting 51,306 people. We also conducted seven dowry-less mass marriages and solemnised 1,338 marriages during the reporting year. We also distribute blankets to the needy people; during the reporting period, we distributed 8,951 blankets. We also render support to orphanages and old-age homes; this year, we supported seven orphanages/old age homes, having 289 residents.

Expenditure on Supporting Social Causes Projects (INR Lakhs)



Impact Assessment and Review Process

We conducted a social audit to measure the impact on communities after establishing UAIL in the state of Odisha. This was done via a framework for impact assessment and a review process.

For this purpose, we collaborated with Xavier Institute of Management, Bhubaneshwar. The study evidenced a significant impact of the establishment of UAIL on the development of the community. One of the major positive impacts was the generation of opportunities for local people, in the areas of agriculture, infrastructure, economic status, education, accessibility and healthcare.

The impacts as a result of the establishment are given as follows:

01

Average annual household income has gone up from Rs. 24,520/- in 2005 to Rs. 68,200/- in 2018.

02

Average annual household expenditure has gone up from Rs. 25,110/- in 2005 to Rs 64,325/- in 2018.

03

Percentage of pucca houses in the area has gone up to 35.16% in 2018 as compared to 4.39% in 2005.

04

Percentage of electrified households has gone up to 91.56% in 2018 as compared to 17.08% in 2005.

05

There has been a significant increase in the standard of living, literacy rate, education and quality of life.

06

Accessibility to basic amenities, such as medical assistance, housing, safe drinking water and transportation, has increased.

07

Due to the establishment of UAIL, migration of people has significantly decreased.

08

The results obtained revealed the development in five focus areas through our initiatives and helped communities become more resilient.

Empowering Women Through Skill-Building and Gainful Employment in Garment Manufacturing at Tikiri

Lack of education and requisite skills render the female population in the remote areas of India unemployed. Due to this, opportunities for engagement with them are limited, and they find it difficult to supplement their income to make a decent living. In order to address these concerns of unemployment and skill development, setting up of an advanced garment manufacturing unit at Tikiri was proposed. This initiative took shape in collaboration with Tikiri agro-craft producer company, Shakti Social Cultural and Sporting Organisation and Utkal Alumina International Ltd.

The following steps were taken as part of this initiative:

- A garment manufacturing unit was set up with 30 advanced JUKI machines, cutting machines, buttonhole and button stitch machines, feed-up of the arm machine and fusing machine, to name a few.
- The selection of women was done based on case work and group work. Through this process of filtering in and out, a list of 42 women members from 14 villages were finalised.
- Prior to inducting the beneficiaries into the Garment Production Centre, a number of meetings, interactive sessions and one-to-one discussions were held with them explaining the objectives of the programme and the way forward.
- Training and capacity-building sessions were conducted on basic sewing and stitching techniques, product development, and soft skills trainings, followed by monthly monitoring and evaluation of their performances aimed at identifying improvement areas.
- During the course of this initiative, some challenges were also encountered with respect to the repair and maintenance of machines, hiring of quality of professional trainers due to remote locations, and ensuring quality of production. These were overcome through timely interventions by the CSR team.
- Till date, 62 women have been trained and 30 women are earning their livelihoods from this unit. Their monthly earnings range between INR 6,000 and 7,000.

Going forward, there are plans to replicate the same project in the peripheral area of Utkal Alumina. After successful completion of few business cycles, Utkal Alumina plans to set up another garment manufacturing unit of this kind in mines periphery.

Encouraging Commercial Vegetable Farming under Project Samriddhi at Utkal

Agriculture is the primary source of income for farmers residing in the villages of Bilamal, Tikiri, and Rayagada. They cultivate traditional crops like maize, ragi, millets and arhar once every three years on a rotational basis. Through these agriculture activities, they managed to earn approximately INR 7000 to 8000 from an acre of land. Aiming to improve the agricultural income of the farmers, a few initiatives were taken, as described here:

- Selection of 0.25 acre of up or medium land
- Ensuring irrigation throughout the year and planning crop rotation
- Capacity-building of the beneficiary
- Growing of off-season crops and short-duration greens and coriander crops
- Providing expert services for crop production and water distribution management
- Providing market for produce in the nearby areas

These steps led to cultivation of different varieties of vegetables including tomato, brinjal, cauliflower, cabbage, bean, chili, greens and coriander round the year in the three seasons. Through this initiative, a rise in income was observed with the annual earning at INR 40,000.

Project Samriddhi (Commercial Vegetable Farming) was awarded at the 7th Asia Best CSR Practices Awards 2017 on World CSR Day on 2nd August 2017 in the category of Community Development Project of the Year.

Project Samriddhi: Commercial Vegetable Farming Initiative

Rainwater Conservation Through Repairing/Desilting of Earthen Check Dam at Renusagar

Check dams are the primary source of irrigation in the villages of Ranhore, Lojhra & Makra. They play a crucial role in multiple cropping, which increases the village economy. These check dams were developed to help the villagers carry out double cropping and conserve water, especially during the months of February and March. This water was also helpful for the cattle & other domestic uses.

But due to decade-old construction and lack of maintenance, a large amount of silt had accumulated in these dams and a leakage had occurred, thereby resulting in reduced rainwater conservation in those areas. The agriculture pattern of those villages was rain-fed & the farmers were only able to cultivate mono-cropping during the monsoon.
To deal with this issue, desilting and repair work was carried out at the check dams. A participatory approach was adopted, involving the local people and under the supervision of Gram Panchayat, to carry out work in the catchment area. This initiative led to an improvement in water availability and enables farmers in the village to carry out multiple cropping.

Further, HIL-Renusagar conducted a CSR survey of its adopted working villages through the Xavier Institute of Social Service (XISS), Ranchi. The XISS team visited these villages and found that local residents find check dams prepared by the Renusagar Power Division fruitful for their livelihood and livestock.

Reliable

95 Employee Stewardship
116 Product Stewardship
123 Customer Centricity
125 Supply Chain Management

Employee Stewardship

We believe that our employees are the key to our accelerated long-term success in being a market leader in the metals and mining sector. The diverse, skilled, experienced and highly committed workforce has always been a constant source of our business strength. As a reliable employer, our focus is to attract talented individuals by offering them challenging opportunities and developing an employee-friendly workplace. Moreover, ensuring equal opportunities while facilitating growth with integrated learning and development programmes enhances their leadership capabilities. We continue to follow our HR Management Framework, to focus upon aligning human capital with our overall business goal.

In addition to the HR Management Framework, we have introduced the Hindalco People Framework 1.0. The framework is based on the three pillars of Culture, Communication and Engagement, which define the professional life cycle of our employees. Built on openness, transparency and collaboration, our culture is reinforced through regular two-way communication and capacity-building, among other initiatives. These facilitate us to adapt a more holistic approach around our values of integrity, commitment, passion, speed and seamlessness.

Our aim is to become a greener, stronger and smarter business. Keeping this in view, multidisciplinary teams of technical experts, scientists and engineers assist us in developing our behavioural, functional and technical competencies. The interventions provide opportunities to all our employees through job exposure, projects, coaching, mentoring and classroom trainings. Our human rights policies and procedures are internally available and regularly reviewed by our management at both the plant and corporate levels. Our HR strategy encompasses manpower productivity, talent development, employee retention and best-in-class learning opportunities.

Built on openness, transparency and collaboration, our culture is reinforced through regular two-way communication and capacity-building, among other initiatives. These facilitate us to adapt a more holistic approach around our values of integrity, commitment, passion, speed and seamlessness.

Key Highlights of FY 2019-20

3.1%

Employee attrition rate

6.81%

Females in management positions

85%

Employee engagement score (Vibes 2019)

667

New hires (total)

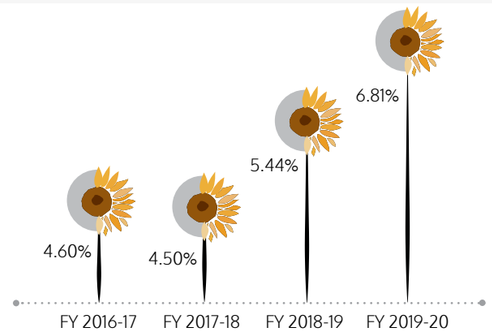
Introduction of Hindalco People Management Framework.

Diversity and Inclusion

We provide equal opportunity to all our employees, irrespective of culture, nationality, religion, caste, creed, race or sexual orientation. This has encouraged a culture of diversity and inclusion at our organisation. As part of the Hindalco People Framework, we have channelled our efforts towards increasing the gender sensitivity and have incorporated gender intelligence sessions for various grades of employees. Additionally, we support our women employees through self-motivation programs, assist them in developing financial acumen, and ensure their safety through our stringent Prevention of Sexual Harassment (POSH) Policy. We also support them through a robust maternity policy to ensure their healthy well-being.

We seek to develop a safe and trustworthy workplace and have a zero-tolerance policy against any form of workplace harassment. Our Internal Complaint (IC) Committee is institutionalised across all our units and office locations, ensuring compliance with the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013. All circulars released by the IC are communicated to all our employees. All our employees have access to portals and helplines to report any violations. Furthermore, we provide relevant insights with respect to the Act and POSH policy to all our employees through a mandatory e-learning course. This course is available on the 'Gyanodaya' portal and a course completion certificate is provided post completion. During the reporting period, 100% of our employees have completed the e-learning course on POSH.

Women in Management Positions (%)



40%

female recruitment at Graduate Engineer Trainee (GET) level

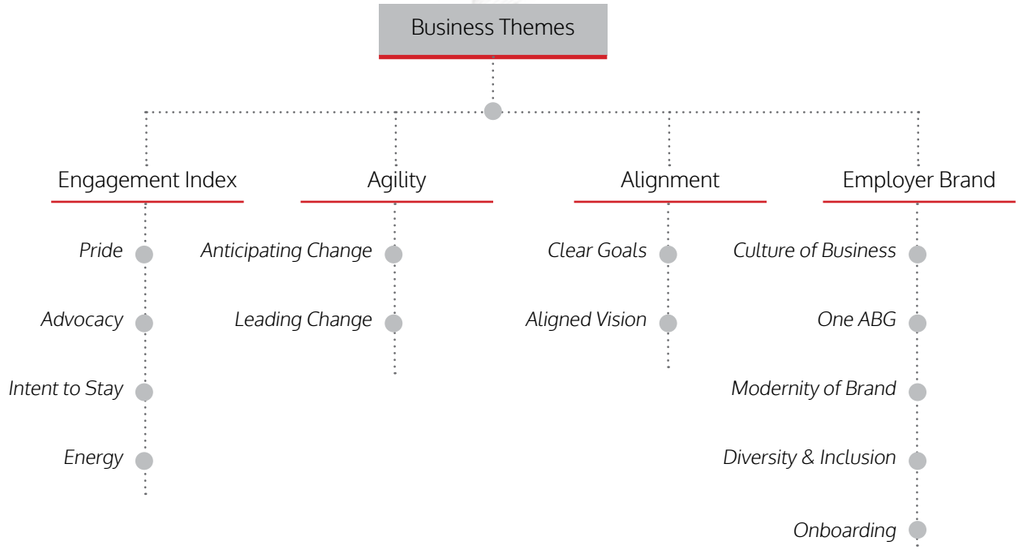
In our observations, we found an increase in the number of innovative ideas across our operations due to the increase in diversity. During the reporting period, we started a second phase of training of second layer leadership. This training was focused on developing gender intelligence and generation intelligence in our managers.

Organisation Effectiveness

Organisation effectiveness facilitates value addition to enrich our human capital. We have developed organisation integrators that align our employees with the organisation's values and purpose. Various initiatives like value month celebration and value café are taken to integrate the values in our employees. Change agents develop the organisation's capacity to reshape our culture and facilitate change management. Additionally, the initiatives and processes for effectiveness are managed by key enablers and leadership team.

Key Enablers and Leadership - Main Tasks

Implement initiatives such as ABG Awards, Pratibha scholarship programme, AWOO campaign, wellness programmes for employees and their families.	Operationalise Value Standards committee at business and unit levels. Train committee members to carry out enquiries in a systematic way.	Operationalise POSH Committee and train Internal Complaints (IC) Committee to carry out communication and processes as per regulatory requirements.



We conduct the employee engagement survey 'Vibes' through a third-party agency. This survey is conducted periodically throughout our business units. In FY 2019-20, we achieved 96% employee participation. The ABG survey model facilitates in understanding employees' perspectives on various parameters, such as agility and alignment, employer brand, performance culture in the organisation, development & career opportunities, and manager effectiveness.

The survey is conducted with the following objectives:

- To understand what energises employees to deliver their best and seek their opinion on work culture and environment, values and performance enablers
- To measure key workforce capabilities that support the desired organisational culture
- To continue tracking performance on work culture and environment, and key performance enablers

The results are than compared with group-wide, country-wide, and globally high-performing (GHP) organisations' scores to better understand the key improvement areas. Results of the survey conducted during the reporting period found that there has been an increase in talent attraction, improvement in resourcing, and strong manager performance throughout the organisation. Additionally, our team is focussed on the parameters identified as having room for improvement. Our total employee count in India reached 23,751 in FY 2019-20. On-roll workmen form the bulk of our operations, at about 66.9%. We observed a decrease in our attrition rate from 4.10% in FY 2018-19 to 3.10% in FY 2019-20. Additionally, there were 667 new hires, 69.71% of which fall under the category of less than 30 years of age.

Key Highlights of Vibes 2019

02

Alignment is strong, performing above high-performance norm

04

Almost all parameters were observed to be above the GHP norms

01

Hindalco tends to outperform high-performance norms

03

Agility tends to perform above the GHP norm

05

Longer-tenure employees show higher scores than those with lower tenure

Business-wise details of our workforce are provided in the table below:

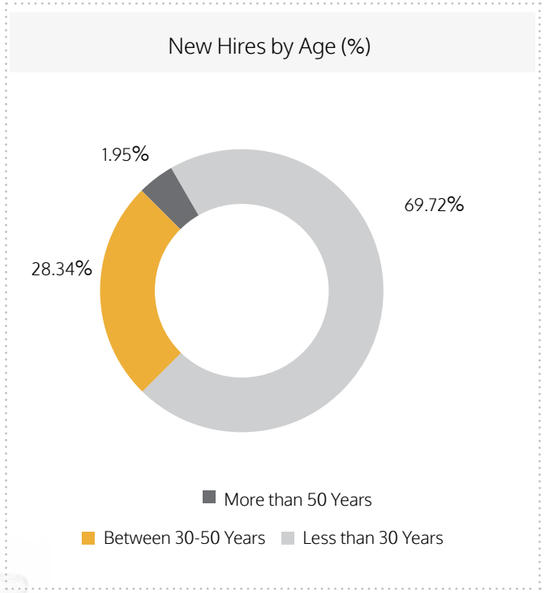
	FY 2019-20		
	Aluminium and Mines	**Copper**	**Total**
Total Manpower Strength (Management Staff and Workmen)	22,206	1,545	23,751
Number of Management & Staff	7,335	502	7,837
Number of Management & Staff (Male)	6,867	470	7,337
Number of Management & Staff (Female)	468	32	500
Number of on-roll workmen	14,871	1,042	15,913
Number of on-roll workmen (Male)	14,776	1,038	15,814
Number of on-roll workmen (Female)	95	4	99
Number of contract workmen	27,339	3,272	30,611
Number of contract workmen (Male)	26,056	3,110	29,166
Number of contract workmen (Female)	1,283	162	1,445

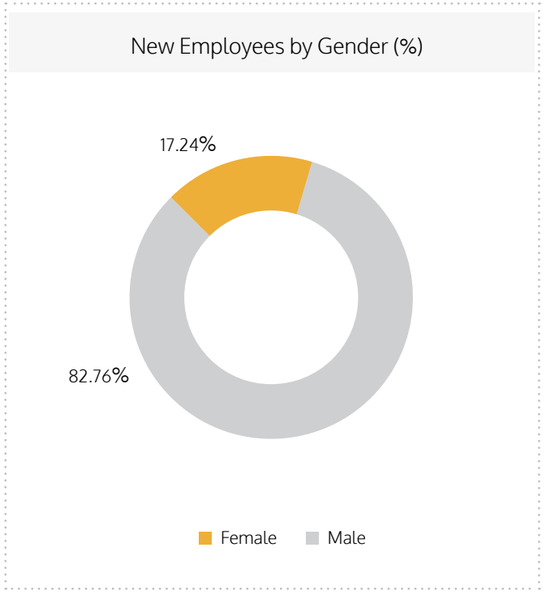
	FY 2019-20		
	Aluminium and Mines	**Copper**	**Total**
Total employees hired	626	41	667
Employees hired – Male	512	40	552
Employees hired – Female	114	1	115
Employees hired (> 50 years old)	13	0	13
Employees hired (30-50 years old)	160	29	189
Employees hired (< 30 years old)	453	12	465

Management Employees (Age - wise)			
Year	**>50 Years**	**30 to 50 Years**	**<30 Years**
FY 2016-17	1,070	2,287	605
FY 2017-18	1,140	2,380	508
FY 2018-19	1,188	2,395	473
FY 2019-20	1,232	2,436	598

Staff Employees (Age -wise)			
Year	**>50 Years**	**30 to 50 Years**	**<30 Years**
FY 2016-17	526	2,021	925
FY 2017-18	573	2,086	949
FY 2018-19	606	2,053	945
FY 2019-20	648	2,019	913

We have focussed on improving the diversity in our industry. Consequently, we have increased the number of new female hires from 13% in FY 2018-19 to 17.24% in FY 2019-20.





Our employee-friendly policies and career growth prospects have resulted in a turnover rate of 7%, which is a considerably good employee turnover rate for the industry. Details of the employee turnover for FY 2019-20 are provided in the table below:

Category	FY 2019-20			
	Aluminium and Mines	Copper	Total	Rate (%)
Total employee turnover	522	33	555	7
Employee turnover -Male	492	29	521	7.1
Employee turnover -Female	30	4	34	6.9
Employee turnover (> 50 years old)	182	7	189	10
Employee turnover (30-50 years old)	176	14	190	4.2
Employee turnover (< 30 years old)	164	12	176	11.8

Employee Care and Human Rights

We believe that our values act as a foundation of a reliable and responsible organisation. They help us conduct business operations, whilst respecting the human rights and the dignity of our people. We believe in providing equal opportunity employment and propagating a work environment free of any forms of discrimination. Our employee portfolio consists of two expats from the United States of America, apart from our Indian employees.

We support our workers' right to collective bargaining, and have observed worker unions at all our operating locations. We have recognised about 65.87% of our total workforce covered under the provision of collective bargaining. This helps us ensure transparency with and trust of our entire workforce. We have developed long-term relationships with unions and follow prevailing labour legislation at the national and state levels for all settlements. Health and safety topics for operations at all respective locations are covered in our agreements with the trade unions. No significant risk of violation of right to collective bargaining was identified throughout our operations during the reporting period.

We are committed to respecting and upholding the human rights of all our stakeholders. Our Human Rights Policy reinforces our commitment and guides our consequent actions. Our defined due diligence process enables us to identify potential risks related to human rights, covering both our employees as well as the communities surrounding our locations.

We conduct this process annually, with the support of the risk management team, through a company-wide risk register. We also have a labour and human rights due diligence checklist in place, which is used in identification and assessment of human rights related risks. These assessments cover all major groups associated with the organisation, such as employees, local communities and indigenous people surrounding the units, migrant labour and contractual labour. Detailed monitoring is conducted at all our sites to identify any risks, with respect to various human rights-related requirements such as no child labour, working conditions, minimum compensation, equal opportunity and freedom of association, among others. Additionally, we have developed a Human Rights Assessment Framework for all our facilities in the reporting period. Assessment of human rights-related risks is also a part of our supplier evaluation process. The legal team audits compliance to the Factories Act and labour laws, and presents its findings to the senior management.

To ensure compliance to labour rights, SOPs (Standard Operating Procedures) are in place at all our business units. Additionally, a grievance mechanism system is in place at all locations for our employees. In accordance with the Industrial Dispute Act, 1947, a Works Committee is formed for our workmen. The Works Committee is responsible for handling any kind of issue with relation to man, machine or material. It also focuses on areas such as health, hygiene, and sanitation of our workforce

Risk mitigation plans are developed to address the identified risks through corrective actions. Risk prevention may include awareness sessions and precautionary measures, and risk reduction is done through building capacity and safeguards, while risk elimination is achieved through modifications in the business processes.

A robust mechanism is in place against any cases of human rights violations in the organisation. Any violation may result in warnings, counselling, penalties and even terminations of employment, depending upon the severity of the case. To assist our mechanism, we have developed a Code of Conduct along with our policies which are applicable to all our employees, contractual employees and other partners across our value chain. The Code and our policies stress upon human rights issues, including child labour , forced or compulsory labour , sexual harassment and discrimination. All our employees have access to portals and helplines to report any case of human rights violations. All our contractors are issued ID cards to declare their personal information. We prohibit any form of child labour across our locations. Moreover, we have started conducting contract labour engagement surveys to take feedback from our contractual workforce. This allows us to avoid any form of human rights violations. In addition to this, trainings are provided to all our security personnel on basic human rights and organisational policies and procedures. During FY 2019-20, we did not report any incidents related to human rights violation or discrimination at any unit.

We seek to provide the best benefits to our permanent employees as per defined plan obligations. Medical insurance, residential accommodation at plants, group personal accident insurance as well as parental leaves are provided to all our employees as part of our benefit plan . All of our management and staff employees are entitled for parental leaves. All employees who availed parental leave during the previous reporting period are currently employed with us after 12 months of return to work. The following table provides details on parental leaves:

Parameters	Total
Total employees that took parental leave during FY 2019-20	346
Total number of employees that returned to work in the reporting period after parental leave ended (Male)	329
Total number of employees that returned to work in the reporting period after parental leave ended (Female)	11
Total number of employees that returned to work after parental leave ended that were still employed 12 months after their return to work (Male)	365
Total number of employees that returned to work after parental leave ended that were still employed 12 months after their return to work (Female)	6

We treat all our employees without any discrimination and provide equal benefits to all. Ratio of basic salary and remuneration for women to men during the reporting period was 0.82:1 for management grade employees and 0.92:1 for non-management grade employees. Industry-wide benchmarking is carried out periodically, while also considering the job roles to develop a remuneration structure. Views of all the relevant stakeholders are considered while revising the remuneration structure.

We believe that transparency is key to develop a responsible and reliable organisation. We take care to notify all our management staff at least 3 months in advance about any significant changes in our operations. We also notify all our workmen about these changes, as per the requirements of local regulations. Additionally, trainings are provided on aspects related to skills, business objectives and values for better effectiveness and contributions. We ensure that all our units are 100% compliant in terms of local and national laws, minimum wages, payment of wages and the Factories Act and all other prevailing regulatory requirements

Review Framework

We have developed a robust 3C + 2S review framework based on the 3Cs -Customer, Cost and Cash. These form the pillars of the framework. Across these pillars, Safety and Sustainability and Systems and Processes (2S) are ingrained by our determined efforts. We focus on improving employee productivity across multiple areas of our business, such as operations, cost efficiencies, safety, sustainability and systems and processes with the help of this framework. We ensure that every member of the workforce is aligned with the organisational goals of driving cost efficiencies.

Performance Evaluation

Our performance evaluation and review system enables us to optimise productivity of our employees, whilst reducing complexity and making us more agile and reliable. This system involves a goal-setting process and performance review for each financial year. The goal-setting process helps the employees to align their goals with that of the organisation. A system and technology are built to ensure 100% coverage through managerial conversations on career and development. The employee feedback surveys indicate that almost all our managers have a conversation with employees to provide regular performance and career development review. We have also introduced a tool called 'PingME 18-19'. This tool helps us capture real-time and continuous feedback from multiple stakeholders. During the reporting period, the usage increased from 35% to 65%. Our focus is to achieve complete penetration of this tool throughout the organisation in terms of usage.

We have developed a potential assessment framework during the reporting period, for our JB 10 & 11 employees to determine their personality and competency characteristics. This facilitates us to identify and develop talent at the junior management level and maintain a healthy succession pipeline.

Additionally, we have modified our systems to treat all our employees in an equal manner and without any categorisation. This helps us ensure higher transparency and fairness in the performance evaluation systems.

Learning and Development

We emphasise on the all-round development of our employees. We focus on providing various state-of-the-art training programmes to develop technical, functional as well as behavioural competencies of our employees. We impart technical trainings to employees involved in our core operations, whereas functional trainings are provided to various departments focussing on their respective functions. Our behavioural trainings focus on developing communication, leadership and soft skills of our employees.

Our Training Needs Identification (TNI) process forms an integral part of our annual performance management system, and is supplemented by a training planner at the business level after seeking requisite inputs. The TNI process factors in review of organisation-wide

learning priorities in consultation with top management, analysis of "My Development Plan" for individual employees, and discussions with business and unit heads based on their requirements. Further inputs from unit HR teams on specific competency focus, performance management, potential assessments and DACs are also taken into consideration while assessing the training needs. In addition to this, we have a competency dictionary in place, which assists in defining competencies for respective job roles. This dictionary is available for technical job roles, especially considering the engineers enrolled at the management level.

We are committed to providing high-quality learning and leadership solutions to our senior leadership. ABG's exclusive leadership centre, Gyanodaya, is used to deliver learning interventions for our senior leadership, in line with our strategic vision and leadership solutions. Additionally, we also have initiatives focusing on our culture, and life-enhancing and technical learnings, such as:

- Behavioural competency programmes (Vision & Strategy, Business Acumen, Teamwork & Collaboration, Develop Oneself & Others, Innovate & Improve, Customer Focus, Get Results, Communicate to Influence & Engage)
- Life enhancement programmes (Turning a New Leaf - a week-long special intervention for retiring employees with spouse, Gender Intelligence - to educate employees about gender sensitisation)
- Wellness programmes (Live Well Series I - awareness program for physical well-being, Live Well Series II - awareness program for emotional well-being)
- Competency development programmes for senior and middle management through Hindalco Technical University

Turning a New Leaf is a week-long special intervention by Gyanodaya for our retiring employees. The individual and their spouse jointly participate in this unique intervention, due to the spouse's importance in the individual's life. This endeavour helps to prepare for the new phase of life post-retirement. It focusses on preparing a transition plan and helping the individuals make the most of the new phase. This includes using questionnaires, spousal feedback, experience-sharing and interaction with peers and experts. Additionally, it aims to raise awareness on topics concerning health, wealth, legislation and networking.

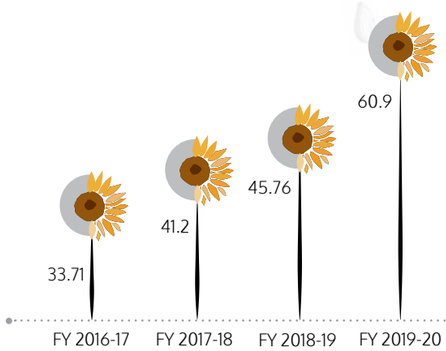
We have introduced customised training interventions for various levels across the organization. Some of these segmented programs are FLY - FUTURE LEADERS IN YOU for Junior management aimed at building a development journey to make them successful in their current role and prepare them for future role. The other program called General Management program " Lead from Middle " has been designed to strengthen the leadership pipeline for mid-level managers who already are leading teams in their respective functional areas. We also launched a second batch of " Executive Presence" as part of Chairman Series in partnership with Gyanodaya for Senior Leadership team. This program focuses on Hindalco Leaders who are best in class functional Experts in a ever changing global Environment that calls for these leaders to display executive presence.

Being a technical industry, developing the technical skills of our employees is of the utmost importance. Keeping this in mind, we formed the Hindalco Technical University in November 2017. The university provides access to various training programmes to develop technical as well as analytical competencies of our employees. These programmes assist them in developing thorough knowledge of the industry processes and operations related to their respective departments.

We measure the impact and effectiveness of the training programs as received part of the feedback process from our enterprise learning management system and other forms of pre and post assessments built into the program design. A third party is engaged to asses the talent capability of our Senior Leadership Team.

We have been exceeding our target of achieving an average of 40 hours of training per employee by FY 2019-20 for the past 3 years. To achieve this feat, we had planned more than 60 hours of trainings per employee during the reporting period. We now aim to continue minimum 60 hour of training per employee every year, including FY 2020-21 The four-year trend of the average hours of trainings per employee can be seen below.

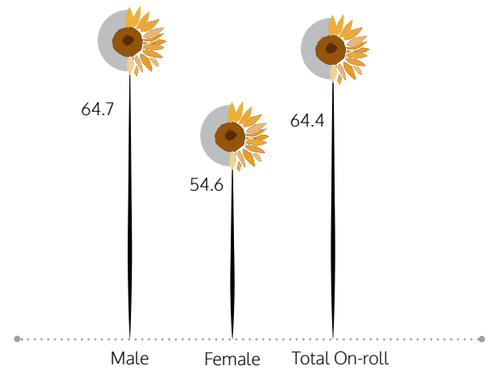
Average Hours of Training Per Year Per Employee



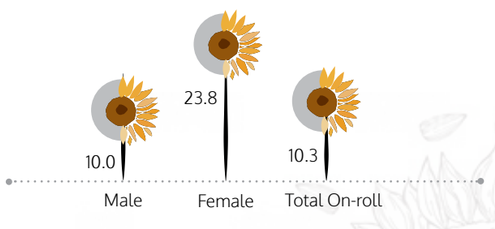
Details of trainings provided to our employees during the reporting period can be seen below

Category	Aluminium and Mines	Copper	Total
Total training man-days	180,924	3,261	184,185
Training man-days (Management & Staff)	53,070	1,584	54,653
Training man-days (On-roll workmen)	127,854	1,677	129,531

Average Training Man-Hours - Aluminium & Mines



Average Training Man-Hours - Copper



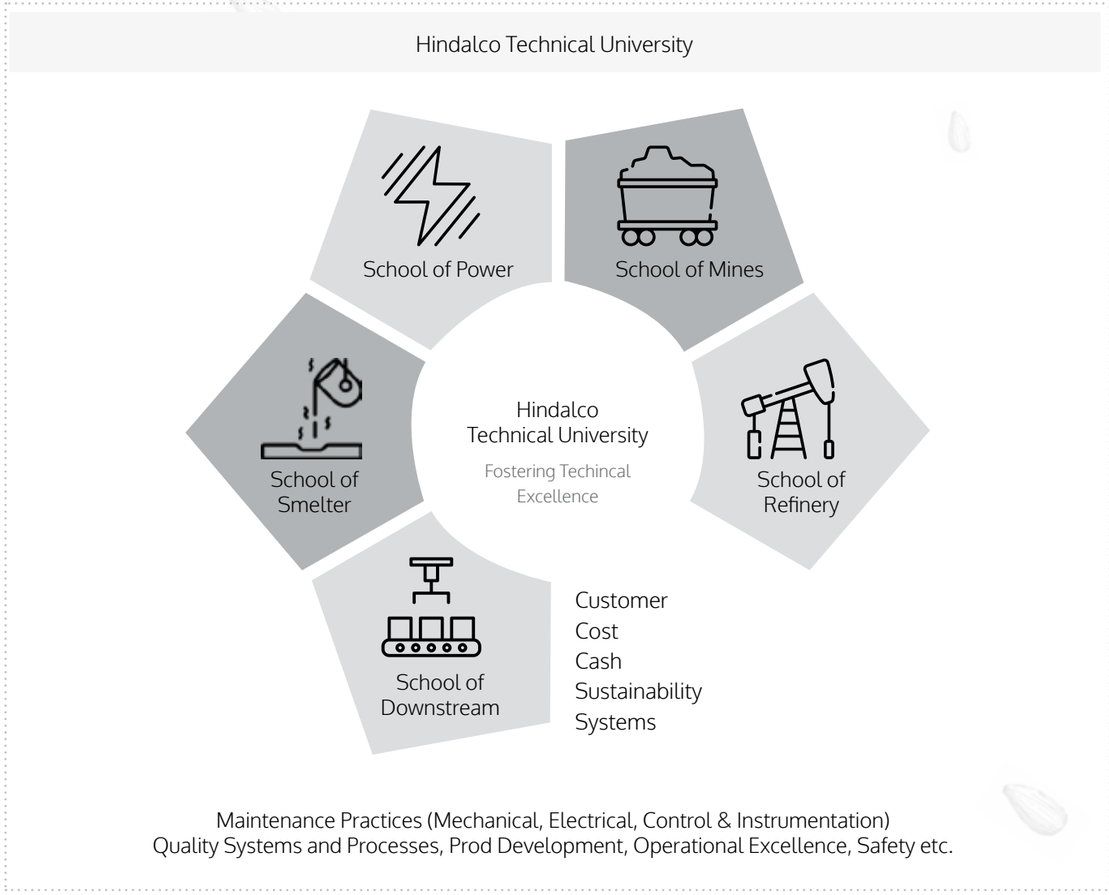
In addition to the classroom training programmes, we have developed e-learning modules for all our employees. These have been developed based on various basic functional and technical skills as well as business morals and values. Specific modules have also been designed on topics like human rights policies and procedures followed within the organisation. The number of e-learning hours recorded throughout the reporting period can be seen below:

Total e-Learning Hours			
	Aluminium and Mines	**Copper**	**Total**
Management & Staff Employees	12,587.65	501.18	13,088.83

Hindalco Technical University

Out of the total 8,013 employees at our managerial and supervisor levels, 80% fall under the technical category. Enhancing their technical expertise and contributing towards their skill development form the basis of our business sustainability. Taking a step further in this direction, we inaugurated the Hindalco Technical University in November 2017, in partnership with global think tanks and different organisations. HTU aims for rapid adoption to industry levels, expansion by setup of 3 mega-greenfield projects, and addressing issues of lack of uniform product standards, quality and technical parameters. With a vision of becoming the "One-Stop Technical Solution Provider for Aditya Birla's Metal Business by 2025", the university aims to become a hub for all technical solutions and develop a pool of technical expertise in-house with the help of best-in-class institutes and consultants. The university was developed to foster technical abilities in our employees through company-specific as well as general training programmes. The main objectives of the university are:

- To be a pillar in Hindalco's strategy to achieve higher productivity
- To be a central platform for standardised technical training
- To prepare Hindalco for future technical challenges

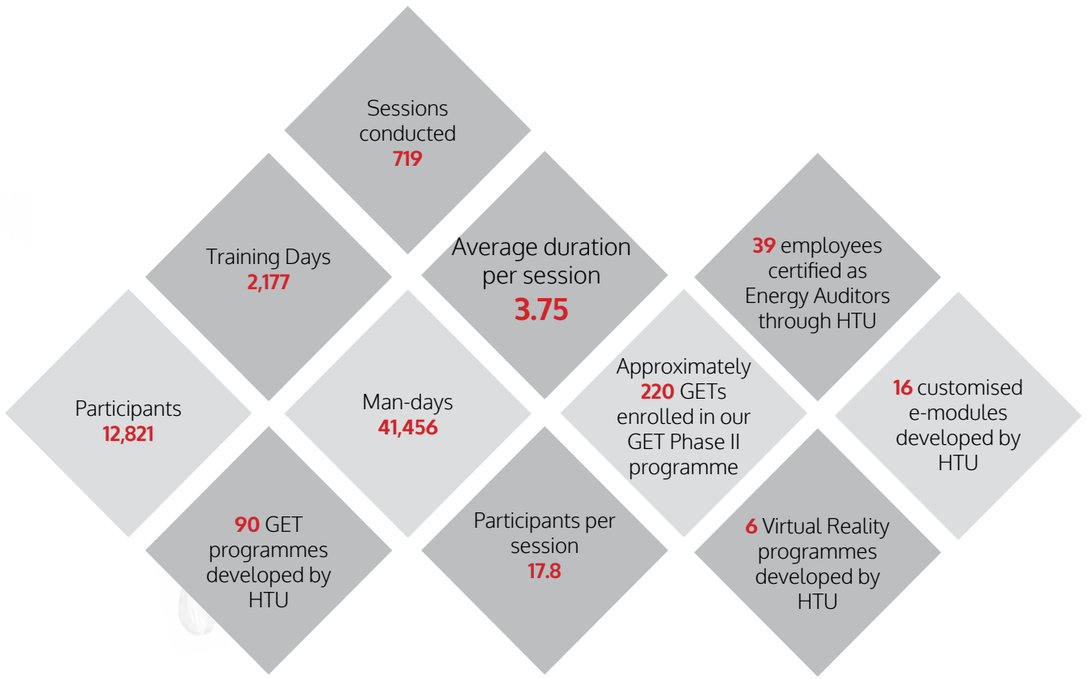


As part of the Hindalco Technical University, all our employees have access to technical programmes that are developed through various industry-specific requirements. The training requirements are understood based on stakeholder consultations, study of global companies, survey of MCE and inputs from the Heads of Departments.

Our mainstream engineers are eligible for corporate-level technical programmes, general technical programmes and various certification programmes. The corporate-level technical programmes include training in Lean Six Sigma, Theory of Inventive Problem Solving (TIPS), Reliability Engineering and Project Management. Meanwhile, general technical programmes increase knowledge of industry-related processes. These include trainings based on refinery, rolling, extrusion and power plant processes. Additionally, function-specific programmes such as aluminium-specific programmes, and mechanical, electrical and instrumentation Engineering programmes are also available. The certification programmes consist of certifications in Plant Engineering, Energy Auditor, Maintenance & Reliability, Six Sigma and Innovation. It also includes providing graduate degrees to our diploma-level professionals and post-graduate degrees to our graduate professionals. Moreover, all employees joining Hindalco with up to 3 years of work experience are enrolled into the Jumpstart programme, which includes technical and analytical programmes.

We plan to focus on workmen skill development in the future. This phase of development will be called HTU 2.0, and aim to develop training programmes, e-modules, video nuggets, HTU Skill Development Centres, certification programmes and knowledge-sharing programmes, based on skill requirement for all our workmen. Additionally, it aims to introduce B. Tech courses on Aluminium Engineering in collaboration with UGC for our diploma engineers. This would be a specialised course for people working in the aluminium manufacturing industry.

HTU's Journey So Far



Young Professional Development Programme – Jumpstart

The young generation is the future for Hindalco. We have introduced the Jumpstart development programme for all our GETs recruited in the organisation as part of the Hindalco Technical University. This programme is designed to develop business as well as technical knowledge for a period of three years. The three-year development plan aims to develop technical and analytical skills along with systematic problem-solving skills through various technical courses and Six Sigma courses (Green Belt & Black Belt). In the first year, the participants undergo four months of technical trainings, followed by six months of on-the-job training. The second year provides basic industry specific courses, along with department-specific courses. The Six Sigma Green Belt course is parallelly conducted in two phases. The final year provides function as well as department-specific advanced courses, along with the Six Sigma Black Belt programme. Such a comprehensive plan helps develop an overall technical expertise in a phased manner across all three years, imparting knowledge of all processes and operations. Additionally, the participants are required to develop technical as well as business development projects related to their function during the second year of the course, under the mentorship of their senior managers. These projects, which are part of their assessment, are pre-identified through discussion with the senior managers and HODs of the functions. The focus is on finding solutions for existing problems within the functions. After the completion of the programme, the participants are provided with Lean Six Sigma Green Belt as well as Black Belt certifications. We have implemented the innovative ideas emerged due to these courses in our operations.

Hindalco Coaching Programme – Building and Enabling Organisation

The Hindalco Coaching Programme was developed in FY 2018-19 in partnership with Gyanodaya and internationally recognised coaching and leadership development institutions. The focus of this program is to enhance and promote a coaching culture and coaching style of leadership in our future leaders.

Technical Career Path (TCP)

Being a large manufacturing organisation, technical and technological expertise are vital to gaining a competitive advantage in the marketplace. This requires specialised capabilities in key technical areas by designing specialist jobs, building a specialist ecosystem and actively nurturing specialists. Specialist jobs are highly knowledge-centric and specific to the core of the organisation. Due to the small number of such specialists, we focus on developing home-grown technical specialists in a few areas. With business and external market conditions getting more complex, the need to develop, nurture and retain officials with specialised skills is crucial for business growth. Hindalco has come up with a Technical Career Path to cater to such needs, instead of the managerial career path.

Technical Career Path

JB 1,2 — Fellow

- Pan-India/Global/Industry
- Experience- 25+ years
- Contribution - Society + Industry + Mentoring

JB 3,4 — Distuinguished Engineer

- Pan-India/Global/Industry
- Experience- 20+ years
- Contribution - Society + Industry

JB 5,6 — Sr. Principal

- Cluster/Pan-India/Global
- Experience- 15-20 years
- Contribution - Society + Industry

JB 7 — Principal Engineer

- Unit/Cluster/Pan-India
- Experience- 10-15 years

JB 8 — Lead Engineer

- Unit/Cluster
- Experience- 7-10 years

Entry for Engineers at Higher Band in Specialist Roles

JB 9 — Sr. Engineer

- Unit
- Experience- 5-7 years

TCP Entry Point for JB 9, 10 Engg.

JB 10 — Engineer

- Unit
- Experience- 3 Years

Lean Six Sigma Training Programme

All the employees joining our organisation are exposed to various technical-cum-functional capacity-building programmes, including Lean Six Sigma courses, function-specific courses, project management and others. These are developed by the Hindalco Technical University, and are aimed at:

- Developing industry-specific skills focussing on innovation, problem-solving and strategy development
- Preparing our employees for current and future challenges of the business

The Lean Six Sigma programme is designed to provide on-the-job implementation of the skills gained during this course. The projects developed by the participants are based on current challenges in the business. They are identified after consultation with the managers and HODs, while trainings are conducted parallelly with project development. The projects developed during the course were implemented and provided financial as well as business advantages. A project charter is developed for each of these projects. The project charter outlines the goal and objective of the project whilst defining the problem statement. It also outlines the scope & boundaries of the project and delineates the roles and responsibilities of the stakeholders. The timelines and the stakeholders involved in the project are also clearly defined as part of the charter. The charter acts as a contract between the organisation, project team and other key stakeholders involved with the project. The template of our project charter can be seen below.

GET Six Sigma Training Session

GET Six Sigma Training Batch

Template of Project Charter

Project Charter

Business Gap

The Business Gap is defined in the project charter. This defines the major reason, and need of the project to be implemented and how is it useful to the organization.

Customer

The customers associated with the project (external/internal are defined in this section

Defects & Metrics

The defects, and issues related to the defect/ problems is defined in this section.

Consequential: The consequences the organization may face due to ignorance of the proble

Problem Statment

General problem statement is defined surrounding which the project is developed

Objective Statement

The objective to be achieved post completion of the project is defined in this section

Financial Impact

Estimated Positive financial impact of the project to the organisation (if any) is described in this section

Milestones/Timeline:	Scheduled	Actual
Start of the project	xx/xx/xx	xx/xx/xx
Multiple Reviews	xx/xx/xx	xx/xx/xx
Closure	xx/xx/xx	xx/xx/xx

Project Scope/Boundaries

Scope and boundary is clearly defined in this section
Out of Scope: Any activities not part of the scope is defined in this section.

Team Members

Names of the members of the team is specified in this section with the name of the Champion.

Building Resilience During COVID-19 Pandemic

Towards the end of the reporting period, the country entered into a lockdown to contain the spread of coronavirus. We were faced with many challenges, such as hindrance to operational continuity, high risk of exposure due to large volumes of employees and lack of awareness among external stakeholders. To ensure smooth functioning of our operations during these critical times, different teams were formed for different purposes, viz. COVID Task Force, Township Management Team, Quarantine Team, Sanitisation Team, Audit Team and Surveillance Team. Further, showcasing our ability to adapt and innovative, we undertook several initiatives to overcome these challenges.

- Organised online sessions related to stress management, counselling sessions, and recreational sessions for employees.
- Allotted separate timings for work and domestic chores to assist employees maintain work-life balance during the period of lockdown.
- Daily health monitoring of employees and their family members through the 'My Doctors Appointment' App.
- Supporting employees to fulfil their daily essential needs through centralised online vendor ordering.
- Arrangements for mass education through various avenues like broadcast messages, WhatsApp groups, unit-specific apps and visuals.
- A dedicated family buddy was allotted for quarantined families to support them in all their requirements and engage with them on regular basis.
- Among other initiatives, a barber shop was set up in the backyard for the employees while maintaining social distancing.

With these resilient measures, we adapted to the new normal in no time and continued to serve our customers through our efforts.

Water, Sanitation and Hygiene (WASH) Pledge

We reiterate our commitment of providing safe drinking water, sanitation and hygiene at the workplace by being a part of World Business Council for Sustainable Development (WBCSD) Water, Sanitation and Hygiene (WASH) Pledge aligning our sustainability goals to the United Nation's Sustainable Development Goals (SDG) 6.1 and 6.2 aim to achieve universal access to water, sanitation and hygiene (WASH) by 2050. With this aim, phase I of WASH Pledge was launched in January 2015 at 15 major units of Hindalco. WASH self-assessment questionnaire was filled in information technology programme, Enablon and the progress was monitored regularly across all sites. In December 2017, Hindalco's overall score was 1.88 which is the benchmark score more than Group target of 1.8. Phase II of WASH Pledge was launched in January 2018 and included additional sites taking the total sites to 42. Regular trainings are being arranged and we are on track to achieve group target compliance score by December 2020.

Product Stewardship

Product innovation and responsible business practices are integral to our operations at Hindalco. To develop and nurture a sustainable business, we constantly focus on innovation, excellence and quality in all the products that we develop. As part of the aluminium industry, we are among the top five aluminium producers, based on shipments, globally. We are an integrated producer with a strong base across the value chain. Our diverse downstream offerings, such as extrusions, flat rolled products, foils, wire rods and billets find application across various industries, ranging from automobiles, packaging, pharmaceutical, transportation, building and construction, to name a few.

We also have the largest custom copper smelter in the world. In our copper operations, we produce copper cathodes and continuous cast copper rods of various sizes. The copper rods find their application in wire, cable and transformer industries. Our products are also contributing towards the fight against the COVID-19 pandemic. Copper is emerging as a preferred metal when it comes to building components such as doorknobs and handles. This copperisation of the industry at large is due to the fact that the COVID-19 virus does not last on copper surfaces for more than four hours.

Keeping long-term reliability in mind, our R&D team designs and develops our products considering the inherent characteristics of the metals we produce. Properties of aluminium such as high recycling potential, light weight and high malleability make it suitable for varied applications. Some of the examples, such as development of aluminium bulker and aluminium wagon, represent our approach towards developing products with low emissions intensity during their lifecycle.

To develop and nurture a sustainable business, we constantly focus on innovation, excellence and quality in all the products that we develop. As part of the aluminium industry, we are among the top five aluminium producers, based on shipments, globally.

We continuously collaborate with industry experts to develop products that are greener, smarter and stronger. Some of our major collaborators include institutions and think tanks like different Indian Institutes of Technology (IITs), NITI Aayog, Jawaharlal Nehru Aluminium Research Development and Design Centre (JNARDDC) and the Institute of Minerals and Materials Technology (IMMT). These collaborations help us develop solutions for realising our vision of future-proofing our business operations.

Packaging is one of the major consumers of aluminium in India. Aluminium, by virtue of its properties, is considered a better substitute for conventional packaging materials such as glass, tinplate and paper. Our high-quality aluminium is considered superior due to its superior alloy composition and metallurgical properties.

Aluminium's excellent material properties such as formability, high strength-to-weight ratio, corrosion resistance, and ease of recycling, make it the ideal material for a wide range of building and construction applications. It, thus, provides the basis for intricate, stable and lightweight structures, while also allowing a high degree of pre-fabrication, with a variety of finishes. Our aluminium is made of virgin aluminium with a superior surface finish with exact dimensions, and meets all stringent quality standards. It is widely used in the construction of windows, doors and facades, and roofing and cladding. Eternia Aluminium Windows and Everlast Aluminium Roofing Sheets are some of our products. Due to their rust-free properties, they are suitable for all weather conditions and thus, require no maintenance.

Aluminium is also used extensively in the transport industry, accounting to an average use of 140kg of aluminium per vehicle in western countries, whereas it stands at 40kg per vehicle in India. This can be attributed to its high strength-to-weight ratio and excellent impact absorption qualities. Due to the superior alloy composition and metallurgical properties, our aluminium helps us meet the stringent performance parameters required for this industry.

Aluminium is widely used in industrial machinery for its non-pyrophoric properties, and its resistance to corrosion and high strength-to-weight ratio. Superior quality aluminium from Hindalco is used extensively in the automobile and rubber industries because of its resistance to corrosion. Aluminium alloys are also widely used in the manufacture of explosives and in the nuclear energy industry. Due to the high quality of our product, they are used in making the most precise industrial machinery equipment.

We consider the requirements of our wide customer base and focus on improving and modifying our processes to meet these needs. For example, in our aluminium business, we had revised our rolling practices by modifying the thermal treatments and pass schedule to increase the tensile strength of our LG foils, to meet our export customer requirements. Similarly, our naval customers require hard alloys of various thickness and temper. Due to the limitations of the cold rolling mill, meeting customer requirements was a challenge. The R&D team came up with the solution to manufacture this material from the hot mill itself, followed by sheet-cutting at Taloja. Weldability assessment of the material was carried out and after fine-tuning of the process, weld coupons were prepared. These coupons were tested for radiography and tensile properties. This led us to meet the requirements of our customers. Owing to our diverse portfolio of product offerings and wide customer base spanning sectors from pharmaceuticals and packaging to automotive and transport, it is essential that all our products comply with local and international product regulations, including codes, service information and labelling. All our products meet the compliance requirements of the markets, including those related to Environment, Health & Safety (EHS). During FY 2019-20, there was no incident of non-compliance concerning marketing communications , product and service information or labelling. All our products comply with local and international regulations concerning product and service information and labelling.

Life Cycle Assessment (LCA)

Responsible product stewardship is a key area of focus in our business sustainability strategy. We have taken cognizance of the fact that there are emerging environmental performance implications across geographies we operate in and thus our management has adopted sustainability measures as a new imperative for business growth. As a leading player in the Indian aluminium sector, the company has undertaken life cycle assessment (LCA) of multiple products to capture reliable scientific information for communicating the environmental performance of products to customers or retailers and more generally those requiring such information for environmental labelling purposes. This assessment was carried out as per ISO 14040/44 standards for one tonne of primary aluminium ingot and one tonne of aluminium cold rolled strips manufactured across Renukoot, Hirakud and Taloja units. The assessment was cradle to grave covering bauxite captive mines, transportation of bauxite, alumina refining, production of pre-baked anodes, aluminium smelting, aluminium casting, scalping, hot rolling, cold rolling, cogeneration plant, ETPs/STPs, and electricity generation at captive power plant covering all the upstream units of the company Environmental impacts were assessed in terms of global warming potential (GWP), acidification potential (AP), primary energy demand (PED), photochemical ozone creation potential (POCP), abiotic resource depletion (ADP) and ozone depletion potential (ODP).
The alumina refining and aluminium smelting processes were identified as major hotspots of the product's environmental impacts. The total global warming potential for one tonne of cold rolled strip was 25.25 tCO_2e. Various scenarios were developed for the identified hotspots to develop a roadmap leading to reduced impacts in the areas of electricity mix decarbonization, bauxite ore quality, energy efficiency, waste utilization and avoidable to landfill etc. With more than 65% electricity produced from coal power in India, the aluminium industry has reasonable impacts on global warming potential and a scenario was developed to substitute Indian electricity mix with European average mix and environmental impacts were compared with the published European Aluminium Association LCA.

The assessment helped us to prioritize our environmental initiatives. We plan to take up more such studies covering wider range of products across all our units. As a next step, we are also evaluating on publishing Environmental Product Declaration (EPD) of our construction/ structural application related products.

Aluminium Lifecycle

Our state-of-the-art Research and Development centres continuously innovate and develop our products. Our product development is based on the regular feedback received from our growing customer base. We have two R&D centres located at Belagavi and Taloja, both of which have received accreditation from Department of Science and Industrial Research and ISO 9001:2000. The Taloja centre is accredited by the National Accreditation Board for Testing and Calibration Laboratories (NABL), in accordance with the ISO/IEC 17025:2005 standard. Both these R&D centres are also associated with the Aditya Birla Science and Technology Company, as well as with external research institutions.

Given below are a few examples of our efforts in the research and development space:

Launch of Aluminium Freight Trailer

Hindalco launched India's' first all-aluminium freight trailer on December 2019. The trailer is one of our big initiatives for India's logistics and freight industry. At the heart of the initiative was Hindalco's intent to design sustainable, engineered transport solutions for the logistics industry.

The aluminium trailer is 34 feet long, 50% lighter and weighs over 2.5 tonnes less than an equivalent steel trailer. It can ferry a wide range of materials such as cement, alumina, fly ash, grains, flour, steel coils and cylinders. The high-strength aluminium alloy ensures that the vehicle is safe, strong, durable, efficient and environmental-friendly, in addition to being cost-effective. Each trailer saves over 15,000 litres of fuel and emits 25 tons less GHGs and helps in achieving BS-VI emission targets. It also has 70% higher scrap value.

We hope to continue empowering and creating value for our customers and nurture our environment through our aluminisation mission

Aluminium Freight Trailer

Development of Aluminium LPG Cylinder

Hindalco, in collaboration with the IOCL's cryogenic division (Fabrication) and LERC (Testing and Certification), is developing an aluminium LPG cylinder that meets the standards set by ISO 20703 and international benchmarks. The key challenge in this development is achieving consistent weld quality and optimising of heat treatment of fabricated cylinders. A batch of ten cylinders was tested at LERC in February 2020. The results indicated that the cylinders meet the requirements of the standard. Efforts are currently underway to develop Indian standards for this product and commercialise it in the domestic market.

Aluminium LPG Cylinder

Launch of Aluminium Foil-Laminated Jute Bags at Tirumala Venkateswara Temple, Andhra Pradesh

We are proud to be associated with Tirumala Tirupati Devasthanams in their effort to reduce usage of plastic during distribution of laddoo prasadam to devotees. On an average, about 3.5-4 lakh laddoos are sold at the temple premises per day, which translates into a requirement of around 70,000 plastic covers on a daily basis, as per estimates.

Tirumala Tirupati Devasthanams (TTD), the trust that manages the temple, has joined hands with us and the Jute Corporation of India (JCI) to roll out a pilot project on distributing prasadam in 100% recyclable aluminium foil-laminated jute bags. Hindalco and JCI have already applied for a patent for the process of aluminium foil lamination of jute.

As part of the pilot, JCI has opened an exclusive prasadam distribution counter for the sale of jute foil-laminated bags at TTD, and over 1 lakh metres of the laminated fabric or around 3 lakh bags were sold within two months of the initiative's launch.
The jute and aluminium bags for Tirupati laddoos are an alternative to plastic bags. They are an Indian innovation and an eco-friendly option for devotees. With the high demand for prasadam, the bags are a good way to reduce plastic pollution. As such, the green initiative is not only good for the environment but also it is providing employment to thousands of artisans in and around Tirupati, Telangana and Kolkata.

Currently, there are around 500 people making these bags. Hindalco's partnership with relevant stakeholders has been an innovative journey to find a unique and sustainable solution to plastic pollution. To further grow the initiative, we have already set up a capacity to process up to 50 lakh metres per annum of the material, which translates to around 1.5-2 crore bags annually, at our Mouda foil plant near Nagpur.

Re-Establishment of 19.6 mm Copper Rod Production for Manufacturing of 'Contact Wire'

Continuing with our efforts of serving our customer base with a wide range of value-added products, we began the process of re-establishing production of 19.6mm copper rod, which is used in railways for manufacturing hard drawn grooved conductor for OHE (Over Head Electrification), known as 'contact wire'. Stringent specifications are set by the Research Designs and Standards Organisation (RDSO) for the quality of this product, specifying the elongation requirement to be minimum 46% against the ISO requirement of 40%. Further, RDSO has partnered with RITES for third-party inspections. A very stringent inspection method is followed to arrive at the elongation results, wherein a 1mm gap cannot be accounted in the elongation test. In addition, various other challenges were also encountered. Establishment of 19.6mm copper rods with the existing set up, increased frequency of cobbles, decreased uptime for production, and increased frequency of cropping for mill inspection were some of the challenges faced during this course of time.
The following solutions were implemented to overcome these challenges:

- To modify the setup for production of 19.6mm, the gap between the Stand 2V to Stand 6V was increased. The exit guide gap was modified to meet the requirement, which led to a setup suitable for production of rods with a maximum diameter of 20.2mm.
- Maintained cast bar temperature at 860°C consistently to get the desired results.
- Increased rod coolant (NAPS) temperature from 45-55°C to 60-70°C by adjusting NAPS heat exchanger temperature.
- To avoid yellow/red patches on the rod, NAPS line individual stand flow and pressure were adjusted.
- To maintain lubrication of rod during coiling operation, wax return valve was modified during production of 19.6mm copper rod.
- Modified guide pipe to avoid physical touch with the rod to minimise line marking.
- Through precise control of CO, RDSO requirement of oxygen of 200-350 ppm is met.

Through these measures, we successfully re-established 19.6mm of copper rod production in the market, while meeting the RDSO's stringent specifications. It is the highest premium-earning product in our portfolio.

Redefined Plastering Solution 'TECHPLAST' by Renusagar Power Division

Renusagar Power Division (RPD) developed a plastering solution known as 'TECHPLAST' to provide an alternative to the conventional mortar (made of cement and sand). TECHPLAST is a "Ready Dry Mix Plaster" that contains ordinary Portland cement (OPC) and other high-quality ingredients. On account of its composition, it finds its application as an additive for inner and outer surface of masonry and concrete structure, as joint for bricks and as fillers for manual work. Users are only required to mix it with water in the prescribed ratio prior to its use.

This product has been manufactured in an eco-friendly manner using 60% of input waste material. It is a "GreenPro IGBC Certified" product and complies with requirements of IS 2250-1965, IS 1661-1972 and IS 2402-1963.

Customer Centricity

Throughout our journey at Hindalco, we strive to meet the expectations of our customers in each business area. Our efforts are backed by clear policies, rules and well-structured mechanisms. On our path of transformation towards a reliable organisation, we streamline our customer-centric processes to build long-term relationship with our customers. Our customer centricity initiatives and projects thrive to meet the requirements of our customers. Involving our top management team in our reviewing these initiatives and projects ensures long-term value creation for our stakeholders.

We focus on the following key dimensions of customer centricity at Hindalco:

Customer Centricity in the Aluminium Business

Our dedicated customer-centric approach led us to adopt the model of Net Promoter Score (NPS) over our previous Customer Satisfaction Model. To gain the overall understanding customer perceptions, we have employed a mix of both Bottom-Up and Top-Down NPS. NPS Top-Down for aluminium products is conducted across the entire spectrum of the product mix - from primary aluminium to value-added products (FRP, extrusion and foil). Here is a look at the most recent NPS Top-Down scores and the plan for the next round of Top-Down NPS surveys. These surveys are conducted at a gap of one year, as implementation of many action plans requires capex decisions.

SBU	NPS results received in FY	Top-Down NPS Score	Next survey planned in FY
Primary – wire rods	FY 2019-20	64%	FY 2021-22
Primary - ingots	FY 2019-20	59%	FY 2021-22
FRP	FY 2019-20	29%	FY 2021-22
Extrusion	FY 2018-19	24%	FY 2020 (ongoing)
Foil	FY 2020-21	46%	FY 2022-23

Apart from the NPS Top-Down surveys, Hindalco is also working on strengthening its NPS Bottom-Up mechanism. In FY 2019-20, customers of primary exports (which comprise of ~46% of sales by volume) were surveyed through the NPS Bottom-Up mechanism and a score of 32% was recorded. Hindalco is revamping its customer satisfaction module on CRM to adopt an NPS-based questionnaire. This will allow Hindalco to conduct Bottom-Up NPS surveys of customers of all SBUs.

Apart from the satisfaction/advocacy measurements, there is immense focus on driving Key Account Management as a customer-centric best practice. 12 customers of strategic importance, which also comprise of 16% of Hindalco's domestic sale, are chosen as key accounts and a cross-functional team has been appointed to ensure best possible servicing of these accounts. In FY 2019-20, sales to these accounts (by volumes) grew by around 3%, whereas overall domestic sales did not witness growth.

Customer Centricity in the Copper Business

In order to improve customer experience, our copper business has adopted an active listening and observing approach to customers during their interactions with the company. We ensure that feedback received from customers is analyzed and relevant actions are taken. We have a structured approach on customer engagement through proactive visit of cross functional team to customer locations and regular interactions with customers. As part of these meetings, our senior management officials visit customer premises and interact with shop floor employees. Events like cluster meets, dealer meets and new product launches are also organised to improve customer interactions.

Copper Business has adopted both bottom up & Top down NPS practice. Through Bottom up practice, the regular feedback and NPS rating is received from customers through our dedicated call Centre and captured in a system driven Mission Happiness platform. Feedback received from the customers is analysed and inputs are incorporated into our processes by involving cross-functional team at plant and zone levels. Action plans are prepared with time line, are implemented, reviewed and monitored on a timely basis. Following this, we communicate the same to our respective customers accordingly to close the loop. Similarly, the feedback is gathered annually by double-blind survey through a third agency and workshops are conducted with all stake holders for corrective actions which are further implemented and reviewed as per time lines.

We use the NPS methodology to capture the satisfaction levels of the customer as well as understand their overall perception about the Company. We witness the NPS score for our copper business increased from 44 to 64, whereas the industry score saw an increase from 49 to 53.

Supply Chain Management

Supply chain forms one of the most important aspect of our operations. With considerably large operations and large logistics management systems, ensuring reliability in the supply chain is a challenge. The inclusion of sustainability aspects in the supply chain risk assessment as well as vendor evaluation framework has resulted in reduced risks in our supply chain operations. While constantly improving on our efforts towards responsible and reliable business practices, we encourage our suppliers to conduct their business in a sustainable and ethical manner. This enables effective resource management and overall reduction in the environmental footprint across the supply chain.

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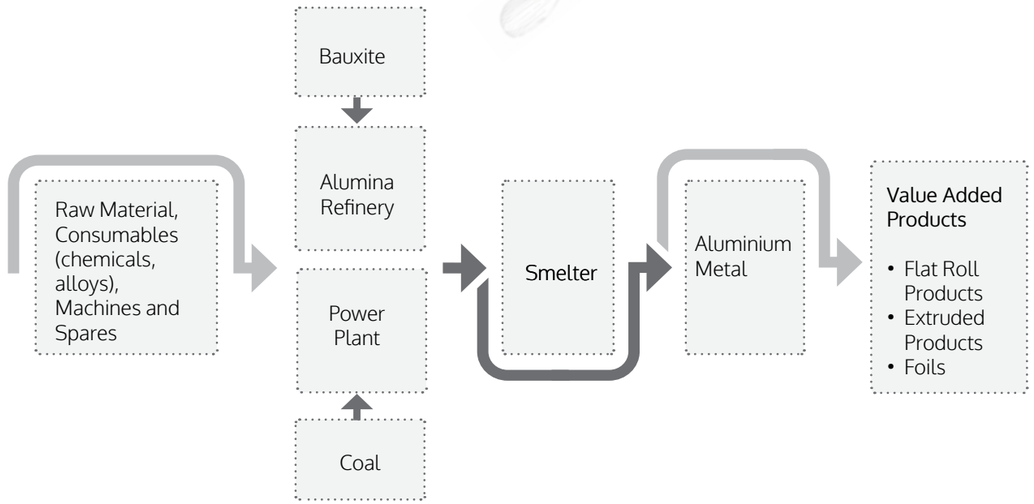
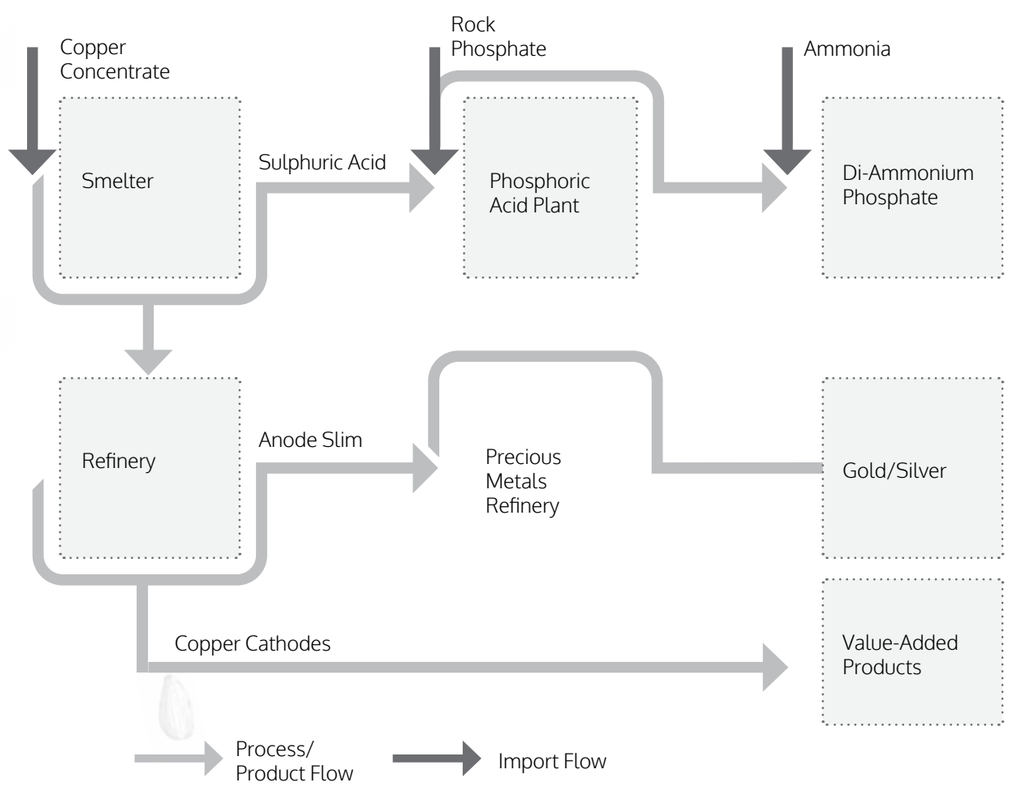
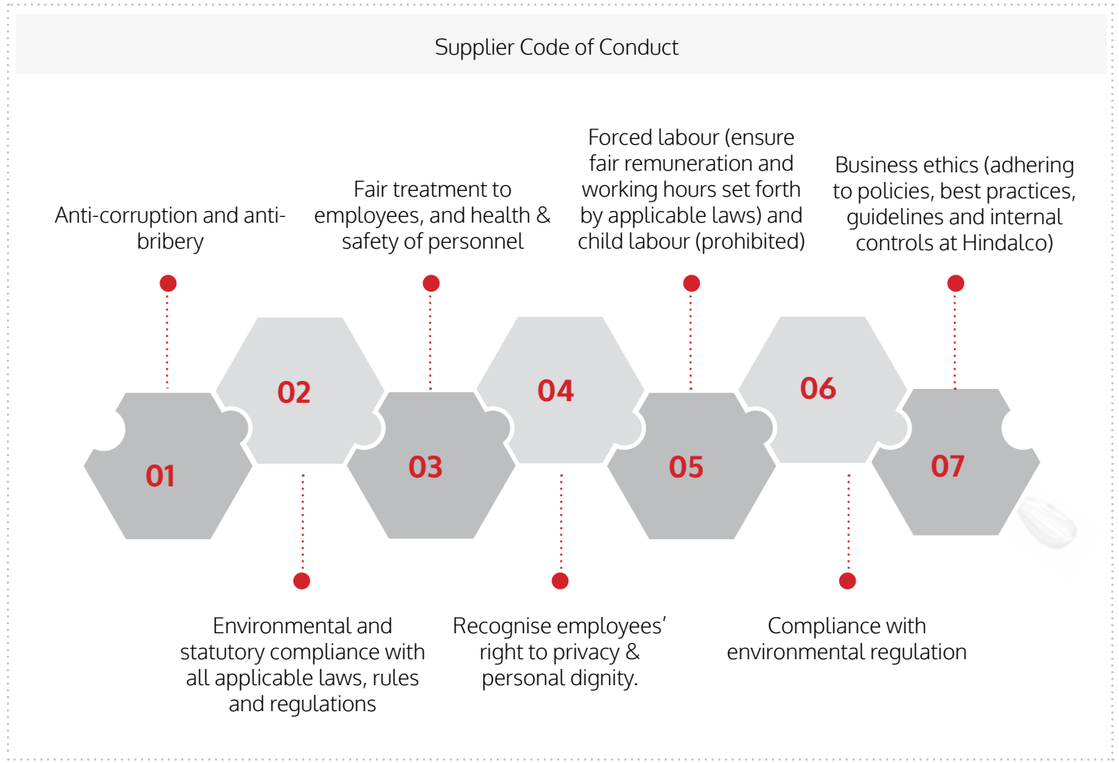




Our Supply Chain and Procurement Policy is aimed at creating value for our suppliers. In order to ensure a sustainable value chain, we work very closely with our supply chain partners. The Supply Chain Code of Conduct serves as a guiding document for our supply chain partners. It encompasses various social and environmental aspects such as human rights, fair and transparent business practices, and environmental standards for suppliers' processes, products and services. All our supply chain partners are expected to abide by the Supply Chain Code of Conduct. All suppliers and vendors undergo a periodic assessment with respect to the Code of Conduct. We also encourage our suppliers to develop their environment and social management systems. Due to our policies and regular engagements, we have been able to strengthen our supply chain over the years. We observed that, during the reporting period, none of our suppliers were penalised or terminated for violation of labour practices or any negative impact on environment or society.



During the reporting period, we were associated with 9,221 supply chain partners, out of which 9,200 form a part of aluminium and copper business. Moreover, to ensure effective environment footprint management, we are trying to incorporate Environment Management Systems at our suppliers' business. 35% of suppliers are ISO 14000 certified, and we aspire to increase this percentage of suppliers by 10% by FY 2020-21 from the FY 2018-19 baseline.

With a view of contributing towards UN SDG 12- Responsible Consumption and Production, we focus on the strengthening of local economy. Our transportation and logistics segment greatly contributes to the same. Thus, the majority of our suppliers are from India, while we also have suppliers from countries like China, US, Mexico, Italy, Singapore, Japan, Togo, Chile, Peru, Brazil, Canada, Australia, Indonesia and South Africa. In the current reporting year, we had a total expenditure of INR 17,420.31 crore on strategic procurement for aluminium, copper and coal, cumulatively. This has aided in providing indirect local employment and income to our suppliers.

Supplier Evaluation and Assessment

We classify our suppliers based on the products they supply. Every single supplier is screened to ensure their financial stability, price competitiveness and ability to deliver on timelines. The screening process also considers a substantial weightage of 25% for the ESG performance of the supplier, which includes the supplier's compliance to international standards of health, safety and environmental, and alignment with national and international human rights standards, among other criteria. A database for periodic screening and assessment of our suppliers for our copper business is under development. Moreover, during the reporting period, 100% of our new suppliers for the Strategic Procurement Function were put through our screening process.

Additionally, a vendor registration is conducted every two years to assess the existing and newly developed vendors on various parameters. A final vendor rating is developed based on the score achieved on these parameters. Based on the scores received after the evaluation, the suppliers are categorised into one of the following categories:

- Identified Vendors: Vendors who have indicated their willingness to enter into business with Hindalco
- Empanelled vendors: Vendors who are eligible for undertaking trial orders
- Approved Vendors: Vendors who are finally selected and approved post-performance evaluation and trial orders

Aspects such as energy conservation and GHG emission reduction are also included in this framework in our supplier evaluation criteria. Other ESG aspects covered under the evaluation parameters are given below:

- Working standard for labourers/workers
- Waste management system
- Financial assessment done, based on Altman-Z method for bankruptcy prediction based on the vendor's financial information
- Health and safety standard compliance, as per statutory requirement
- Compliance to quality management system and quality control
- Compliance of work permits
- Risk identification standard implemented

Suppliers are assessed on a rating scale of 0 to 5.

Any supplier with a score less than 2.5 is prohibited to associate with any business opportunities with us. During FY 2018-19, 38% of our critical suppliers scored below 2.5; our target is to reduce such suppliers by 3% to 5% by FY 2020-21. In line with the target, we aim to support our suppliers in improving their ESG performance through various initiatives. To sustain our business, we identify suppliers who are critical to our operations by virtue of the goods or services that they provide, which aids in gaining competitive advantage and market success. A spend analysis is done to identify such critical suppliers. We engaged with 9,209 Tier-1 suppliers, 1,800 of whom were identified as being critical. These critical suppliers accounted for 98% of the total procurement spend.

We have been assessing an increasing number of suppliers with the ESG criteria and ensure compliance. Additionally, we have also developed detailed questionnaires to assess the compliance of the supplier to the ESG criteria. The most recent vendor assessment conducted in FY 2018-19 showed an increase in the percentage of supplier compliance from 40% in FY 2016-17 to 67%, as seen below

	Supplier Base	% supplier compliance
FY 2016-17	298	40%
FY 2017-18	298	40%
FY 2018-19	335	67%
FY 2019-20	335	67%

Supply Chain Risk Assessment

In a move to achieve sustainable supply chain operations, we undertake supply chain risk assessment as part of our vendor evaluation process to assess and manage supplier risk across the areas of health & safety, environment, labour & social aspects, financial aspects, and market dependency.

All our suppliers are assessed based on their risk scores calculated from their performance on the aforementioned parameters. The risk scores give an understanding to the Company on the risks each supplier may be exposed to. Based on these, the suppliers are classified as high, medium or low risk. This enables us in building strategy for sourcing to reduce the risk of exposure. The new vendors onboarded are screened on the sustainability criteria of environmental awareness, human rights and social aspects. The assessments also involve site visits to assess the suppliers' performance as and when required. For the current reporting year, we have screened 100% of our raw material suppliers for our aluminium business, using the sustainability risk assessment criteria, and aim to achieve 100% screening by FY 2020-21. We plan to screen our copper business suppliers in FY 2020-21.

Sustainability is included in our vendor evaluation framework through the integration of risk scores for our suppliers in categories with substantial business exposure. We also track our Tier-2 suppliers to understand the risks associated with our supply chain in some categories. Additionally, we take up suitable vendor mix and vendor development decisions to reduce the commodity-wise risk score and make our supply chain more sustainable.

Supplier Risk Assessment Tool

During the reporting period, we have started conducting risk assessment audits for our suppliers. These assessments facilitate an understanding of the overall risk management capability of the supplier. The assessment tool is developed internally and has a holistic approach towards the business management as well as sustainability of the supplier. Aspects covered under this assessment are as follows:

- Management
- Environment, health and safety
- Quality
- Operations
- Capacity
- Development engineering
- Labour
- Supplier management

We have developed a comprehensive questionnaire that enables us to effectively identify risks under each aspect. Every aspect is given a weightage and a risk rating is developed after the audit. The risk rating is as follows:

Risk Rating	Category
Less than 2.5	High Risk Supplier - Development needed
2.5 to 3.24	Moderate Risk Supplier - (Acceptable – Action may still be required)
3.25 to 5.00	Low Risk Supplier

Supplier Risk Assessment Evaluation Process

- Self-Assessment by the Supplier
- Hindalco Rating
- Summary Section by Audit Team
- Mitigation Plan

Assessment of Supplier at Vizag with our Supplier Risk Assessment Tool

During the reporting period, we visited one of our suppliers based in Vizag, to test the supplier risk assessment template developed. This assessment was conducted based on the new model, which included a self-assessment followed by audit visits and scoring based on the defined focus areas. Based on the findings, the supplier was suggested certain improvement points. Some of the major mitigation plans suggested to the suppliers are as follows:

- Biodiversity assessment to be conducted
- Systems to track safety systems to be developed
- Increase in recycling of by-products
- Increase in focus on sanitation and water conservation inside the plant
- Increase in safety prevention measures
- Increase in safety and environmental trainings

A mitigation plan was developed along with the supplier based on the findings. These suggestions and the plans were conversed with the suppliers. The suggestions were well-received, and the suppliers are underway to incorporate our suggestions in their systems.

Our Contribution to the Sustainable Development Goals

Page 89

- Job-oriented training skills
- Sustainable livelihood and infrastructure development projects

Page 89

- Training and educating the farmers for increasing the harvest and reap
- Supporting activities in agriculture and horticulture

Page 87

- Providing healthcare to rural patients through hospitals and dispensaries
- Mother, child care and adolescent girls' healthcare initiatives
- Specialised health camps and eye camps
- Infrastructure development for hospitals and the community

Page 85

- Aditya Birla Schools and Hindalco Technical University
- School support programmes
- Pre-schools, balwadis, anganwadis and play schools
- gyanodaya E-portal learning
- Infrastructure development, new school building construction
- Enrolment awareness, events and focus on technical training

Page 96

- Diversity and inclusion at workplace
- Women at Hindalco
- HR management framework business objectives

Page 64, 61, 86, 115

- Implementation of ZLD at 11 sites
- Rainwater harvesting
- Renovation of health centres and issues related to water and sanitation
- Implementation of WASH
- Access to safe and clean drinking water

Page 49

- Transforming towards renewable energy
- Training employees to become Energy Auditors and Energy Managers
- Investing in Energy Efficiency

Page 77,115

- Decent work environment
- Training on health and safety
- Implementation of online data management tool "Enablon"

Page 116, 118, 89

- Collaboration with think tanks and government institutions
- Development of aluminium bulker and oxygen-free copper
- Accredited R&D centres at Belagavi and Taloja
- Infrastructure development initiatives for communities

Page 89

- Reducing inequalities by supporting social reform
- Training programmes for unemployed youth
- Support programme for the BPL, old age and needy
- Support to differently abled

Page 74, 118, 46, 39

- Health & safety impact assessment of products
- Conducted LCA of our products
- Reducing the consumption of virgin material
- Transfer from road to rail, wherever possible

Page 31,39, 42, 58, 59

- Risk and sensitivity analysis
- Mineral conservation
- Restoring the ecosystems
- Installed 30 MW of solar plants

Page 79, 54, 59, 73

- Green belt development programme
- Initiatives for reducing the dust pollution
- Effective water management for preserving the topsoil
- Preserving the seed bank by local plantation

Page 89

- Organised a dowry-less mass marriage and other activities related to social reforms.

Page 71, 43

- Initiated a biodiversity study in collaboration with IUCN at three of our operational locations.
- Through Xynteo India2022, we are partnering with various industry leaders to develop solutions for a sustainable environment as well as healthcare.

Assurance Statement

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Independent Assurance Statement

The Board of Directors and Management
Hindalco Industries Limited
Mumbai, India

Ernst & Young Associates LLP (EY) was engaged by Hindalco Industries Limited (the 'Company') to provide independent assurance on its annual Sustainability Report (the 'Report') for the Financial Year 2019-20.

The development of the Report is based on the Global Reporting Initiative (GRI) Sustainability Reporting Standards ('GRI Standards'); its content and presentation is the sole responsibility of the management of the Company. EY's responsibility, as agreed with the management of the Company, is to provide independent assurance on the report content as described in the scope of assurance. Our responsibility in performing our assurance activities is to the management of the Company only and in accordance with the terms of reference agreed with the Company. We do not therefore accept or assume any responsibility for any other purpose or to any other person or organization. Any dependence that any such third party may place on the Report is entirely at its own risk. The assurance report should not be taken as a basis for interpreting the Company's overall performance, except for the aspects mentioned in the scope below.

Scope of assurance
The scope of assurance covers the following aspects of the Report:

- Data and information related to the Company's sustainability performance of its Indian operations pertaining to the GRI Standards listed below, for the period 1st April 2019 to 31st March 2020;
- The Company's internal protocols, processes, and controls related to the collection and collation of specified sustainability performance data;
- Verification of sample data and related information through consultations with the Company's representatives at the Company's Head Office in Mumbai and the following locations of operations:
  - Physical visits:
    1) Utkal Alumina International Limited, Doraguda, Odisha
    2) Aditya Aluminium, Lapanga, Odisha
    3) Hirakud FRP, Sambalpur, Odisha
  - Desk review:
    4) Birla Copper, Dahej, Gujarat;
- The environmental and social performance data that was subject to above assurance is as follows:
  - General Disclosures (102-1 to 102-56)
  - Environmental Topics:
    - Materials (301-1, 301-2), Energy (302-1, 302-3, 302-4), Water and Effluents (303-1, 303-2, 303-3, 303-4, 303-5), Biodiversity (304-1, 304-2, 304-3, 304-4), Emissions (305-1, 305-2, 305-4, 305-5, 305-6, 305-7), Effluents and Waste (306-1, 306-2, 306-3, 306-5), Supplier Environmental Assessment (308-1, 308-2), Sector Disclosures – Metals and Mining (MM1, MM2, MM3);
  - Social Topics:
    - Employment (401-1, 401-2, 401-3), Labor/Management Relations (402-1), Occupational Health and Safety (403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-7, 403-8, 403-9, 403-10), Training and Education (404-1, 404-2, 404-3), Diversity and Equal Opportunity (405-1, 405-2), Non-discrimination (406-1), Freedom of Association and Collective Bargaining (407-1), Child Labor (408-1), Forced or Compulsory Labor (409-1), Security Practices (410-1), Human Rights Assessment (412-1, 412-2), Local Communities (413-1), Supplier Social Assessment (414-1, 414-2), Customer Health and Safety (416-1), Marketing and Labeling (417-1), Sector Disclosures – Metals and Mining (MM8).

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Limitations of our review
The assurance scope excludes:

- Operations of the Company other than those mentioned in the 'Scope of Assurance';
- Aspects of the Report and data/information other than those mentioned above;
- Data and information outside the defined reporting period *i.e.* 1st April 2019 to 31st March 2020;
- The Company's statements that describe expression of opinion, belief, aspiration, expectation, aim or future intention provided by the Company;
- Review of the Company's compliance with regulations, acts, guidelines with respect to various regulatory agencies and other legal matters;
- Data and information on economic and financial performance of the Company.

Assurance criteria
The assurance engagement was planned and performed in accordance with the International Federation of Accountants' International Standard for Assurance Engagements Other than Audits or Reviews of Historical Financial Information (ISAE 3000) and the second edition of AccountAbility's AA1000 Assurance Standard 2008 (AA1000 AS). Our evidence-gathering procedures were designed to obtain a 'Limited' level of assurance (as set out in ISAE 3000) on reporting principles and a 'Type 1, Moderate' level of assurance (as per AA1000 AS), as well as conformance of sustainability performance disclosures as per GRI Standards.

What we did to form our conclusions
In order to form our conclusions we undertook the following key steps:

- Interviews with select key personnel and the core team responsible for the preparation of the Report to understand the Company's sustainability vision, mechanism for management of sustainability issues and engagement with key stakeholders;
- Interactions with the key personnel at the Company's locations of operations to understand and review the current processes in place for capturing sustainability performance data;
- Verification of data on a sample basis at the Company's corporate office and locations of operations as mentioned in the 'Scope of Assurance' above;
- Review of relevant documents and systems for gathering, analyzing and aggregating sustainability performance data in the reporting period;
- Review of selected qualitative statements in various sections of the Report.

Our observations
The Company has developed the Report as per the GRI Standards. The Report includes a description of the Company's stakeholder engagement process, materiality assessment and relevant performance disclosures on the identified material topics.

Our conclusion
On the basis of our review scope and methodology, our conclusions are as follows:

- **Inclusiveness**
  The Company has described its stakeholder engagement approach and activities in the Sustainability Report. We are not aware of any matter that would lead us to conclude that the Company has not applied the principle of inclusivity in engaging with the key stakeholder groups identified in the Report.

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- **Materiality**
  The Company has identified key issues material to its sustainability performance and described the process for materiality analysis in the Sustainability Report. Nothing has come to our attention that causes us to believe that material issues so identified have been excluded from the Report by the Company.

- **Responsiveness**
  We are not aware of any matter that would lead us to believe that the Company has not applied the responsiveness principle in its engagement with stakeholders identified in the Report on material aspects covering its sustainability performance.

- **Conclusion as per ISAE 3000 standard**
  Nothing has come to our attention that causes us not to believe that the data has been presented fairly, in material respects, in keeping with the GRI Standards and the Company's reporting principles and criteria. Some data pertaining to key performance disclosures underwent change as part of our assurance process. There is scope to further strengthen internal controls to ensure uniform and accurate reporting.

Our assurance team and independence
Our assurance team, comprising of multidisciplinary professionals, has been drawn from our climate change and sustainability network and undertakes similar engagements with a number of significant Indian and international businesses. As an assurance provider, EY is required to comply with the independence requirements set out in International Federation of Accountants (IFAC) Code of Ethics for Professional Accountants[1]. EY's independence policies and procedures ensure compliance with the Code.

for Ernst & Young Associates LLP,

Chaitanya Kalia
Partner
11 August 2020
Mumbai

AA1000
Licensed Assurance Provider
000-43

[1] International Federation of Accountants (IFAC) Code of Ethics for Professional Accountants. This *Code* establishes ethical requirements for professional accountants.

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Alignment with Business Responsibility Report

Principle	Description of the Principle	Report Reference	Page Number
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Principle 2	Businesses should provide goods and services that are safe and contribute to sustainability throughout their life cycle.	Customer Centricity	123
		Product Stewardship	116
Principle 3	Businesses should promote the wellbeing of all employees.	Employee Stewardship	95
Principle 4	Businesses should respect the interests of, and be responsive towards all stakeholders, especially those who are disadvantaged, vulnerable and marginalized.	Stakeholder Engagement & Materiality Assessment	19
Principle 5	Businesses should respect and promote human rights.	Corporate Governance	25
		Employee Stewardship	116
Principle 6	Business should respect, protect, and make efforts to restore the environment.	Environmental Stewardship	44
Principle 7	Businesses, when engaged in influencing public and regulatory policy, should do so in a responsible manner.	Corporate Governance	25
Principle 8	Businesses should support inclusive growth and equitable development	Economic Stewardship	34
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Principle 9	Businesses should engage with and provide value to their customers and consumers in a responsible manner.	Customer Centricity	123

Alignment with UNGC Principles

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	Human Rights		
1	Businesses should support and respect the protection of internationally proclaimed human rights	Supply Chain Management Corporate Governance Employee Stewardship	125, 25, 103
2	Make sure that they are not complicit in human right abuses	Employee Stewardship	103
	Labour		
3	Business should uphold the freedom of association and the effective recognition of the right to collective bargaining	Employee Stewardship	103
4	The elimination of all forms of forced and compulsory labour	Employee Stewardship Supply Chain Management	125, 103
5	The effective abolition of child labour.	Community Stewardship Employee Stewardship Supply Chain Management	08, 01, 03, 125
6	The elimination of discrimination in respect of employment and occupation	Corporate Governance Employee Stewardship	25, 103
	Environment		
7	Business should support a precautionary approach to environmental challenges.	Economic Stewardship	34
8	Undertake initiatives to promote greater environmental responsibility.	Product Stewardship Environmental Stewardship Responsible Mining Supply Chain Management	116, 44, 39, 125
9	Encourage the development and diffusion of environmentally friendly technologies	Stakeholder engagement and Materiality analysis Product Stewardship Environmental Stewardship Employee Stewardship	19, 116, 44, 95
	Anti-Corruption		
10	Business should work against corruption in all its forms, including extortion and bribery.	Supply Chain Management Corporate Governance	125, 25

Annexure I

Annexure I - Glossary

2S - Safety, Sustainability and systems and processes

3C - Customer, Cost and Cash

ABG - Aditya Birla Group

ABSTCPL - Aditya Birla Science and Technology Company Private Limited

ACF - Activated Carbon Filters

ADP - Abiotic Resource Potential

Al - Aluminium

ANC - Antenatal Care

AP - Acidification Potential

ARAI - Automobile Research Association of India

ASB - Apex Safety Board

ASEAN - Association of South East Asian Nations

ASM - Artisanal and Small-Scale Mining

AWOO - A World of Opportunities

AWRS - Ash Water Recovery System

BBS - Behaviour Based Safety

BEE - Bureau of Energy Efficiency

BET - Business Ecosystems Training

BIS - Bureau of Indian Standards

BOD - Biological Oxygen Demand

BPC - Belt Pipe Conveyor

BR - Bauxite Residue

BRR - Business Responsibility Report

C.T. - Cooling Tank

CALM - Community Awareness and Local Marketing

CCR - Continuous Cast Copper Rod

CEMS - Continuous Emissions Monitoring System

CFBC - Circulating Fluidised Bed Combustion

CHW TSDF - Common Hazardous Waste Treatment Storage & Disposal Facility

CII - Confederation of Indian Industry

CO2 - Carbon-dioxide

CoC - Code of Conduct

COC - Cycles of Concentration

COD - Chemical Oxygen Demand

CPCB - Central Pollution Control Board

CPP - Captive Power Plant

CSM - Contractor Safety Management

CSR - Corporate Social Responsibility

Cu - Copper

CuCB - Copper insert Collector Bar

DAP - Di-Ammonium Phosphate

DHIL - Dahej Harbour Infrastructure Limited.

DM feed - Demineralized feed

DSIR - Department of Scientific and Industrial Research

EBIDTA - Earnings Before Interest, Tax, Depreciation and Amortization

EHS - Environment Health Safety

EPD - Environmental Product Declaration

ERM - Enterprise Risk Management

ESG - Environment, Social Governance

ESP - Electro-static Precipitator

ESR - Ecosystem Services Review

ETP - Effluent Treatment Plant

FAME - Foundation for Accelerated Mass Empowerment

FGD - Flue Gas Desulphurization

FICCI - Federation of Indian Chambers of Commerce and Industry

FIMI - Federation of Indian Mineral Industries

FRP - Flat Rolled Products

FTA - Free Trade Agreement

GET - Graduate Engineer Trainee

GHG - Greenhouse Gases

GHP - Globally High Performing

GJ - Giga Joules

GoI - Government of India

GRM - Grievance Redressal Mechanism

GWP - Global Warming Potential

H&S - Health & Safety

Ha - Area in Hectare

HFTR - High Frequency Transformer Rectifier

HIV - Human Immunodeficiency Virus

HMF - Hindalco Management Framework

HRSCC - High-Rated Solid Contact Clarifier

IBAT - Integrated Boiodiversity Assessment Tool

ICC- Internal Complaint Committee

IFC- International Finance Corporation

IIT - Indian Institute of Technology

ILO _ International Labour Organizarion

IMMT - Institute of Minerals and Materials Technology

IOL - Intraocular lens

IPCC - Intergovernmental Panel on Climate Change

ISAE- International Standard on Assurance Engagement

ISO/IEC - International Organization for Standardization/ International Electrotechnical Commission

ISRO - Indian Space Research Organization

IUCN - international Union for Conservation of Nature

JCI - Jute Corporation of India

JNARDDC - Jawaharlal Nehru Aluminium Research Development and Design Centre

LCA - Life Cycle Assessment

LED - Light Emitting Diode

LME - London Metal Exchange

LTIFR - Lost Time Injury Frequency Rate

LTISR - Lost Time Injury Severity Rate

MGF - Multigrade Sand Filter

MoEFCC - Ministry of Environment, Forest and Climate Change

MT - Million Tonne

NAAQS -National Ambient Air Quality Standards

NABL - National Accreditation Board for Testing and Calibration Laboratories

NAMC - National Award for Manufacturing Competitiveness

NDRF - National Disaster Response Force

NEBOSH - National Examination Board in Occupational Safety and Health

NIIT - National Institute of Information Technology

NNL - No Net Loss

NPS - Net Promoter Score

NSE - National Stock Exchange of India Limited

NVG - National Voluntary Guidelines

ODP - Ozone Depleting Potential	SPCB - State Pollution Control Board
ODS- Ozone Depleting Substance	SPL - Spent Pot Lining
OHE - Over Head Electrification	STP - Sewage Treatment Plant
OHS - Occupational Health & Safety	TB - Tuberculosis
OPC - Ordinary Portland Cement	TCP - Technical Career Path
OSHAS - Occupational Health and Safety Assessment Series	TDS - Total Dissolved Solids
PAT - Perform, Achieve and Trade	TERI - The Energy and Resources Institute
PAT - Profit After Tax	TIPS - Theory of Inventive Problem Solving
PED - Primary Energy Demand	TNI - Training Needs Identification
PHE - Plate Heat Exchanger	TR - Transformer Rectifier
PM - Particulate Matter	TRIFR - Total Recordable Injury Frequency Rate
PNC - Postnatal Care	TSS - Total Soluble Solids
POCP - Photochemical Ozone Creation Potential	TTD- Tirumala Tirupati Devasthanam
POSH - Prevention of Sexual Harassment	UAIL- Utkal Aluminium International Limited
QLEA - Qualitative Exposure Assessments	UN - United Nations
QnEA - Quantitative Exposure Assessment	UNGC - United Nations Global Compact
R&D - Research & Development	VAM - Vesicular-Arbuscular Mycorrhiza
RDSO - Research Design and Standards Organization	VSC - Value Standard Committee
REC - Renewable Energy Certificate	WAH - Women at Hindalco
RO - Reverse Osmosis	WaMTF - Waste Management Task Force
RPD - Renusagar Power Division	WASH - Water, Sanitation and Hygiene
SCADA - Supervisory Control and Data Acquisition	WBSCD - World Business Council for Sustainable Development
SDG - Sustainable Development Goals	WHO - World Health Organization
SEBI - Securities and Exchange Board of India	WRI - World Resource Institute
SMEs - Subject Matter Experts	XISS - Xavier Institute of Social Sciences
SOP - Standard Operating Procedure	ZLD- Zero Liquid Discharge

Annexure II
Awards and Accreditation

Corporate

- Silver Shield for Excellence in Financial Reporting for FY2018-19 awarded by The Institute of Chartered Accountants of India (ICAI)
- Hindalco entered the Dow Jones Sustainability Indices (DJSI) Emerging Markets Index 2019 edition by ranking 3rd rank among Materials Sector - Aluminium industry peers
- Commendation for Significant Achievement award in CII ITC Sustainability Awards 2019 under Corporate Excellence category.

- Best Performance Award 2019 presented by the Indian Institute of Metals
- Certificate of Merit 2019 earned from Frost & Sullivan for Project Evaluation & Recognition Programme.
- CII Award for Customer Obsession in 'Active Customer engagement' category
- CSR Impact Award presented by Dalmia Bharat CSRBOX for imparting quality education for the community.
- CSR Times Award presented at National CSR Summit 2019 for CSR work in the field of livelihood programmes.
- Safety System Excellence Award (Certificate of Appreciation) received from FICCI
- Certified by CII as Energy Efficient Unit 2019
- Platinum Award for HR Excellence 2019 presented by Apex India Foundation
- Numerous prizes won during CII TPM Club competitions for Kaizen, Human Mistake Proofing and Energy Efficiency Circle competition
- India CSR Gold Award 2019
- FAME Excellence Platinum Award 2019 for
- People First HR Excellence Platinum Award
- Platinum Award for Employee Engagement 2019 presented by HR Association of India

Aditya Aluminium

- Presented the 7th FICCI Quality Excellence Award (Platinum Prize 1st) for Industry by the Federation of Indian Chambers of Commerce & Industry, Delhi for excellence in Quality process in April 2019
- Gold award for "Chapter Convention on Quality Concepts" by Quality Circle Forum of India on September 2019
- Platinum Award presented by Frost & Sullivan for Future Ready Factory of the Year presented in December 2019
- The CII Eastern Regional Productivity Award presented by the Chairman CII Eastern region for contribution in the areas of Productivity in January 2020.

Mahan Aluminium

- India Manufacturing Excellence Award 2019 presented by Frost & Sullivan for being selected as the Future Ready Factory of the year.

Renukoot

- First National CSR Award presented by the Ministry of Corporate Affairs, the highest recognition in the domain of CSR by the Government of India. The award recognizes Hindalco's contribution to India's national priority areas - skill development and livelihoods
- CSR Health Impact Award-2019 presented by the I.S.W Council, New Delhi,
- CII Excellent Energy Efficient Award -2019.
- CII National Award for Excellence in Water Management 2019
- Seem National Energy Management Award 2019 for excellent efforts towards energy conservation by Society of Energy Engineers and Managers.
- Four Quality Circle teams bagged "Par Excellence" & "Excellence" awards during 33rd National Convention on Quality Concepts-NCQC 2019 held at IIT BHU Varanasi by QCFI.
- Four Quality Circle teams bagged "Gold Award" during Varanasi Centre Convention on Quality Concepts-VRCCQC 2019 held at Varanasi by QCFI.

Renusagar

- Greentech Award-2019 for Tech-Plast as certified Green Product.
- Two Quality Circle team's bagged "Par Excellence" award during 33rd NCQC 2019 held at IIT BHU Varanasi.
- UPNEDA Award for excellence in Energy conservation under PAT cycle 1.
- 8th FICCI Safety System Excellence Awards for Industry-2019 from FICCI New Delhi.

Jharkhand mines - lohardaga

- FAME Platinum Award 2019 for Best CSR for Lohardaga Mines, for the outstanding Project on Community Development.
- NMDC Award for Social Awareness 2018-19 for Bhusar Bauxite Mines, presented by the Federation of Indian Mineral Industries (FIMI), New Delhi} for significant contribution to socio-economic development of the host community.
- "National Safety Award (Mining)" for the Year 2015 & 2016 presented in December 2019 to to Jalim & Sanai Bauxite Mines at Lohardaga and Samri Bauxite Mines in the category of "Longest Accident Free Period " .

Jharkhand mines - kathautia

- Awards during the Annual Safety Week Celebrations by Director General of Mines Safety (DGMS) for Overall Performance, Safety Management Plan, Compliance of recommendations of 10th and 11th Safety Conference; Runners up Trophy in Storage & Transportation of Explosives Award,
- CII Award for Excellence in Safety Health & Environment (SHE) and 2nd Runners Up in Safety, Health, Environment & Mining.

Gare Palma mines

- India CSR award for Sanitation in four Gram Panchayats and safe drinking water supply to one entire Gram Panchayat

Hirakud SMELTER & POWER

- Grow Care India CSR award-2019 in Gold category for Best innovative CSR Project by Grow care India foundation, New Delhi
- Quality Circle team won awards in Excellence and Par Excellence category of NCQC (National Convention On Quality Concept) 2019 - Varanasi chapter.

Alupuram

Runners Up award for "Excellence in safety management" from National safety council, Kerala chapter

Dahej

FAME (Foundation for Accelerated Mass Empowerment) CSR Excellence Platinum award 2019 for excellence in Social Development Projects .

Utkal alumina international limited

- Kalinga Safety Award for best Safety, Health & Environment Management
- *M/s Frost & Sullivan and TERI Sustainability 4.0 Awards: In 2020 Utkal Alumina awarded in Challenger Category for the 'Certificate of Merit' in Sustainability and won the Safety Excellence - Certificate of Merit
- Conferred the prestigious Mahatma Award for excellence in Corporate Social Responsibility by Liveweek.
- Quality Circle team won Gold award of CCQC (Chapter Convention On Quality Concept -NCQC) 2019, Koraput chapter
- Quality Circle team won awards in Excellence and Par Excellence category of NCQC (National Convention On Quality Concept -NCQC) 2019, Varanasi chapter

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