



HEG/SECTT/2017

8th December, 2017

1 BSE Limited
25th Floor, P J Towers
Dalal Street
MUMBAI - 400 001.
Scrip Code: 509631

2 National Stock Exchange of India Limited
Exchange Plaza, 5th Floor
Plot No.C/1, G Block, Bandra - Kurla Complex
Bandra (E),
MUMBAI - 400 051.
Scrip Code: HEG

Sub: Analyst / Institutional Investor Meeting - Outcome

Dear Sir,

Please refer to our letter dated 4<sup>th</sup> December, 2017 intimating about the Analyst / Institutional Investor meeting scheduled from Thursday, the 7<sup>th</sup> December, 2017 to Friday, the 8<sup>th</sup> December, 2017, in Mumbai organized by Jefferies.

The aforesaid meetings were concluded on today i.e 8th December, 2017.

A copy of presentation made during the above said meeting is already on the website of the Company i.e. <u>www.hegltd.com</u>. A copy of the same is also attached herewith for your reference.

Kindly take the same on record.

Thanking you,

Yours faithfully, For **HEG Limited** 

ompany Secretary

heg.investor@Injbhilwara.com

Encl: as above

**HEG LIMITED** 

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Tel.: +91-7480-405500, 233524 to 233527

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## PROUD TO BE INDIAN PRIVILEGED TO BE GLOBAL



# HEG IS PART OF LNJ BHILWARA GROUP A DIVERSIFIED, REPUTED AND LARGE INDIAN BUSINESS HOUSE HAVING MORE THAN FIVE DECADES OF INDUSTRIAL EXPERIENCE AND PRESENCE IN

## IT Enabled **Power Generation & Graphite Electrodes Textiles Services Power Consultancy**



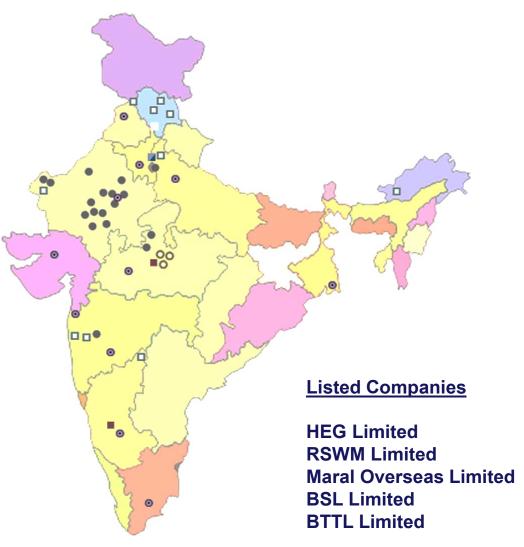
### **NATIONWIDE PRESENCE**

- Group has 5 of its companies listed on Indian Stock Exchanges, with over one million stakeholders.
- Corporate office & Production units at 37 locations with over 25,000 workforce.

## LNJ Group - Key Financials 2016-17

Turnover	USD 989 mn		
Net Fixed Assets	USD 777 mn		
Networth	USD 725 mn		
EBITDA	USD 157 mn		

## **Plants & Office Locations**





## WORLD'S LARGEST SINGLE SITE GRAPHITE ELECTRODES PLANT











### **HIGHLIGHTS**

- 1977 Established in Financial (appx 25% equity) / Technical participation of Pechiney, France
- 1992 Pechiney sold their Graphite business to SGL, Germany & Indian Promoters bought these shares in HEG
- 1995 / 2011 Kept expanding from 10,000 mt in small tranches & in 2011 took a quantum leap from 60,000 to 80,000 mt
- Single largest Graphite plant in the world under one roof.
- Consistently exporting appx 65-70% of production to more than 30 countries and to more than 100 customers around the world incl ArcelorMittal, Nucor, Posco, Tata, Sail, Jindals, Sabic, Gerdau, Ferroatlantica, Celsa etc.
- Possibility to expand to 100,000 mt in 18-24 months at a small investment



## **GRAPHITE ELECTRODES (GE) INDUSTRY – OUR UNIQUE STRENGTHS**

- GE- An indispensable material for Electric Arc Furnaces (EAF) for Steel production
- EAF accounts for appx 45% of total World Steel Production (Without China)
- High Entry Barrier HEG the last new entrant in the world -1977
- Uses 100 % Captive Power
- State of the art manufacturing facility due to constant expansions & investments
- Capable of producing 100% UHP Electrodes
- Facilities suitable for manufacturing up to 32" electrodes







## **R&D CENTER**

## R&D set up to corroborate the Quality & Improvement Drives with small scale production facilities

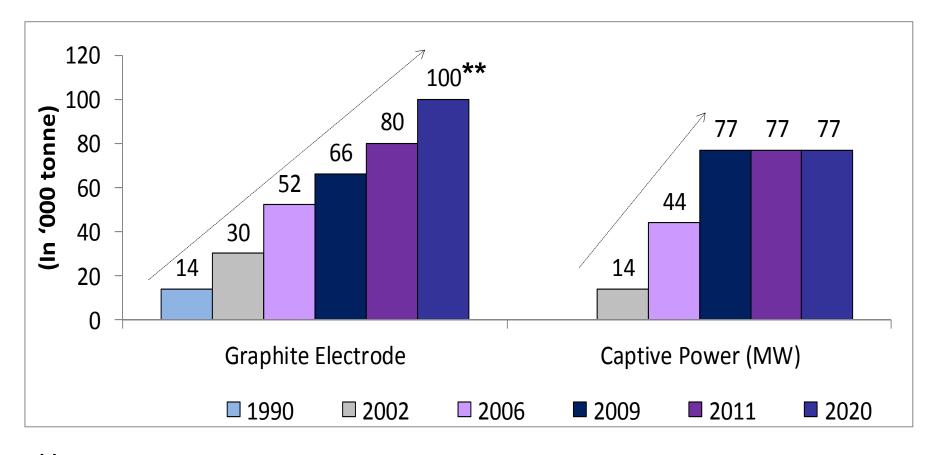
- The focus is also on development of new product lines
- Development is focused towards Carbon

## **R&D Centre**





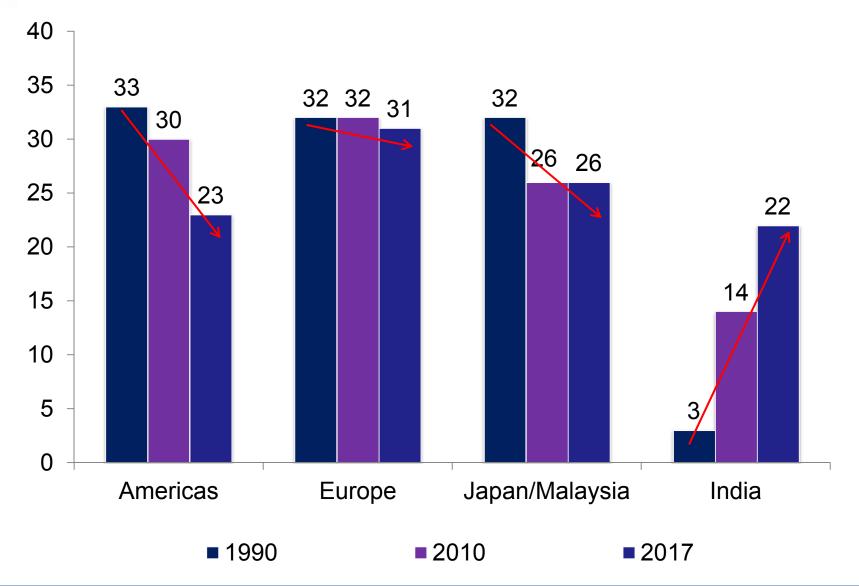
## **CAPACITY BUILD UP**



\*\* Probable



## INDUSTRY OVERVIEW – INDIA'S RISING SHARE (WITHOUT CHINA)





## GRAPHITE ELECTRODES CAPACITY EVOLUTION ( W/O CHINA & RUSSIA)

S. No.	Company Name	2010	2014	2017	No. of plants
1	SDK	105	105	115 + 110 = 225	2 + 3
2	Tokai	100	100	65 + 30 = 95	3 + 1
3	NCK / SEC	60	60	60	2
	Sub-Total Japanese	265	265	240 + 140 = 380	7 + 4
4	GТI	245	185	160	3
5	SGL	230	180	(	0
	Sub-Total	740	630	540	14
6	HEG	60	80	80	1
7	GIL	60	98	98	4
	Sub-Total	120	178	178	5
	Grand Total	860	808	718	19



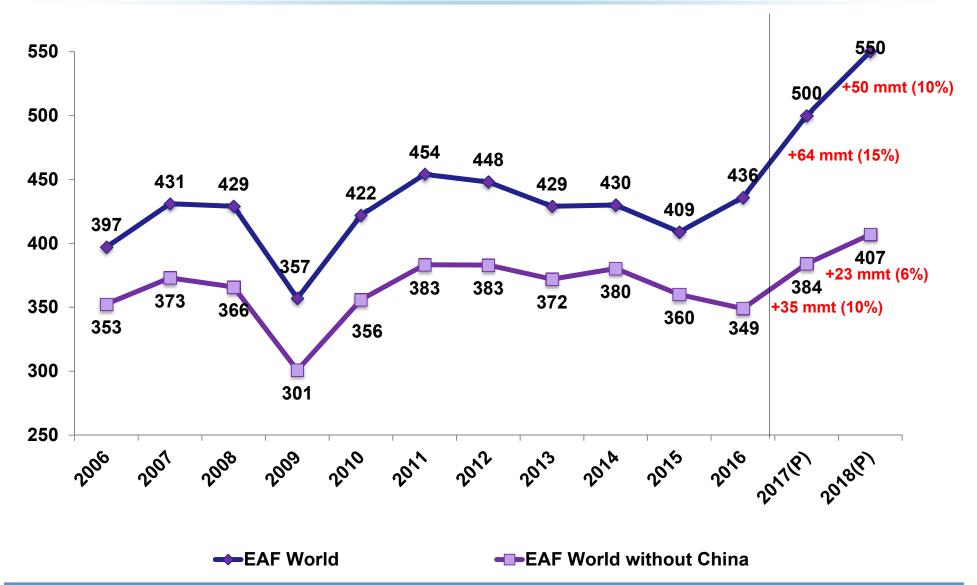
### **NOTES**

- SGL closed three plants in Italy, Canada, Germany between 2010 & 2016
- GTI closed three plants in S. Africa, Brazil, USA between 2010 & 2016
- SDK acquired SGL's three plants in 2017 in Spain, Austria & Malaysia & reduced capacity in Japan & increased capacity in USA between 2015 & 2016
- Tokai acquired SGL's plant in USA & reduced capacities in Japan & Germany between 2014 & 2016
- No change in Indian Capacities



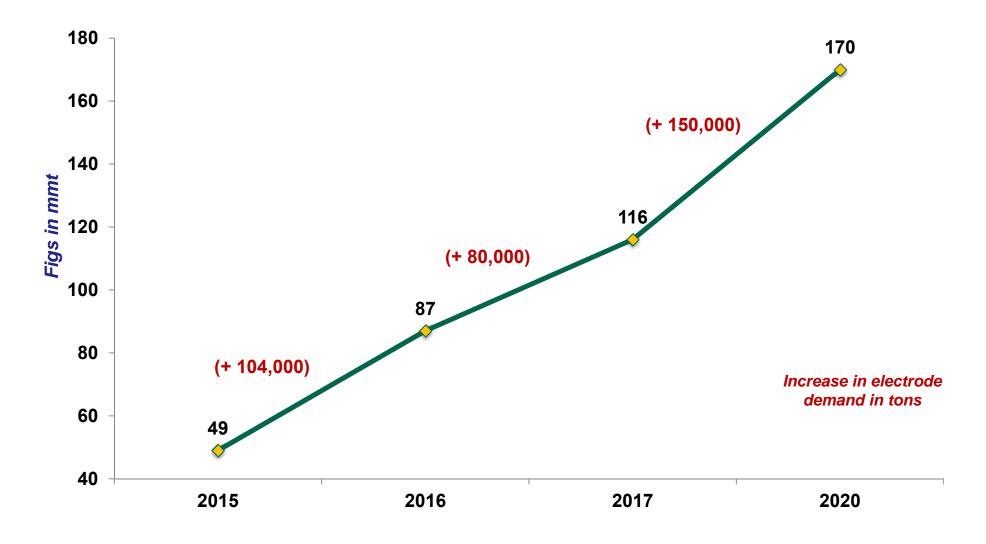
## **EAF WORLD PRODUCTION -WITH & WITHOUT CHINA**

## Figures in mmt





## **CHINA'S EAF GROWTH**





#### **NEEDLE COKE SCENARIO**

- With the sudden increase in demand of GE, needle coke availability has become a bottleneck.
- The Maintenance shut down schedule of some of the large refineries have coincided further affecting the needle coke availability
- Due to excess capacity of needle coke in the recent past, some of the needle coke producers have been trying to find a new application for coke in the Lithium Ion batteries. In the last couple of years needle coke has been successfully used in this application and a reasonably large part of needle coke is now being used in China in Lithium Ion batteries.



### CHINESE CRACKDOWN ON POLLUTING INDUSTRIES

- In January 17, Chinese Government identified some highly polluting industries, which included small, outdated Induction Furnaces and Mini Blast Furnaces asking them to close down by June'17.
- China has closed capacity totalling in the range of 100-120 million tons p.a.
   of Induction furnaces consisting of around 600 plants nation wide.
- Though no reliable numbers are available, it is believed that a very large part of these are permanently closed with very little possibilities of restarting.
- Nearly 300,000 mt of graphite electrode manufacturing capacity has been shut down in China since the second half of 2016 due to environmental concerns. (Source- CRU)
- Graphite Electrode Prices Have Risen Sharply due to Supply Tightness.
   Raw materials suppliers unable to meet demand from electrode manufacturers. (Source- CRU)



### CHINA REDUCES EXPORT OF STEEL

- China has been exporting appx. 110 mmt of finished Steel globally for past couple of years leading to reduced production in these countries.
- Due to closures of steel capacities & continuing growth of steel demand within China, their exports of steel in first 9 months of 2017 have dropped to annualized appx 75 mmt.
- China has been exporting around 25 mmt of Billets pa to various countries at dumping prices, leading to reduced production in these countries.
- It is reported that billet exports are likely to come down to less than 7 to 8 mmt in 2017 leading to higher melting and start ups of many EAFs in countries like Turkey, South East Asia and Middle East, leading to increased demand for electrodes
- Thereby helping increased Steel production in those countries who were hitherto suffering due to steel imports from China, leading to increased demand for electrodes
- China's winter cut in steel production has started. This will halt appx 33 mmt production between mid November'17 to end March'18
- This recent winter cut of 33 mmt in 5 months would further reduce China's exports of steel & billets, thereby helping other countries increase their steel production leading to more demand of electrodes.



#### CHINA'S EAF STEEL GROWTH

- Chinese EAF production in first 9 months of 2017 has grown by 25% (to 81 mmt), which is expected to grow by 33% (to 116mmt) in the full year 2017
- China is likely to add additional new EAFs capacities of 30-50 mmt in near future
- This major shift towards electric arc furnace of 50-70 mmt will increase the Chinese electrode consumption by 150,000 tons
- The average steel production increased by 1% over the last five years pa



### RECENT CHANGES IN GRAPHITE INDUSTRY LED BY CHINA

Source: Platts

- Due to substantial capacity closures of electrodes, the exports of electrodes are likely to fall by appx 100,000 mt
- There is no stock on the ground and demand from mills -- particularly EAFs -has increased sharply, taking electrode suppliers by surprise.
- Producers cannot increase electrode production capacity, as there is a shortage of needle coke, a primary raw material -- this is being exacerbated by coke makers selling into other markets, such as the lithium-ion battery sector, after the downturn in demand from electrode producers.
- China's own electrode consumption is rising as electric arc furnaces are melting more scrap rather than charging hot metal, sources said.



### RECENT DEVELOPMENTS IN GRAPHITE INDUSTRY

- GrafTech has invoked force majeure suggesting disruption in supply of electrodes in November and December due to Hurricane Harvey impacting its needle coke facilities in Texas recently
- Some large steel companies like Outokumpu, AK Steel and Republic Steel have introduced electrode surcharge on their finished steel prices which would be updated monthly
- Due to closure of induction furnace and Mini Blast furnace in China, it was earlier reported that they are in the process of establishing large scale new capacity of appx 70 mmt, which would increase the GE demand within China
- As per latest WSA data for 9 months 2017, the Chinese EAF steel production for 9m 2017 increased at the rate of 25% from 65 mmt to 81mmt which on an annualised basis becomes 116 mmt for the whole year which is an increase of 29mmt (33% increase over 2016) resulting in increase in GE consumption in China.





