



PROUD TO BE INDIAN
PRIVILEGED TO BE GLOBAL

HEG/SECTT/2018

6th August, 2018

1	BSE Limited 25 th 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
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Sub: Investors presentation on the Unaudited Financial Results of the Company for the quarter ended 30th June, 2018.

Dear Sir,

Please find enclosed a copy of Investors Presentation on the Unaudited financial results of the Company for the quarter ended 30th June, 2018 for your information and record please.

Thanking you,

Yours faithfully,
For **HEG LIMITED**


(**VIVEK CHAUDHARY**)
COMPANY SECRETARY

heg.investor@lnjbhilwara.com

Encl : as above

HEG LIMITED

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(Madhya Pradesh), India
Tel. : +91-7480-405500, 233524 to 233527
Fax : +91-7480-233522
Website : www.heg ltd.com

Corporate Identification No.: L23109MP1972PLC008290

ISO 9001
BUREAU VERITAS
Certification



ISO 14001
BUREAU VERITAS
Certification





**PROUD TO BE INDIAN
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Q1 of FY19 Investor Update Presentation

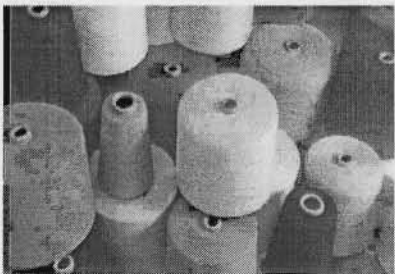
April 2018

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

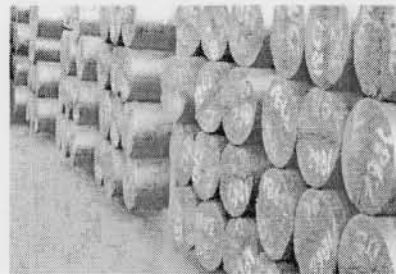
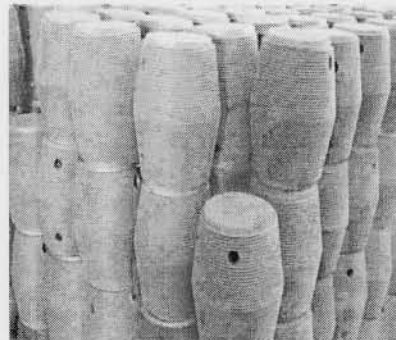


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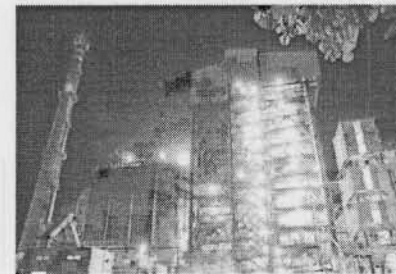
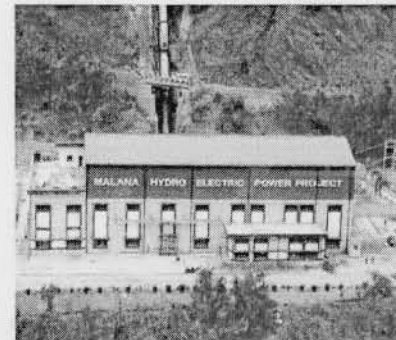
Textiles



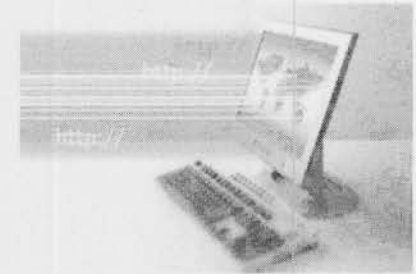
Graphite Electrodes



Power Generation & Power Consultancy



IT Enabled Services

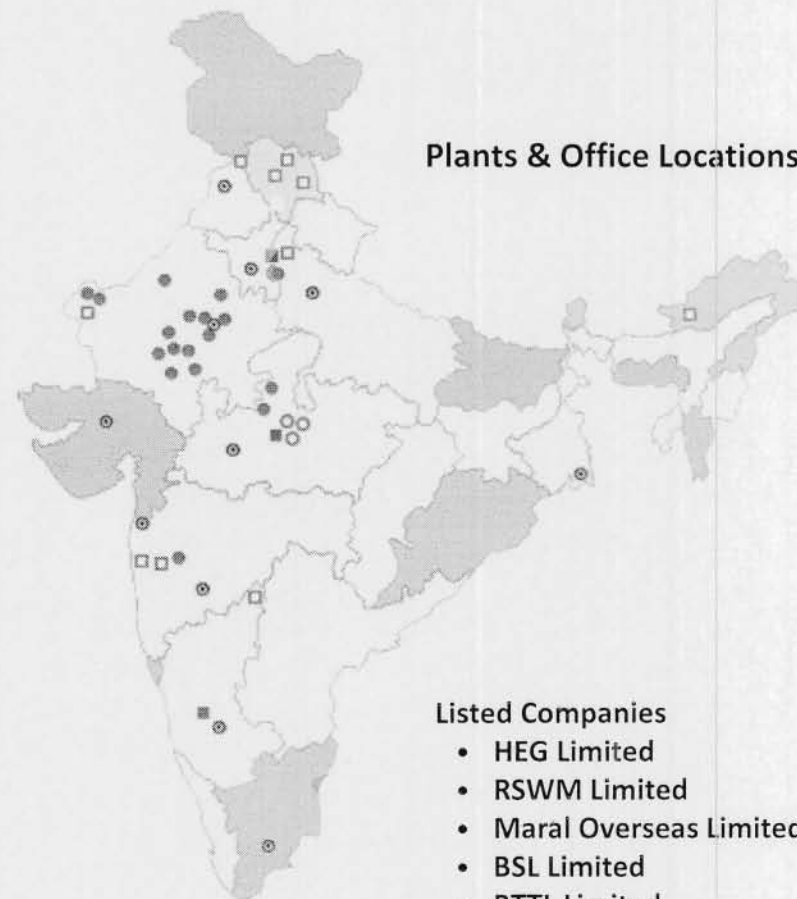


Nationwide Presence

- 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 2017-18

Turnover	USD 1242 mn
Net Fixed Assets	USD 673 mn
Networth	USD 894 mn
EBITDA	USD 382 mn

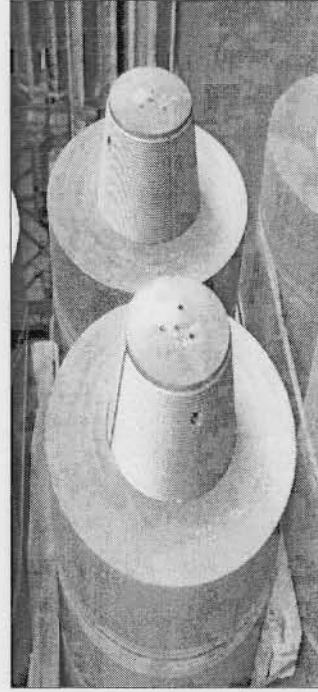
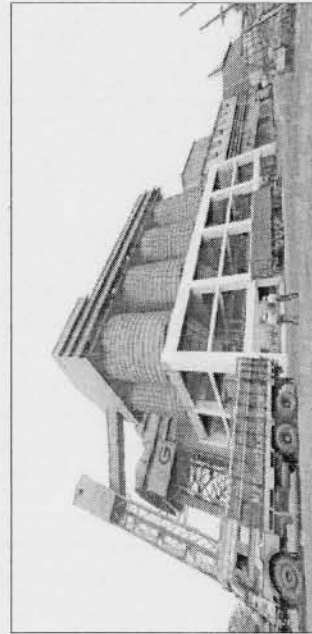
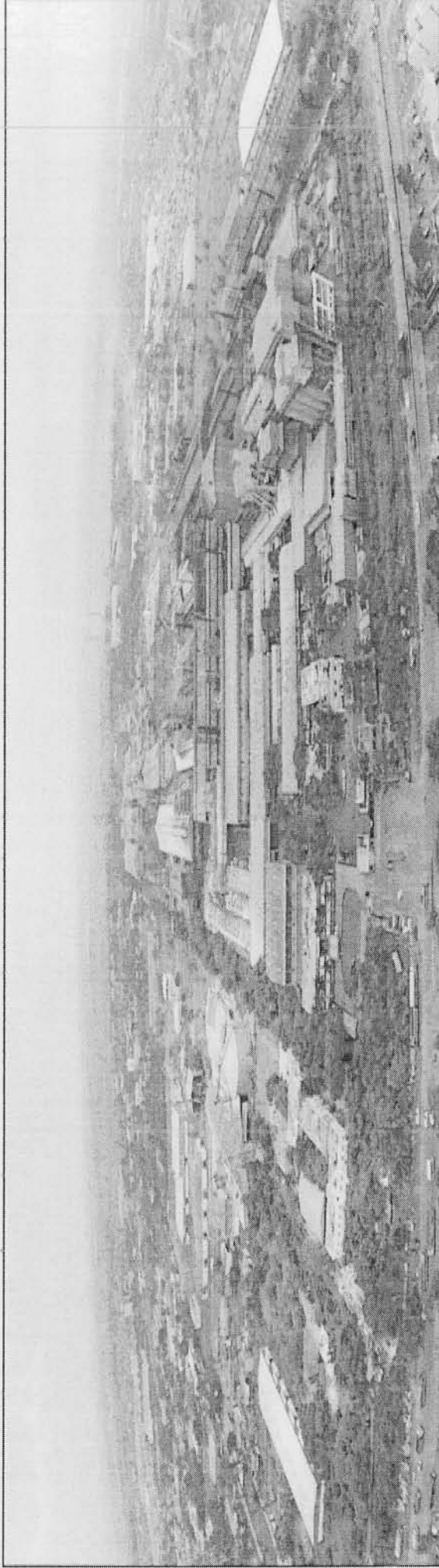


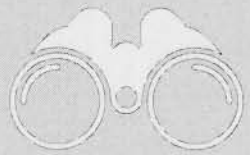


- HEG Limited is a leading graphite electrode manufacturer & exporter Globally
- The company produces two grades of graphite electrodes - Ultra High Power (UHP) & High Power (HP) - used in producing steel through the Electric Arc Furnace (EAF) route.
- Exports approximately 70% of its production to about 30 countries around the world.
- Diversified customer portfolio –supplying large proportion of our volumes to top 20 steel companies of the world.
- Graphite electrodes manufacturing plant (capacity of 80,000 tons per annum) located at Mandideep in Madhya Pradesh - is the largest single-site facility in the world
- Captive power generation capacity of around 76.5 mw (2 thermal power plants & 1 hydro power plant)



World's Largest Single Site Graphite Electrode Plant





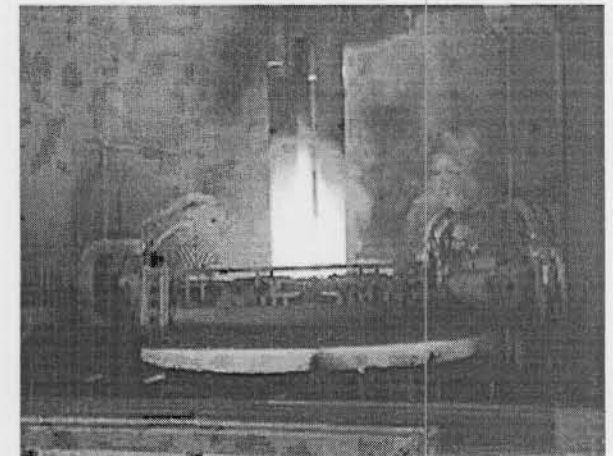
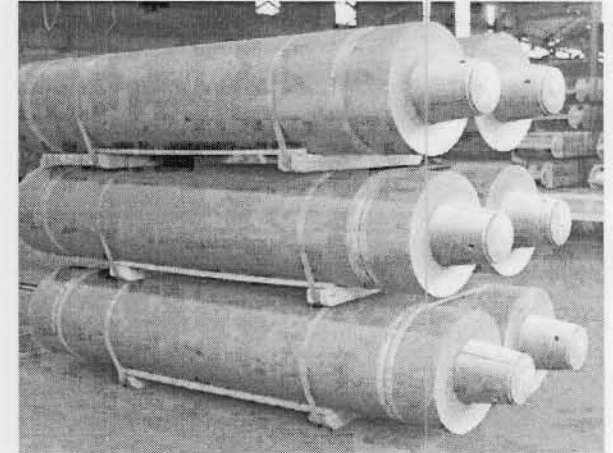
Highlights

- 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, Sabc, Gerdau, Ferroatlantica, Celsa etc.
- Possibility to expand to 100,000 mt in 18-24 months at a small investment

Graphite Electrode (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

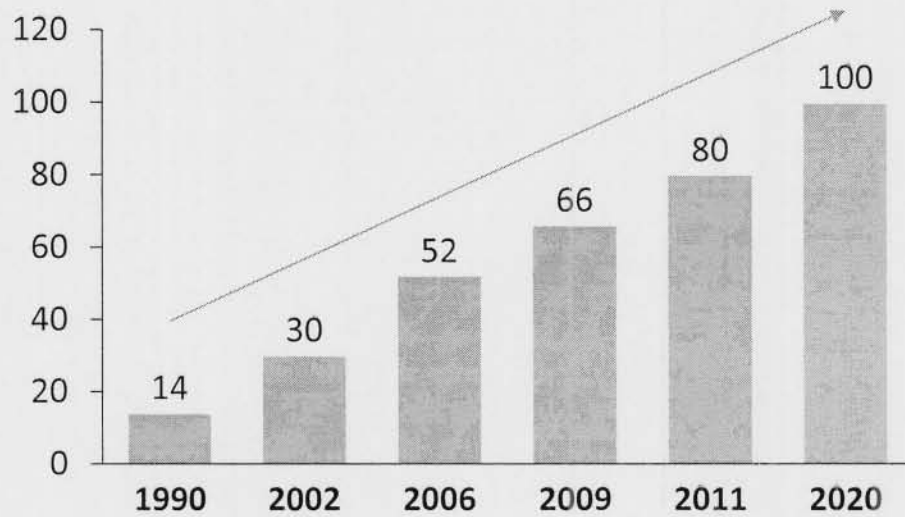


Capacity Build Up



Graphite Electrode

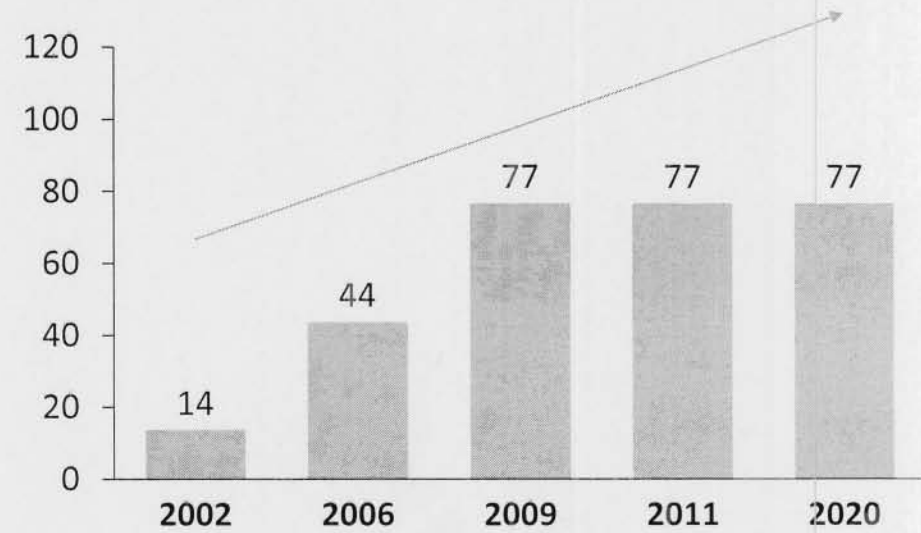
(In '000 tonne)



■ Probable

Captive Power (MW)

(In '000 tonne)





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



in Rs. Crore (except EPS)

	Q1 FY19	Q4 FY18	Q1 FY18	FY18
REVENUE	1595	1296	214	2771
EBITDA*	1196	955	24	1734
EBITDA Margin	75%	74%	11%	63%
EBIT	1178	937	6	1661
EBIT Margin	74%	72%	3%	60%
PAT	770	634	(8.43)	1081
PAT Margin	48%	49%	(4)%	39%
EPS	192.77	158.66	(2.11)	270.61

* EBITDA includes Other Income

Segmental Performance – Graphite Electrodes



in Rs. Crore

	Q1 FY19	Q4 FY18	Q1 FY18	FY18
Net Sales	1587	1288	212	2739
Export (% of sales)	69%	79%	62%	71%
EBITDA Margin	75%	74%	1.5%	61%
EBIT Margin	74%	73%	(5.4)%	59%

- Capacity utilisation at around 82% during the Qtr.
- Increase in the operational efficiency to capitalise on the structural changes in the industry
- Continuous efforts on Debottlenecking
- Efforts on cutting cost, rationalizing manpower and other resources

Segmental Performance – Power



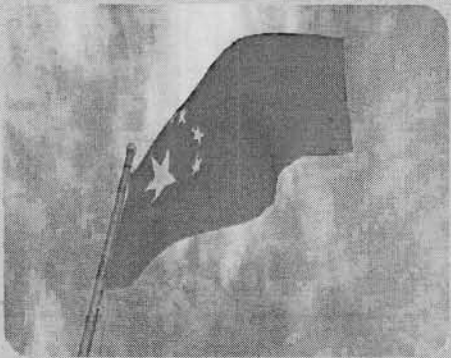
in Rs. Crore

	Q1 FY19	Q4 FY18	Q1 FY18	FY18
Net Sales	26.51	40.66	54.24	213.80
EBITDA Margin	(6)%	11%	38%	28%
EBIT Margin	(18)%	4%	33%	23%

Chinese Government is taking air pollution control measures seriously.



Blue Sky Policy



- ❖ New action plan released on the country's official government website, will expand the fight to 82 cities across China
 - ❖ Eight inspection teams were sent to 21 regions to ensure the enforcement of new promulgations.
 - ❖ More actions on **"scattered"** pollution sources : cut off water, electricity and raw material supplies.
 - ❖ Special anti-smog measures would still be introduced over autumn and winter.
 - ❖ Government curbed traffic and coal use, and also imposed **"one size fits all"** restrictions on industries like steel, aluminium and cement.
 - ❖ Shutting outdated steel plants to bring capacity under 1 billion tpy by 2025,
- **CISA president Yu Yong
- ❖ Local people are very happy about better air quality and more blue sky days.

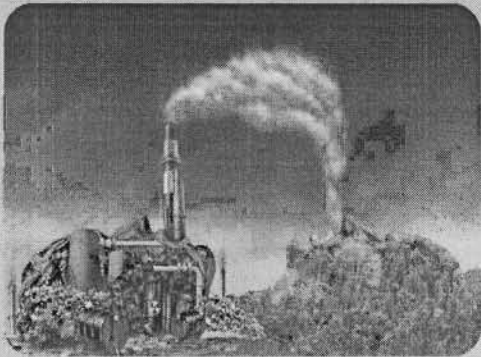


Chinese Steel Scenario

- ❖ BHP, one of three large iron ore producers of the world, projects drop in Iron ore prices by 20% over the next two years due to drop in demand.
- ❖ Steel scrap supply in china will grow exponentially from current level of 80 mmt in 2018 to about 350 mmt by 2035 facilitating increased steel production through EAF route.
- ❖ Lower steel scrap prices in upcoming years due to rising supplies in China is a huge threat for the integrated mills.
- ❖ Technology is now permitting selected EAF-based mini-sheet steel mills to produce sophisticated automotive sheet products, which was hitherto mostly produced through blast furnace route.
- ❖ USA's integrated mills will also be threatened by the mini-sheet-mills' growing production of high mega Pascal and formable automotive sheet by 2025.
- ❖ No new capacity for steel, coke and primary aluminum production will be allowed in the regions of Beijing, Tianjin, Hebei, Shandong and Henan through to 2020.
- ❖ More flexibility in the approval of new electric arc furnaces. Net conclusion on production – enough capacity but dumping could limit supply greater than expected.

China is in the fifth year of a “war on pollution” .

China Pollution Crack Down



- ❖ It is becoming increasingly difficult for small BOF to meet environment standards.
- ❖ There are “Special Emission Levels” during winter and some special standards around major cities which are more strict.
- ❖ Ultra low standards should start to be enforced by 2020 nation wide.
- ❖ It will cap steel capacity in Hebei, China's largest steel making province, at 200 million tonnes by 2020, down from 286 million tonnes in 2013.
- ❖ Steel mills are making lot of money despite low production . Thus lower NPAs for Chinese banks, industry turning black from red, the govt. getting more taxes- (Everybody Happy 😊).
- ❖ How does Govt. monitor Emission
 - Real Time Video Monitoring.
 - Content Detection
 - Periodic Surprise Inspection

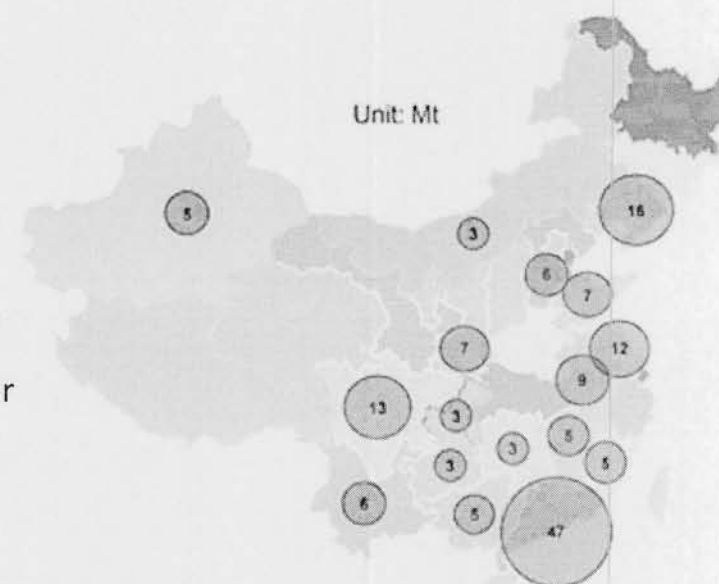
China's Steel Capacity outlook 2018



- ❖ Capacity reduction ahead of expectations: net capacity reduction achieved 115 mmt vs. 150 mmt target. The balance is expected to close down in this year.
- ❖ Additional ~155 mmt illegal induction furnace capacity closed
- ❖ Many of these is being replaced by new electric arc furnaces
- ❖ 105 new EAFs, with capacity of 66 mmt have been installed or commenced construction in China in 2017
- ❖ Steel replacement policy in favour of EAF v BF; New measure requires capacity replacement in Beijing and 6 other provinces to keep the ratio at 1.25:1 level or more. For other regions the ratio become higher than 1:1, effectively reducing steel capacity
- ❖ As per CISA, China steel capacity to be brought below 1 bn mt by 2025

Source - WSA

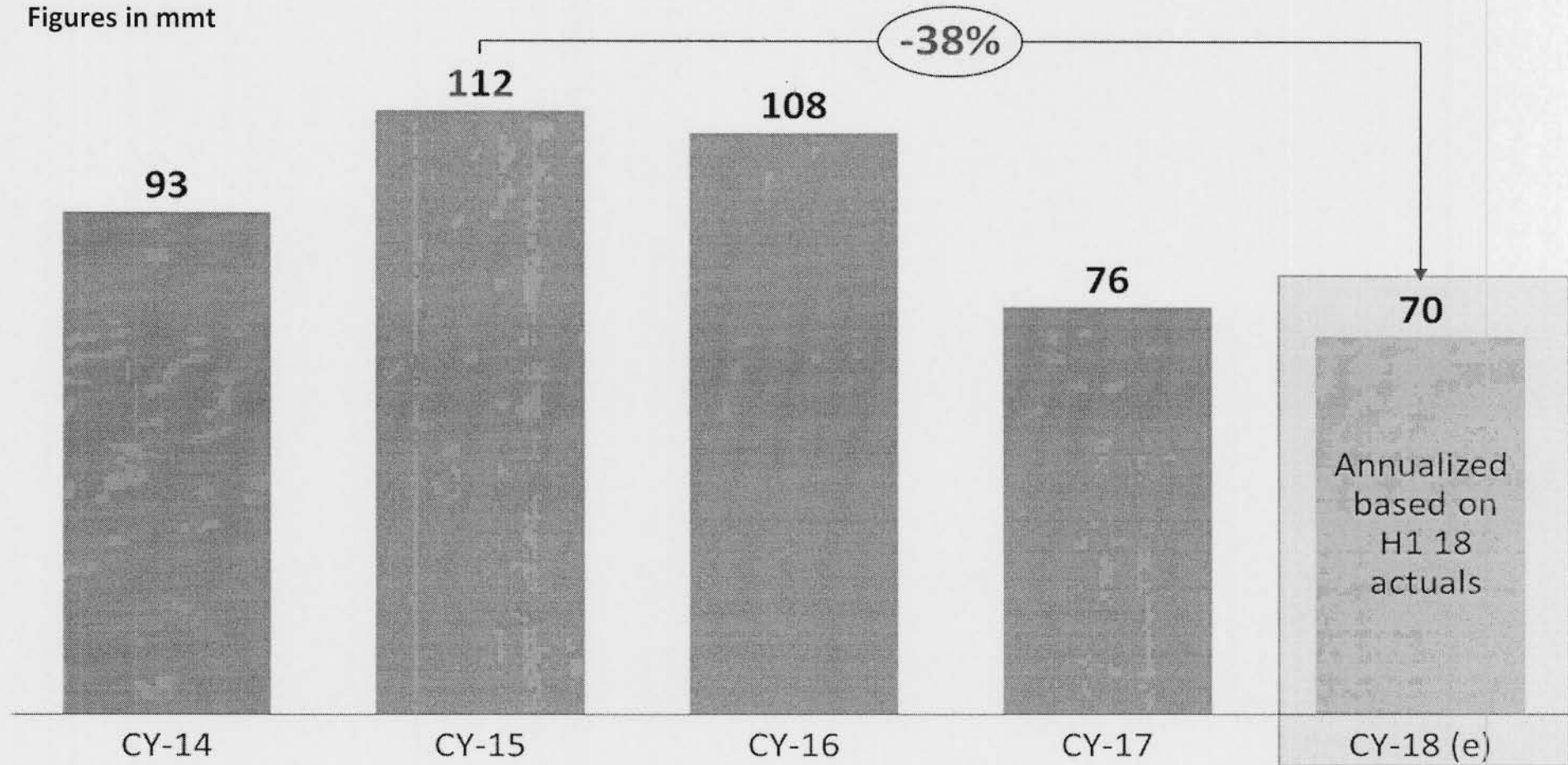
IF's capacity closure in Major Regions

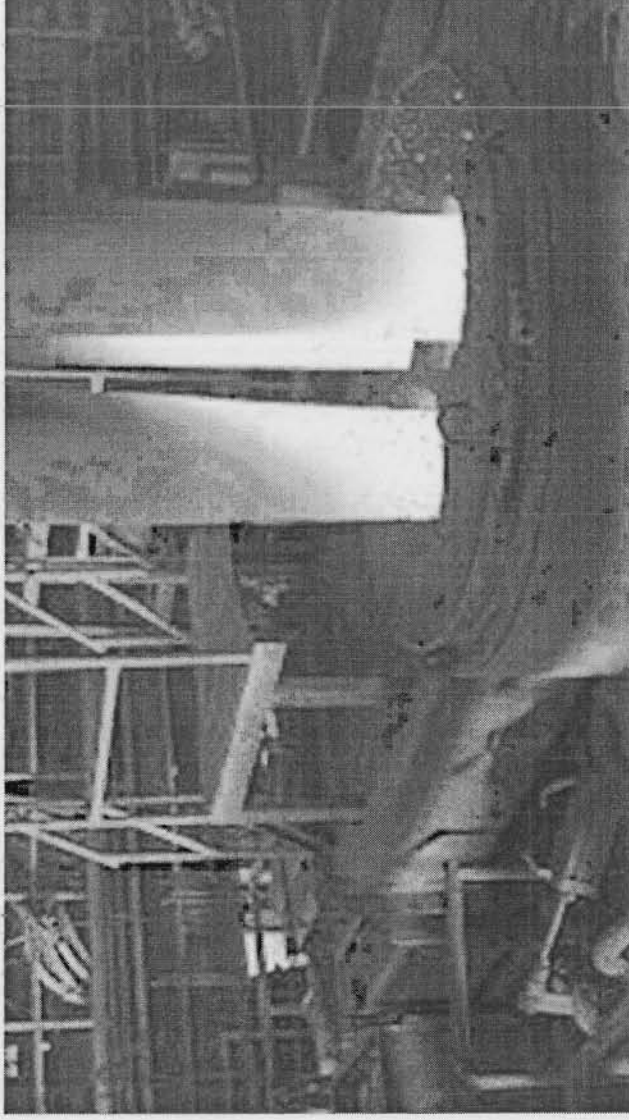


China Steel Exports



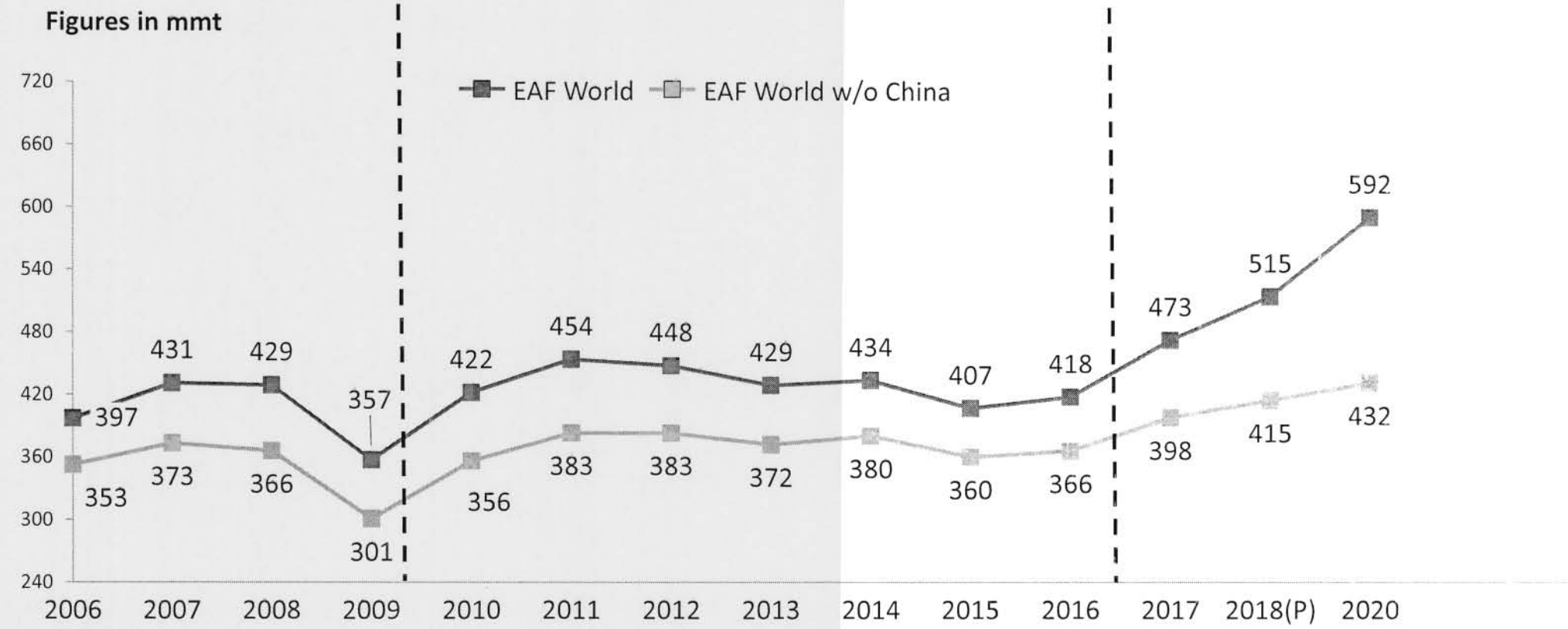
Figures in mmt





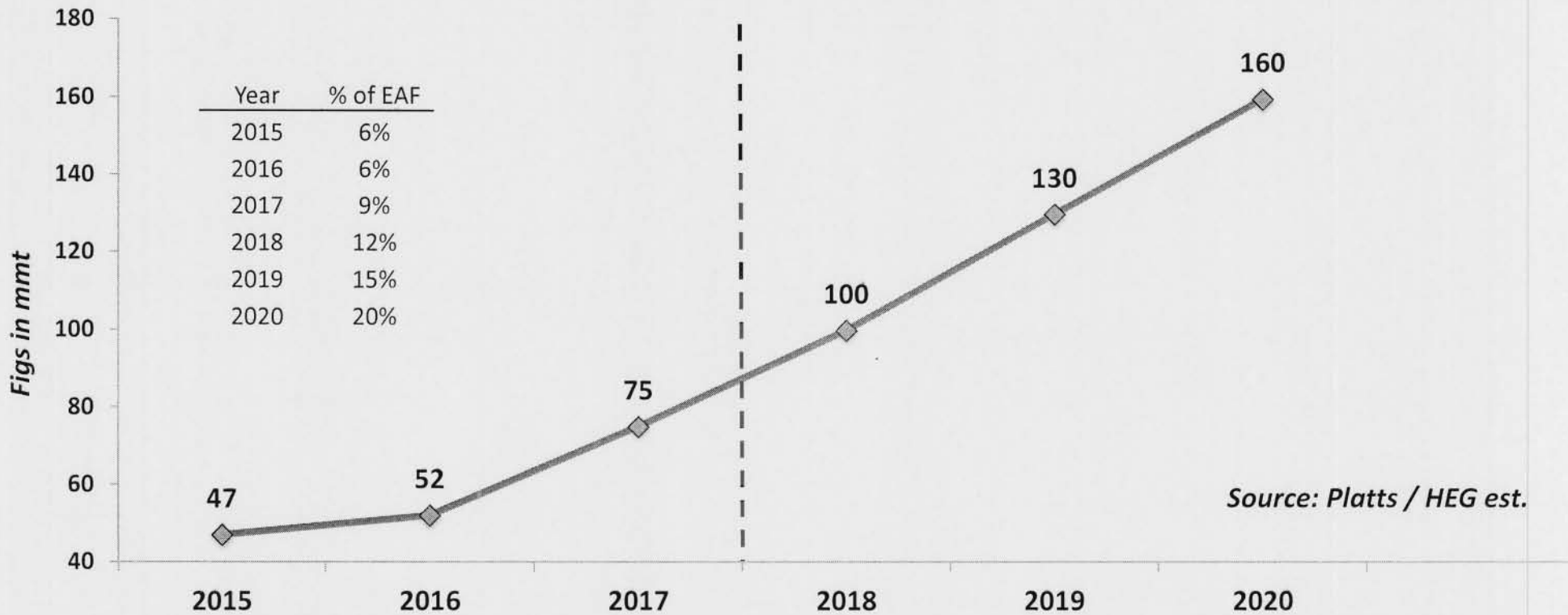
EAF Steel Scenario

EAF World Production –With & Without China



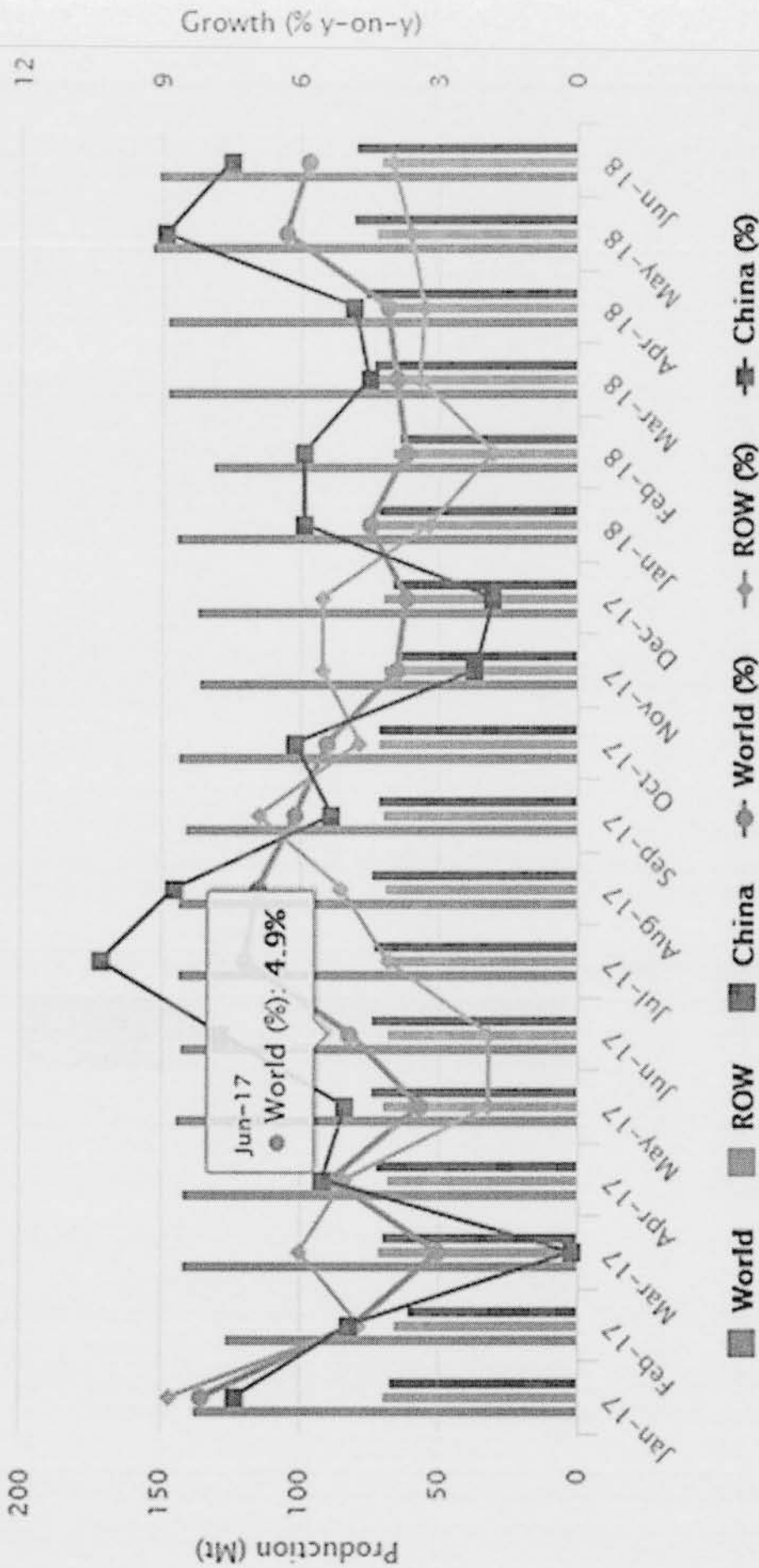
Source: WSA

China's EAF Growth (as per Chinese sources)



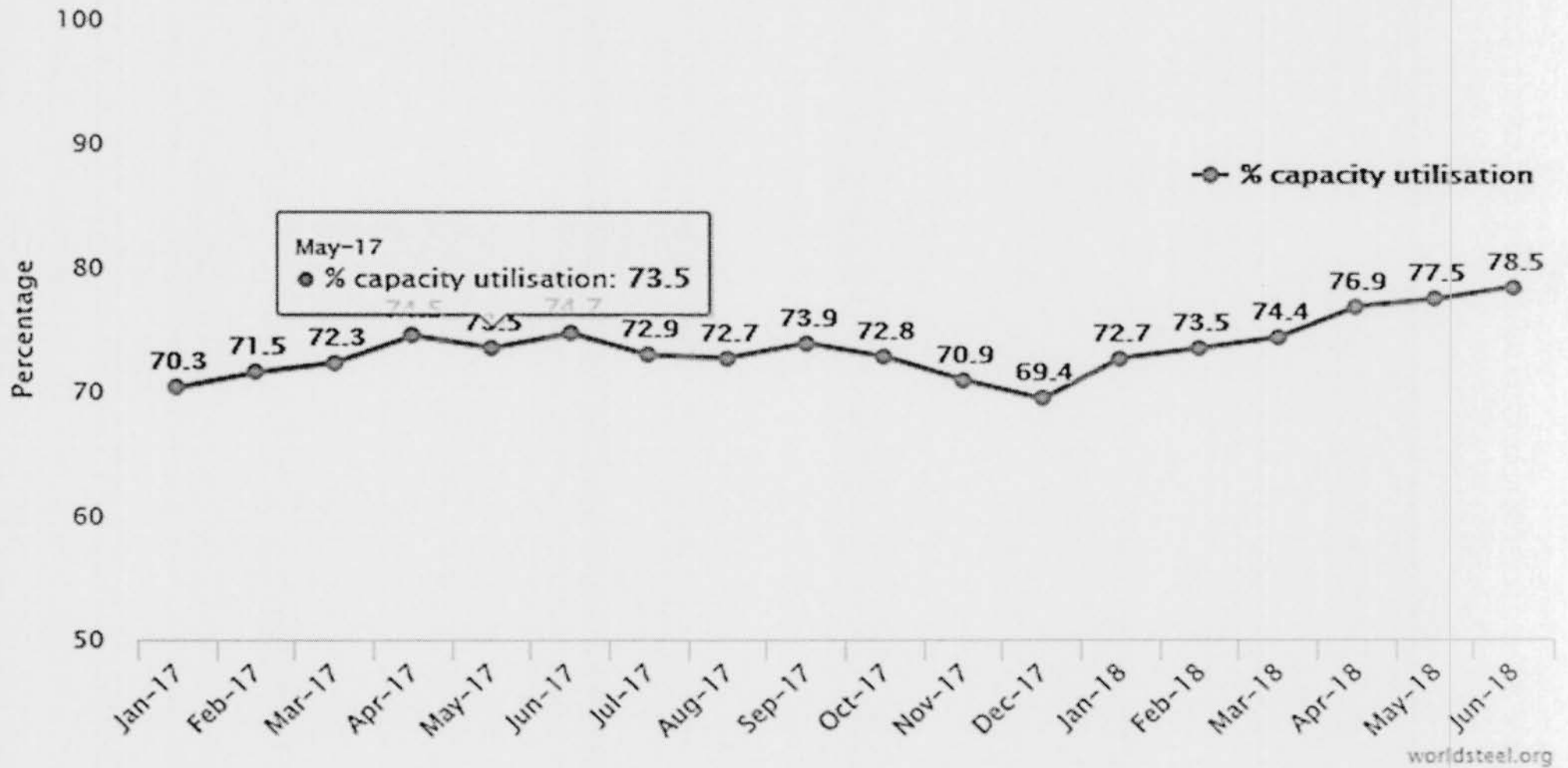
➤ Additional EAF capacity of 110 mmt between 2016 and 2020, would mean an additional demand of appx 275,000 mt of GE in China.

Crude Steel Production



worldsteel.org

World Steel Capacity Utilization



worldsteel.org

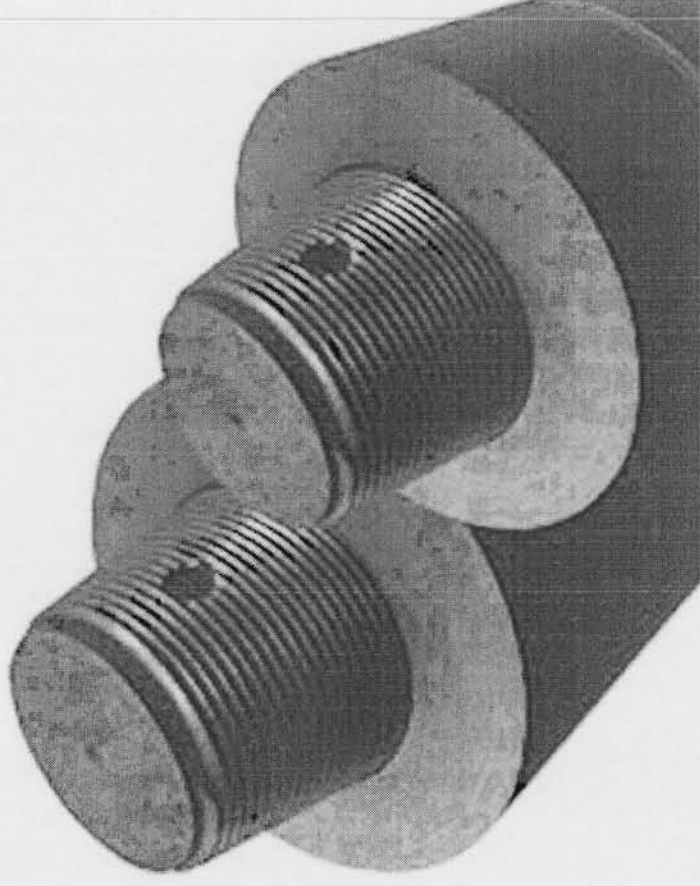
WORLD STEEL SCENARIO (JAN-JUN) 2018, MMT



Crude Steel Production	2015	2016	2017	Change 2017 vs.2016	(Jan-Jun) 2018	Change (Jan-Jun) 2018 vs. 2017
World	1620	1606	1691	5.3%	881	4.6%
China	803	787	832	5.7%	451	6.0%
World without China	817	819	859	4.9%	430	3.2%

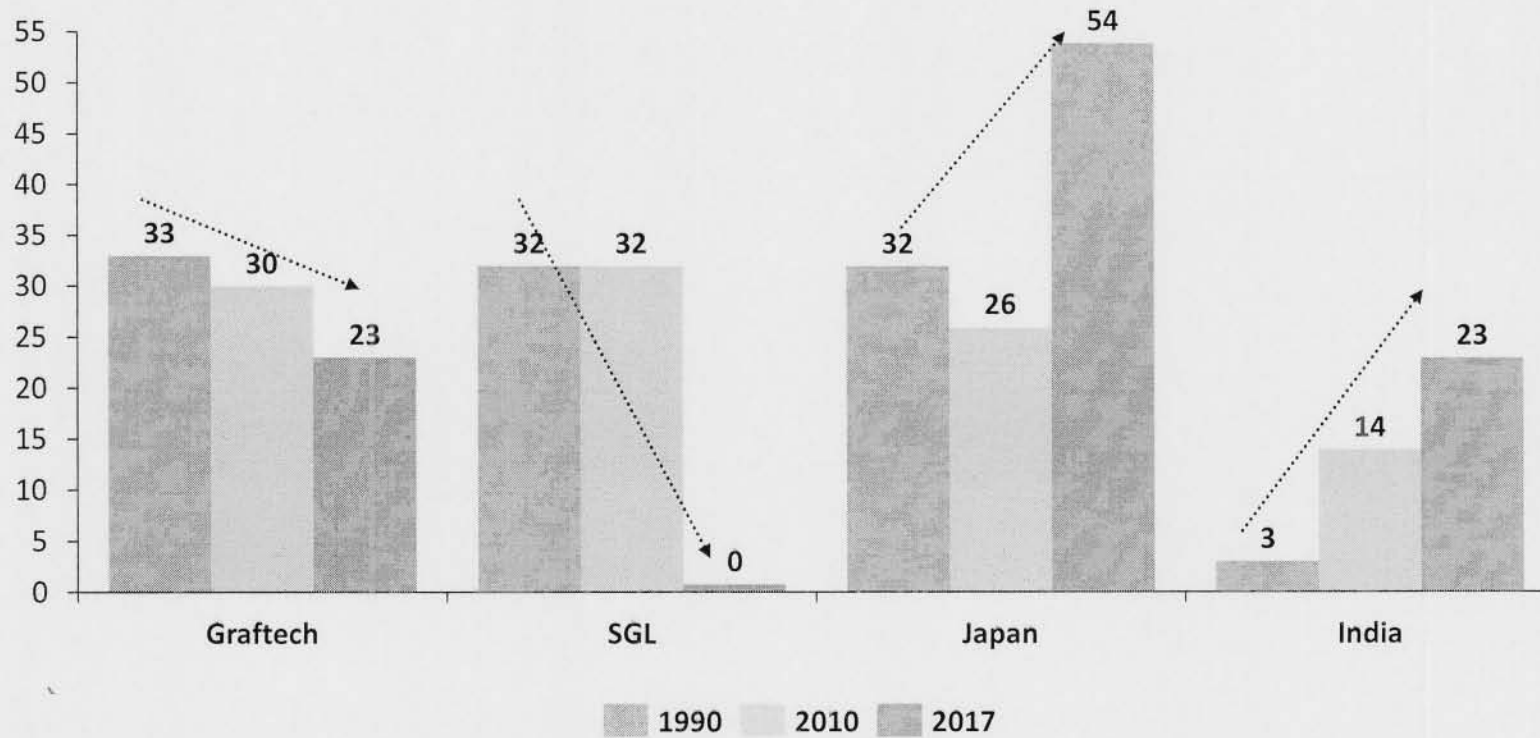
Growth Areas	% ↑	% of world pdn
Middle East	15.9	2.1
Africa	8.0	0.8
Asia	5.2	71.6
CIS	2.8	5.9
N. America	2.4	6.9
S. America	2.4	2.5
EU	1.6	10.2

India produced 52mmt steel posting a growth of 5.1%



GE Industry

Industry Overview – India's Rising Share (w/o China & Russia)





GE Capacity Evolution (w/o China & Russia)

S. No.	Company Name	2010	2014	2017	No. of plants
1	SDK	105	105	225	5
2	Tokai	100	100	95	4
3	NCK / SEC	60	60	60	2
	Sub-Total Japan	265	265	380	11
4	Graftech	245	185	167	3
5	SGL	230	180	0	0
	Sub-Total	740	630	547	14
6	HEG	60	80	80	1
7	GIL	60	98	98	4
	Sub-Total India	120	178	178	5
	Grand Total	860	808	725	19

HEG's 80,000 tons plant is the largest single site integrated GE plant in the world.

GE Industry Development



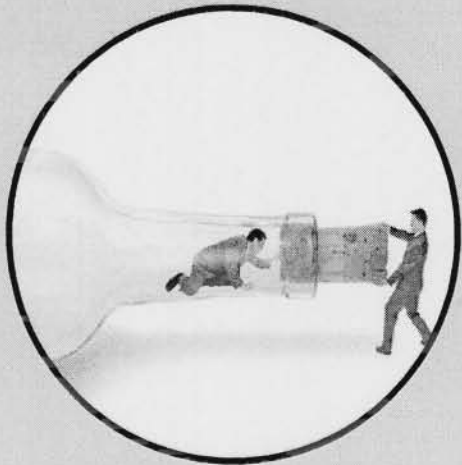
8 GE plants got closed between 2010 and 2016 , 20% of world capacity due to demand supply imbalance.



Currently 19 plants in 15 countries comprising 725,000 tons capacity are working at 85-90% capacity utilization & are unable to cope with the additional demand due to rise in EAF steel production causing shooting up of GE prices.



Almost 300,000 tons of inefficient/polluting GE capacity in China has been shut down thereby causing shortage of GE within China & reduction of Chinese exports further contributing to price rise of GE.



Needle Coke Scenario

- Needle coke is the main raw material for GE production & is very critical for the growth of GE industry.
- 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
- With the sudden increase in demand of GE, needle coke availability has become a bottleneck.
- All Global GE manufacturers are not able to operate beyond 85-90% capacity utilization.
- One of the largest producers of needle coke is debottlenecking its capacity enabling them to increase its production by around 50-60,000 mt.
- This is likely to be on stream in the 2nd half of 2018 and should help the Graphite Industry to some extent for short term Q4 2018 onwards



Thank You

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