PROUD TO BE INDIAN
PRIVILEGED TO BE GLOBAL

HEG/SECTT/2018 31st August, 2018

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**

Reg: Intimation of Schedule of Analyst / Institutional Investor Meeting and a Presentation to be made at the Investors meet, under the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015

Dear Sirs,

Pursuant to Regulation 30 of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, we wish to inform you that Senior Management of the Company will be participating at Elara India Dialogue 2018, organized by Elara Capital in Mumbai on Tuesday, the 4th September, 2018.

The schedule is subject to changes due to any exigencies on behalf of the Organizers or the Company.

We would like to inform further that the presentation to be made in the aforesaid conference is attached herewith for your reference.

The same is also being uploaded on the Company website i.e. www.hegltd.com

We request you to kindly take the same on record.

Thanking you,

Yours faithfully,
For **HEG Limited**

(Vivek Chaudhary)
Company Secretary

heg.investor@lnjbhilwara.com

Encl : as above.

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Investor Presentation

June 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

PROUD TO BE INDIAN
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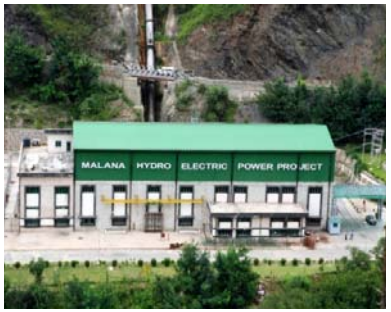
Textiles

Graphite Electrodes

Power Generation & Power Consultancy



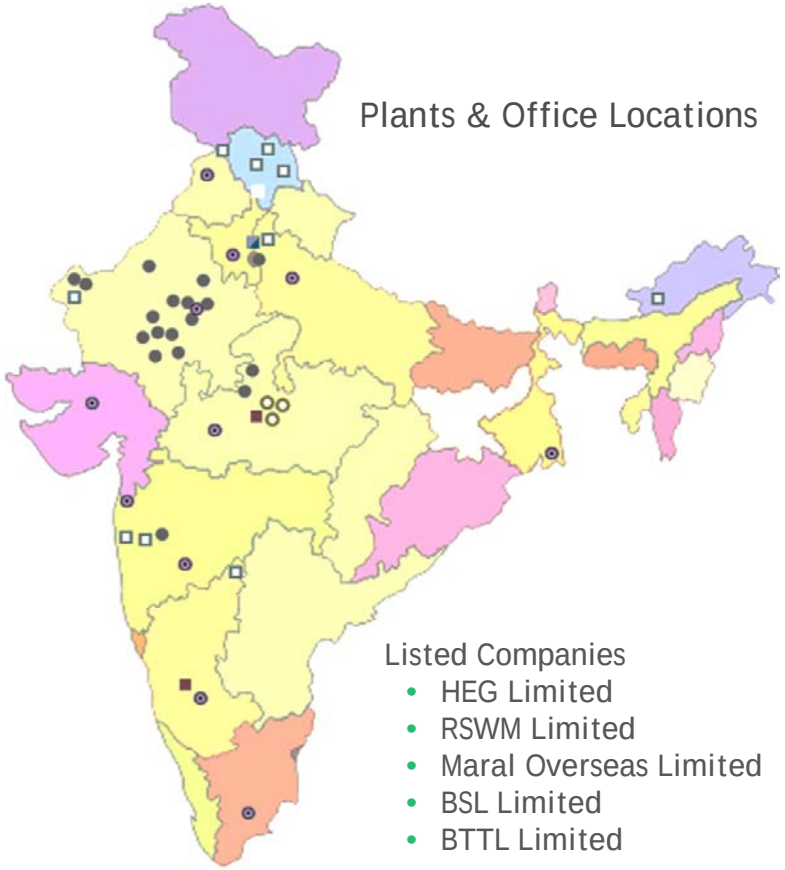
IT Enabled Services

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



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, Sabic, 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

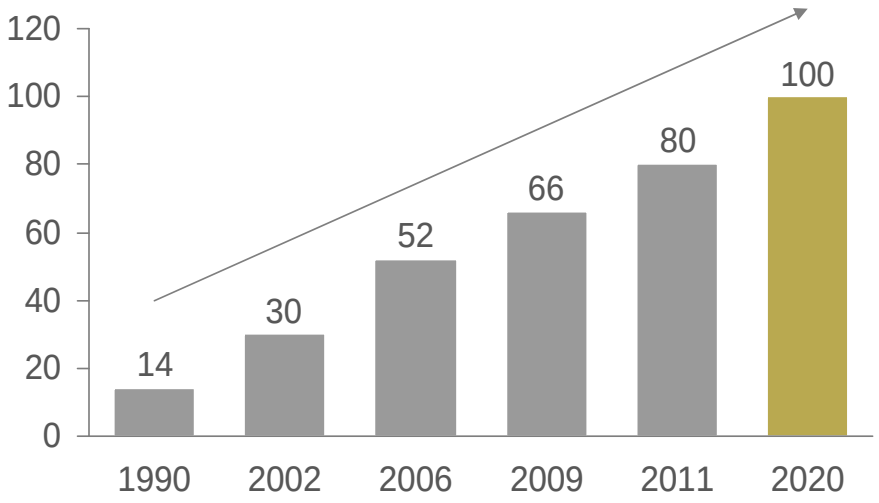
- GE- An indispensable material for Electric Arc Furnaces (EAF) for Steel production
- EAF accounts for appx 45% of total World Steel Production (Without China)
- High Entry Barrier – HEG the last new entrant in the world -1977
- Uses 100 % Captive Power
- State of the art manufacturing facility – due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

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

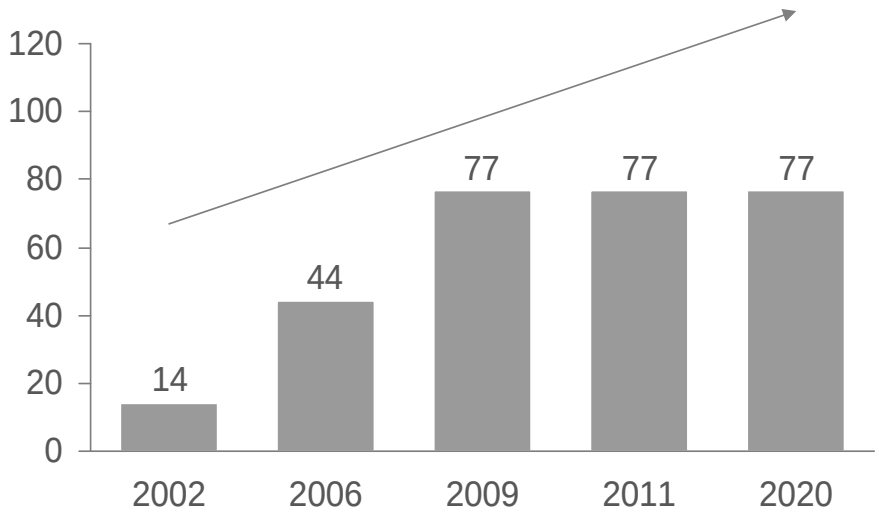
Capacity Build Up

Graphite Electrode
(In '000 tonne)



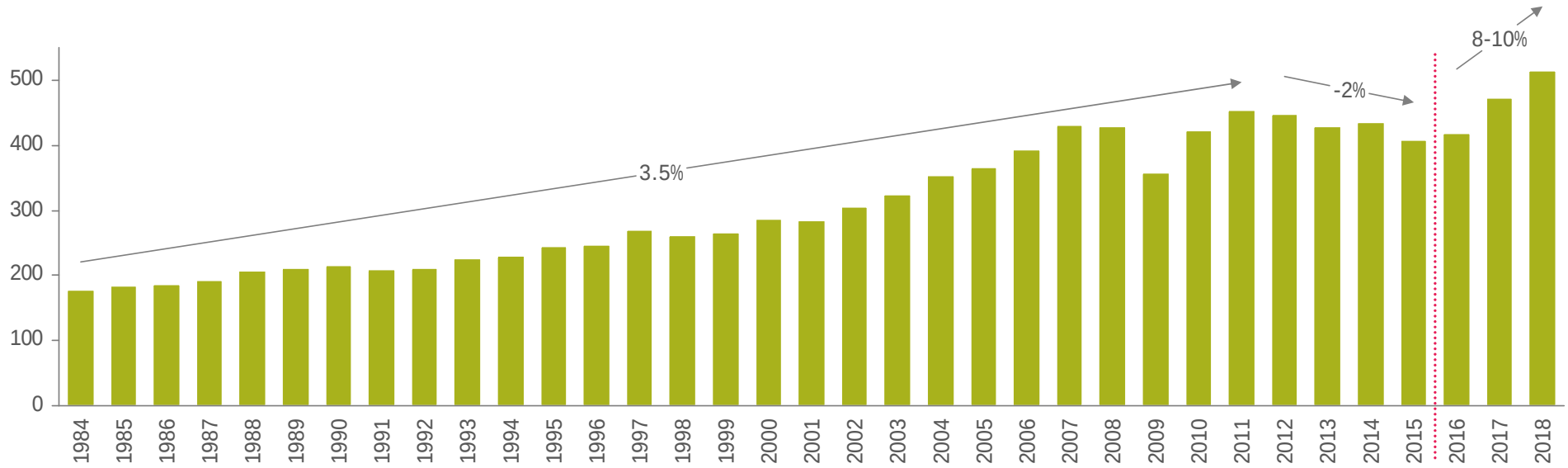
Probable

Captive Power (MW)
(In '000 tonne)



EAF Steel

Global EAF steel production



- EAF steel production grew at the CAGR of 3.5% from 1984-2011
- Due to financial meltdown in 2009 and sudden surge of large BOF capacity built in China between 2010-15 , EAF steel production dropped at the CAGR of 2% & now started to grow at the rate of about 8-10% from 2016 onwards.

Source: WSA

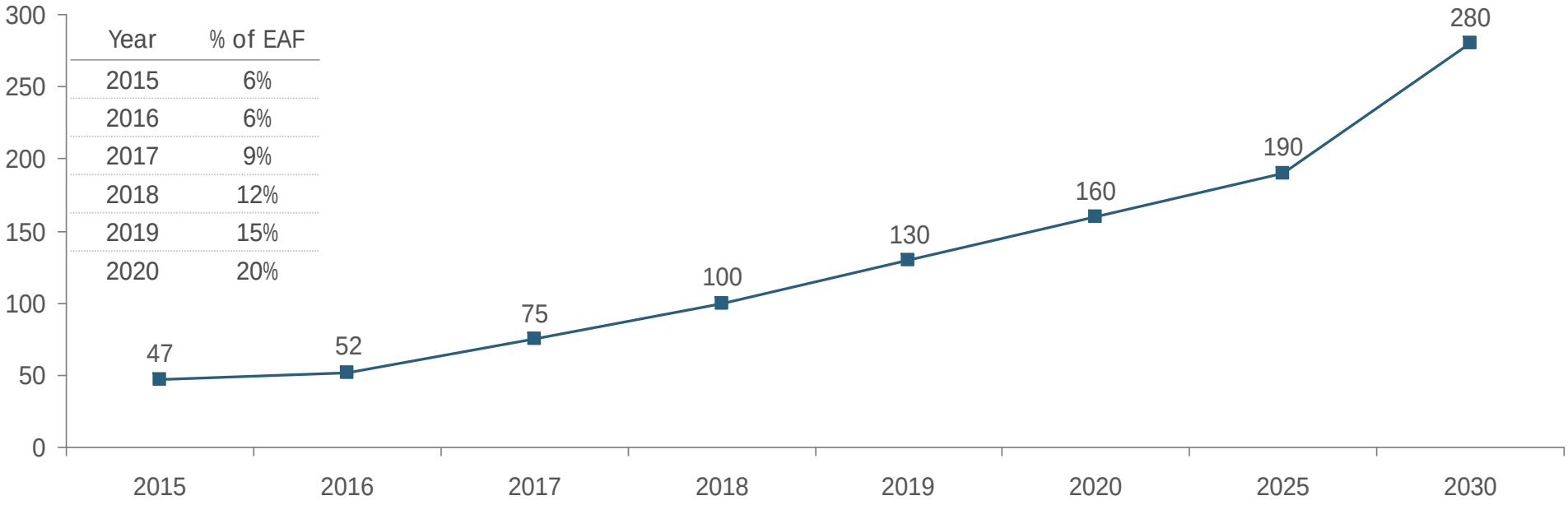
EAF World Production –With & Without China

Figures in mmt

Source: WSA

China's EAF Growth

Figures in mmt



Year	% of EAF
2015	6%
2016	6%
2017	9%
2018	12%
2019	15%
2020	20%

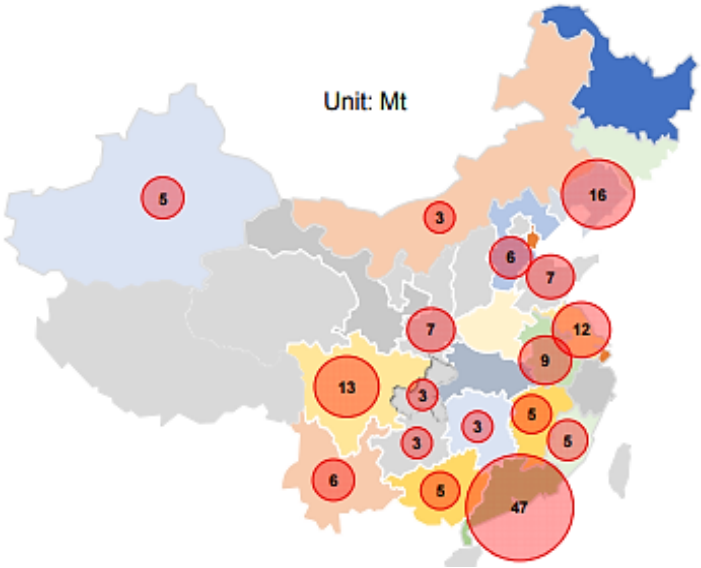
- Additional 110 mmt by 2020 means an addl electrode requirement of 275,000 tons p.a.
- Chinese EAF production set to grow rapidly from 6% share in 2016 to 20% in 2020

Source: Platts / HEG est.

China's Steel Capacity outlook 2018

IF's capacity closure in Major Regions

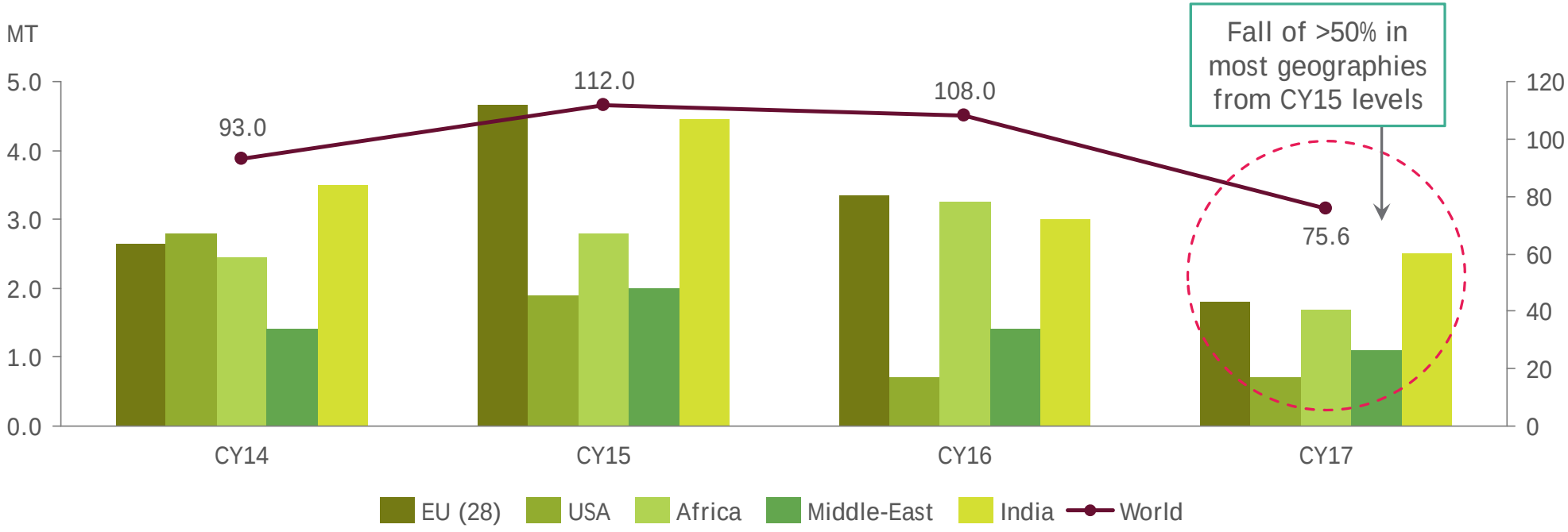
- Capacity reduction ahead of expectations: net capacity reduction achieved 115 mmt vs. 150 mmt target. The balance is expected to close down in this year.
- Additional ~155 mmt illegal induction furnace capacity closed
- Many of these is being replaced by new electric arc furnaces
- 105 new EAFs, with 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

Chinese Steel Exports

Exhibit 1: Chinese steel exports have fallen sharply in CY17



- In Q1 2018, it further fell down to annualized 60 million tons

Source: Bloomberg, Centrum Research

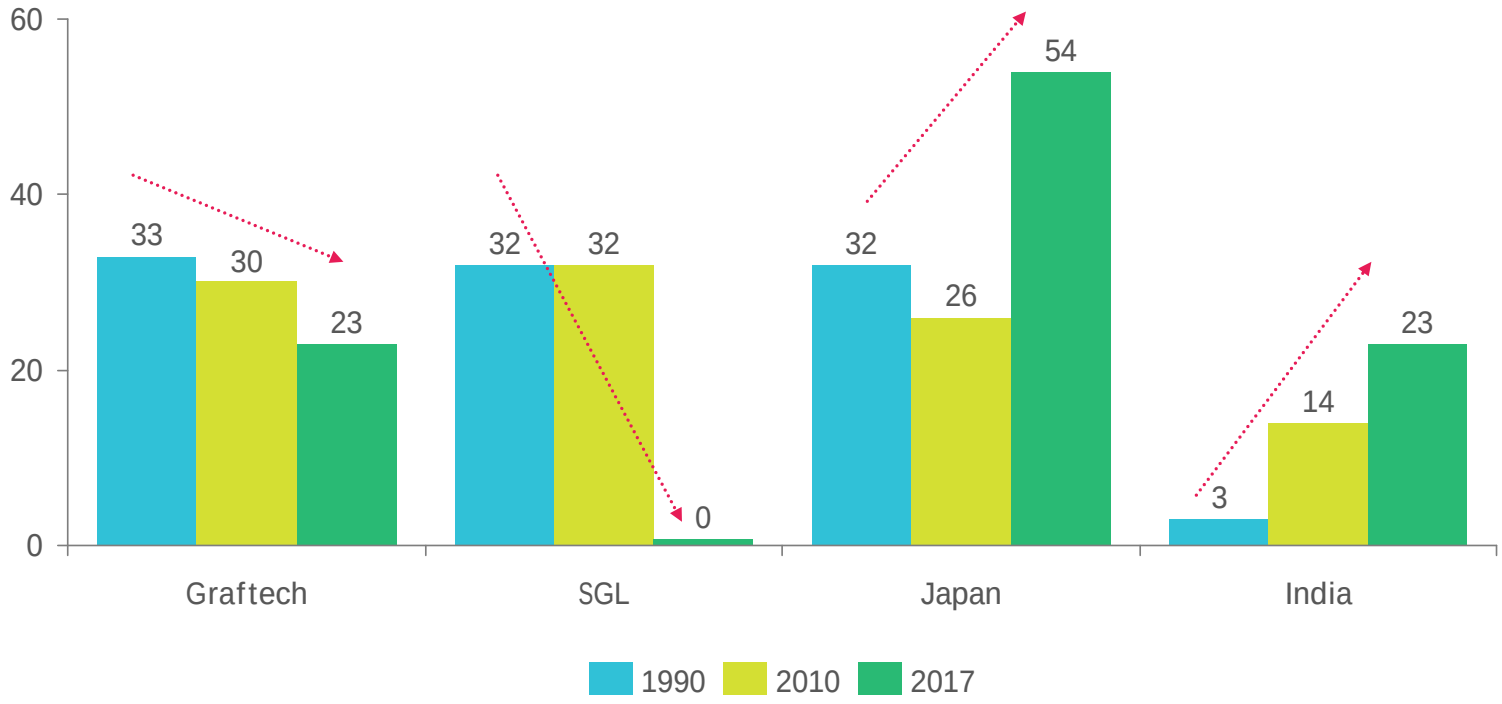
Conclusion on EAF Steel

EAF Steel production is expected to grow at a faster pace compared to BOF because of following reasons:

- Replacement of Induction furnaces & polluting blast furnaces in China by EAFs
- EAF Share in China to grow from 6% in 2016 to 20% in 2020
- Chinese scrap availability to increase at the CAGR of 4% for the next 20-25 years.
- Continuous increase in share of EAF in rest of the world due to pollution concerns on BOF and less capital intensive nature of EAFs
- As China's steel exports keep dropping, the Rest of the World Steel production keeps increasing where EAF accounts for 45% of Steel Production.

Graphite Electrode (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 extend for short term Q4 2018 onwards

Thank You