



Graphite India Limited

(NSE: GRAPHITE, BSE: 509488)

Corporate Presentation
March 2017



Forward Looking Statements

This presentation contains statements that contain “forward looking statements” including, but without limitation, statements relating to the implementation of strategic initiatives, and other statements relating to Graphite India’s future business developments and economic performance.

While these forward looking statements indicate our assessment and future expectations concerning the development of our business, a number of risks, uncertainties and other unknown factors could cause actual developments and results to differ materially from our expectations.

These factors include, but are not limited to, general market, macro-economic, governmental and regulatory trends, movements in currency exchange and interest rates, competitive pressures, technological developments, changes in the financial conditions of third parties dealing with us, legislative developments, and other key factors that could affect our business and financial performance.

Graphite India undertakes no obligation to publicly revise any forward looking statements to reflect future / likely events or circumstances.

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Global Market Position

- ❖ Largest Indian producer of graphite electrodes by total capacity
- ❖ One of the leading players in a highly consolidated industry
- ❖ Accounts for approximately 12.6%¹ of capacity among leading global electrode manufacturers
- ❖ Diversified client base with a global footprint

Best-in-Class Operations

- ❖ High quality; more than 48%² of electrode production exported in competition with global players
- ❖ Focus on operational efficiency, productivity and technological know-how results in operating margins in line with market leaders
- ❖ Secured supplies of key raw material, needle coke, at prices lower than the previous financial year
- ❖ Access to low cost sources of power

Attractive Industry Dynamics

- ❖ Consolidated industry with significant entry barriers due to technology intensive nature of operations
- ❖ Electrodes are critical to the electric arc furnace (EAF) steel making process, with no substitutes available
- ❖ Share of EAF's route in global steel production is ~26%
- ❖ Strong support for EAF route over traditional blast furnace method due to:
 - Relatively lower production costs & capex requirement
 - Operational flexibility
 - Generates less carbon emissions

Strong Financial Performance

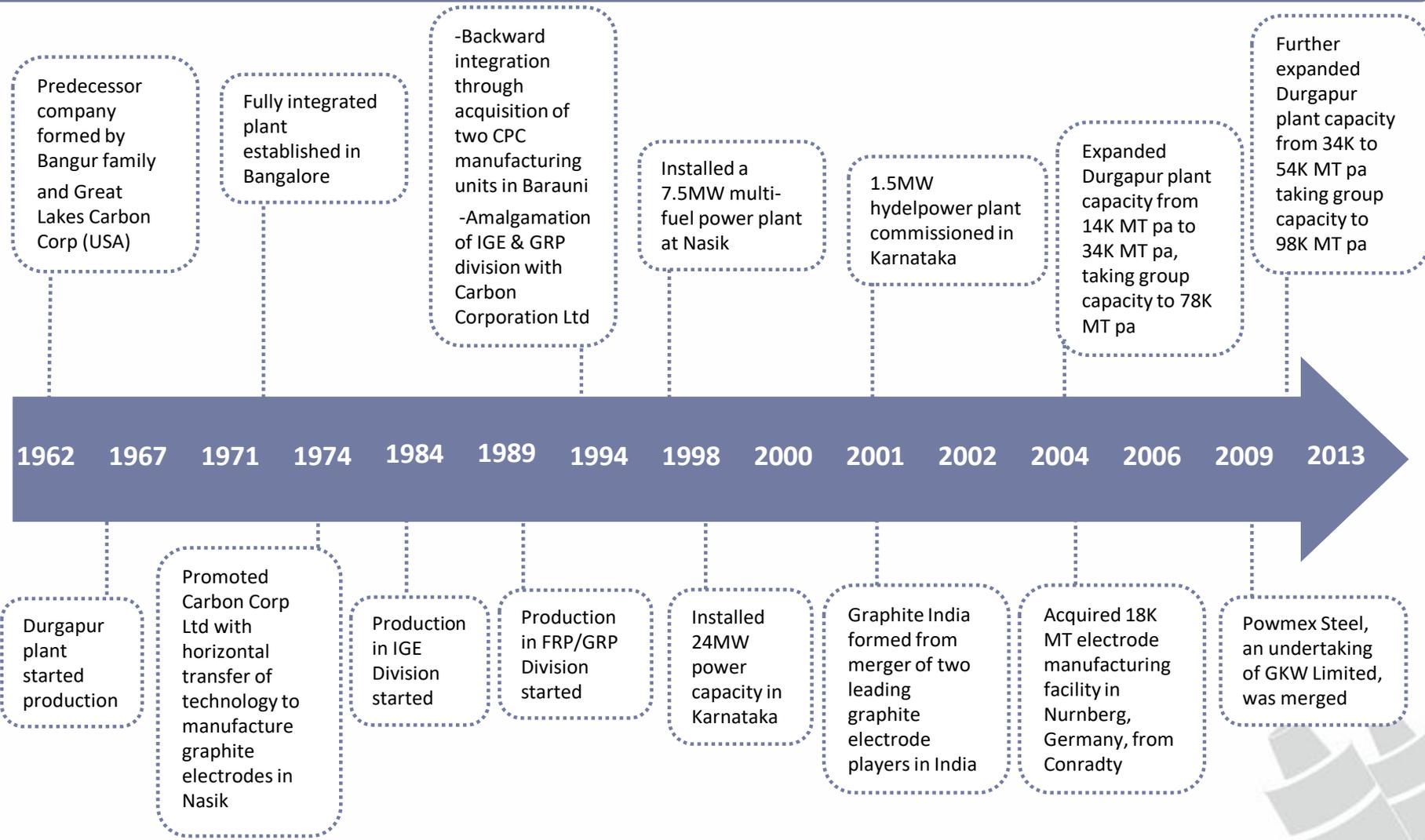
- ❖ Consistent cash flows to support on-going capex requirements and provide operational flexibility
- ❖ Strong balance sheet with net cash position
- ❖ Strong cost management has resulted in one of the highest average EBITDA margins in the industry
- ❖ Consistent dividend policy

Graphite India is globally well positioned through its product quality, scale of operations and manufacturing platform base

Notes:

1. Global capacity excludes Chinese producers
2. Standalone

Over 40 Years of Experience in the Graphite Electrode Industry



Graphite India

Graphite and Carbon*
91%

Steel*
5%

Others*
4%

Highlights

- Core expertise in value-added Ultra-High Power (UHP) electrodes
- 98K tonnes/year (TPA) capacity, of which UHP accounts for 90% while Regular Power (RP) accounts for 10%
- Backward integrated; manufactures Calcined Petroleum Coke for use in electrode manufacturing
- Enhanced product range – large diameter UHP electrodes and specialty graphite products
- Impervious graphite equipment find applications in corrosive chemical industries such as pharma, agro-chemical, chloro-alkali & fertilizer industries
- Power generation capacity of 33MW through hydel and multi-fuel routes. It is used primarily as captive supply for the graphite electrodes business

- Largest producer of High-Speed Steel (HSS) in the country
- HSS is used in the manufacture of cutting tools such as drills, taps, milling cutters, reamers, hobs, broaches and special form tools
- HSS cutting tools are essentially utilized in automotive, machine tools, aviation and DIY markets

- Pipes & tanks used for water supply, sewage / industrial effluent collection and disposal, cooling towers, industrial process pipelines, seawater pipelines, industrial ducting and gasoline storage

Products

- Graphite Electrodes
- Specialty Carbon and Graphite
- Calcined Petroleum Coke
- Carbon Paste

- Impervious Graphite Equipment: Heat Exchangers
- Power generation through Hydel (18 MW)
- Power generation through Multi-fuel routes (13.5 MW)

- High Speed Steel (HSS)
- Alloy Steel

- GRP Pipes & Tanks



Graphite Electrodes



Graphite Electrodes



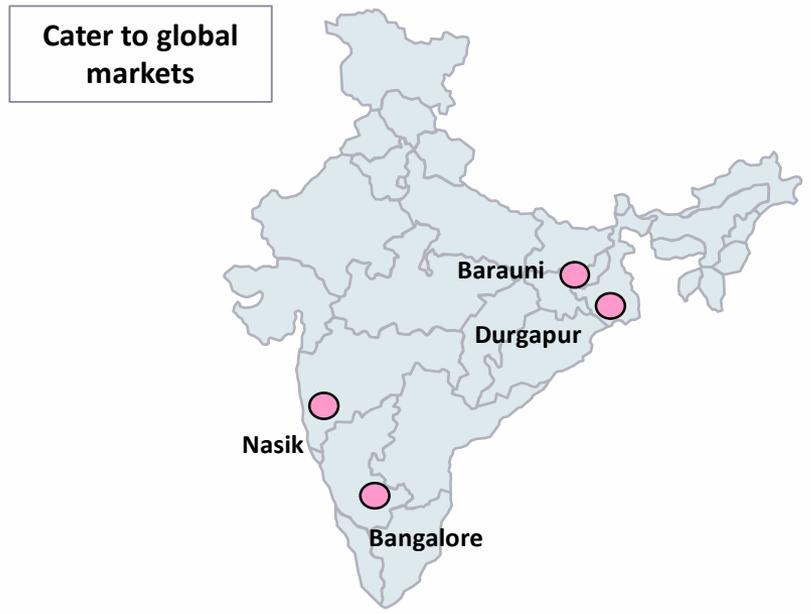
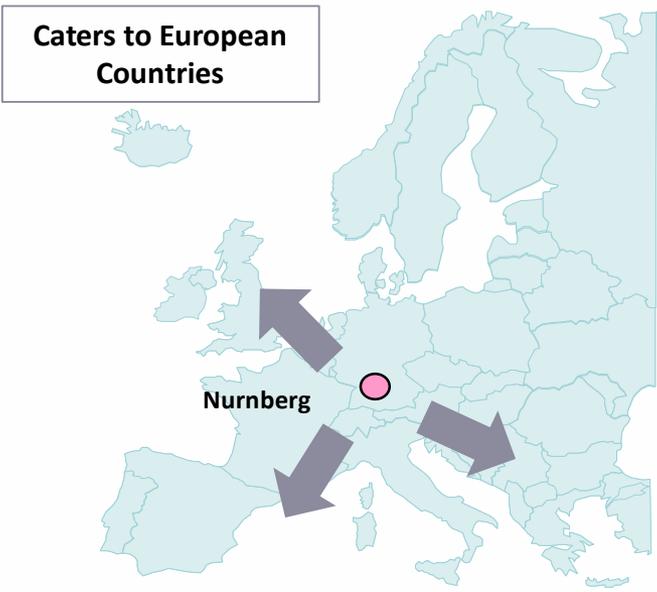
Steel Melting



GRP Pipe

*Percentage refers to FY2016 Sales Contribution

Strategically Located Manufacturing Facilities



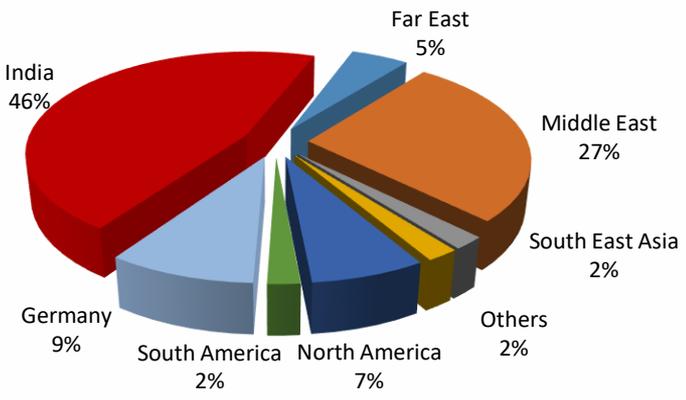
Plant Location	Post Expansion Capacity (MT/Year)
Durgapur (India)	54,000
Bangalore (India)	13,000
Nasik (India)	13,000
Nurnberg (Germany)	18,000
Total	98,000

- ❖ The Indian plants are located close to the three main ports of India, offering logistic advantages to clients overseas
- ❖ Closer to customers in Indian markets
- ❖ The German plant caters to the needs of European customers and is located close to the EU market

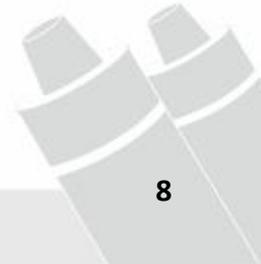
Diversified Premier Global Customer Base



FY2016 GIL's Electrode Sales Volume by Region¹

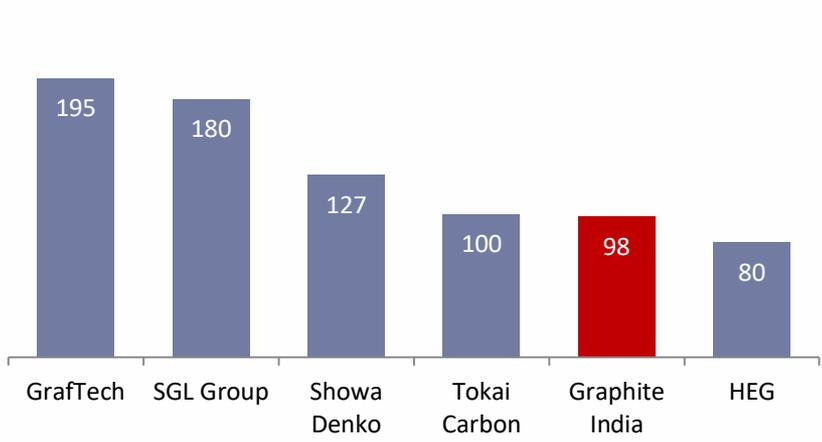


Note:
1. Standalone

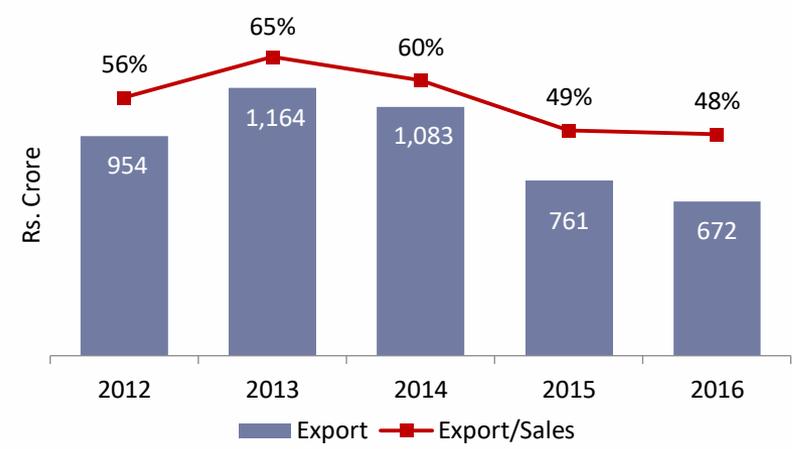


Global Player with Strong Profitability

Graphite Electrode Capacity (in thousand tonnes / Year)

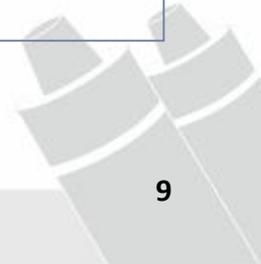


GIL Exports¹



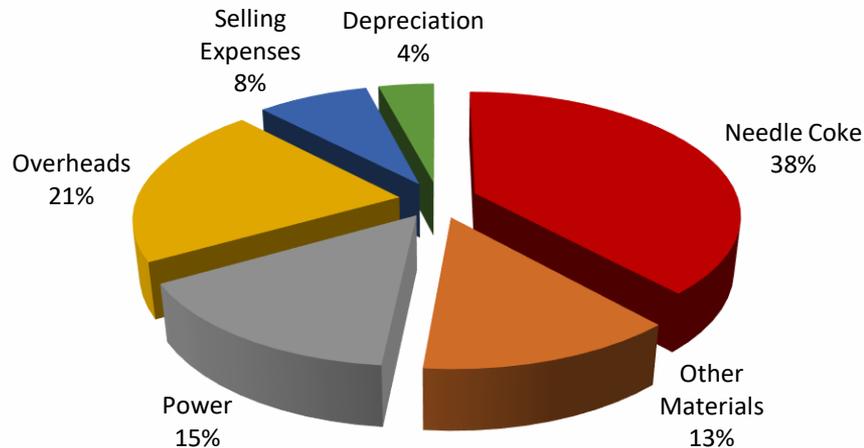
- ❖ Graphite India is one of the largest graphite electrode manufacturers globally and the largest in India
- ❖ Consolidated capacity utilization of 62% in FY2016
- ❖ Operating margins remain one of the highest amongst the leading electrode manufacturers

Note:
1. Fiscal years; Standalone Gross Sales

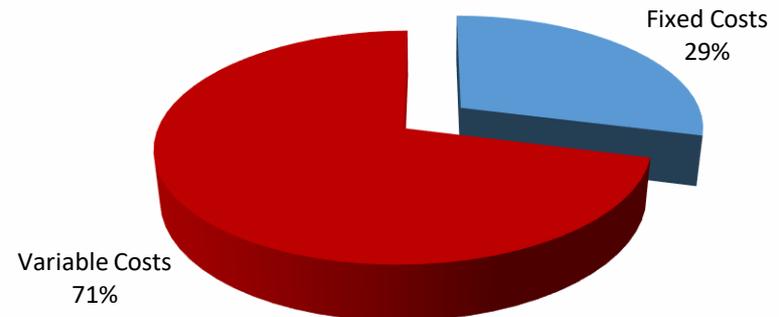


Management Focus on Efficient Supplier Relationships

FY2016 COGS Breakdown

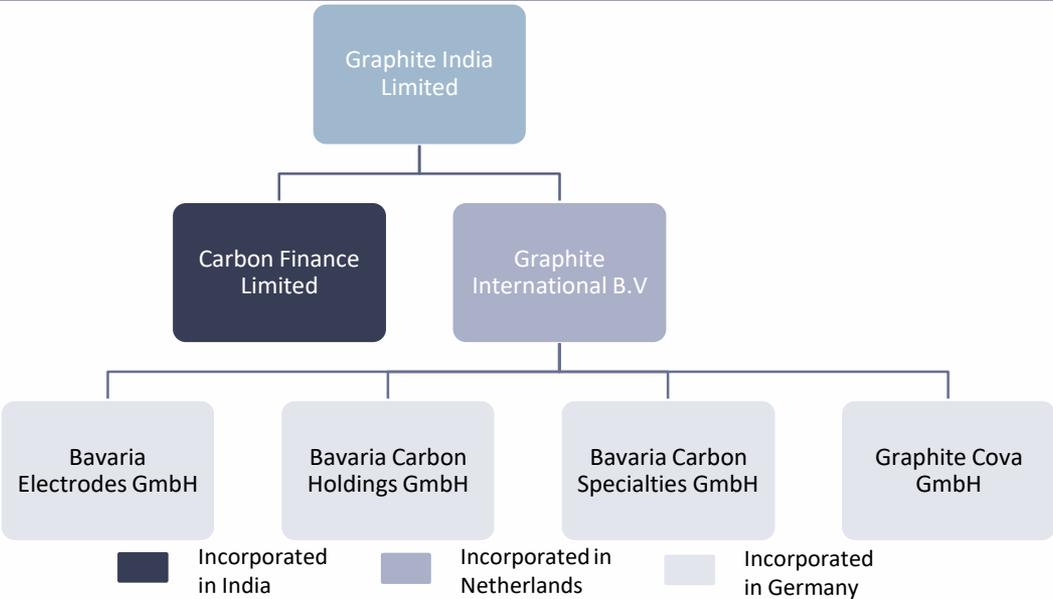


FY2016 Fixed vs. Variable COGS

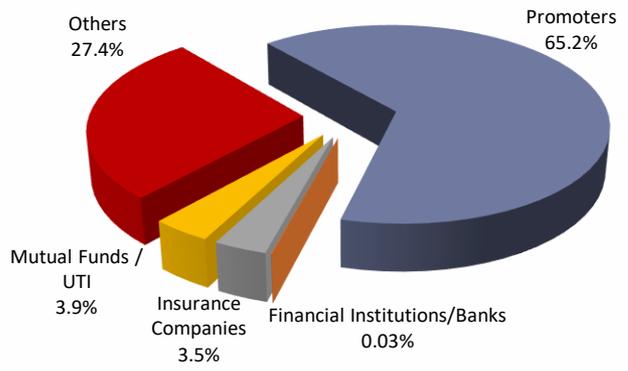


- ❖ Captive power generation capacity provides low cost and reliable source of power and mitigates risk of rising power costs:
 - 31.5MW installed capacity
 - **Bangalore Plant:** Power needs met by 18MW captive hydel power plant and supplies from KSEB;
 - **Nasik Plant:** Power needs met by MSEB;
 - **Durgapur Plant:** Power requirements met through supplies from DVC
- ❖ Secured needle coke supplies until the end of FY2017 which are at lower prices as compared to FY2016

Group Organizational Structure and Ownership



Shareholding Pattern

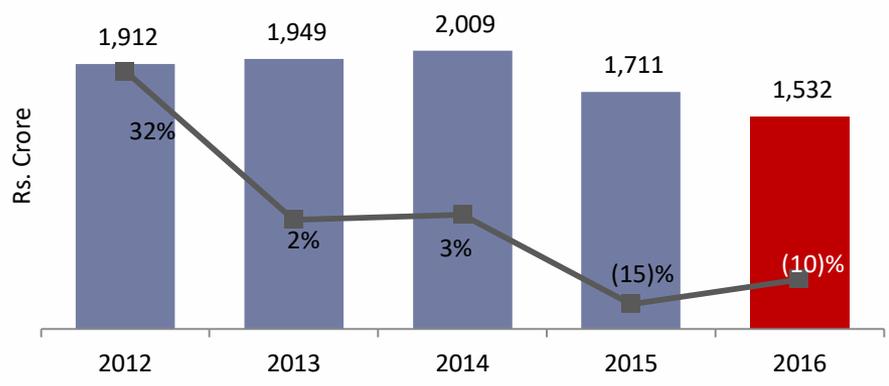


Shareholders	Dec -15	Mar -16	Jun -16	Sep -16	Dec -16
Promoters	65.3%	65.2%	65.2%	65.2%	65.2%
Financial Institutions/Banks	0.02%	0.03%	0.03%	0.03%	0.02%
Insurance Companies	3.5%	3.5%	3.5%	3.5%	3.5%
Mutual Funds / UTI	3.0%	3.9%	3.9%	3.9%	3.9%
Others	28.2%	27.4%	27.4%	27.4%	27.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

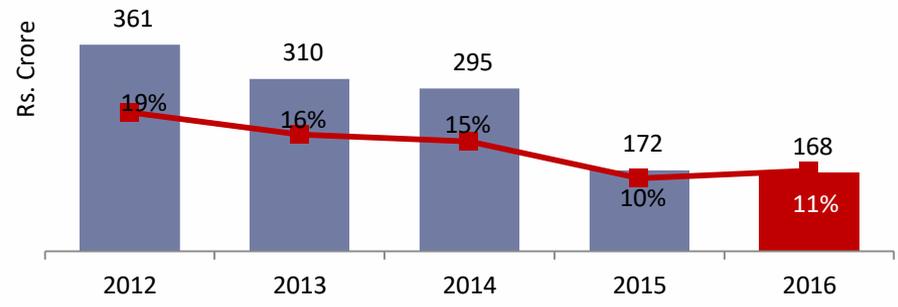
Senior Management Team

Key Executives	Background
<p>K.K. Bangur <i>Chairman</i></p>	<ul style="list-style-type: none"> • Over 30 years of experience in managing the affairs of companies and its business activities • Has been a Director of Graphite India since July 1988 and Chairman since July 1993 • Chairman of the Shareholders/Investors Grievance Committee and Committee for Borrowings • Past President of Indian Chamber of Commerce, Kolkata, Executive Committee member of FICCI, New Delhi and the past President of All India Employers Organization, New Delhi
<p>M. B. Gadgil <i>Executive Director</i></p>	<ul style="list-style-type: none"> • Mechanical Engineer with a Management Degree and has been with the Company for over 38 years • Responsible for the management of Company affairs and is actively involved in strategic/ investment decisions
<p>B.Shiva <i>Senior VP, Legal & Company Secretary</i></p>	<ul style="list-style-type: none"> • Mr. B Shiva, SVP (Legal) & Co Secretary, is a Law graduate and Fellow member of The Institute of Company Secretaries of India. He has been with the Company for more than 23 years now
<p>A. K. Dutta <i>Senior VP, Marketing</i></p>	<ul style="list-style-type: none"> • Mr. A. K. Dutta is an Electrical Engineer with post graduation in management from IIM Calcutta and has about 33 years of experience in marketing. He joined GIL in 2006
<p>S.W. Parnerkar <i>Executive VP, Finance</i></p>	<ul style="list-style-type: none"> • Mr. S.W Parnerkar, M.Com, L.L.B , FCMA , FCS, is the head of Finance of the Company • Associated with the company for the last 22 years, he is responsible for all accounts and financial aspects of the Company

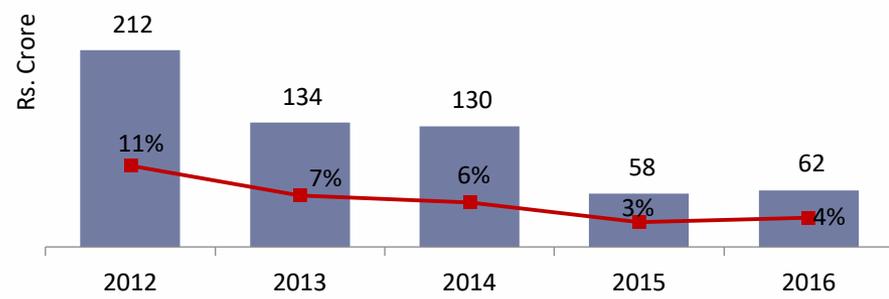
Net Sales (in Crore) and Growth (%)



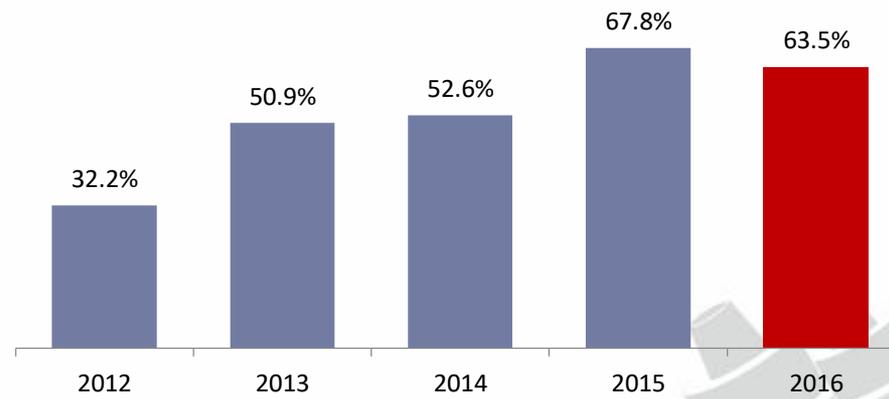
EBITDA (in Crore) and Margins (%)



Net Profit (in Crore) and Margins (%)



Dividend Payout Ratio (%)



Notes:
 1. Dividend payout ratio: Dividend per share / Earnings per share
 2. Above figures are consolidated

Segment Performance

Standalone

(Rs. Crore)	Full Year Ended		y-o-y
	FY2016	FY2015	Growth (%)
Segment Revenue	1,346.7	1,497.2	(10.1)%
Graphite and Carbon	1,222.4	1,330.7	(8.1)%
Steel	64.9	80.9	(19.7)%
Unallocated	59.6	86.1	(30.8)%
Less: Inter Segment Sales	(0.22)	(0.38)	

(Rs. Crore)	FY2016	FY2015	Growth (%)
Profit before tax and interest	152.0	155.3	(2.1)%
Graphite and Carbon	143.3	142.5	0.6%
Steel	2.5	6.6	(61.8)%
Unallocated	6.1	6.3	

Consolidated

(Rs. Crore)	Full Year Ended		y-o-y
	FY2016	FY2015	Growth (%)
Segment Revenue	1,532.4	1,710.7	(10.4)%
Graphite and Carbon	1,405.0	1,538.3	(8.7)%
Steel	64.9	80.9	(19.7)%
Unallocated	62.8	91.9	(31.7)%
Less: Inter Segment Sales	(0.22)	(0.38)	

(Rs. Crore)	FY2016	FY2015	Growth (%)
Profit before tax and interest	135.9	137.3	(1.0)%
Graphite and Carbon	124.6	119.2	4.6%
Steel	2.5	6.6	(61.8)%
Unallocated	8.8	11.6	

Standalone Financial Performance¹

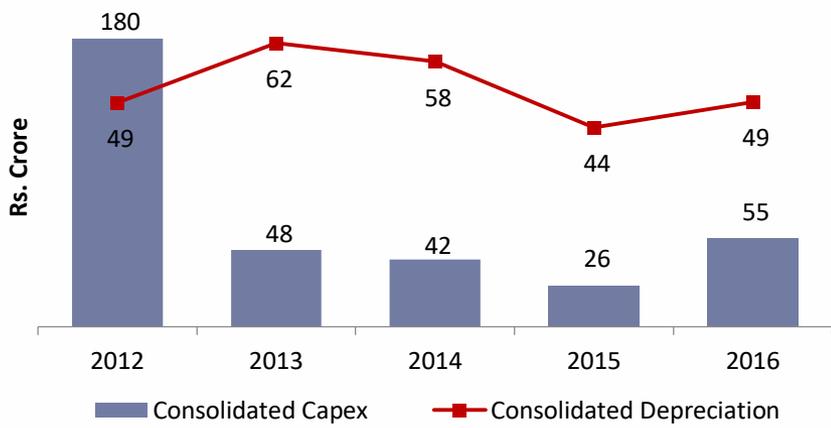
(Rs. Crore)	Q3		y-o-y Growth (%)	Q2		q-o-q Growth (%)	Nine Months		y-o-y Growth (%)
	FY2017	FY2016		FY2017	FY2016		FY2017	FY2016	
Gross Sales	351.9	364.3	(3.4)%	335.1	5.0%	978.6	1,033.4	(5.3)%	
Net Sales (including Other Operating Income)	337.6	356.6	(5.3)%	319.6	5.6%	932.4	997.4	(6.5)%	
Operating Profit (EBITDA) ²	49.3	49.9	(1.2)%	36.1	36.6%	113.7	152.0	(25.2)%	
<i>Margin (%)</i>	14.6%	14.0%		11.3%		12.2%	15.2%		
Interest Expense	2.1	1.3	65.9%	1.8	17.6%	5.4	5.6	(3.7)%	
Depreciation	9.6	11.1	(13.8)%	9.7	(0.6)%	29.0	33.5	(13.4)%	
Profit Before Tax	37.5	37.5	0.2%	24.6	52.6%	79.3	112.9	(29.8)%	
Net Profit	23.4	22.9	1.9%	15.9	46.7%	50.3	76.1	(33.9)%	
<i>Margin (%)</i>	6.9%	6.4%		5.0%		5.4%	7.6%		
Earnings Per Share	1.20	1.17	1.9%	0.82	46.7%	2.58	3.89	(33.9)%	

Notes:

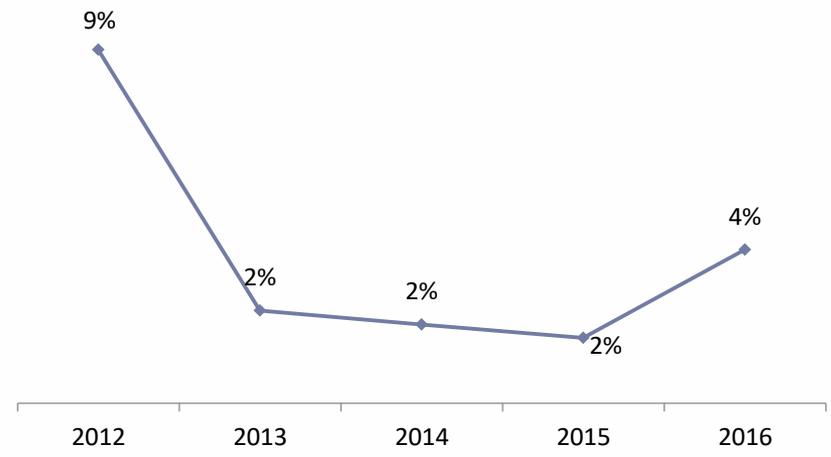
1. Financials as per IND-AS
2. Operating Profit includes Other Income
3. All margins calculated as a percentage of Net Sales (including Other Operating Income)

Capex and Depreciation Trends

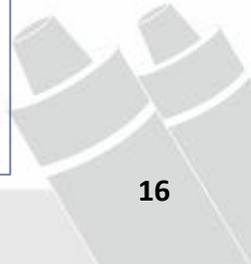
Capex and Depreciation Trend



Capex to Sales Ratio

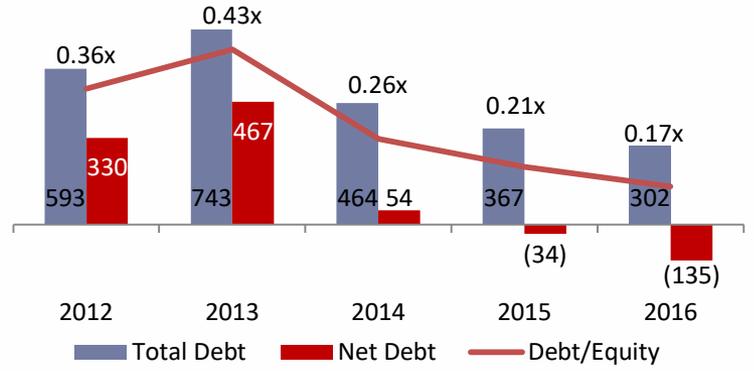


- ❖ Timely and efficient investments primarily in brownfield projects
- ❖ Increased capex in FY 2012 is primarily due to Durgapur expansion and capital work in progress
- ❖ Annual maintenance capex estimated at approximately Rs. 25-30 Crore
- ❖ Durgapur plant expansion of 20K MT has been completed at a capital cost of Rs. 275 Crore, funded through internal accruals and borrowings

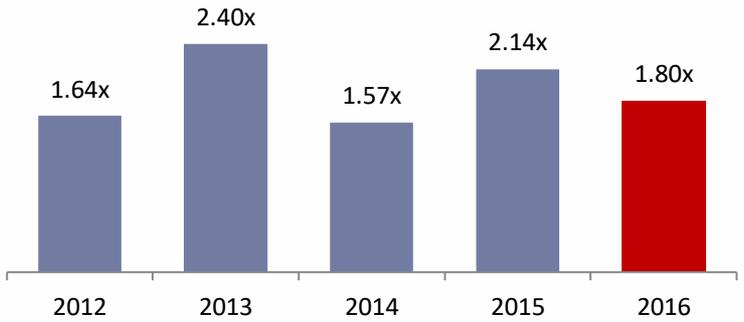


Conservative Leverage Profile

Total Debt and Debt/Equity



Debt/EBITDA



Agency	Instrument	Rating	Comment
ICRA	Short-Term Funds	A1+	Indicates highest-credit-quality rating to short term debt instruments. Instruments rated in this category carry the lowest credit risk in short term
ICRA	Long-Term Funds	AA+	Indicates high-credit-quality rating. The rated instrument carries low credit risk

- ❖ Increase in Debt/Equity from 0.36x in FY2012 to 0.43x in FY2013 was due to working capital requirements along with expansion at Durgapur
- ❖ Debt/Equity reduced to 0.17x in FY2016 due to better working capital management
- ❖ As on March 31, 2016, total debt of Rs. 302 Crore, cash & cash equivalent of Rs. 437 Crore and net cash of Rs. 135 Crore on a consolidated basis
- ❖ Consistent cash flows to support on-going capex requirements and provide operational flexibility

Note:
1. Above financials are consolidated

Clearly Defined Group Strategy

Management Focused on Delivering a Sustainable Revenue Growth, EBITDA Margin and ROE

Outlook

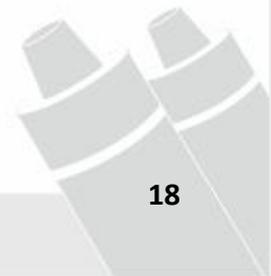
- Aspire to be amongst top 3 players
- To further improve penetration in untapped markets
- Enhance brand visibility globally through an international stock listing

Strategic Initiatives

- Grow capacity and explore opportunities in other low cost locations
- Enhance higher value products in sales mix
- Grow graphite electrodes, equipment & specialty products into global businesses

Present

- Multi country location
- One of the largest global producers
- Strong brand equity
- Dominant in India and selected global markets
- Global presence in impervious graphite electrodes and specialty carbon



Near Term Strategic Plan

Graphite and Carbon

Strategically established new eco-friendly facilities with **advanced technology** and **greater energy efficiency**

Well positioned to **benefit from the growing demand** for graphite electrode in the medium term globally. Recent imposition of safeguard duties and MIP on graphite electrodes from China expected to provide impetus to demand in India

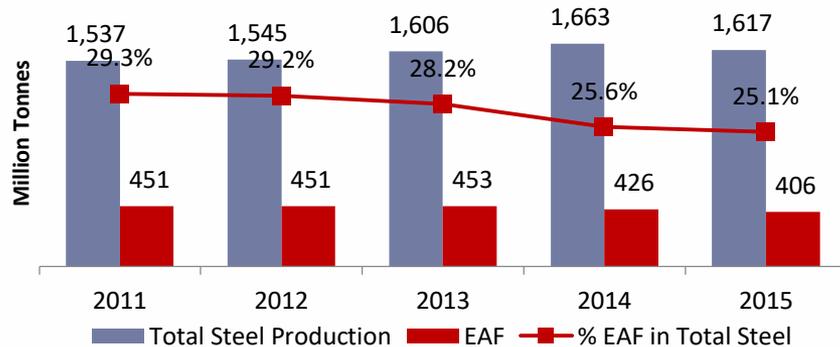
Use **low cost base** and **high product quality** to expand global reach and customer base at competitive prices

Enhance presence in value added graphite products and grow impervious graphite equipment business

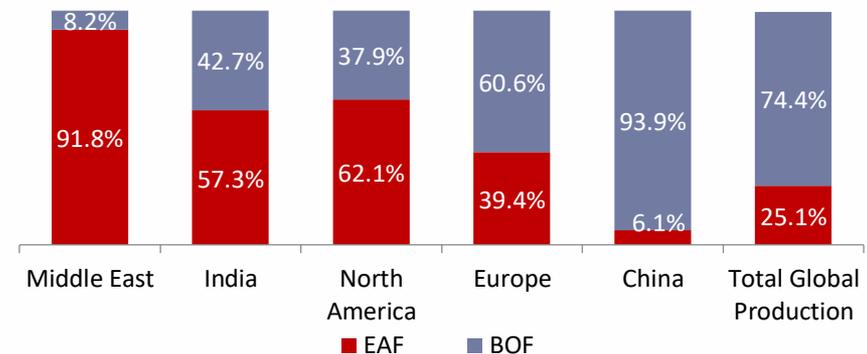
Focused on **preserving margins** through proactively managing production schedules and **cost control initiatives** across facilities

Global Steel and Graphite Electrode Industry

Global Steel Production



Process Wise Steel Production 2015



- ❖ EAF route of manufacturing enjoys several advantages over traditional BOF route:
 - Lower capital investment
 - Lower break-even tonnage
 - Flexibility in locating plants closer to consumption
 - Less polluting than integrated steel plants
- ❖ India has been increasing its market share of graphite electrode production steadily over the past few years due to relatively low cost of operations

Over the years, prices of Iron Ore and Coal, the raw materials used in BOF have declined considerably

Iron Ore



Coal



Scrap



❖ The prices of iron ore and coal (used in BOF production) have declined more than scrap (used in EAF production), leading to a temporary shift to BOF

Source: FactSet

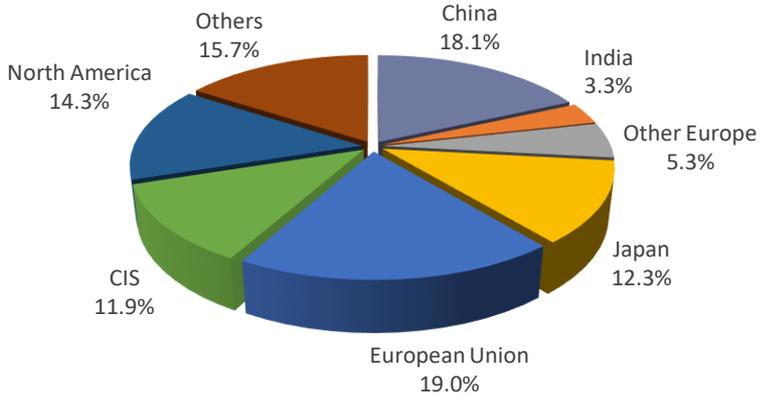
*Australian Thermal Coal Fob Newcastle/Port Kembla (\$/MT)

Iron Ore Swap Near Term (NYM \$/t)

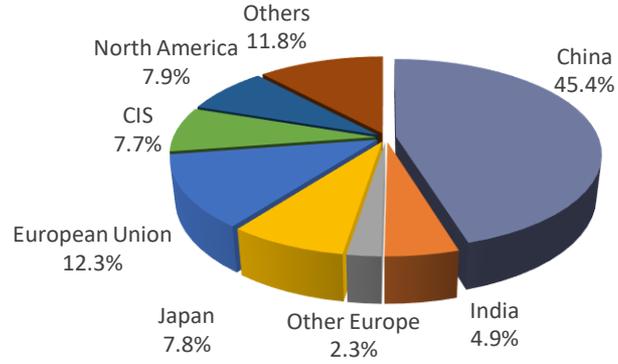
Steel Scrap, No. 1 Heavy, \$/T

Over the years, China became the biggest crude steel producer with a 50.3% share in 2015 vs 45.4% in 2010 & 18.1% in 2001

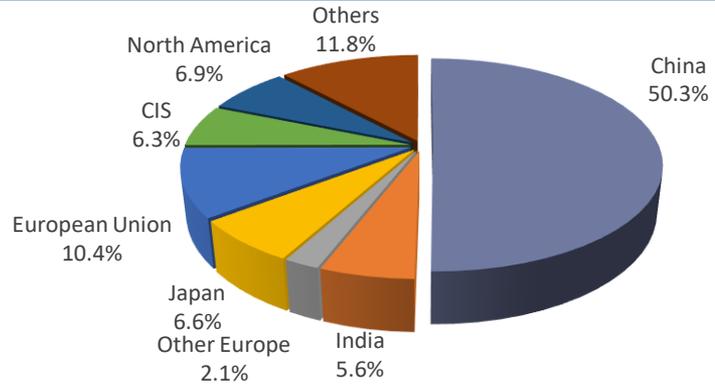
Global Steel Production 2001



Global Steel Production 2010

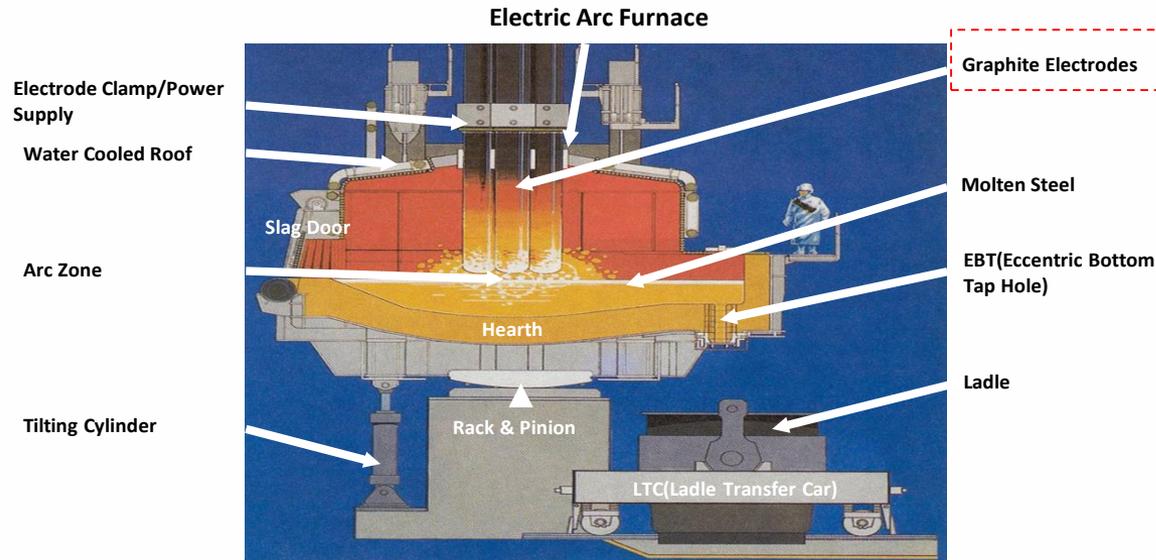


Global Steel Production 2015



Overcapacities in China have led to subsidized exports which have been adversely affecting global production

EAF Steel Production Process



- ❖ An electric arc furnace (EAF) is a furnace that heats charged material by means of an electric arc
- ❖ Arc furnaces range in size from small units of approximately one tonne capacity (used in foundries for producing cast iron products) up to about 400 tonne units used for secondary steelmaking
- ❖ Electric arc furnace temperatures can be up to 1,800 degrees Celsius and the electrode tip & arc temperatures can go as high as 3,000-4,000 degrees Celsius
- ❖ Graphite Electrodes are consumed in an electric arc furnace
 - An electrode typically lasts for 22-30 heats /batches or 10 hours
 - A single graphite electrode can weigh over 2 tonnes
 - Electrode demand is driven by the production of steel through the EAF method

- ❖ Five largest global players account for approximately 75% of the global capacity*
 - Most of this capacity is in high cost locations including US, Europe and Japan
- ❖ The technology involved in manufacturing ultra high power electrodes is restricted to few major players, including Graphite India, and is a major reason of the industry's entry barrier
- ❖ Graphite electrodes constitute approximately 2% of the steel cost of production in the EAF method
- ❖ There are no substitutes for graphite electrodes in the EAF steel making process
- ❖ The graphite electrode industry is not sensitive to steel prices but depends on the volume of steel production through the EAF method
- ❖ New investments in EAF steel mills are characterised by large furnace capacities requiring large diameter UHP which is expected to increase the demand for UHP Electrodes
- ❖ Closure of unprofitable electrode manufacturing facilities is expected to provide relief in the medium to long run

* Global capacity excludes Chinese producers

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