

8 December 2020

Graphite, India

Graphite electrode market dynamics to improve; upgrading to a Buy

Weak demand and heightened inventory led to Graphite India's (GRIL) subdued realisations and lower sales volumes (last six quarters). We expect it to benefit, however, from coming tailwinds: 1) A pick-up in steel production globally (up 2.3% y/y in Q2 FY21); 2) the recent rebound in graphite-electrode (GE) prices in China; 3) expectations of complete de-stocking of electrode stocks in the next two quarters and 4) benign raw material prices. Q2 FY21 capacity utilisation improved sequentially from 42% to 72%, which, we believe would continue. Hence, we turn positive on the company, thereby upgrading our rating from a Sell to a Buy, with a revised target price of Rs373 (8x FY22 EV/EBITDA), earlier Rs212.

GE inventory to be exhausted in two quarters: Weak demand from user industries, China's electrode-dumping and huge stocks in the system led to GE realisations (\$4,185/tonne in Q2 FY21) coming under pressure (from \$12,940 in FY19). GRIL management spoke of complete de-stocking of system-wide electrode inventory in the next two quarters. We believe this should help improve demand for electrodes and, thereby, realisations.

Pick-up in global steel production: After sliding for four quarters in a row, global steel production rebounded in Sep'20, growing 2.3% y/y, 10.3% q/q. The World Steel Association forecasts steel demand to contract 2.4% to 1,725m tons due to Covid'19, while increase 4.1% y/y to 1,795m tons in 2021. With ~28% of global steel produced in electric-arc furnaces, we expect the fortunes of GE manufacturers to turn around.

Valuations: We expect the company to benefit from the pick-up in steel production and higher realisations in electrodes. We expect it to report an EBITDA loss in FY21 and a Rs6.6bn EBITDA Profit in FY22. GRIL is trading at 4.7x FY22e EV/EBITDA. We recommend a Buy on the stock, with a higher target price of Rs373 (8x FY22 EV/EBITDA). **Risk:** Less-than-expected demand for electrodes would cap prices, leading to lower realisations.

Key financials (YE Mar)	FY18	FY19	FY20	FY21e	FY22e
Sales (Rs m)	32,660	78,579	30,936	20,574	30,981
Net profit (Rs m)	10,320	33,956	2,040	-1,191	6,027
EPS (Rs)	52.8	176.8	10.5	-6.1	30.8
PE (x)	13.7	2.5	25.7	NA	8.7
EV / EBITDA (x)	9.3	1.3	47.4	NA	4.7
PBV (x)	5.2	1.6	1.2	1.2	1.1
RoE (%)	45.0	85.4	4.1	-2.6	12.9
RoCE (%)	55.8	115.8	3.7	-2.8	16.2
Dividend yield (%)	2.3	12.3	1.2	-	2.9
Net debt / equity (x)	-0.3	-0.4	-0.3	-0.5	-0.4

Source: Company, Anand Rath Research

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Rating: **Buy**

Target Price: Rs373

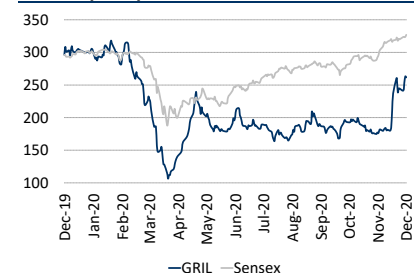
Share Price: Rs269

Key data	GRIL IN / GRPH.BO
52-week high / low	Rs330 / 103
Sensex / Nifty	45427 / 13356
3-m average volume	\$3.6m
Market cap	Rs51bn / \$693.1m
Shares outstanding	195m

Shareholding pattern (%)	Sep-20	Jun-20	Mar-20
Promoters	65.3	65.3	65.3
- of which, Pledged	-	-	-
Free float	34.7	34.7	34.7
- Foreign institutions	6.8	9.9	10.3
- Domestic institutions	70.2	68.2	68.2
- Public	23.0	21.9	21.5

Estimates revision (%)	FY21e	FY22e
Sales	(36.4)	(8.7)
EBITDA	NA	23.9
EPS	NA	8.6

Relative price performance



Source: Bloomberg

Ashwani Sharma

Research Analyst

Rahul Jain

Research Associate

Quick Glance – Consolidated Financials and Valuations

Fig 1 – Income statement (Rs m)

Year-end: Mar	FY18	FY19	FY20	FY21e	FY22e
Volumes (tonnes)	83,300	84,770	54,390	56,595	75,215
Net revenues	32,660	78,579	30,936	20,574	30,981
Growth (%)	122.5	140.6	-60.6	-33.5	50.6
Material cost	7,719	14,859	19,781	13,513	13,336
Employee & other exps.	10,500	13,488	10,355	9,876	11,060
EBITDA	14,442	50,232	799	-2,814	6,585
EBITDA margins (%)	44.2	63.9	2.6	-13.7	21.3
- Depreciation	516	625	515	519	533
Other income	885	2,097	1,744	1,953	2,213
Interest expenses	81	116	178	107	117
PBT	14,730	51,589	1,851	-1,486	8,148
Effective tax rates (%)	29.9	33.1	-13.9	25.0	25.0
+ Associates / (Minorities)	-	-30	-69	-76	-84
Net income	10,320	33,956	2,040	-1,191	6,027
Adjusted income	10,320	34,504	2,040	-1,191	6,027
WANS	195	195	195	195	195
FDEPS (Rs / sh)	52.8	176.8	10.5	-6.1	30.8
EPS growth (%)	1,261.6	234.8	-94.1	NA	NA

Fig 3 – Cash-flow statement (Rs m)

Year-end: Mar	FY18	FY19	FY20	FY21e	FY22e
PBT	14,730	51,040	1,851	-1,486	8,148
+ Non-cash items	-42	-1,017	-598	-799	-942
Oper. prof. before WC	14,688	50,023	1,254	-2,285	7,206
- Incr. / (decr.) in WC	2,638	10,662	-2,907	-7,902	3,953
Others incl. taxes	4,780	16,413	65	-421	2,037
Operating cash-flow	7,270	22,949	4,095	6,037	1,216
- Capex (tang. + intang.)	-619	-335	-428	-176	-306
Free cash-flow	6,651	22,614	3,668	5,861	910
Acquisitions	-	-	-	-	-
- Div. (incl. buyback & taxes)	3,321	10,732	645	-	1,507
+ Equity raised	-	-	-	-	-
+ Debt raised	130	874	560	-1,000	500
- Fin investments	5,244	12,797	-5,678	3,740	1,017
- Misc. (CFI + CFF)	-1,825	-3,563	8,781	-771	-896
Net cash-flow	41	3,523	480	1,892	-218

Source: Company, Anand Rathi Research

Fig 5 – Price movement



Fig 2 – Balance sheet (Rs m)

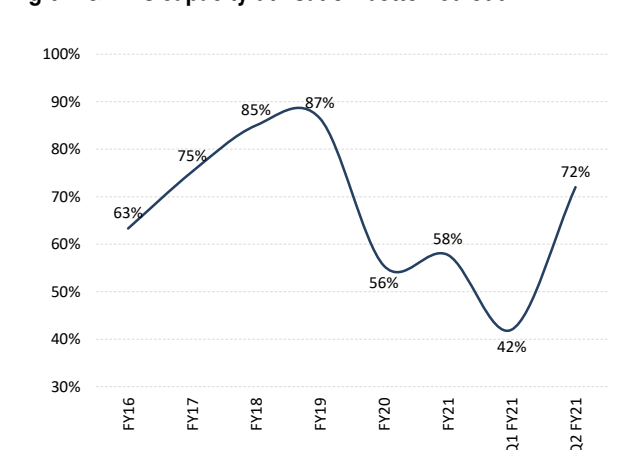
Year-end: Mar	FY18	FY19	FY20	FY21e	FY22e
Share capital	391	391	391	391	391
Net worth	27,318	53,506	45,543	44,352	48,872
Debt	2,722	3,596	4,156	3,156	3,656
Minority interest	-	-	-	-	-
DTL / (Assets)	451	1,092	770	819	819
Capital employed	30,491	58,194	50,468	48,326	53,347
Net tangible assets	7,002	6,620	6,356	6,013	5,785
Net intangible assets	14	19	17	18	18
Goodwill	-	-	-	-	-
CWIP (tang. & intang.)	81	168	347	347	347
Investments (strategic)	1,750	5,981	6,551	7,251	7,751
Investments (financial)	10,328	19,915	14,117	17,617	18,617
Current assets (ex cash)	17,578	32,235	23,835	15,901	22,108
Cash	556	4,079	4,559	6,451	6,233
Current liabilities	6,818	10,821	5,313	5,270	7,512
Working capital	10,760	21,413	18,522	10,631	14,596
Capital deployed	30,491	58,194	50,468	48,326	53,347
Contingent liabilities	852	1,216	-	-	-

Fig 4 – Ratio analysis

Year-end: Mar	FY18	FY19	FY20	FY21e	FY22e
P/E (x)	13.7	2.5	25.7	NA	8.7
EV / EBITDA (x)	9.3	1.3	47.4	NA	4.7
EV / Sales (x)	4.1	0.8	1.2	1.5	1.0
P/B (x)	5.2	1.6	1.2	1.2	1.1
RoE (%)	45.0	85.4	4.1	-2.6	12.9
RoCE (%) - after tax	55.8	115.8	3.7	-2.8	16.2
RoIC (%) - after tax	61.8	148.3	8.6	-4.9	32.8
DPS (Rs / sh)	17.0	55.0	3.3	-	7.7
Dividend yield (%)	2.3	12.3	1.2	-	2.9
Dividend payout (%) - incl. DDT	32.2	31.6	31.6	-	25.0
Receivables (days)	92	40	48	48	43
Inventory (days)	88	100	185	180	175
Payables (days)	83	83	23	29	48
FCF : PAT%	64.5	65.5	179.8	NA	15.1
EBITDA per tonne	2,688	8,453	208	(919)	1,869

Source: Company, Anand Rathi Research

Fig 6 – GRIL's capacity utilisation bottomed out



Quarterly Highlights

Fig 7 – Quarterly trend

(Rs m)	Q1 FY19	Q2 FY19	Q3 FY19	Q4 FY19	Q1 FY20	Q2 FY20	Q3 FY20	Q4 FY20	Q1 FY21	Q2 FY21	Y/Y (%)	Q/Q (%)
Sales	17,770	20,080	15,620	13,900	8,970	8,330	5,970	5,480	3,500	4,730	(43.2)	35.1
Material cost	2,820	3,580	4,200	4,090	3,920	4,890	8,810	3,560	2,870	3,140	(35.8)	9.4
Employee cost	470	620	580	550	530	610	460	450	400	460	(24.6)	15.0
Power & fuel	800	840	850	800	770	670	460	470	360	630	(6.0)	75.0
Other expenditure	680	1,370	1,310	1,750	1,150	990	1,160	790	590	850	(14.1)	44.1
EBITDA *	13,000	13,670	8,680	6,710	2,600	1,170	(4,920)	210	130	(350)	NA	NA
% of sales											bps y/y	bps q/q
Material cost	15.9	17.8	26.9	29.4	43.7	58.7	147.6	65.0	82.0	66.4	768 bps	-1562 bps
Employee cost	2.6	3.1	3.7	4.0	5.9	7.3	7.7	8.2	11.4	9.7	240 bps	-170 bps
Power & Fuel	4.5	4.2	5.4	5.8	8.6	8.0	7.7	8.6	10.3	13.3	528 bps	303 bps
Other expenditure	3.8	6.8	8.4	12.6	12.8	11.9	19.4	14.4	16.9	18.0	609 bps	111 bps
EBITDA margins *	73.2	68.1	55.6	48.3	29.0	14.0	(82.4)	3.8	3.7	(7.4)	NA	NA
(Rs m)											Y/Y (%)	Q/Q (%)
Other income	280	420	640	630	540	430	420	180	670	470	9.3	(29.9)
Depreciation	110	120	110	220	110	110	110	110	110	110	0.0	0.0
Interest	10	30	30	40	50	40	40	40	20	20	(50.0)	0.0
Profit before Tax	13,160	13,940	9,180	7,080	2,980	1,450	(4,650)	240	670	(10)	NA	NA
Tax	4,580	4,820	3,090	2,260	1,030	(220)	(1,100)	(10)	(50)	(60)	NA	NA
Reported PAT	8,580	9,120	6,090	4,820	1,950	1,670	(3,550)	250	720	50	(97.0)	(93.1)
Adjusted PAT	8,580	9,120	6,090	4,820	1,950	1,670	(3,254)	250	720	50	(97.0)	(93.1)
EPS (Rs)	44.0	46.8	31.2	24.7	10.0	8.6	(16.7)	1.3	3.7	0.3	(97.0)	(93.1)

Source: Company, Anand Rathi Research.

Note: * Adjusted for NRV of Rs850m in Q1 FY21

Fig 8 – Realisations to improve, hereon

	Q4 FY18	Q1 FY19	Q2 FY19	Q3 FY19	Q4 FY19	Q1 FY20	Q2 FY20	Q3 FY20	Q4 FY20	Q1 FY21	Q2 FY21
Capacity utilisation %	100	100	100	86	92	84	71	54	50	42	72
Production (tonne)	20,000	19,600	20,400	17,200	18,400	16,800	14,200	10,800	10,000	8,400	14,400
Sales realizations (\$ / tonne)	9,000	13,155	13,775	12,480	10,403	7,388	8,633	7,594	7,371	5,245	4,185
EBITDA / tonne (Rs)	5,223	9,914	9,573	7,108	5,136	2,226	1,175	(6,453)	294	(1,158)	(582)

Source: Company, Anand Rathi Research

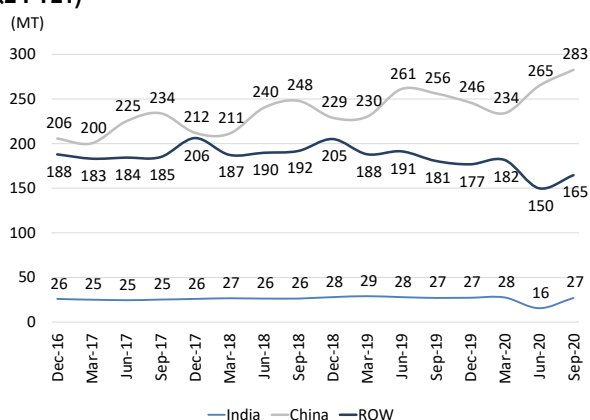
Lower volumes, weak realisations hurt Q2 performance

Graphite India's Q2 FY21 standalone revenue was down a huge 43% y/y to Rs4.7bn. However, sequentially it significantly improved (35%). It reported a Rs350m EBITDA loss, against Rs1.2bn EBITDA profit a year ago and Rs130m the quarter prior (adj. for an Rs850m Net realisable Value (NRV) loss). Capacity utilisation improved a percentage point y/y to 72%. Lower sales volumes and realisations, however, cut into its Q2 performance. Higher other income and lower interest cost led to a loss before tax of just Rs10m. On a Rs60m deferred tax credit, Q2 profit was Rs50m.

China's Blue Sky policy implementation is on track, though slow

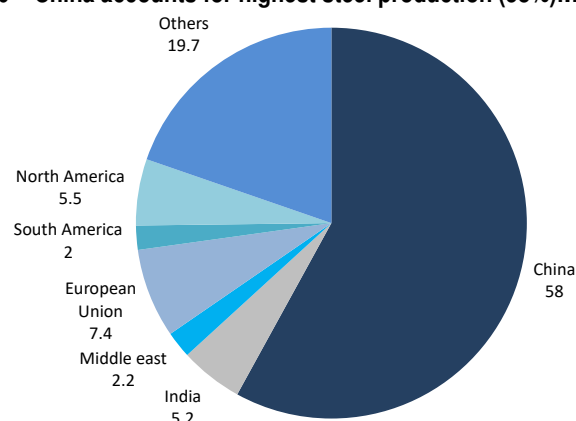
China produces more than 50% of the world's steel. In Sep'20, it committed to becoming carbon neutral by 2060, aiming at its CO₂ emissions peaking before 2030. It plans to convert 20% of its 1bn tonne annual steel production to the EAF method by 2025, from 10-11% now. Due to delays in converting its blast furnaces (BF) to electric-arc furnaces, its surplus production of GE's was being dumped in India. We expect imports of graphite electrodes from China to slow gradually as its Blue Sky policy implementation picks up. This should benefit graphite electrode suppliers like Graphite India.

Fig 9 – Pick-up in steel production globally (up 2.3% y/y in Q2 FY21)



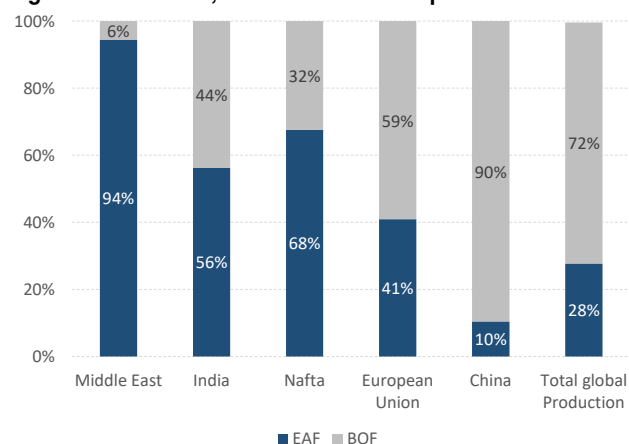
Source: Company, Anand Rathi Research

Fig 10 – China accounts for highest steel production (58%)...



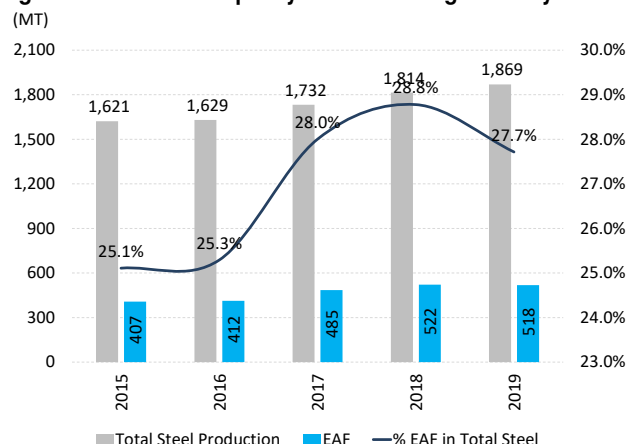
Source: Company, Anand Rathi Research

Fig 11 – ...however, has the lowest EAF production

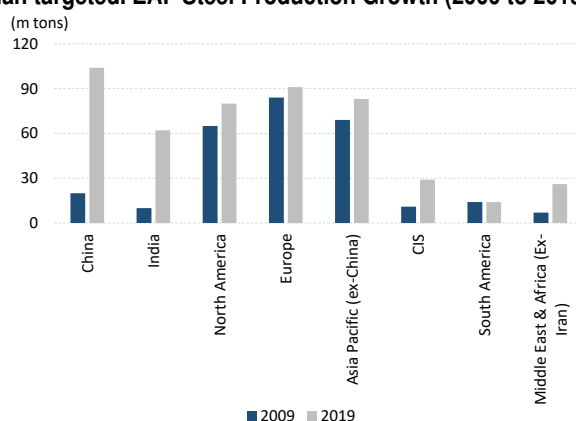


Source: Company, Anand Rathi Research

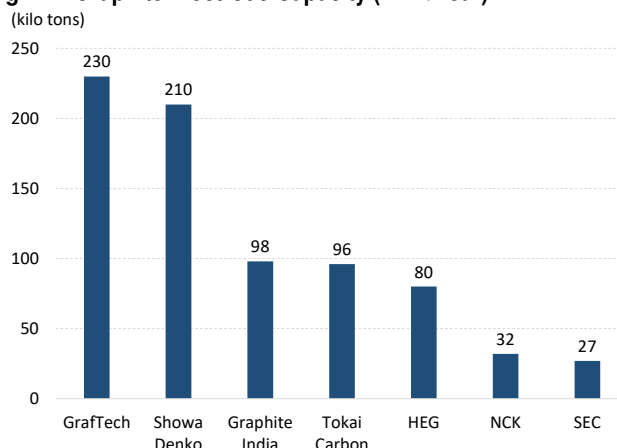
Fig 12 – Global EAF capacity to increase significantly



Source: Company, Anand Rathi Research

Fig 13 – China EAF-route steel production is 10-11%, lower than targeted. EAF Steel Production Growth (2000 to 2019)

Source: World Steel Association, Anand Rathi Research

Fig 14 – Graphite Electrode Capacity (KMT/Year)

Source: Company, Anand Rathi Research

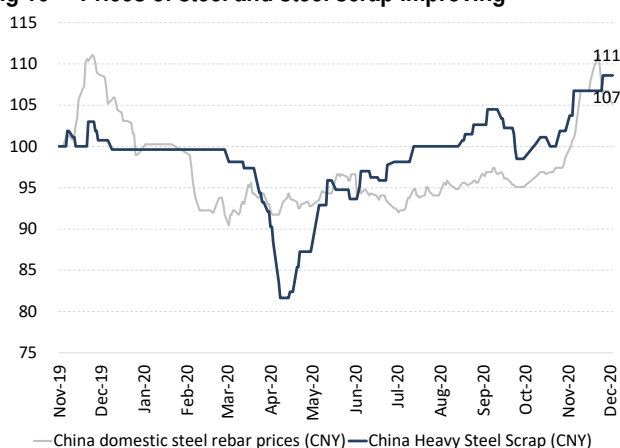
Fig 15 – Blast Furnace v/s Electric Arc Furnace: Requirements to produce 1000 kg of crude steel

Blast - Furnace route	Electric Arc Furnace route
1,370 kg of iron order	710 kg of steel scrap
780 kg of coal	586 kg of iron ore
270 kg of limestone	150 kg of coal
125 kg of steel scrap	88 kg of limestone
	2.3 GJ of electricity

Source: World Steel Association

Higher electrode prices in some markets; will they persist, however

Prices of steel globally have recently increased. Prices of steel scrap, however, have not risen commensurately. Production of steel through the electric-arc-furnace method has increased in China to benefit from the higher gross margins available through this method. (In China, rebars manufactured through the EAF method obtained gross margins of ~Yuan50/tonne a month ago; now they command ~Yuan300/tonne.) Hence, with increased steel production by the EAF method, demand for, and sales of, GE's have increased. Besides, certain manufacturers in some regions have raised graphite prices following greater demand for such electrodes. Whether such higher electrode prices persist would be key to monitor in the coming two quarters.

Fig 16 – Prices of steel and steel scrap improving

Source: Bloomberg

Fig 17 – Graphite electrode prices have started rebounding

Source: Bloomberg

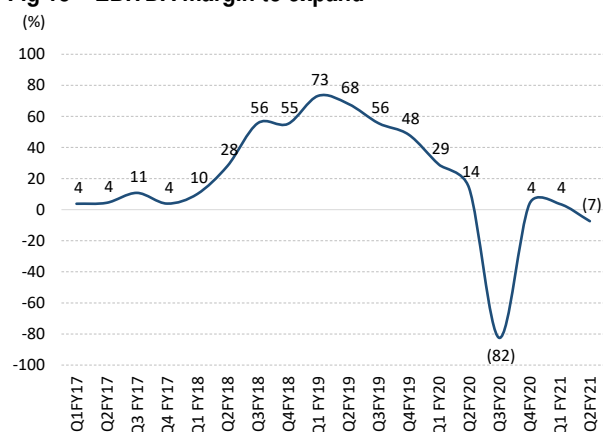
Needle coke prices to stay soft in medium term

In 2018, demand for GEs rose significantly, leading to a considerable spurt in prices. Needle-coke prices, however, had not risen in tandem with GE prices (the lag effect). Thus, GE manufacturers then enjoyed higher gross margins, chiefly as needle-coke contracts had already been entered into.

A similar thing is occurring now. Production in China by the electric-arc furnace method has increased, leading to greater demand for GEs. Hence, GE prices have started climbing. However, with huge needle-coke stocks and as manufacturers have contracted for needle coke at lower prices that could last six months, we expect needle-coke prices to hold for a while. Thus, the lag in movement of GE prices and needle-coke prices can be 6-12 months.

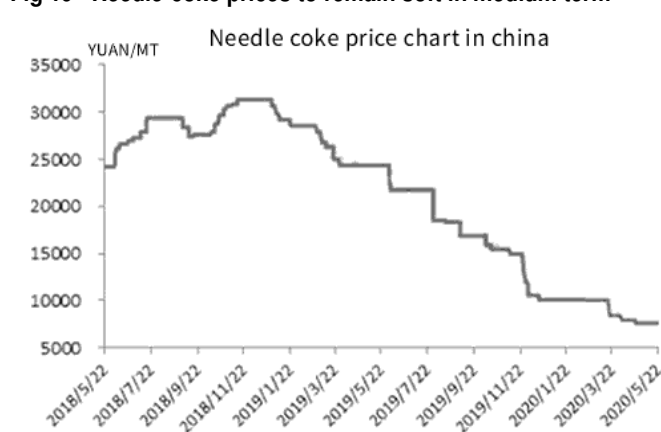
In the last one year, also, various needle-coke companies globally have invested in greenfield/brownfield expansions. Hence, competition among needle-coke producers would intensify, keeping prices competitive. Therefore, we believe needle-coke prices will be soft in the near to medium term compared to the rise in prices of GEs.

Fig 18 – EBITDA margin to expand



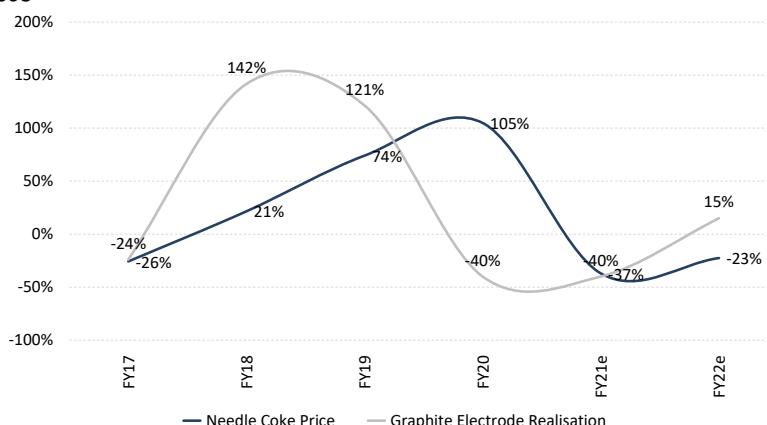
Source: Company, Anand Rathi Research Note: Adjusted for NRV of Rs850m in Q1 FY21

Fig 19 – Needle-coke prices to remain soft in medium term



Source: Industry

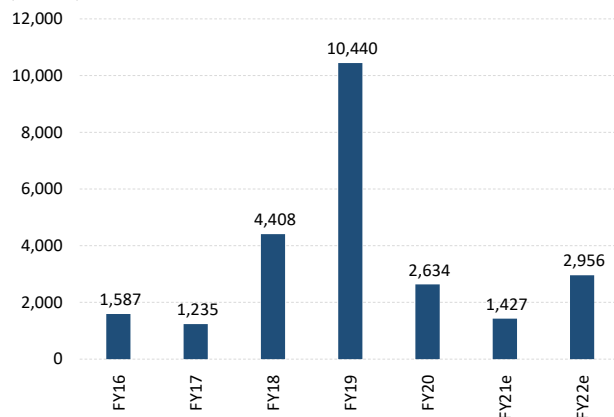
Fig 20 – Growth trend: Graphite India electrode realisations vs. Needle-coke prices



Source: Company, Anand Rathi Research

Fig 21 – Spread to reach near \$3,000/tonne by FY22e

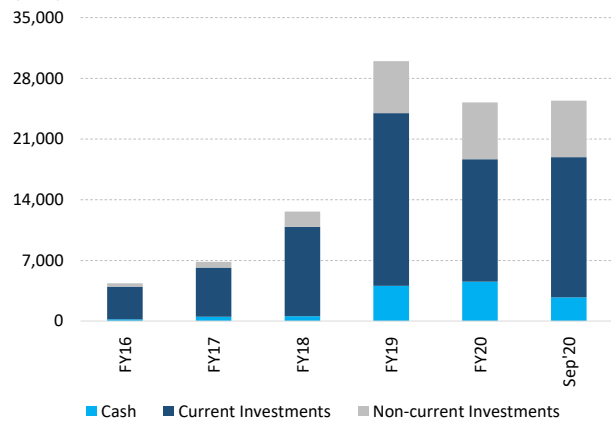
(\$/tonne)



Source: Company, Anand Rathi Research

Fig 22 – Cash + Investments is ~48% of M.cap.

(Rs m)



Source: Company, Anand Rathi Research

Valuation

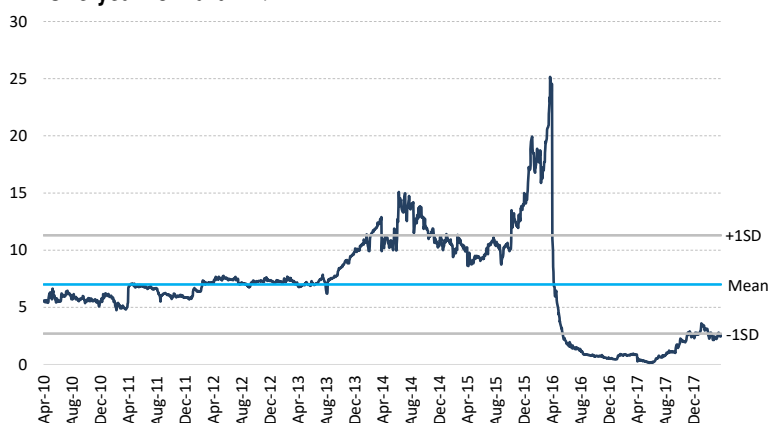
Being the third-largest manufacturer globally and the largest in its home market (with capacity of 98,000 tonnes), we expect Graphite India to benefit from a pick-up in steel production and higher realisations in electrodes. Q2 FY21 realisation stood at \$4,185/tonne, which we believe is likely to trend upward with mounting demand for graphite electrodes. As on Sep'20, it has consol. Cash plus Investments (Non-Current + Current) of Rs25.4bn (~48% of M.cap). GE dynamics are changing and according we have raised EBITDA estimates, factoring lower raw material prices. We expect an EBITDA loss in FY21 and Rs7bn EBITDA in FY22. Based on this, we have upgraded our rating on the stock from a Sell to a Buy, with a higher target price of Rs373 (8x FY22 EV/EBITDA), earlier Rs212. (Peak one year forward EV/EBITDA was 25x).

Fig 23 – Change in estimates

Rs m	Old Estimates		New Estimates		Change (%)	
	FY21e	FY22e	FY21e	FY22e	FY21e	FY22e
Revenue	32,354	33,919	20,574	30,981	(36.4)	(8.7)
EBITDA	4,418	5,316	-2,814	6,585	NA	23.9
EPS (Rs)	23.8	28.4	(6.1)	30.8	NA	8.6

Source: Anand Rath Research

Fig 24 – One-year-forward EV/EBITDA



Source: Company, Anand Rath Research

Key risks

- Any less-than-expected demand for electrodes would cap prices, leading to lower realisations.
- Delay in converting plants in China from blast furnaces to electric-arc furnaces.
- Greater production of GEs by China, leading to dumping in India and other markets.

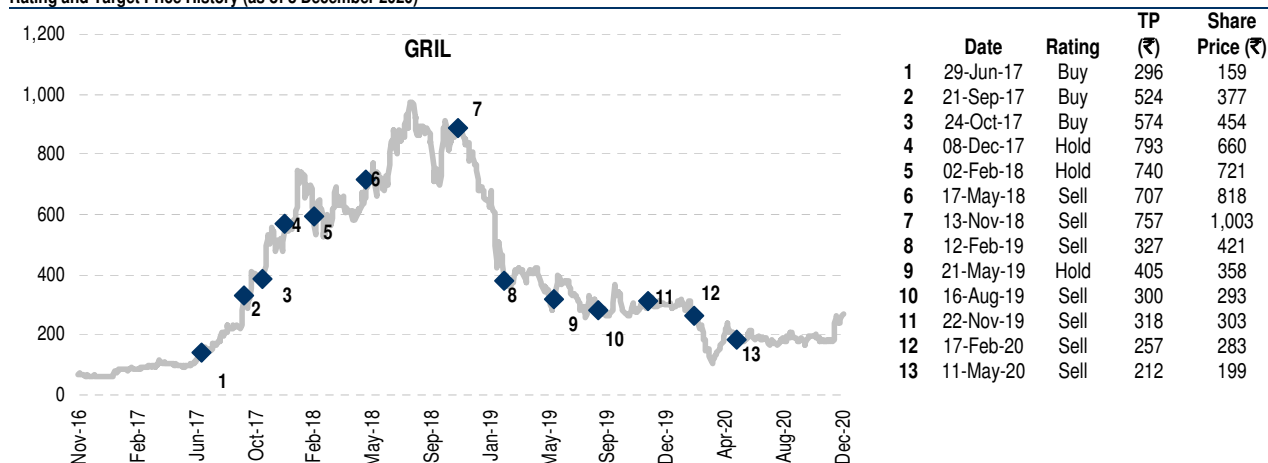
Appendix

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Rating and Target Price History (as of 8 December 2020)



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Ratings Guide (12 months)

	Buy	Hold	Sell
Large Caps (>US\$1bn)	>15%	5-15%	<5%
Mid/Small Caps (<US\$1bn)	>25%	5-25%	<5%

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