

June 28, 2023

Strategic fit, better times lies ahead...

About the stock: HEG is one of the leading graphite electrode manufacturers in India and is a key exporter of the same in global markets.

- HEG has world's largest single site graphite electrode manufacturing plant of 80,000 tonne capacity at Mandideep in Madhya Pradesh
- HEG also has a captive power generation capacity of ~80 MW (two thermal power plants and one hydro power plant).

Key Investment thesis:

- **Global decarbonization trend augurs well for HEG:** Globally, Steel manufacturers are shifting towards EAF route of steelmaking, which is expected to drive sustainable demand for graphite electrodes in the long-term horizon. A point in case is US wherein over the last couple of years, there has been several announcements by large steel companies for new steel capacity addition through the EAF route. In US, of the ~25 million tonnes (MT) of EAF route of steelmaking capacity have been announced of which some capacities are already operational while balance is expected to be operational in the medium term. Of the 25 MT announced EAF capacity in US, ~7 MT has already come on stream and balance 18 MT would be operational in next 2 years, thereby auguring well for Graphite Electrode demand, thereby benefitting HEG.
- **Capacity Expansion augurs well:** HEG has world's largest single site Graphite Electrode plant under one roof with a capacity of 80000 tonnes per annum for a long time. Few years back, HEG had announced capacity expansion plans and is currently on the verge of completing expansion from 80,000 tonnes per annum to 1,00,000 tonnes per annum by June 2023 (wherein major part of the new capacity is already commissioned). Going forward on the expanded capacity of 1,00,000 tonnes, we have assumed capacity utilisation of ~65% for FY24E and ~70% for FY25E.

Rating and Target Price

- We have assigned **BUY** rating on HEG, on the back of trend in shift globally towards EAF route of steelmaking which augurs well for graphite electrode demand. Also, HEG is on the verge of commissioning its capacity expansion plans which will aid volume growth going forward.
- We have valued HEG at 6.5x FY25E EV/EBITDA and arrive at a target price of ₹ 2025.
- HEG's double digit return ratios & Cash positive B/S provide margin of safety



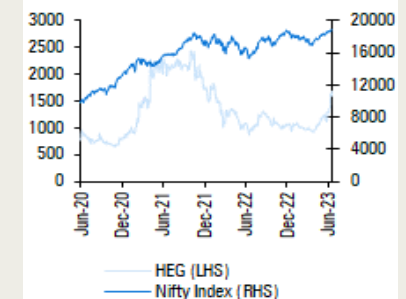
Particulars

Particulars	Amount
Market Cap (In ₹ crore)	6,195
Debt in ₹ crore (FY23)	741
Cash & Cash Eq. (FY23) (in ₹ crore)	806
EV	₹ 6129 crore
52 Week H / L (₹)	1747 / 806
Equity Capital (₹)	38.6 crore
Face Value	₹ 10

Shareholding pattern

(in %)	Jun-22	Sep-22	Dec-22	Mar-23
Promoter	55.1	55.1	55.1	55.8
FIs	6.8	5.7	5.0	6.3
DIs	8.4	8.5	6.7	6.3
Others	29.6	30.7	33.2	31.7
Total	100.0	100.0	100.0	100.0

Price Chart



Key Risks

- Lower-than-expected increase in graphite electrodes realisation
- Higher-than-expected increase in operating cost

Research Analyst

Shashank Kanodia, CFA
shashank.kanodia@icicisecurities.com

Key Financial Summary

(₹ Crore)	FY20	FY21	FY22	FY23	CAGR (FY18-23)	FY24E	FY25E	CAGR (FY23-25E)
Net Sales	2,149	1,256	2,202	2,467	-2%	3,240	3,503	19%
Reported EBITDA	-6	-59	527	620	-18%	1,030	1,153	36%
Adjusted PAT	53	-25	391	456	-16%	727	814	34%
Adjusted EPS (₹)	13.8	(6.5)	101.2	118.0		188.3	210.9	
EV/EBITDA (x)	NA	NA	11.5	10.6		5.7	5.0	
RoCE (%)	1.6	(0.5)	11.9	13.0		19.0	19.5	
RoE (%)	1.6	-0.7	10.3	11.2		15.9	15.9	

Source: Company, ICICI Direct Research

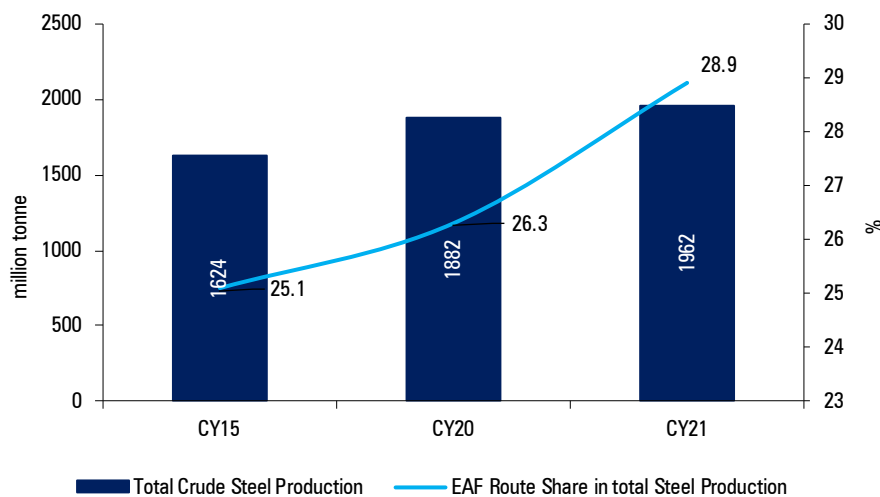
Company Background

HEG is one of world's leading producer of Graphite Electrodes. HEG has been World's Largest Single Site Graphite Electrode Plant under one roof with a capacity of 80000 tonnes per annum for a long time. HEG is on the verge of completing expansion to 100,000 tons by June 2023 (major part of the new capacity already commissioned). HEG is exporting approximately 65-70% of its production to about 35 countries around the world consistently since more than 20 years. HEG has diversified customer base wherein it is supplying large portion of production to top 20 steel companies of the world.

Investment Rationale

- Increasing Traction of EAF Route of Steel Making bodes well:** Globally, Steel manufacturers are shifting towards the Electric Arc Furnace (EAF) route of steelmaking, which is expected to drive sustainable demand for graphite electrodes in the long term. The evident focus on substantial decarbonization measures in the developed world indicates that the growth of Electric Arc Furnace (EAF) will surpass that of Blast Furnace/Basic Oxygen Furnace (BF/BOF). The EAF process is considered to be more environmentally friendly than traditional steel production methods, making it an attractive option for companies looking to reduce their carbon footprint. EAF Steel emits one fourth carbon in the environment as compared to same Steel produced by traditional Blast Furnaces. Hence shift towards EAF route of steelmaking augurs well for HEG.

Exhibit 1: Increasing share of EAF route in total crude steel production



Source: World Steel Association, ICICI Direct Research

Exhibit 2: Carbon emission and Energy Intensity (BF vs. EAF Route)

2021 CO₂ emissions and energy intensity

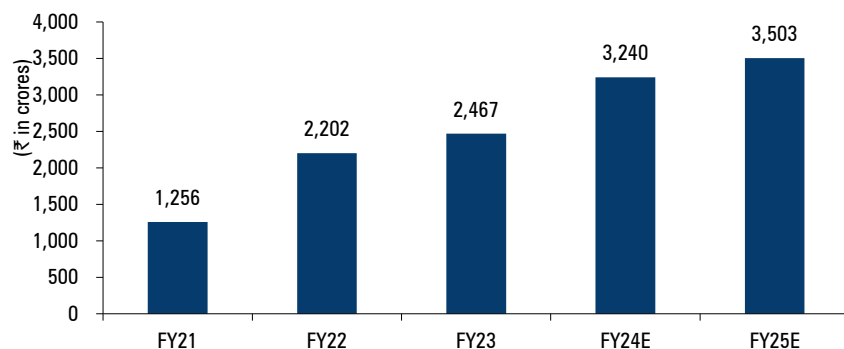
2021 data	CO ₂ emission intensity by production route	Energy intensity by production route
	tonnes CO ₂ per tonne of crude steel cast	GJ per tonne of crude steel cast
Global average	1.91	21.31
BF-BOF	2.32	24.43
Scrap-EAF	0.67	10.04

Source: Company, ICICI Direct Research

- Developing advance carbon material for Li-On battery:** HEG is also entering into Manufacturing of Graphite Anodes for Lithium-ion cells and it's allied & ancillary products through the incorporation of a subsidiary company. It is to be executed in phases with Phase 1 capex pegged at ~₹1,000 crore catering to ~10-12 GwH of cell manufacturing capacity (Sunshine sector). **We believe the step is in the right direction and bodes well for long term growth prospects at HEG. Given the likely commissioning of the said plant in CY25, we have not built the same in our estimates.**

Financial story in charts

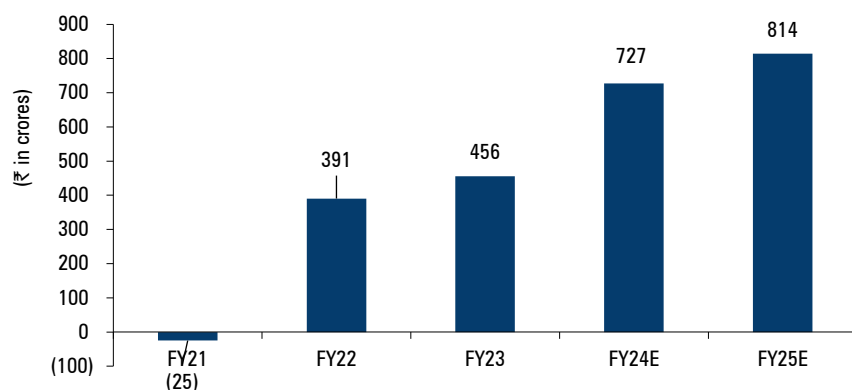
Exhibit 3: Trend in topline (In ₹ crore)



We expect topline to grow at a CAGR of 19% during FY23-25E

Source: Company, ICICI Direct Research

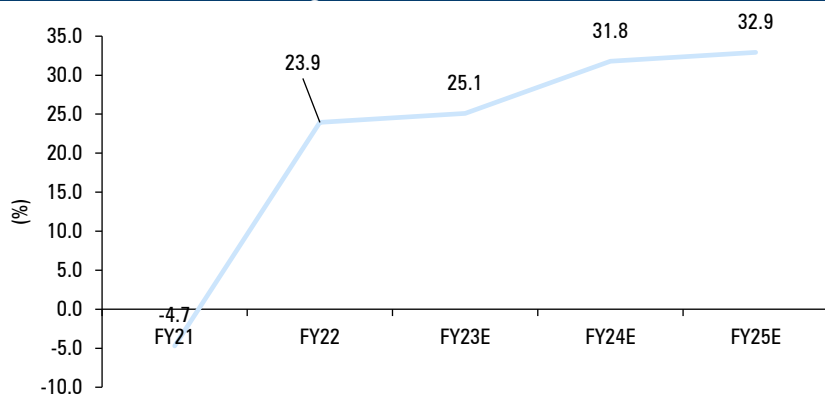
Exhibit 4: Trend in PAT (in ₹ crore)



We expect standalone PAT to grow at a CAGR of 34% during FY23-25E

Source: Company, ICICI Direct Research

Exhibit 5: Trend in EBITDA margin (in %)



We expect HEG to report EBITDA margin of 31.8% for FY24E and 32.9% for FY25E

Source: Company, ICICI Direct Research

Exhibit 6: Valuation Matrix

	Sales (₹ Crore)	Growth (%)	EPS (₹)	Growth (%)	PE (x)	EV/EBIDTA (x)	P/ BV (x)	RoE (%)	RoCE (%)
FY20	2149	-67	14	-98	124.8	NA	1.9	1.6	1.6
FY21	1256	-42	-7	PL	NA	NA	2.0	-0.7	-0.5
FY22	2202	75	101	LP	17.0	11.5	1.8	10.3	11.9
FY23	2467	12	118	17	14.6	10.6	1.6	11.2	13.0
FY24E	3240	31	188	60	9.2	5.7	1.5	15.9	19.0
FY25E	3503	8	211	12	8.2	5.0	1.3	15.9	19.5

Source: Company, ICICI Direct Research

Key risk and concerns

Volatility in Needle coke prices.

Needle coke is a key raw material used in manufacturing of UHP grade of Graphite electrode. Availability of needle coke and / or steep rise in prices of needle coke can adversely impact HEG's operating margins.

Volatility in Graphite electrode prices

Graphite electrode prices in the global market tends to be volatile in nature. Any sharp drop in global graphite electrode prices can adversely impact HEG's operating margins

Lower than estimated capacity utilisation

For HEG, on the expanded capacity of 100000 tonnes we have assumed capacity utilisation of 65% for FY24E and 70% for FY25E. Any delay in ramp up of new capacity and/ or lower than estimated production due to slowdown in demand from the user industry could adversely impact HEG's profitability.

Financial summary (Standalone)

Exhibit 7: Profit and loss statement		₹ crore			
(Year-end March)	FY22	FY23	FY24E	FY25E	
Total Operating Income	2,202	2,467	3,240	3,503	
Growth (%)	75	12	31	8	
Total Operating Expenditure	1674	1848	2210	2350	
EBITDA	527	620	1,030	1,153	
Growth (%)	LP	18	66	12	
Depreciation	79	102	124	138	
Interest	7	26	29	33	
Other Income	80	109	94	105	
PBT	520	600	971	1,088	
Exceptional Item	0	0	0	0	
Total Tax	129	145	245	274	
Reported PAT	391	456	727	814	
Adjusted PAT	391	456	727	814	
Growth (%)	LP	17	60	12	
EPS (₹)	101	118	188	211	

Source: Company, ICICI Direct Research

Exhibit 8: Cash flow statement		₹ crore			
(Year-end March)	FY22	FY23	FY24E	FY25E	
Profit/(Loss) after taxation	391	456	727	814	
Add: Depreciation & Amortization	79	102	124	138	
Net Increase in Current Assets	-807	-231	-399	-158	
Net Increase in Current Liabilities	276	-48	153	56	
CF from operating activities	-61	279	604	850	
(Inc)/dec in Investments	227	369	0	-25	
(Inc)/dec in Fixed Assets	-471	-478	-200	-500	
Others	0	0	0	0	
CF from investing activities	-244	-109	-200	-525	
Inc / (Dec) in Equity Capital	0	0	0	0	
Inc / (Dec) in Loan	367	78	-50	-50	
Dividend & Dividend Tax	-154	-164	-220	-280	
Others	144	-4	0	0	
CF from financing activities	357	-90	-270	-330	
Net Cash flow	52	79	134	-5	
Opening Cash	551	602	681	815	
Closing Cash	602	681	815	810	

Source: Company, ICICI Direct Research

Exhibit 9: Balance sheet		₹ crore			
(Year-end March)	FY22	FY23	FY24E	FY25E	
Liabilities					
Equity Capital	39	39	39	39	
Reserve and Surplus	3738	4039	4545	5080	
Total Shareholders funds	3777	4077	4584	5118	
Total Debt	663	741	691	641	
Deferred Tax Liability	96	87	87	87	
Non Current Liabilities	10	7	7	7	
Total Liabilities	4547	4912	5368	5853	
Assets					
Gross Block	1920	2622	3192	3292	
Less: Acc Depreciation	1157	1259	1383	1417	
Net Block	763	1363	1809	1875	
Capital WIP	696	472	102	399	
Total Fixed Assets	1459	1835	1911	2274	
Investments	1035	666	666	691	
Inventory	978	1440	1665	1770	
Debtors	589	489	666	720	
Loans and Advances	339	268	276	284	
Other Current Assets	169	109	98	88	
Cash	602	681	815	810	
Total Current Assets	2677	2988	3520	3673	
Creditors	448	412	534	560	
Other Current Liabilities (incl Pro	177	165	195	225	
Current Liabilities & Prov	624	576	729	785	
Net Current Assets	2053	2411	2791	2888	
Others	0	0	0	0	
Application of Funds	4547	4912	5368	5853	

Source: Company, ICICI Direct Research

Exhibit 10: Key ratios					
(Year-end March)	FY22	FY23	FY24E	FY25E	
Per share data (₹)					
EPS	101	118	188	211	
BV	978	1,056	1,188	1,326	
DPS	40	43	56	72	
Cash Per Share	156	177	211	210	
Operating Ratios (%)					
EBITDA margins	23.9	25.1	31.8	32.9	
PBT margins	23.6	24.3	30.0	31.1	
Net Profit margins	17.7	18.5	22.4	23.2	
Inventory days	213	285	275	275	
Debtor days	98	72	75	75	
Creditor days	197	164	165	165	
Return Ratios (%)					
RoE	10.3	11.2	15.9	15.9	
RoCE	11.9	13.0	19.0	19.5	
RoIC	14.1	12.9	24.0	24.1	
Valuation Ratios (x)					
P/E	17.0	14.6	9.2	8.2	
EV / EBITDA	11.5	10.6	5.7	5.0	
EV / Revenues	3.1	2.7	2.0	1.9	
Market Cap / Revenues	3.0	2.7	2.1	1.9	
Price to Book Value	1.8	1.6	1.5	1.3	
Solvency Ratios					
Debt / Equity	0.2	0.2	0.2	0.1	
Debt/EBITDA	1.3	1.2	0.7	0.6	
Current Ratio	4.3	5.2	4.8	4.7	
Quick Ratio	2.7	2.7	2.5	2.4	

Source: Company, ICICI Direct Research

RATING RATIONALE

ICICI Direct endeavours to provide objective opinions and recommendations. ICICI Direct assigns ratings to its stocks according to their notional target price vs. current market price and then categorizes them as Buy, Hold, Reduce and Sell. The performance horizon is two years unless specified and the notional target price is defined as the analysts' valuation for a stock

Buy: > 15%

Hold: -5% to 15%;

Reduce: -15% to -5%;

Sell: < -15%



Pankaj Pandey

Head – Research

pankaj.pandey@icicisecurities.com

**ICICI Direct Research Desk,
ICICI Securities Limited,
Third Floor, Brillanto House,
Road No 13, MIDC,
Andheri (East)
Mumbai – 400 093
research@icicidirect.com**

ANALYST CERTIFICATION

I We, Shashank Kanodia MBA (Capital markets) , Research Analysts, authors and the names subscribed to this report, hereby certify that all of the views expressed in this research report accurately reflect our views about the subject issuer(s) or securities. We also certify that no part of our compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or view(s) in this report. It is also confirmed that above mentioned Analysts of this report have not received any compensation from the companies mentioned in the report in the preceding twelve months and do not serve as an officer, director or employee of the companies mentioned in the report.

Terms & conditions and other disclosures:

ICICI Securities Limited (ICICI Securities) is a full-service, integrated investment banking and is, inter alia, engaged in the business of stock broking and distribution of financial products.

ICICI Securities is Sebi registered stock broker, merchant banker, investment adviser, portfolio manager and Research Analyst. ICICI Securities is registered with Insurance Regulatory Development Authority of India Limited (IRDAI) as a composite corporate agent and with PFRDA as a Point of Presence. ICICI Securities Limited Research Analyst SEBI Registration Number – INH000000990. ICICI Securities Limited SEBI Registration is INZ000183631 for stock broker. Registered Office Address: ICICI Venture House, Appasaheb Marathe Marg, Prabhadevi, Mumbai - 400 025. CIN: L67120MH1995PLC086241, Tel: (91 22) 6807 7100. ICICI Securities is a subsidiary of ICICI Bank which is India's largest private sector bank and has its various subsidiaries engaged in businesses of housing finance, asset management, life insurance, general insurance, venture capital fund management, etc. ("associates"), the details in respect of which are available on www.icicibank.com.

Investments in securities market are subject to market risks. Read all the related documents carefully before investing.

Registration granted by Sebi and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors. None of the research recommendations promise or guarantee any assured, minimum or risk-free return to the investors.

Name of the Compliance officer (Research Analyst): Mr. Atul Agarwal

Contact number: 022-40701000 E-mail Address: complianceofficer@icicisecurities.com

For any queries or grievances: Mr. Prabodh Avadhoot Email address: heads-servicequality@icicidirect.com Contact Number: 18601231122

ICICI Securities is one of the leading merchant bankers/ underwriters of securities and participate in virtually all securities trading markets in India. We and our associates might have investment banking and other business relationship with a significant percentage of companies covered by our Investment Research Department. ICICI Securities and its analysts, persons reporting to analysts and their relatives are generally prohibited from maintaining a financial interest in the securities or derivatives of any companies that the analysts cover. Recommendation in reports based on technical and derivative analysis centre on studying charts of a stock's price movement, outstanding positions, trading volume etc as opposed to focusing on a company's fundamentals and, as such, may not match with the recommendation in fundamental reports. Investors may visit icicidirect.com to view the Fundamental and Technical Research Reports. Our proprietary trading and investment businesses may make investment decisions that are inconsistent with the recommendations expressed herein. ICICI Securities Limited has two independent equity research groups: Institutional Research and Retail Research. This report has been prepared by the Retail Research. The views and opinions expressed in this document may or may not match or may be contrary with the views, estimates, rating, and target price of the Institutional Research. The information and opinions in this report have been prepared by ICICI Securities and are subject to change without any notice. The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of ICICI Securities. While we would endeavour to update the information herein on a reasonable basis, ICICI Securities is under no obligation to update or keep the information current. Also, there may be regulatory, compliance or other reasons that may prevent ICICI Securities from doing so. Non-rated securities indicate that rating on a particular security has been suspended temporarily and such suspension is in compliance with applicable regulations and/or ICICI Securities policies, in circumstances where ICICI Securities might be acting in an advisory capacity to this company, or in certain other circumstances.

This report is based on information obtained from public sources and sources believed to be reliable, but no independent verification has been made nor is its accuracy or completeness guaranteed. This report and information herein is solely for informational purpose and shall not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. ICICI Securities will not treat recipients as customers by virtue of their receiving this report. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. The recipient should independently evaluate the investment risks. The value and return on investment may vary because of changes in interest rates, foreign exchange rates or any other reason. ICICI Securities accepts no liabilities whatsoever for any loss or damage of any kind arising out of the use of this report. Past performance is not necessarily a guide to future performance. Investors are advised to see Risk Disclosure Document to understand the risks associated before investing in the securities markets. Actual results may differ materially from those set forth in projections. Forward-looking statements are not predictions and may be subject to change without notice. ICICI Securities or its associates might have managed or co-managed public offering of securities for the subject company or might have been mandated by the subject company for any other assignment in the past twelve months.

ICICI Securities or its associates might have received any compensation from the companies mentioned in the report during the period preceding twelve months from the date of this report for services in respect of managing or co-managing public offerings, corporate finance, investment banking or merchant banking, brokerage services or other advisory service in a merger or specific transaction. ICICI Securities or its associates might have received any compensation for products or services other than investment banking or merchant banking or brokerage services from the companies mentioned in the report in the past twelve months.

ICICI Securities encourages independence in research report preparation and strives to minimize conflict in preparation of research report. ICICI Securities or its associates or its analysts did not receive any compensation or other benefits from the companies mentioned in the report or third party in connection with preparation of the research report. Accordingly, neither ICICI Securities nor Research Analysts and their relatives have any material conflict of interest at the time of publication of this report.

Compensation of our Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. ICICI Securities or its subsidiaries collectively or Research Analysts or their relatives do not own 1% or more of the equity securities of the Company mentioned in the report as of the last day of the month preceding the publication of the research report.

Since associates of ICICI Securities and ICICI Securities as a entity are engaged in various financial service businesses, they might have financial interests or actual/ beneficial ownership of one percent or more or other material conflict of interest various companies including the subject company/companies mentioned in this report. CICI Securities may have issued other reports that are inconsistent with and reach different conclusion from the information presented in this report. Neither the Research Analysts nor ICICI Securities have been engaged in market making activity for the companies mentioned in the report.

We submit that no material disciplinary action has been taken on ICICI Securities by any Regulatory Authority impacting Equity Research Analysis activities.

This report is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject ICICI Securities and affiliates to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to certain category of investors. Persons in whose possession this document may come are required to inform themselves of and to observe such restriction.