### **Result Update**

**Rating matrix** 

Potential Upside

Rating

Target **Target Period** 

Rating



August 7, 2018

# **Graphite India (CAREVE)**

₹ 1020

#### What's Changed? Target Changed from ₹ 1250 to ₹ 1400 EPS FY19E Changed from ₹ 120.6 to ₹ 138.0 **EPS FY20E** Changed from ₹ 125.0 to ₹ 140.0

Buy ₹ 1400

37%

12 months

Unchanged

Quarterly Performance (Standalone)								
	Q1FY19	Q1FY18	YoY (%)	Q4FY18	QoQ (%)			
Revenue	1,777.0	351.0	406.3	1,212.2	46.6			
EBITDA	1300.0	35.5	3562.0	668.56	94.4			
EBITDA (%)	73.2	10.1	6304 bps	55.2	1801 bps			
PAT	858.0	29.5	2808.5	453.7	89.1			

Key Financials				
(₹ Crore)	FY17	FY18	FY19E	FY20E
Total Operating Income	1467.8	3266.0	7347.2	7620.6
EBITDA	39.6	1444.2	3966.1	3980.8
Net Profit	70.5	1032.0	2697.3	2736.1
EPS	3.6	52.8	138.0	140.0

Valuation summary				
	FY17	FY18	FY19E	FY20E
PE (x)	282.9	19.3	7.4	7.3
Target PE (x)	388.3	26.5	10.1	10.0
EV/EBITDA (x)	493.2	13.1	4.7	4.4
P/BV (x)	10.7	7.3	5.2	3.8
RoNW (%)	3.8	37.8	70.4	51.8
RoCE (%)	-0.3	47.1	98.8	74.2

Stock data	
Particular	Amount
Market Capitalisation (₹ crore)	₹ 20751
Debt (FY18) (₹ crore)	₹ 272
Cash & Cash Equivalent (FY18) (₹ crore)	₹ 1263
EV (₹ crore)	₹ 19760
52 week H/L	1072 / 205
Equity capital (₹ crore)	₹ 39.1
Face value	₹ 2

Price performance (%)				
Return %	1M	3M	6M	12M
HEG	17.7	53.0	74.9	790.1
Graphite India	14.3	51.9	54.5	407.5

#### **Research Analyst**

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# Robust performance...

- Graphite India's standalone operations reported a topline of ₹ 1777 crore (up 406.3% YoY, 46.6% QoQ), higher than our estimate of ₹ 1537.7 crore. EBITDA for the quarter was at ₹ 1300 crore, higher than our estimate of ₹ 995 crore. The EBITDA margin was at 73.2% (our estimate: 63.5%, Q1FY18: 10.1% and Q4FY18: 55.2%). Standalone PAT was robust at ₹ 858 crore (vs. our estimate of ₹ 662.7 crore)
- On a consolidated basis, the topline was at ₹ 1965 crore (up 403.8% YoY, 48.5% QoQ). EBITDA came in at ₹ 1436 crore. The corresponding EBITDA margin was at 73.1% (vs. Q4FY18: 54.4%, Q1FY18: 9.7%). Consolidated PAT was at ₹ 957 crore

#### Growing EAF production points to healthy demand prospects...

Due to stringent environmental norms, China has shut ~155-160 million tonne (MT) of largely unaccounted induction furnace capacity along with ~115 MT steelmaking capacity in 2016-17. These capacity cuts have led to steel export reduction by ~40% from the region, thereby encouraging steel production via EAF route in other countries. Industry sources indicate globally ~55 MT of EAF steel production was added in 2017. On the back of stringent pollution control norms, China is also aiming to increase share of EAF route of steelmaking in its total steel production. In its effort to shift toward more environmental friendly steel production, China is likely to commission 66 MT of EAF capacities in CY18.

#### Supply constraints to keep graphite electrode prices elevated...

Graphite electrode prices fell to unsustainable levels in 2014-17 on account of subdued demand from EAF producers, which led to a permanent shutdown of ~200000 tonne globally (ex-China). Furthermore, ~300000 tonne graphite electrode capacity was shut in China citing environmental concerns. The decline in graphite electrode exports from China coupled with shutdown of global graphite electrodes capacity vacated a substantial part of the global electrode market, tilting the graphite electrode demand-supply dynamics in favour of domestic players like Graphite India. Demand for graphite electrodes remained healthy on account of increasing steel production through EAF. Even in China, steel produced through the EAF route increased sharply from  $\sim 6\%$ in CY16 to  $\sim$ 9% in CY17. In the absence of any new capacity additions owing to limited supply of needle coke (a key raw material), we believe this demand-supply imbalance (in favour of demand) is likely to sustain in the near to medium term keeping graphite electrode prices healthy.

#### Strong Q1 performance, outlook remains buoyant; maintain BUY!

Strong demand for graphite electrodes from the EAF steelmaking route amid supply constraints has led to a sharp increase in graphite electrodes prices, thereby resulting in healthy profitability. Given the consistently healthy capacity utilisation levels of 100% in Q4FY18 and 98% in the current quarter, we upward revise our capacity utilisation levels for both standalone and consolidated operations. As the operating environment continues to remain favourable, we expect the topline, EBITDA and PAT to grow at a CAGR of 46%, 55% and 54%, respectively. We continue to value the stock at 10x FY20E EPS of ₹ 140 and arrive at a target price of ₹ 1400. We maintain our **BUY** recommendation on the stock. Graphite India has been one of the good wealth creators for investors with the stock price nearly multiplying ~6x since our Sector Update in July 2017.



Variance analysis							
	Q1FY19	Q1FY19E	Q1FY18	YoY (%)	Q4FY18	QoQ (%)	
Revenue	1777.0	1567.8	351.0	406.3	1212.2	46.6	Topline came in above our estimates
Other Income	28.0	22.2	21.1	32.7	37.0	-24.4	
Employee Expense	47.0	54.9	41.1	14.4	45.0	4.4	
Raw Material Expense	234.0	361.8	124.0	88.7	348.1	-32.8	
Power & Fuel Expense	80.0	78.4	70.9	12.8	75.8	5.6	
Other operating expenses	116.0	77.8	79.5	45.9	74.8	55.0	
EBITDA	1,300.0	995.0	35.5	3,562.0	668.6	94.4	EBITDA came in significantly higher than our estimates
EBITDA Margin (%)	73.2	63.5	10.1	6304 bps	55.2	1801 bps	
Depreciation	11.0	19.0	12.0	-8.3	11.1	-1.0	
Interest	1.0	9.0	1.0	0.0	2.0	-49.7	
Exceptional Items	0.0	0.0	0.0	NA	0.0	NA	
PBT	1316.0	989.2	43.7	2911.4	692.5	90.0	
Tax Outgo	458.0	326.4	14.2	3,125.4	238.8	91.8	
PAT	858.0	662.7	29.5	2808.5	453.7	89.1	PAT came in higher than our estimates
Key Metrics							
Capacity Utilisation Level (%); Domestic	98%	90%	95%		100%		Capacity utilisation came in higher than our estimates
Operations	3370	2070	0070		10070		Supassi, assistant sunto in ingrior train our sotimutes

Source: Company, ICICI Direct Research

Change in estimates							
		FY19E			FY20E		
(₹ Crore)	Old	New	% Change	Old	New	% Change	Comments
Revenue	6685.3	7,347	9.9	6933.2	7620.6	9.9	Upward revised estimates on all parameters
EBITDA	3,428.9	3,966	15.7	3,485.3	3,980.8	14.2	
EBITDA Margin (%)	51.3	54.0	269 bps	50.3	52.2	197 bps	
PAT	2,357.5	2,697	14.4	2,442.0	2,736.1	12.0	
EPS (₹)	120.6	138.0	14.4	125.0	140.0	12.0	

EPS (₹)
Source: Company, ICICI Direct Research

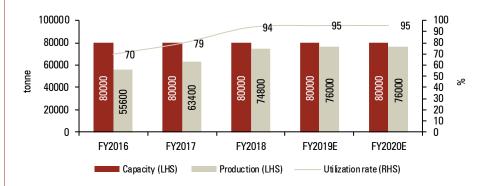
Assumptions					
	Current		Earlier		Comments
	FY19E	FY20E	FY19E	FY20E	
Domestic capacity utilisation (%)	95	95	85	85	Upward revised capacity utilisation level for both years
Consolidated capacity utilisation (%)	88	88	79	79	



## **Company Analysis**

The company is a leading manufacturer of graphite electrodes with an installed capacity of 98,000 tonne per annum (TPA). The installed capacity in India is 80,000 tonne of which 54,000 tonne is in Durgapur, 13000 tonne in Nashik and 13000 tonne in Bangalore. GIL also owns a plant in Nuremberg (Germany) with an installed capacity of 18,000 tonne. The company commissioned its last capacity expansion in Q1FY14 wherein it installed capacity of 20,000 tonne at its Durgapur plant while incurring a capex of ₹ 255 crore.

#### Exhibit 1: Graphite electrode capacity production & utilisation rate (standalone basis)

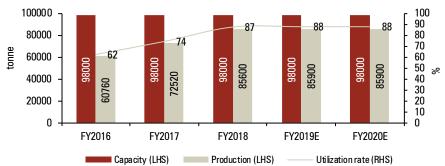


Source: Company, ICICI Direct Research

On a standalone basis, we expect capacity utilisation of 95% in FY19E and FY20E

On a consolidated basis, we expect the company to report capacity utilisation 88% in FY19E, FY20E

### Exhibit 2: Capacity & utilisation rates (Consolidated basis



Source: Company, ICICI Direct Research

#### Exhibit 3: Graphite electrode segment EBIT performance



Source: Company, ICICI Direct Research

For standalone operations in Q1FY19, EBIT margins of the graphite electrodes segment improved notably to 75.6% compared to 60.2% in Q4FY18 and 10.8% in Q1FY18



### Key takeaways from Q1FY19 presentation

- Global steel production registered 5.6% growth in Q1FY19. Chinese steel production increased 7.3% during the quarter. New electric arc furnaces (EAF) are becoming operational as they replace certain blast furnace capacities to curb environmental pollution. With these dynamics, there is an increased demand for graphite electrodes within China
- Chinese net steel exports in H1CY18 were down 15.5% YoY to 28.7 million tonne (MT) leading to increased steel production and capacity utilisation in all other major EAF steel producing geographies
- Around 56 new EAF furnaces are expected to come online in 2018 with aggregate capacity of 60-70 MT. The share of steel making through EAF has already risen to 9% in 2017 from 6% in the previous year
- The Chinese government has set a target of achieving 20% steel production through EAF route by 2020
- Needle coke availability is highly concentrated while petroleum needle coke demand is increasing due to its use in lithium ion batteries used in electric vehicles. Hence, the timely availability of adequate needle coke at a reasonable price will determine the effective/profitable utilisation of any meaningful addition to electrode capacity across the industry
- On a consolidated basis, the company has a net cash status of ₹ 1523 crore as the quarter ended. On a standalone basis, net cash on the books was at ₹ 1502 crore



#### **Key takeaways from annual report FY18**

#### Industry structure and developments

- Global demand for graphite electrode was strong owing to a) demand revival in some steel producing countries with higher EAF capacities, b) consolidation in electrode industry, which saw ~200000 tonne capacity being shut down and c) closure of significant steel capacities in highly polluting induction furnaces and blast furnaces in China that are gradually being replaced by environmental friendly electric arc furnaces. China also closed down some of its electrode manufacturing facilities
- During 1984-2011, EAF steel production grew faster than overall steel production due to its greater resilience, variable cost structure, less capital intensive, less polluting and more environmental friendly nature. The growth trend was, however, reversed in 2011-15 due to global overcapacity in steel production driven largely by Chinese BF steel production
- Beginning 2016, focused efforts by the Chinese government to restructure the domestic steel industry have led to clamping down of restrictions on Chinese BF steel production and lowering export volumes. In addition, developed economies instituted a number of protective trade policies to protect its domestic steel producers. As a result, since 2016, EAF steel production resurged, reinforcing its strong growth trajectory. This revival in EAF steel production resulted in an increase in demand for graphite electrodes
- World Steel Association (WSA) expects steel demand to reach 1616 million tonne (MT) in 2018 increasing 1.8% YoY. It forecasts global steel demand will grow 0.7% YoY to reach 1626.7 MT in 2019. Steel demand in China is expected to remain flat but is likely to gradually replace BoF with EAF
- The company estimates the EAF route of steel production will grow at a CAGR of 5% in 2018-20 to 520 MT by 2020

#### Other highlights

- The company incurred a capex of ₹ 50 crore during the year against capex of ₹ 84 crore in the previous year
- Icra re-affirmed the long term rating of Icra AA+ with a Stable outlook.
   The short-term rating was re-affirmed at Icra A1+
- Graphite India declared an interim dividend of ₹ 5/share and a final dividend of ₹ 12/share for FY18



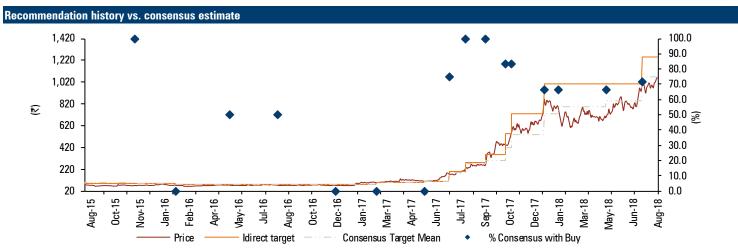
## **Outlook** and valuation

The Q1FY19 performance has been marked by robust EBITDA margin of ~73.2% (vs. Q1FY18: 10.1% and Q4FY18: 55.2%). Strong demand for graphite electrodes from the EAF steel making route amid supply constraints has led to a sharp increase in spot electrode prices and, thereby, profitability over the last year. As the operating environment continues to remain favourable, we expect the topline, EBITDA and PAT to grow at a CAGR of 46%, 55% and 54%, respectively. We continue to value the stock at 10x FY20E EPS of ₹ 140 and arrive at a target price of ₹ 1400/share. We maintain our **BUY** recommendation.

Graphite India has been one of the good wealth creators for investors with the stock price nearly multiplying ~6x since our <u>Sector Update</u> in July 2017. The company has a robust balance sheet, net cash status and healthy cash flow generation, auguring well for the company.

Exhibit 4:	Exhibit 4: Valuation matrix										
	Revenue (₹ Cr)	Growth (%)	EPS (₹)	Growth (%)	PE (x)	EV/EBITDA (x)	RoNW(%)	RoCE(%)			
FY15	1710.7	-14.9	2.9	-55.7	346.1	145.5	3.3	4.4			
FY16	1532.3	-10.4	4.2	43.8	240.7	147.1	4.7	4.2			
FY17	1467.8	-4.2	3.6	-14.9	282.9	493.2	3.8	-0.3			
FY18E	3266.0	122.5	52.8	1364.7	19.3	13.1	37.8	47.1			
FY19E	7347.2	125.0	138.0	161.4	7.4	4.7	70.4	98.8			
FY20E	7620.6	3.7	140.0	1.4	7.3	4.4	51.8	74.2			





Source: Bloomberg, Company, ICICI Direct Research

Key events	
Date	Event
Mar-10	Converts bonds into shares. Sets bond conversion price at ₹ 55.3
Dec-10	European Union renews tariffs on graphite electrodes from India (tariff at 9.4%)
Mar-11	GIL declares lockout at Titlagarh unit post labour unrest at its plant site
Jun-11	Titlagarh unit resumes production post settlement with labour unions including increase in wages & other benefits
Mar-12	GIL sells its entire stake in its subsidiary Carbon International (engaged in trading activities only) for €4.6 million (₹ 30 crore)
Jul-12	Karnataka State Pollution Control Board orders the company to shut operations in its Bangalore plant till further orders, citing environmental pollution
Aug-12	GIL resumes operations at its Bangalore plant after obtaining stay on the pollution control board order for closure of its plant at Bangalore
Sep-12	The company's international peer Graftech expected to hike electrode prices for 2013 contracts
Nov-13	Global players announce production cuts to support graphite electrode prices
Feb-15	Gol imposes antidumping duty on graphite electrodes (all diameters) originating in or exported from China. The amount of anti-dumping duty ranges from US\$278.19 per MT to US\$922.03 per MT, depending on the Chinese producer/exporter
Mar-16	Board declares interim dividend of ₹ 2.0/share
Jun-17	Board declares dividend of ₹ 2.0/share for FY17

Source: Company, ICICI Direct Research

Top 1	U Shareholders				
Rank	Name	Latest Filing Date	% 0/S	Position	Change
1	Emerald Co., Ltd.	30-Jun-2018	61.2	119.6M	0
2	L&T Investment Management Limited	30-Jun-2018	4.8	9.3M	0.4M
3	GKN PLC	30-Jun-2018	2.0	4.0M	0
4	Life Insurance Corporation of India	30-Jun-2018	1.9	3.7M	0
5	Societe Generale SA	30-Jun-2018	1.3	2.6M	2.6M
6	The New India Assurance Co. Ltd.	30-Jun-2018	1.1	2.1M	-0.2M
7	Bangur (Krishna Kumar)	30-Jun-2018	0.8	1.7M	0
8	The Vanguard Group, Inc.	30-Jun-2018	0.7	1.5M	0.0M
9	Goldman Sachs Asset Management International	30-Jun-2018	0.6	1.1M	0.2M
10	Dimensional Fund Advisors, L.P.	30-Jun-2018	0.5	0.9M	-0.0M
	D ( 10101 D' ) D (				

-18
5.2
6.0
8.8
0.1
5

Source: Reuters, ICICI Direct Research

Recent Activity					
Buys			Sells		
Investor name	Value	Shares	Investor name	Value	Shares
Societe Generale SA	31.6M	2.6M	The New India Assurance Co. Ltd.	-2.3M	-0.2M
L&T Investment Management Limited	5.0M	0.4M	IDFC Asset Management Company Private Limited	-1.9M	-0.2M
Goldman Sachs Asset Management International	2.8M	0.2M	AllianceBernstein L.P.	-1.5M	-0.1M
JPMorgan Asset Management U.K. Limited	1.4M	0.1M	Florida State Board of Administration	-0.7M	-0.1M
Driehaus Capital Management, LLC	1.4M	0.1M	Principal PNB Asset Management Company Ltd.	-0.4M	-0.0M

Source: Reuters, ICICI Direct Research



# **Financial summary**

Profit and loss statement				(₹ crore)
(Year-end March)	FY17	FY18	FY19E	FY20E
Total Operating Income	1467.8	3266.0	7347.2	7620.6
Growth (%)	-4.2	122.5	125.0	3.7
Raw Material Expenses	585.1	771.9	1,839.8	2,087.8
Employee Expenses	222.5	252.1	386.7	401.1
Other expenses	620.6	797.8	1,154.7	1,150.9
Total Operating Expenditure	1,428.2	1,821.8	3,381.1	3,639.8
EBITDA	39.6	1444.2	3966.1	3980.8
Growth (%)	-70.6	3,551.5	174.6	0.4
Depreciation	46.4	51.6	58.2	61.2
Interest	7.9	8.1	5.9	1.8
Other Income	86.5	88.5	123.8	165.9
PBT	71.8	1,473.0	4,025.8	4,083.7
Exceptional Item	0.0	0.0	0.0	0.0
Total Tax	1.3	441.0	1,328.5	1,347.6
PAT	70.5	1032.0	2697.3	2736.1
Growth (%)	-14.9	1,364.7	161.4	1.4
EPS (₹)	3.6	52.8	138.0	140.0

Source: Company, ICICI Direct Research

Balance sheet				(₹ crore)
(Year-end March)	FY17	FY18	FY19E	FY20E
Liabilities				
Equity Capital	39.1	39.1	39.1	39.1
Reserve and Surplus	1,818.5	2,692.7	3,792.2	5,246.0
Total Shareholders funds	1,857.6	2,731.8	3,831.2	5,285.1
Total Debt	259.2	272.2	122.2	0.0
Deferred Tax Liability	85.0	94.5	94.5	94.5
Minority Interest / Others	0.0	0.0	0.0	0.0
Total Liabilities	2,201.8	3,098.5	4,047.9	5,379.6
Assets				
Gross Block	1,539.1	1,624.9	1,699.9	1,799.9
Less: Acc Depreciation	871.7	923.3	981.5	1,042.7
Net Block	667.4	701.6	718.4	757.1
Capital WIP	32.1	8.1	8.1	8.1
Total Fixed Assets	699.5	709.7	726.5	765.3
Investments	631.0	1,207.8	1,307.8	2,107.8
Inventory	602.1	786.4	1,610.4	1,774.7
Debtors	441.5	823.5	1,711.0	1,879.1
Loans and Advances	11.7	22.1	50.8	50.8
Other Current Assets	103.5	125.8	100.8	75.8
Cash	51.5	55.6	179.6	476.0
Total Current Assets	1,210.1	1,813.4	3,652.5	4,256.3
Current Liabilities	316.0	647.8	1,509.7	1,565.9
Provisions	25.7	34.0	129.2	184.0
Current Liabilities & Prov	341.7	681.8	1,638.9	1,749.8
Net Current Assets	868.4	1,131.6	2,013.6	2,506.5
Others Assets	2.9	49.4	0.0	0.0
Application of Funds	2,201.8	3,098.5	4,047.9	5,379.6

Source: Company, ICICI Direct Research

Cash flow statement				(₹ crore)
(Year-end March)	FY17	FY18	FY19E	FY20E
Profit after Tax	70.5	1,032.0	2,697.3	2,736.1
Add: Depreciation	46.4	51.6	58.2	61.2
(Inc)/dec in Current Asset	204.0	-599.1	-1,715.2	-307.4
Inc/(dec) in CL & Provision	11.6	340.1	957.1	110.9
Others	9.3	-37.0	49.4	0.0
CF from operating activities	341.7	787.6	2,046.9	2,600.9
(Inc)/dec in Investments	-215.1	-576.8	-100.0	-800.0
(Inc)/dec in Fixed Assets	-89.1	-61.9	-75.0	-100.0
Others	0.0	0.0	0.0	0.0
CF from investing activities	-304.2	-638.7	-175.0	-900.0
Issue/(Buy back) of Equity	0.0	0.0	0.0	0.0
Inc/(dec) in loan funds	-43.1	13.0	-150.0	-122.2
Dividend paid & div. tax	-47.0	-388.7	-1,262.3	-1,280.5
Inc/(dec) in Share Cap	83.0	230.9	-335.5	-1.7
Others	0.0	0.0	0.0	0.0
CF from financing activities	-7.1	-144.8	-1,747.9	-1,404.4
Net Cash flow	30.4	4.1	124.0	296.5
Opening Cash	21.0	51.5	55.6	179.6
Closing Cash	51.5	55.6	179.6	476.0

Source: Company, ICICI Direct Research

Key ratios				
(Year-end March)	FY17	FY18	FY19E	FY20E
Per share data (₹)				
EPS	3.6	52.8	138.0	140.0
Cash EPS	6.0	55.5	141.0	143.2
BV	95.1	139.8	196.1	270.5
DPS	2.0	17.0	55.2	56.0
Cash Per Share	34.9	64.7	76.1	132.2
Operating Ratios (%)				
EBITDA Margin	2.7	44.2	54.0	52.2
PBT / Total Operating income	4.9	45.1	54.8	53.6
PAT Margin	4.8	31.6	36.7	35.9
Inventory days	150	88	80	85
Debtor days	110	92	85	90
Creditor days	79	72	75	75
Return Ratios (%)				
RoE	3.8	37.8	70.4	51.8
RoCE	-0.3	47.1	98.8	74.2
RoIC	-0.3	47.2	103.6	81.5
Valuation Ratios (x)				
P/E	282.9	19.3	7.4	7.3
EV / EBITDA	493.2	13.1	4.7	4.4
EV / Net Sales	13.3	5.8	2.5	2.3
Market Cap / Sales	13.6	6.1	2.7	2.6
Price to Book Value	10.7	7.3	5.2	3.8
Solvency Ratios				
Debt/EBITDA	6.6	0.2	0.0	0.0
Debt / Equity	0.1	0.1	0.0	0.0
Current Ratio	3.5	2.7	2.2	2.4
Quick Ratio	1.8	1.5	1.2	1.4



## ICICI Direct Research coverage universe (Graphite Electrodes)

Company	CMP		M Cap EPS (₹)		P/E (x)		EV/EBITDA (x)		ROCE(%)		ROE(%)								
Company	(₹)	TP (₹) I	Rating	(₹ Cr)	FY18	FY19E	FY20E	FY18	FY19E	FY20E	FY18	FY19E	FY20E	FY18	FY19E	FY20E	FY18	FY19E	FY20E
Graphite India	1,020	1,400	Buy	19,931	52.8	138.0	140.0	19.3	7.4	7.3	13.1	4.7	4.4	47.1	98.8	74.2	37.8	70.4	51.8
HEG	4400	5000	Buy	17,600	270.6	485.1	500.0	16.3	9.1	8.8	10.4	5.9	5.6	78.9	94.4	68.4	59.8	63.2	45.8



#### RATING RATIONALE

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

Strong Buy: >15%/20% for large caps/midcaps, respectively, with high conviction;

Buy: >10%/15% for large caps/midcaps, respectively;

Hold: Up to  $\pm$ -10%; Sell: -10% or more;



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#### **ANALYST CERTIFICATION**

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