

Systematix

Institutional Equities

Vedanta 14 May 2023

Cash generation to remain elevated

Vedanta's (VEDL) 4QFY23 consolidated EBITDA at Rs 94.6bn (-30.6% YoY, +33.8% QoQ) was 6% above our estimate. Strong performance in the aluminium (+93% QoQ) EBITDA) and Zinc International (+43% QoQ EBITDA) segments was offset by weak performance in the oil & gas (O&G) division which saw EBITDA decline by 16% QoQ. Cons. operating cash flow for FY23 remained strong at Rs 330bn (-5% YoY) despite a 23% YoY decline in cons. EBITDA in FY23. EBITDA to cash conversion (before WC changes) remained strong at 99% in line with the 3-year average of 100%. Management remains bullish on the overall commodities demand scenario and has stepped up groupwide capex by >40% to USD 1.7bn for FY24. FY23 Dividend payout of Rs 299bn (Rs 80/share) helped reduce debt at parent Vedanta Resources (VRL) by USD 2bn. We believe dividend is likely to remain elevated at Rs 60-80/share over FY24/25 driven by a sharp reduction in energy costs, especially for coal, implying a yield of 22-29% providing strong downside support. VEDL consumes >36mt of coal across its various business and the sharp 70% drop in coal prices is positive.

Maintain BUY: We adjust our FY23E/24E EBITDA by -6%/-9% respectively to reflect adjustments to our annual commodity price and cost assumptions. We value VEDL at 4.5x FY25E EV/EBITDA, with a revised target price of Rs 506/share (Rs 551 earlier). Maintain BUY. Over the near term, a) aluminium business volume ramp up by >35%, b) alumina capacity ramp up by >150%, c) captive coal mining >30mt (100% captivity), d) >100% increase in iron ore mining through new mines in Goa, Odisha, and Liberia, and e) higher output at FACOR, are positive for VEDL. Adverse commodity price swings due to aggressive rate tightening and its impact on demand pose key risks.

Key takeaways from the 4QFY23 earnings call and outlook

Debt and leverage: 4QFY23 closed with net debt higher by Rs 72bn (+18.9% QoQ) due to sustaining capex and dividend payout. In FY23, VEDL reduced debt at the holding company VRL by USD 2bn, out of its target of USD 4bn debt reduction over three years. The cash requirement for maturing debt of USD 2bn at VRL for the next fiscal is completely covered, according to the management.

Capacity expansion: BALCO capacity expansion has hit some hurdles in meeting the expected completion time due to delays in incoming technology and equipment from China and is now expected to be completed by 1QFY25. Alumina capacity expansion at Lanjigarh is ongoing with trains I and II (1.5mt each) expected to be commissioned by 2HFY24. VEDL commissioned a new 60ktpa (140ktpa currently) furnace at FACOR and further plans to augment it from 140kt to 450kt.

Augmenting O&G capacity: VEDL signed off 10-year PSC extension in Rajasthan and future efforts will be focused on augmenting O&G reserves and exploration activities. It has identified offshore exploration wells in Northeast India which are likely to help step up output over the next few years. VEDL has guided USD 1.7bn growth capex for FY24, out of which USD 0.5bn will be dedicated towards O&G business.

Coal integration: The Jamkhani coal mine commenced operations ahead of schedule and the company will now focus on the operationalization of Kurloi North (8mtpa), Radhikapur (6mtpa), and Ghogharpalli (20mtpa) coal mines. Once operationalized, these mines will enable 100% coal security for VEDL.

RESULT UPDATE Sector: Metals Rating: BUY CMP: Rs 275 Target Price: Rs 506 Stock Info Sensex/Nifty 62,027/18,314 Bloomberg **VEDL IN** Equity shares (mn) 3,717.5 Rs 340/206 52-wk High/Low Face value Rs 1 M-Cap Rs 1,023bn/USD 12bn

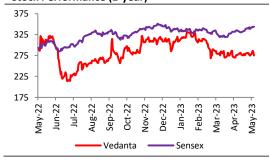
Financiai	Snapsnot	(KS DI	1
V/F 84			_

i manetar shapshot (ns shi)							
Y/E Mar	FY23	FY24E	FY25E				
Net Sales	1,473	1,549	1,707				
EBIDTA	344	497	578				
PAT	108	205	247				
EPS (Rs)	29	55	66				
PE (x)	9.9	5.0	4.1				
EV/EBITDA (x)	4.7	3.0	2.6				
RoE (%)	19.8	54.7	75.3				
RoCE (%)	39.9	64.9	78.8				
Dividend yield (%)	36.9	24.0	29.0				

Shareholding Pattern (%)

	Mar'23	Dec'22	Sep'22
Promoter	68.1	69.6	69.7
-Pledged	100.0	100.0	100.0
FII	7.9	7.9	8.1
DII	10.2	11.0	10.4
Others	13.8	11.5	11.8

Stock Performance (1-year)



rahuljain@systematixgroup.in +91 22 6704 8066

Shweta Dikshit

shwetadikshit@systematixgroup.in +91 22 6704 8042

Systematix Research is also available on Bloomberg SSSL <Go>, Thomson & Reuters

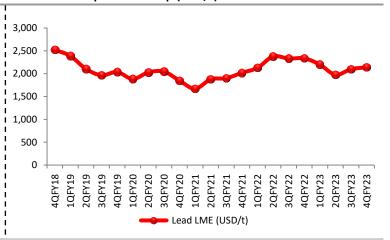
Exhibit 1: Quarterly snapshot (Consolidated)

(Rs bn)	4QFY22	1QFY23	2QFY23	3QFY23	4QFY23
Net revenues	398	386	367	341	379
YoY change (%)					(4.8)
QoQ change (%)					11.2
EBITDA	136	102	77	71	95
YoY change (%)					(30.6)
QoQ change (%)					33.8
EBITDA Margin (%)	34	26	21	21	25
Net earnings (adjusted)	55	44	20	34	5
YoY change (%)					(90.0)
QoQ change (%)					(83.8)

Exhibit 2: Zinc prices recover marginally during 4QFY23 (USD/t)

4,500 4,000 3,500 3,000 2,500 2,000 1,500 1,000 500 0 2QFY19 4QFY20 3QFY21 4QFY21 2QFY22 2QFY23 3QFY19 4QFY19 1QFY21 2QFY21 1QFY22 3QFY22 4QFY22 1QFY23 1QFY20 Zinc LME (USD/t)

Exhibit 3: Lead prices level up (USD/t)



Source: Company, Systematix Institutional Research

Source: Company, Systematix Institutional Research

Exhibit 4: Zinc India: Volumes higher QoQ

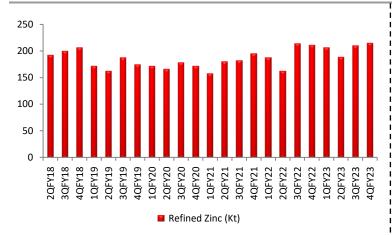


Exhibit 5: Zinc India: Costs drop marginally (USD/t)



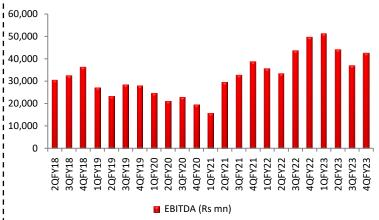
Source: Company, Systematix Institutional Research

Source: Company, Systematix Institutional Research

Exhibit 6: Zinc India: Silver output trend



Exhibit 7: Zinc India: EBITDA increases

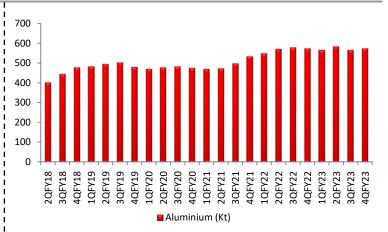


Source: Company, Systematix Institutional Research

Exhibit 8: Alumina volume declines during 4QFY23

600 500 400 300 200 100 3QFY19 3QFY21 4QFY21 2QFY22 1QFY23 4QFY19 1QFY20 3QFY20 2QFY21 1QFY22 4QFY20 1QFY21 4QFY22 4QFY18 **2QFY19** 2QFY20 Alumina (Kt) Lanjigarh

Exhibit 9: Aluminium output running at full capacity



Source: Company, Systematix Institutional Research

Source: Company, Systematix Institutional Research

Exhibit 10: Share of captive alumina

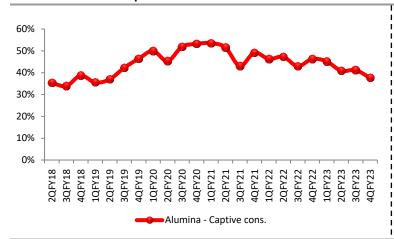
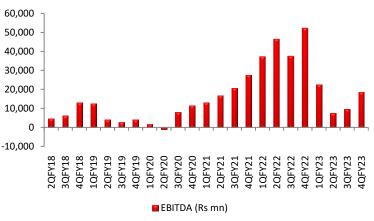


Exhibit 11: Aluminium EBITDA recovers on lower input costs



Source: Company, Systematix Institutional Research

Source: Company, Systematix Institutional Research

Exhibit 12: Alumina COP declines QoQ

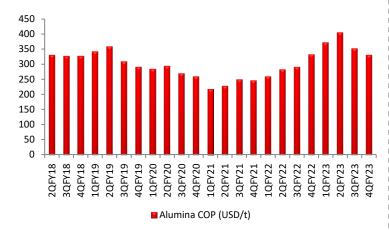


Exhibit 13: Aluminium EBITDA/t

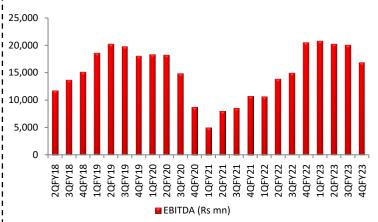


Source: Company, Systematix Institutional Research

Exhibit 14: Oil output trends lower

1,40,000 1,20,000 1,00,000 80,000 60,000 40,000 20,000 1QFY19 2QFY19 3QFY19 4QFY19 1QFY20 2QFY20 3QFY20 4QFY20 1QFY22 2QFY22 3QFY22 4QFY22 1QFY21 2QFY21 3QFY21 4QFY21 Avg daily working total gross (boepd)

Exhibit 15: Oil division: EBITDA declines QoQ



Source: Company, Systematix Institutional Research

Source: Company, Systematix Institutional Research

Exhibit 16: Oil discount to Brent has narrowed

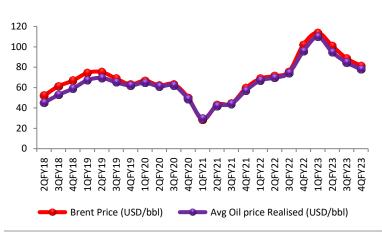
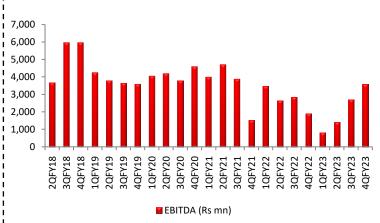


Exhibit 17: Power business: EBITDA shows sharp recovery



Source: Company, Systematix Institutional Research

Source: Company, Systematix Institutional Research

Exhibit 18: Zinc international output

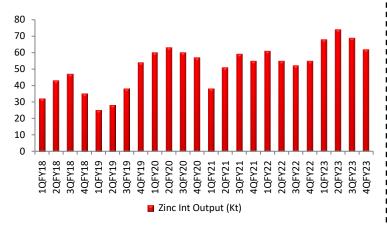
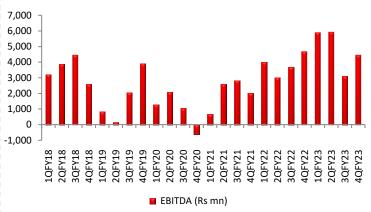
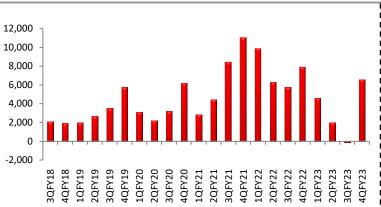


Exhibit 19: Zinc international EBITDA



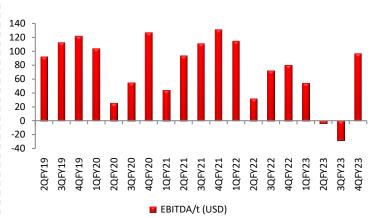
Source: Company, Systematix Institutional Research

Exhibit 20: Steel & iron ore business: EBITDA rises on high volumes



EBITDA (Rs mn)

Exhibit 21: Electrosteel Steel: EBITDA/t (USD)



Source: Company, Systematix Institutional Research

Source: Company, Systematix Institutional Research

Exhibit 22: FY23 attributable EBITDA composition

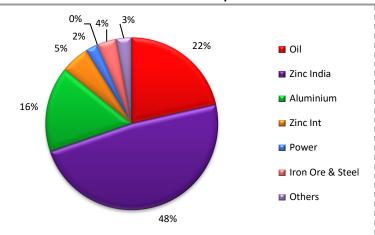
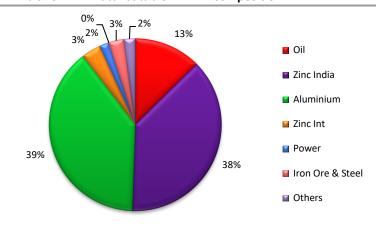


Exhibit 23: FY24E attributable EBITDA composition



Source: Company, Systematix Institutional Research

Source: Company, Systematix Institutional Research

Exhibit 24: FY25E attributable EBITDA composition

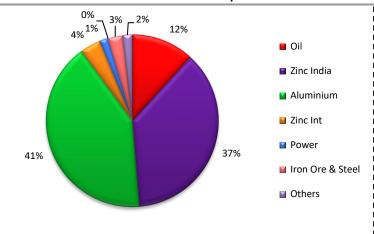


Exhibit 25: Aluminium volumes to gradually increase

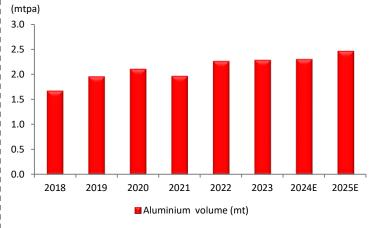
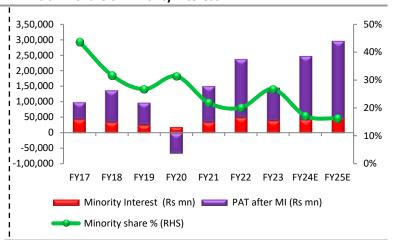


Exhibit 26: Zinc output for ZI and HZL

1,400 1,200 1,000 800 600 400 200 0 2018 2019 2020 2021 2022 2023 2024E 2025E ■ Zinc India volume (kt) ■Zinc International volume (kt)

Exhibit 27: Share of Minority Interest in PAT



Source: Company, Systematix Institutional Research

Source: Company, Systematix Institutional Research

Exhibit 28: Cash generation likely high on steady capex (Rs bn)

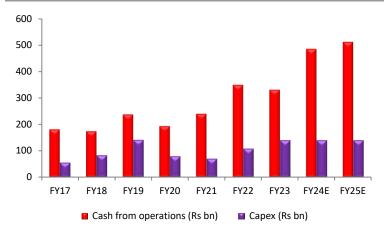
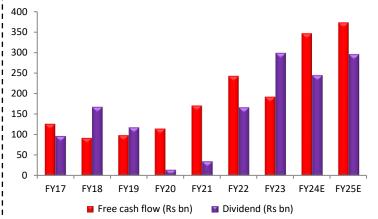
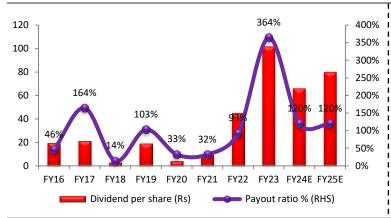


Exhibit 29: Free cash generation to remain high (Rs bn)



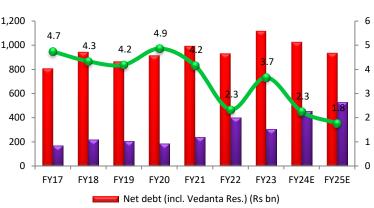
Source: Company, Systematix Institutional Research

Exhibit 30: Dividend and payout ratio



Source: Company, Systematix Institutional Research

Exhibit 31: Consolidated net debt and attributable EBITDA



Source: Company, Systematix Institutional Research

Source: Company, Systematix Institutional Research

Exhibit 32: Revised estimates

(Rs bn)	Prev	ious	Ne	ew	% Change		
	FY24E	FY25E	FY24E	FY25E	FY24E	FY25E	
Net Sales	1,677	1,811	1,549	1,707	-8%	-6%	
EBITDA	528	636	497	578	-6%	-9%	
PAT	215	287	205	247	-5%	-14%	



Exhibit 33: VEDL valuation (FY25E)

	EBITDA	Multiple	EV	Per share
	(Rs bn)	(x)	(Rs bn)	(Rs)
Cons. EBITDA		4.5	2,601	700
Less: Cons Net debt			453	122
Add: CWIP			174	47
Equity Value (A)			2,322	625
Less: Minority interest				
a) Hindustan Zinc (35.1%)	75	4.5	337	91
b) BALCO (49%)	5	4.5	22	6
c) Zinc International (26%)	6	4.5	26	7
Total Minority (B)	86		385	104
Less: Minority share in net cash			55	15
Total			1,882	506

Source: Systematix Institutional Research

Exhibit 34: Dividend discount model

Scenario	Current	I	II	III
Expected dividend (Rs/Share)	68	68	68	68
Cost of capital (r)	13.8%	13.8%	13.8%	13.8%
Growth rate of dividends (g)	-11%	0%	5%	7%
Price per share (r-g)	272	488	765	990

Source: Systematix Institutional Research

Exhibit 35: VEDL: FY18-25E, key assumptions

	Unit	FY18	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E
Volumes									
Zinc	kt	827	696	680	715	777	820	845	878
Lead	kt	168	198	175	214	192	211	222	233
Silver	ton	558	679	716	706	647	714	743	772
Aluminium	kt	1,675	1,959	2,109	1,969	2,267	2,289	2,304	2,467
Power	mu	11,041	13,517	14,153	11,261	11,872	11,551	11,334	11,189
Iron ore	mt	8	4	4	7	7	5.6	7	7
Gross Oil production	bbl/day	1,89,926	1,88,784	1,72,971	1,62,105	1,60,851	1,42,615	1,36,910	1,36,910
LME price assumptions									
Zinc	USD/t	3,057	2,700	2,500	2,422	3,257	3,319	3,000	3,050
Lead	USD/t	2,379	2,100	2,000	1,862	2,293	2,101	2,200	2,250
Silver	USD/oz	17	17	17	23	23	20	25	26
Aluminium	USD/t	2,046	2,025	1,800	1,805	2,774	2,487	2,200	2,300
Brent price	USD/bbl	58	60	60	43.75	81	96	80	85
Currency	USD/INR	64	70	71	75	74	80	82	83

FINANCIALS (CONSOLIDATED)

Profit & Loss Statement

YE: Mar (Rs bn)	FY21	FY22	FY23	FY24E	FY25E
Net Sales	880	1,327	1,473	1,549	1,707
Expenditure	607	879	1,129	1,052	1,129
EBITDA	273	448	344	497	578
Depreciation	76	89	106	116	128
Other Income	34	26	29	26	24
EBIT	231	385	267	406	475
Interest cost	52	48	62	63	65
Exceptionals	(7)	(8)	(2)	-	-
PBT	172	330	203	343	410
Taxes	22	93	58	96	115
Adj. PAT	157	245	147	247	295
Minority Interest	34	49	39	42	48
PAT after MI	123	196	108	205	247
No of shares	3,718	3,719	3,719	3,719	3,719
Adj. EPS	33	53	29	55	66

Source: Company, Systematix Institutional Research

Balance Sheet

YE: Mar (Rs bn)	FY21	FY22	FY23	FY24E	FY25E
Equity capital	4	4	4	4	4
Reserves and surplus	619	650	391	350	300
Net worth	623	654	394	353	304
Minority Interest	151	173	100	142	190
Total Debt	570	531	662	682	702
Other LT liabilities	90	95	95	95	95
Total sources	1,434	1,454	1,251	1,273	1,291
Net block	1,068	1,093	956	1,094	1,232
Net deferred tax	36	7	26	26	26
Other assets	243	297	274	274	274
CWIP	188	198	197	197	197
Cash	333	326	224	168	69
Inventories	99	143	150	120	132
Receivables	35	49	40	42	44
Other current assets	20	23	38	38	38
Current Assets	487	542	452	368	282
Current liabilities	401	486	653	686	720
Net working capital	86	56	(201)	(318)	(437)
Total Assets	1,434	1,454	1,251	1,273	1,291

Source: Company, Systematix Institutional Research

Cash Flow

YE: Mar (Rs bn)	FY21	FY22	FY23	FY24E	FY25E
PBT	172	330	203	343	410
Add: Depreciation	77	89	106	116	128
Add: Interest	51	47	61	63	65
Less: taxes paid	21	57	64	72	86
Add:other adjustments	(2)	8	1	-	-
Less: WC changes	(16)	(48)	46	60	20
Total OCF	240	350	331	485	512
OCF w/o WC changes	256	397	285	425	492
Capital expenditure	(69)	(106)	(138)	(138)	(138)
Change in investments	(19)	65	114	-	70
Interest/Dividend Recd	20	19	17	15	15
Total ICF	(68)	(23)	(7)	(122)	(53)
Free Cash Flows	172	327	324	363	459
Share issuances	-	-	-	-	-
Change in borrowings	(87)	(69)	14	20	20
Dividends	(35)	(167)	(300)	(246)	(297)
Interest payment	(50)	(52)	(48)	(62)	(63)
Others					
Total Financing CF	(176)	(289)	(341)	(289)	(341)
Net change in cash	(3)	38	(18)	74	117
Opening cash & CE	51	49	87	69	143
Closing cash & CE	49	87	69	143	260

Source: Company, Systematix Institutional Research

Ratios

YE: Mar	FY21	FY22	FY23	FY24E	FY25E
Yoy growth in Revenue	4.2	50.8	11.0	5.2	10.2
Yoy growth in Ebitda	32.1	64.1	(23.2)	44.3	16.3
Yoy growth in Net income	156.6	55.8	(39.8)	67.7	19.5
Effective tax rate (%)	12.7	28.1	28.5	28.0	28.0
EBITDA margin (%)	31.0	33.8	23.4	32.1	33.9
PAT margin (%)	14.0	14.7	7.3	13.2	14.5
ROAE (%)	18.7	28.2	19.8	54.7	75.3
ROCE (%)	19.0	37.1	39.9	64.9	78.8
Net debt to equity (x)	0.4	0.3	1.1	1.5	2.1
Per share numbers (Rs)					
Reported earnings	29.4	48.5	27.9	55.0	66.5
Dividend	9.5	45.0	101.5	66.0	79.8
Free cash	49.9	72.4	56.2	86.3	100.8
Book value	167.5	175.8	106.0	95.0	81.7
Valuations (x)					
Price to diluted earnings	9.4	5.7	9.9	5.0	4.1
EV/Ebitda	5.8	3.5	4.7	3.0	2.6
EV/Sales	1.5	1.0	0.9	0.8	0.8

Institutional Equities Team

Nikhil Khandelwal	Managing Director	+91-22-6704 8001	nikhil@systematixgroup.in
Equity Research			
Analysts	Industry Sectors	Desk-Phone	E-mail
Dhananjay Sinha	Co Head of Equities & Head of Research - Strategy & Economics	+91-22-6704 8095	dhananjaysinha@systematixgroup.in
Ashish Poddar	Consumer Durables, Building Materials, Small & Midcaps	+91-22-6704 8039	ashishpoddar@systematixgroup.in
Girija Ray	Cement	+91-22-6704 8098	girijaray@systematixgroup.in
Himanshu Nayyar	Consumer Staples & Discretionary	+91-22-6704 8079	himanshunayyar@systematixgroup.in
Manjith Nair	Banking, Insurance	+91-22-6704 8065	manjithnair@systematixgroup.in
Pradeep Agrawal	NBFCs & Diversified Financials	+91-22-6704 8024	pradeepagrawal@systematixgroup.in
Pratik Tholiya	Specialty & Agro Chem, Fertilisers, Sugar, Textiles and Select Midcaps	+91-22-6704 8028	pratiktholiya@systematixgroup.in
Rahul Jain	Metals & Mining	+91-22-6704 8066	rahuljain@systematixgroup.in
Sudeep Anand	Oil & Gas , Telecom, Logistics	+91-22-6704 8085	sudeepanand@systematixgroup.in
Vishal Manchanda	Pharmaceuticals and Healthcare	+91-22-6704 8064	vishalmanchanda@systematixgroup.in
Aniket Shah	Banking, Insurance	+91-22-6704 8034	aniketshah@systematixgroup.in
Bezad Deboo	Pharmaceuticals and Healthcare	+91-22-6704 8046	bezaddeboo@systematixgroup.in
Chetan Mahadik	Consumer Staples & Discretionary	+91-22-6704 8091	chetanmahadik@systematixgroup.in
Hena Vora	NBFCs & Diversified Financials	+91-22-6704 8045	henavora@systematixgroup.in
Pranay Shah	Consumer Durables, Building Materials, Small & Midcaps	+91-22-6704 8017	pranayshah@systematixgroup.in
Pratik Oza	Midcaps	+91-22-6704 8036	pratikoza@systematixgroup.in
Prathmesh Kamath	Oil & Gas , Telecom, Logistics	+91-22-6704 8022	prathmeshkamath@systematixgroup.in
Purvi Mundhra	Macro-Strategy	+91-22-6704 8078	purvimundhra@systematixgroup.in
Rajesh Mudaliar	Consumer Staples & Discretionary	+91-22-6704 8084	rajeshmudaliar@systematixgroup.in
Shraddha Kapadia	Consumer Durables, Building Materials, Small & Midcaps	+91-22-6704 8019	shraddhakapadia@systematixgroup.in
Shweta Dikshit	Metals & Mining	+91-22-6704 8042	shwetadikshit@systematixgroup.in
/arun Gajaria	Midcaps	+91-22-6704 8081	varungajaria@systematixgroup.in
Equity Sales & Trading			
Name		Desk-Phone	E-mail
		Desk-Filolie	
	Co Head of Equities & Head of Sales	+91-22-6704 8062	vipulsanghvi@systematixgroup.in
/ipul Sanghvi	Co Head of Equities & Head of Sales Sales		
/ipul Sanghvi Sidharth Agrawal	·	+91-22-6704 8062	vipulsanghvi@systematixgroup.in
/ipul Sanghvi Sidharth Agrawal Chintan Shah	Sales	+91-22-6704 8062 +91-22-6704 8090	vipulsanghvi@systematixgroup.in sidharthagrawal@systematixgroup.in
/ipul Sanghvi Sidharth Agrawal Chintan Shah Pawan Sharma	Sales Sales	+91-22-6704 8062 +91-22-6704 8090 +91-22-6704 8061	vipulsanghvi@systematixgroup.in sidharthagrawal@systematixgroup.in chintanshah@systematixgroup.in
/ipul Sanghvi Sidharth Agrawal Chintan Shah Pawan Sharma Mukesh Chaturvedi	Sales Sales Director and Head - Sales Trading	+91-22-6704 8062 +91-22-6704 8090 +91-22-6704 8061 +91-22-6704 8067	vipulsanghvi@systematixgroup.in sidharthagrawal@systematixgroup.in chintanshah@systematixgroup.in pawansharma@systematixgroup.in
/ipul Sanghvi Sidharth Agrawal Chintan Shah Pawan Sharma Mukesh Chaturvedi /inod Bhuwad	Sales Sales Director and Head - Sales Trading Vice President and Co Head - Sales Trading	+91-22-6704 8062 +91-22-6704 8090 +91-22-6704 8061 +91-22-6704 8067 +91-22-6704 8074	vipulsanghvi@systematixgroup.in sidharthagrawal@systematixgroup.in chintanshah@systematixgroup.in pawansharma@systematixgroup.in mukeshchaturvedi@systematixgroup.in
Vipul Sanghvi Sidharth Agrawal Chintan Shah Pawan Sharma Mukesh Chaturvedi Vinod Bhuwad Rashmi Solanki	Sales Sales Director and Head - Sales Trading Vice President and Co Head - Sales Trading Sales Trading	+91-22-6704 8062 +91-22-6704 8090 +91-22-6704 8061 +91-22-6704 8067 +91-22-6704 8074 +91-22-6704 8051	vipulsanghvi@systematixgroup.in sidharthagrawal@systematixgroup.in chintanshah@systematixgroup.in pawansharma@systematixgroup.in mukeshchaturvedi@systematixgroup.in vinodbhuwad@systematixgroup.in
/ipul Sanghvi Sidharth Agrawal Chintan Shah Pawan Sharma Mukesh Chaturvedi /inod Bhuwad Rashmi Solanki Karan Damani	Sales Sales Director and Head - Sales Trading Vice President and Co Head - Sales Trading Sales Trading Sales Trading	+91-22-6704 8062 +91-22-6704 8090 +91-22-6704 8061 +91-22-6704 8067 +91-22-6704 8051 +91-22-6704 8097	vipulsanghvi@systematixgroup.in sidharthagrawal@systematixgroup.in chintanshah@systematixgroup.in pawansharma@systematixgroup.in mukeshchaturvedi@systematixgroup.in vinodbhuwad@systematixgroup.in rashmisolanki@systematixgroup.in
/ipul Sanghvi Sidharth Agrawal Chintan Shah Pawan Sharma Mukesh Chaturvedi /inod Bhuwad Rashmi Solanki Karan Damani	Sales Sales Director and Head - Sales Trading Vice President and Co Head - Sales Trading Sales Trading Sales Trading Sales Trading	+91-22-6704 8062 +91-22-6704 8090 +91-22-6704 8061 +91-22-6704 8067 +91-22-6704 8051 +91-22-6704 8097 +91-22-6704 8053	vipulsanghvi@systematixgroup.in sidharthagrawal@systematixgroup.in chintanshah@systematixgroup.in pawansharma@systematixgroup.in mukeshchaturvedi@systematixgroup.in vinodbhuwad@systematixgroup.in rashmisolanki@systematixgroup.in karandamani@systematixgroup.in
/ipul Sanghvi Sidharth Agrawal Chintan Shah Pawan Sharma Mukesh Chaturvedi /inod Bhuwad Rashmi Solanki Karan Damani /ipul Chheda	Sales Sales Director and Head - Sales Trading Vice President and Co Head - Sales Trading Sales Trading Sales Trading Sales Trading Dealer	+91-22-6704 8062 +91-22-6704 8090 +91-22-6704 8061 +91-22-6704 8067 +91-22-6704 8074 +91-22-6704 8051 +91-22-6704 8053 +91-22-6704 8087	vipulsanghvi@systematixgroup.in sidharthagrawal@systematixgroup.in chintanshah@systematixgroup.in pawansharma@systematixgroup.in mukeshchaturvedi@systematixgroup.in vinodbhuwad@systematixgroup.in rashmisolanki@systematixgroup.in karandamani@systematixgroup.in vipulchheda@systematixgroup.in
Vipul Sanghvi Sidharth Agrawal Chintan Shah Pawan Sharma Mukesh Chaturvedi Vinod Bhuwad Rashmi Solanki Karan Damani Vipul Chheda Paras Shah Rahul Singh	Sales Sales Director and Head - Sales Trading Vice President and Co Head - Sales Trading Sales Trading Sales Trading Sales Trading Dealer Dealer	+91-22-6704 8062 +91-22-6704 8090 +91-22-6704 8061 +91-22-6704 8067 +91-22-6704 8051 +91-22-6704 8097 +91-22-6704 8053 +91-22-6704 8087 +91-22-6704 8047	vipulsanghvi@systematixgroup.in sidharthagrawal@systematixgroup.in chintanshah@systematixgroup.in pawansharma@systematixgroup.in mukeshchaturvedi@systematixgroup.in vinodbhuwad@systematixgroup.in rashmisolanki@systematixgroup.in karandamani@systematixgroup.in vipulchheda@systematixgroup.in parasshah@systematixgroup.in
Vipul Sanghvi Sidharth Agrawal Chintan Shah Pawan Sharma Vukesh Chaturvedi Vinod Bhuwad Rashmi Solanki Karan Damani Vipul Chheda Paras Shah Rahul Singh	Sales Sales Director and Head - Sales Trading Vice President and Co Head - Sales Trading Sales Trading Sales Trading Sales Trading Dealer Dealer	+91-22-6704 8062 +91-22-6704 8090 +91-22-6704 8061 +91-22-6704 8067 +91-22-6704 8074 +91-22-6704 8051 +91-22-6704 8053 +91-22-6704 8087 +91-22-6704 8047	vipulsanghvi@systematixgroup.in sidharthagrawal@systematixgroup.in chintanshah@systematixgroup.in pawansharma@systematixgroup.in mukeshchaturvedi@systematixgroup.in vinodbhuwad@systematixgroup.in rashmisolanki@systematixgroup.in karandamani@systematixgroup.in vipulchheda@systematixgroup.in parasshah@systematixgroup.in
Vipul Sanghvi Sidharth Agrawal Chintan Shah Pawan Sharma Mukesh Chaturvedi Vinod Bhuwad Rashmi Solanki Karan Damani Vipul Chheda Paras Shah Rahul Singh Corporate Access	Sales Sales Director and Head - Sales Trading Vice President and Co Head - Sales Trading Sales Trading Sales Trading Sales Trading Dealer Dealer Dealer	+91-22-6704 8062 +91-22-6704 8090 +91-22-6704 8061 +91-22-6704 8067 +91-22-6704 8051 +91-22-6704 8097 +91-22-6704 8053 +91-22-6704 8087 +91-22-6704 8047 +91-22-6704 8054	vipulsanghvi@systematixgroup.in sidharthagrawal@systematixgroup.in chintanshah@systematixgroup.in pawansharma@systematixgroup.in mukeshchaturvedi@systematixgroup.in vinodbhuwad@systematixgroup.in rashmisolanki@systematixgroup.in karandamani@systematixgroup.in vipulchheda@systematixgroup.in parasshah@systematixgroup.in rahulsingh@systematixgroup.in
Vipul Sanghvi Sidharth Agrawal Chintan Shah Pawan Sharma Mukesh Chaturvedi Vinod Bhuwad Rashmi Solanki Karan Damani Vipul Chheda Paras Shah Rahul Singh Corporate Access Pearl Pillay	Sales Sales Director and Head - Sales Trading Vice President and Co Head - Sales Trading Sales Trading Sales Trading Sales Trading Dealer Dealer Dealer	+91-22-6704 8062 +91-22-6704 8090 +91-22-6704 8061 +91-22-6704 8067 +91-22-6704 8051 +91-22-6704 8097 +91-22-6704 8053 +91-22-6704 8087 +91-22-6704 8047 +91-22-6704 8054	vipulsanghvi@systematixgroup.in sidharthagrawal@systematixgroup.in chintanshah@systematixgroup.in pawansharma@systematixgroup.in mukeshchaturvedi@systematixgroup.in vinodbhuwad@systematixgroup.in rashmisolanki@systematixgroup.in karandamani@systematixgroup.in vipulchheda@systematixgroup.in parasshah@systematixgroup.in rahulsingh@systematixgroup.in
Vipul Sanghvi Sidharth Agrawal Chintan Shah Pawan Sharma Mukesh Chaturvedi Vinod Bhuwad Rashmi Solanki Karan Damani Vipul Chheda Paras Shah Rahul Singh Corporate Access Pearl Pillay Production Madhu Narayanan	Sales Sales Director and Head - Sales Trading Vice President and Co Head - Sales Trading Sales Trading Sales Trading Sales Trading Dealer Dealer Dealer Sr. Associate	+91-22-6704 8062 +91-22-6704 8090 +91-22-6704 8061 +91-22-6704 8067 +91-22-6704 8051 +91-22-6704 8097 +91-22-6704 8053 +91-22-6704 8087 +91-22-6704 8047 +91-22-6704 8054	vipulsanghvi@systematixgroup.in sidharthagrawal@systematixgroup.in chintanshah@systematixgroup.in pawansharma@systematixgroup.in mukeshchaturvedi@systematixgroup.in vinodbhuwad@systematixgroup.in rashmisolanki@systematixgroup.in karandamani@systematixgroup.in vipulchheda@systematixgroup.in parasshah@systematixgroup.in rahulsingh@systematixgroup.in
Vipul Sanghvi Sidharth Agrawal Chintan Shah Pawan Sharma Mukesh Chaturvedi Vinod Bhuwad Rashmi Solanki Karan Damani Vipul Chheda Paras Shah Rahul Singh Corporate Access Pearl Pillay Production Madhu Narayanan Mrunali Pagdhare	Sales Sales Director and Head - Sales Trading Vice President and Co Head - Sales Trading Sales Trading Sales Trading Sales Trading Dealer Dealer Dealer Dealer Editor	+91-22-6704 8062 +91-22-6704 8090 +91-22-6704 8061 +91-22-6704 8067 +91-22-6704 8051 +91-22-6704 8053 +91-22-6704 8087 +91-22-6704 8047 +91-22-6704 8054 +91-22-6704 8054	vipulsanghvi@systematixgroup.in sidharthagrawal@systematixgroup.in chintanshah@systematixgroup.in pawansharma@systematixgroup.in mukeshchaturvedi@systematixgroup.in vinodbhuwad@systematixgroup.in rashmisolanki@systematixgroup.in karandamani@systematixgroup.in vipulchheda@systematixgroup.in parasshah@systematixgroup.in rahulsingh@systematixgroup.in pearlpillay@systematixgroup.in madhunarayanan@systematixgroup.in mrunalip@systematixgroup.in
Vipul Sanghvi Sidharth Agrawal Chintan Shah Pawan Sharma Mukesh Chaturvedi Vinod Bhuwad Rashmi Solanki Karan Damani Vipul Chheda Paras Shah Rahul Singh Corporate Access Pearl Pillay Production Madhu Narayanan Mrunali Pagdhare Vijayendra Achrekar Operations	Sales Sales Director and Head - Sales Trading Vice President and Co Head - Sales Trading Sales Trading Sales Trading Sales Trading Dealer Dealer Dealer Dealer Editor Production	+91-22-6704 8062 +91-22-6704 8090 +91-22-6704 8061 +91-22-6704 8067 +91-22-6704 8051 +91-22-6704 8053 +91-22-6704 8087 +91-22-6704 8047 +91-22-6704 8054 +91-22-6704 8054 +91-22-6704 8058	vipulsanghvi@systematixgroup.in sidharthagrawal@systematixgroup.in chintanshah@systematixgroup.in pawansharma@systematixgroup.in mukeshchaturvedi@systematixgroup.in vinodbhuwad@systematixgroup.in rashmisolanki@systematixgroup.in karandamani@systematixgroup.in vipulchheda@systematixgroup.in parasshah@systematixgroup.in rahulsingh@systematixgroup.in pearlpillay@systematixgroup.in madhunarayanan@systematixgroup.in
Vipul Sanghvi Sidharth Agrawal Chintan Shah Pawan Sharma Mukesh Chaturvedi Vinod Bhuwad Rashmi Solanki Karan Damani Vipul Chheda Paras Shah Rahul Singh Corporate Access Pearl Pillay Production Madhu Narayanan Mrunali Pagdhare Vijayendra Achrekar	Sales Sales Director and Head - Sales Trading Vice President and Co Head - Sales Trading Sales Trading Sales Trading Sales Trading Dealer Dealer Dealer Dealer Editor Production	+91-22-6704 8062 +91-22-6704 8090 +91-22-6704 8061 +91-22-6704 8067 +91-22-6704 8051 +91-22-6704 8053 +91-22-6704 8087 +91-22-6704 8047 +91-22-6704 8054 +91-22-6704 8054 +91-22-6704 8058	vipulsanghvi@systematixgroup.in sidharthagrawal@systematixgroup.in chintanshah@systematixgroup.in pawansharma@systematixgroup.in mukeshchaturvedi@systematixgroup.in vinodbhuwad@systematixgroup.in rashmisolanki@systematixgroup.in karandamani@systematixgroup.in vipulchheda@systematixgroup.in parasshah@systematixgroup.in rahulsingh@systematixgroup.in pearlpillay@systematixgroup.in madhunarayanan@systematixgroup.in mrunalip@systematixgroup.in
/ipul Sanghvi Sidharth Agrawal Chintan Shah Pawan Sharma Mukesh Chaturvedi /inod Bhuwad Rashmi Solanki Karan Damani /ipul Chheda Paras Shah Rahul Singh Corporate Access Pearl Pillay Production Madhu Narayanan Mrunali Pagdhare /ijayendra Achrekar Operations	Sales Sales Director and Head - Sales Trading Vice President and Co Head - Sales Trading Sales Trading Sales Trading Sales Trading Dealer Dealer Dealer Dealer Beditor Production Production	+91-22-6704 8062 +91-22-6704 8090 +91-22-6704 8061 +91-22-6704 8067 +91-22-6704 8051 +91-22-6704 8053 +91-22-6704 8053 +91-22-6704 8047 +91-22-6704 8054 +91-22-6704 8054 +91-22-6704 8055 +91-22-6704 8057 +91-22-6704 8057 +91-22-6704 8057 +91-22-6704 8059	vipulsanghvi@systematixgroup.in sidharthagrawal@systematixgroup.in chintanshah@systematixgroup.in pawansharma@systematixgroup.in mukeshchaturvedi@systematixgroup.in vinodbhuwad@systematixgroup.in rashmisolanki@systematixgroup.in karandamani@systematixgroup.in vipulchheda@systematixgroup.in parasshah@systematixgroup.in rahulsingh@systematixgroup.in mearlpillay@systematixgroup.in madhunarayanan@systematixgroup.in mrunalip@systematixgroup.in vijayendraachrekar@systematixgroup.ir



DISCLOSURES/APPENDIX

I. ANALYST CERTIFICATION

I, Rahul Jain, Shweta Dikshit; hereby certify that (1) views expressed in this research report accurately reflect my/our personal views about any or all of the subject securities or issuers referred to in this research report, (2) no part of my/our compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed in this research report by Systematix Shares and Stocks (India) Limited (SSSIL) or its group/associate companies, (3) reasonable care is taken to achieve and maintain independence and objectivity in making any recommendations.

Disclosure of Interest Statement	Update
Analyst holding in the stock	No
Served as an officer, director or employee	No

- II. ISSUER SPECIFIC REGULATORY DISCLOSURES, unless specifically mentioned in point no. 9 below:
 - 1. The research analyst(s), SSSIL, associates or relatives do not have any financial interest in the company(ies) covered in this report.
 - 2. The research analyst(s), SSSIL, associates or relatives collectively do not hold more than 1% of the securities of the company(ies) covered in this report as of the end of the month immediately preceding the distribution of the research report.
 - 3. The research analyst(s), SSSIL, associates or relatives did not have any other material conflict of interest at the time of publication of this research report.
 - 4. The research analyst, SSSIL and its associates have not received compensation for investment banking or merchant banking or brokerage services or any other products or services from the company(ies) covered in this report in the past twelve months.
 - 5. The research analyst, SSSIL or its associates have not managed or co-managed a private or public offering of securities for the company(ies) covered in this report in the previous twelve months.
 - 6. SSSIL or its associates have not received compensation or other benefits from the company(ies) covered in this report or from any third party in connection with this research report.
 - 7. The research analyst has not served as an officer, director or employee of the company(ies) covered in this research report.
 - 8. The research analyst and SSSIL have not been engaged in market making activity for the company(ies) covered in this research report.
 - 9. Details of SSSIL, research analyst and its associates pertaining to the companies covered in this research report:

Sr. No.	Particulars	Yes / No.
1	Whether compensation was received from the company(ies) covered in the research report in the past 12 months for investment banking transaction by SSSIL.	No
2	Whether research analyst, SSSIL or its associates and relatives collectively hold more than 1% of the company(ies) covered in the research report.	No
3	Whether compensation has been received by SSSIL or its associates from the company(ies) covered in the research report.	No
4	Whether SSSIL or its affiliates have managed or co-managed a private or public offering of securities for the company(ies) covered in the research report in the previous twelve months.	No
5	Whether research analyst, SSSIL or associates have received compensation for investment banking or merchant banking or brokerage services or any other products or services from the company(ies) covered in the research report in the last twelve months.	No

10. There is no material disciplinary action taken by any regulatory authority that impacts the equity research analysis activities.

STOCK RATINGS

BUY (B): The stock's total return is expected to exceed 15% over the next 12 months.

HOLD (H): The stock's total return is expected to be within -15% to +15% over the next 12 months.

SELL (S): The stock's total return is expected to give negative returns of more than 15% over the next 12 months.

NOT RATED (NR): The analyst has no recommendation on the stock under review.

INDUSTRY VIEWS

ATTRACTIVE (AT): Fundamentals/valuations of the sector are expected to be attractive over the next 12-18 months.

NEUTRAL (NL): Fundamentals/valuations of the sector are expected to neither improve nor deteriorate over the next 12-18 months.

CAUTIOUS (CS): Fundamentals/valuations of the sector are expected to deteriorate over the next 12-18 months.

III. DISCLAIMER

The information and opinions contained herein have been compiled or arrived at based on the information obtained in good faith from sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy completeness or correctness.

This document is for information purposes only. This report is based on information that we consider reliable; we do not represent that it is accurate or complete and one should exercise due caution while acting on it. Description of any company(ies) or its/their securities mentioned herein are not complete and this document is not and should not be construed as an offer or solicitation of an offer to buy or sell any securities or other financial instruments. Past performance is not a guide for future performance, future returns are not guaranteed and a loss of original capital may occur. All opinions, projections and estimates constitute the judgment of the author as on the date of the report and these, plus any other information contained in the report, are subject to change without notice. Prices and availability of financial instruments are also subject to change without notice. This report is intended for distribution to institutional investors.

This report is not directed to or intended for display, downloading, printing, reproducing or for distribution to or use by, any person or entity that is a citizen or resident or located in any locality, state, country or other jurisdiction where such distribution, publication, reproduction, availability or use would be contrary to law or regulation or what would subject to SSSIL or its affiliates to any registration or licensing requirement within such jurisdiction. If this report is inadvertently sent or has reached any individual in such country, especially USA, the same may be ignored and brought to the attention of the sender. Neither this document nor any copy of it may be taken or transmitted into the United States (to U.S. persons), Canada, or Japan or distributed, directly or indirectly, in the United States or Canada or distributed or redistributed in Japan or to any resident thereof. Any unauthorized use, duplication,

redistribution or disclosure of this report including, but not limited to, redistribution by electronic mail, posting of the report on a website or page, and/or providing to a third party a link, is prohibited by law and will result in prosecution. The information contained in the report is intended solely for the recipient and may not be further distributed by the recipient to any third party.

SSSIL generally prohibits its analysts, persons reporting to analysts, and members of their households from maintaining a financial interest in the securities or derivatives of any companies that the analysts cover. Additionally, SSSIL generally prohibits its analysts and persons reporting to analysts from serving as an officer, director, or advisory board member of any companies that they cover. Our salespeople, traders, and other professionals or affiliates may provide oral or written market commentary or trading strategies to our clients that reflect opinions that are contrary to the opinions expressed herein. Our proprietary trading and investing businesses may make investment decisions that are inconsistent with the recommendations expressed herein. The views expressed in this research report reflect the personal views of the analyst(s) about the subject securities or issues and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report. The compensation of the analyst who prepared this document is determined exclusively by SSSIL; however, compensation may relate to the revenues of the Systematix Group as a whole, of which investment banking, sales and trading are a part. Research analysts and sales persons of SSSIL may provide important inputs to its affiliated company(ies).

Foreign currencies denominated securities, wherever mentioned, are subject to exchange rate fluctuations which could have an adverse effect on their value or price or the income derived from them. In addition, investors in securities such as ADRs, the values of which are influenced by foreign currencies, effectively assume currency risk. SSSIL, its directors, analysts or employees do not take any responsibility, financial or otherwise, of the losses or the damages sustained due to the investments made or any action taken on the basis of this report including but not restricted to fluctuation in the prices of shares and bonds, changes in the currency rates, diminution in the NAVs, reduction in the dividend or income, etc.

SSSIL and its affiliates, officers, directors, and employees subject to the information given in the disclosures may: (a) from time to time, have long or short positions in, and buy or sell, the securities thereof, of company (ies) mentioned herein or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation (financial interest) or act as a market maker in the financial instruments of the company (ies) discussed herein or act as advisor or lender / borrower to such company (ies) or have other potential material conflict of interest with respect to any recommendation and related information and opinions. The views expressed are those of the analyst and the company may or may not subscribe to the views expressed therein.

SSSIL, its affiliates and any third party involved in, or related to, computing or compiling the information hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of this information. Without limiting any of the foregoing, in no event shall SSSIL, any of its affiliates or any third party involved in, or related to, computing or compiling the information have any liability for any damages of any kind. The company accepts no liability whatsoever for the actions of third parties. The report may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the report refers to website material of the company, the company has not reviewed the linked site. Accessing such website or following such link through the report or the website of the company shall be at your own risk and the company shall have no liability arising out of, or in connection with, any such referenced website.

SSSIL will not be liable for any delay or any other interruption which may occur in presenting the data due to any technical glitch to present the data. In no event shall SSSIL be liable for any damages, including without limitation, direct or indirect, special, incidental, or consequential damages, losses or expenses arising in connection with the data presented by SSSIL through this presentation.

SSSIL or any of its other group companies or associates will not be responsible for any decisions taken on the basis of this report. Investors are advised to consult their investment and tax consultants before taking any investment decisions based on this report.





Systematix Shares and Stocks (India) Limited:

Registered and Corporate address: The Capital, A-wing, No. 603 – 606, 6th Floor, Plot No. C-70, G Block, Bandra Kurla Complex, Bandra (East), Mumbai – 400 051

CIN - U65993MH1995PLC268414 | BSE SEBI Reg. No.: INZ000171134 (Member Code: 182) | NSE SEBI Reg. No.: INZ000171134 (Member Code: 11327) | MCX SEBI Reg. No.: INZ000171134 (Member Code: 56625) | NCDEX SEBI Reg. No.: INZ000171134 (Member Code: 1281) | Depository Participant SEBI Reg. No.: IN-DP-480-2020 (DP Id: 34600) | PMS SEBI Reg. No.: INP000002692 | Research Analyst SEBI Reg. No.: INH200000840 | Investment Advisor SEBI Reg. No. INA000010414 | AMFI : ARN - 64917