

Exide Industries

Refer to important disclosures at the end of this report

Q3 EBITDA misses estimates; Lead price increase to hit Q4 margin

Exide's Q3 revenue increased 7% YoY to Rs34.1bn, below our estimate of Rs36.1bn, owing to lower-than-expected sales in the replacement and overseas segments. EBITDA grew by 7% YoY to Rs4bn, lower than our estimate by 8% due to revenue miss. We reduce our FY23-25E EPS by 2-4%, mainly due to lower revenue assumptions. Despite losing out in the PLI-ACC scheme, EXID plans to set up a lithium-ion cell manufacturing facility, commissioning of which is expected after two years. Any progress on tie-ups with OEMs for battery supplies could provide clarity on Exide's long-term growth prospects. We retain HOLD, with TP of Rs202/share (Rs205 earlier), based on 11x FY25E EPS and value of HDFC Life stake at Rs57/share. Key downside risks: Lower-than-expected demand in key geographies, increased competitive intensity, and adverse movement in commodity prices/currency rates.

Q3 EBITDA beats estimates: Revenue grew 7% YoY to Rs34.1bn (Emkay est.: Rs36.1bn), missing our estimates due to lower-than-expected sales in the replacement and overseas segments. Positive revenue growth was witnessed in the auto OEM, auto replacement and industrial segments. Within the industrial segment, most verticals such as Railways, Projects, Telecom, Solar and Traction have witnessed growth. EBITDA grew by 7% to Rs4bn, 8% lower than our estimates, owing to revenue miss. EBITDA margin expanded by 10bps to 11.8%. Gross margin expanded by 120bps to 32.2%, led by lower input costs. Other income grew by 56% to Rs234mn. Overall, adjusted PAT grew by 9% to Rs2.2bn (Emkay est.: Rs2.47bn), coming in below our estimates on lower-than-expected operating profit. **What we liked:** 1) Improvement in Q3 gross margin. However, Q4 margin is likely to contract on increasing lead prices. **What we did not like:** 1) Work on the lithium-ion cell manufacturing facility project has commenced. However, commissioning of the project is expected only after ~2 years.

CMP	Target Price
Rs 176 as of (January 30, 2023)	Rs 202 (▼) 12 months
Rating	Upside
HOLD (■)	14 %

Change in Estimates

EPS Chg FY23E/FY24E (%)	(3.7) / (1.5)
Target Price change (%)	(1.5)
Target Period (Months)	12
Previous Reco	HOLD

Emkay vs Consensus

EPS Estimates		
	FY23E	FY24E
Emkay	10.6	12.6
Consensus	10.8	12.8
Mean Consensus TP (12M)	Rs 212	

Stock Details

Bloomberg Code	EXID IN
Face Value (Rs)	1
Shares outstanding (mn)	850
52 Week H/L	194 / 130
M Cap (Rs bn/USD bn)	150 / 1.84
Daily Avg Volume (nos.)	3,487,530
Daily Avg Turnover (USD mn)	-

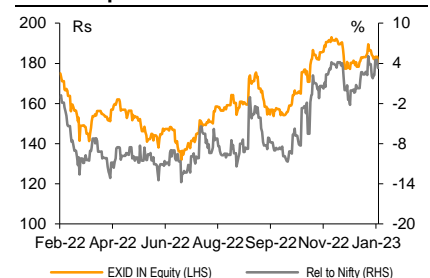
Shareholding Pattern Dec '22

Promoters	46.0%
FIIIs	11.0%
DIIIs	19.6%
Public and Others	23.5%

Price Performance

(%)	1M	3M	6M	12M
Absolute	(2)	7	11	1
Rel. to Nifty	-	8	8	(2)

Relative price trend



Source: Bloomberg

This report is solely produced by Emkay Global. The following person(s) are responsible for the production of the recommendation:

Raghunandhan N L

raghunandhan.nl@emkayglobal.com
+91 22 6624 2428

Mumuksh Mandlesha

mumuksh.mandlesha@emkayglobal.com
+91 22 6612 1334

Bhargava Perni

bhargava.perni@emkayglobal.com
+91 22 6624 2429

Financial Snapshot (Standalone)

(Rs mn)	FY21	FY22	FY23E	FY24E	FY25E
Revenue	100,408	123,817	146,331	158,115	170,165
EBITDA	13,556	13,956	15,835	18,768	20,427
EBITDA Margin (%)	13.5	11.3	10.8	11.9	12.0
APAT	7,583	7,643	9,027	10,704	11,342
EPS (Rs)	8.9	9.0	10.6	12.6	13.3
EPS (% chg)	(9.9)	0.8	18.1	18.6	6.0
ROE (%)	11.5	8.7	8.3	9.2	9.2
P/E (x)	19.8	19.6	16.6	14.0	13.2
EV/EBITDA (x)	10.3	10.1	9.2	8.0	7.6
P/BV (x)	3.2	2.9	3.0	3.3	3.7

Source: Company, Emkay Research

This report is intended for team.emkay@whitemarquesolutions.com use and downloaded at 01/31/2023 11:35 AM

Exhibit 1: Expect revenue CAGR of 8% over FY23-25E

Key revenue assumptions (Rs mn)	FY21	FY22	FY23E	FY24E	FY25E
Automotive	68,992	89,552	104,335	112,628	120,761
Growth (%)	-1	30	17	8	7
-OEM	15,359	16,945	21,137	23,425	25,465
Growth (%)	-10	10	25	11	9
-Aftermarket	32,601	45,522	54,509	59,037	63,801
Growth (%)	11	40	20	8	8
-Inverter/Others	21,033	27,085	28,689	30,166	31,495
Growth (%)	-10	29	6	5	4
Industrial	31,112	34,776	41,995	45,487	49,404
Growth (%)	9	12	21	8	9
Total Revenue	100,105	124,328	146,331	158,115	170,165
Growth (%)	2	24	18	8	8

Source: Company, Emkay Research

Exhibit 2: Changes in estimates

(Rs mn)	FY23E				FY24E				FY25E			
	Earlier	Revised	% Change	% YoY	Earlier	Revised	% Change	% YoY	Earlier	Revised	% Change	% YoY
Revenue	149,643	146,331	(2.2)	18.2	161,727	158,115	(2.2)	8.1	174,115	170,165	(2.3)	7.6
EBITDA	16,532	15,835	(4.2)	13.5	19,394	18,768	(3.2)	18.5	20,941	20,427	(2.5)	8.8
Margin (%)	11.0	10.8	-23 bps	-45 bps	12.0	11.9	-12 bps	105 bps	12.0	12.0	-2 bps	13 bps
Net Profit	9,375	9,027	(3.7)	18.1	10,869	10,704	(1.5)	18.6	11,684	11,342	(2.9)	6.0
EPS (Rs)	11.0	10.6	(3.7)	18.1	12.8	12.6	(1.5)	18.6	13.7	13.3	(2.9)	6.0

Source: Company, Emkay Research

Exhibit 3: Actual vs. Estimates (Q3FY23)

(Rs mn)	Actual	Estimates		% Variation		Comment
		Emkay	Consensus	Emkay	Consensus	
Total Revenue	34,053	36,122	36,427	(5.7)	(6.5)	Below estimates due to lower-than-expected sales in replacement and overseas segments
EBITDA	4,005	4,335	4,176	(7.6)	(4.1)	Below estimates owing to revenue miss
EBITDA Margin (%)	11.8	12.0	11.5	(24) bps	30 bps	
Adjusted net profit	2,232	2,466	2,437	(9.5)	(8.4)	Below estimates due to lower-than-expected operating profit

Source: Bloomberg, Company, Emkay Research

Exhibit 4: Quarterly performance

(Rs mn)	Q3FY22	Q4FY22	Q1FY23	Q2FY23	Q3FY23	YoY (%)	QoQ (%)	FY23 YTD	FY22 YTD	YoY (%)
Revenue	31,967	34,086	38,994	37,189	34,053	6.5	(8.4)	110,236	89,731	22.9
Expenditure	28,240	30,596	35,127	33,065	30,048	6.4	(9.1)	98,240	79,265	23.9
as % of sales	88.3	89.8	90.1	88.9	88.2			89.1	88.3	
Consumption of RM	22,042	24,554	28,111	25,846	23,079	4.7	(10.7)	77,036	61,199	25.9
as % of sales	69.0	72.0	72.1	69.5	67.8			69.9	68.2	
Employee Cost	2,044	1,893	2,128	2,210	2,120	3.7	(4.1)	6,457	6,000	7.6
as % of sales	6.4	5.6	5.5	5.9	6.2			5.9	6.7	
Other expenditure	4,154	4,149	4,888	5,009	4,849	16.7	(3.2)	14,746	12,067	22.2
as % of sales	13.0	12.2	12.5	13.5	14.2			13.4	13.4	
EBITDA	3,726	3,490	3,866	4,124	4,005	7.5	(2.9)	11,996	10,466	14.6
EBITDA margin (%)	11.7	10.2	9.9	11.1	11.8			10.9	11.7	
Depreciation	1,041	1,065	1,091	1,120	1,151	10.6	2.8	3,362	3,062	9.8
EBIT	2,685	2,426	2,776	3,005	2,854	6.3	(5.0)	8,634	7,404	16.6
Other Income	150	392	322	356	234	55.6	(34.2)	912	411	121.8
Interest	83	106	64	62	80	(4.0)	28.5	205	278	(26.1)
PBT	2,753	2,712	3,034	3,298	3,008	9.3	(8.8)	9,340	7,537	23.9
Total Tax	712	707	771	836	776	9.1	(7.1)	2,383	1,899	25.5
Adjusted PAT	2,041	2,005	2,263	2,462	2,232	9.3	(9.4)	6,958	5,639	23.4
Extra ordinary items Loss/(Gain)	0	-39,192	0	0	0			0	0	
Reported PAT	2,041	41,197	2,263	2,462	2,232	9.3	(9.4)	6,958	5,639	23.4
Adjusted EPS (Rs)	2.4	2.4	2.7	2.9	2.6	9.3	(9.4)	8.2	6.6	23.4

Source: Company, Emkay Research

This report is intended for team.emkay@whitemarquesolutions.com use and downloaded at 01/31/2023 11:33 AM

Emkay Research is also available on www.emkayglobal.com and Bloomberg EMKAY<GO>. Please refer to the last page of the report on Restrictions on Distribution. In Singapore, this research report or research analyses may only be distributed to Institutional Investors, Expert Investors or Accredited Investors as defined in the Securities and Futures Act, Chapter 289 of Singapore.

Key Financials (Standalone)**Income Statement**

Y/E Mar (Rs mn)	FY21	FY22	FY23E	FY24E	FY25E
Revenue	100,408	123,817	146,331	158,115	170,165
Expenditure	86,853	109,861	130,496	139,347	149,738
EBITDA	13,556	13,956	15,835	18,768	20,427
Depreciation	3,794	4,126	4,512	4,989	5,513
EBIT	9,762	9,830	11,323	13,778	14,914
Other Income	654	803	1,081	1,054	1,127
Interest expenses	238	384	288	465	817
PBT	10,179	10,249	12,116	14,368	15,224
Tax	2,596	2,606	3,090	3,664	3,882
Extraordinary Items	0	39,192	0	0	0
Minority Int./Income from Assoc.	0	0	0	0	0
Reported Net Income	7,583	46,835	9,027	10,704	11,342
Adjusted PAT	7,583	7,643	9,027	10,704	11,342

Balance Sheet

Y/E Mar (Rs mn)	FY21	FY22	FY23E	FY24E	FY25E
Equity share capital	850	850	850	850	850
Reserves & surplus	68,085	105,206	111,524	119,017	126,956
Net worth	68,935	106,056	112,374	119,867	127,806
Minority Interest	0	0	0	0	0
Loan Funds	0	0	0	2,000	7,000
Net deferred tax liability	771	(584)	(584)	(584)	(584)
Total Liabilities	69,706	105,472	111,790	121,283	134,222
Net block	26,379	27,686	28,174	28,685	29,172
Investment	30,924	60,765	65,765	74,737	86,737
Current Assets	36,978	41,273	47,096	49,952	53,409
Cash & bank balance	914	1,612	2,058	1,242	927
Other Current Assets	1,874	2,076	2,284	2,512	2,764
Current liabilities & Provision	26,582	27,376	32,368	35,214	38,219
Net current assets	10,396	13,898	14,728	14,738	15,190
Misc. exp	0	0	0	0	0
Total Assets	69,706	105,472	111,790	121,283	134,222

Cash Flow

Y/E Mar (Rs mn)	FY21	FY22	FY23E	FY24E	FY25E
PBT (Ex-Other income) (NI+Dep)	9,525	56,383	11,035	13,314	14,097
Other Non-Cash items	0	0	0	0	0
Chg in working cap	3,044	(3,525)	(385)	(826)	(767)
Operating Cashflow	13,480	(682)	11,975	14,000	15,453
Capital expenditure	(3,384)	(5,812)	(5,000)	(5,500)	(6,000)
Free Cash Flow	10,096	(6,494)	6,975	8,500	9,453
Investments	(9,787)	8,384	(5,000)	(8,972)	(12,000)
Other Investing Cash Flow	402	157	386	279	325
Investing Cashflow	(12,114)	3,533	(8,532)	(13,139)	(16,548)
Equity Capital Raised	0	0	0	0	0
Loans Taken / (Repaid)	0	0	0	2,000	5,000
Dividend paid (incl tax)	(1,700)	(1,700)	(2,708)	(3,211)	(3,403)
Other Financing Cash Flow	(253)	(313)	0	0	0
Financing Cashflow	(1,998)	(2,153)	(2,997)	(1,676)	780
Net chg in cash	(632)	699	446	(815)	(315)
Opening cash position	1,546	914	1,612	2,058	1,242
Closing cash position	914	1,612	2,058	1,242	927

Source: Company, Emkay Research

This report is intended for team.emkay@whitemarquesolutions.com use and downloaded at 01/31/2023 11:33 AM

Emkay Research is also available on www.emkayglobal.com and Bloomberg EMKAY<GO>. Please refer to the last page of the report on Restrictions on Distribution. In Singapore, this research report or research analyses may only be distributed to Institutional Investors, Expert Investors or Accredited Investors as defined in the Securities and Futures Act, Chapter 289 of Singapore.

Key Ratios

Profitability (%)	FY21	FY22	FY23E	FY24E	FY25E
EBITDA Margin	13.5	11.3	10.8	11.9	12.0
EBIT Margin	9.7	7.9	7.7	8.7	8.8
Effective Tax Rate	25.5	25.4	25.5	25.5	25.5
Net Margin	7.6	6.2	6.2	6.8	6.7
ROCE	11.3	8.7	8.2	9.3	9.1
ROE	11.5	8.7	8.3	9.2	9.2
RoIC	19.6	19.3	20.9	24.7	26.0

Per Share Data (Rs)	FY21	FY22	FY23E	FY24E	FY25E
EPS	8.9	9.0	10.6	12.6	13.3
CEPS	13.4	13.8	15.9	18.5	19.8
BVPS	55.1	61.6	58.4	53.1	48.3
DPS	2.7	2.0	3.2	3.8	4.0

Valuations (x)	FY21	FY22	FY23E	FY24E	FY25E
PER	19.8	19.6	16.6	14.0	13.2
P/CEPS	13.2	12.7	11.1	9.6	8.9
P/BV	3.2	2.9	3.0	3.3	3.7
EV / Sales	1.4	1.1	1.0	1.0	0.9
EV / EBITDA	10.3	10.1	9.2	8.0	7.6
Dividend Yield (%)	1.5	1.1	1.8	2.1	2.3

Gearing Ratio (x)	FY21	FY22	FY23E	FY24E	FY25E
Net Debt/ Equity	(0.1)	(0.1)	0.0	0.0	0.0
Net Debt/EBIDTA	(0.7)	(0.6)	(0.3)	0.0	0.3
Working Cap Cycle (days)	34.5	36.2	31.6	31.2	30.6

Growth (%)	FY21	FY22	FY23E	FY24E	FY25E
Revenue	1.9	23.3	18.2	8.1	7.6
EBITDA	(0.7)	3.0	13.5	18.5	8.8
EBIT	(2.6)	0.7	15.2	21.7	8.2
PAT	(8.1)	517.7	(80.7)	18.6	6.0

Quarterly (Rs mn)	Q3FY22	Q4FY22	Q1FY23	Q2FY23	Q3FY23
Revenue	31,967	34,086	38,994	37,189	34,053
EBITDA	3,726	3,490	3,866	4,124	4,005
EBITDA Margin (%)	11.7	10.2	9.9	11.1	11.8
PAT	2,041	2,005	2,263	2,462	2,232
EPS (Rs)	2.4	2.4	2.7	2.9	2.6

Source: Company, Emkay Research

Shareholding Pattern (%)	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22
Promoters	46.0	46.0	46.0	46.0	46.0
FIs	9.6	10.1	10.4	10.5	11.0
DIs	20.6	19.2	17.8	17.8	19.6
Public and Others	23.8	24.7	25.8	25.7	23.5

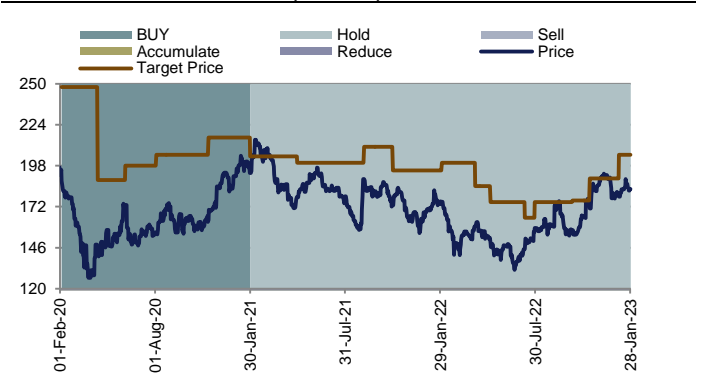
Source: Capitaline

RECOMMENDATION HISTORY (Rs/share)

Date	Closing Price	TP	Period (months)	Rating	Analyst
06-Jan-23	178	205	12m	Hold	Raghunandhan NL
11-Nov-22	171	190	12m	Hold	Raghunandhan NL
09-Oct-22	157	176	12m	Hold	Raghunandhan NL
29-Jul-22	159	175	12m	Hold	Raghunandhan NL
10-Jul-22	145	165	12m	Hold	Raghunandhan NL
05-May-22	149	175	12m	Hold	Raghunandhan NL
06-Apr-22	159	185	12m	Hold	Raghunandhan NL
24-Feb-22	141	200	12m	Hold	Raghunandhan NL
01-Feb-22	175	200	12m	Hold	Raghunandhan NL
30-Oct-21	173	195	12m	Hold	Raghunandhan NL
05-Sep-21	190	210	12m	Hold	Raghunandhan NL
30-Jul-21	179	200	12m	Hold	Raghunandhan NL
02-Jul-21	182	200	12m	Hold	Raghunandhan NL
18-Jun-21	185	200	12m	Hold	Raghunandhan NL
01-Jun-21	190	200	12m	Hold	Raghunandhan NL
30-May-21	192	200	12m	Hold	Raghunandhan NL
30-Apr-21	178	200	12m	Hold	Raghunandhan NL
30-Jan-21	194	204	12m	Hold	Raghunandhan NL
11-Nov-20	164	216	12m	Buy	Raghunandhan NL
11-Oct-20	164	205	12m	Buy	Raghunandhan NL
29-Sep-20	164	205	12m	Buy	Raghunandhan NL
03-Aug-20	155	205	12m	Buy	Raghunandhan NL
29-Jun-20	147	198	12m	Buy	Raghunandhan NL
05-Jun-20	173	198	12m	Buy	Raghunandhan NL
04-May-20	147	189	12m	Buy	Raghunandhan NL
29-Apr-20	155	189	12m	Buy	Raghunandhan NL
13-Apr-20	143	189	12m	Buy	Raghunandhan NL
27-Feb-20	171	248	12m	Buy	Raghunandhan NL
14-Feb-20	179	248	12m	Buy	Raghunandhan NL
04-Feb-20	188	248	12m	Buy	Raghunandhan NL

Source: Company, Emkay Research

RECOMMENDATION HISTORY (Rs/share)



Source: Bloomberg, Company, Emkay Research

Emkay Rating Distribution

Ratings	Expected Return within the next 12-18 months.
BUY	Over 15%
HOLD	Between -5% to 15%
SELL	Below -5%

Completed Date: 30 Jan 2023 21:39:20 (SGT)

Dissemination Date: 30 Jan 2023 21:40:20 (SGT)

Sources for all charts and tables are Emkay Research unless otherwise specified.

GENERAL DISCLOSURE/DISCLAIMER BY EMKAY GLOBAL FINANCIAL SERVICES LIMITED (EGFSL):

Emkay Global Financial Services Limited (CIN-L67120MH1995PLC084899) and its affiliates are a full-service, brokerage, investment banking, investment management and financing group. Emkay Global Financial Services Limited (EGFSL) along with its affiliates are participants in virtually all securities trading markets in India. EGFSL was established in 1995 and is one of India's leading brokerage and distribution house. EGFSL is a corporate trading member of Bombay Stock Exchange Limited (BSE), National Stock Exchange of India Limited (NSE), MCX Stock Exchange Limited (MCX-SX). EGFSL along with its subsidiaries offers the most comprehensive avenues for investments and is engaged in the businesses including stock broking (Institutional and retail), merchant banking, commodity broking, depository participant, portfolio management, insurance broking and services rendered in connection with distribution of primary market issues and financial products like mutual funds, fixed deposits. Details of associates are available on our website i.e. www.emkayglobal.com

EGFSL is registered as Research Analyst with SEBI bearing registration Number INH000000354 as per SEBI (Research Analysts) Regulations, 2014. EGFSL hereby declares that it has not defaulted with any stock exchange nor its activities were suspended by any stock exchange with whom it is registered in last five years, except that NSE had disabled EGFSL from trading on October 05, October 08 and October 09, 2012 for a manifest error resulting into a bonafide erroneous trade on October 05, 2012. However, SEBI and Stock Exchanges have conducted the routine inspection and based on their observations have issued advice letters or levied minor penalty on EGFSL for certain operational deviations in ordinary/routine course of business. EGFSL has not been debarred from doing business by any Stock Exchange / SEBI or any other authorities; nor has its certificate of registration been cancelled by SEBI at any point of time.

EGFSL offers research services to clients as well as prospects. The analyst for this report certifies that all of the views expressed in this report accurately reflect his or her personal views about the subject company or companies and its or their securities, and no part of his or her compensation was, is or will be, directly or indirectly related to specific recommendations or views expressed in this report.

Other disclosures by Emkay Global Financial Services Limited (Research Entity) and its Research Analyst under SEBI (Research Analyst) Regulations, 2014 with reference to the subject company(s) covered in this report

EGFSL and/or its affiliates may seek investment banking or other business from the company or companies that are the subject of this material. Emkay may have issued or may issue other reports that are inconsistent with and reach different conclusion from the information, recommendations or information presented in this report or are contrary to those contained in this report. Emkay Investors may visit www.emkayglobal.com to view all Research Reports. 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 research published by any other analyst or by associate entities of Emkay; our proprietary trading, investment businesses or other associate entities may make investment decisions that are inconsistent with the recommendations expressed herein. In reviewing these materials, you should be aware that any or all of the foregoing, among other things, may give rise to real or potential conflicts of interest including but not limited to those stated herein. Additionally, other important information regarding our relationships with the company or companies that are the subject of this material is provided herein. This report is not directed to, 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 or regulation or which would subject EGFSL or its group companies to any registration or licensing requirement within such jurisdiction. Specifically, this document does not constitute an offer to or solicitation to any U.S. person for the purchase or sale of any financial instrument or as an official confirmation of any transaction to any U.S. person. Unless otherwise stated, this message should not be construed as official confirmation of any transaction. No part of this document may be distributed in Canada or used by private customers in United Kingdom. All material presented in this report, unless specifically indicated otherwise, is under copyright to Emkay. None of the material, nor its content, nor any copy of it, may be altered in any way, transmitted to, copied or distributed to any other party, without the prior express written permission of EGFSL. All trademarks, service marks and logos used in this report are trademarks or registered trademarks of EGFSL or its Group Companies. The information contained herein is not intended for publication or distribution or circulation in any manner whatsoever and any unauthorized reading, dissemination, distribution or copying of this communication is prohibited unless otherwise expressly authorized. Please ensure that you have read "Risk Disclosure Document for Capital Market and Derivatives Segments" as prescribed by Securities and Exchange Board of India before investing in Indian Securities Market. In so far as this report includes current or historic information, it is believed to be reliable, although its accuracy and completeness cannot be guaranteed.

- This publication has not been reviewed or authorized by any regulatory authority. There is no planned schedule or frequency for updating research publication relating to any issuer.
- Please contact the primary analyst for valuation methodologies and assumptions associated with the covered companies or price targets

Disclaimer for U.S. persons only: This research report is a product of Emkay Global Financial Services Limited (Emkay), which is the employer of the research analyst(s) who has prepared the research report. The research analyst(s) preparing the research report is/are resident outside the United States (U.S.) and are not associated persons of any U.S. regulated broker-dealer and therefore the analyst(s) is/are not subject to supervision by a U.S. broker-dealer, and is/are not required to satisfy the regulatory licensing requirements of Financial Institutions Regulatory Authority (FINRA) or required to otherwise comply with U.S. rules or regulations regarding, among other things, communications with a subject company, public appearances and trading securities held by a research analyst account. This report is intended for distribution to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the U.S. Securities and Exchange Act, 1934 (the Exchange Act) and interpretations thereof by U.S. Securities and Exchange Commission (SEC) in reliance on Rule 15a 6(a)(2). If the recipient of this report is not a Major Institutional Investor as specified above, then it should not act upon this report and return the same to the sender. Further, this report may not be copied, duplicated and/or transmitted onward to any U.S. person, which is not the Major Institutional Investor. In reliance on the exemption from registration provided by Rule 15a-6 of the Exchange Act and interpretations thereof by the SEC in order to conduct certain business with Major Institutional Investors.

ANALYST CERTIFICATION BY EMKAY GLOBAL FINANCIAL SERVICES LIMITED (EGFSL)

The research analyst(s) primarily responsible for the content of this research report, in part or in whole, certifies that the views about the companies and their securities expressed in this report accurately reflect his/her personal views. The analyst(s) also certifies that no part of his/her compensation was, is, or will be, directly or indirectly, related to specific recommendations or views expressed in the report. The research analyst (s) primarily responsible of the content of this research report, in part or in whole, certifies that he or his associate¹ does not serve as an officer, director or employee of the issuer or the new listing applicant (which includes in the case of a real estate investment trust, an officer of the management company of the real estate investment trust; and in the case of any other entity, an officer or its equivalent counterparty of the entity who is responsible for the management of the issuer or the new listing applicant). The research analyst(s) primarily responsible for the content of this research report or his associate does not have financial interests² in relation to an issuer or a new listing applicant that the analyst reviews. EGFSL has procedures in place to eliminate, avoid and manage any potential conflicts of interests that may arise in connection with the production of research reports. The research analyst(s) responsible for this report operates as part of a separate and independent team to the investment banking function of the EGFSL and procedures are in place to ensure that confidential information held by either the research or investment banking function is handled appropriately. There is no direct link of EGFSL compensation to any specific investment banking function of the EGFSL.

¹ An associate is defined as (i) the spouse, or any minor child (natural or adopted) or minor step-child, of the analyst; (ii) the trustee of a trust of which the analyst, his spouse, minor child (natural or adopted) or minor step-child, is a beneficiary or discretionary object; or (iii) another person accustomed or obliged to act in accordance with the directions or instructions of the analyst.

² Financial interest is defined as interest that are commonly known financial interest, such as investment in the securities in respect of an issuer or a new listing applicant, or financial accommodation arrangement between the issuer or the new listing applicant and the firm or analysis. This term does not include commercial lending conducted at the arm's length, or investments in any collective investment scheme other than an issuer or new listing applicant notwithstanding the fact that the scheme has investments in securities in respect of an issuer or a new listing applicant.

COMPANY-SPECIFIC / REGULATORY DISCLOSURES BY EMKAY GLOBAL FINANCIAL SERVICES LIMITED (EGFSL):

Disclosures by Emkay Global Financial Services Limited (Research Entity) and its Research Analyst under SEBI (Research Analyst) Regulations, 2014 with reference to the subject company(s) covered in this report:-

1. EGFSL, its subsidiaries and/or other affiliates do not have a proprietary position in the securities recommended in this report as of January 30, 2023
2. EGFSL, and/or Research Analyst does not market make in equity securities of the issuer(s) or company(ies) mentioned in this Research Report
- Disclosure of previous investment recommendation produced:**
3. EGFSL may have published other investment recommendations in respect of the same securities / instruments recommended in this research report during the preceding 12 months. Please contact the primary analyst listed in the first page of this report to view previous investment recommendations published by EGFSL in the preceding 12 months.
4. EGFSL, its subsidiaries and/or other affiliates and Research Analyst or his/her relative's does not have any material conflict of interest in the securities recommended in this report as of January 30, 2023.
5. EGFSL, its subsidiaries and/or other affiliates and Research Analyst or his/her relative's does not have actual/beneficial ownership of 1% or more securities of the subject company at the end of the month immediately preceding the January 30, 2023
6. EGFSL, its subsidiaries and/or other affiliates and Research Analyst have not received any compensation in whatever form including compensation for investment banking or merchant banking or brokerage services or for products or services other than investment banking or merchant banking or brokerage services from securities recommended in this report (subject company) in the past 12 months.
7. EGFSL, its subsidiaries and/or other affiliates and/or and Research Analyst have not received any compensation or other benefits from securities recommended in this report (subject company) or third party in connection with the research report.
8. Securities recommended in this report (Subject Company) has not been client of EGFSL, its subsidiaries and/or other affiliates and/or and Research Analyst during twelve months preceding the January 30, 2023

RESTRICTIONS ON DISTRIBUTION

General	This report is not directed to, 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 or regulation.
Australia	This report is not for distribution into Australia.
Hong Kong	This report is not for distribution into Hong Kong.
Indonesia	This report is being distributed in Indonesia by PT DBS Vickers Sekuritas Indonesia.
Malaysia	This report is not for distribution into Malaysia.
Singapore	This report is distributed in Singapore by DBS Bank Ltd (Company Regn. No. 16800306E) or DBSVS (Company Regn. No. 1860024G) both of which are Exempt Financial Advisers as defined in the Financial Advisers Act and regulated by the Monetary Authority of Singapore. DBS Bank Ltd and/or DBSVS, may distribute reports produced by its respective foreign entities, affiliates or other foreign research houses pursuant to an agreement under Regulation 32C of the financial Advisers Regulations. Singapore recipients should contact DBS Bank Ltd at 6327 2288 for matters arising from, or in connection with the report.
Thailand	This report is being distributed in Thailand by DBS Vickers Securities (Thailand) Co Ltd.
United Kingdom	This report is disseminated in the United Kingdom by DBS Vickers Securities (UK) Ltd, ("DBSVUK"). DBSVUK is authorised and regulated by the Financial Conduct Authority in the United Kingdom. In respect of the United Kingdom, this report is solely intended for the clients of DBSVUK, its respective connected and associated corporations and affiliates only and no part of this document may be (i) copied, photocopied or duplicated in any form or by any means or (ii) redistributed without the prior written consent of DBSVUK. This communication is directed at persons having professional experience in matters relating to investments. Any investment activity following from this communication will only be engaged in with such persons. Persons who do not have professional experience in matters relating to investments should not rely on this communication.
Dubai International Financial Centre	This research report is being distributed by DBS Bank Ltd., (DIFC Branch) having its office at units 608-610, 6 th Floor, Gate Precinct Building 5, PO Box 506538, Dubai International Financial Centre (DIFC), Dubai, United Arab Emirates. DBS Bank Ltd., (DIFC Branch) is regulated by The Dubai Financial Services Authority. This research report is intended only for professional clients (as defined in the DFSA rulebook) and no other person may act upon it.
United Arab Emirates	This report is provided by DBS Bank Ltd (Company Regn. No. 196800306E) which is an Exempt Financial Adviser as defined in the Financial Advisers Act and regulated by the Monetary Authority of Singapore. This report is for information purposes only and should not be relied upon or acted on by the recipient or considered as a solicitation or inducement to buy or sell any financial product. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situation, or needs of individual clients. You should contact your relationship manager or investment adviser if you need advice on the merits of buying, selling or holding a particular investment. You should note that the information in this report may be out of date and it is not represented or warranted to be accurate, timely or complete. This report or any portion thereof may not be reprinted, sold or redistributed without our written consent.
United States	DBSVUSA did not participate in its preparation. The research analyst(s) named on this report are not registered as research analysts with FINRA and are not associated persons of DBSVUSA. The research analyst(s) are not subject to FINRA Rule 2241 restrictions on analyst compensation, communications with a subject company, public appearances and trading securities held by a research analyst. This report is being distributed in the United States by DBSVUSA, which accepts responsibility for its contents. This report may only be distributed to Major U.S. Institutional Investors (as defined in SEC Rule 15a-6) and to such other institutional investors and qualified persons as DBSVUSA may authorize. Any U.S. person receiving this report who wishes to effect transactions in any securities referred to herein should contact DBSVUSA directly and not its affiliate.
Other jurisdictions	In any other jurisdictions, except if otherwise restricted by laws or regulations, this report is intended only for qualified, professional, institutional or sophisticated investors as defined in the laws and regulations of such jurisdictions.

Emkay Global Financial Services Ltd.

CIN - L67120MH1995PLC084899

7th Floor, The Ruby, Senapati Bapat Marg, Dadar - West, Mumbai - 400028. India

Tel: +91 22 66121212 Fax: +91 22 66121299 Web: www.emkayglobal.com