

HPCL

Refer to important disclosures at the end of this report

Weaker refining leads to earnings-miss, as expansion projects weigh in

- HPCL's Q3FY23 SA EBITDA/PAT of Rs20.7bn/Rs1.7bn missed our estimates by 26%/82%. The EBITDA-miss was driven by lower reported GRM at USD9.1/bbl (vs USD13.5 est). PAT was further affected by higher forex losses and lower Other Income.
- We estimate Q3 core GRM at ~USD11/bbl, affected by the Vizag expansion. Our marketing inventory loss estimate of Rs6-7bn (based on BPCL) implies blended margin of ~Rs3.7/kg (6% beat to our estimate). Gross-debt fell 6% QoQ to Rs642bn (up 72% YoY).
- While OMCs' fortunes improve on the marketing front, HPCL's ongoing major refinery expansions with the lowest refining/marketing ratio put it in a weak spot, with sizeable loss likely in FY23, unless more subsidy is provided (we, however, assume Rs150bn subsidy).
- We build RPAT of Rs15bn in FY23, but cut FY24/25E EPS by 11/18%, building-in higher finance costs on elevated debt levels. We roll-over to Mar-25, but retain our TP of Rs230. We maintain our HOLD rating. Subsidy and auto-fuel price hikes remain key upside risks.

Other Highlights: Refinery volume was up 8% QoQ, at 4.8mmt. Domestic marketing sales grew 10% YoY, while overall volume was up 7% on lower exports. Petrol/diesel sales volume growth was 11/15% YoY vs. 8/10% for the industry. Pipeline volume grew 6% QoQ to 5.8mmt. HPCL's gross profit turned positive to Rs64.8bn, after two consecutive quarters of losses as marketing margins improved QoQ. Other Expenditure was flat YoY/fell 8% QoQ to Rs36.9bn (12% below our est.). Depreciation rose 3% QoQ, while interest rose 15% QoQ to Rs6.8bn. Other Income was down 52% YoY at Rs2.9bn (a 42% miss), while forex loss stood at Rs4bn vs. our est. of Rs3bn. Share of associate/JV profits turned positive to Rs2.9bn vs. Rs2.6bn loss QoQ, implying margin recovery in HMEL. 9MFY23 capex was ~Rs92bn.

Management KTAs: Debt has reduced now, as LPG subsidy payout of Rs56.2bn was in Jan-23. The Vizag expansion should conclude by Q1FY24 and the resid upgradation project by end-CY23. There is still no clarity on the Rs300bn capital support or how to avail it.

Outlook: HPCL logged weaker-than-expected refining performance in Q3, while marketing performance was a tad better. We estimate HPCL to post profit in Q4FY23, though we assume the Rs150bn of auto-fuel subsidy (Rs300bn for the industry, with the highest share for HPCL) would result in FY23 PAT of Rs15bn; hence, we await any related announcements. Ex-subsidy, HPCL could albeit suffer sizeable losses in full-FY23. HPCL's major projects would last for a year at least, given Rs140-150bn capex p.a. along with the Barmer refinery equity infusion. Hence, debt is likely to stay elevated. Any cooling in broader commodity prices and/or resumption in auto-fuel price change based on market rate are key triggers.

Valuation: We value HPCL on SOTP-methodology, with investments at a 30% holdco discount. We retain our 5.5x target EV/EBITDA and maintain HOLD on the stock with TP of Rs230. HPCL remains a high beta play, as it is the most-leveraged OMC. Key risks: Adverse commodity prices & downstream margins; currency movement; govt policies; project issues.

Financial Snapshot (Standalone)

(Rs mn)	FY21	FY22	FY23E	FY24E	FY25E
Revenue	23,29,968	34,96,829	43,07,030	39,70,087	36,38,440
EBITDA	1,59,254	1,01,759	(1,15,990)	1,28,973	1,51,559
EBITDA Margin (%)	6.8	2.9	(2.7)	3.2	4.2
APAT	1,05,310	59,162	(1,39,624)	39,145	46,238
EPS (Rs)	72.5	41.7	(98.4)	27.6	32.6
EPS (% chg)	450.2	(42.5)	NM	NM	18.1
ROE (%)	32.3	15.8	(35.4)	9.5	10.5
P/E (x)	3.2	5.6	NM	8.4	7.1
EV/EBITDA (x)	4.5	7.3	NM	7.2	6.2
P/BV (x)	0.9	0.9	0.8	0.8	0.7

Source: Company, Emkay Research

CMP	Target Price
Rs 232 as of (February 9, 2023)	Rs 230 (■) 12 months
Rating	Upside
HOLD (■)	(1.1) %

Change in Estimates

EPS Chg FY23E/FY24E (%)	NM/(11)
Target Price change (%)	-
Target Period (Months)	12
Previous Reco	HOLD

Emkay vs Consensus

	EPS Estimates	
	FY23E	FY24E
Emkay	(98.4)	27.6
Consensus	(36.2)	45.9
Mean Consensus TP (12M)	Rs 265	

Stock Details

Bloomberg Code	HPCL IN
Face Value (Rs)	10
Shares outstanding (mn)	1,419
52 Week H/L	307 / 200
M Cap (Rs bn/USD bn)	329 / 3.99
Daily Avg Volume (nos.)	40,98,453
Daily Avg Turnover (USD mn)	11.7

Shareholding Pattern Dec '22

Promoters	54.9%
FIIIs	15.7%
DIIIs	19.6%
Public and Others	9.8%

Price Performance

(%)	1M	3M	6M	12M
Absolute	(5)	13	(3)	(22)
Rel. to Nifty	(4)	15	(5)	(23)

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:

Sabri Hazarika

sabri.hazarika@emkayglobal.com
+91 22 6612 1282

Harsh Maru

harsh.maru@emkayglobal.com
+91 22 6612 1336

Exhibit 1: Actual vs. Estimates (Q3FY23)

Rs bn	Actual	Estimates (Emkay)	Consensus Estimates (Bloomberg)	Variation		Comments
				Emkay	Consensus	
Total Revenue	1,096.0	994.5	1,028.7	10%	7%	
Adjusted EBITDA	20.7	28.1	6.1	-26%	239%	Lower than expected GRMs
EBITDA Margin	1.9%	2.8%	0.6%	-93bps	223bps	
Adjusted Net Profit	1.7	9.3	-6.4	-82%	NM	Forex losses and Other Income miss

Source: Company, Emkay Research

Exhibit 2: Quarterly summary

Rs mn	Q3FY22	Q4FY22	Q1FY23	Q2FY23	Q3FY23	YoY	QoQ	9MFY22	9MFY23	YoY
Revenue	9,66,024	9,75,727	11,44,547	10,28,003	10,96,032	13%	7%	25,21,102	32,68,582	30%
COGS	9,06,271	9,01,413	12,13,482	10,45,509	10,31,258	14%	-1%	23,18,744	32,90,249	42%
Gross Profit	59,753	74,315	(68,935)	(17,507)	64,774	8%		2,02,358	(21,667)	
Opex	42,997	52,456	46,557	47,611	44,027	2%	-8%	1,27,207	1,38,195	9%
Total Expenditure	9,49,268	9,53,869	12,60,039	10,93,120	10,75,284	13%	-2%	24,45,951	34,28,443	40%
EBITDA	16,756	21,859	(1,15,492)	(65,118)	20,748	24%		75,151	(1,59,861)	
Depreciation	10,247	10,832	10,945	10,809	11,105	8%	3%	28,859	32,858	14%
Interest	2,358	3,283	3,327	5,950	6,817	189%	15%	6,444	16,093	150%
Other Income	6,040	15,979	3,397	2,805	2,889	-52%	3%	17,510	9,091	-48%
Exceptional Items*	-	-	-	56,170	-			-	56,170	
Forex Gain/(Losses)	1,416	(872)	(9,454)	(6,031)	(4,031)			1,830	(19,516)	
PBT	11,607	22,850	(1,35,820)	(28,932)	1,684	-85%		59,187	(1,63,068)	
Tax	2,918	4,897	-33,850	-7,211	-40			13,314	-41,101	
PAT	8,689	17,953	-1,01,969	-21,721	1,724	-80%		45,874	-1,21,967	
Adjusted PAT	8,689	17,953	(1,01,969)	(63,656)	1,724	-80%		45,874	(1,63,902)	
Adjusted EPS (Rs)	6.1	12.7	(71.9)	(44.9)	1.2	-80%		32.3	(115.5)	
Tax Rate	25%	21%	25%	25%	-2%			22%	25%	
Core EBITDA^	64,256	(1,07,242)	(1,07,592)	(38,118)	32,748	-49%		79,451	(1,12,961)	
Core PAT^	43,153	(78,823)	(88,612)	(38,949)	13,251	-69%		46,120	(1,14,310)	
Core EPS (Rs)^	30.4	(55.6)	(62.5)	(27.5)	9.3	-69%		32.5	(80.6)	
Refining Volumes (mmt)	4.2	4.7	4.8	4.5	4.8	14%	8%	9.3	14.1	52%
Reported GRM (USD/bbl)	6.4	12.4	16.7	8.4	9.1	43%	9%	4.5	11.5	156%
Core GRM (USD/bbl)^	4.9	6.4	14.7	13.4	11.1	126%	-17%	2.6	13.1	400%
Adjusted Refining EBITDA^	6,706	23,287	36,325	12,846	17,220	157%		2,280	66,391	
Marketing Volumes (mmt)	10.5	10.7	10.7	10.4	11.3	7%	8%	28.5	32.3	14%
Diesel	4.4	4.4	4.9	4.3	5.1	15%	17%	12.1	14.3	18%
Petrol	2.0	1.9	2.1	2.2	2.2	11%	2%	5.6	6.5	17%
Marketing Margin (Rs/mt)^	8,806	-6,963	-9,714	-2,740	3,681	-58%		6,512	-2,814	
Adjusted Marketing EBITDA^	7,343	-4,095	-1,54,545	-80,623	681	-91%		65,640	-2,34,487	
Marketing Inventory Gain/(Losses)^	-50,900	1,13,600	-13,300	-14,000	-6,300			-13,700	-33,600	
Pipeline Volumes (mmt)	5.5	5.3	5.8	5.5	5.8	6%	6%	14.6	17.1	17%
Implied Pipeline EBITDA	2,706	2,666	2,728	2,660	2,847	5%	7%	7,231	8,235	14%
Gross Debt	3,72,500	4,31,930	4,72,830	6,85,460	6,42,450	72%	-6%	3,72,500	6,42,450	72%
Implied Net Debt	3,18,655	3,77,950	4,18,945	6,31,669	5,88,659	85%	-7%	3,18,655	5,88,659	85%
Net Under-recovery	-	-	-	-	-			-	-	

Source: Company, Emkay Research; ^OMCs have largely discontinued reporting inventory gain/loss figures; hence these numbers are assumed; Segmental EBITDA is also computed; * Rs56.2bn of LPG subsidy assumed as exceptional, being one-time

Exhibit 3: Change in assumptions

	FY23E			FY24E			FY25E		
	Previous	Revised	Variance	Previous	Revised	Variance	Previous	Revised	Variance
GRM (USD/bbl)	10.0	11.5	15%	8.0	8.0	0%	8.5	8.5	0%
Marketing Margin (Rs/mt)	2,067	-1,016	NM	4,404	4,449	1%	4,691	4,800	2%
Marketing Sales (mmt)	45	44	-3%	46	45	-1%	47	47	-1%
<i>Growth</i>	14.7%	11.6%	-312bps	1.6%	3.2%	159bps	2.7%	3.2%	46bps

Source: Company, Emkay Research

Exhibit 4: Change in estimates

(Rs bn)	FY23E			FY24E			FY25E		
	Previous	Revised	Variance	Previous	Revised	Variance	Previous	Revised	Variance
Revenue	4,334	4,307	-1%	3,815	3,970	4%	3,481	3,638	5%
EBITDA	14	-116	NM	129	129	0%	154	152	-2%
<i>EBITDA Margins</i>	0.3%	-2.7%	NM	3.4%	3.2%	-13bps	4.4%	4.2%	-26bps
PAT	-38	-140	NM	44	39	-11%	56	46	-18%
EPS (Rs)	-26.5	-98.4	NM	30.9	27.6	-11%	39.7	32.6	-18%

Source: Company, Emkay Research; Note – RPAT estimate for FY23 is ~Rs15bn as LPG & potential auto-fuel subsidy has been put under exceptional items

Exhibit 5: SOTP-based Valuation – Mar-24E

Components	Basis	Mar-25E EBITDA	Multiple(x)	EV (Rs bn)	EV/share (Rs)	Comments
Refining Standalone	EV/EBITDA	88	5.5	482	340	
Pipelines Standalone	EV/EBITDA	14	5.5	74	52	
Petrochemicals Standalone	EV/EBITDA	-	-	-	-	
Marketing Standalone	EV/EBITDA	50	5.5	277	195	
Core Business EV		152	5.5	834	588	Blended multiple at 5.5x
Less: Adj. Net Debt (at Mar-24 end)				581	410	
Core Business Valuation				252	178	
Value of HMEL Stake	P/E			56	39	
Value of Listed Investments	TP/CMP			18	13	At 30% HoldCo Discount
Target Price-Fair Value (Rs/sh)					230	

Source: Company, Emkay Research

Exhibit 6: Schedule and Value of Investments

Listed	Type	Basis of Valuation	TP/CMP (Rs/sh)	Equity Value (Rs bn)	HPCL Stake	Pro-rata Value (Rs bn)	HoldCo Discount	Contr. to SOTP (Rs bn)	Per Share Value (Rs)
MRPL	Financial	CMP*1.12x	61	107	17.0%	18	30%	13	8.9
Oil India	Financial	TP (Emkay)	270	293	2.5%	7	30%	5	3.6
Total Listed						25		18	13

Source: Company, Emkay Research; *1.12x is taken as 1 year forward over CMP

Exhibit 7: Value of the HMEL-stake

Components	Basis	Mar-25E PAT (Rs bn)	Multiple (x)	Equity value (Rs bn)	HPCL stake	Pro-rata value (Rs bn)	Holdco Disc.	Contr. To SOTP (Rs bn)	Per-share Value (Rs)
HPCL Mittal Energy (HMEL)	P/E	20	8.0	160	50%	80	30%	56	39

Source: Company, Emkay Research

Key Financials (Standalone)**Income Statement**

Y/E Mar (Rs mn)	FY21	FY22	FY23E	FY24E	FY25E
Revenue	23,29,968	34,96,829	43,07,030	39,70,087	36,38,440
Expenditure	21,70,714	33,95,071	44,23,020	38,41,114	34,86,881
EBITDA	1,59,254	1,01,759	(1,15,990)	1,28,973	1,51,559
Depreciation	35,527	39,691	44,608	59,922	67,843
EBIT	1,23,728	62,067	(1,60,599)	69,051	83,717
Other Income	16,004	22,741	17,696	18,651	19,882
Interest expenses	9,147	9,727	23,761	35,368	41,783
PBT	1,30,584	75,081	(1,66,663)	52,333	61,815
Tax	37,158	22,875	1,59,131	13,188	15,577
Extraordinary Items	11,884	6,956	1,86,170	0	0
Minority Int./Income from Assoc.	0	0	0	0	0
Reported Net Income	1,06,639	63,826	14,591	39,145	46,238
Adjusted PAT	1,05,310	59,162	(1,39,624)	39,145	46,238

Balance Sheet

Y/E Mar (Rs mn)	FY21	FY22	FY23E	FY24E	FY25E
Equity share capital	14,524	14,189	14,186	14,186	14,186
Reserves & surplus	3,47,337	3,72,581	3,87,172	4,12,616	4,42,671
Net worth	3,61,861	3,86,770	4,01,358	4,26,802	4,56,857
Minority Interest	0	0	0	0	0
Loan Funds	4,29,159	4,65,906	5,62,106	6,62,106	6,92,106
Net deferred tax liability	55,111	59,783	19,283	(967)	(11,092)
Total Liabilities	8,46,131	9,12,459	9,82,746	10,87,940	11,37,870
Net block	4,99,005	5,71,336	7,97,058	9,07,284	9,68,177
Investment	1,49,928	1,79,437	1,81,232	1,83,044	1,84,874
Current Assets	4,21,265	4,83,171	5,88,686	5,54,587	5,20,972
Cash & bank balance	2,372	1,310	4,307	12,256	20,017
Other Current Assets	6,388	6,275	7,729	7,124	6,529
Current liabilities & Provision	4,66,403	5,89,145	7,18,059	6,50,655	6,11,098
Net current assets	(45,137)	(1,05,974)	(1,29,373)	(96,068)	(90,126)
Misc. exp	0	0	0	0	0
Total Assets	8,46,131	9,12,459	9,82,746	10,87,940	11,37,870

Cash Flow

Y/E Mar (Rs mn)	FY21	FY22	FY23E	FY24E	FY25E
PBT (Ex-Other income) (NI+Dep)	1,14,581	52,340	(1,84,359)	33,682	41,934
Other Non-Cash items	21,638	15,146	1,86,170	0	0
Chg in working cap	41,864	64,446	(14,103)	(45,606)	(8,306)
Operating Cashflow	1,77,223	1,58,898	51,160	70,179	1,27,676
Capital expenditure	(1,22,526)	(1,37,347)	(1,36,500)	(1,30,000)	(1,10,000)
Free Cash Flow	54,697	21,551	(85,340)	(59,821)	17,676
Investments	(24,812)	(29,510)	(1,794)	(1,812)	(1,830)
Other Investing Cash Flow	4,052	18,462	0	0	0
Investing Cashflow	(1,27,282)	(1,25,653)	(1,20,598)	(1,13,161)	(91,949)
Equity Capital Raised	(718)	(335)	(4)	0	0
Loans Taken / (Repaid)	(1,050)	36,747	96,200	1,00,000	30,000
Dividend paid (incl tax)	(14,844)	(32,229)	0	(13,701)	(16,183)
Other Financing Cash Flow	(22,941)	(28,763)	0	0	0
Financing Cashflow	(48,700)	(34,306)	72,436	50,931	(27,966)
Net chg in cash	1,241	(1,062)	2,998	7,948	7,761
Opening cash position	1,132	2,372	1,310	4,307	12,256
Closing cash position	2,372	1,310	4,307	12,256	20,017

Source: Company, Emkay Research

This report is intended for team.emkay@whitemarquesolutions.com use and downloaded at 03/08/2023 12:36 PM

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	6.8	2.9	(2.7)	3.2	4.2
EBIT Margin	5.3	1.8	(3.7)	1.7	2.3
Effective Tax Rate	28.5	30.5	NM	25.2	25.2
Net Margin	4.0	1.5	(7.6)	1.0	1.3
ROCE	17.2	9.6	(15.1)	8.5	9.3
ROE	32.3	15.8	(35.4)	9.5	10.5
RoIC	19.1	9.4	(55.7)	7.1	7.6

Per Share Data (Rs)	FY21	FY22	FY23E	FY24E	FY25E
EPS	72.5	41.7	(98.4)	27.6	32.6
CEPS	97.0	69.7	(67.0)	69.8	80.4
BVPS	249.1	272.6	282.9	300.9	322.1
DPS	22.7	14.0	0.0	9.7	11.4

Valuations (x)	FY21	FY22	FY23E	FY24E	FY25E
PER	3.2	5.6	NM	8.4	7.1
P/CEPS	2.4	3.3	NM	3.3	2.9
P/BV	0.9	0.9	0.8	0.8	0.7
EV / Sales	0.3	0.2	0.2	0.2	0.3
EV / EBITDA	4.5	7.3	NM	7.2	6.2
Dividend Yield (%)	9.8	6.0	0.0	4.2	4.9

Gearing Ratio (x)	FY21	FY22	FY23E	FY24E	FY25E
Net Debt/ Equity	1.0	1.1	1.3	1.4	1.3
Net Debt/EBIDTA	2.3	4.0	NM	4.6	4.1
Working Cap Cycle (days)	27.8	15.1	15.1	15.1	15.1

Growth (%)	FY21	FY22	FY23E	FY24E	FY25E
Revenue	(13.3)	50.1	23.2	(7.8)	(8.4)
EBITDA	165.6	(36.1)	NM	NM	17.5
EBIT	359.5	(49.8)	NM	NM	21.2
PAT	304.4	(40.1)	NM	NM	18.1

Quarterly (Rs mn)	Q3FY22	Q4FY22	Q1FY23	Q2FY23	Q3FY23
Revenue	9,66,024	9,75,727	11,44,547	10,28,003	10,96,032
EBITDA	16,756	21,859	(1,15,492)	(65,118)	20,748
EBITDA Margin (%)	1.7	2.2	(10.1)	(6.3)	1.9
PAT	8,689	17,953	(1,01,969)	(21,721)	1,724
EPS (Rs)	6.1	12.7	(71.9)	(15.3)	1.2

Source: Company, Emkay Research

Shareholding Pattern (%)	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22
Promoters	54.9	54.9	54.9	54.9	54.9
FIs	20.2	19.9	18.2	16.7	15.7
DIs	15.1	15.1	16.4	18.0	19.6
Public and Others	9.8	10.1	10.5	10.4	9.8

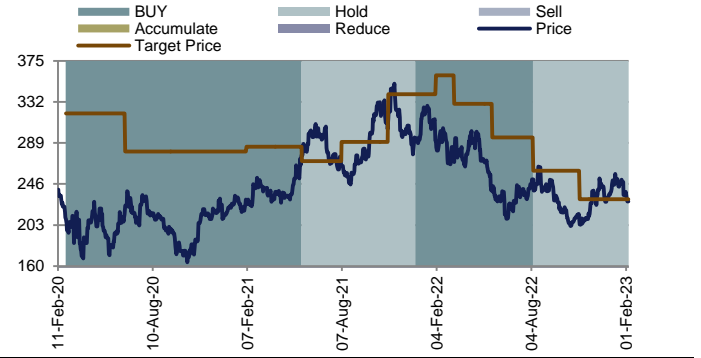
Source: Capitaline

RECOMMENDATION HISTORY (Rs/share)

Date	Closing Price	TP	Period	Rating	Analyst
06-Dec-22	224	230	12m	Hold	Sabri Hazarika
04-Nov-22	204	230	12m	Hold	Sabri Hazarika
07-Sep-22	244	260	12m	Hold	Sabri Hazarika
07-Aug-22	251	260	12m	Hold	Sabri Hazarika
15-Jul-22	240	295	12m	Buy	Sabri Hazarika
28-Jun-22	222	295	12m	Buy	Sabri Hazarika
22-May-22	244	295	12m	Buy	Sabri Hazarika
21-May-22	244	295	12m	Buy	Sabri Hazarika
09-Mar-22	269	330	12m	Buy	Sabri Hazarika
02-Feb-22	291	360	12m	Buy	Sabri Hazarika
25-Dec-21	292	340	12m	Buy	Sabri Hazarika
23-Nov-21	319	340	12m	Hold	Sabri Hazarika
03-Nov-21	314	340	12m	Hold	Sabri Hazarika
06-Aug-21	265	290	12m	Hold	Sabri Hazarika
26-Jul-21	274	270	12m	Hold	Sabri Hazarika
23-Jun-21	300	270	12m	Hold	Sabri Hazarika
29-May-21	281	270	12m	Hold	Sabri Hazarika
22-May-21	276	270	12m	Hold	Sabri Hazarika
23-Apr-21	234	285	12m	Buy	Sabri Hazarika
23-Mar-21	239	285	12m	Buy	Sabri Hazarika
18-Mar-21	234	285	12m	Buy	Sabri Hazarika
05-Feb-21	225	285	12m	Buy	Sabri Hazarika
06-Jan-21	221	280	12m	Buy	Sabri Hazarika
26-Nov-20	213	280	12m	Buy	Sabri Hazarika
05-Nov-20	205	280	12m	Buy	Sabri Hazarika
28-Sep-20	184	280	12m	Buy	Sabri Hazarika
23-Sep-20	177	280	12m	Buy	Sabri Hazarika
08-Aug-20	214	280	12m	Buy	Sabri Hazarika
18-Jun-20	223	280	12m	Buy	Sabri Hazarika
03-Jun-20	197	320	12m	Buy	Sabri Hazarika
06-May-20	203	320	12m	Buy	Sabri Hazarika
26-Feb-20	209	320	12m	Buy	Sabri Hazarika

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: 10 Feb 2023 03:44:36 (SGT)

Dissemination Date: 10 Feb 2023 03:45:36 (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 February 10, 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 February 10, 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 February 10, 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 February 10, 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