

AIA Engineering | BUY

Performance broadly in-line; customer conversion key to watch

AIA Engineering (AIAE) reported number broadly in-line with estimates. Revenue was down 9.7% YoY to INR 11.5bn, due to lower realisation, (on account of pass-on of low RM cost) which declined to INR 158/kg vs INR 170/KG in 4QFY24 and lower volume. EBITDA declined 5.8% YoY to INR 2.97bn. Other income grew 20% YoY to INR 765mn, which include treasury income of INR 720mn. PAT declined 2.9% YoY to INR 2.6bn. FY24 volumes were flat at 2,97,345 MT (vs 2,91,342 MT in FY23), due to delayed conversion. Management targets incremental volume of 30,000 MT for FY25 and would continue to focus on new customer conversion (from forged media to High Chrome media), though it is taking longer than expected time. AIAE has trimmed down its capacity addition target (brown field expansion) to 36,000 MT vs 80,000 MT guided earlier, while it is on track for debottlenecking exercise, which will further increase capacity by 20,000 MT. Post this, capacity is likely to be 4,96,000 MT.

- Lower volumes and realisation impacted revenue:** Revenue declined 9.7% YoY to INR 11.5bn, (JMFe of INR12.2bn). Volume declined 2.8% YoY to 71,433 MT, due to decline in mining segment volume (down 6.9% YoY to 44,932 MT), while it grew for non-mining segment (up 4.9% YoY to 26,501 MT). Realisations declined 7% YoY to INR 158/kg. EBITDA declined 5.8% YoY to INR 3bn (JMFe INR 3bn), while EBITDA margins expanded 110bps YoY, mainly due to gross margins expansion (160bps YoY to 56.2%) and lower power & fuel cost (6.4% vs 8.2% YoY). PAT declined 3% YoY to INR 2.6bn, (JMFe of INR 2.7bn), aided by higher other income (up 20% YoY at INR 765mn).
- Delayed conversion impacted volumes:** Though the demand environment remained stable, targeted conversion of customers (from forged to high chrome media- market size 2.5 MT) is witnessing delay impacting volume growth. Management expect additional volume of 30,000 MT for FY25, which will be driven by mill liner, increased volume from Canada, backed with healthy demand scenario for mining industry.
- Trimmed its capacity addition target:** Company had faced some delay in shipment of equipment from Europe for capacity addition. Additionally it has also trimmed its initial brown-field capacity expansion target of 80,000MT to 36,000 MT factoring in excess current capacity. However as it is plug and play module, it can easily ramp up capacity in 5-6 months time. The upcoming 36,000 MT is likely to operational by 3QFY25. It is also undertaking debottlenecking exercise of its non-grinding media which will enhance capacity by 20,000 MT. Post expansion installed capacity will be 4,96,000MT.
- Maintain BUY with revised TP of INR4,260:** We estimate revenue and EPS CAGR of 10% and 5% respectively over FY24-26E, factoring in volume CAGR of 9.7%. Additionally AIA offers the possibility of incremental growth through acquisitions given its strong cash reserves (net cash INR 32.9bn as on Mar'24). Maintain BUY with revised TP of INR 4,260 based on 32x FY26E. Key Risk- delay in new customer conversion and volatility in RM prices & freight cost.



Deepak Agarwal
deepak.agarwal@jmfl.com | Tel: (91 22) 66303037

Nilesh Soni
nilesh.soni@jmfl.com | Tel: (91 22) 66303372

Recommendation and Price Target

Current Reco.	BUY
Previous Reco.	BUY
Current Price Target (12M)	4,260
Upside/(Downside)	12.9%
Previous Price Target	4,400
Change	-3.2%

Key Data – AIAE IN

Current Market Price	INR3,775
Market cap (bn)	INR356.0/US\$4.3
Free Float	41%
Shares in issue (mn)	94.3
Diluted share (mn)	94.3
3-mon avg daily val (mn)	INR311.3/US\$3.7
52-week range	4,630/2,705
Sensex/Nifty	73,105/22,218
INR/US\$	83.5

Price Performance

%	1M	6M	12M
Absolute	-3.8	4.9	37.6
Relative*	-3.4	-5.7	17.3

* To the BSE Sensex

JM Financial Research is also available on:
Bloomberg - JMFR <GO>,
Thomson Publisher & Reuters,
S&P Capital IQ, FactSet and Visible Alpha

Please see Appendix I at the end of this report for Important Disclosures and Disclaimers and Research Analyst Certification.

Financial Summary					(INR mn)
Y/E March	FY22A	FY23A	FY24A	FY25E	FY26E
Net Sales	35,665	49,088	48,538	53,783	59,117
Sales Growth (%)	23.8	37.6	-1.1	10.8	9.9
EBITDA	7,210	12,407	13,338	12,793	13,994
EBITDA Margin (%)	20.2	25.3	27.5	23.8	23.7
Adjusted Net Profit	6,196	10,559	11,356	11,200	12,550
Diluted EPS (INR)	65.7	111.9	120.4	118.7	133.1
Diluted EPS Growth (%)	9.4	70.4	7.5	-1.4	12.0
ROIC (%)	18.3	28.1	28.3	25.3	26.4
ROE (%)	13.8	20.2	18.4	15.8	15.7
P/E (x)	57.5	33.7	31.4	31.8	28.4
P/B (x)	7.5	6.3	5.3	4.7	4.2
EV/EBITDA (x)	48.5	28.4	26.5	27.3	24.7
Dividend Yield (%)	0.2	0.4	0.4	0.7	0.8

Source: Company data, JM Financial. Note: Valuations as of 14/May/2024

Exhibit 1. Change in estimates

INR mn	Revised Estimates		Previous Estimates		% chg	
	FY25E	FY26E	FY25E	FY26E	FY25E	FY26E
Sales	53,783	59,117	54,792	60,949	-1.8	-3.0
EBITDA	12,793	13,994	13,105	14,576	-2.4	-4.0
EBITDA Margin (%)	23.8%	23.7%	23.9%	23.9%	-10bps	-20bps
Adj PAT	11,200	12,550	11,502	12,964	-2.6	-3.2
Adj EPS (INR)	118.7	133.1	121.9	137.4	-2.6	-3.2

Source: JM Financial

Exhibit 2. Volume projection from FY24-26E

Particulars	FY19A	FY20A	FY21A	FY22A	FY23A	FY24E	FY25E	FY26E
Mining Volumes	170,224	177,274	180,844	170,842	192,352	203,677	235,654	265,465
YoY%	23.3%	4.1%	2.0%	-5.5%	12.6%	5.9%	15.7%	12.7%
Non Mining Volumes	94,950	89,955	85,458	89,627	98,990	93,668	91,276	92,102
YoY%	5.5%	-5.3%	-5.0%	4.9%	10.4%	-5.4%	-2.6%	0.9%
Total	265,174	267,229	266,302	260,469	291,342	297,345	326,930	357,566

Source: Company, JM Financial

Exhibit 3. Quarterly performance

Y/E March	4QFY23	4QFY24	% YoY	3QFY24	% QoQ	4QFY24E	Var (%)
Net Sales	12,736	11,502	-9.7	11,692	-1.6	12,197	-5.7
Expenditure	9,578	8,528	-11.0	8,579	-0.6	9,245	-7.8
EBITDA	3,157	2,974	-5.8	3,112	-4.4	2,952	0.7
EBITDA (%)	24.8	25.9	110bps	26.6	-80bps	24.2	170bps
Other income	638	765	19.8	831	-8.0	779	-1.8
Depreciation	232	245	5.5	270	-9.1	295	-16.9
EBIT	3,563	3,493	-2.0	3,673	-4.9	3,436	1.7
Interest	99	64	-35.4	71	-9.7	80	-20.2
Extraordinary item	0	0		0		0	
PBT after Eol	3,464	3,430	-1.0	3,603	-4.8	3,355	2.2
Tax	788	832	5.7	811	2.6	693	20.0
Tax rate (%)	22.7	24.3		22.5		20.7	
Tax on Eol (assumed)	0	0		0		0	
PAT before MI/SA	2,677	2,597	-3.0	2,791	-7.0	2,662	-2.4
Minority/Share of associates	-5	-8		-5	75.7	5	-258.6
Adjusted PAT	2,682	2,605	-2.9	2,796	-6.8	2,657	-1.9
Adjusted EPS (INR)	28.4	27.6	-2.9	29.6	-6.8	28.2	-1.9

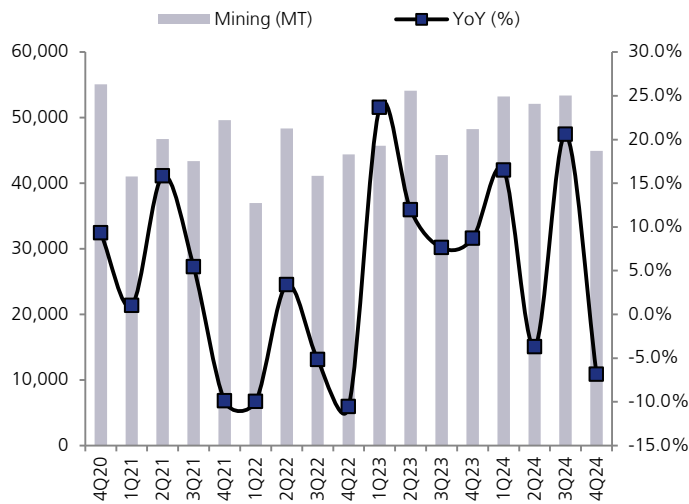
Source: Company, JM Financial

Exhibit 4. Cost Breakup

Y/E March	4QFY23	4QFY24	% YoY	3QFY24	% QoQ	4QFY24E	Var (%)
COGS	5,777	5,037	-12.8	4,806	4.8	5,316	-5.3
as a % of sales	45.4	43.8	-160bps	41.1	270bps	43.6	20bps
Staff Cost	399	442	10.7	432	2.3	443	-0.1
as a % of sales	3.1	3.8	70bps	3.7	10bps	3.6	20bps
Other Expenditure	3,402	3,049	-10.4	3,341	-8.7	3,486	-12.5
as a % of sales	26.7	26.5	-20bps	28.6	-210bps	28.6	-210bps

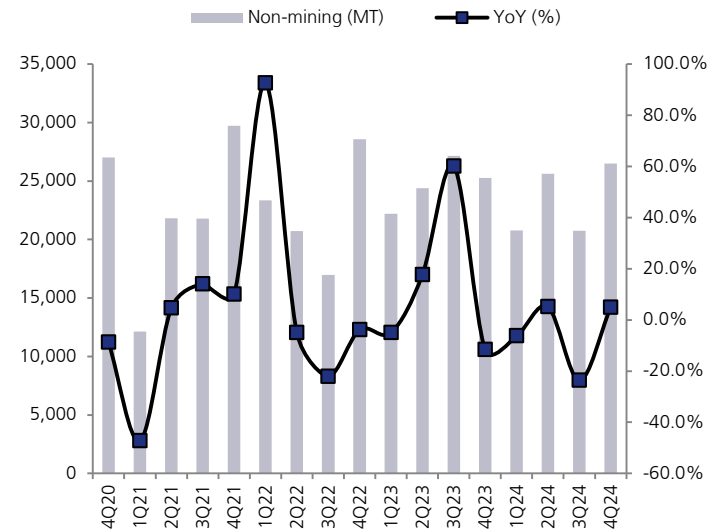
Source: Company, JM Financial

Exhibit 5. Mining volume declined 7% YoY



Source: Company, JM Financial

Exhibit 6. Non-Mining volume grew 5% YoY



Source: Company, JM Financial

Key Conference call highlights

- **Volume Guidance:** Management guided for incremental volume growth of 30,000 MT for FY25 (2,97,345 MT in FY24).
- Other income was higher as it included gain of INR 720mn of treasury income.
- **USA Anti Dumping petition:** One of the competitor has filled petition for imposition of anti dumping duty. USA accounted for volume of 27,000 MT for CY23. It is still at very early stage.
- **Capacity:** Company is undertaking debottlenecking exercise for non-grinding media business with capex of INR 2.1bn of which it has incurred INR 1.1bn as on date. This will enhance capacity by 20,000 tons.
- While on grinding media capacity addition, company has trimmed down its expansion plan to 36,000 tons as of now vs original target of 80,000 tons. 36000 tons is expected to be operational by 3QFY25, while rest has been put on hold.
- **Capex:** Plans to incur capex of INR 2bn comprising of- 1) grinding media INR 900mn, 2) debottlenecking INR 750mn and 3) renewable power INR 350mn. (FY24 capex was INR 2.1bn).

Financial Tables (Consolidated)

Income Statement		(INR mn)			
Y/E March	FY22A	FY23A	FY24A	FY25E	FY26E
Net Sales	35,665	49,088	48,538	53,783	59,117
Sales Growth	23.8%	37.6%	-1.1%	10.8%	9.9%
Other Operating Income	0	0	0	0	0
Total Revenue	35,665	49,088	48,538	53,783	59,117
Cost of Goods Sold/Op. Exp	14,711	20,658	20,727	24,041	26,425
Personnel Cost	1,394	1,519	1,714	1,944	2,204
Other Expenses	12,351	14,504	12,760	15,005	16,494
EBITDA	7,210	12,407	13,338	12,793	13,994
EBITDA Margin	20.2%	25.3%	27.5%	23.8%	23.7%
EBITDA Growth	10.0%	72.1%	7.5%	-4.1%	9.4%
Deprn. & Amort.	921	930	1,003	1,206	1,322
EBIT	6,289	11,476	12,335	11,587	12,671
Other Income	1,563	2,345	2,814	3,168	3,824
Finance Cost	39	201	284	284	284
PBT before Excep. & Forex	7,814	13,620	14,865	14,471	16,211
Excep. & Forex Inc./Loss(-)	0	0	0	0	0
PBT	7,814	13,620	14,865	14,471	16,211
Taxes	1,617	3,055	3,510	3,256	3,648
Extraordinary Inc./Loss(-)	0	0	0	0	0
Assoc. Profit/Min. Int.(-)	-1	6	-1	14	14
Reported Net Profit	6,198	10,559	11,356	11,200	12,550
Adjusted Net Profit	6,196	10,559	11,356	11,200	12,550
Net Margin	17.4%	21.5%	23.4%	20.8%	21.2%
Diluted Share Cap. (mn)	94.3	94.3	94.3	94.3	94.3
Diluted EPS (INR)	65.7	111.9	120.4	118.7	133.1
Diluted EPS Growth	9.4%	70.4%	7.5%	-1.4%	12.0%
Total Dividend + Tax	849	1,509	1,509	2,452	3,018
Dividend Per Share (INR)	9.0	16.0	16.0	26.0	32.0

Source: Company, JM Financial

Cash Flow Statement		(INR mn)			
Y/E March	FY22A	FY23A	FY24A	FY25E	FY26E
Profit before Tax	7,813	13,620	14,880	14,471	16,211
Deprn. & Amort.	921	930	1,003	1,206	1,322
Net Interest Exp. / Inc. (-)	-748	-870	-1,695	-2,884	-3,540
Inc (-) / Dec in WCap.	-6,010	-1,521	-1,112	239	-2,338
Others	-743	-441	-773	0	0
Taxes Paid	-1,625	-3,041	-3,276	-3,256	-3,648
Operating Cash Flow	-392	8,677	9,027	9,776	8,008
Capex	-1,255	-1,948	-2,108	-1,922	-1,922
Free Cash Flow	-1,647	6,729	6,920	7,855	6,086
Inc (-) / Dec in Investments	2,253	-10,135	-6,078	-3,000	-3,000
Others	0	0	0	0	0
Investing Cash Flow	999	-12,083	-8,185	-4,922	-4,922
Inc / Dec (-) in Capital	0	0	0	0	0
Dividend + Tax thereon	-763	-771	-1,369	-2,452	-3,018
Inc / Dec (-) in Loans	-1,816	4,932	-431	0	0
Others	-96	-211	-310	2,898	3,554
Financing Cash Flow	-2,675	3,950	-2,110	446	536
Inc / Dec (-) in Cash	-2,069	544	-1,268	5,300	3,622
Opening Cash Balance	7,130	5,061	8,060	5,536	10,836
Closing Cash Balance	5,061	8,060	5,536	10,836	14,459

Source: Company, JM Financial

Balance Sheet		(INR mn)			
Y/E March	FY22A	FY23A	FY24A	FY25E	FY26E
Shareholders' Fund	47,550	56,913	66,577	75,340	84,885
Share Capital	189	189	189	189	189
Reserves & Surplus	47,361	56,725	66,389	75,151	84,697
Preference Share Capital	0	0	0	0	0
Minority Interest	85	89	103	117	131
Total Loans	28	4,990	4,546	4,546	4,546
Def. Tax Liab. / Assets (-)	390	399	581	581	581
Total - Equity & Liab.	48,052	62,391	71,807	80,584	90,143
Net Fixed Assets	10,002	11,102	12,025	12,740	13,339
Gross Fixed Assets	13,840	16,898	18,976	20,898	22,820
Intangible Assets	0	0	0	0	0
Less: Deprn. & Amort.	5,940	6,871	7,874	9,080	10,402
Capital WIP	2,102	1,074	922	922	922
Investments	10,554	22,543	30,431	33,431	36,431
Current Assets	30,444	32,667	32,496	38,980	45,394
Inventories	12,260	12,180	12,047	14,293	15,711
Sundry Debtors	8,001	8,608	8,810	9,578	10,528
Cash & Bank Balances	5,061	8,060	5,536	10,836	14,459
Loans & Advances	3,253	1,288	1,283	1,474	1,620
Other Current Assets	1,869	2,531	4,821	2,800	3,077
Current Liab. & Prov.	2,949	3,921	3,144	4,568	5,021
Current Liabilities	1,967	2,614	1,786	2,947	3,239
Provisions & Others	981	1,307	1,358	1,621	1,782
Net Current Assets	27,496	28,746	29,351	34,412	40,373
Total - Assets	48,052	62,391	71,807	80,584	90,143

Source: Company, JM Financial

Dupont Analysis					
Y/E March	FY22A	FY23A	FY24A	FY25E	FY26E
Net Margin	17.4%	21.5%	23.4%	20.8%	21.2%
Asset Turnover (x)	0.8	0.9	0.7	0.7	0.7
Leverage Factor (x)	1.0	1.1	1.1	1.1	1.1
RoE	13.8%	20.2%	18.4%	15.8%	15.7%

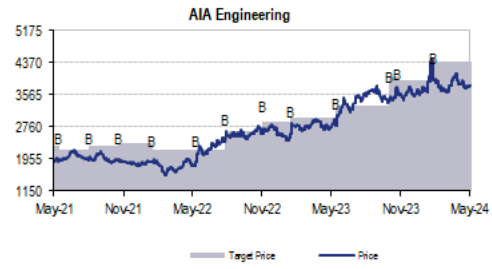
Key Ratios					
Y/E March	FY22A	FY23A	FY24A	FY25E	FY26E
BV/Share (INR)	504.1	603.4	705.9	798.8	900.0
ROIC	18.3%	28.1%	28.3%	25.3%	26.4%
ROE	13.8%	20.2%	18.4%	15.8%	15.7%
Net Debt/Equity (x)	-0.1	-0.1	0.0	-0.1	-0.1
P/E (x)	57.5	33.7	31.4	31.8	28.4
P/B (x)	7.5	6.3	5.3	4.7	4.2
EV/EBITDA (x)	48.5	28.4	26.5	27.3	24.7
EV/Sales (x)	9.8	7.2	7.3	6.5	5.8
Debtor days	82	64	66	65	65
Inventory days	125	91	91	97	97
Creditor days	25	26	19	26	26

Source: Company, JM Financial

History of Recommendation and Target Price

Date	Recommendation	Target Price	% Chg.
31-Jan-20	Hold	1,550	
9-Apr-20	Hold	1,300	-16.1
22-Jun-20	Hold	1,350	3.8
11-Aug-20	Hold	1,400	3.7
1-Sep-20	Hold	1,450	3.6
2-Nov-20	Hold	1,600	10.3
10-Feb-21	Buy	2,300	43.8
25-May-21	Buy	2,200	-4.3
14-Aug-21	Buy	2,300	4.5
1-Nov-21	Buy	2,350	2.2
27-Jan-22	Buy	2,200	-6.4
25-May-22	Buy	2,200	0.0
9-Aug-22	Buy	2,650	20.5
14-Nov-22	Buy	2,900	9.4
27-Jan-23	Buy	3,000	3.4
26-May-23	Buy	3,300	10.0
16-Oct-23	Buy	4,015	21.7
7-Nov-23	Buy	3,910	-2.6
8-Feb-24	Buy	4,400	12.5

Recommendation History



APPENDIX I

JM Financial Institutional Securities Limited

Corporate Identity Number: U67100MH2017PLC296081

Member of BSE Ltd. and National Stock Exchange of India Ltd.

SEBI Registration Nos.: Stock Broker - INZ000163434, Research Analyst - INH000000610

Registered Office: 7th Floor, Cnergy, Appasaheb Marathe Marg, Prabhadevi, Mumbai 400 025, India.

Board: +91 22 6630 3030 | Fax: +91 22 6630 3488 | Email: jmfinancial.research@jmfl.com | www.jmfl.com

Compliance Officer: Mr. Sahil Salastekar | Tel: +91 22 6224 1073 | Email: sahil.salastekar@jmfl.com

Grievance officer: Mr. Sahil Salastekar | Tel: +91 22 6224 1073 | Email: instcompliance@jmfl.com

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

Definition of ratings	
Rating	Meaning
Buy	Total expected returns of more than 10% for stocks with market capitalisation in excess of INR 200 billion and REITs* and more than 15% for all other stocks, over the next twelve months. Total expected return includes dividend yields.
Hold	Price expected to move in the range of 10% downside to 10% upside from the current market price for stocks with market capitalisation in excess of INR 200 billion and REITs* and in the range of 10% downside to 15% upside from the current market price for all other stocks, over the next twelve months.
Sell	Price expected to move downwards by more than 10% from the current market price over the next twelve months.

* REITs refers to Real Estate Investment Trusts.

Research Analyst(s) Certification

The Research Analyst(s), with respect to each issuer and its securities covered by them in this research report, certify that:

All of the views expressed in this research report accurately reflect his or her or their personal views about all of the issuers and their securities; and

No part of his or her or their compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed in this research report.

Important Disclosures

This research report has been prepared by JM Financial Institutional Securities Limited (JM Financial Institutional Securities) to provide information about the company(ies) and sector(s), if any, covered in the report and may be distributed by it and/or its associates solely for the purpose of information of the select recipient of this report. This report and/or any part thereof, may not be duplicated in any form and/or reproduced or redistributed without the prior written consent of JM Financial Institutional Securities. This report has been prepared independent of the companies covered herein.

JM Financial Institutional Securities is registered with the Securities and Exchange Board of India (SEBI) as a Research Analyst and a Stock Broker having trading memberships of the BSE Ltd. (BSE) and National Stock Exchange of India Ltd. (NSE). No material disciplinary action has been taken by SEBI against JM Financial Institutional Securities in the past two financial years which may impact the investment decision making of the investor. Registration granted by SEBI and certification from the National Institute of Securities Market (NISM) in no way guarantee performance of JM Financial Institutional Securities or provide any assurance of returns to investors.

JM Financial Institutional Securities renders stock broking services primarily to institutional investors and provides the research services to its institutional clients/investors. JM Financial Institutional Securities and its associates are part of a multi-service, integrated investment banking, investment management, brokerage and financing group. JM Financial Institutional Securities and/or its associates might have provided or may provide services in respect of managing offerings of securities, corporate finance, investment banking, mergers & acquisitions, broking, financing or any other advisory services to the company(ies) covered herein. JM Financial Institutional Securities and/or its associates might have received during the past twelve months or may receive compensation from the company(ies) mentioned in this report for rendering any of the above services.

JM Financial Institutional Securities and/or its associates, their directors and employees may; (a) from time to time, have a long or short position in, and buy or sell the securities of the company(ies) mentioned herein or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) covered under this report or (c) act as an advisor or lender/borrower to, or may have any financial interest in, such company(ies) or (d) considering the nature of business/activities that JM Financial Institutional Securities is engaged in, it may have potential conflict of interest at the time of publication of this report on the subject company(ies).

Neither JM Financial Institutional Securities nor its associates or the Research Analyst(s) named in this report or his/her relatives individually own one per cent or more securities of the company(ies) covered under this report, at the relevant date as specified in the SEBI (Research Analysts) Regulations, 2014.

The Research Analyst(s) principally responsible for the preparation of this research report and their immediate relatives are prohibited from buying or selling debt or equity securities, including but not limited to any option, right, warrant, future, long or short position issued by company(ies) covered under this report. The Research Analyst(s) principally responsible for the preparation of this research report or their immediate relatives (as defined under SEBI (Research Analysts) Regulations, 2014); (a) do not have any financial interest in the company(ies) covered under this report or (b) did not receive any compensation from the company(ies) covered under this report, or from any third party, in connection with this report or (c) do not have any other material conflict of interest at the time of publication of this report. Research Analyst(s) are not serving as an officer, director or employee of the company(ies) covered under this report.

While reasonable care has been taken in the preparation of this report, it does not purport to be a complete description of the securities, markets or developments referred to herein, and JM Financial Institutional Securities does not warrant its accuracy or completeness. JM Financial Institutional Securities may not be in any way responsible for any loss or damage that may arise to any person from any inadvertent error in the information contained in this report. This report is provided for information only and is not an investment advice and must not alone be taken as the basis for an investment decision.

This research report is based on the fundamental research/analysis conducted by the Research Analyst(s) named herein. Accordingly, this report has been prepared by studying/focusing on the fundamentals of the company(ies) covered in this report and other macro-economic factors. JM Financial Institutional Securities may have also issued or may issue, research reports and/or recommendations based on the technical/quantitative analysis of the company(ies) covered in this report by studying and using charts of the stock's price movement, trading volume and/or other volatility parameters. As a result, the views/recommendations expressed in such technical research reports could be inconsistent or even contrary to the views contained in this report.

The investment discussed or views expressed or recommendations/opinions given herein may not be suitable for all investors. The user assumes the entire risk of any use made of this information. The information contained herein may be changed without notice and JM Financial Institutional Securities reserves the right to make modifications and alterations to this statement as they may deem fit from time to time.

This report is neither an offer nor solicitation of an offer to buy and/or sell any securities mentioned herein and/or not an official confirmation of any transaction.

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

Additional disclosure only for U.S. persons: JM Financial Institutional Securities has entered into an agreement with JM Financial Securities, Inc. ("JM Financial Securities"), a U.S. registered broker-dealer and member of the Financial Industry Regulatory Authority ("FINRA") in order to conduct certain business in the United States in reliance on the exemption from U.S. broker-dealer registration provided by Rule 15a-6, promulgated under the U.S. Securities Exchange Act of 1934 (the "Exchange Act"), as amended, and as interpreted by the staff of the U.S. Securities and Exchange Commission ("SEC") (together "Rule 15a-6").

This research report is distributed in the United States by JM Financial Securities in compliance with Rule 15a-6, and as a "third party research report" for purposes of FINRA Rule 2241. In compliance with Rule 15a-6(a)(3) this research report is distributed only to "major U.S. institutional investors" as defined in Rule 15a-6 and is not intended for use by any person or entity that is not a major U.S. institutional investor. If you have received a copy of this research report and are not a major U.S. institutional investor, you are instructed not to read, rely on, or reproduce the contents hereof, and to destroy this research or return it to JM Financial Institutional Securities or to JM Financial Securities.

This research report is a product of JM Financial Institutional Securities, which is the employer of the research analyst(s) solely responsible for its content. The research analyst(s) preparing this research report is/are resident outside the United States and are not associated persons or employees of any U.S. registered broker-dealer. Therefore, the analyst(s) are not subject to supervision by a U.S. broker-dealer, or otherwise required to satisfy the regulatory licensing requirements of FINRA and may not be subject to the Rule 2241 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

Any U.S. person who is recipient of this report that wishes further information regarding, or to effect any transaction in, any of the securities discussed in this report, must contact, and deal directly through a U.S. registered representative affiliated with a broker-dealer registered with the SEC and a member of FINRA. In the U.S., JM Financial Institutional Securities has an affiliate, JM Financial Securities, Inc. located at 1325 Avenue of the Americas, 28th Floor, Office No. 2821, New York, New York 10019. Telephone +1 (332) 900 4958 which is registered with the SEC and is a member of FINRA and SIPC.

Additional disclosure only for U.K. persons: Neither JM Financial Institutional Securities nor any of its affiliates is authorised in the United Kingdom (U.K.) by the Financial Conduct Authority. As a result, this report is for distribution only to persons who (i) have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the "Financial Promotion Order"), (ii) are persons falling within Article 49(2)(a) to (d) ("high net worth companies, unincorporated associations etc.") of the Financial Promotion Order, (iii) are outside the United Kingdom, or (iv) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000) in connection with the matters to which this report relates may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as "relevant persons"). This report is directed only at relevant persons and must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this report relates is available only to relevant persons and will be engaged in only with relevant persons.

Additional disclosure only for Canadian persons: This report is not, and under no circumstances is to be construed as, an advertisement or a public offering of the securities described herein in Canada or any province or territory thereof. Under no circumstances is this report to be construed as an offer to sell securities or as a solicitation of an offer to buy securities in any jurisdiction of Canada. Any offer or sale of the securities described herein in Canada will be made only under an exemption from the requirements to file a prospectus with the relevant Canadian securities regulators and only by a dealer properly registered under applicable securities laws or, alternatively, pursuant to an exemption from the registration requirement in the relevant province or territory of Canada in which such offer or sale is made. This report is not, and under no circumstances is it to be construed as, a prospectus or an offering memorandum. No securities commission or similar regulatory authority in Canada has reviewed or in any way passed upon these materials, the information contained herein or the merits of the securities described herein and any representation to the contrary is an offence. If you are located in Canada, this report has been made available to you based on your representation that you are an "accredited investor" as such term is defined in National Instrument 45-106 Prospectus Exemptions and a "permitted client" as such term is defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Under no circumstances is the information contained herein to be construed as investment advice in any province or territory of Canada nor should it be construed as being tailored to the needs of the recipient. Canadian recipients are advised that JM Financial Securities, Inc., JM Financial Institutional Securities Limited, their affiliates and authorized agents are not responsible for, nor do they accept, any liability whatsoever for any direct or consequential loss arising from any use of this research report or the information contained herein.