

# Kajaria Ceramics | BUY

## Distribution expansion to drive outperformance

Kajaria Ceramics (KJC), at its Investor meet, outlined 3 year growth plan, with an aim to a) achieve tile volume of 150msm and revenue of INR 55bn by FY27 (implying 12% CAGR in volume and revenue vs 6-8% industry growth expectation) on distribution expansion (500 dealer addition) and scale up in projects segment, particularly B2G front, b) grow its non-tile revenue to INR 10bn in FY27 (vs. INR 5bn in FY24) and c) EBITDA margin trajectory of 15-17% on the back of cost rationalisation and scaling up in margin accretive adjacencies. The company has planned capex of INR 2.3-2.5bn each year till FY27 (largely maintenance capex). We had cut our FY25-26 estimates by 4% each post 4Q results ([link for the report](#)) to reflect the delay in demand recovery. Our estimates remain unchanged post analyst meet as KJC's 3 year plans are broadly in-line with our estimates (FY24 volume guidance of 11-13%). We maintain BUY with a Mar'25TP of INR 1,480, basis 35x Mar'26 EPS. Key risks – Slower-than-expected recovery in macro and any material rise in fuel cost.

- 3 year road map:** Kajaria has charted a 3 year roadmap for itself, in which the company aspires to achieve revenue of INR 65bn (12% CAGR in FY24-27) and tile revenue/ volume of INR 55bn/ 150msm respectively (12% CAGR). In its non-tiles division, management expects to achieve revenue of INR 10bn (from INR 5bn in FY24, implying 25% CAGR over FY24-27). Bathware segment revenue to grow to INR 6.8bn (vs. INR 3.6bn in FY24, implying +23% on 3 year CAGR basis). In Plywood/Adhesive, company targets to grow at 19%/44% CAGR respectively over FY24-27. On the profitability front, company is optimistic to sustain its EBITDA margin at 15-17% range (barring the impact of steep gas price volatility). We believe the 3 year road map is realistic for the tile segment and slightly conservative on operating margins front.
- Domestic tiles industry to grow at 6-8% CAGR, while Kajaria to grow at 12% CAGR over FY24-27:** As per the management, the current market size of the domestic tiles industry is of INR 420bn, which is expected to grow at 6-8% CAGR of FY24-27. Exports market size is c. INR 190bn, which takes the combined market size of Indian tiles industry to c. INR 610bn. Management is confident of outpacing the industry growth by delivering volume growth of 12% CAGR over FY24-27. Management expects, sustained exports momentum for Morbi player will continue to limit the competitive intensity in the domestic market.
- Premiumisation, branding and penetration into tier 2-3 cities among key enablers of growth:** KJC is optimistic on achieving its guidance largely on the back of key initiatives such as a) premiumisation, where company is focusing on improving product mix through launch of large format tiles/ slabs, b) branding – creating more exclusive dealer showrooms, airport branding, IPL sponsorship, etc. c) distribution expansion into tier 2-3 cities along with increasing the pocket share in existing dealer network while removing the non performing dealers and d) digitisation through integration of salesforce automation and other IT related infrastructure. Currently, Kajaria is present in 1000 towns in India and aspires to expand it to 2000 towns over the next 3 years (total universe of 4041 towns).



**Achal Lohade**

achal.lohade@jmfl.com | Tel: (91 22) 66303081

**Vineet Shanker**

vineet.shanker@jmfl.com | Tel: (91 22) 66303574

**Pooja Kubadia**

pooja.kubadia@jmfl.com | Tel: (91 22) 66303074

### Recommendation and Price Target

Current Reco.	BUY
Previous Reco.	BUY
Current Price Target (12M)	1,480
Upside/(Downside)	28.0%
Previous Price Target	1,560
Change	-5.1%

### Key Data – KJC IN

Current Market Price	INR1,156
Market cap (bn)	INR184.1/US\$2.2
Free Float	52%
Shares in issue (mn)	158.9
Diluted share (mn)	158.9
3-mon avg daily val (mn)	INR320.8/US\$3.8
52-week range	1,524/1,110
Sensex/Nifty	73,466/22,303
INR/US\$	83.5

### Price Performance

%	1M	6M	12M
Absolute	-7.8	-8.8	0.7
Relative*	-6.3	-19.5	-15.3

\* To the BSE Sensex

Financial Summary					(INR mn)
Y/E March	FY22A	FY23A	FY24A	FY25E	FY26E
Net Sales	37,052	43,819	45,784	50,772	59,049
Sales Growth (%)	33.2	18.3	4.5	10.9	16.3
EBITDA	6,107	5,920	6,997	8,061	10,340
EBITDA Margin (%)	16.5	13.5	15.3	15.9	17.5
Adjusted Net Profit	3,770	3,525	4,221	5,152	6,717
Diluted EPS (INR)	23.7	22.2	26.6	32.4	42.3
Diluted EPS Growth (%)	22.4	-6.5	19.8	22.1	30.4
ROIC (%)	21.4	16.8	18.3	19.7	23.8
ROE (%)	18.9	15.8	17.1	18.7	21.8
P/E (x)	48.7	52.1	43.5	35.7	27.4
P/B (x)	8.7	7.9	7.0	6.3	5.6
EV/EBITDA (x)	29.7	30.9	25.9	22.4	17.3
Dividend Yield (%)	0.9	0.9	1.0	1.3	1.6

Source: Company data, JM Financial. Note: Valuations as of 08/May/2024.

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

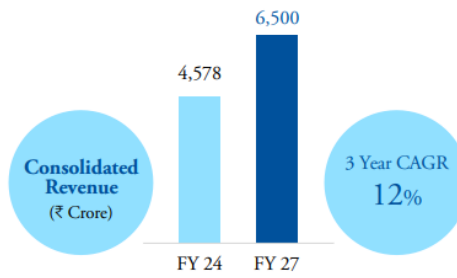
Please see Appendix I at the end of this report for Important Disclosures and Disclaimers and Research Analyst Certification.

- **Maintain estimates; BUY:** We had cut our FY25/FY26 estimates by 4% post 4Q result to reflect delayed recovery in demand [\(link for 4Q24 result update\)](#). We maintain BUY with Mar'25 TP to INR 1,480 (35x Mar'26 EPS) as we believe the demand for tiles is expected to recover over the next 2-3 quarters. We continue to like KJC's market leadership in tiles, robust cash flows, strong brand recall, high retail mix, and strong distribution network across India and healthy return ratios. Key risk to our call: Delay in pass-through of gas price inflation.
- **Other highlights**
  - Tile volume for the industry was flat YoY in FY24. Expect 6-8% growth in tile volume for industry over next 3 years
  - Fuel cost was stable QoQ in 4QFY24 and expected to remain broadly stable in FY25, ceteris paribus.
  - Currently KJC derive 70% of sales through retail (vs 50% for industry)..Of the 30% institutional mix, a) Government projects like airport, defence, railway stations constitute 12% for KJC and is expected to see 300-400bps increase over next 3 years , b) 7-8% from large builders and c) 10% mid level builders across India. KJC is now aggressively focusing on strengthening its B2G segment through a 35 member dedicated team. Institutional segment margins are about 4-5ppt lower than retail margins, as per the company..
  - On the impact of ADD on Indian tiles exports by USA, management said that exports only contribute 7% of total exports which will be offset by growth in other regions.
  - During the year, Ceramics/ PVT/ GVT mix was 43%/26% /31% on volume basis and 38%/26%/36% on value basis.
  - Retail-Institutional mix during the year stood at 70-30%. Of 30% institutional mix, government related projects contribute c. 12% while remaining is contributed by large builders, hotels, etc.
  - Nepal JV (KJC owns 50% in the JV) to commence operation in July'24, which will have a total manufacturing capacity of 5msm for both Ceramic and GVT. Management expects to achieve 10% market share in INR 20bn/40msm market size.
  - The company is entering the Tiles adhesive market with their own brand "Gresbond". The first manufacturing plant being set up in Gailpur, Rajasthan by Q2FY25. As per the management, tiles adhesive industry to continue to grow at 12-15% CAGR over FY24-27. Increasing acceptance of large slab tiles to support the growth.

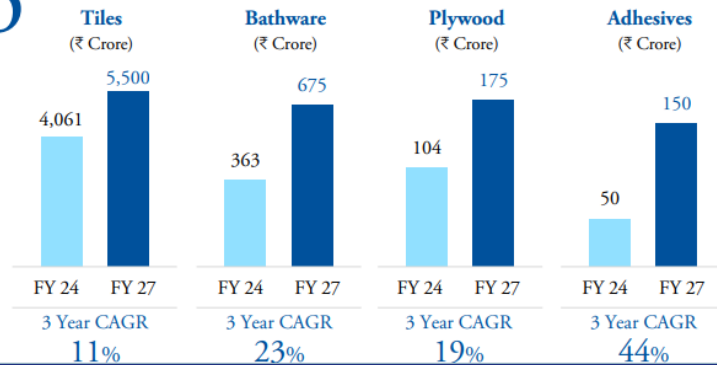
Exhibit 1. 3 year road map

**Kajaria**

# 3 Year Roadmap



Catalysts

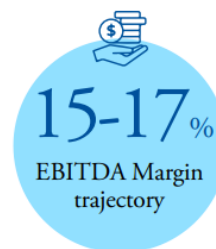
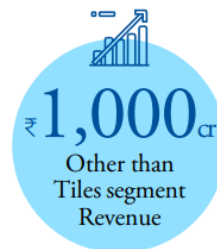
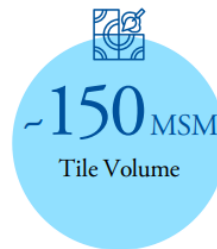


Source: JM Financial, Company

Exhibit 2. 3 year mission statement

**Kajaria**

# 3 Year Mission Statement



Source: Company, JM Financial

## Financial Tables (Consolidated)

Income Statement		(INR mn)			
Y/E March	FY22A	FY23A	FY24A	FY25E	FY26E
Net Sales	37,052	43,819	45,784	50,772	59,049
Sales Growth	33.2%	18.3%	4.5%	10.9%	16.3%
Other Operating Income	0	0	0	0	0
<b>Total Revenue</b>	<b>37,052</b>	<b>43,819</b>	<b>45,784</b>	<b>50,772</b>	<b>59,049</b>
Cost of Goods Sold/Op. Exp	15,551	18,070	19,770	21,901	25,184
Personnel Cost	4,077	4,612	5,053	5,634	6,112
Other Expenses	11,317	15,216	13,965	15,176	17,412
<b>EBITDA</b>	<b>6,107</b>	<b>5,920</b>	<b>6,997</b>	<b>8,061</b>	<b>10,340</b>
EBITDA Margin	16.5%	13.5%	15.3%	15.9%	17.5%
EBITDA Growth	20.0%	-3.1%	18.2%	15.2%	28.3%
Deprn. & Amort.	1,154	1,329	1,480	1,713	1,997
EBIT	4,953	4,592	5,517	6,348	8,343
Other Income	276	336	462	740	884
Finance Cost	127	223	211	220	223
PBT before Excep. & Forex	5,102	4,705	5,768	6,868	9,004
Excep. & Forex Inc./Loss(-)	0	0	0	0	0
PBT	5,102	4,705	5,768	6,868	9,004
Taxes	1,274	1,163	1,435	1,662	2,179
Extraordinary Inc./Loss(-)	0	0	0	0	0
Assoc. Profit/Min. Int.(-)	58	17	113	54	108
Reported Net Profit	3,770	3,525	4,221	5,152	6,717
<b>Adjusted Net Profit</b>	<b>3,770</b>	<b>3,525</b>	<b>4,221</b>	<b>5,152</b>	<b>6,717</b>
Net Margin	10.2%	8.0%	9.2%	10.1%	11.4%
Diluted Share Cap. (mn)	158.9	158.9	158.9	158.9	158.9
<b>Diluted EPS (INR)</b>	<b>23.7</b>	<b>22.2</b>	<b>26.6</b>	<b>32.4</b>	<b>42.3</b>
Diluted EPS Growth	22.4%	-6.5%	19.8%	22.1%	30.4%
Total Dividend + Tax	1,696	1,586	1,899	2,319	3,023
Dividend Per Share (INR)	10.7	10.0	12.0	14.6	19.0

Source: Company, JM Financial

Balance Sheet		(INR mn)			
Y/E March	FY22A	FY23A	FY24A	FY25E	FY26E
Shareholders' Fund	21,224	23,268	26,165	28,999	32,693
Share Capital	159	159	159	159	159
Reserves & Surplus	21,065	23,109	26,006	28,840	32,534
Preference Share Capital	0	0	0	0	0
Minority Interest	648	776	591	645	753
Total Loans	1,279	2,093	1,706	1,706	1,706
Def. Tax Liab. / Assets (-)	733	765	839	852	870
<b>Total - Equity &amp; Liab.</b>	<b>23,884</b>	<b>26,902</b>	<b>29,301</b>	<b>32,202</b>	<b>36,022</b>
Net Fixed Assets	14,130	15,283	17,056	18,344	18,847
Gross Fixed Assets	19,761	24,060	27,451	30,451	32,951
Intangible Assets	0	0	0	0	0
Less: Deprn. & Amort.	8,265	9,594	11,074	12,787	14,784
Capital WIP	2,634	817	679	679	679
Investments	0	19	185	185	185
Current Assets	15,736	18,003	18,188	21,093	25,620
Inventories	4,659	5,647	5,322	6,955	8,089
Sundry Debtors	5,133	6,012	6,194	6,966	8,101
Cash & Bank Balances	4,244	3,938	5,141	5,489	7,578
Loans & Advances	1,700	2,407	1,531	1,684	1,852
Other Current Assets	0	0	0	0	0
Current Liab. & Prov.	5,981	6,403	6,129	7,419	8,629
Current Liabilities	2,981	3,104	2,933	3,596	4,182
Provisions & Others	3,000	3,300	3,196	3,824	4,447
Net Current Assets	9,755	11,600	12,060	13,674	16,992
<b>Total - Assets</b>	<b>23,884</b>	<b>26,902</b>	<b>29,301</b>	<b>32,202</b>	<b>36,023</b>

Source: Company, JM Financial

Cash Flow Statement		(INR mn)			
Y/E March	FY22A	FY23A	FY24A	FY25E	FY26E
Profit before Tax	5,102	4,625	5,756	6,868	9,004
Deprn. & Amort.	1,154	1,329	1,480	1,713	1,997
Net Interest Exp. / Inc. (-)	-111	224	-100	-520	-661
Inc (-) / Dec in WCap.	-621	-1,851	260	-1,267	-1,228
Others	17	-107	4	68	126
Taxes Paid	-1,285	-1,265	-1,385	-1,662	-2,179
<b>Operating Cash Flow</b>	<b>4,255</b>	<b>2,955</b>	<b>6,017</b>	<b>5,200</b>	<b>7,060</b>
Capex	-2,687	-2,317	-2,785	-3,000	-2,500
Free Cash Flow	1,568	639	3,232	2,200	4,560
Inc (-) / Dec in Investments	266	-20	5	0	0
Others	-558	500	-197	740	884
<b>Investing Cash Flow</b>	<b>-2,979</b>	<b>-1,837</b>	<b>-2,976</b>	<b>-2,260</b>	<b>-1,616</b>
Inc / Dec (-) in Capital	52	12	11	0	0
Dividend + Tax thereon	-1,273	-1,433	-1,394	-2,319	-3,023
Inc / Dec (-) in Loans	99	427	-393	0	0
Others	-79	-354	-386	-274	-331
<b>Financing Cash Flow</b>	<b>-1,201</b>	<b>-1,348</b>	<b>-2,163</b>	<b>-2,592</b>	<b>-3,354</b>
<b>Inc / Dec (-) in Cash</b>	<b>75</b>	<b>-230</b>	<b>878</b>	<b>347</b>	<b>2,090</b>
Opening Cash Balance	4,428	4,244	3,938	5,141	5,489
Closing Cash Balance	4,502	4,014	4,816	5,489	7,578

Source: Company, JM Financial

Dupont Analysis		FY22A	FY23A	FY24A	FY25E	FY26E
Net Margin		10.2%	8.0%	9.2%	10.1%	11.4%
Asset Turnover (x)		1.7	1.7	1.6	1.7	1.7
Leverage Factor (x)		1.1	1.1	1.1	1.1	1.1
RoE		18.9%	15.8%	17.1%	18.7%	21.8%

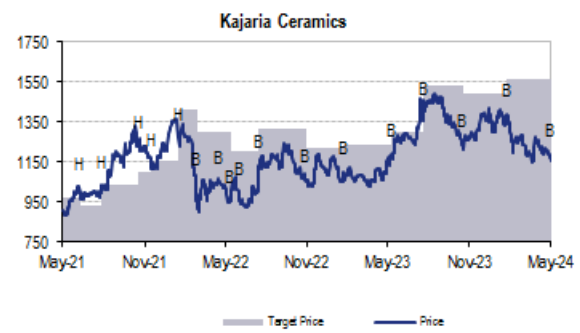
Key Ratios		FY22A	FY23A	FY24A	FY25E	FY26E
BV/Share (INR)		133.5	146.4	164.6	182.5	205.7
ROIC		21.4%	16.8%	18.3%	19.7%	23.8%
ROE		18.9%	15.8%	17.1%	18.7%	21.8%
Net Debt/Equity (x)		-0.1	-0.1	-0.1	-0.1	-0.2
P/E (x)		48.7	52.1	43.5	35.7	27.4
P/B (x)		8.7	7.9	7.0	6.3	5.6
EV/EBITDA (x)		29.7	30.9	25.9	22.4	17.3
EV/Sales (x)		4.9	4.2	4.0	3.6	3.0
Debtor days		51	50	49	50	50
Inventory days		46	47	42	50	50
Creditor days		35	30	28	31	31

Source: Company, JM Financial

## History of Earnings Estimate and Target Price

Date	Recommendation	Target Price	% Chg.
15-Jan-21	Buy	820	
21-Jan-21	Buy	870	6.1
2-Mar-21	Buy	970	11.5
14-Jun-21	Hold	930	-4.1
3-Aug-21	Hold	1,030	10.8
23-Oct-21	Hold	1,100	6.8
23-Nov-21	Hold	1,150	4.5
22-Jan-22	Hold	1,410	22.6
2-Mar-22	Buy	1,300	-7.8
22-Apr-22	Buy	1,300	0.0
18-May-22	Buy	1,200	-7.7
7-Jun-22	Buy	1,200	0.0
22-Jul-22	Buy	1,310	9.2
3-Nov-22	Buy	1,220	-6.9
29-Jan-23	Buy	1,230	0.8
17-May-23	Buy	1,300	5.7
26-Jul-23	Buy	1,530	17.7
22-Oct-23	Buy	1,490	-2.6
31-Jan-24	Buy	1,560	4.7
7-May-24	Buy	1,480	-5.1

## 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.