Bharat Electronics | BUY

JM FINANCIAL

Strong performance continues; positive outlook intact

Bharat Electronics (BHE) reported numbers above expectation, with revenue growing 19.6% YoY to INR 42bn and EBITDA margins expanding 340bps YoY. Order book as on 1QFY25 stands strong at INR 767bn (3.7x TTM sales). Order pipeline continues to remain robust for next couple of year, driven by government focus on product localization and increasing government capex on defence sector. BEL expects to bag orders worth INR 250bn, in FY25. QRSAM (project worth INR 250bn) all trails are completed successfully and orders are expect to be placed in FY26. Order pipeline for FY26 stands at INR 500bn (incl. QRSAM order). Management reaffirmed its revenue guidance of 15% growth for FY25; with EIBTDA margins of 23%-25%. BEL will continue to explore new growth opportunities through export initiatives, diversification, capability enhancement, competitiveness and modernisation. Capex planned for FY25 stands at INR8bn.

- Revenue reported strong growth for 1QFY25: Net sales grew 19.6% YoY to INR 42bn above JMFe INR 38.8bn, driven by strong opening order backlog (INR 759bn, 3.8x TTM sales as on FY24). EBITDA grew 41% YoY to INR 9.4bn (JMFe of INR 7.5bn). with EBITDA margin expanding 340bps YoY to 22.3% (JMFe 19.2% and con. est of 21.3%), mainly driven by gross margins expansion of 200bps and lower employee cost as % of sales (15.7% vs 17.8% YoY). Other expenses were higher by 30% YoY due to higher provision of LD's (INR 1320mn vs INR 540mn YoY). PAT grew 46.2%YoY to INR 7.8bn, (JMFe of INR 5.9bn).
- Order book stands strong at INR 767bn: Order inflow during the quarter came in c.INR 48bn (down 40% YoY, high base). Order book stands as on Jun'24 stands at INR 767bn (3.7x TTM sales, up 17.4% YoY). Off the total order book- Defence accounts for 85.8%, non-Defence 11.3% and exports 2.9%. Order pipeline continues to remain strong with expected orders like ADFCR Atulya, EW suite B17, security & surveillance system for Army, mountain radar etc.
- KAVACH to be a add on for diversification plans: Supply challenges of Kavach systems from existing vendor (three existing), has opened up a new opportunity for BEL. BEL is in process of developing prototype of KAVACH system and Indian Railways has granted BEL an 18-month timeline for same. It will take another 24 months for BEL to generate revenue from same. BEL opportunity size stands at INR 200-300bn over 5-6 years.
- Maintain BUY with TP of INR 360: We remain positive on BEL given strong order backlog, strong revenue visibility, sustained steady margin profile, healthy order prospects, continuous focus on diversification & exports markets and continued indigenisation push by Gol. We have assumed order inflows of INR 700bn for FY25 and FY26 combined, vs management guidance of INR 750bn (excl. QRSAM INR 500bn guidance). Factoring this, we expect revenue and PAT CAGR of 20% over FY24 FY26E. We maintain BUY rating on stock with TP of INR 360 valuing it at PE of 45x FY26E (earlier 40x FY26E), factoring in strong order pipeline and defence outlook.

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)	360
Upside/(Downside)	12.0%
Previous Price Target	320
Change	12.5%

Key Data – BHE IN	
Current Market Price	INR321
Market cap (bn)	INR2,349.0/US\$28.1
Free Float	49%
Shares in issue (mn)	7,309.8
Diluted share (mn)	7,309.8
3-mon avg daily val (mn)	INR14,910.6/US\$178.1
52-week range	341/124
Sensex/Nifty	81,356/24,836
INR/US\$	83.7

Price Performance			
%	1M	6M	12M
Absolute	5.1	68.3	146.9
Relative*	2.1	47.2	100.8

* To the BSE Sensex

Financial Summary					(INR mn)
Y/E March	FY22A	FY23A	FY24A	FY25E	FY26E
Net Sales	1,53,138	1,76,462	2,01,694	2,41,495	2,92,736
Sales Growth (%)	8.9	15.2	14.3	19.7	21.2
EBITDA	33,092	40,476	49,982	58,291	73,101
EBITDA Margin (%)	21.6	22.9	24.8	24.1	25.0
Adjusted Net Profit	23,489	30,067	40,200	46,306	57,930
Diluted EPS (INR)	3.2	4.1	5.5	6.3	7.9
Diluted EPS Growth (%)	13.7	28.0	33.7	15.2	25.1
ROIC (%)	57.8	68.9	73.7	84.5	90.8
ROE (%)	20.5	23.4	27.0	26.6	28.6
P/E (x)	99.9	78.0	58.4	50.7	40.5
P/B (x)	19.5	17.2	14.5	12.6	10.7
EV/EBITDA (x)	68.6	56.0	44.8	38.1	30.1
Dividend Yield (%)	0.5	0.6	0.7	0.9	1.1

Source: Company data, JM Financial. Note: Valuations as of 29/Jul/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.

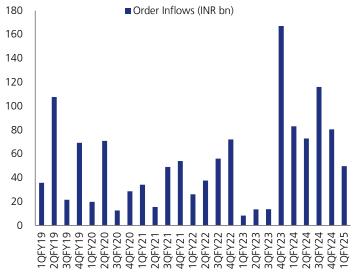
Exhibit 1. Quarterly Performance							
Y/E March (INR mn)	1QFY24	1QFY25	YoY (%)	4QFY24	QoQ (%)	1QFY25E	Var (%)
Net Sales	35,108	41,988	19.6	85,285	-50.8	38,798	8.2
Expenditure	28,464	32,620	14.6	62,486	-47.8	31,349	4.1
EBITDA	6,644	9,367	41.0	22,800	-58.9	7,449	25.8
EBITDA (%)	18.9	22.3	340bps	26.7	-440bps	19.2	310bps
Other income	1,417	2,015	42.2	2,205	-8.6	1,558	29.3
Depreciation	1,013	997	-1.5	1,109	-10.1	1,120	-11.0
EBIT	7,048	10,385	47.3	23,895	-56.5	7,887	31.7
Interest	11	12	10.3	39	-70.0	11	
PBT before Eol	7,038	10,373	47.4	23,856	-56.5	7,876	31.7
Eol	0	0		0	0bps	0	
PBT	7,038	10,373	47.4	23,856	-56.5	7,876	31.7
Tax	1,729	2,612	51.1	6,021	-56.6	1,985	31.6
Tax rate (%)	24.6	25.2	60bps	25.2	-10bps	25.2	
PAT	5,308	7,761	46.2	17,835	-56.5	5,892	31.7
EPS (INR)	0.7	1.1	46.2	2.4	-56.5	0.8	31.7
Adj PAT	5,308	7,761	46.2	17,835	-56.5	5,892	31.7
Adj EPS (INR)	0.7	1.1	46.2	2.4	-56.5	0.8	31.7

Source: Company, JM Financial

Exhibit 2. Cost Breakup							
Y/E March (INR mn)	1QFY24	1QFY25	YoY (%)	4QFY24	QoQ (%)	1QFY25E	Var (%)
COGS	19,844	22,906	15.4	43,994	-47.9	21,921	4.5
as a % of sales	56.5	54.6	-200bps	51.6	300bps	56.5	-190bps
Staff Cost	6,237	6,608	5.9	6,300	4.9	6,402	3.2
as a % of sales	17.8	15.7	-200bps	7.4	840bps	16.5	-80bps
Other Expenditure	2,383	3,106	30.3	12,192	-74.5	3,026	2.6
as a % of sales	6.8	7.4	60bps	14.3	-690bps	7.8	-40bps

Source: Company, JM Financial





Source: Company, JM Financial

Exhibit 4. Order book stands strong at INR 767bn, 3,7x TTM sales as on 1QFY25



Source: Company, JM Financial

Key Concall Takeaways

• **Guidance:** Management maintained its revenue guidance of 15% growth for FY25. Order inflow to be INR 250bn. Gross margins to be 40-42% sustainable, with EBITDA margins in range of 23-25%.

- Cumulative order inflow for FY25 and FY26 to be INR 750bn, including QRSAM orders.
- QRSAM- All trails are completed successfully, expect orders in FY26 (INR +250bn).
- Contracts executed in 1QFY25- 1) LRSAM- INR 8.4bn, 2) TBIC project INR 3bn, 3) Hammer missile –INR2.4bn, 4) platform terminal INR 2.3bn, 5) EW systems Shakti INR 1.3bn, 6) Naval order INR 1bn.
- Other expenses were higher due to provision of LD's (INR 1,320mn vs INR 540mn YoY).
- Exports- Major products exported include Medical electronics, PR module, compass etc.
- Order book breakup- Defence-85.85%, Non defence 11.3%, exportsc.2%.
- BEL is not directly involved in the Pinaka project but is planning to supply some subsystems required by the lead agencies overseeing the initiative.
- Su-30 upgrade program, BEL is planning to supply with various advanced subsystems, including radar, electronic warfare (EW) systems, and radio and communication systems
- Indian Railways has allotted BEL an 18-month timeline to develop a prototype for the Kavach system
- Capex for FY25 to be c. INR 8bn.

Financial Tables (Standalone)

Income Statement					(INR mn)
Y/E March	FY22A	FY23A	FY24A	FY25E	FY26E
Net Sales	1,53,138	1,76,462	2,01,694	2,41,495	2,92,736
Sales Growth	8.9%	15.2%	14.3%	19.7%	21.2%
Other Operating Income	0	0	0	0	0
Total Revenue	1,53,138	1,76,462	2,01,694	2,41,495	2,92,736
Cost of Goods Sold/Op. Exp	89,025	98,088	1,05,659	1,38,860	1,68,323
Personnel Cost	21,094	22,977	24,667	27,440	30,820
Other Expenses	9,926	14,921	21,386	16,905	20,492
EBITDA	33,092	40,476	49,982	58,291	73,101
EBITDA Margin	21.6%	22.9%	24.8%	24.1%	25.0%
EBITDA Growth	4.0%	22.3%	23.5%	16.6%	25.4%
Depn. & Amort.	3,802	4,079	4,124	4,459	4,736
EBIT	29,291	36,397	45,857	53,833	68,365
Other Income	2,336	3,600	7,558	7,981	8,947
Finance Cost	49	148	70	72	72
PBT before Excep. & Forex	31,578	39,849	53,346	61,741	77,239
Excep. & Forex Inc./Loss(-)	0	0	0	0	0
PBT	31,578	39,849	53,346	61,741	77,239
Taxes	8,089	9,782	13,146	15,435	19,310
Extraordinary Inc./Loss(-)	0	0	0	0	0
Assoc. Profit/Min. Int.(-)	0	0	0	0	0
Reported Net Profit	23,489	30,067	40,200	46,306	57,930
Adjusted Net Profit	23,489	30,067	40,200	46,306	57,930
Net Margin	15.3%	17.0%	19.9%	19.2%	19.8%
Diluted Share Cap. (mn)	7,309.8	7,309.8	7,309.8	7,309.8	7,309.8
Diluted EPS (INR)	3.2	4.1	5.5	6.3	7.9
Diluted EPS Growth	13.7%	28.0%	33.7%	15.2%	25.1%
Total Dividend + Tax	10,960	13,160	16,082	20,838	26,068
Dividend Per Share (INR)	1.5	1.8	2.2	2.9	3.6

Balance Sheet					(INR mn)
Y/E March	FY22A	FY23A	FY24A	FY25E	FY26E
Shareholders' Fund	1,20,491	1,36,455	1,61,426	1,86,894	2,18,755
Share Capital	2,437	7,310	7,310	7,310	7,310
Reserves & Surplus	1,18,054	1,29,146	1,54,116	1,79,584	2,11,446
Preference Share Capital	0	0	0	0	0
Minority Interest	0	0	0	0	0
Total Loans	0	0	0	0	0
Def. Tax Liab. / Assets (-)	-6,207	-5,034	-5,742	-5,742	-5,742
Total - Equity & Liab.	1,14,284	1,31,422	1,55,684	1,81,152	2,13,014
Net Fixed Assets	33,825	35,133	36,500	39,041	41,305
Gross Fixed Assets	49,943	55,624	60,194	67,194	74,194
Intangible Assets	0	0	0	0	0
Less: Depn. & Amort.	20,104	24,107	28,231	32,690	37,426
Capital WIP	3,986	3,616	4,538	4,538	4,538
Investments	15,542	6,644	7,678	7,678	7,678
Current Assets	2,78,925	3,03,734	3,41,637	4,05,702	4,86,442
Inventories	55,396	64,062	74,076	88,659	1,07,470
Sundry Debtors	61,034	70,220	73,622	88,150	1,06,854
Cash & Bank Balances	74,991	80,090	1,09,681	1,27,769	1,49,537
Loans & Advances	1,338	2,514	3,116	3,970	4,812
Other Current Assets	86,166	86,849	81,142	97,154	1,17,769
Current Liab. & Prov.	2,14,009	2,14,089	2,30,131	2,71,269	3,22,411
Current Liabilities	33,663	33,197	36,937	43,006	52,131
Provisions & Others	1,80,346	1,80,893	1,93,194	2,28,263	2,70,280
Net Current Assets	64,916	89,645	1,11,506	1,34,433	1,64,031
Total – Assets	1,14,284	1,31,422	1,55,684	1,81,152	2,13,014

Source: Company, JM Financial

Source: Company, JM Financial

Cash Flow Statement					(INR mn)
Y/E March	FY22A	FY23A	FY24A	FY25E	FY26E
Profit before Tax	31,578	39,849	53,346	61,741	77,239
Depn. & Amort.	3,802	4,079	4,124	4,459	4,736
Net Interest Exp. / Inc. (-)	-1,720	-2,463	-5,646	72	72
Inc (-) / Dec in WCap.	15,498	-21,179	-2,376	-4,839	-7,830
Others	479	417	11,161	0	0
Taxes Paid	-8,024	-9,150	-14,130	-15,435	-19,310
Operating Cash Flow	41,612	11,552	46,480	45,998	54,908
Capex	-5,461	-5,621	-6,471	-7,000	-7,000
Free Cash Flow	36,151	5,931	40,009	38,998	47,908
Inc (-) / Dec in Investments	-43,145	33,441	-52,417	0	0
Others	0	0	0	0	0
Investing Cash Flow	-48,606	27,820	-58,889	-7,000	-7,000
Inc / Dec (-) in Capital	0	0	0	0	0
Dividend + Tax thereon	-10,233	-12,424	-14,615	-20,838	-26,068
Inc / Dec (-) in Loans	0	0	0	0	0
Others	-556	-714	-128	-72	-72
Financing Cash Flow	-10,789	-13,138	-14,743	-20,910	-26,141
Inc / Dec (-) in Cash	-17,783	26,234	-27,152	18,088	21,768
Opening Cash Balance	30,157	74,991	38,642	1,09,681	1,27,769
Closing Cash Balance	74,991	80,090	1,09,681	1,27,769	1,49,537

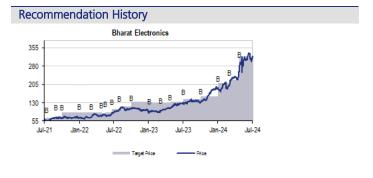
Dupont Analysis					
Y/E March	FY22A	FY23A	FY24A	FY25E	FY26E
Net Margin	15.3%	17.0%	19.9%	19.2%	19.8%
Asset Turnover (x)	1.3	1.4	1.4	1.4	1.4
Leverage Factor (x)	1.0	1.0	1.0	1.0	1.0
RoE	20.5%	23.4%	27.0%	26.6%	28.6%

Key Ratios					
Y/E March	FY22A	FY23A	FY24A	FY25E	FY26E
BV/Share (INR)	16.5	18.7	22.1	25.6	29.9
ROIC	57.8%	68.9%	73.7%	84.5%	90.8%
ROE	20.5%	23.4%	27.0%	26.6%	28.6%
Net Debt/Equity (x)	-0.6	-0.6	-0.7	-0.7	-0.7
P/E (x)	99.9	78.0	58.4	50.7	40.5
P/B (x)	19.5	17.2	14.5	12.6	10.7
EV/EBITDA (x)	68.6	56.0	44.8	38.1	30.1
EV/Sales (x)	14.8	12.8	11.1	9.2	7.5
Debtor days	145	145	133	133	133
Inventory days	132	133	134	134	134
Creditor days	102	89	89	86	87

Source: Company, JM Financial

Source: Company, JM Financial

Date	Recommendation	Target Price	% Chg.
5-Apr-21	Buy	50	
23-Jun-21	Buy	67	33.3
9-Aug-21	Buy	70	5.0
29-Sep-21	Buy	73	4.8
29-Oct-21	Buy	90	22.7
31-Jan-22	Buy	90	0.0
3-Apr-22	Buy	90	0.0
24-May-22	Buy	87	-3.7
14-Jun-22	Buy	92	5.8
21-Jul-22	Buy	105	14.5
30-Aug-22	Buy	117	11.1
31-Oct-22	Buy	135	15.8
2-Feb-23	Buy	130	-3.7
3-Apr-23	Buy	130	0.0
24-May-23	Buy	135	3.8
31-Jul-23	Buy	145	7.4
1-Nov-23	Buy	155	6.9
31-Jan-24	Buy	210	35.5
1-Apr-24	Buy	225	7.1
22-May-24	Buy	320	42.2



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 lo