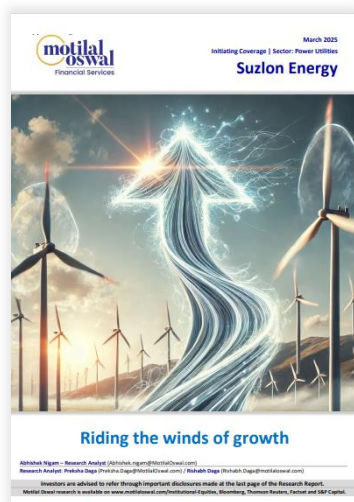


## Our latest Utilities updates



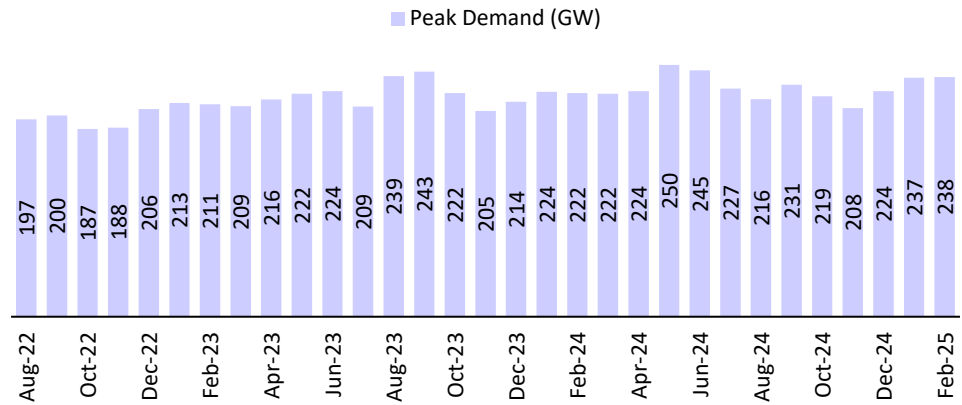
## Positive outlook persists amid healthy demand

- Over the last month, power stocks within our coverage have re-rated 1-18%. Investor focus has again returned to peak demand even as concerns around delays in Power Purchase Agreement (PPA) signing and transmission connectivity have continued to linger.
- Strong merchant spreads return: In Feb'25, peak power demand came in at 238GW (up 7% YoY). The Indian Meteorological Department (IMD) is forecasting Mar'25 to be warmer than usual, and the Central Electricity Authority (CEA) has estimated peak demand to reach 270GW (up 8% YoY) during the summer of 2025. Merchant power prices in the Day-Ahead Market (DAM) are up 16% YoY (INR4.57/unit in early Mar'25 from INR3.91/unit in Mar'24) ([Link](#)). We highlight JSW Energy as a top pick in the utility space with 15% of total operational capacity on a merchant basis.
- Declining battery prices are reshaping project configurations and are creating the potential for project economics to improve further. As battery prices have declined from >USD200/kWh in 2018 to USD135/kWh now, companies are re-thinking storage vs. wind combinations and innovating to improve project IRRs.
- Delays in PPA signing are raising investor concerns around the sanctity of guided EBITDA for generation companies; though TPWR, JSWE, and ACME Solar are well placed with 82%, 65%, and 53% of their respective project pipelines already having secured PPAs.
- Transmission connectivity challenges remain high: even though most players in our coverage universe have already secured adequate connectivity for RE projects coming up till FY27. Recognizing these constraints, CERC has proposed the introduction of restricted grid access to optimize transmission efficiency, which we believe should alleviate some of these concerns.

## Peak demand firming up again, merchant power prices strong

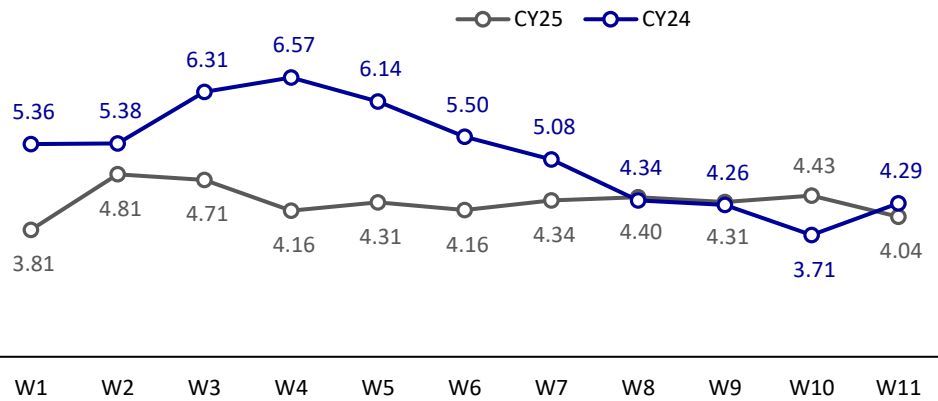
- In Feb'25, peak demand reached 238 GW, marking a 7% YoY growth from 222GW in Feb'24. Further, the Indian Meteorological Department (IMD) is expecting Mar'25 to be warmer than usual, with a high number of heatwaves (days).
- The CEA estimates that peak demand could reach 270 GW during the summer of 2025, surpassing last year's record 250 GW on May 31. This rising demand is already evident in March, with power consumption up 9% in the first ten days compared to the same period in 2024 (Source: NPP).
- Market clearing prices in DAM also reflected this surge in demand, rising to ₹4.57/unit in early Mar'25 from ₹3.91/unit in Mar'24, as quoted by Rohit Bajaj, Joint Managing Director of Indian Energy Exchange (IEX) ([Link](#)).

**Exhibit 1: India's peak demand (GW)**



Source: CEA, MOFSL

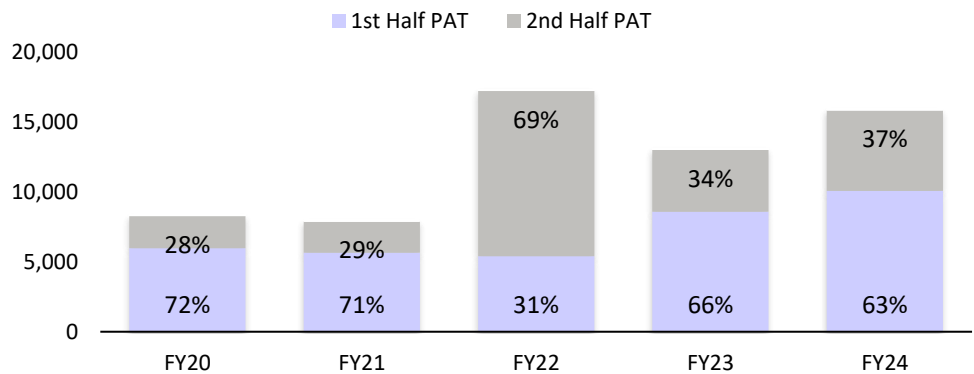
**Exhibit 2: Weekly weighted MCP (INR/kWh)**



Source: IEX, MOFSL

■ Within our coverage universe, **JSW Energy** is the key play on rising merchant power prices with 1.3GW of merchant capacity, post-commissioning of 350MW Ind-Barath Unit 2 announced on Mar'25. We note that JSWE generates over **60% of its annual profits in the first half of the year**, aligning with the peak demand periods.

**Exhibit 3: JSWE's Adj. PAT over the years (INR m)**

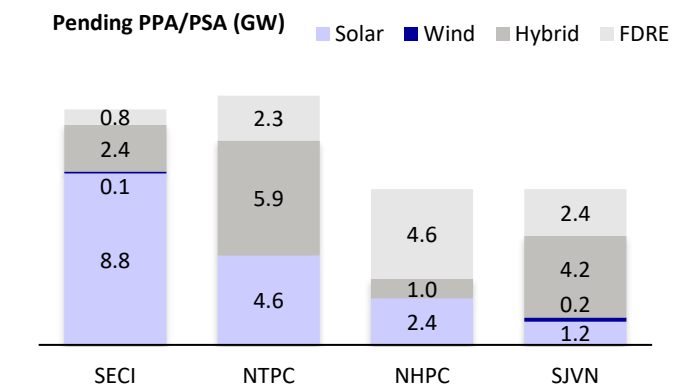


Source: Company, MOFSL

**JSWE and TPWR the least impacted by PPA delays**

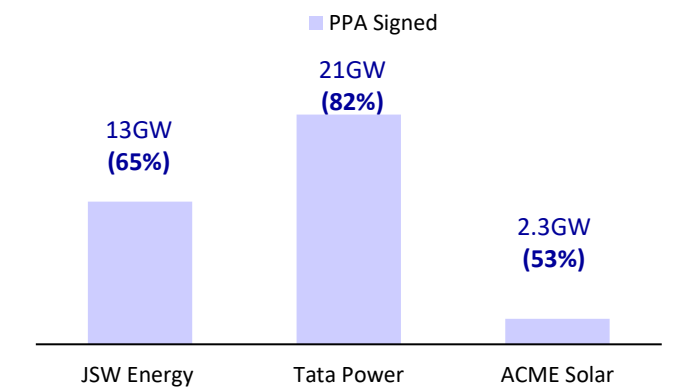
- According to media articles [\(link\)](#) and our channel checks, **nearly 40GW of RE projects** awarded by government-backed agencies have remained stranded for over a year. The majority of these, based on our discussions with industry participants, are in the plain vanilla solar category (~17GW), followed by hybrid (13GW).
- Key reasons for the delay in signing PPA, according to us, are led by: 1) expectations of declining RE tariffs, 2) the time-consuming process required for state DISCOMs to secure regulatory approvals, and 3) a sharp rise in RE auctions to ~62GW in FY24 from ~13/15/12GW in FY21/FY22/FY23.
- Delays in securing PPA have raised investor concerns about the sanctity of guided EBITDA for generation companies. Amongst the RE generation companies in our coverage universe, TPWR (82%) and JSWE (65%) have the highest % of project pipeline covered by PPA, followed by ACME Solar (53%).

**Exhibit 4: PPA and PSAs not signed yet for nearly 40GW of RE projects awarded**



Source: Industry, MOFSL

**Exhibit 5: PPA signed (as a % of under construction + pipeline)**

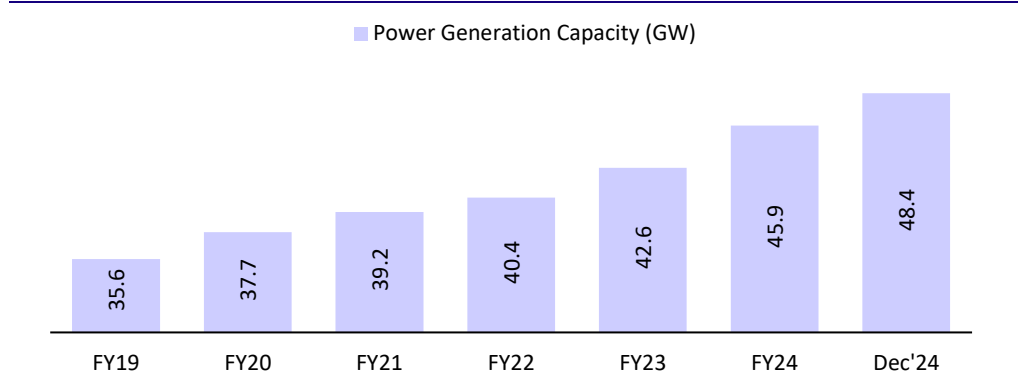


Source: Company, MOFSL

**Falling battery prices reshaping project economics, minimizing penalty risk**

- Falling battery prices (down from **over USD200/kWh in 2018** to **~USD135/kWh now**) are reshaping the renewable energy landscape as developers maximize capex on solar/battery components while curtailing capital allocation to wind equipment.
- FDRE projects face a **penalty equal to 1.5x the PPA tariff** in case of generation falling short of committed targets. Wind capacity is often cited as a source of generation variability, exposing the company to 1) penalties in the event of lower than committed generation and 2) merchant risk in the event of over-generation. Developers are oversizing solar and battery storage, as solar + tracker systems are achieving PLFs comparable to/marginally below wind capacity. Wind energy is also constrained by land access and right-of-way (RoW) challenges, requiring longer execution timelines compared to solar.
- Replacing wind capacity with additional battery capacity leads to 1) reducing the risk of incurring penalties, and 2) minimizing execution challenges. Key industry participants believe annual wind installations in India are likely to remain in the 4-5GW range due to execution challenges. In our coverage universe, JSWE, TPWR, and Acme Solar have 0.3/1.9/2.6 GW of FDRE projects in hand, which account for 2%/19%/59% of their RE project pipeline.

**Exhibit 6: Evolution of wind power capacity in India (in GW)**

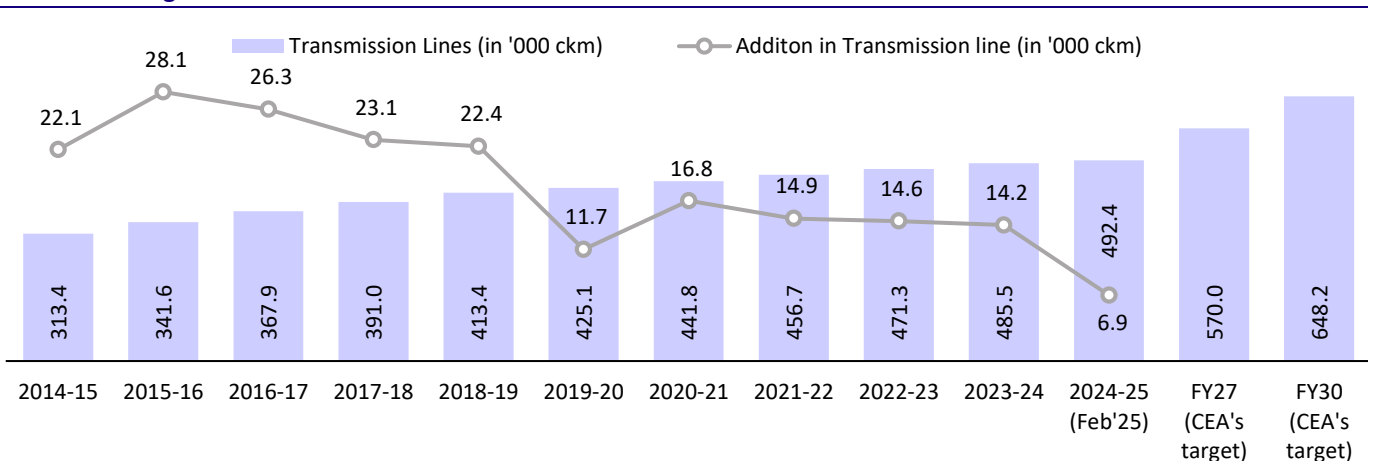


Source: NPP, MOFSL

**CERC's draft proposal to help resolve connectivity issue**

- Based on our recent discussions with leading RE developers—including JSWE, Acme Solar, and ReNew—transmission infrastructure has emerged as a primary challenge in project execution. Developers cite right-of-way (RoW) disputes, landowner compensation demands, and delays in forest clearances as key impediments. These issues have led to the postponement of 14 inter-state transmission system (ISTS) projects ([Link](#)), highlighting structural bottlenecks in India's transmission planning and execution.
- In response to these challenges, the Central Electricity Regulatory Commission (CERC) has proposed the Fourth Amendment to the Connectivity and General Network Access Regulations, 2025, aimed at optimizing transmission efficiency. The draft regulation introduces restricted grid access, allocating solar projects to solar hours while wind and energy storage systems (ESS) utilize non-solar hours.
- This reform seeks to unlock stranded transmission capacity, particularly benefiting wind energy projects, while promoting hybrid project integration and accelerating renewable capacity expansion. If effectively implemented, it could enhance grid utilization and reduce transmission bottlenecks.
- Within our coverage universe, JSWE and Acme Solar have secured full transmission connectivity for their 8.0GW and 4.4GW under-construction RE portfolios, respectively. Acme Solar also secured an additional 2GW already secured for future projects. In contrast, NTPC Green has connectivity for 50% of its 10GW under-construction RE portfolio.

**Exhibit 7: India's growth of transmission lines**

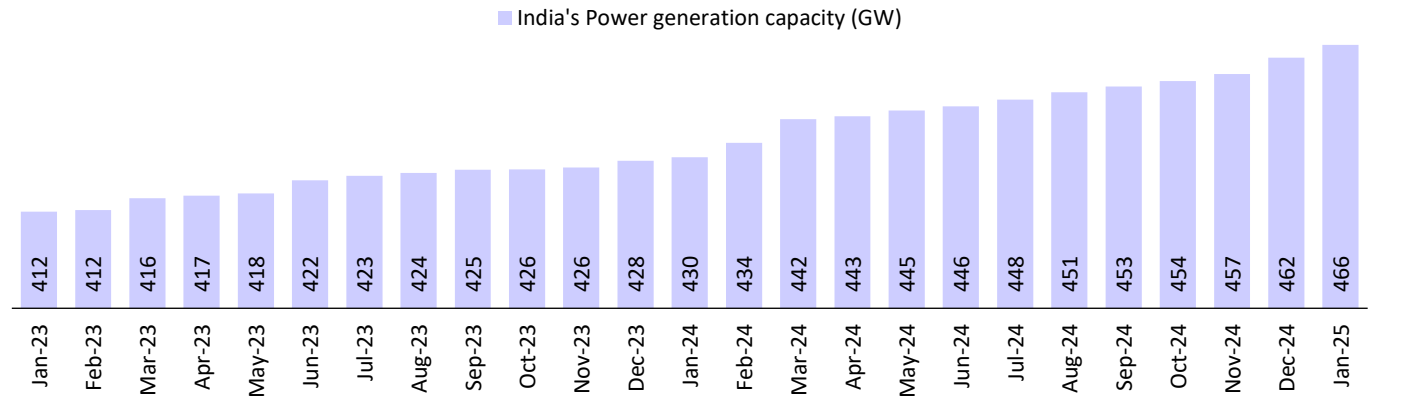


Source: Ministry of Power, CEA, MOFSL

**Valuation**

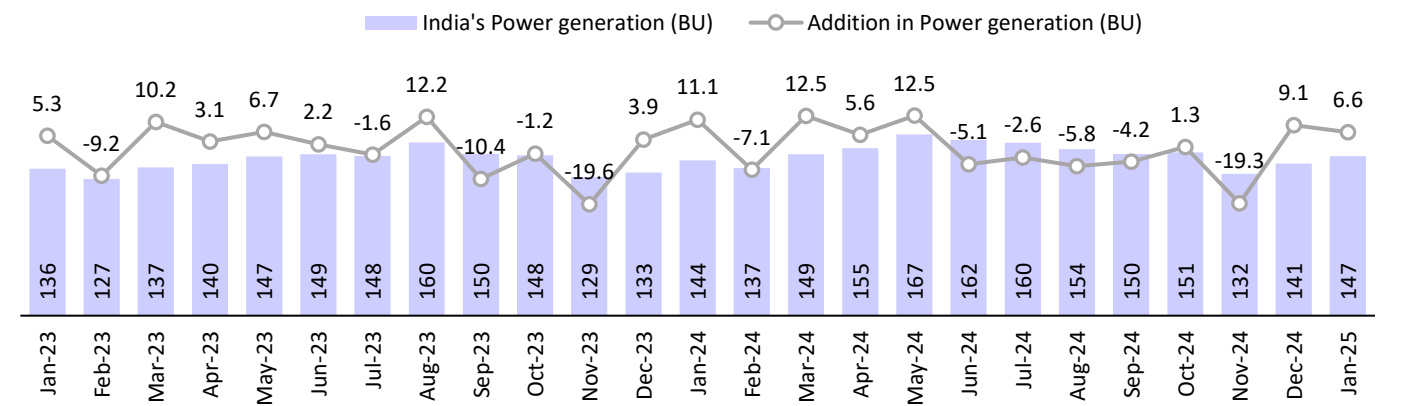
- We reiterate our **BUY** rating on JSWE, which is our top pick in the space, with a **sum-of-the-parts (SoTP)-based TP of INR705**.
- We also have a **BUY** rating on ACME Solar with a TP of **INR 330**. Our valuation is based on an **EV/EBITDA multiple of 11x** applied to the estimated **FY28 EBITDA**. Adjusted for net debt, our TP implies an **upside potential of 59%**.

**Exhibit 8: India's power generation capacity (in GW)**



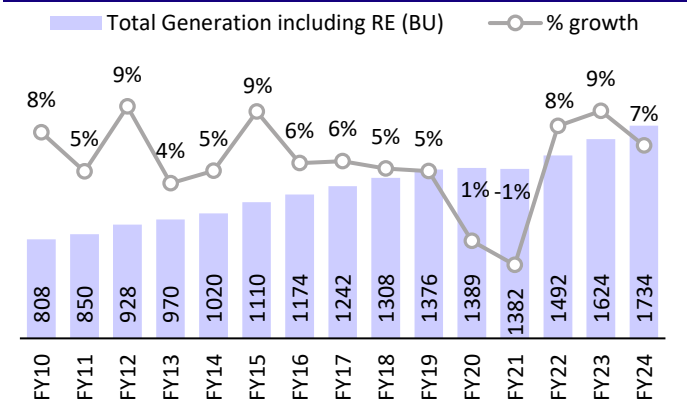
Source: NPP, MOFSL

**Exhibit 9: India's power generation (in BU)**



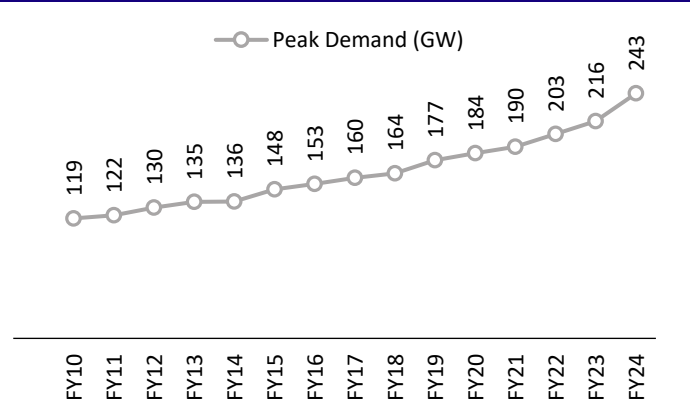
Source: NPP, CEA, MOFSL

**Exhibit 10: India's power demand growth**



Source: NPP, CEA, MOFSL

**Exhibit 11: Peak demand growth**



Source: NPP, CEA, MOFSL

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

## NOTES

Explanation of Investment Rating	
Investment Rating	Expected return (over 12-month)
BUY	>=15%
SELL	< - 10%
NEUTRAL	< - 10 % to 15%
UNDER REVIEW	Rating may undergo a change
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation

\*In case the recommendation given by the Research Analyst is inconsistent with the investment rating legend for a continuous period of 30 days, the Research Analyst shall be within following 30 days take appropriate measures to make the recommendation consistent with the investment rating legend.

**Disclosures**

The following Disclosures are being made in compliance with the SEBI Research Analyst Regulations 2014 (herein after referred to as the Regulations).

Motilal Oswal Financial Services Ltd. (MOFSL) is a SEBI Registered Research Analyst having registration no. INH000000412. MOFSL, the Research Entity (RE) as defined in the Regulations, is engaged in the business of providing Stock broking services, Depository participant services & distribution of various financial products. MOFSL is a listed public company, the details in respect of which are available on [www.motilaloswal.com](http://www.motilaloswal.com). MOFSL (erstwhile Motilal Oswal Securities Limited - MOSL) is registered with the Securities & Exchange Board of India (SEBI) and is a registered Trading Member with National Stock Exchange of India Ltd. (NSE) and Bombay Stock Exchange Limited (BSE), Multi Commodity Exchange of India Limited (MCX) and National Commodity & Derivatives Exchange Limited (NCDEX) for its stock broking activities & is Depository participant with Central Depository Services Limited (CDSL) National Securities Depository Limited (NSDL), NERL, COMRIS and CCRL and is member of Association of Mutual Funds of India (AMFI) for distribution of financial products and Insurance Regulatory & Development Authority of India (IRDA) as Corporate Agent for insurance products. Details of associate entities of Motilal Oswal Financial Services Limited are available on the website at <http://online-reports.motilaloswal.com/Dormant/documents/List%20of%20Associate%20companies.pdf>

MOFSL and its associate company(ies), their directors and Research Analyst and their relatives may; (a) from time to time, have a long or short position in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein. (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) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.

MOFSL and / or its affiliates do and seek to do business including investment banking with companies covered in its research reports. As a result, the recipients of this report should be aware that MOFSL may have a potential conflict of interest that may affect the objectivity of this report. Compensation of Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. Details of pending Enquiry Proceedings of Motilal Oswal Financial Services Limited are available on the website at <https://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx>

A graph of daily closing prices of securities is available at [www.nseindia.com](http://www.nseindia.com), [www.bseindia.com](http://www.bseindia.com). Research Analyst views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of MOFSL or its associates maintains arm's length distance with Research Team as all the activities are segregated from MOFSL research activity and therefore it can have an independent view with regards to Subject Company for which Research Team have expressed their views.

**Regional Disclosures (outside India)**

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL & its group companies to registration or licensing requirements within such jurisdictions.

**For Hong Kong:**

This report is distributed in Hong Kong by Motilal Oswal capital Markets (Hong Kong) Private Limited, a licensed corporation (CE AYY-301) licensed and regulated by the Hong Kong Securities and Futures Commission (SFC) pursuant to the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) "SFO". As per SEBI (Research Analyst Regulations) 2014 Motilal Oswal Securities (SEBI Reg. No. INH000000412) has an agreement with Motilal Oswal capital Markets (Hong Kong) Private Limited for distribution of research report in Hong Kong. This report is intended for distribution only to "Professional Investors" as defined in Part 1 of Schedule 1 to SFO. Any investment or investment activity to which this document relates is only available to professional investor and will be engaged only with professional investors." Nothing here is an offer or solicitation of these securities, products and services in any jurisdiction where their offer or sale is not qualified or exempt from registration. The Indian Analyst(s) who compile this report is/are not located in Hong Kong & are not conducting Research Analysis in Hong Kong.

**For U.S.**

Motilal Oswal Financial Services Limited (MOFSL) is not a registered broker - dealer under the U.S. Securities Exchange Act of 1934, as amended (the "1934 act") and under applicable state laws in the United States. In addition MOFSL is not a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act" and together with the 1934 Act, the "Acts"), and under applicable state laws in the United States. Accordingly, in the absence of specific exemption under the Acts, any brokerage and investment services provided by MOFSL, including the products and services described herein are not available to or intended for U.S. persons. This report is intended for distribution only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the Exchange Act and interpretations thereof by SEC (henceforth referred to as "major institutional investors"). This document must not be acted on or relied on by persons who are not major institutional investors. Any investment or investment activity to which this document relates is only available to major institutional investors and will be engaged in only with major institutional investors. In reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and interpretations thereof by the U.S. Securities and Exchange Commission ("SEC") in order to conduct business with Institutional Investors based in the U.S., MOFSL has entered into a chaperoning agreement with a U.S. registered broker-dealer, Motilal Oswal Securities International Private Limited. ("MOSIPL"). Any business interaction pursuant to this report will have to be executed within the provisions of this chaperoning agreement.

The Research Analysts contributing to the report may not be registered /qualified as research analyst with FINRA. Such research analyst may not be associated persons of the U.S. registered broker-dealer, MOSIPL, and therefore, may not be subject to NASD rule 2711 and NYSE Rule 472 restrictions on communication with a subject company, public appearances and trading securities held by a research analyst account.

**For Singapore**

In Singapore, this report is being distributed by Motilal Oswal Capital Markets (Singapore) Pte. Ltd. ("MOCMSPL") (UEN 201129401Z), which is a holder of a capital markets services license and an exempt financial adviser in Singapore. This report is distributed solely to persons who (a) qualify as "institutional investors" as defined in section 4A(1)(c) of the Securities and Futures Act of Singapore ("SFA") or (b) are considered "accredited investors" as defined in section 2(1) of the Financial Advisers Regulations of Singapore read with section 4A(1)(a) of the SFA. Accordingly, if a recipient is neither an "institutional investor" nor an "accredited investor", they must immediately discontinue any use of this Report and inform MOCMSPL .

In respect of any matter arising from or in connection with the research you could contact the following representatives of MOCMSPL. In case of grievances for any of the services rendered by MOCMSPL write to [grievances@motilaloswal.com](mailto:grievances@motilaloswal.com).

Nainesh Rajani

Email: [nainesh.rajani@motilaloswal.com](mailto:nainesh.rajani@motilaloswal.com)

Contact: (+65) 8328 0276

**Specific Disclosures**

1. Research Analyst and/or his/her relatives do not have a financial interest in the subject company(ies), as they do not have equity holdings in the subject company(ies). MOFSL has financial interest in the subject company(ies) at the end of the week immediately preceding the date of publication of the Research Report: Yes.  
Nature of Financial interest is holding equity shares or derivatives of the subject company
2. Research Analyst and/or his/her relatives do not have actual/beneficial ownership of 1% or more securities in the subject company(ies) at the end of the month immediately preceding the date of publication of Research Report.  
MOFSL has actual/beneficial ownership of 1% or more securities of the subject company(ies) at the end of the month immediately preceding the date of publication of Research Report: No
3. Research Analyst and/or his/her relatives have not received compensation/other benefits from the subject company(ies) in the past 12 months.  
MOFSL may have received compensation from the subject company(ies) in the past 12 months.
4. Research Analyst and/or his/her relatives do not have material conflict of interest in the subject company at the time of publication of research report.  
MOFSL does not have material conflict of interest in the subject company at the time of publication of research report.
5. Research Analyst has not served as an officer, director or employee of subject company(ies).
6. MOFSL has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months.
7. MOFSL has not received compensation for investment banking/merchant banking/brokerage services from the subject company(ies) in the past 12 months.



8. MOFSL may have received any compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company(ies) in the past 12 months.
9. MOFSL may have received compensation or other benefits from the subject company(ies) or third party in connection with the research report.
10. MOFSL has not engaged in market making activity for the subject company.

The associates of MOFSL may have:

- financial interest in the subject company
- actual/beneficial ownership of 1% or more securities in the subject company at the end of the month immediately preceding the date of publication of the Research Report or date of the public appearance.
- received compensation/other benefits from the subject company in the past 12 months
- any other potential conflict of interests with respect to any recommendation and other related information and opinions; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.
- acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- 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) discussed herein or act as an advisor or lender/borrower to such company(ies)
- received compensation from the subject company in the past 12 months for investment banking / merchant banking / brokerage services or from other than said services.
- Served subject company as its clients during twelve months preceding the date of distribution of the research report.

The associates of MOFSL has not received any compensation or other benefits from third party in connection with the research report

Above disclosures include beneficial holdings lying in demat account of MOFSL which are opened for proprietary investments only. While calculating beneficial holdings, It does not consider demat accounts which are opened in name of MOFSL for other purposes (i.e holding client securities, collaterals, error trades etc.). MOFSL also earns DP income from clients which are not considered in above disclosures.

**Analyst Certification**

The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issues, and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report.

**Terms & Conditions:**

This report has been prepared by MOFSL and is meant for sole use by the recipient and not for circulation. The report and information contained herein is strictly confidential and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of MOFSL. The report is based on the facts, figures and information that are considered true, correct, reliable and accurate. The intent of this report is not recommendatory in nature. The information is obtained from publicly available media or other sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. The report is prepared solely for informational purpose and does not constitute an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments for the clients. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. MOFSL will not treat recipients as customers by virtue of their receiving this report.

**Disclaimer:**

The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent. This report and information herein is solely for informational purpose and may not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. Each recipient of this document should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved), and should consult its own advisors to determine the merits and risks of such an investment. The investment discussed or views expressed may not be suitable for all investors. Certain transactions -including those involving futures, options, another derivative products as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. No representation or warranty, express or implied, is made as to the accuracy, completeness or fairness of the information and opinions contained in this document. The Disclosures of Interest Statement incorporated in this document is provided solely to enhance the transparency and should not be treated as endorsement of the views expressed in the report. This information is subject to change without any prior notice. The Company reserves the right to make modifications and alternations to this statement as may be required from time to time without any prior approval. MOFSL, its associates, their directors and the employees may from time to time, effect or have effected an own account transaction in, or deal as principal or agent in or for the securities mentioned in this document. They may perform or seek to perform investment banking or other services for, or solicit investment banking or other business from, any company referred to in this report. Each of these entities functions as a separate, distinct and independent of each other. The recipient should take this into account before interpreting the document. This report has been prepared on the basis of information that is already available in publicly accessible media or developed through analysis of MOFSL. The views expressed are those of the analyst, and the Company may or may not subscribe to all the views expressed therein. This document is being supplied to you solely for your information and may not be reproduced, redistributed or passed on, directly or indirectly, to any other person or published, copied, in whole or in part, for any purpose. 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 MOFSL 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 certain category of investors. Persons in whose possession this document may come are required to inform themselves of and to observe such restriction. Neither the Firm, not its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profits that may arise from or in connection with the use of the information. The person accessing this information specifically agrees to exempt MOFSL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold MOFSL or any of its affiliates or employees responsible for any such misuse and further agrees to hold MOFSL or any of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays.

This report is meant for the clients of Motilal Oswal only.

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

Registration granted by SEBI and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022 - 71934200 / 71934263; www.motilaloswal.com.

Correspondence Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad (West), Mumbai- 400 064. Tel No: 022 71881000. Details of Compliance Officer: Neeraj Agarwal, Email Id: na@motilaloswal.com, Contact No.:022-40548085.

Grievance Redressal Cell:

Contact Person	Contact No.	Email ID
Ms. Hemangi Date	022 40548000 / 022 67490600	query@motilaloswal.com
Ms. Kumud Upadhyay	022 40548082	servicehead@motilaloswal.com
Mr. Ajay Menon	022 40548083	am@motilaloswal.com

Registration details of group entities.: Motilal Oswal Financial Services Ltd. (MOFSL): INZ000158836 (BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412 . AMFI: ARN : 146822. IRDA Corporate Agent – CA0579. Motilal Oswal Financial Services Ltd. is a distributor of Mutual Funds, PMS, Fixed Deposit, Insurance, Bond, NCDs and IPO products.

Customer having any query/feedback/ clarification may write to query@motilaloswal.com. In case of grievances for any of the services rendered by Motilal Oswal Financial Services Limited (MOFSL) write to grievances@motilaloswal.com, for DP to dpgrievances@motilaloswal.com.