

Tata Power

BSE SENSEX S&P CNX 24,678 81,709

CMP: INR439

TP: INR509 (+16%)

Buy

TATA POWER

Stock into	
Bloomberg	

Bloomberg	TPWR IN
Equity Shares (m)	3195
M.Cap.(INRb)/(USDb)	1405 / 16.6
52-Week Range (INR)	495 / 280
1, 6, 12 Rel. Per (%)	-3/-6/32
12M Avg Val (INR m)	7257
Free float (%)	53.1

Financials Snapshot (INR b)

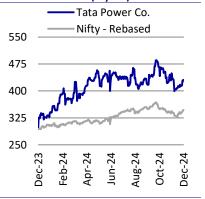
i ilianciais shap.	JIIOC (IIIVI	~ <i> </i>	
Y/E March	FY24	FY25E	FY26E
Sales	614.5	771.5	837.5
EBITDA	107.8	145.5	156.4
Adj. PAT	35.1	43.3	56.5
EPS (INR)	11.0	13.6	17.7
EPS Gr. (%)	5.1	23.6	30.5
BV/Sh.(INR)	101.2	115.1	132.5
Ratios			
Net D:E	1.0	1.2	1.1
RoE (%)	11.5	12.5	14.3
RoCE (%)	8.4	10.2	9.4
Payout (%)	18.2	18.4	18.4
Valuations			
P/E (x)	40.0	32.4	24.8
P/BV (x)	4.3	3.8	3.3
EV/EBITDA (x)	17.2	13.6	13.0
Div. Yield (%)	0.5	0.6	0.7
·			

Shareholding pattern (%)

	0 1		
As On	Sep-24	Jun-24	Sep-23
Promoter	46.9	46.9	46.9
DII	17.0	15.8	16.0
FII	9.2	9.5	10.0
Others	27.0	27.8	27.1

FII Includes depository receipts

Stock Performance (1-year)



Ambitious investments and strategic expansion drive growth

- We attended Tata Power's analyst meet, where the company showcased its 4.3GW cell and module manufacturing facility at Tirunelveli in Tamil Nadu. The event was also attended by senior management from the company. Our key takeaways: 1) management showcased its vision to double EBITDA and PAT (before minority) to INR300b and INR100b by FY30, respectively; 2) by FY30, TPWR expects the share of renewables in PAT to rise to ~50% (FY24: 21%), while the share of conventional generation and coal, which now account for ~44% of PAT, will decline to ~11%; 3) capex is estimated to rise to INR1,460b in the next five years, ~3x the capex over the last five years.
- While the company had provided similar guidance last year as well, below are the key takeaways that stood out for us: 1) capex for FY26-27 was raised to INR250-260b p.a. from INR220-230b; 2) TPWR provided greater granular details at project and capacity levels this time (especially for T&D, cell & module manufacturing, and RE generation), which enhances visibility as to how the revenue and EBITDA targets will be achieved; 3) COD for 2.8GW of pumped hydro projects has been deferred slightly by 6-12 months; 4) the operational green capacity target for 2030 was raised to 23GW (from 20GW previously) while the under-construction pipeline has now expanded to 10GW (from 3.7GW earlier), and 5) land, PPA, and transmission connectivity for the RE pipeline remain solid.
 - Segment-wise guidance provided is as follows: 1)cell and module manufacturing: both cell and module production are expected to ramp up to 4GW by FY26 (1/1.8GW in 2HFY25 for cell/module); 2) pumped storage and hydro-power: construction at 1GW Bhivpuri PSP and 1.8GW Shirwata PSP is likely to commence in CY25; TPWR also outlined additional hydro potential in Bhutan of up to 15GW vs. the 5.1GW MoU signed with Druk Green Power; 3) **T&D:** transmission and distribution remain the key focus areas for the company with a plan to double operational capacity to 10,500 cKm by FY30 (from 4,633 cKm now), and Odisha regulated equity to nearly double by FY30; in distribution, TPWR aims to expand the customer base to 40m by FY30 (from 12.5m now) and the company outlined Rajasthan, UP, Assam, Andhra Pradesh, and Andaman & Nicobar, where active discussions are ongoing with respect to distribution-related opportunities; and 4) green generation capacity: while the company has 6.7GW green operational generation capacity, ~10GW remains under construction, and the FY30 vision is to reach ~23GW in operational green capacity.
- We reiterate our BUY rating on the stock with an SoTP-based TP of INR509.

Abhishek Nigam – Research Analyst (Abhishek.Nigam@MotilalOswal.com)

Operational green generation capacity to expand to 23GW by FY30

- TPWR targets 23 GW of operational green generation capacity by FY30, with 65% of total capacity operational by FY30 comprising RE.
- A phased commissioning of 5.6 GW of projects is planned between 4QFY25 and 2QFY27, with significant progress in land acquisition (40%), PPA signings (90%), and transmission connectivity (80%).

Exhibit 1: Clean and green capacity roadmap (GW)

Exhibit 1. Clean and green capacity roadinap (GW)				
GW				
6.3				
6.7				
15				
23				
10				
33				

Source: Company, MOFSL

Exhibit 2: RE	pipeline with	100%	visibility	of la	ınd	and
transmission	(MW)					

i di i si i i i si si ci i i i i i i i i i	
ipeline	MW
QFY25	588
QFY26	709
QFY26	420
QFY26	953
QFY26	594
QFY27	1657
QFY27	627
otal	5,548

Source: Company, MOFSL

Cell and module manufacturing to ramp up to 4GW in FY26

- Solar rooftop installations are projected to report a 36% CAGR over FY24-FY30.
- The company's cell and module production facilities have achieved operational status, with 2GW capacity operational as of December 2024. Plans are in place to scale production to 4 GW by FY26, focusing on domestic opportunities and captive consumption.
- Production yields are strong, with cells performing at 97% and 85%, aiming for improvements to approximately 98%.

T&D network and customer base to more than double by FY30

- TPWR's operational transmission network spans 4,633 ckm, with 2,416 ckm under construction, requiring a total capex of INR123.5b.
- The company aims to achieve 10,500 ckm by FY30, necessitating an additional INR125b for 3,500 ckm.
- Regulated equity in Odisha is projected to rise by 94% between FY24 and FY30.
- Distribution operations are set to expand, with TPWR targeting an increase from 12.5m customers to 40m by FY30 across Rajasthan, Uttar Pradesh, Assam, and Andhra Pradesh.
- Industry-wide capex in India for FY25-FY32 is estimated at USD110b, with transmission auctions surpassing FY24 levels in 1HFY25 (INR512b vs. INR474b in FY24).
- India AT&C losses have reduced to 17.6% in FY24 from 22.3% in FY21, while discom losses have declined to INR210b from INR260b.

Pumped Storage Projects (PSP) commissioning deferred slightly

- Bhivpuri PSP (1 GW): Construction to commence in early 2025, with COD by mid-2028, requiring INR56.6b.
- Shirwata PSP (1.8 GW): Construction to start in mid-2025, with a capital investment of INR78.5b.
- An additional 9GW of PSP potential has been identified for future development.

Hydro power opportunities in Bhutan can drive long-term growth

- TPWR's hydro capacity is expected to reach 5 GW by 2031, supported by projects in Bhutan and India.
- In Bhutan, Tata Power is collaborating with Druk Power on a 5.1 GW hydro and solar initiative as part of Bhutan's 20 GW renewable vision.
- Projects include Dorjilung (to be operational by 2031) and Khorlochu (expected to be operational by 2029).

Vision to double EBITDA and PAT by FY30

- Over the past four years, TPWR has doubled its revenue and PAT, delivering on its prior guidance. The quality of earnings too has improved with a reduced share of non-core income, and the company remains focused on consistency in performance.
- By FY30, TPWR targets an EBITDA of INR300b and PAT of INR100b (before minority interest), which are more than double the levels achieved in FY24.
- The strong growth in profitability will be driven by contributions from RE generation, T&D, and hydro-related opportunities.

Exhibit 3: Financial performance

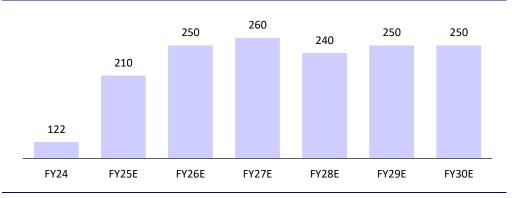
Particulars (INR b)	FY24	FY30E	Growth from FY24 to FY30E
Revenue	615	1,000	1.6x
EBITDA	127	300	2.4x
PAT (before minority)	41	100	2.5x

Source: Company, MOFSL

FY26/27 capex has been increased modestly vs. previous guidance

- TPWR has increased its capex run rate, investing INR500b in FY21-25 and planning INR1,460 b over the next five years.
- Allocation includes INR750b for renewable energy, INR300b for T&D, and INR200b for generation.

Exhibit 4: Estimated capex of INR1,460b between FY25and FY30E (INR b)



Source: Company, MOFSL

Renewables
60%

Pumped Storage
and Hydro
10%

Transmission
20%

Distribution
7%

Exhibit 5: Capex between FY25 and FY30E

Source: Company, MOFSL

Strategic portfolio optimization and focused investments

- TPWR is strategically pursuing the divestment of its non-core assets, valued at approximately USD1b, to strengthen its capital structure and enhance capital allocation efficiency.
- The company is prioritizing investments in real-time hybrid renewable projects and high-IRR transmission and distribution (T&D) ventures, aligning with its growth objectives.
- Additionally, Tata Power remains cautious regarding nuclear energy initiatives, awaiting clear policy directives before advancing in this segment.

Advancing solar manufacturing with cutting-edge technology

- TPWR operates the cell and module manufacturing facility at Tirunelveli, Tamil Nadu. The company imports wafers from China, primarily sourced from GCL and LONGi, which are then are chemically textured to reduce reflectivity from 40% to 7%, thus enhancing light absorption.
- The facility employs three automated texturing lines with German-imported equipment, ensuring minimal manual intervention. Using p-type wafers, the diffusion process incorporates phosphorus to form pn-junctions, with critical steps such as oxidation, polishing, and annealing thus optimizing conductivity.
- The production process includes cutting-edge technologies like LDSE, PECVD, printing, and sintering, enabling the manufacture of bifacial cells with improved light absorption.
- The facility boasts a capacity of 4 GW for Mono PERC cells (23.5% efficiency) and 0.3 GW for TopCon cells (24.3% efficiency), with plans for TopCon expansion. The module manufacturing plant, with a total capacity of 4.3 GW across four highly automated lines, maintains production speeds of 200 modules per hour and a low rejection rate of 2-3%.
- All equipment is designed for scalability and compatibility with advanced TopCon technology, underscoring Tata Power's commitment to innovation and excellence in renewable energy manufacturing.

Valuation and view

- The valuation of TPWR is segmented across various business units, leading to a TP of INR509/share.
- The regulated business is valued using a 3x multiple on regulated equity.
- The coal segment is valued based on equity with a 1.5x multiple of FY24 book value.
- The renewables segment is valued at a 14x multiple of projected FY27 EBITDA.
- The pumped storage segment is valued at 1x PB, while other segments are valued at 1.5x PB. Cash and investments add INR57/share.
- The sum of these contributions results in a total target price of INR509/share, reflecting the comprehensive valuation of TPWR's diverse business segments.

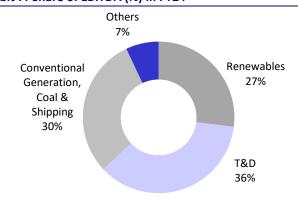
Exhibit 6: Our SoTP-based valuation

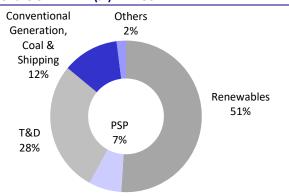
Segment	Metric type	Metric value	Multiple	Value (INR/sh.)
Regulated business	Regulated equity	1,04,716	3.0	98
Coal	Equity		1.5x FY24 BV	14
Renewables	FY27 EBITDA	88,266	14	278
Pumped storage	Equity	37,650	1x PB	13
Others	Equity		1.5x PB	48
Cash and investments				57
Target price		·		509
СМР				439
Upside / (Downside)				16%

Story in charts

Exhibit 7: Share of EBITDA (%) in FY24

Exhibit 8: Share of EBITDA (%) in FY30E



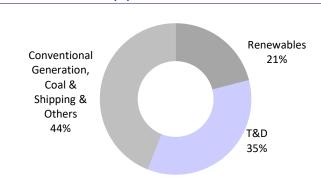


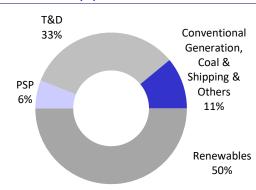
Source: Company, MOFSL

Source: Company, MOFSL

Exhibit 9: Share of PAT (%) in FY24

Exhibit 10: Share of PAT (%) in FY30E



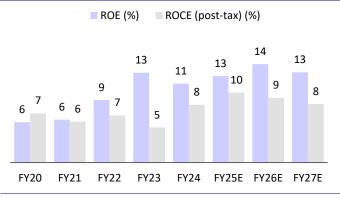


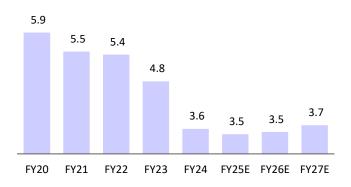
Source: Company, MOFSL

Source: Company, MOFSL

Exhibit 11: Consolidated RoE and RoCE, post-tax (%)

Exhibit 12: Net Debt/EBITDA





Source: Company, MOSL

Source: Company, MOSL

Financials and valuations

Y/E March	FY23	FY24	FY25E	FY26E	FY27E
Net Sales	5,51,091	6,14,489	7,71,519	8,37,541	8,87,758
Change (%)	28.7	11.5	25.6	8.6	6.0
Total Expenses	4,74,028	5,06,651	6,25,991	6,81,186	7,24,305
EBITDA	77,063	1,07,838	1,45,528	1,56,354	1,63,452
% of Net Sales	14.0	17.5	18.9	18.7	18.4
Depn. & Amortization	34,392	37,864	41,567	47,758	51,488
EBIT	42,671	69,975	1,03,961	1,08,596	1,11,964
Net Interest	43,717	46,332	47,955	57,400	56,875
Other income	14,380	18,234	14,409	20,555	21,122
PBT before EO	13,335	41,877	70,415	71,752	76,211
Regulatory inc./(exp)	9,241	861	-13,616	0	0
EO items	0	2,807	-125	0	0
PBT after EO	22,575	45,544	56,924	71,752	76,211
Tax	16,473	14,519	16,363	17,876	18,994
Rate (%)	73.0	31.9	28.7	24.9	24.9
JV	31,995	11,776	11,863	12,205	12,442
Reported PAT	33,364	36,962	43,416	56,542	59,376
Minority	4,732	5,839	9,008	9,539	10,282
Adjusted PAT	33,364	35,050	43,326	56,542	59,376
Change (%)	69.9	5.1	23.6	30.5	5.0

Consolidated Balance Sheet					(INR m)
Y/E March	FY23	FY24	FY25E	FY26E	FY27E
Share Capital	3,196	3,196	3,196	3,196	3,196
Reserves	2,84,679	3,20,357	3,64,542	4,20,237	4,79,510
Net Worth	2,87,874	3,23,553	3,67,737	4,23,433	4,82,705
Minority Interest	54,167	59,775	67,550	75,856	84,906
Total Loans	4,89,744	4,94,798	6,39,746	7,33,460	8,30,125
Deferred Tax Liability	19,194	27,723	27,723	27,723	27,723
Capital Employed	8,50,979	9,05,849	11,02,757	12,60,472	14,25,459
Gross Block	8,80,388	9,73,889	11,20,228	12,61,973	12,94,621
Less: Accum. Deprn.	2,81,504	3,19,368	3,60,935	4,08,693	4,60,181
Net Fixed Assets	5,98,884	6,54,521	7,59,293	8,53,280	8,34,439
Capital WIP	53,764	1,15,613	1,71,438	1,85,188	3,11,688
Goodwill	18,583	17,575	17,575	17,575	17,575
Investments	1,55,201	1,48,381	1,52,148	1,56,181	1,68,623
Curr. Assets	4,55,924	4,59,445	5,06,768	5,56,783	6,06,935
Inventories	39,429	44,196	45,221	46,431	47,391
Account Receivables	69,522	74,017	92,261	93,558	98,055
Cash and Bank Balance	1,23,561	1,06,298	1,34,352	1,81,860	2,26,556
Others	2,23,412	2,34,934	2,34,934	2,34,934	2,34,934
Curr. Liability & Prov.	4,31,376	4,89,686	5,04,465	5,08,535	5,13,801
Account Payables	74,072	93,214	1,07,993	1,12,062	1,17,329
Provisions & Others	3,57,304	3,96,472	3,96,472	3,96,472	3,96,472
Net Curr. Assets	24,548	-30,241	2,303	48,249	93,134
Appl. of Funds	8,50,979	9,05,849	11,02,757	12,60,472	14,25,459

Financials and valuations

Ratios					
Y/E March	FY23	FY24	FY25E	FY26E	FY27E
Basic (INR)					
EPS	10.4	11.0	13.6	17.7	18.6
Cash EPS	21.2	22.8	26.6	32.6	34.7
BV/Share	90.1	101.2	115.1	132.5	151.1
DPS	2.0	2.0	2.5	3.3	3.3
Payout (%)	19.2	18.2	18.4	18.4	17.5
Dividend yield (%)	0.5	0.5	0.6	0.7	0.7
Valuation (x)					
P/E	42.0	40.0	32.4	24.8	23.6
Cash P/E	20.7	19.2	16.5	13.5	12.7
P/BV	4.9	4.3	3.8	3.3	2.9
EV/EBITDA	23.7	17.2	13.6	13.0	12.8
Dividend Yield (%)	0.5	0.5	0.6	0.7	0.7
FCF (pre-int) to EV yield (%)	1.7	1.2	-3.5	0.7	0.3
Return Ratios (%)					
RoE	13.0	11.5	12.5	14.3	13.1
RoCE (post-tax)	5.1	8.4	10.2	9.4	8.5
RoIC (post-tax)	2.4	9.4	12.9	12.1	11.8
Working Capital Ratios					
Fixed Asset Turnover (x)	0.9	0.9	1.0	1.0	1.1
Asset Turnover (x)	0.6	0.7	0.7	0.7	0.6
Debtor (Days)	46	44	44	41	40
Inventory (Days)	26	26	21	20	19
Leverage Ratio (x)					
Net Debt/EBITDA	4.8	3.6	3.5	3.5	3.7
Debt/Equity	1.1	1.0	1.2	1.1	1.1
Consolidated Cash Flow Statement					(INR m)
Y/E March	FY23	FY24	FY25E	FY26E	FY27E
EBITDA	86,304	1,08,699	1,31,912	1,56,354	1,63,452
WC	-9,857	19,275	-4,489	1,562	-189
Others	3,852	3,882	0	0	0
Direct taxes (net)	-8,707	-5,895	-16,363	-17,876	-18,994
CF from Op. Activity	71,591	1,25,961	1,11,059	1,40,040	1,44,269
Capex	-76,560	-1,33,328	-2,02,164	-1,55,495	-1,59,147
FCF	-4,969	-7,366	-91,105	-15,455	-14,879
Int & div income	36,253	29,774	22,505	28,728	21,122
Investments(subs/JVs)	5,342	2,457	0	0	0
Others	3,015	2,846	125	0	0
CF from Inv. Activity	-31,950	-98,250	-1,79,534	-1,26,767	-1,38,026
Share capital	40,084	1,139	0	0	0
Borrowings	11,690	5,126	1,44,948	93,714	96,665
Finance cost	-41,084	-47,765	-47,955	-57,400	-56,875
Dividend	-7,869	-8,868	-9,222	-11,619	-11,619
Others	10,587	5,394	0	0	0
CF from Fin. Activity	13,408	-44,974	87,772	24,695	28,172
(Inc)/Dec in Cash	53,050	-17,263	19,296	37,968	34,414
Opening balance	70,512	1,23,561	1,06,298	1,34,352	1,81,860
Closing balance	1,23,562	1,06,298	1,25,594	1,72,321	2,16,274

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

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 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, 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 (NDDL),NERL, COMRIS and CCRL and is member of Association of Mutual Funds of India (IRDA) as Corporate Agent for insurance products. Details of associate entities of Motilal Oswal Financial Services Ltd. are available on the website at https://onlinereports.motilaloswal.com/Dormant/documents/Associate%20Details.pdf

Details of pending Enquiry Proceedings of Motilal Oswal Financial Services Limited are available on the website at https://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx

MOFSL, it's associates, Research Analyst or their relatives may have any financial interest in the subject company. MOFSL and/or its associates and/or Research Analyst or their relatives may have 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. MOFSL and its associate company(ies), their directors and Research Analyst and their relatives may have any other potential conflict of interests at the time of publication of the research report or at the time of public appearance, 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.

In the past 12 months, MOFSL or any of its associates may have:

- a) received any compensation/other benefits from the subject company of this report
- b) managed or co-managed public offering of securities from subject company of this research report,
- c) received compensation for investment banking or merchant banking or brokerage services from subject company of this research report,
- d) received compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company of this research report.
- MOFSL and it's associates have not received any compensation or other benefits from the subject company or third party in connection with the research report.
- . Subject Company may have been a client of MOFSL or its associates during twelve months preceding the date of distribution of the research report.
- Research Analyst may have served as director/officer/employee in the subject company.
- MOFSL and research analyst may engage in market making activity for the subject company.

MOFSL and its associate company(ies), and Research Analyst and their relatives from time to time may have:

a) 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.

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. To enhance transparency, MOFSL has incorporated a Disclosure of Interest Statement in this document. This should, however, not be treated as endorsement of the views expressed in the 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.

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.

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.

Disclosure of Interest Statement	Tata Power
Analyst ownership of the stock	No

A graph of daily closing prices of securities is available at www.bseindia.com, 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 Financial Services Limited (SEBI Reg No. INH000000412) has an agreement with Motilal Oswal capital Markets (Hong Kong) Private Limited for distribution only to "Professional Investors" as defined in Part I of Schedule 1 to SFO. Any 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") (Co. Reg. NO. 201129401Z) which is a holder of a capital markets services license and an exempt financial adviser in Singapore. Persons in Singapore should contact MOCMSPL in respect of any matter arising from, or in connection with this report/publication/communication. This report is distributed solely to persons who qualify as "Institutional Investors", of which some of whom may consist of "accredited" institutional investors as defined in section 4A(1) of the Securities and Futures Act of Singapore .Accordingly, if a Singapore person is not, or ceases to be, such an investor, they must immediately discontinue any use of this Report and inform MOCMSPL.

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

Offevarioe Neuressar 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. Aiay 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.