TATA POWER

COMPANY UPDATE

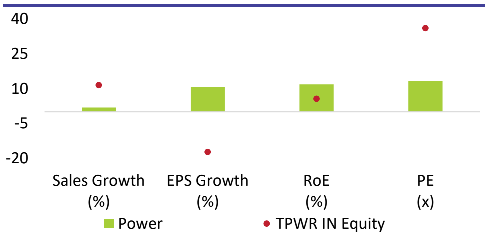
KEY DATA

Rating	BUY
Sector relative	Outperformer
Price (INR)	132
12 month price target (INR)	170
Market cap (INR bn/USD bn)	421/5.7
Free float/Foreign ownership (%)	53.1/10.8

What's Changed

Target Price	↑
Rating/Risk Rating	–

INVESTMENT METRICS

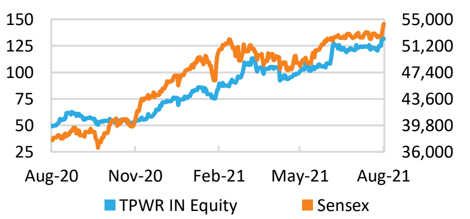


FINANCIALS

(INR mn)

Year to March	FY20A	FY21A	FY22E	FY23E
Revenue	2,91,364	3,24,681	4,00,511	4,45,926
EBITDA	79,428	69,277	76,892	88,705
Adjusted profit	12,014	11,736	18,489	22,345
Diluted EPS (INR)	4.4	3.7	5.8	7.0
EPS growth (%)	63.2	(17.3)	57.5	20.9
RoAE (%)	7.5	5.6	8.0	9.1
P/E (x)	29.7	35.9	22.8	18.9
EV/EBITDA (x)	10.6	10.7	10.1	8.9
Dividend yield (%)	1.1	1.2	1.3	1.4

PRICE PERFORMANCE



Explore:

Financial model
Podcast
Corporate access
Video

The Shift: Changing business orientation

Tata Power's (TPWR) orientation towards utility allied services/EPC business model (read *From a utility to growth play*) is gaining heft and provides a big runway for growth over the next four years. In this note, we attempt to decode the EV profitability/return profile and TPWR's preparedness along with RE progress and FY21 ARI. In our view, sunrise businesses, which are characterised by high growth/RoE/ESG rating and low capex intensity, could contribute ~45% to PAT by FY25.

While we steer clear of pure-play renewable companies' very high valuations (FY25E EV/EBITDA -12x), we do argue that TPWR's sustained re-rating would continue, bolstered by policy tailwinds. Retain 'BUY' and top pick with revised a TP of INR170 (earlier INR120).

Sailing through high tide; making right moves

TPWR's transition, from a plain-vanilla traditional utility to a B2C business (EV charging, home automation, solar roof top/pumps, microgrids), gave it a head-start, especially in EV/rooftop/pumps. We had already envisaged an overall opportunity size of USD45bn in these sunrise businesses over the next four years. This along with penetration in distribution space and high coal prices (TPWR is net long coal at 2.5MT) augurs well for its profitability. Also, while the balance sheet has broadly been mended, renewable monetisation plans and strong FCF generation should provide growth capital (INR40bn equity in 3Y). Overall, TPWR's integrated business strategy has made positive strides keeping in mind its core focus areas.

Getting future-ready; new business plans unfolding gradually

In this nascent market, TPWR already has a head-start with a commanding market share (40%-plus) across the EV charging business spectrum (5,100 chargers already). While the EV market is still evolving, as the market goes cracking, TPWR is likely to be the leader. With different types of EV business models (capex of INR15-20bn with high teens RoE), we peg total opportunity at ~USD500mn over the next four years for TPWR, which could present an INR1.5-2bn PAT opportunity annually. In RE, solar pumps and solar rooftop are gaining traction and could lead to 3x PAT growth.

Outlook and valuation: Re-rating to continue; maintain 'BUY'

We are enthused by the 100-year-old corporate's nimble approach towards the big energy transition–RE/EV etc. Consensus seems to have accepted TPWR's blazing transformation (100%/25% upwards target price/EPS revision). We believe there is still more steam left for the stock to re-rate hereon as well (after 4x rally in past 15 months). TPWR presents a strong case of perception rethink—Mundra and balance sheet are non-issues. Though our revised valuation framework shies away from assigning very high multiples, it still doesn't capture the full growth potential of the newer services/EPC business.

We are raising the TP to INR170 assigning a higher valuation to RE business (INR60/share), incorporating valuation for new businesses (INR5/share), deleveraging benefits and rolling forward to Sep-23E. We maintain **'BUY/SO'**.

Swarnim Maheshwari
+91 (22) 4040 7418
Swarnim.Maheshwari@edelweissfin.com

Manoj Kumar K V
ManojKumar.kv@edelweissfin.com

Angad Saluja
angad.saluja@edelweissfin.com

Financial Statements

Income Statement (INR mn)

Year to March	FY20A	FY21A	FY22E	FY23E
Total operating income	2,91,364	3,24,681	4,00,511	4,45,926
Energy Cost	1,61,429	1,74,094	2,14,885	2,21,079
Employee costs	14,406	21,565	22,028	24,526
Other expenses	36,101	59,746	86,705	1,11,615
EBITDA	79,428	69,277	76,892	88,705
Depreciation	26,336	27,449	31,045	34,071
Less: Interest expense	44,937	40,104	41,181	43,010
Add: Other income	5,626	4,392	5,870	6,340
Profit before tax	23,307	14,850	26,017	31,154
Prov for tax	6,415	5,019	4,089	4,937
Less: Other adj	375	5,018	0	0
Reported profit	14,276	11,736	18,489	22,345
Less: Excp.item (net)	(2,262)	0	0	0
Adjusted profit	12,014	11,736	18,489	22,345
Diluted shares o/s	2,705	3,196	3,196	3,196
Adjusted diluted EPS	4.4	3.7	5.8	7.0
DPS (INR)	1.5	1.6	1.7	1.9
Tax rate (%)	27.5	33.8	15.7	15.8

Balance Sheet (INR mn)

Year to March	FY20A	FY21A	FY22E	FY23E
Share capital	2,705	3,196	3,196	3,196
Reserves	1,77,955	2,05,027	2,18,083	2,34,357
Shareholders funds	1,95,660	2,23,223	2,36,279	2,52,552
Minority interest	23,320	29,273	32,711	36,584
Borrowings	4,45,395	3,84,812	3,74,823	3,94,639
Trade payables	50,954	71,201	64,760	66,627
Other liabs & prov	1,07,557	1,61,880	1,72,339	1,80,332
Total liabilities	8,86,856	9,86,502	9,97,025	10,46,848
Net block	4,46,626	4,87,489	5,31,444	5,62,373
Intangible assets	30,038	31,404	31,404	31,404
Capital WIP	16,115	35,998	35,000	35,000
Total fixed assets	4,92,779	5,54,891	5,97,848	6,28,777
Non current inv	1,38,353	1,26,495	1,26,495	1,26,495
Cash/cash equivalent	27,937	66,122	16,715	22,136
Sundry debtors	44,259	50,010	54,864	61,086
Loans & advances	27,575	32,208	32,852	33,509
Other assets	1,40,682	1,38,842	1,50,138	1,56,550
Total assets	8,86,856	9,86,502	9,97,025	10,46,848

Important Ratios (%)

Year to March	FY20A	FY21A	FY22E	FY23E
Energy cost (% rev)	55.4	53.6	53.7	49.6
Employee cost (% rev)	4.9	6.6	5.5	5.5
Other exp (% rev)	12.4	18.4	21.6	25.0
EBITDA margin (%)	27.3	21.3	19.2	19.9
Net profit margin (%)	4.1	3.6	4.6	5.0
Revenue growth (% YoY)	(2.5)	11.4	23.4	11.3
EBITDA growth (% YoY)	17.8	(12.8)	11.0	15.4
Adj. profit growth (%)	63.2	(2.3)	57.5	20.9

Free Cash Flow (INR mn)

Year to March	FY20A	FY21A	FY22E	FY23E
Reported profit	14,276	11,736	18,489	22,345
Add: Depreciation	26,336	27,449	31,045	34,071
Interest (net of tax)	32,569	26,550	34,708	36,195
Others	(6,170)	6,303	4,041	4,348
Less: Changes in WC	6,743	12,542	(12,955)	(3,612)
Operating cash flow	73,753	84,580	75,328	93,347
Less: Capex	52,305	88,195	74,002	65,000
Free cash flow	21,448	(3,615)	1,326	28,347

Assumptions (%)

Year to March	FY20A	FY21A	FY22E	FY23E
GDP (YoY %)	4.8	(6.0)	7.0	6.0
Repo rate (%)	4.4	3.5	3.5	4.0
USD/INR (average)	70.7	75.0	73.0	72.0
Mundra unit sale (MUs)	29,328.5	29,328.5	29,328.5	29,328.5
Mundra tariff (INR/kwh)	2.9	2.5	2.8	2.7
BUMI coal sales (MT)	59.0	58.0	59.0	60.0
BUMI avg realn. (USD/t)	51.9	48.8	79.0	71.1
Reg Equity Cl (INR mn)	80,670.4	82,515.5	84,360.6	86,190.7
Reg RoE Co (%)	19.3	19.8	20.3	20.9

Key Ratios

Year to March	FY20A	FY21A	FY22E	FY23E
RoE (%)	7.5	5.6	8.0	9.1
RoCE (%)	8.9	7.1	8.1	9.2
Inventory days	39	38	39	46
Receivable days	56	53	48	47
Payable days	120	128	115	108
Working cap (% sales)	22.3	(1.3)	2.2	2.7
Gross debt/equity (x)	2.0	1.5	1.4	1.4
Net debt/equity (x)	1.9	1.3	1.3	1.3
Interest coverage (x)	1.2	1.0	1.1	1.3

Valuation Metrics

Year to March	FY20A	FY21A	FY22E	FY23E
Diluted P/E (x)	29.7	35.9	22.8	18.9
Price/BV (x)	1.8	1.9	1.8	1.7
EV/EBITDA (x)	10.6	10.7	10.1	8.9
Dividend yield (%)	1.1	1.2	1.3	1.4

Valuation Drivers

Year to March	FY20A	FY21A	FY22E	FY23E
EPS growth (%)	63.2	(17.3)	57.5	20.9
RoE (%)	7.5	5.6	8.0	9.1
EBITDA growth (%)	17.8	(12.8)	11.0	15.4
Payout ratio (%)	28.4	42.2	29.4	27.2

Source: Company and Edelweiss estimates

Story in charts

Exhibit 1: Tata Power EV Charging business model summary

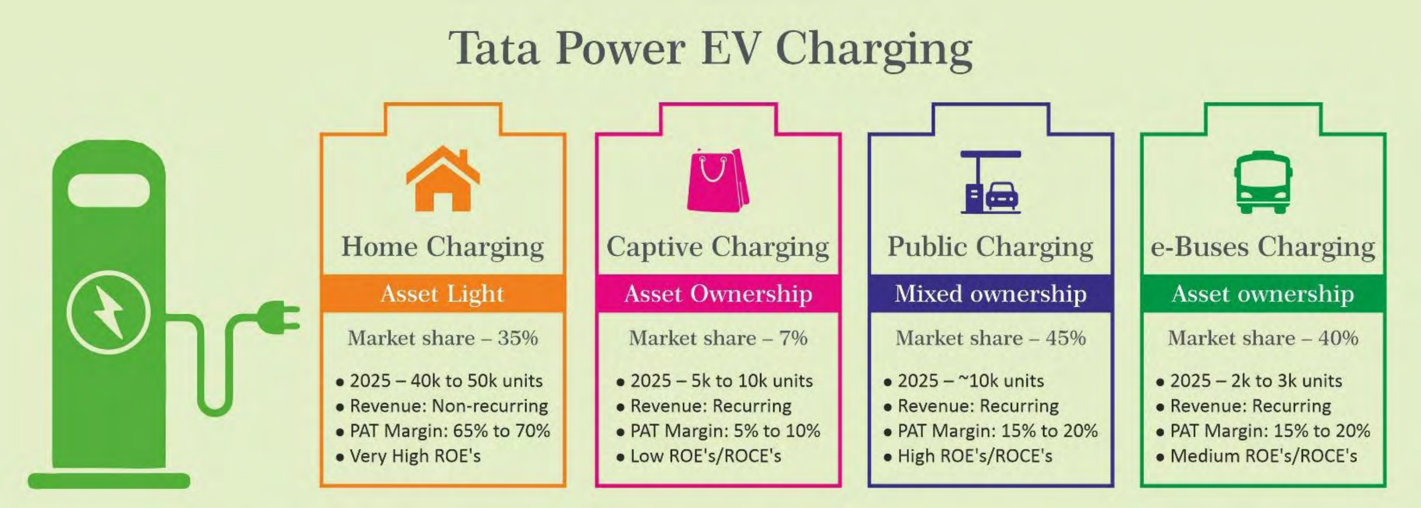
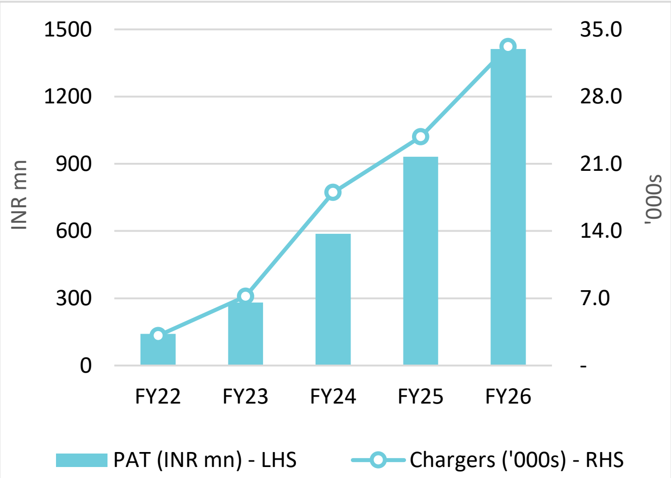
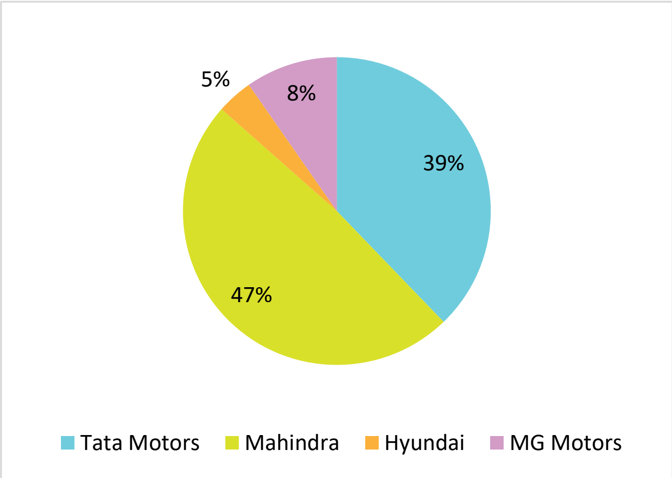


Exhibit 2: EV charging to contribute 7–8% to FY25E PAT



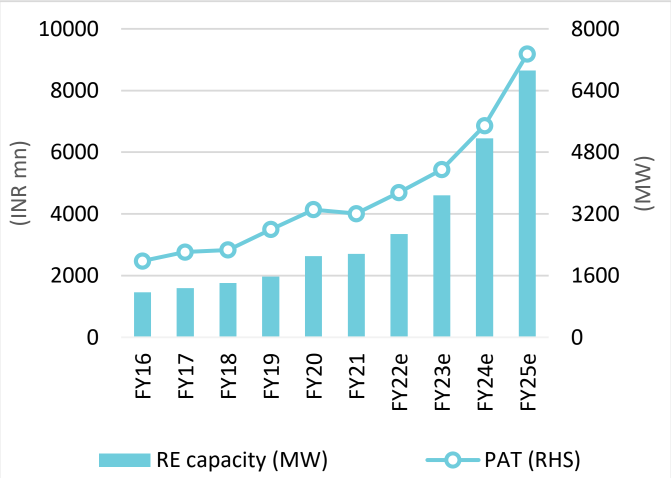
Source: Industry, Company, Edelweiss Research

Exhibit 3: 4W EV market share: Ready market for TPWR



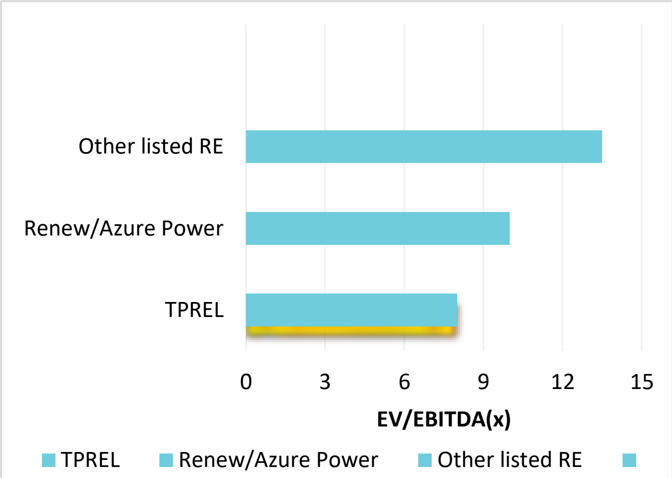
Source: VAHAN, Edelweiss Research

Exhibit 4: TPWR is one of the leading players in RE....



Source: Company, Edelweiss Research

Exhibit 5: ...but set to re-rate given valuation gap with peers



Source: Edelweiss Research

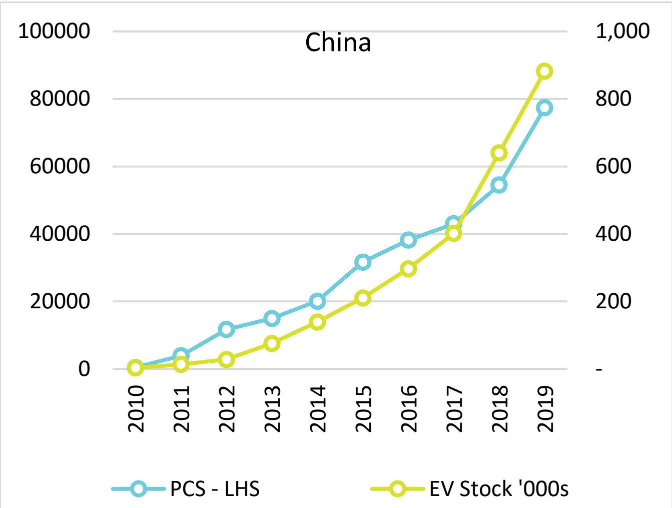
EV: The pursuit of happiness

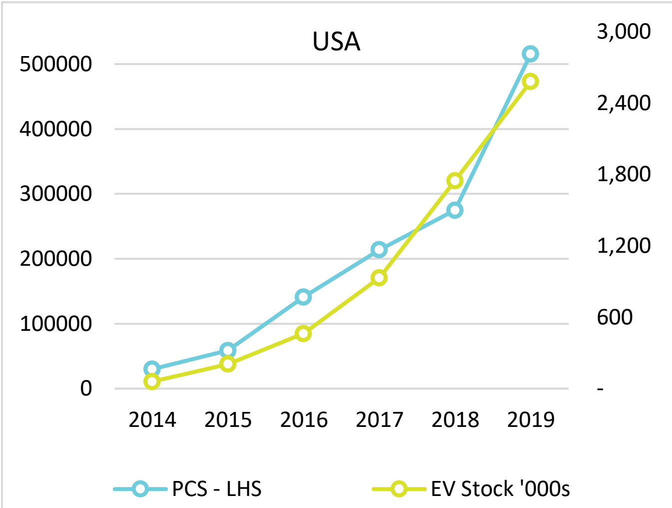
The government has laid out a detailed plan for reduction of emissions through increased adoption of renewables and green technologies. EV 30@30 is one such mission targeting 30% EV share in overall vehicle sales by 2030. Although a "highly ambitious" target, the government's measures are in the right direction, be it through policy measures or financial assistance, which paves way to crack into this nascent market. Over the past five years, the share of EV sales increased from 0.1% to merely 0.87%, making it a long road ahead in this pursuit of happiness.

Criticality of charging infrastructure: Driver of EV adoption

The necessary spurt in EV adoption/demand is largely a function of easy accessibility to charging points given battery capacity constraints. In the current technological landscape, 2W/3W EV batteries can be sufficiently charged through home charging points given their low voltage requirements. However, a 4W/heavy EV requires a high voltage charging point for faster charging. Given the general usage of 4W+ vehicles for long distance travel and parking constraints in homes, the necessity for faster/rapid public charging stations (PCS) becomes more imperative. Thus, the need for large-scale development for easy accessibility of charging infrastructure in India becomes sacrosanct to meet its sustainable goals.

Exhibit 6: Charging infrastructure a key driver of EV adaptability



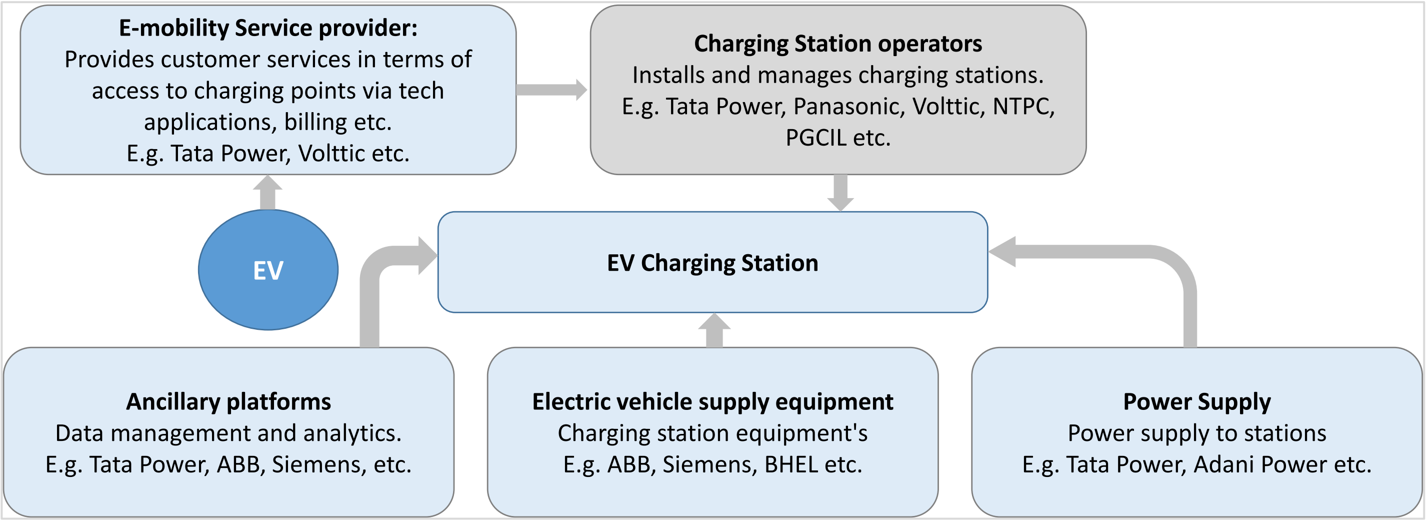


Source: IEA, Edelweiss Research

Charging infra ecosystem: More than what meets the eye

The development of charging infrastructure calls for necessity of a wide range of market players including: a) equipment suppliers; b) power supply utilities; c) station operators; d) e-mobility service providers and other ancillary service providers. However, the architecture of a charging infrastructure ecosystem varies based on the end-user category--public (PCS such as malls, apartments, parking lots etc.,) or private (homes). The fundamental difference would be the need for service providers and station operators for a PCS ecosystem, while private would largely be self-managed.

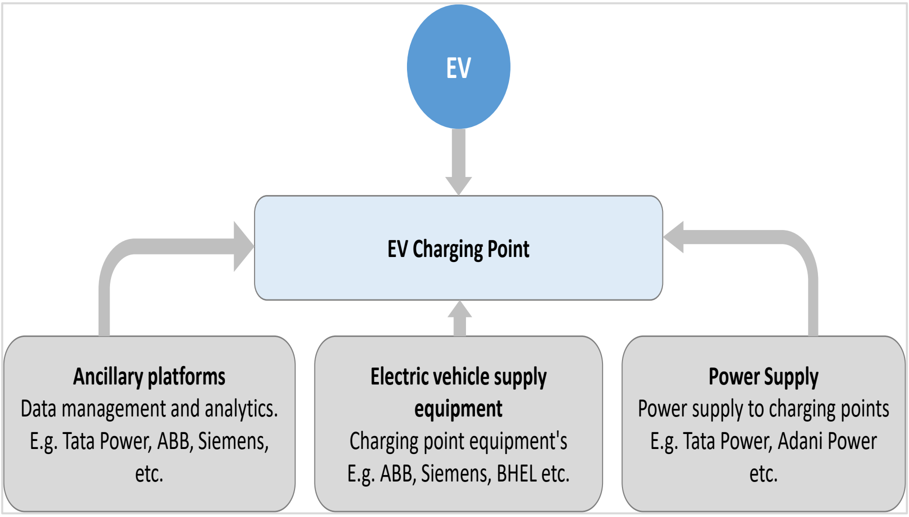
Exhibit 7: Charging Infrastructure ecosystem of public charging stations



Source: Company, Edelweiss Research

Tata Power has a presence in four out of five EV charging business models, which is a key advantage over competitors

Exhibit 8: Charging Infrastructure ecosystem of private/home charging points



Source: Company, Industry, Edelweiss Research

Huge potential: Private players keen on tapping into opportunity

Based on the government's target of 30% EV sales by 2030, the requirement of charging infrastructure looks massive. With this in view, the government has laid out its own plan to develop public charging facilities with at least one charging station in a 3X3km range across various cities, one station every 25km on both sides of highways and one fast/rapid charging station every 100km on both sides of highways. Although difficult to compute for such a massive target, albeit not taking into account private plans, a back-of-the-envelope analysis indicates any meaningful pickup in EV sales in India will require infrastructure creation at a similar scale as China, which had 0.5mn/0.8mn publicly accessible chargers as in 2019/20.

Currently, charging infrastructure is being dominated by existing power companies (TPWR) and a few startups (Volttic and Sunergize) in highways, tourist locations, hotels, offices, malls, parking areas, dealerships, residential societies, etc. Our analysis of EV charging installation targets of major players indicates the market offers large opportunity left to be tapped over a larger time horizon. Further, this makes us believe that early movers are likely to benefit significantly in this market.

Exhibit 9: EV chargers plan of major players in India:

Company	No. of chargers (over 2025)	Comments
Tata Power	1,00,000	Target to install over 0.1mn PCS over the next 5 years
Panasonic*	70,000	Charging facilities across 24 cities to cater to more than 1 million EVs by 2024. (*assuming 7% market share)
EESL	10,000	Plans to install 10,000 chargers over the next 3 years in partnership with companies such as Maha metro, BHEL, HPCL etc
EV Motors India	6,500	Plans to install EV chargers at an investment of INR14bn
Volttic	12,000	To deploy 12,000+ charging points by 2025 with investment of USD 40+ million
Government tenders	7,000	EV chargers called for under FAME-II, participated by PSUs
Magenta	4,000	Charging facilities by March 2022 at INR550mn capex; Of this 1,000 are being installed
Total	2,09,500	

Source: Company, Edelweiss Research

Incentives in place amid viability concerns

In this nascent market, the conundrum of charging infrastructure project's viability challenges the faster establishment of EV networks across India. To tackle this, the government introduced FAME-II--a subsidy scheme for faster development of EV landscape (including charging infrastructure)--at an outlay of INR100bn over 2024. In the initial phase, the government has already sanctioned installation of 2,877 PCS (versus 7,000 proposals) in 62 cities by 22 public entities.

State governments too are providing subsidies for installation of charging infrastructure. For example, Maharashtra government is providing subsidy up to INR1mn (compared to annual operational expenditure which stands at similar levels), thus significantly improving the viability of such projects.

Moving forward, further assistance in the form of capital cost subsidies, low power tariffs and concessional land leases for a station would make development of these projects more lucrative.

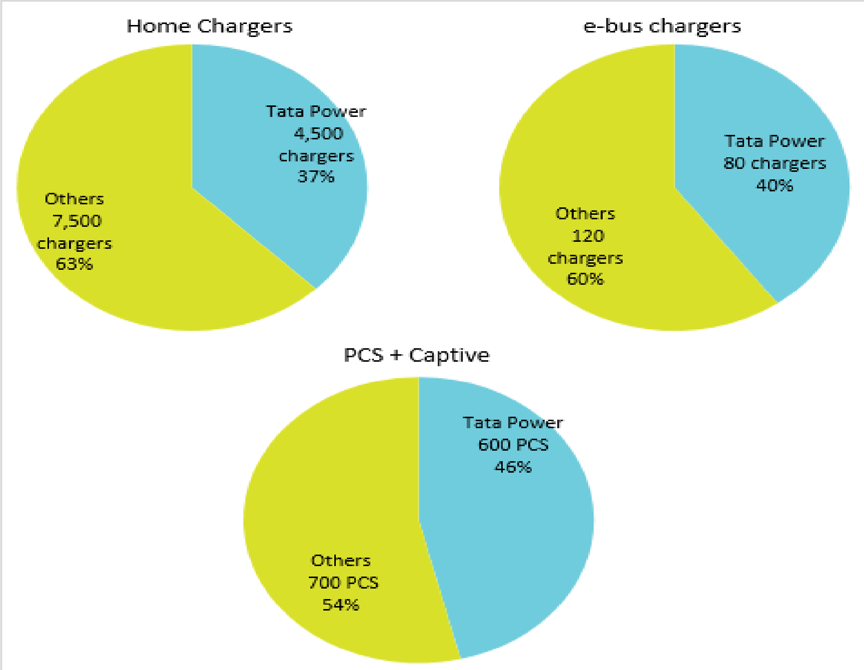
TPWR: Aiming for bull's eye; at forefront of exponential growth

"As on date TPWR has installed 600 PCS, 4,500 home chargers and 80 bus chargers"

TPWR is altering its DNA via extensive focus on renewables and consumer-centric businesses. In this nascent market, TPWR already has a head start with a commanding market share across the EV charging business spectrum. As the market goes cracking, TPWR is likely to be the leader in this space. The company has a network of 600 Public charging stations across 110 cities and 27 highways which is already a market share of more than 50%. Along with presence in AC/DC charging, it has setup 80 ultra-high capacity chargers for public transport buses. Further, it has binding MOUs with Tata Motors, JLR and MG Motors (all market leaders in Electric vehicles) for home charging network. It has installed over 4,500 home chargers and is a key beneficiary of expansion plans of these OEMs.

As a part of its strategic business objectives, TPWR targets to expand the public charging network to over 0.1mn points (2,500 in FY22) in over 100 cities in India over the next five years. Over and above this, it is planning to leverage its strength in home and bus chargers infrastructure too for creating a large headroom to grow in the EV charging industry.

Exhibit 10: With strategic focus, TPWR is already a leader in EV charging space



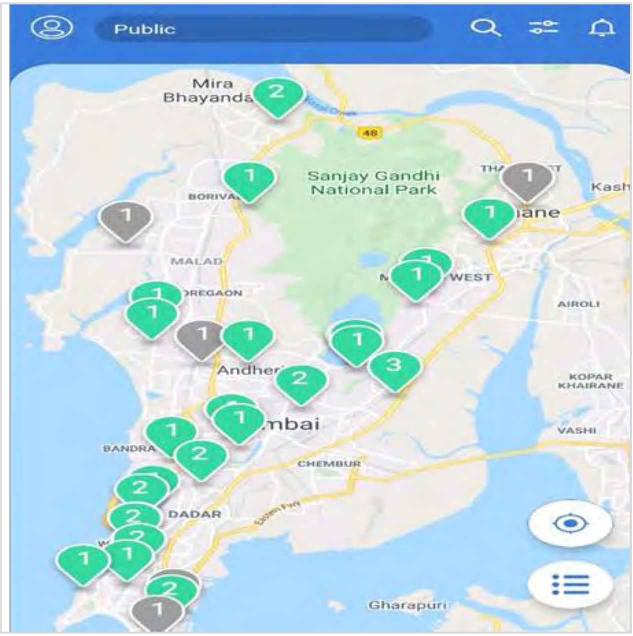
Source: Company, Industry, Edelweiss Research

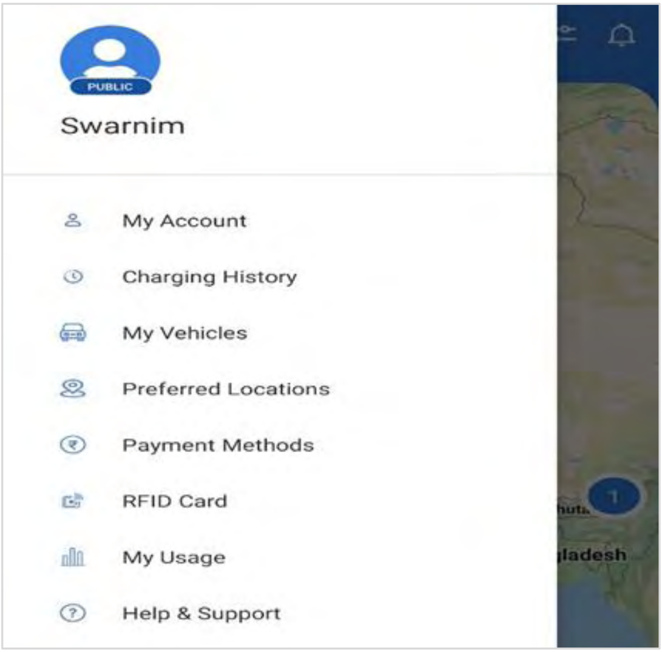
India is expected to witness a mixed trend in EV penetration in coming years. 2W/3W vehicles are likely to lead the race in the personal vehicle market and shared fleet/buses are likely to lead in the public vehicle market. Keeping in mind the requirement for a varied usage of charging infrastructure, TPWR has undertaken a mixed approach–asset ownership and asset light model to proactively lead the market in coming years.

Tata Power EZ Charge App enables to locate charging infra

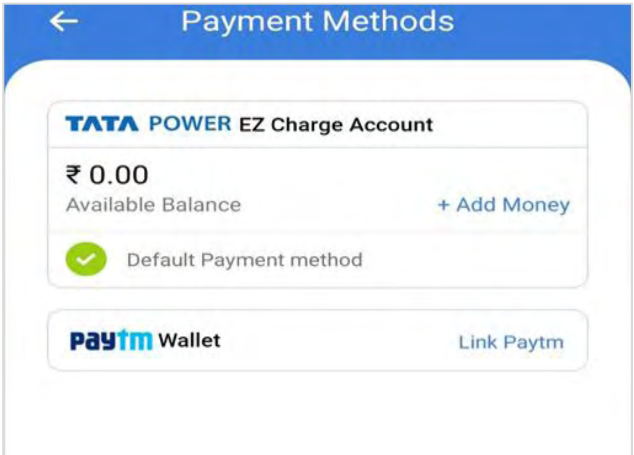
TPWR provides an End-to-end customized solutions offerings - Backend Power Infrastructure, EV Chargers of different charging standards, Charger Installation, Annual Maintenance, Charger Management Software Platform Subscription, and Mobile App. It has developed an app for the easy charging of Electric Vehicles under the banner ***'Tata Power EZ charge'.*** Our first-hand experience of locating charging stations and making payments was smooth.

Exhibit 11: The App is quite simple to use and ensures time saving by checking availability of the charging infra online





Source: Tata Power EZ charge app



Source: Tata Power EZ charge app

Exhibit 12: e-bus charger installed by Tata Power

Source: Company

With various partnerships and Group captive opportunities, the foundation block of EV charging for TPWR is already in place

Partnerships falling in place: Fully charged to go the extra mile

In line with its business plan, TPWR during FY21 forged partnerships with its group companies Tata Motors and Jaguar Land Rover to install charging infrastructure at their dealerships, customers' locations and other public locations. In addition, the company has also signed MoUs outside the group's ambit such as with MG Motors, Central railway, OEMs and HPCL, to install the charging infrastructure in the future.

HPCL partnership: Opens the door to Promised Land

TPWR during July 2021 signed an agreement with Hindustan Petroleum Corporation (HPCL) to provide end-to-end EV charging stations at HPCL's retail outlets located at multiple places across the country. HPCL has ~18,000 retail outlets in India, of which certain locations have been tied up for installation of charging points on a revenue-sharing model. We note that the partnership is in line with the Ministry of Petroleum's suggestions to have at least one EV charging station in all the 70,000 fuel pumps across the country. We expect current and potential partnerships to unfold a larger market in the future. We note that state-owned IOCL/ BPCL/ HPCL hold 45%/25%/25% share of total retail outlets in India, which adds to more partnership potential in the near future.

Tata Group's retail presence: More than 1,500–2,000 captive opportunities

Tata Group's retail presence in India through various entities such as Croma (~200 stores in 32 cities), Titan (in ~1,300 locations), Indian Hotels (>100 properties), Westside (>200 stores in 82 cities) and many more retail outlets can be leveraged to penetrate the market in initial stages. The group's retail presence is a major strategic advantage given these locations are apt for a full charging requirement as petrol pumps are largely used for a top-up recharge.

Exhibit 13: Foundation blocks in place; penetration a matter of time

Source: Company

A targeted mixed approach

India is expected to witness a mixed trend in EV penetration in coming years. 2W/3W vehicles are likely to lead the race in the personal vehicle market and shared fleet/buses are likely to lead in the public vehicle market. Keeping in mind the requirement for a varied usage of charging infrastructure, TPWR has undertaken a mixed approach–asset ownership and asset light model to proactively lead the market in coming years.

Home charging: Asset-light model

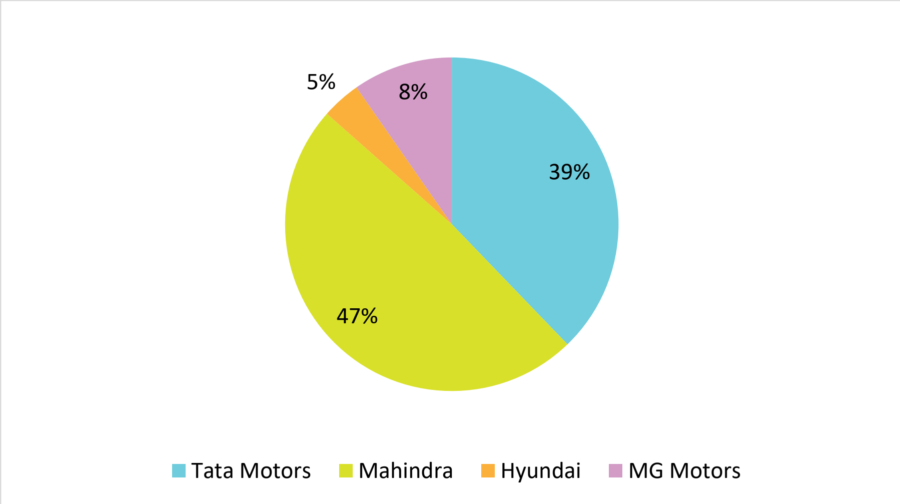
In the personal mobility market, EV sales are expected to reach ~5-6% of new vehicle sales i.e. 0.4-0.5mn over the next five years. Although a large market, the charging infrastructure requirement is met in homes and would largely require only a one time simple installation and ancillary services support.

"As per various global studies, 70% of charging requirements would be met from home charging and TPWR holds ~35% market share"

In this market, TPWR works on an asset light model where it undertakes partnerships with OEMs such as Tata Motors, Jaguar etc., to install home chargers for their customers.

- TPWR derives a one-time income through installation cost of chargers, which can range from INR5k to INR15k – already inclusive of an EV purchase cost – and earns very high margins thereof.
- Over and above this, additional revenue from value-added services like smart meters, usage of charging infrastructure (priority access wherever needed) are likely to benefit the company coming years. TPWR is also strongly investing in establishing digital platforms and R&D of energy storage/battery and EV charging station to expand its services base.
- TPWR has exclusive tie up with Tata Motors, MF and Jaguar& Landrover. Note that, Tata Motors and other two currently holds a market share of 45-50% in India's 4W EV industry. This bodes well for TPWR as it stands to gain the most.

Exhibit 14: Market share of India's 4W EV industry – Total 16K vehicles



Source: VAHAN, Edelweiss Research

Captive charging: Asset ownership model

In places with space constraints where owning dedicated chargers is difficult, TPWR has planned to capture the market through installation of common charging points (offices, societies, dedicated points etc.). TPWR would invest in the infrastructure and provide O&M and other management services. The revenue stream is recurring in nature, which is earned on a per unit basis and one time member ship fee.

- Over the next five years, we expect Tata Power to install 5k to 10k captive chargers in the asset ownership model. This would also include dedicated charger points for shared vehicles (Ola, Uber etc.) whose share is likely to be largest among the public vehicle market.

- The capital expenditure for these chargers can range from INR0.3mn (for two hours charging speed) to INR 0.8mn (for one hour charging speed) per unit and the recurring revenue for O&M can be earned based on the utilization level.

Public charging stations: Mixed ownership

TPWR has also charted plans to install public charging stations in places such as petrol pumps, malls, cafés, etc., on a hybrid model. TPWR is targeting to install 10k PCS in the next five years, out of which we expect roughly half to be owned by TPWR and the balance through franchisee.

TPWR held a market share of ~45% in PCS market during FY21

- **Ownership model**: We expect that TPWR could incur capital expenditure of INR0.5mn to INR1.5mn, depending on charging capacity. Assuming INR1mn per unit, total capital expenditure for 5K units that could be installed in ownership model is INR50bn. For which, revenue will be on earned on recurring basis based on utilization of charging stations.

- **Franchisee model**: It is similar to the home charging market, where TPWR installs charging stations for a fixed fee as determined by the contract.

E-buses: Asset ownership model

E-buses charging infrastructure is one of the largest areas being targeted by TPWR. Over the next five years, we expect TPWR to install ~2k-3k chargers for e-buses.

TPWR holds a market share of ~40% in e-bus chargers in FY21

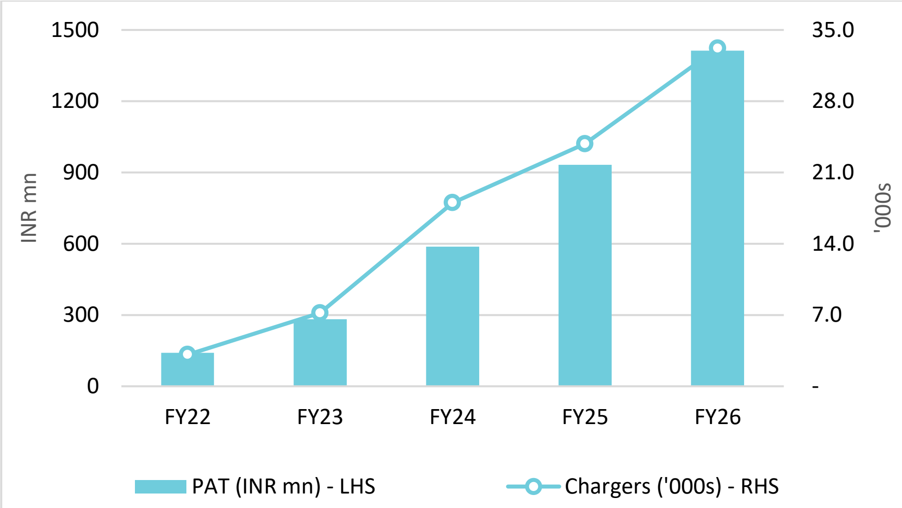
- Assuming a capital expenditure of each charger of around INR7.5mn, the total capital expenditure for 2k chargers over next five years would be ~INR150bn, for which revenue would be earned on recurring basis based on utilization levels.

Exhibit 15: TPWR's FY25E EV charging *pro forma* P&L (assuming low utilisation rates)

Value per unit (INR)	Home	Captive	PCS	PCS (Franchisee)	e-buses	Comments
Number of chargers	40,000 to 50,000	5,000 to 10,000	5,000	5,000	2,000 to 3,000	Assumptions: Home: 10% of market share of expected 0.4mn to 0.5mn EV sales Captive: 10% of market share PCS- 50% in Asset ownership
Capital Expenditure (including subsidy)	-	INR0.3mn to INR 0.8mn	INR0.5mn to INR1.5mn	-	INR7mn to INR8mn	Based on chargers capacity
Revenue	INR 10k to INR12k	INR70k to INR100k	INR0.2mn to INR0.3mn	INR 10k to INR12k	INR1.5mn to INR2.0mn	Based on average utilization of 4% to 5% and Tariff based on charger locations
EBITDA Margin	>90%	70% to 80%	70% to 80%	>90%	70% to 80%	Margin in the range of 70%
ROE	Very High	Low	High	High	Medium	
ROCE	Very High	Low	High	High	Medium	

Source: Industry, Company, Edelweiss Research

Exhibit 16: Our estimate of EV charging business for TPWR

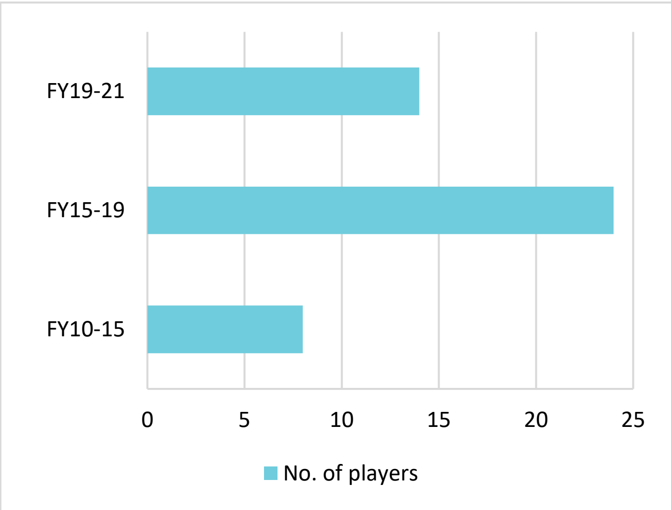


Source: Industry, Edelweiss Research

Renewables: Encashing opportunity

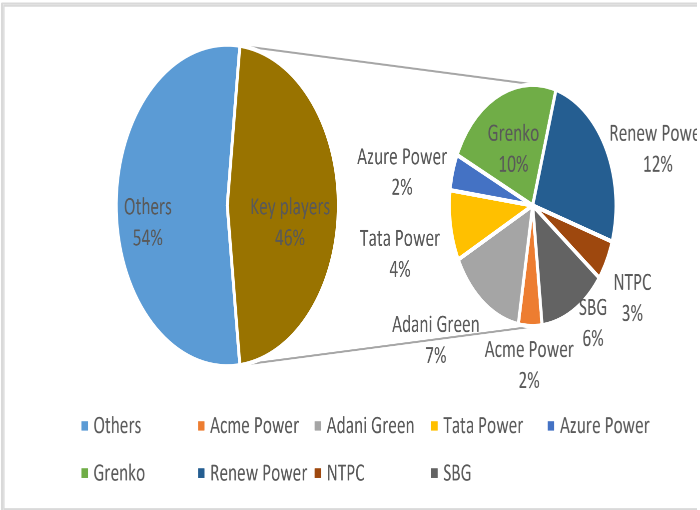
TPWR has presence along the entire solar value chain--module and cell manufacturing, EPC and O&M. This integration lends it competitive edge. The growth potential in renewables remains significant riding cost economics and government push to scale up renewable capacity to 450GW by FY30. In our view, TPREL (TPWR Renewables is 100% subsidiary of TPWR) is appositely placed to increase its market share from current ~3% to 5-6% by FY25 (overall renewable installed to be 200GW) and 12-13% by FY30. TPWR's total operational capacity stands at ~2.8GW and ~1.5GW is UC, which is likely to come on stream over the next 12-15 months. We expect 5GW of operational capacity by FY23 end.

Exhibit 17: No. of bidders have reduced



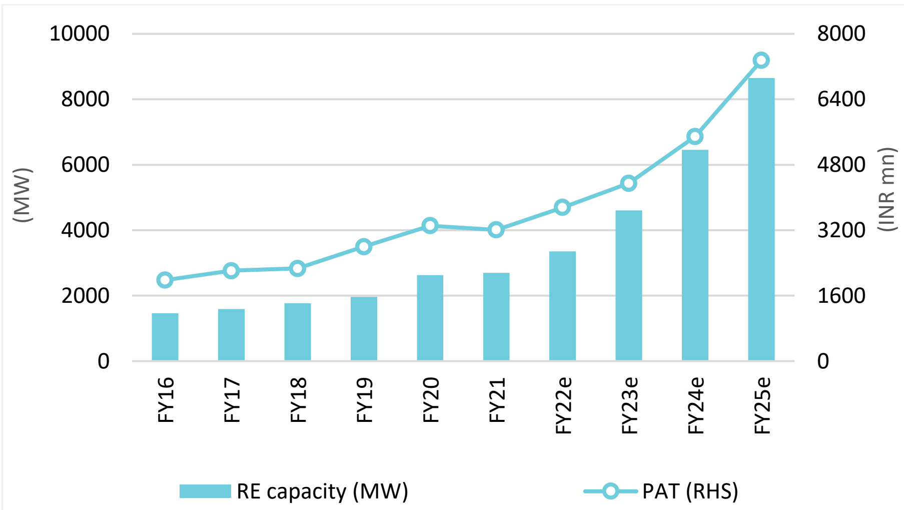
Source: Edelweiss Research

Exhibit 18: No. of bidders have reduced



Source: Edelweiss Research

Exhibit 19: TPREL financial performance over last five years and next three years



Source: Company, Edelweiss Research

Rise in manufacturing capacity; RIL entry to make India competitive

TPWR recently expanded its manufacturing capacity (700MW to 1100MW) of cells from 300MW to 530MW with Mono PERC and Module from 400MW to 580MW with Mono PERC Half cut technology. While TPSL's (Tata Power Soalr is 100% subsidiary of Tata Power) revised scale of manufacturing is not amongst the top-5 in India, it is reasonably big and at least gives some hedge to the volatile Chinese cell/module prices. With the government imposing 40%/25% BCD on Chinese imports of Modules/Cells, it provides some tailwind for Indian manufacturers.

RIL's entry in integrate solar module manufacturing to make India more competitive; TPWR's just eyeing captive use of its module manufacturing

With Reliance Industries (RIL) announcing its mega entry in the integrated solar photovoltaic Giga module factory, other Indian players are likely to be in wait and watch mode before committing any big capex. This is mainly due to RIL's numero uno position in everything. That said, TPWR's push towards Solar EPC and its guidance that it continues to look at expansion of manufacturing facility, it is likely that Tata Power will expand its capacity further especially to meet its captive requirements for Rooftop and Solar pumps.

Overall, India could be broadly self-reliant in terms of cells/modules over the next four-five years, insulating it from Chinese modules/cell prices volatility, as we expect the former to be competitive.

TPSL utility scale growth starting to accelerate; OPLEV to hit soon

TPSL executes large utility scale solar projects on EPC basis, does rooftop solar (E&C) and solar pumps (E&C). It is one of India's largest specialized EPC players and comes with a successful background of executing large projects such as the 150MW Ayana at Ananthapur, 50MW Kasargod at Kerala, 56MW Greenko, 30MWp solar power plant in Lapanga (Odisha), 105 MWp of floating solar at Kayamkulam. As a strategy, the company is focused on large utilities only projects either that of SECI or tenders floated by state governments.

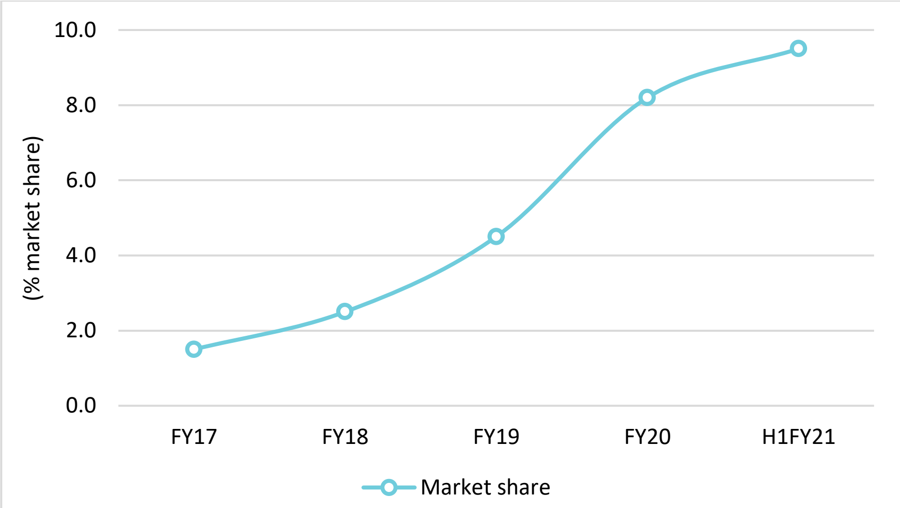
Exhibit 20: TPWR recently won tenders with value and scope of work

EPC Orders other than TPREL				
Large Projects	Scope	Customer	MW AC	Year
BEL Avadi	Full	BEL	16	FY18
ABREL Bijapur	Full	ABREL	24	FY18
Shahi - Bellary	Full	Shahi	40	FY18
Shahi - Bidar	Full	Shahi	24	FY18
ABREL Lapanga	Full	ABREL	24	FY18
GSECL Dhuvaran	Full	GSECL	75	FY18
Phelan Bhadla	Full	Phelan	50	FY19
Greenko	Full	Greenko	180	FY19
Ayana	Full	Ayana	250	FY19
Soft Bank	BOS	Soft Bank	200	FY20
THDC Kasargod	Full	THDC	50	FY20
GIPCL	Full	GIPCL	100	FY20
NTPC Kayamkulam	Full	NTPC	70	FY20
NTPC Jaitsar	Full	NTPC	160	FY20
NTPC CPSU 1	Full	NTPC	250	FY20
NTPC CPSU 2	Full	NTPC	300	FY20
SECI Kasargod	Full	THDC	50	FY21
GSECL Chanderva	Full	GSECL	30	FY21
GSECL Ghenti	Full	GSECL	35	FY21
GSECL Sanesh	Full	GSECL	55	FY21
GSECL Pachham	Full	GSECL	40	FY21
SJVNL	Full	SJVNL	100	FY21
NTPC 470	Full	NTPC	320	FY21
Sub-Total			2,443	
			INR90bn	

Source: Company, Edelweiss Research
Note: TPSL has also won 1,950MW projects from TPREL worth INR90bn.

TPSL started executing third-party EPC contracts only from FY19 (earlier was a captive opportunity with TPREL). In the past two years, the company has gained significant market share (our assessment at 9-10%) and boasts one of the highest order books in the space (~INR100bn of which ~40% is captive). The solar EPC business provides an annual opportunity of INR120–150bn (10–12GW annual solar project awards). The revenue growth has started to come in and we expect the OPLEV benefit to soon take the margin from current 5-6% to 8-9% over the next two years. The company is targeting 20% market share in solar EPC projects riding its focus on quality, superior project execution skills and end-to-end solutions.

Exhibit 21: TPWR has among highest market shares in utility EPC space



Source: Company, Edelweiss Research

Exhibit 22: Key financials

Solar EPC (INR mn)	FY20	FY21e	FY22e	FY23e	FY24e	FY25e
Industry ordering (MW)	10,500	8,500	10,200	12,240	13,464	13,464
TPWR intake (MW)	1,365	1,380	1,224	1,469	1,750	2,020
Revenue	14,420	41,589	64,156	83,545	86,742	90,023
EBITDA	1,476	2,190	4,257	7,101	8,241	9,002
PAT	1,146	1,754	3,285	4,936	5,826	6,413

Source: Company, Edelweiss Research

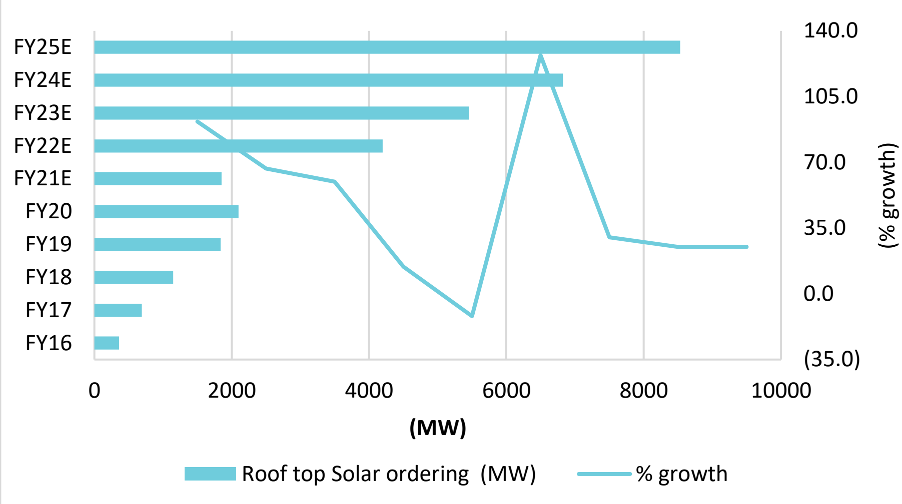
Rooftop solar: Shades of flashes, but government support needed

Rooftop solar adoption has not gathered the desired momentum in India (just 6GW installation versus 40GW planned in 2022). There are policy issues and at the heart of the problem is Discoms' myopic view of potential revenue loss should they go ahead with net metering, especially with residential consumers which form 30% of the installed capacity and has low appetite due to high capital cost (lower financing options available) apart from lack of awareness.

In Dec 2020, MOP restricted net metering only to rooftop units producing 10kW or less. Most of the Discoms have implemented and all the bigger customers are getting compensated by respective state governments at tariff of less than INR2/unit which is not that attractive given their power purchase cost is in excess of INR7/unit. This increases breakeven levels for customers from ~3.5 years earlier to 6-7 years now.

The pandemic did lead to some acceleration in RTS adoption by **commercial and industrial customers** (925MW installed in past nine months) as it is one of the better ways to cut operational costs, especially for businesses with high electricity cost (INR6-7/kWh). These consumers with higher electricity tariffs are pre-emptively installing more RTS systems as they are not bothered with the net metering system (captive use). Booming sectors such as agro, pharma, hospitals and education have emerged as industries that are keen to go solar. Also, the MOP recently mentioned that it intends to offer subsidies for rooftop adoption, which could boost its adoption.

Exhibit 23: Solar rooftop market to push the throttle



Source: Company, Edelweiss Research

The RTS market is set for good growth owing to C&I customers' renewed urgency to reduce operational cost of business with financing options

TPWR has 10% market share in rooftop segment: TPWR has an installed base of ~700MW in the country with 15,000 projects in residential rooftops (50–100MW) and the balance in the commercial & industrial space and a few in institutional space. It recently announced the expansion of its rooftop services to 90 cities across India. TPWR Solar has already partnered with more than 100 institutions such as schools, universities, non-profit organizations in implementing solar energy systems to meet their power needs. Importantly, the company offers attractive financing schemes for the rooftop projects as well, thereby enticing consumers.

Overall, we still expect 20-25GW of cumulative installations over next three–four years, and further expect TPWR to gain 200–300bps market share over the next few years.

Exhibit 24: Key financials

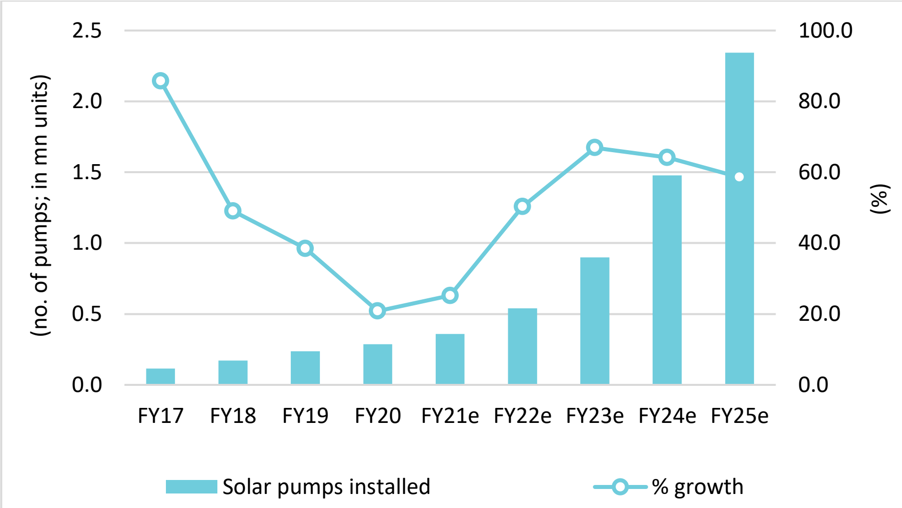
Solar Rooftop (INR mn)	FY20	FY21e	FY22e	FY23e	FY24e	FY25e
Industry ordering (MW)	2,100	1,750	4,200	5,460	6,825	8,531
TPWR intake (MW)	147	140	395	573	819	1,024
Revenue	4,050	6,290	14,213	20,432	28,605	35,042
EBITDA	350	359	1,079	1,945	2,932	3,592
PAT	4	195	569	1,267	2,165	2,678

Source: Company, Edelweiss Research

Solar pump: Opportunity shaping up well; TPSL set to gain

TPSL is engaged in solar water pumps business for a decade and has a complete range of products and DC and AC range of pumps suitable for surface, bore well, land and open-well applications. The PM KUSUM scheme, which plans to solarise 2mn standalone pumps (off-grid) and 1.5mn grid-connected pumps over the next two–three years is gathering significant momentum. Our channel checks indicate that the central government is reviewing the KUSUM payment scheme fortnightly, thereby keeping receivables under check. This is a big difference versus earlier schemes launched by the government.

Exhibit 25: Exhibit 1: Solar pumps installation set to take off



Source: Company, Edelweiss Research

TPWR is well positioned to tap into exponential growth: We expect 2mn pumps to be installed over the next three–four years, which pegs the overall opportunity at INR400bn. We expect high single-digit market share for TPWR.

Exhibit 26: Key financials

Solar Pumps (INR mn)	FY20	FY21e	FY22e	FY23e	FY24e	FY25e
Industry ordering (no.)	55,500	72,150	180,375	360,750	577,200	865,800
TPWR intake (no.)	-	10,823	22,529	46,898	69,264	103,896
Revenue	2,850	2,706	5,660	11,842	17,577	26,497
EBITDA	420	271	538	1,243	1,890	2,848
PAT	20	122	300	854	1,359	2,113

Source: Company, Edelweiss Research

Renewable monetisation: Update

TPWR's renewable monetisation plan has been delayed by about six months, but the canvass of monetisation is getting much bigger now. This is evident from the fact that TPSL is not getting merged into TPWR SA and indicates renewable monetisation is much bigger now and likely to include other renewable businesses/services business as well. Earlier, only the monetisation of developer business through InvIT was under consideration.

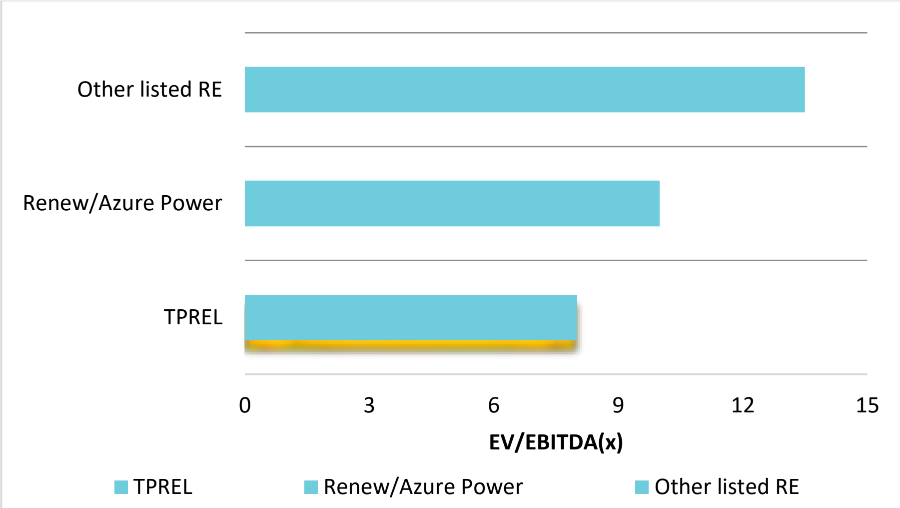
Pure-play renewable companies have shown expensive valuations

Over the past three-six months, pure play renewable companies have shown significant uptick in valuations/prices and are trading at FY25 forward EV/EBITDA of 12x (FY23-14x). At the same time overseas listing of Renew Power through SPAC suggests FY23 EV/EBITDA multiple of 10x which looks more realistic given that growth opportunities have started to crystallise.

While we abstain from the extremely high valuations of the pure-play companies, we argue that TPREL's valuations (earlier at 8x) need a better multiple (9.5x now on FY23E) as: 1) it has a proven track record; 2) visibly strong growth pipeline which warrants growth platform premium; and 3) improving opportunities in the sector (could be temporary lull in transition period).

While the renewable monetisation announcement is the acid test for valuations of TPREL/TPSL, we believe the Street is undervaluing TPREL and TPSL, which could be a big trigger for TPWR.

Exhibit 27: Valuations comparison with Indian listed peer set



Source: Company, Edelweiss Research

Exhibit 28: Redrawing TPWR RE IPO price using listed RE companies multiples

A) Using EV/EBITDA of Pure play RE in India	**(Per share)**	**(Per share)**	**(Per share)**	**(Per share)**
Renewable IPO valuations	At 100%	At 76%	At 49%	At 26%
Developer	236	180	116	61
TPSL	36	27	17	9
Total	272	207	133	71
B) Using EV/EBITDA of Global	**(Per share)**	**(Per share)**	**(Per share)**	**(Per share)**
Renewable IPO valuations	At 100%	At 76%	At 49%	At 26%
Developer	92	70	45	24
TPSL	36	27	17	9
Total	128	97	63	33
C) Using Equity per MW listed RE				
Renewable IPO valuations	At 100%	At 76%	At 49%	At 26%
Developer	191	145	93	50
TPSL	36	27	17	9
Total	226	172	111	59

Source: Edelweiss Research
Note: The above-mentioned calculations are based on peer set valuations and do not suggest our expectations, which are more in the range of INR60–75/share.

Upping ESG quotient

TPWR's new business strategy was formulated with ESG at its heart. Essentially, the move from legacy businesses to new ones is being done keeping the ESG factor in mind as it not only aims to achieve carbon neutrality, but is also looking to enhance quality of life and environment. With the legacy businesses, the ESG rating is on the lower side due to the Environment factor (45% revenue mix from thermal power), which the company is trying to address aggressively. The Social & Governance factors are fairly strong for the company, in our view.

The company is determined to improve its ESG rating by: i) steering clear of coal-based capacity; ii) phasing out current coal generation on expiry of residual life/PPAs; and iii) expanding clean & green capacity (solar/wind projects, solar rooftop, solar water pumps, etc) to 60% by FY25. It is now walking the renewable way. The thermal revenue mix is likely to dip from current 45% to 25% by FY25.

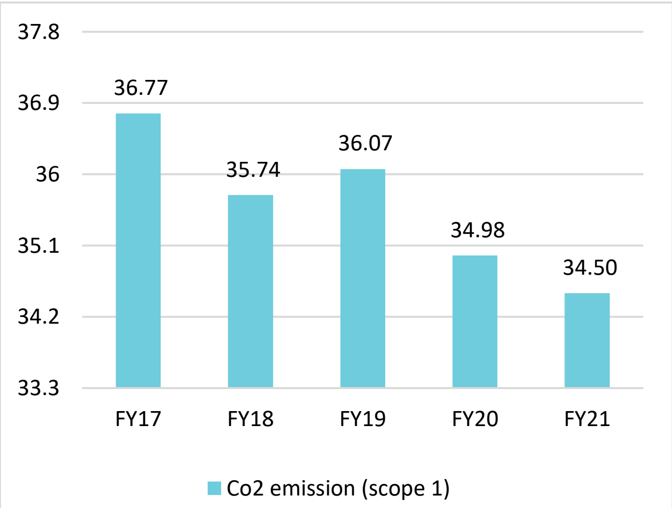
Importantly, acquisition of the 1,980MW Prayagraj thermal plant was perhaps the company's last investment in a thermal coal-based power plant. This underscores TPWR's focus on improving its ESG governance/rating **(current MSCI ESG rating is BB). Further, it targets to enter Dow Jones Sustainability Index Emerging Market List by FY25.**

Exhibit 29: ESG rating of various agencies

ESG Rating	2020	2019
CDP -Climate change	C	D
CDP - Water security	C	F (Non-disclosure)
MSCI Rating	BB	BB
FTSE Russell	3.6	3.5

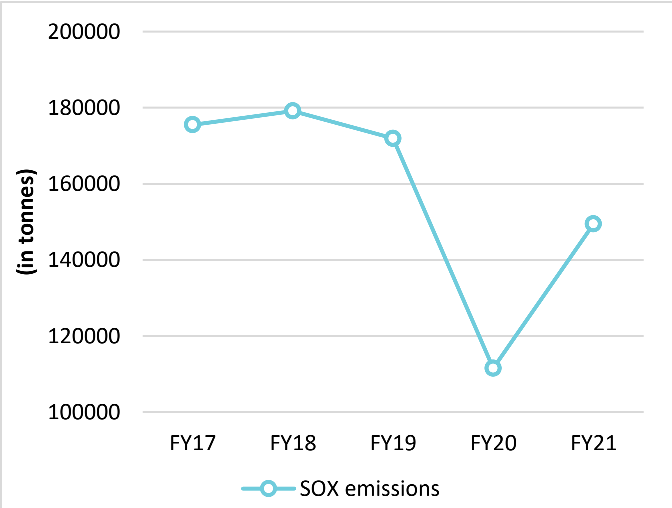
Source: Company, Edelweiss Research

Exhibit 30: GHG emissions continue to reduce…



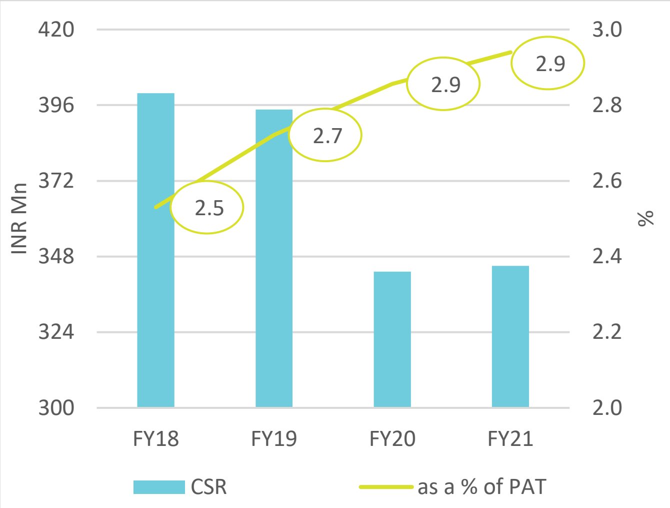
Source: Company, Edelweiss Research

Exhibit 31: ..SOx emissions remain under control



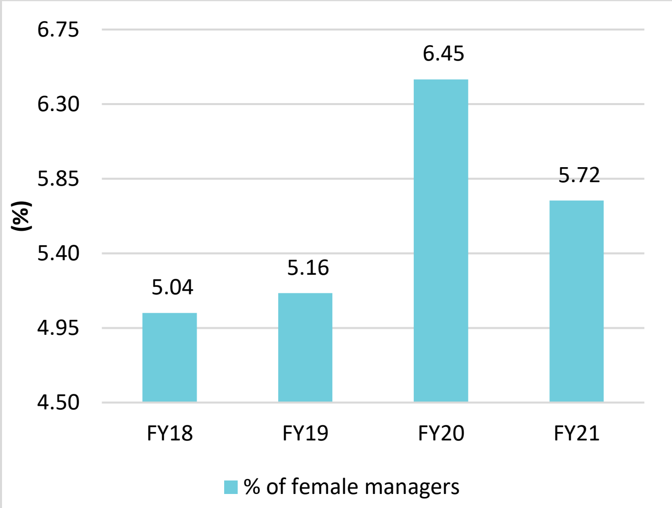
Source: Company, Edelweiss Research

Exhibit 32: Remaining high on social cards…



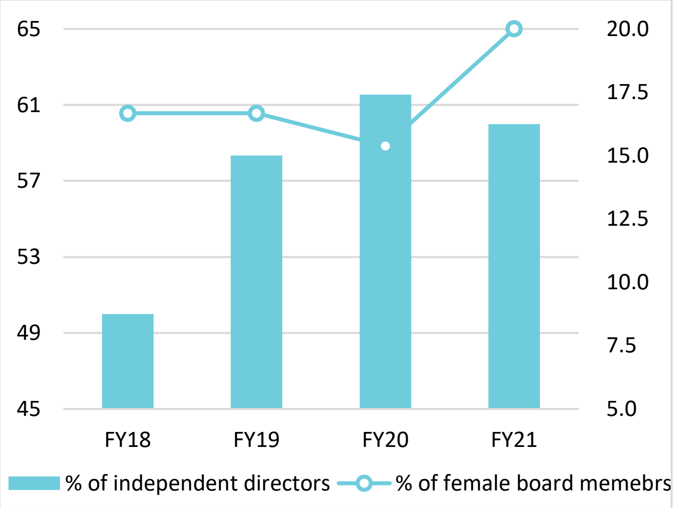
Source: Company, Edelweiss Research

Exhibit 33: ..female as % of total workforce



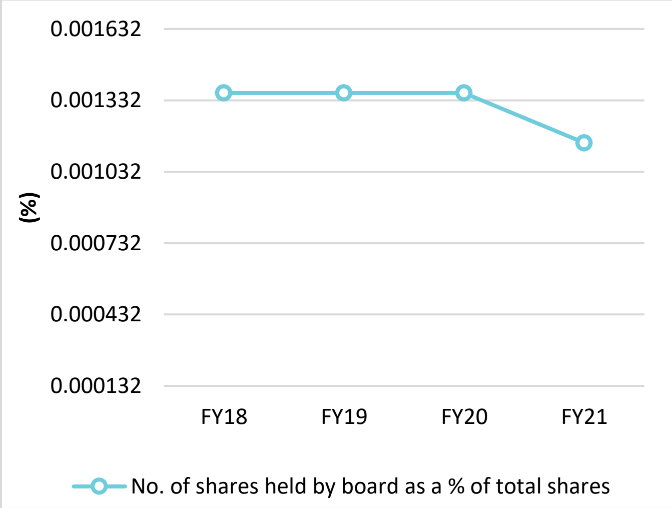
Source: Company, Edelweiss Research

Exhibit 34: Governance scorecard remains strong



Source: Company, Edelweiss Research

Exhibit 35: Board doesn't hold any significant shares



Source: Company, Edelweiss Research

Outlook and valuation: Re-rating to continue

World over, the energy space is in a very big transition and while conventional power will co-exist, RE/EV/*green Hydrogen* are the future. TPWR's proactive approach towards this new energy transition is noteworthy and demonstrates nimble footed approach of the 100 year old corporate. TPWR 2.0 is much more growth-oriented imbibing strong ESG footprints, keener focus on new sunrise businesses and reasonable D/E profile.

We firmly believe that TPWR has shed its tag of a 'high leverage and no growth company'. It has made significant strides towards the new sunrise businesses which have significant growth potential (4x growth over the next five years) and a much better return profile (18-20% RoE) than its existing regulated/utility businesses.

In a short span, it has achieved market leadership across the spectrum. The realignment of its growth model will top the sustainability index, which is more crucial and which—importantly—will lead to the sustained perception change beyond one-time benefits. Additionally, there is supportive regulatory policy framework in the making like Electricity Amendment Act 2020, National Tariff Policy etc. which should support the company's existing and newer businesses.

Moreover, having successfully cut net debt of INR70bn, deleveraging is not over yet and there is potential for another INR20bn monetisation (ex-RE) in the near term. Additionally, renewable monetisation could cut leverage by a substantial ~USD500mn (stake sale). This could be used for growth capital /further deleveraging which bodes well for the company.

We have revised our SOTP-based TP to INR170 (earlier INR120) based on:

1) Higher valuation to TPSL from INR12 earlier to INR24 now. We are now assigning 12x P/E (8x earlier) to FY23E PAT of INR6bn, which is still 10% discount to its peer set Sterling and Wilson despite better return profile of TPSL.

2) Higher valuation to TPREL (developer portfolio) from INR18 earlier to INR37 as: a) we bake in 4GW capacity by FY23 end versus 3GW earlier; and b) increase EV/EBITDA multiple to 10x (earlier-8x) in line with recent transactions. This is still 30% below valuations of pure play renewable companies in India.

3) Unlisted investments (INR8/share) versus zero earlier.

Exhibit 36: Consensus earnings upgrade to continue…

Source: Bloomberg, Edelweiss Research

Exhibit 37: …just like the target price

Source: Bloomberg, Edelweiss Research

Exhibit 38: Major divestment plans

INR mn	FY21	Comment
South African wind assets	8,000	Concluded
Cennergi asset sale	8,000	Concluded
Sale of ships	16,000	Concluded
Defense business	6,000	Concluded
Total	**38,000**	
INR mn	**FY22**	**Comment**
Georgia hydro project	3,000	185MW; 40% stake; Book value
Zambia hydro project	5,000	120MW; 50% stake; Book value
Indonesian coal mine	5,000	Negotiations on underway
Tata Projects	25,000	48% ownership; IPO / stake sale
Total	**38,000**	

Source: Company, Edelweiss Research

Exhibit 39: SoTP valuation

Businesses	Method	FY23 Regulated Equity	RoE	CoE	Multiple	Valuation (INR mn)	Tata Share (%)	Tata Share (INR mn)	Per share (INR)	Rationale
Mumbai integrated Regulated biz	P/B	46,591	17.0%	12.0%	2.0	93,182	100	93,182		
Delhi Distribution	P/B	18,601	18.0%	12.0%	2.2	40,922	51	20,870	7	Derived valuation lead by higher ROE's and in line with sector valuations. Higher valuations to capture growth opportunities in distribution biz
Other Regulated business (Maithon, IEL, Power links, Jojobera)	P/B	41,083	17.0%	12.0%	1.75	71,896	74	53,203	17	
Odisha distribution biz	NPV at 13%	16,400				57,800	51	29,478	9	Biz is not mature and P/Bv fails to capture the high growth business. Hence, prefer NPV for all 4 circles
TPREL	EV/EBITDA				10.0	1,18,898	100	1,18,898	37	Higher valuation led by lower interest rate regime leading to improved outlook and demand for renewable projects
TPSL	P/E				12.0	78,440	100	78,440	25	15% discount to listed peer set SWS despite TPSSL being a higher margins and ROE biz. 8x P/E to PAT (tax rate of 20%)
Mundra UMPP	NPV at COE of 13%					(35,614)	100	(35,614)	(11)	Assuming higher coal prices in FY22/23 and then stable
KPC & Bumi	NPV at WACC of 9.5%					1,75,997	30	52,799	17	Assuming highe profits in FY22/23 with cash cost at 58%
Prayagraj	NPV at COE of 13%					8,859	26	2,303	1	
Newer businesses	P?E				10.00	14,500	100	14,500	5	On FY24 PAT
Restructuring benefits	NPV of tax synergies					25,813	100	25,813	8	Tax benefit of INR110bn over next 10 years due to merger
Cash & Investments	FY21				1.00	66,122	100	66,122	21	
Unlisted Investments	On Book value					21,250	100	21,250	7	
Total								5,19,995	170	

Source: Company, Edelweiss Research

ARI: Update on strategy

Strategic business objectives

FY21 Annual Report insights indicate that the company's commendable performance in tougher times has set precedence for a galloping growth potential over the coming years. Its expanded focus on consumer focused business and ESG goals (clean energy mix of 80% by 2030) provides comfort to the paradigm shift being undertaken.

In FY21, TPWR has taken positive strides towards consolidating its position as an integrated power company. The business strategy is framed bearing in mind the company's core focus areas. It has identified eight Strategic Business Objectives, which present a consolidated and holistic view of TPWR's overall business performance and outlook.

Exhibit 40: Strategic business objectives

Profitable scale-up of Renewables, Distribution, Services and Energy Solutions business

- Increase share of clean and green energy in Company's portfolio to 80% by FY30
- 40 million customer base across distribution businesses by FY26
- Being the leading EV charging network provider in India with over 1 lakh chargers installation by FY26

Focus on Sustainability with an intent to attain carbon neutrality

- Attain Carbon Neutrality before 2050
- Reduce specific fuel consumption by improving operational efficiency
- Benchmark in waste management (Gainful fly ash utilisation)

Maintaining financial leverage at targeted levels

- Strengthening of balance sheet by reducing debt to a more sustainable level
- Adopt debt-light models through innovative financial engineering and restructuring

Leverage digital platforms to drive new customer centric businesses

- Establish digital platforms for new businesses like EV Charging, Home Automation and Energy Services
- Leveraging data analytics to deliver customized solutions and Value Added Services (VAS) to customers
- Generating insights from various customer data across businesses to improve offerings

Develop future energy products and solutions

- Focus on adapting and introducing new models for satisfying energy needs of the customers
- Becoming the one stop solution provider for varied customer needs on energy through integrated offerings

Create an engaged, agile, customer centric and future ready workforce

- Enhancing employee engagement and targeting to be amongst the employers of choice
- Building organizational capabilities to drive customer-centricity
- Focus on Diversity & Inclusion

Minimizing coal cost under recovery in CGPL

- Optimising the coal cost under recovery through better coal sourcing, optimal blending and freight management
- Operating plant at optimum efficiency levels and achieving better operational parameters

Set new benchmarks in operational excellence and financial returns for existing businesses

- Achieve benchmark performance in various operational parameters in Thermal and Hydro plants
- Maximise incentives in regulated business
- Operating RE portfolio at benchmark and above design parameters to increase the yield
- AT&C loss reduction in Odisha Discoms
- Improve asset performance by maximizing digital initiatives

Source: Company, Edelweiss Research

Operational update

Over the past decade, TPWR's generating capacity has jumped ~5x to 12,808MW. Of this, thermal contributes 69%, followed by solar (currently at 14%); hydro, wind and waste heat recovery contribute 7%, 7% and 3%, respectively. Incrementally, management is focusing on renewable energy and a shift in fuel mix towards non-fossil fuel-based generation.

Exhibit 41: TPWR - Current portfolio

Fuel source	State	Location	Normative Capacity under Management (MW)	PPA tenure	Return profile	Total (MW)
Thermal - Coal, Oil, Gas	Gujarat	Mundra	4,150	Long term	Bid-based	8,805
	Maharashtra	Mumbai	^ 930	Medium term	Regulated	
	Jharkhand	Maithon	1,050	Long term	Regulated	
	Jharkhand	Jojobera	547	Long term	* Regulated returns * Bilaterally negotiated (captive)	
	Odisha	Kalinganagar	40	Long term	Tolling / Fixed tariff	
	Uttar Pradesh	Prayagraj	1,980	Long term	Under Platform Management	
	New Delhi	Rithala (gas based)	108*	None	Non-operational	
Thermal – Waste Heat Recovery	Jharkhand	Jamshedpur	120	Long Term	Bilaterally negotiated (captive)	375
	Odisha	Kalinganagar	135	Long Term	Bilaterally negotiated (captive)	
	West Bengal	Haldia	120	Short Term	Merchant sale and bilateral contracts	
Hydro	Maharashtra	Bhira	300	Medium Term	Regulated	447
	Maharashtra	Khopoli	72	Medium Term	Regulated	
	Maharashtra	Bhivpuri	75	Medium Term	Regulated	
Renewables	Mah, Guj, MP, Kar, TN, Raj and AP	Wind Farms	932	Long Term	Feed-in tariff and bid-driven contracts	2,694
	Andaman, AP, Bihar, Delhi, Guj, Har, Jharkhand, Kar, MP, Mah, Punjab, Raj, TN, Telangana, UP and Uttarakhand	Solar Photovoltaic (PV)	1,762	Long Term	Feed-in tariff and bid-driven contracts	
Total domestic						12,321
Thermal - Coal, Oil, Gas	Indonesia	PT Citra	54	Long Term	Bilaterally negotiated (captive)	54
		Kusuma				
		Perdana				
Hydro	Bhutan	Dagachhu	126	Short term	Merchant Sale	126
	Zambia	Itezhi Tezhi	120	Long term	Regulated	120
	Georgia		187	Long term	Regulated	187
Total international						487
Total						12,808

*Source: Company, Edelweiss Research: Note: * 108 MW capacity in Delhi is classified as assets held for sale; ^ Additional 500 MW capacity (Unit #6) is classified as assets held for sale*

Thermal generation

Mundra losses narrow; refinanced debt aids profitability

CGPL's loss narrowed to INR6.4bn in FY21 versus INR8.9bn in FY20. This was driven by lower under recoveries (lower coal benchmark prices), blending optimisation, effective coal procurement and lower finance cost (refinancing of ECB loan). Under-recovery on account of fuel cost was INR0.45/kwh (flat YoY) due to time lag in escalation index setting of fuel revenue Vis a Vis coal cost.

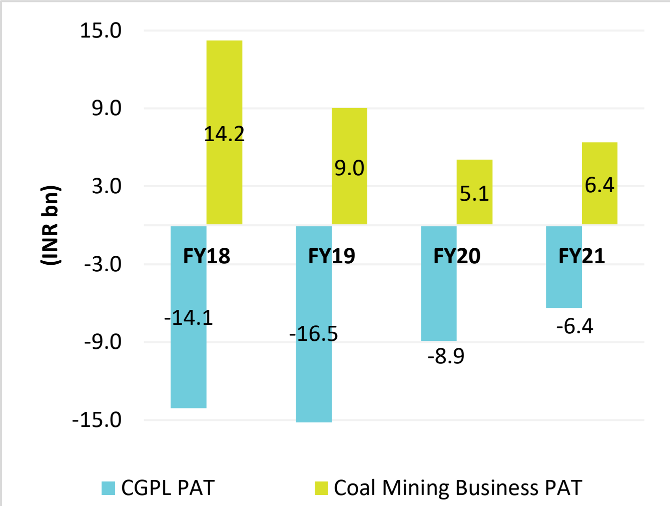
The hedge between CGPL and coal mining business worked well for TPWR during FY21, given that the loss in CGPL was completely offset by profit in coal mining.

Exhibit 42: CGPL---Losses reduce sharply to INR6.4bn

Key Operational Highlights	FY18	FY19	FY20	FY21
Mundra				
PLF (%)	73.0	74.0	73.0	73.0
FOB price of coal (USD/tonne)	61.5	60.3	50.3	47.6
Revenue (INR /kwh)	2.6	2.9	2.9	2.9
FOB Fuel under-recovery (INR/kwh)	0.8	0.8	0.5	0.5
Adj PAT (INR mn)	-14,710	-16,540	-8,910	-6,370
Coal mining business				
Coal sold (MT)	57.0	56.7	61.8	59.2
FOB revenue (USD/tonne)	68.1	63.6	55.3	49.0
Royalty (USD/tonne)	8.9	9.2	7.7	6.9
COGS (USD/tonne)	34.9	36.6	37.0	31.9
Gross profit (USD/tonne)	24.3	17.8	11.3	10.2
PAT (INR mn)	14,230	9,020	5,060	6,380

Source: Annual report, Company presentation, Edelweiss Research

Exhibit 43: CGPL---Coal mining hedge: Offsets loss in FY21



Source: Annual report, Company presentation, Edelweiss Research

CGPL debt reduction; improves profitability

In FY21, CGPL repaid its existing debts through divestment proceeds and issue of unsecured perpetual securities to TPWR. This resulted in decrease in non-current borrowings to INR 34bn and increase in unsecured perpetual securities to INR 112bn.

Exhibit 44: Reduction in debt during FY21

Mundra financing	FY18	FY19	FY20	FY21
Equity share capital	61	80	80	80
Unsecured perpetual securities	55	70	70	112
Non-current borrowings	0	69	76	34
Current borrowings	102	17	12	5

Source: Company, Edelweiss Research

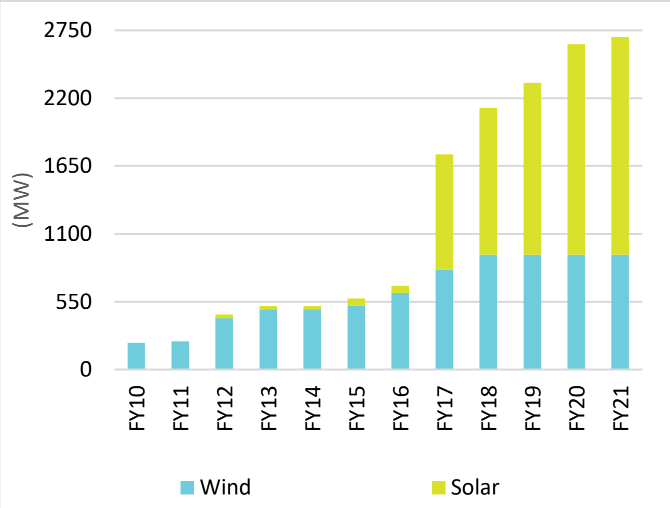
Renewable business

Renewable gaining traction

Over the past decade, TPWR has increased its overall generation capacity almost 5x. While large part of the generation comes from thermal power, management as a strategy has been focusing on expanding its renewable footprint. From current green energy mix of ~31%, management is targeting 60% by FY25 and 80% by FY30. TPREL and TPSSL cumulatively added 456MW of solar PV and rooftop projects in FY21. Additionally, they have 1,314MW of solar projects under construction.

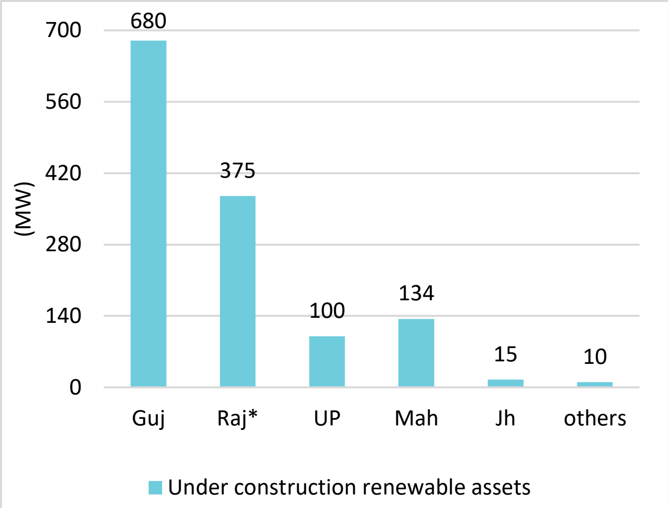
For the 1,314MW of solar asset under construction, TPREL plans to supply 520MW in Gujarat to GUVNL, 150MW to TPWR Distribution (signed long-term PPA), 100MW to Uttar Pradesh Power Corporation and Noida Power Corporation (signed PPA).

Exhibit 45: ewables portfolio...



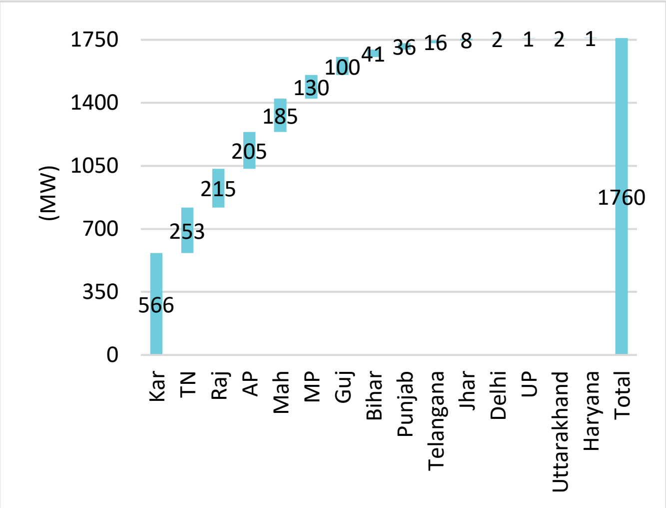
Source: Company, Edelweiss Research

Exhibit 46: ...via 1,314MW of solar assets under construction



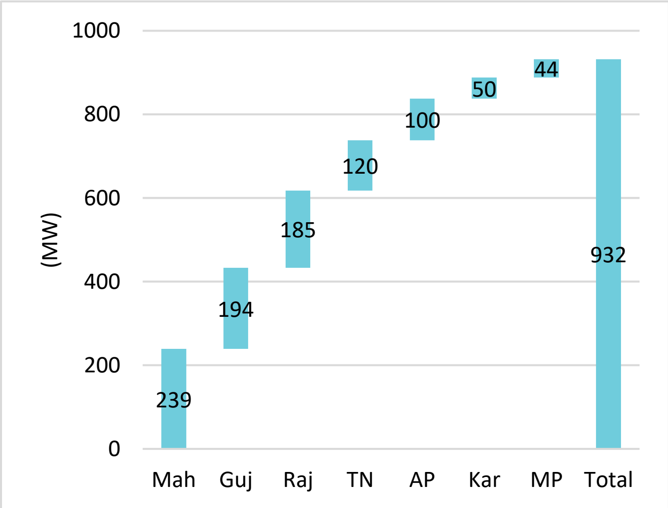
Source: Company, Edelweiss Research

Exhibit 47: To date, 1,760MW of solar projects...



Source: Company, Edelweiss Research

Exhibit 48: ...932MW of wind projects commissioned



Source: Company, Edelweiss Research

Exhibit 49: Expanding renewable footprint

Subsidiaries	FY18	FY19	FY20	FY21
TPREL				
Capacity (MW)	624	824	1,136	1,146
Operating Income (INR mn)	4,870	7,170	9,170	9,600
EBITDA (INR mn)	4,330	7,190	8,210	8,490
Adj. PAT (INR mn)	1,910	930	-470	210
WREL				
Capacity (MW)	1,008	1,008	1,010	1,010
Operating Income (INR mn)	11,970	12,720	11,980	11,890
EBITDA (INR mn)	10,940	11,750	10,920	10,930
PAT (INR mn)	2,380	3,000	2,920	3,200
Tata power standalone (renewable assets)				
Capacity (MW)	376	380	379	379
Operating Income (INR mn)	2,710	2,640	2,840	2,290
EBITDA (INR mn)	2,250	2,040	2,250	1,410
PAT (INR mn)	450	160	370	80
Solar PV Manufacturing - TPSCL				
Operating Income (INR mn)	27,520	31,750	21,410	51,190
EBITDA (INR mn)	2,350	2,350	2,140	3,300
PAT (INR mn)	990	900	1,230	2,080

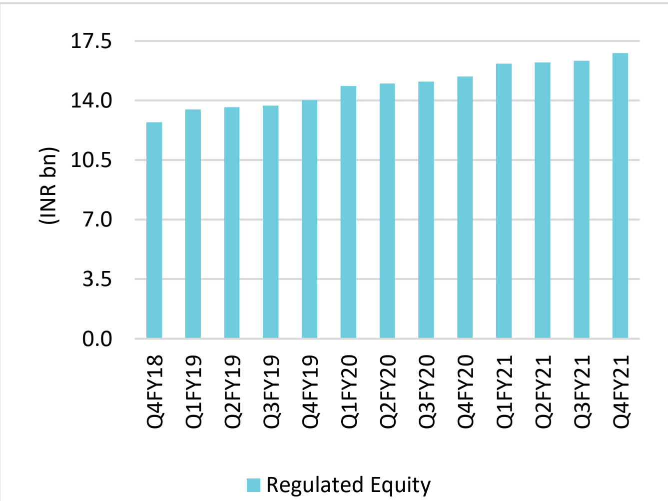
Source: Annual report, Company presentation, Edelweiss Research

Transmission and distribution

Delhi distribution expanding customer reach

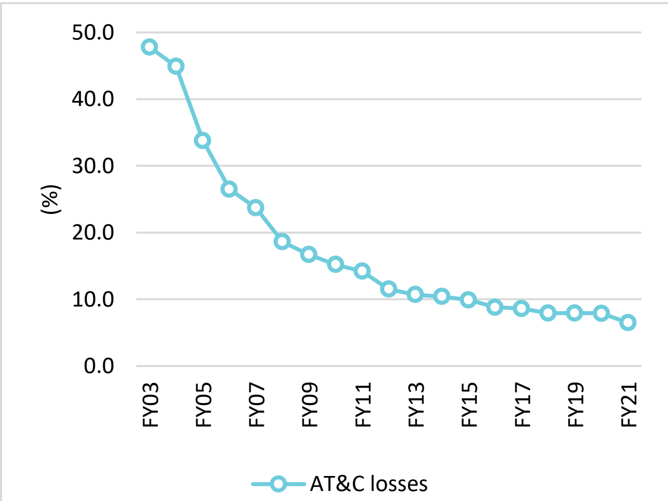
TPWR Delhi Distribution's (TPDDL) strong show sustained with regulated equity growing 9% YoY (10% in FY18, FY19 and FY20 as well) to INR16.8bn in FY21. Customer base expanded to 1.82mn (up 4% YoY) reaching 510sq km. The AT&C came to 6.5% in FY21 (7.89% in FY20). The company has also been rolling out smart meters for customers installing ~0.23mn smart meters within its serviceable area.

Exhibit 50: Delhi distribution regulated equity up 9% YoY



Source: Company, Edelweiss Research

Exhibit 51: AT&C losses down substantially

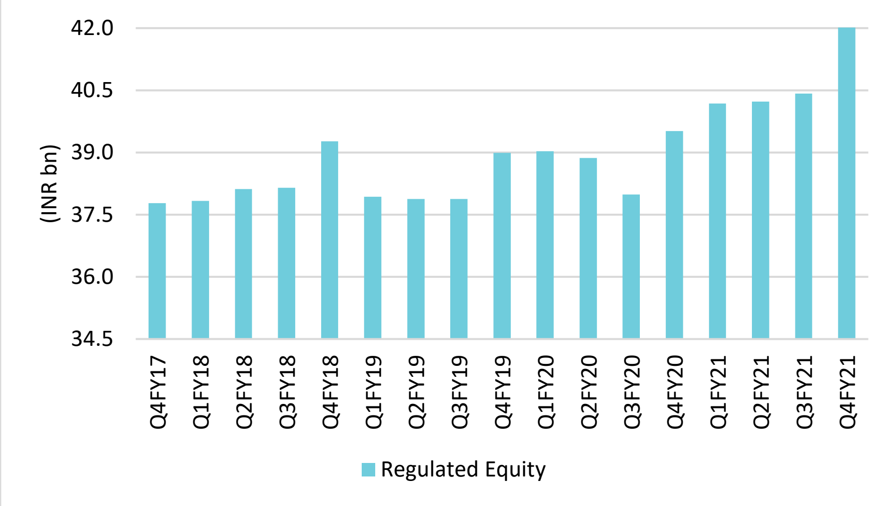


Source: Company, Edelweiss Research

Mumbai regulated equity growth takes off

Regulated equity increases: Regulated equity of Mumbai business grew by 6% YoY at INR42bn (largely flat over FY18-20). On the operational front, transmission assets were able to clock 99.89% grid availability in FY21 (99.75% in FY20).

Exhibit 52: Regulated equity for Mumbai operations grew in FY21



Source: Company, Edelweiss Research

Ajmer distribution: Increase in AT&C losses

The distribution franchise business in Ajmer declined sharply by 65% PAT growth in FY21 led by increase in AT&C loss to 10.2% (9.96% in FY20). Ajmer operations have a customer base of 0.15mn clocking sales of 461mn units (down 5% YoY).

New Discom acquisition – Expands customer reach

TPWR has acquired three DISCOMs in Odhisa distribution area through competitive bidding during FY21. A total of 51% stake in all three Discoms has been acquired expanding its customer reach to ~7mn consumers.

TPWR targets to expand further in the Discom business through active participation in the upcoming privatization of Discoms'. The bids for privatisation in UTs of Chandigarh, Dadra and Nagar Haveli and Daman and Diu had also been floated and are in advanced stages of finalization.

Exhibit 53: Discoms' acquired during the year

DISCOMs	SPV	Model	Stake	Customers (mn)
Central Odisha	TP Central Odisha Distribution Limited	Distribution License	51%	2.71
Western Odisha	TP Western Odisha Distribution Limited	Distribution License	51%	2.14
Southern Odisha	TP Southern Odisha Distribution Limited	Distribution License	51%	2.34
Northern Odisha *	TP Northern Odisha Distribution Limited	Distribution License	51%	1.91
Total				9.1

*Source: Company, Edelweiss Research: Note: *acquired wef 1st Apr-21*

Other businesses

Adjaristsqali Georgia LLC (AGL)

TPWR (through TPIPL) owns 50% in the AGL JV. AGL is developing 187MW hydropower project in Georgia. The plant operations were suspended in October 2017 and restoring and repair work has now been carried out (from insurance claim proceeds). The company has also concluded the BOO Agreement in December 2019 for a 15-year PPA and commercial operations have commenced in March 2020. The 9 MW Skhalta HPP, which is also a component of the overall project, was commissioned in March 2021 and PPA for this plant has also been executed for 15 years.

EV charging: Significant inroads

TPWR has set up 532 EV charging stations (vs 170 stations in FY20) in 92 cities (vs 20 cities in FY20), including Mumbai, Delhi, Hyderabad, Bengaluru, Pune, Kolkata, Chennai, among others. It has also partnered with Tata Motors, Jaguar Land Rover and MG Motors for developing EV charging infrastructure for their customers and dealers. The company has also rolled out its Beta version of software platform and mobile application to help customers locate charging stations and making bill payments.

Solar EPC: Record order book

While TPSSL's revenue grew strongly by 139% YoY from sales for large projects. The company has won large orders in FY21 resulting in highest-ever order book of INR87bn. TPSSL has also upped its manufacturing capabilities to 1,100 MW and produced. The company has also installed 30,000 solar agricultural pumps (up 180% YoY).

Management is striving to provide affordable and reliable electricity to remote areas across India through microgrids. Currently, the company has 156 micrografts operational and around 40 projects are in the pipeline.

Disinvestments in non-core business on track

Over the past three years, TPWR's strategy has been to focus on its core business operations. This has led to not only monetisation of non-core assets helping prune debt, but also freed up management bandwidth for developing the core portfolio. To this effect, the company had classified several investments as 'held for sale'.

Currently, TPWR has ~INR29bn of assets (net of liabilities) classified as held for sale, which it intends to offload in the near future.

PT Arutmin Indonesia: TPWR had sold its stake in PT Arutmin Indonesia for ~USD400mn and the proceeds are expected to be received in a phased manner over the next few years. TPWR currently records a carrying value of INR19bn.

Itezhi Tezhi Power Corporation: In FY19, TPWR had classified investment in Itezhi Tezhi Power Corporation (120MW hydro project in Zambia; TPWR's stake 50%) as asset held for sale. Investment amount along with loans and other receivables amount to ~INR 6.1bn.

Strategic Engineering Division (SED): in FY18, TPWR had approved sale of its stake in SED to Tata Advanced Systems for an EV of ~INR22bn (INR10bn at time of closing and INR12bn on achieving certain milestones). The transaction has been completed during the year and an upfront receipt of INR 6bn has been received. As on Mar'21, a total of INR 8.5bn has been recognised as held for sale.

Tata Projects: TPWR has reassessed its plan to sell investment in Tata Projects and has reclassified its investment from asset held for sale to Investment in Associate. The net asset value of the entity is INR14bn.

Financial update

New businesses offsets set-back in conventional businesses

In FY21, TPWR's revenue jumped 11% YoY led by acquisition of Odisha Discoms and increase in execution of solar EPC projects. However, EBITDA declined by 13% YoY on higher base (on account of favourable tariff order in Maithon Power over previous years) and lower PLF in wind plants. Overall, consolidated PAT declined by 2% YoY, partially aided by reduction in interest costs. The below table sets out businesswise contribution and key drivers/reasons for PAT performance.

Exhibit 54: Financial performance by business – Key drivers and factors impacting profitability

Tata Power-Consolidated (INR mn)	Revenue (FY21)	EBITDA (FY21)	PAT (FY21)	FY21 PAT growth (%)
Standalone & Key Subsidiaries				
Tata Power (Standalone)	64,800	33,660	9,270	76
CGPL (Mundra UMPP)	69,900	9,220	(6,370)	(29)
MPL (Maithon Power)*	25,030	6,990	3,110	(8)
TPDDL (Delhi Discom)**	76,270	12,550	4,280	3
TPTCL (Power Trading)	2,650	530	330	(20)
Tata Power Solar (Solar Mfg)	51,190	3,300	2,080	69
TPREL Standalone (Renewable Power)	9,600	8,490	210	2,000
WREL (Renewable Power)	11,890	10,930	3,200	10
Coal SPVs (Investment Companies)	-	110	(1,990)	(39)
TERPL (Shipping Co)	10,030	4,130	2,870	55
TP Central Odisha Dist Ltd (CESU)**	28,860	1,180	70	NA
TP Southern Odisha Dist Ltd (SouthCo)**	3,100	250	220	NA
TP Western Odisha Dist Ltd (WESCO)**	8,230	260	(10)	NA
TPIPL (Overseas Investment Co)	-	90	-	(100)
Others	7,680	1,300	(310)	(488)
TOTAL	3,69,230	92,990	16,970	132
Joint Venture and Associates***	-	-	8,730	(8)
TOTAL	3,69,230	92,990	25,700	53
Eliminations	(38,440)	(13,210)	(11,260)	179
Exceptional Items	-	-	140	(84)
Discontinued operations	-	-	(200)	(59)
TOTAL	3,30,790	79,780	14,390	9

*Source: Company, Edelweiss Research: Note: EBITDA figures include other income; *. MPL/TPDDL numbers above represent 100% share. TPWR share is 74%; **TPWR share is 51%; *** JV and Associates numbers above represents TPWR's share*

Decline in debt level

One of TPWR's strategic business objectives is to reduce debt through divestment of non-core assets and strengthen its balance sheet. Additionally, with the use of innovative financial engineering and restructuring, management in focusing on adopting a debt-light model.

Exhibit 55: Gross debt decreases following utilization of monetization proceeds

Parameter (INR bn)	FY18	FY19	FY20	FY21
Long-term debt	224	311	327	300
Short-term debt	188	139	118	84
Current maturity of long-term debt	74	35	38	47
Total Debt	486	485	484	432
Less: Cash & liquid investments	20	9	28	66
Less: Debt against dividend in Coal SPVs	-	27	20	6
Net Debt	466	448	436	359
Equity	188	204	219	253
Gross debt to equity (x)	2.6	2.4	2.2	1.7
Net debt to equity (x)	2.5	2.2	2.0	1.4

Source: Company, Edelweiss Research

Repayment of debt during FY21 has resulted in finance cost decreasing to INR40bn in FY21 versus INR45bn in FY20.

Exhibit 56: Higher debt at TPREL owing to ongoing capacity expansion

Debt breakdown (INR bn)	FY18	FY19	FY20	FY21
CGPL (Mundra)	100	87	88	41
Coal SPV's	71	59	52	37
TPDDL (Delhi Discom)	30	31	35	33
WREL (Renewable Power)	52	49	51	46
TPREL (Renewable Power)	33	41	53	52
TPSSL (Solar Manufacturing)	3	7	-	5
Maithon	22	24	21	18
Odhisa DISCOMs	-	-	-	3
Tata Power Standalone	164	175	177	196
Others	11	12	8	1
Total Debt	486	485	484	432

Source: Company, Edelweiss Research

Exhibit 57: INR 155bn / INR 206bn maturing over next 2/4 years

Debt maturity profile	FY22	FY23	FY24	FY25	FY30	FY31+
Unsecured						
Debentures (INR bn)	17.1	58.0	5.5	5.0	15.0	1.0
Term loans (INR bn)	15.9	1.1	0.5	0.4	-	-
Others (INR bn)	-	-	-	-	-	-
Secured						
Debentures (INR bn)	5.6	4.7	3.2	3.6	7.1	-
Term loans (INR bn)	26.5	24.2	14.4	15.7	38.9	10.1
Others (INR bn)	1.0	1.1	1.3	1.7	8.7	0.2
Total (INR bn)	66.1	89.1	24.9	26.3	69.7	11.2

Source: Company, Edelweiss Research

Healthy cash conversion cycle with decline in receivables

Overall cash conversion cycle (CCC) in FY21 stood at -37 days (-25 days in FY20) on decline in receivable days and increase in payables days. Management's conscious efforts to reduce working capital had continued to aid in WC improvement in FY21.

Exhibit 58: Cash conversion cycle averaged -37 days in FY21

Parameter	FY18	FY19	FY20	FY21
Inventories (INR mn)	16,231	17,064	17,524	18,848
Current receivables (INR mn)	27,889	44,453	44,259	50,010
Current trade payable (INR mn)	56,098	54,815	50,954	71,201
Inventory days	38	34	39	38
Debtors days	45	44	56	53
Payable days	130	112	120	128
Cash Conversion Cycle	(48)	(35)	(25)	(37)

Source: Company, Edelweiss Research

Exhibit 59: INR12bn more than 182 days past due

Gross receivable age profile (INR bn)	FY18	FY19	FY20	FY21
Within the credit period	10	24	18	32
1-90 days past due	8	12	11	11
91-182 days past due	3	4	4	5
More than 182 days past due	13	11	16	12

Source: Company, Edelweiss Research

Operating cash flows jump on improvement in working capital

Working capital improvement in FY21 was led by reduction in receivables, increase in payables and other liabilities. This resulted in OCF rising by INR28bn. With lower capex, FCF rose 29% YoY to INR67bn in FY21.

Exhibit 60: Operating cash flow impacted by expansion in working capital

Parameter	FY18	FY19	FY20	FY21
PBT	28,446	36,273	19,255	17,671
Depreciation	23,773	23,931	26,336	27,449
Others	7,854	8,742	27,511	31,389
Working capital changes	9,584	(18,150)	6,743	12,542
Income Tax	(6,019)	(5,058)	(6,091)	(4,470)
Operating Cash Flow	63,639	45,738	73,753	84,580
Capex	(35,040)	(35,333)	(21,894)	(17,867)
Sale of investments	6,937	(27,377)	3,429	(5,476)
Others	12,925	4,763	19,894	19,067
Investing cash flow	(15,179)	(3,192)	(5,429)	6,676
Change in debt	4,370	(6,416)	(1,070)	(59,734)
Interest paid	(45,704)	39,761	40,025	(37,314)
Others	(5,929)	600	10,402	1,11,731
Cash flow from financing	(47,263)	(51,845)	(51,095)	(76,029)
Operating cash flow	63,639	45,738	73,753	84,580
Capex	(35,040)	(35,333)	(21,894)	(17,867)
Free cash flow	28,599	10,405	51,859	66,713

Source: Company, Edelweiss Research

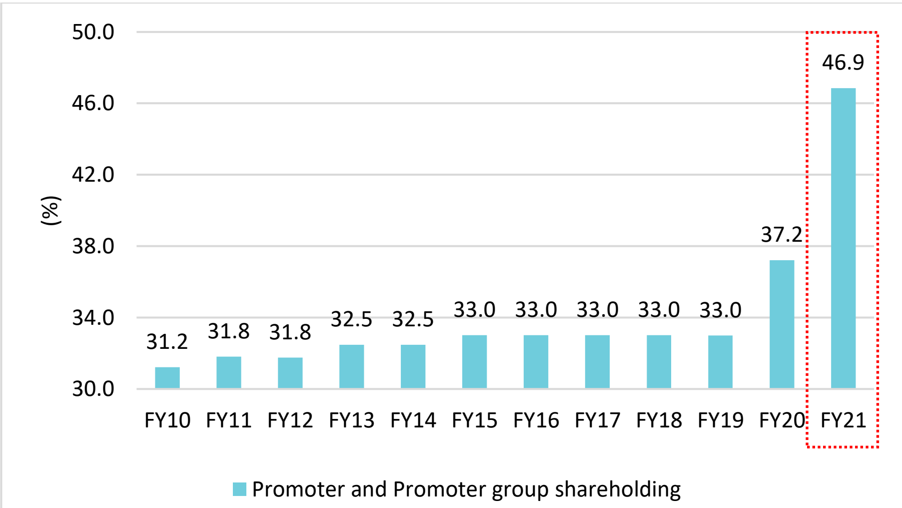
Contingent liabilities increases, albeit comfortable

TPWR did not record any new major contingent liability claim in FY21. Overall consolidated contingent liabilities stood at ~INR30bn (13% of net worth) vs INR 24bn in FY20.

Rising promoter stake infuses confidence

TPWR board, in July 2020, has approved a preferential issue of 490mn shares to promoters at INR53 apiece aggregating up to INR26bn of cash consideration. This has increased promoter group's stake by 10% to 47%.

Exhibit 61: Promoter group shareholding to rise to 46.9% post dilution



Source: Company, Edelweiss Research

Additional Data

Management

Chairman	N. Chandrasekaran
MD & CEO	Praveer Sinha
CFO	R N Subramanyam
Non Executive	Saurabh Agarwal
Auditor	SRBC & CO LLP

Holdings – Top 10*

	% Holding		% Holding
Life Insurance	5.14	General Insuran	1.19
Matthews Intern	4.68	Franklin Resour	0.89
Vanguard Group	2.08	Republic of Ind	0.80
ICICI Prudentia	1.72	BlackRock Inc	0.73
Tata Steel Ltd	1.22	Tata Asset Mana	0.71

**Latest public data*

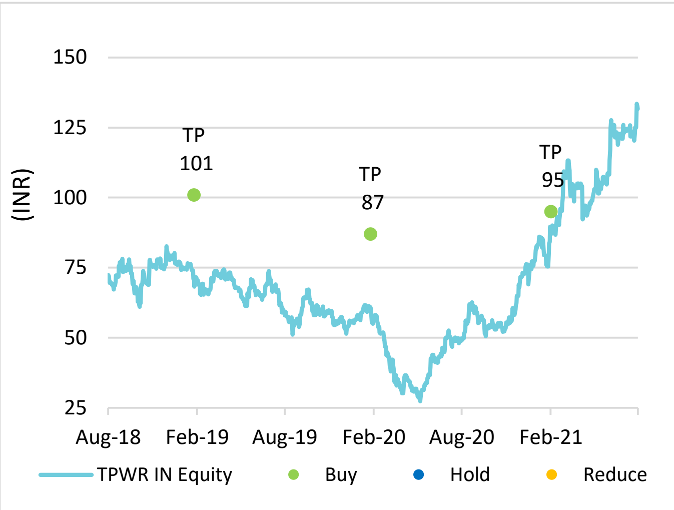
Recent Company Research

Date	Title	Price	Reco
12-May-21	Mixed bag; renewables catalyst delayed; *Result Update*	106	Buy
09-Apr-21	Upping the ESG quotient; *Company Update*	104	Buy
05-Feb-21	Good showing; right levers at play; *Result Update*	90	Buy

Recent Sector Research

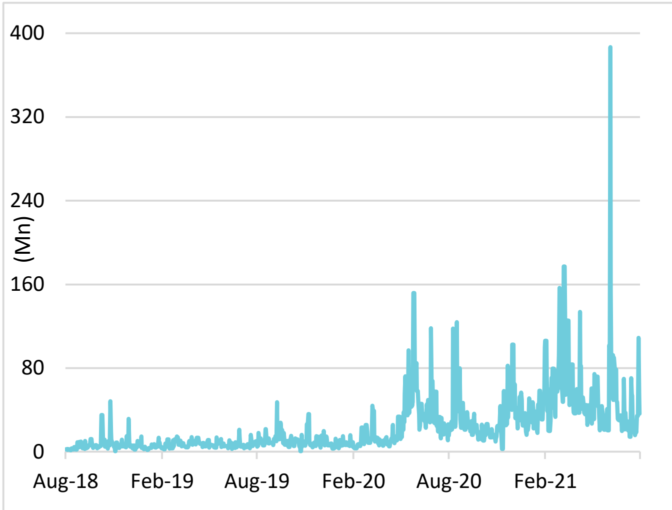
Date	Name of Co./Sector	Title
03-Aug-21	India Grid Trust	Limited room for capital appreciation; *Result Update*
02-Aug-21	NTPC	Charting out green growth trajectory; *Result Update*
24-Jul-21	Indian Energy Exchange	New opportunities on the horizon; *Result Update*

Rating Interpretation



Source: Bloomberg, Edelweiss research

Daily Volume



Source: Bloomberg

Rating Distribution: Edelweiss Research Coverage

	Buy	Hold	Reduce	Total
Rating Distribution*	173	54	19	247
	>50bn	**>10bn and <50bn**	**<10bn**	**Total**
Market Cap (INR)	215	40	4	259

**1 stocks under review*

Rating Rationale

Rating	Expected absolute returns over 12 months
Buy:	>15%
Hold:	>15% and <-5%
Reduce:	<-5%

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Aditya Narain
Head of Research
Aditya.narain@edelweissfin.com