BUY

CMP: **INR 1,010** Target Price: **INR 1,318** ▲ 30%

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30 September 2024

India | Equity Research | Initiating Coverage

Adani Energy Solutions

Power

'Aut iveniam viam aut faciam' – I will either find a way or make one

Adani Energy Solutions Limited (AESL) is operating a mix of regulated and unregulated businesses. It has transitioned a) from operating regulated transmission assets to becoming a leader in competitively built transmission and b) from operating regulated distribution assets to emerging as a leader in smart meter assets. It has tapped into unregulated businesses and scaled up emerging new opportunities. Earnings growth may be driven by: a) New transmission opportunities, b) growth in Mumbai DISCOM, c) existing smart meter wins and new opportunities. We estimate EBITDA to grow at 32% CAGR between FY24-FY27E: 1) + INR ~30bn from new transmission bids, 2) +INR ~40bn from smart meter, and 3) + INR ~5bn from distribution areas. Initiate coverage with **BUY** with SoTP-based TP of **INR 1,318**.

Started with cost plus transmission business

AESL started by developing cost-plus transmission assets. It has set up four transmission assets on regulated basis – cost of INR 110bn and INR 33bn of regulated equity. It made an entry into distribution business with the acquisition of Mumbai DISCOM. The regulated equity in the business has grown at 9% CAGR over FY20-FY24 to INR 60bn (vs 4% growth earlier).

Ramped up unregulated business

Adani Energy has a market share of 20% in transmission assets (unregulated). It has emerged as the largest private player in transmission assets by winning INR 170bn over FY16-H1FY25. It has used its experience in operating Mumbai DISCOM to leapfrog into building a sizeable smart meter business worth INR 272bn (unregulated).

A sizeable opportunity in unregulated business

India is looking to bid INR 1.6trn worth of new transmission assets. A sizeable opportunity will improve the growth expectations. Also, the smart meter bidding worth INR 1.2trn is likely to be bid out over the next 12-18 months. Thus, we expect unregulated businesses to see strong growth going ahead.

Initiate coverage with BUY; TP of INR 1,318

We initiate coverage on the stock recommending a **BUY** with an SoTP-based TP of **INR 1,318** per share.

Financial Summary

Y/E March (INR mn)	FY24A	FY25E	FY26E	FY27E
Net Revenue	1,61,526	1,70,544	1,99,264	2,50,120
EBITDA	57,164	68,865	93,897	1,32,381
EBITDA Margin (%)	35.4	40.4	47.1	52.9
Net Profit	11,463	15,611	22,201	33,884
EPS (INR)	10.3	13.0	18.5	28.2
EPS % Chg YoY	(12.2)	26.5	42.2	52.6
P/E (x)	98.3	77.7	54.7	35.8
EV/EBITDA (x)	25.7	23.0	18.5	14.3
RoCE (%)	6.3	7.2	7.5	8.1
RoE (%)	8.7	9.0	10.0	13.5

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Market Data

Market Cap (INR)	1,218bn
Market Cap (USD)	14,497mn
Bloomberg Code	ADANIENS IN
Reuters Code	ADAI.BO
52-week Range (INR)	1,347/687
Free Float (%)	30.0
ADTV-3M (mn) (USD)	42.0

Price Performance (%)	3m	6m	12m
Absolute	1.3	(1.6)	24.7
Relative to Sensex	(7.0)	(17.8)	(5.3)

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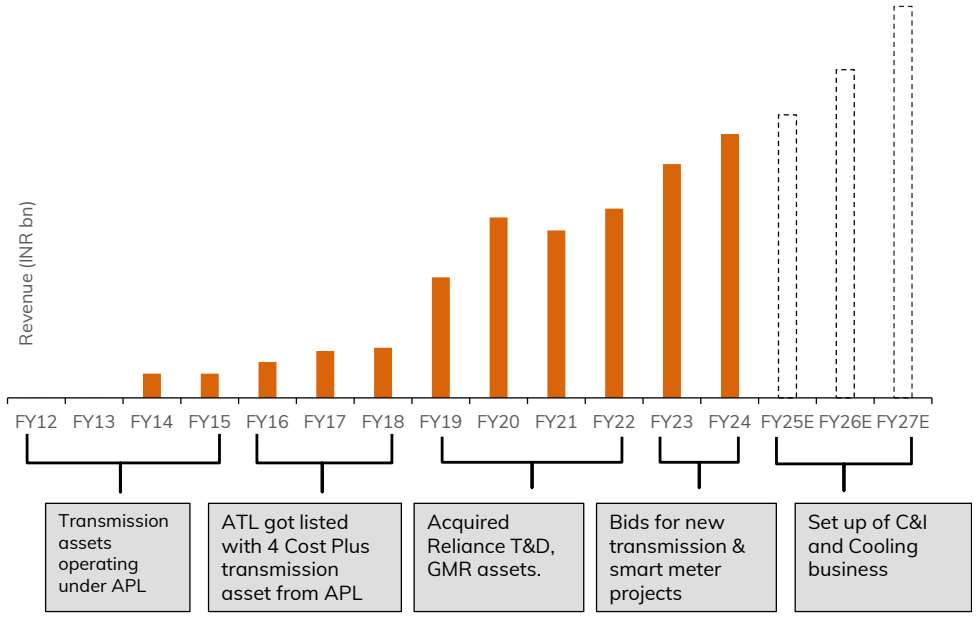
Investment argument

- AESL is the largest private transmission company (Link), operating one of the largest private DISCOMs and has emerged as the 2nd largest player in smart meter.
- It started operating as a cost-plus business in power transmission and distribution but it has entered into unregulated businesses to drive value creation and earnings.
- **Transmission**
  - It developed its first few transmission assets to evacuate power from the power plant of group companies. It started building new transmission assets with the government encouraging private participation.
  - The government mandated bidding for new inter–state transmission asset. AESL has the highest market share among private players in winning transmission bids.
  - AESL has historically won 30% share in transmission bids. YTD-FY25 it has 29 operational and 10 under-construction assets in its portfolio.
  - India has lined up new transmission project to be built on inter-state transmission system. The bidding pipeline for Indian transmission projects is healthy at INR 1.5-2trn.
- **Distribution**
  - AESL is operating one of the largest regulated DISCOMs in the country, the Mumbai DISCOM (operational since 1926).
  - AT&C losses have been maintained below benchmark, leading to recovery of fixed cost and higher returns.
  - The growth in Mumbai DISCOM is driven by increase in electricity consumption, thus, leading to higher capex.
  - As a result, regulated equity has grown at 9% CAGR over FY20-FY24.
- **Smart meter – a sizeable opportunity**
  - India has embarked on a mission to reduce AT&C losses. It is targeting smart meter in each household by Dec'25.
  - Till date, 120mn smart meters have been bid and AESL has won 20% share or INR 273bn worth of bids.
  - It has experience of installing smart meters in Mumbai. Adani Energy (AESL) has won 20% of new smart meter bids. 50% of the bids have been completed and 50% are pending.
  - It is looking to win further new circles under pending bids for smart meter.
  - Smart meter is a less capital-intensive business compared to transmission and distribution and is an unregulated business.
- Incubating new businesses – Cooling as a service and Energy as a Service
  - Adani Energy is looking to push the envelope with its new initiative Cooling as a Service
  - It is also looking to enter into Energy as a Service - supply RE power to commercial and industrial consumers.
- Adani Energy has raised Rs.83bn in August – 24 through QIP at a price of Rs.970 per share. As a result, net debt to equity has declined to 1.6x (from 2.7x)
- We expect EBITDA to grow 13% in next three years: 1) +INR 40-45bn from new transmission bids, 2) +INR 60bn from smart meter, and 3) + INR 70bn from distribution areas. As a result, the stock is trading at 12xEV/EBITDA. We value the businesses on SoTP basis with target price of **INR 1,318** per share.

Adani Energy – spreading its wings

AESL is amongst the largest private transmission players, with experience in developing and operating transmission assets worth INR 260bn (project cost) – a mix of cost plus and bid projects. It acquired the existing business of Mumbai DISCOM to enter distribution business. It has recently won new bids for smart meter to enter smart meter business. It has also received trading licensee and is looking to emerge as power solution provider for commercial and industrial businesses.

Exhibit 1: History of the company



Source: I-Sec research, Company data

FY03-FY14

- Adani Power Limited (APL) had set up first transmission assets to evacuate power from Mundra power plants.
- It built the first HVDC line from Mundra to Mahendragarh to transport power to the state of Haryana.
- Adani Power Maharashtra Limited (subsidiary of APL) had set up the transmission asset to evacuate power from Tiroda Power plant located in Maharashtra.

FY15-FY18

- AESL (erstwhile Adani Transmission) took shape with four transmission assets of Adani Power through demerger of the assets from holding companies.
- The need of a separate transmission play came primarily from the emerging opportunities in India for private players.
- The government was looking to build new transmission assets on bids, thus, encouraging private participation.
- It also acquired transmission assets from KEC, Kalpataru, Reliance Infra and GMR to drive consolidation.
- It had the largest market share in bid-based projects with share of 20% until FY24 (Source: NSGM).

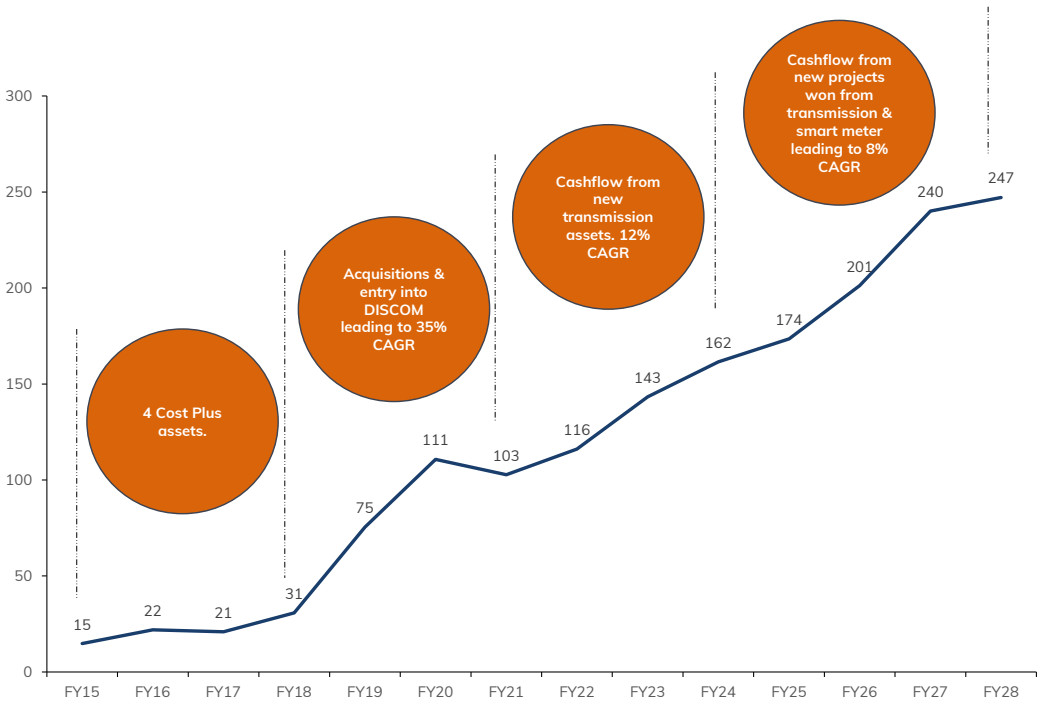
FY19 – FY23

- Adani Energy reinvented itself with the acquisition of Mumbai DISCOM business – akin to a leveraged buyout.
- It sold 25% stake to QIA in Mumbai Distribution business in FY20.
- It also made an entry into smart meter business in FY23.
- Abu-Dhabi based IHC invested INR 39bn in FY23.

FY24...

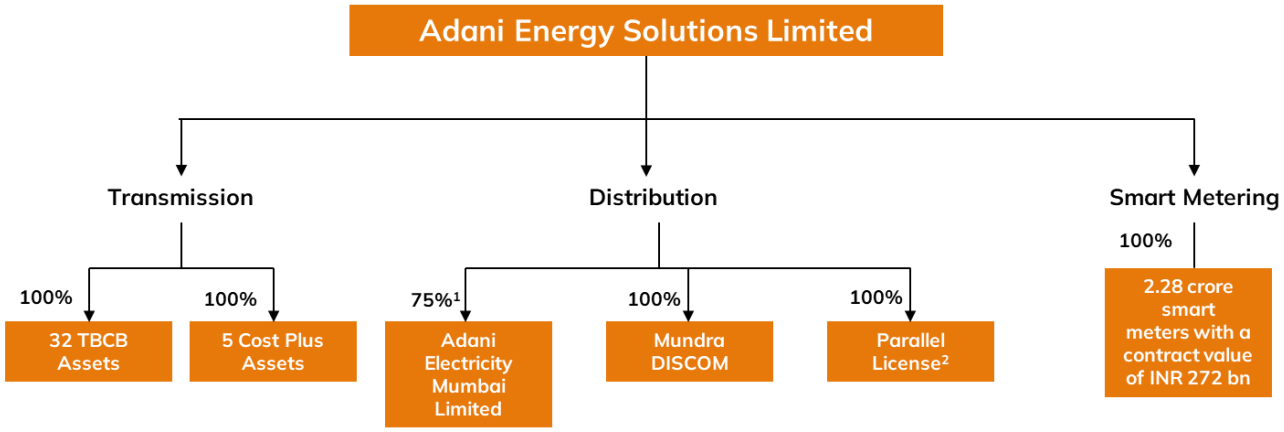
- Adani Energy has been installing smart meters in its own distribution area.
- India is looking to set up 250m new smart meters in private public partnership or 10-year concessions.
- The bidding for smart meter picked up in FY24 and H1FY25.
- Adani Energy has won 20% market share in new bids (Source: NSGM). Currently, the company has 9 smart meter projects in its portfolio. It considers smart meter business lucrative.
- It raised INR 84bn through QIP proceeds. A part of the proceeds will be utilised to repay debt, and hence, strengthen the balance sheet.

Exhibit 2: Revenue growth over the years



Source: I-Sec research, Company data

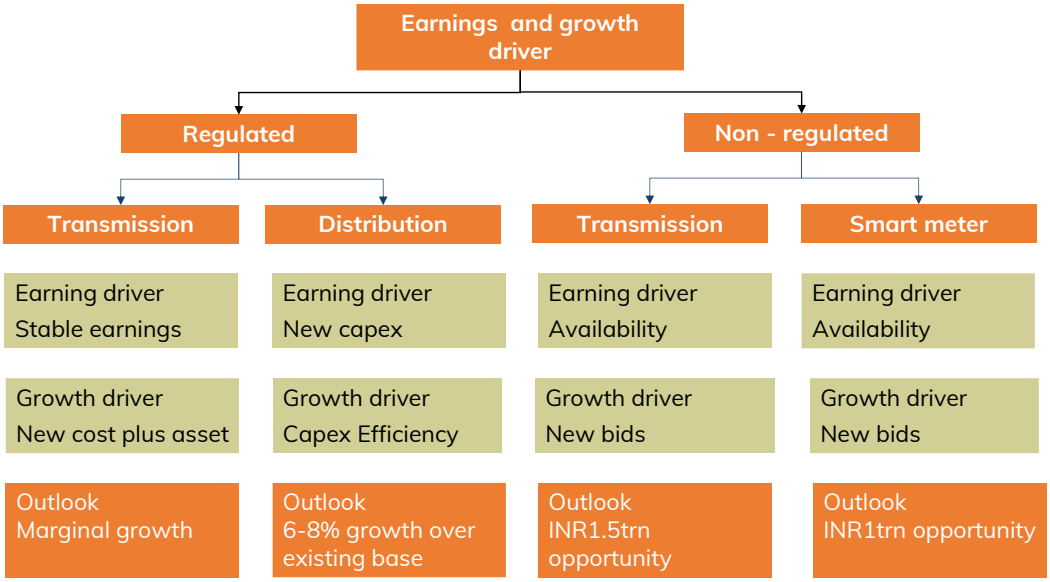
Exhibit 3: AESL company structure



[1] *Balance 25% is owned by QIA*
[2] *Parallel License includes License for Navi Mumbai, Thane, Gautam Buddha Nagar and Mundra Taluka*

Source: Company data;

Exhibit 4: Earnings and growth drivers



Source: I-Sec research

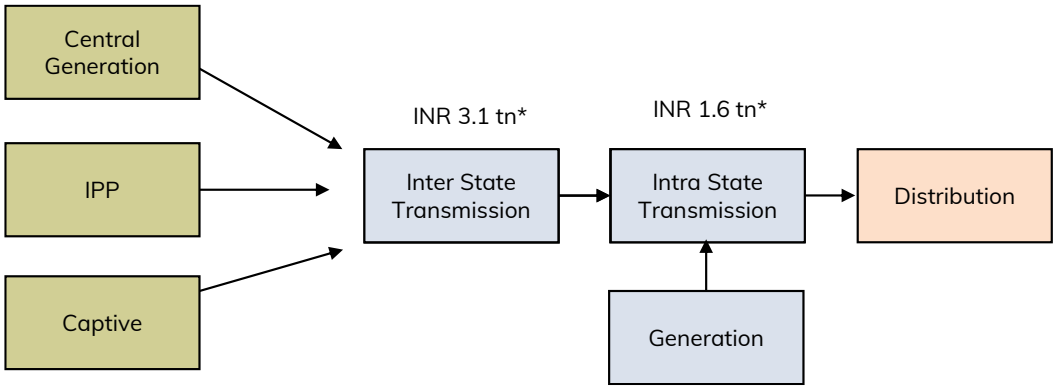
Transmission

To build the new grid on bidding basis

- **Transmission sector by nature is monopoly and hence highly regulated. However, privatization has gained ground in the country.**
- **To bring the competition in transmission sector, the government identifies the element to be build and call for auction.**
- **Also, the private participation is mandatory for new bids with regulated or cost-plus projects relegated to margins.**
- **Till date, government has bid out INR 1.5trn – mostly inter-state transmission projects and we expect a higher proportion of new intra–state transmission elements to be built on competitive basis.**
- **Intra-state transmission is also being built under the bidding, but the pace is slow. However, it is also likely to see a surge in activity. One of the central agencies estimate capex of INR 1.7trn.**

Transmission business is a monopoly with the projects being built on a regulated basis. To bring private participation and improve efficiency, the government opened the transmission sector for competition.

Exhibit 5: Structure of the transmission business



Source: I-Sec research; *NEP estimates

Transmission sector opens for private participation...

The government has been looking to increase private sector participation since 2005. The bidding for transmission started in 2006 with two projects awarded on competitive basis. However, given the teething issues and the urgency, the government awarded almost everything on regulated basis.

Policies advocated competition

Tariff policy of 2006 made the bidding mandatory (post 2011). Necessary contractual and institutional framework for introducing tariff-based competitive bidding (TBCB) model. This opened the transmission sector for private players. Over the years, the guidelines for encouraging competition in development of transmission projects have been revised and re-issued.

New tariff policy aided privatization

New tariff policy in 2016 further suggested bidding barring certain exemptions. All of this helped inter-state transmission system to move altogether to tariff-based competitive projects.

Intra state is also moving to bidding

The central government directed the states to seek competition in new intra-state projects. However, intra-state bids are few and far, though, almost all states have come out with a direction to build new projects on bid above certain project cost (or threshold).

Exhibit 6: Intra-state transmission bidding

Sr. No.	State	Threshold (INR bn)	Year
1	Andhra Pradesh	2,500	2024
2	Assam	1,000	2019
3	Bihar	1,000	2019
4	Gujarat	1,000	2023
5	Maharashtra	5,000	2023
6	Haryana	1,000	2021
7	Chhatisgarh	2,500	2023
8	Madhya Pradesh	2,500	2021
9	Rajasthan	1,000	2018
10	Punjab	500	2018
11	Himachal Pradesh	450	2023
12	Odisha	1,000	2022
13	Uttarakhand	1,000	2022
14	Ladakh	1,000	2023
15	Uttar Pradesh	1,000	2021

Source: I-Sec research; Ministry of Power
Note that 10 intra-state transmission schemes for Uttar Pradesh, Madhya Pradesh and Maharashtra have been completed under TBCB and further, seven intra-state transmission projects in Uttar Pradesh, Odisha, DVC (West Bengal) and DVC (Jharkhand) are to be awarded through the TBCB route.

Exhibit 7: Savings from TBCB projects vs regulated projects

certain categories of transmission system as specified in the Tariff Policy 2016. With adoption of Tariff Based Competitive Bidding for development of transmission system, following key benefits have been observed:

(i) Lower Tariff compared to Cost Plus: With large number of bidders participating in development of a transmission project, discovered tariff for a transmission project can be lower than cost-plus tariff by about 30-40%

Source: I-Sec research; Link

Revised guidelines for bids – further aids privatization

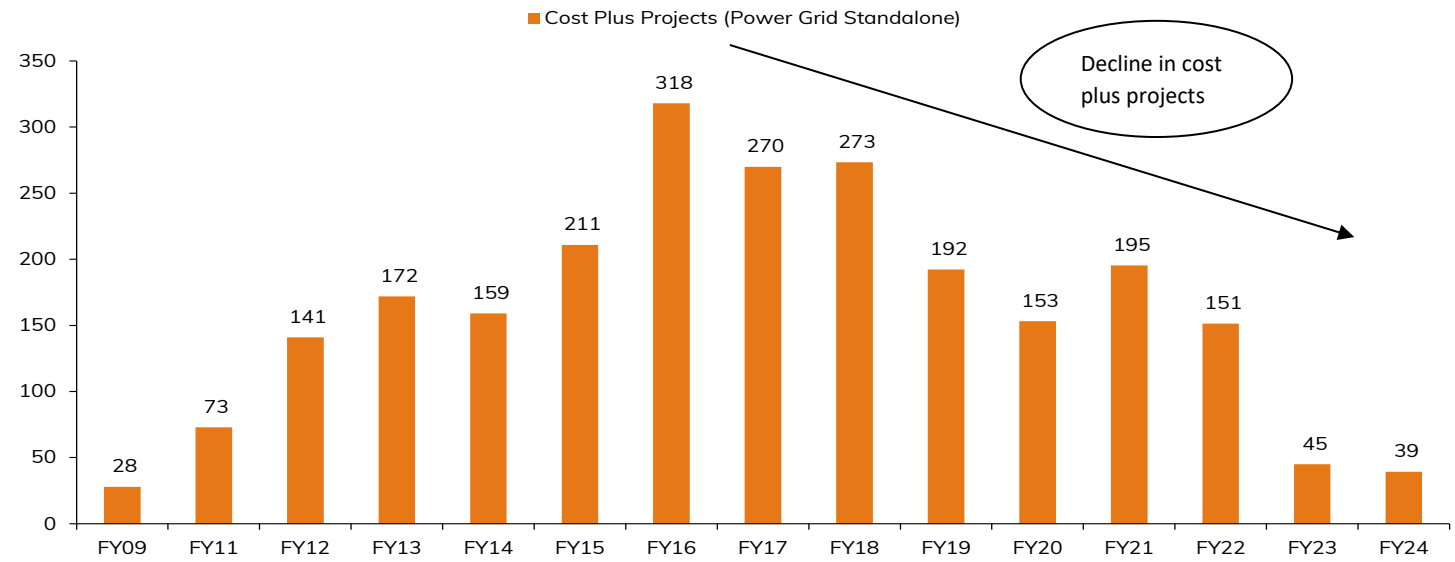
The major changes in the revised guidelines include:

- a reduction in the equity lock-in period (from earlier 51% for a period of two years from date of commissioning (COD) and 26% for a period of three years thereafter to 51% for a period of one year from COD),
- signing of TSA by the CTU,
- provisions for quoting of a single tariff in the bid,
- changing from a build-own-operate-maintain (BOOM) model to a build-own-operate-transfer (BOOT) model.

...reflected in bidding opportunities in recent years

Regulated projects have dwindled in last 10 years as reflected in a decline in Power Grid cost plus projects. This is reflected in the decline of commissioning of Power Grid (standalone) projects. Hitherto, Power Grid enjoyed virtual monopoly in transmission segment.

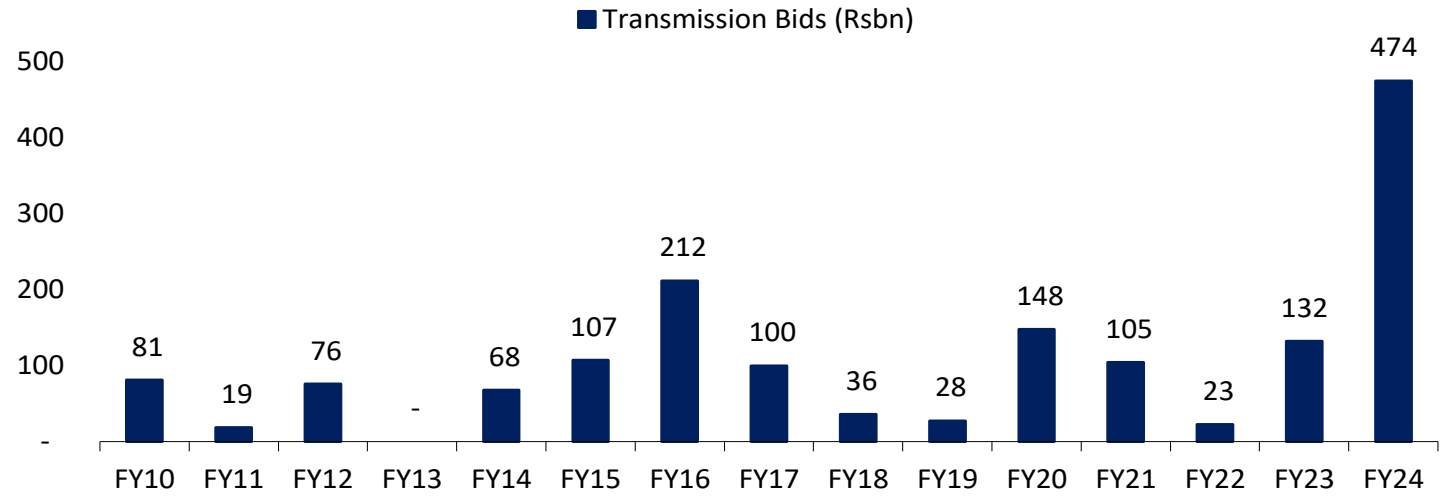
Exhibit 8: Decline in cost-plus projects of Power Grid



Source: I-Sec research; PGCIL

The bidding started in 2010 and it gathered pace between FY15-FY17. However, the decline in new projects led to a decline in bidding in FY18-FY23. With India looking to rebuild the new grid and bidding becoming universal, FY24 saw a huge surge in bidding for new projects.

Exhibit 9: Bids in transmission over the years

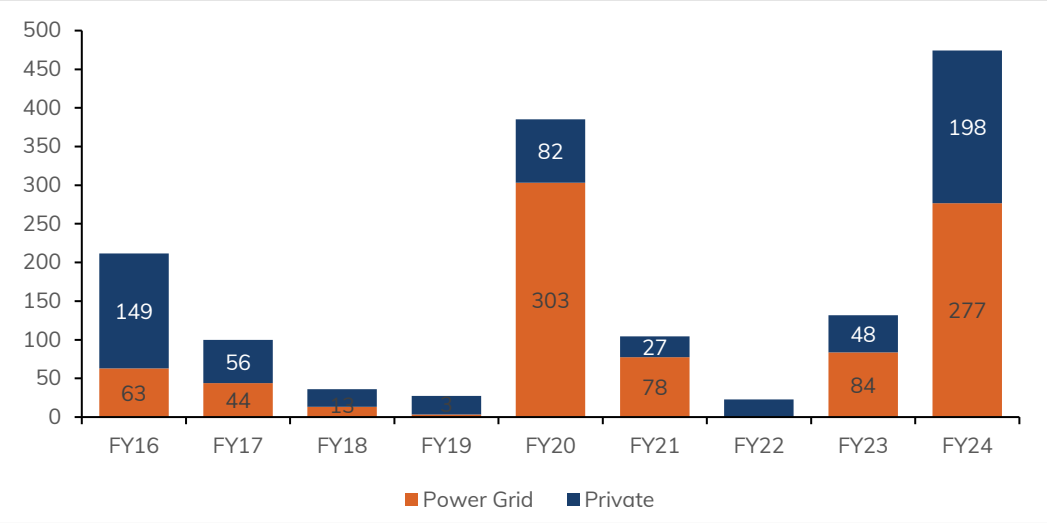


Source: I-Sec research; CEA

Private players gained ground

Projects worth INR 1.5trn have been awarded on competitive basis since the bidding commenced. Private players have been able to garner a significant market share. The market share in the bids has been >30% every year. The market share was 44% in FY24.

Exhibit 10: TBCB bids floated over the last 9 years (INR bn)

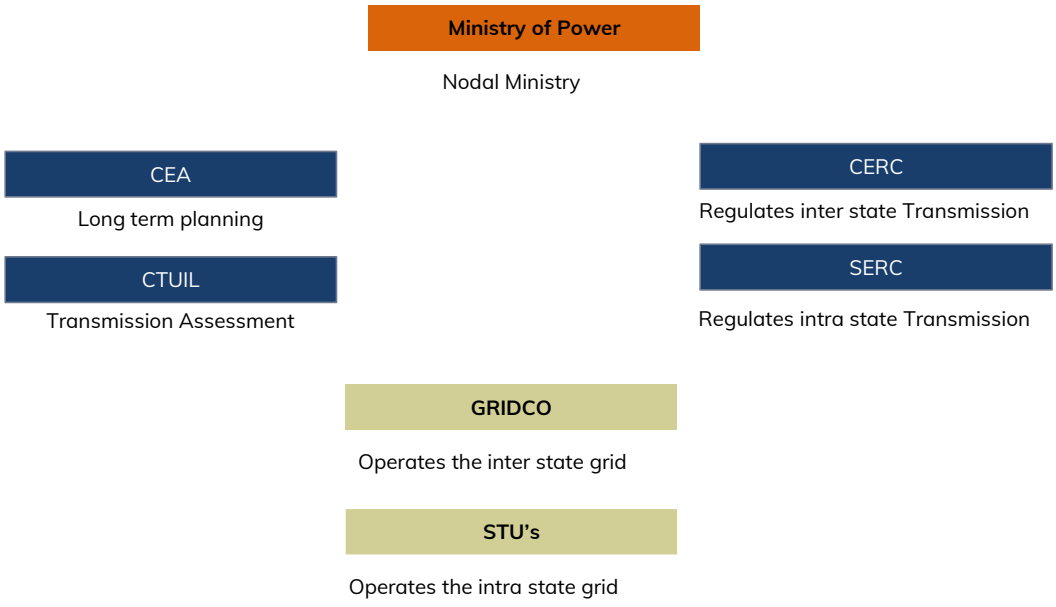


Source: I-Sec research; CEA

Note that competitive bidding for all inter-state transmission triggered intense competition with players rushing to gain a foothold in the sector. This resulted in high competitive intensity across projects awarded in FY12-14, reflected in participation of several players across related spaces, but with limited experience in end-to-end project execution. Now, the sector has achieved maturity, in our opinion.

Regulatory structure and key stakeholders

Exhibit 11: Regulatory structure



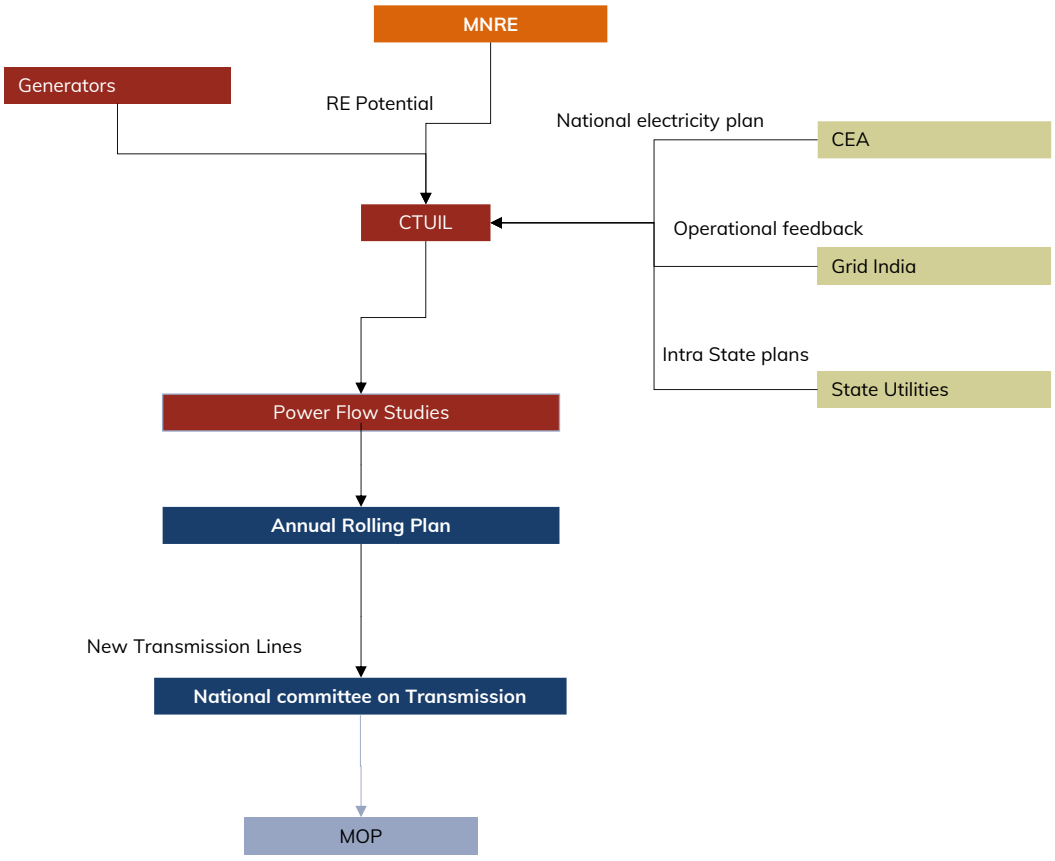
Source: I-Sec research

>INR 2trn opportunity

India's national transmission grid must urgently modernise to increase the rate of renewable energy adoption. This is essential for achieving India's renewable energy investment ambitions while accelerating the excellent progress of recent years. Transmission capacity needs to be built quickly and, in the locations, best suited to exploit renewable energy.

The current grid is evacuating 400GW of power and the new grid has to be built to evacuate and integrate 900GW of power capacity by FY32. A series of reports by implementing agencies suggests a high capex requirement over the next 10 years.

Exhibit 12: Key stakeholders



Source: I-Sec research

Renewables evacuation plan – estimated at INR 2.4trn

To integrate the RE capacity in the grid, the Central Electricity Authority (CEA) has released a report: "Transmission System for Integration of over 500 GW Renewable Energy Capacity by 2030". In the report, the transmission system has been planned for >500 GW of renewable capacity. It also includes the evacuation infrastructure for offshore wind farms in Tamil Nadu and Gujarat. Total investment required is INR 2.4trn by FY30.

Exhibit 13: RE evacuation plan investment breakup

I(NR bn)	Till FY30
Total	**2440**
- Onshore	2140
- Offshore	300
Transmission Line (thousand ckms)	51
HVDC	8
765KV	26
400KV	16
220KV	1
Transformation Capacity (GVA)	315
HVDC	25
765KV	274
400KV	13
220KV	0

Source: I-Sec research, CEA

Exhibit 14: Onshore RE evacuation plan investment breakup

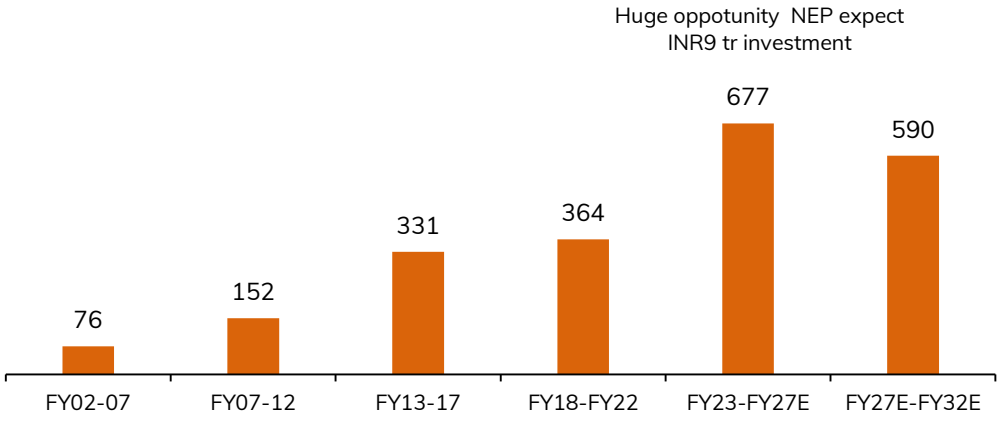
Transmission plans for 500GW	GW
Existing Capacity of renewables	**165**
Existing space in transmission grid	32
Intra state grid	24
Hydro capacity	15
System has to be designed for	**264**
Battery (GW)	50
TS to be planned for (INR bn)	**2,140**
INR /MW	10

Source: I-Sec research, CEA

National electricity plan expects INR 9trn

The national electricity plan pegs the total inter-state transmission capital expenditure at INR 9.2trn over 10 years (FY22 onwards) till FY32. This also includes intra-state expenditure. It expects a total investment of INR 4.7trn – INR 3.1trn in inter-state and INR 1.6trn in intra-state over FY22-27. Below is the snapshot of the plan:

Exhibit 15: NEP investment plan by years

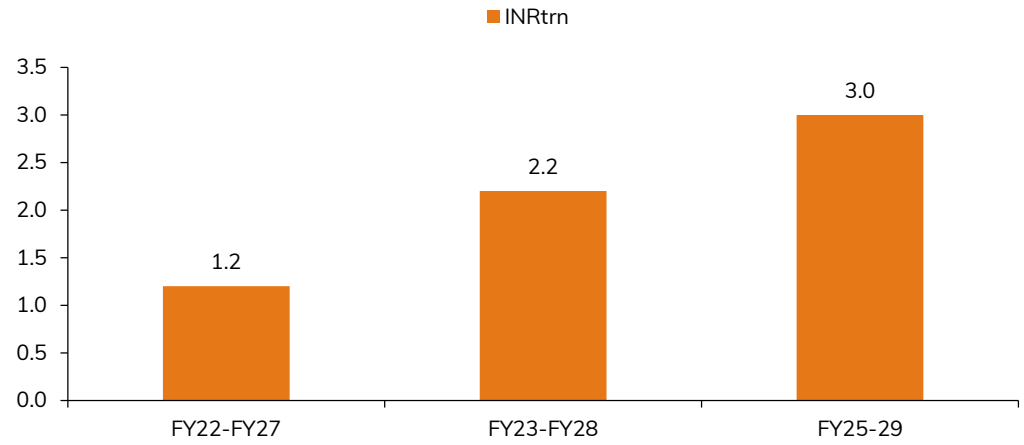


Source: I-Sec research, NEP

Rolling plan expects INR 3trn capex

Rolling transmission plan is being brought out by CTUIL for assessing the adequacy of inter-state transmission scheme for evacuating the generation. The plan is published at the beginning of every fiscal year for looking at the steps required to meet the demand over the next five years. Each successive rolling plan of FY22, FY23 and FY24 has upgraded the expected transmission capex. FY24 capex requirement has been pegged at INR 3trn.

Exhibit 16: CTUIL rolling plan



Source: I-Sec research; CTUIL

Translating into a strong pipeline of projects

India has given the final approval of > INR 2.5trn worth of projects in the recent past. Note that these projects are recommended by National Committee of Transmission. Out of which, INR 0.5trn was completed in FY24 and INR 0.3trn was awarded on nomination basis. So, we reckon a bidding of INR 2trn over the next 18 to 24 months. Below is the status of the projects approved since Jan'21.

Exhibit 17: Cost-plus bids

Status of projects since Jan 2021	INR bn	Details
Bids to be floated	555	Likely in next 12 months
Bids floated	1,277	Huge Pipeline
Bids completed	537	Bid completed in FY24 and H1
Cost Plus	324.4	Leh Ladakh
Total	**2,694**	

Source: I-Sec research; NCT

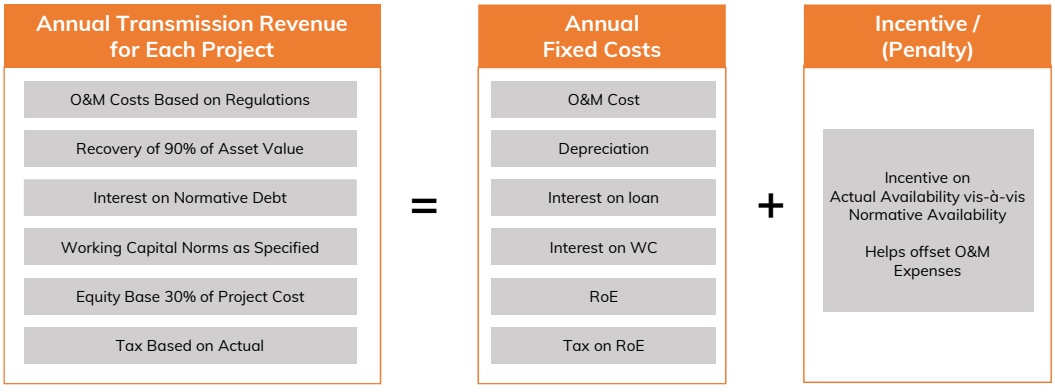
Earnings model for transmission

Two earnings models exist currently for transmission – regulated and unregulated. Both are discussed in detail below:

Cost plus

Earnings from transmission project operating on regulated basis are governed by existing regulations. Earnings are linked to availability and equity invested in projects. Note that the life of transmission assets is 35 years.

Exhibit 18: Calculation of transmission revenue

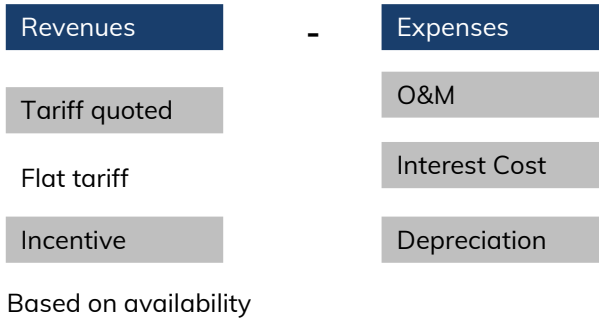


Source: I-Sec research; PFC

Bidding

Earnings and return from a bid project are based on capex incurred and the availability. Under the new bidding model, the developer has to quote single tariff for 35 years.

Exhibit 19: Bidding model



Source: I-Sec research

To assess the return from such bids, capex to tariff is the right metric to indicate the return expectations.

Exhibit 20: IRR generated through varying capex to tariff and interest rates

IRR		Capex to Tariff						
		6.0	7.0	7.5	8.0	8.5	9.0	10.0
Interest Rate	5.0%	37%	29%	26%	23%	21%	19%	16%
	6.0%	34%	27%	24%	21%	19%	17%	14%
	7.0%	32%	24%	21%	19%	17%	15%	12%
	8.0%	29%	22%	19%	17%	15%	13%	11%
	9.0%	27%	20%	17%	15%	13%	12%	10%
	10.0%	24%	18%	15%	13%	12%	11%	9%
	11.0%	22%	16%	14%	12%	11%	9%	8%

Source: I-Sec research

Value creation

A company can create higher value by executing it at lower capex (reflected in lower capex) and tying up debt at low interest rates.

Exhibit 21: Price-to-book value generated through varying capex to tariff and interest rates

P/BV		Capex to Tariff						
		6.0	7.0	7.5	8.0	8.5	9.0	10.0
Interest Rate	5.0%	4.0	3.2	2.9	2.6	2.4	2.2	1.8
	6.0%	3.8	3.0	2.7	2.4	2.2	2.0	1.6
	7.0%	3.5	2.8	2.5	2.2	2.0	1.7	1.4
	8.0%	3.3	2.6	2.2	2.0	1.7	1.5	1.2
	9.0%	3.1	2.3	2.0	1.8	1.5	1.3	1.0
	10.0%	2.9	2.1	1.8	1.6	1.3	1.1	0.7
	11.0%	2.7	1.9	1.6	1.3	1.1	0.9	0.5

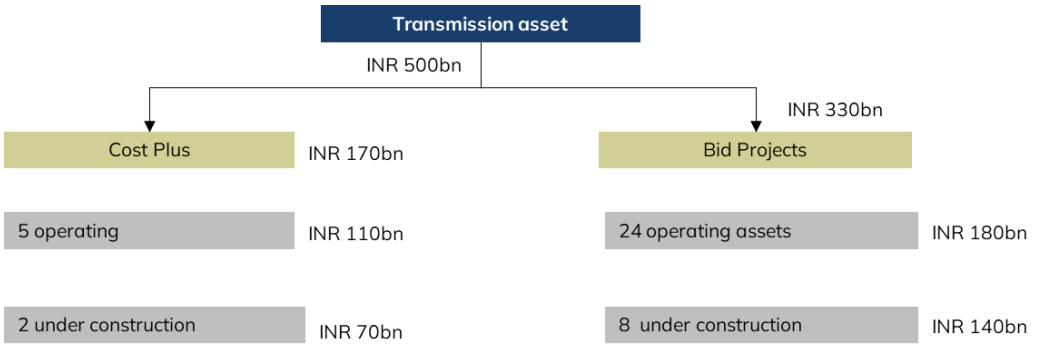
Source: I-Sec research, *10

AESL enjoys strong market share in bid projects

- **Adani Energy entered into transmission sector with development of transmission assets to evacuate power from group power plants. It started by building four cost-plus transmission projects.**
- **It started participating in bidding for new transmission assets. It is the largest private player in transmission in India. It owns 42% of operational private transmission capacity (Source: Company data, CEA).**
- **It has a market share of 20% in competitive bids in transmission sector from bids between FY14-FY24 (Source: NSGM).**
- **The ratio of tariff to capital cost for bid projects is 15%, indicating healthy return on operating and cost-plus projects.**
- **It has been operating all the assets at higher-than-normative availability.**

Adani Energy started with building cost-plus assets and it doubled down on new transmission opportunities arising from private participation. It has emerged as the largest player in projects being awarded on competitive basis.

Exhibit 22: Transmission asset portfolio of AESL



Source: I-Sec research

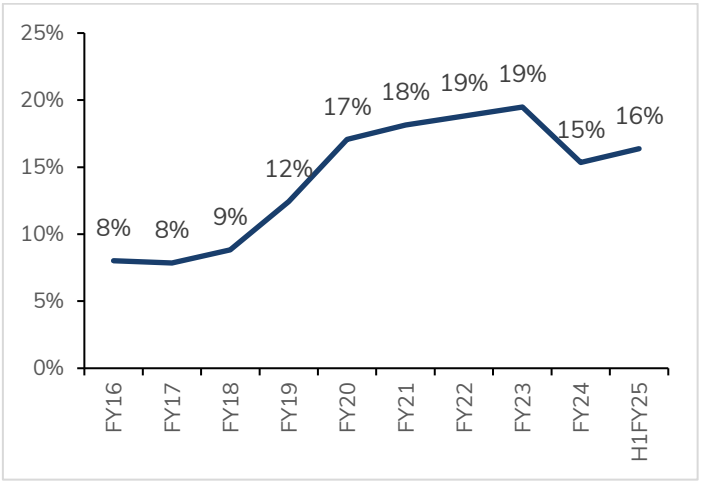
Entered with portfolio of four cost-plus assets

Adani Energy entered the transmission sector with demerger of four cost plus transmission assets from Adani Power. These projects are modelled on a cost plus, regulated return on equity basis, thereby, providing a clear revenue visibility. The model protects the economic rationale of the projects with a pre-defined and regulated post-tax return on equity of 15.5%.

Expansion through acquisitions and bids

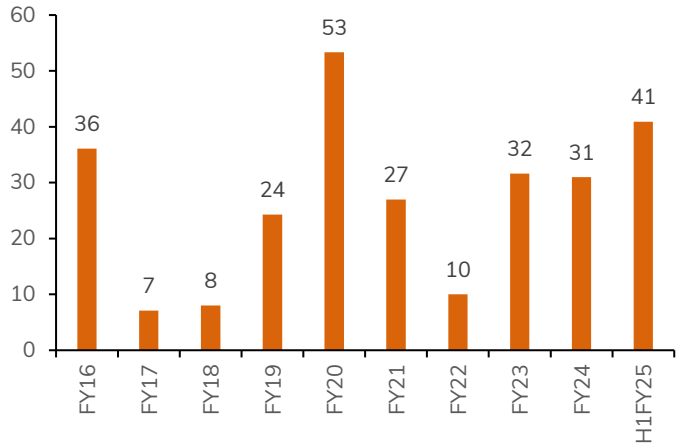
The expansion over the years has been driven by a mix of organic and inorganic expansions. The portfolio comprises 37 transmission and two distribution projects (as of FY24) with presence in 16 states spread across the eastern, western, northern, and southern transmission regions of the country. (Refer Annexure I for details)

Exhibit 23: Adani energy market share in bids



Source: I-Sec research, Company data

Exhibit 24: Bids won by Adani energy (INR bn)



Source: I-Sec research, Company data

Exhibit 25: Asset Acquisitions over the years

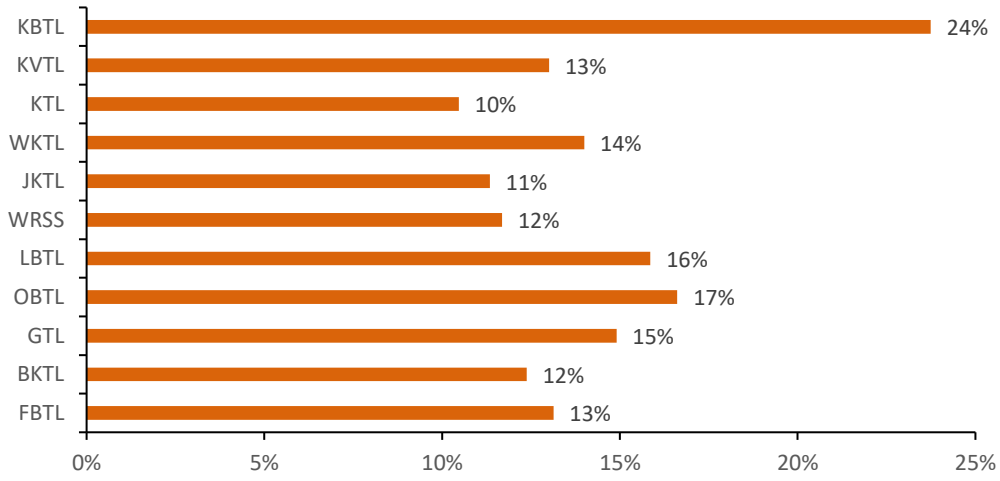
Sr No	Acquisitions	Acquired from	Acquisition year	Leveiised Tariff
1	Aravali Transmission Service Company LTD. (ATSCL)	GMR Infra	FY17	223
2	Maru Transmission Service Company LTD. (MTSCL)	GMR Infra	FY17	364
3	Western Transmission (Gujarat) LTD. (WTGL)	R-Infra	FY18	497
4	Western Transco Power LTD. (WTPL)	R-Infra	FY18	924
5	Adani Transmission Bikaner Sikar Private Limited (ATBSPL)	KEC	FY20	313
6	Alipurduar Transmission Ltd.	Kalpataru	FY21	1498
7	Warora Kurnool Transmission Ltd. (WKTL)	Essel	FY22	4096
8	KPS - 1 (Khavda Pooling Station)	Megha	FY24	862
9	Adani Transmission Step-Two Limited (ATSTL)	Essar Power	FY25	-

Source: I-Sec research, Company data

Bidding it right

AESL has been bidding and acquiring assets strategically i.e. projects that are in close vicinity of each other, helping in the reduction of O&M expense. The company has majority of its projects in Maharashtra, Rajasthan, Gujarat and Chhattisgarh. This synergy would improve the IRR/RoE of the assets by achieving operating excellence.

Exhibit 26: Levelised tariff to project cost



Source: I-Sec research

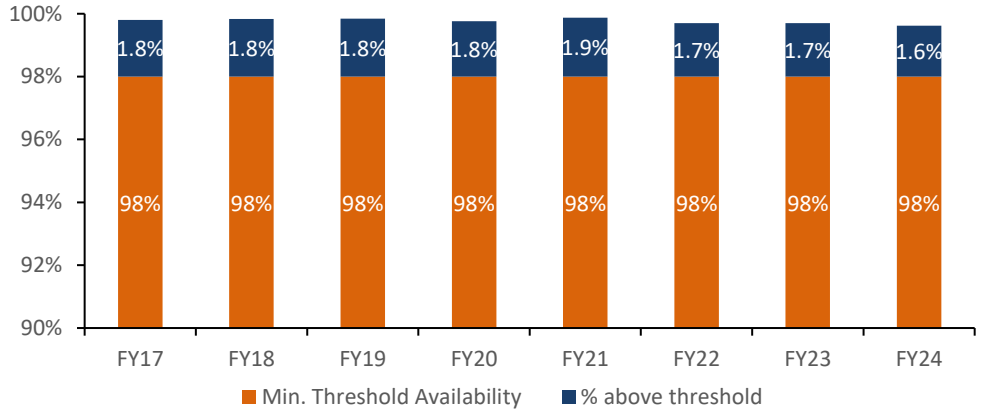
AESL has been bidding projects on average at 15% levelised tariff to capex, showcasing the right bidding strategy leading to a desirable IRR/RoE at project level.

Operational excellence

Availability metric for all its projects has been above the threshold limit and the assets have been getting the incentives for the same, demonstrating strong operational performance across its assets. Its performance is backed by O&M capabilities leveraging upon new-age technology, economies of scale (healthy presence across transmission corridors) and best-in-industry technical capabilities.

The incentives can form 1-3.5% of the total transmission revenue for that particular asset depending upon its availability. We estimate, if the availability metric is above the threshold limit of 98% by 1.5-1.8%, it would result in 40-50bps higher IRR at asset level.

Exhibit 27: Robust network availability



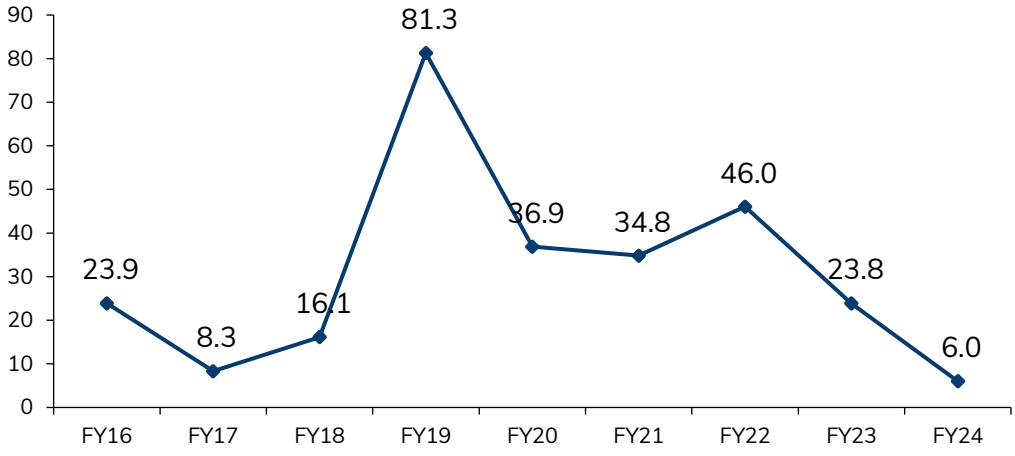
Source: I-Sec research

Reflecting in significant market share

Adani Energy garnered ~20% of projects under TBCB, emerging as the winner in 17 out of total 102 projects bid out (completed and under construction only) with majority of share held by PGCIL.

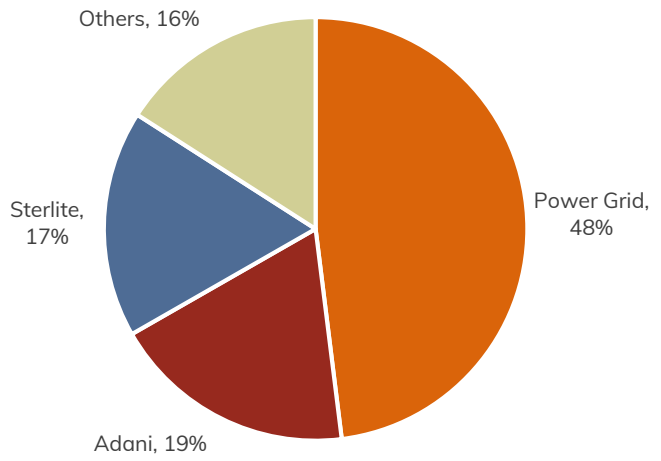
Amongst private players, Adani Energy is leading with market share of 40% (Source: CEA). Its private transmission capacity grew to 38,726 route ckm as of FY23 from 30,768 route ckm in FY19, at 5.9% CAGR.

Exhibit 28: AESL YoY growth in ckm



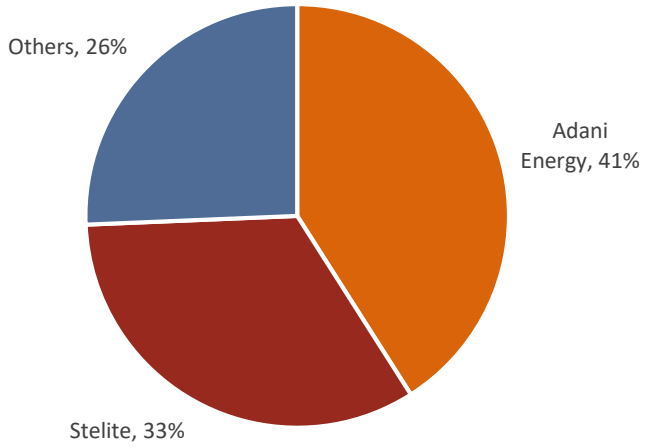
Source: I-Sec research; Company data

Exhibit 29: Power Grid - biggest player in transmission



Source: I-Sec research, Company data

Exhibit 30: AESL is leading private participation



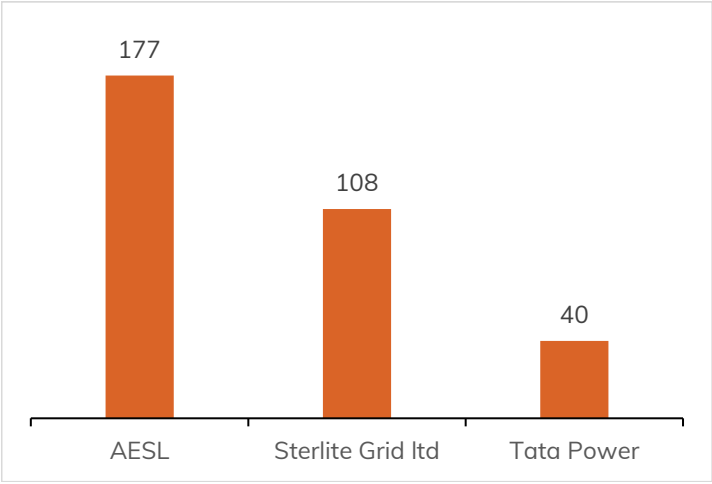
Source: I-Sec research, Company data

Sector concentrated with Adani Energy leading the share

Competition in the transmission sector depends on the size, nature and complexity of the project and the geographic region in which the project is being executed. While service quality, technical capability, health and safety track record, availability of qualified personnel, reputation and experience are important considerations, price is the major factor in most tender awards. Furthermore, size, scheduling and complexity of certain large-scale projects preclude participation by smaller and less sophisticated companies that operate in transmission industry. Adani energy has the scale and execution experience and capabilities build over the years that gives an edge against new upcoming players.

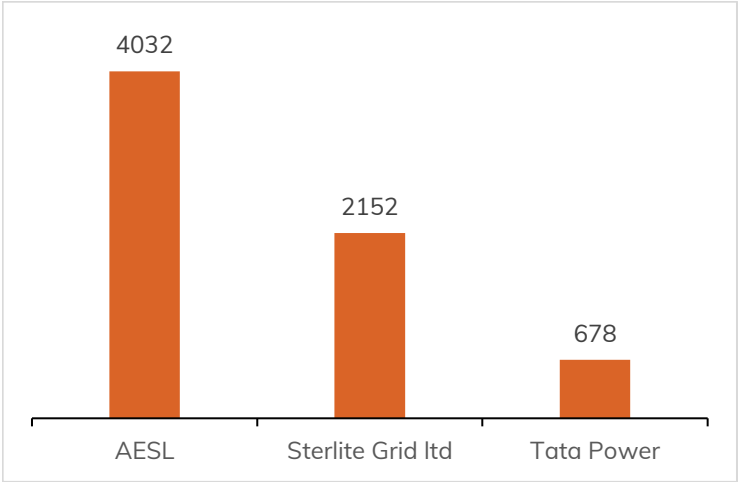
In the past couple of years, the sector concentrated majorly amongst 3 private players apart from PGCIL. The company added 4,032 ckm of transmission line capacity between FY 2019 and 2023, vis-a-vis 2,152 ckm and 678 ckm by Sterlite Power Transmission Limited and Tata Power Limited, respectively. The investments have been on the similar lines.

Exhibit 31: Bids during FY19-24 (INR bn)



Source: I-Sec research, Company data

Exhibit 32: Transmission lines added in FY19-24 (ckt km)



Source: I-Sec research, Company data

Distribution

Distribution sector is ailing

- Distribution sector is considered to be monopoly and hitherto, has been protected by competition.
- India distribution sector is hobbled by inefficiencies. It is owned primarily by the public sector. Total size of the sector in terms of revenue is close to INR 9trn.
- Private sector participation in the distribution sector remains minimal, with 93% of the electricity by both volume and revenue sold through state government-owned distribution utilities.
- However, private sector has done exceedingly well in the fewer pockets it operates. The loss numbers are below 10% for almost every circle owned by private sector.
- Two models have been used by government to bring private sector in the distribution: a) selling the existing distribution licensee to private companies b) private franchisee. 14 distribution licensees are operating and 8 franchisee are operating in the country.
- However, the newer opportunities have been lower than expectations. Damana and Diu was the last DISCOM to be privatized while Malegaon was the last franchisee to be awarded.

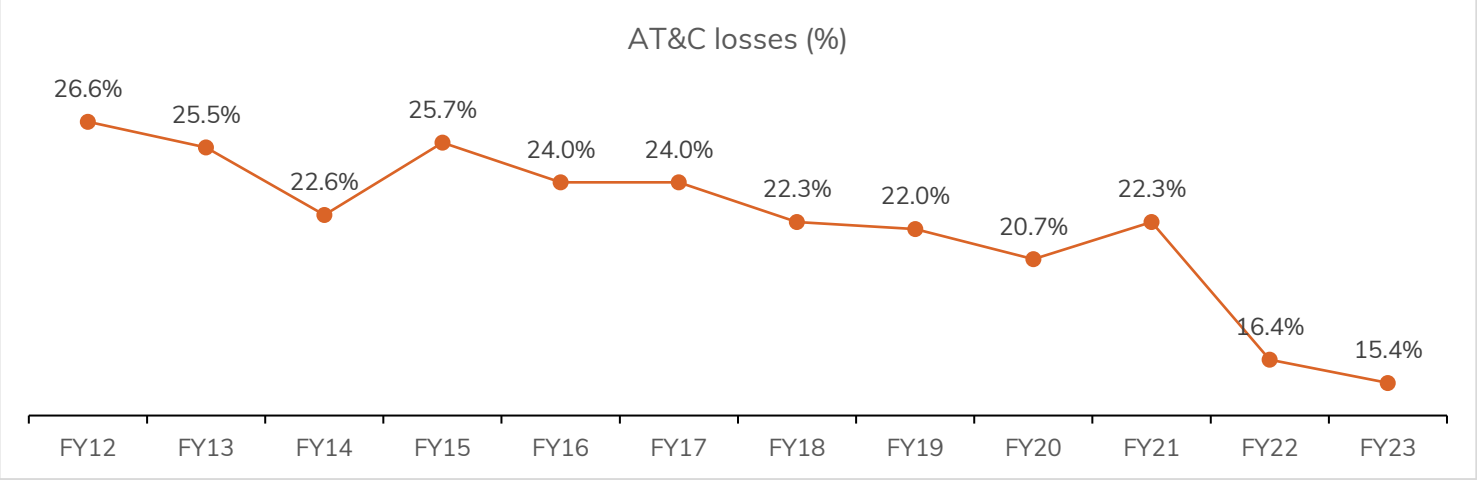
Distribution continues to be the weakest link in the supply chain of the power sector. Most distribution utilities are making major losses as a consequence of expensive long-term power purchase agreements, poor infrastructure, and inefficient operations.

India distribution sector plagued by losses

Indian distribution sector is primarily owned by states distribution companies and are regulated by state regulators. The responsibility for the distribution of power to rural and urban consumers rests with states. Health of the DISCOM has been a concern. DISCOMs have continued to report losses.

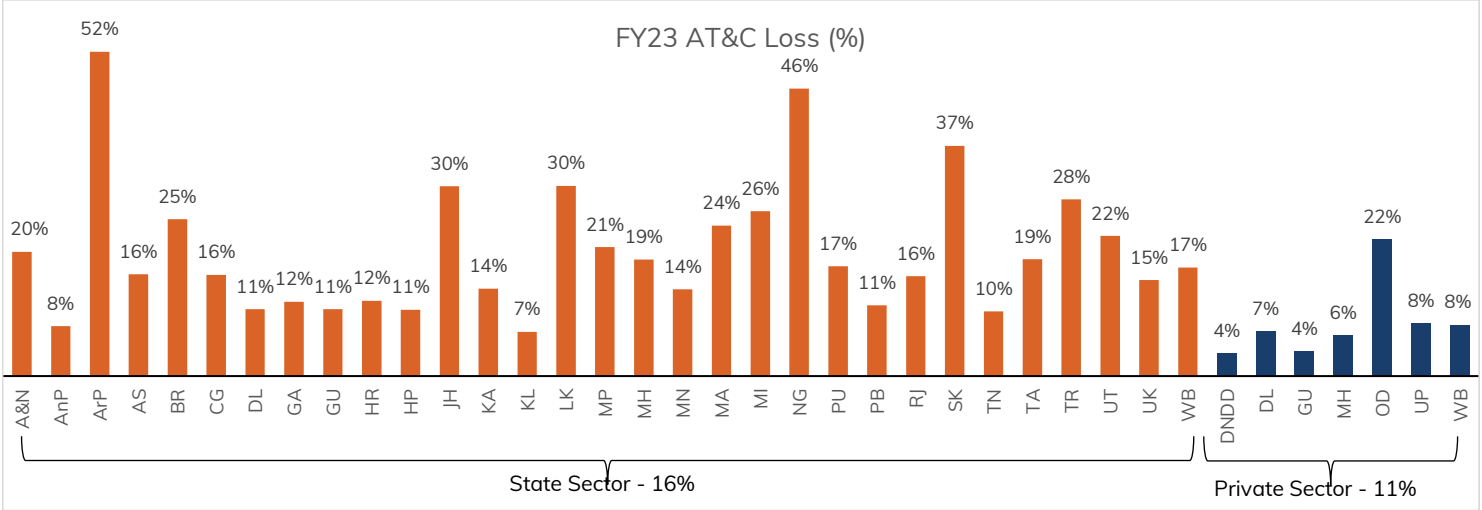
AT&C losses have come down in last couple of years because of liquidation of dues aided by central government schemes.

Exhibit 33: AT&C losses have come down in the last couple of years...



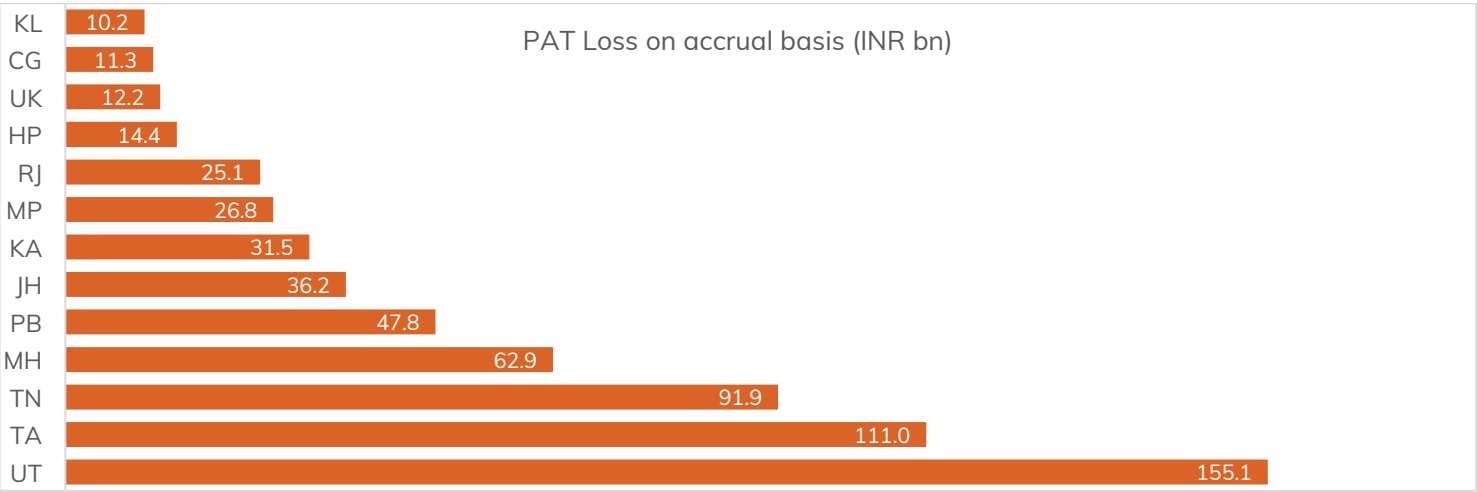
Source: I-Sec research; PFC

Exhibit 34: ...yet, AT&C losses continue to be high (by state)



Source: I-Sec research, PFC;

Exhibit 35: Snapshot of large losses (> INR 1bn) accrued by discoms (state-wise)



Source: I-Sec research, PFC;

Leading to government bail outs

The continued losses have led to recurring bailout of distribution companies. The government embarked on a bailout in FY21 by a) infusing liquidity in discom through financial institution and b) installing smart meters to reduce commercial losses and upgrading infrastructure to reduce technical losses.

Exhibit 36: Government bailouts to discoms amounting to more than INR 5.5trn

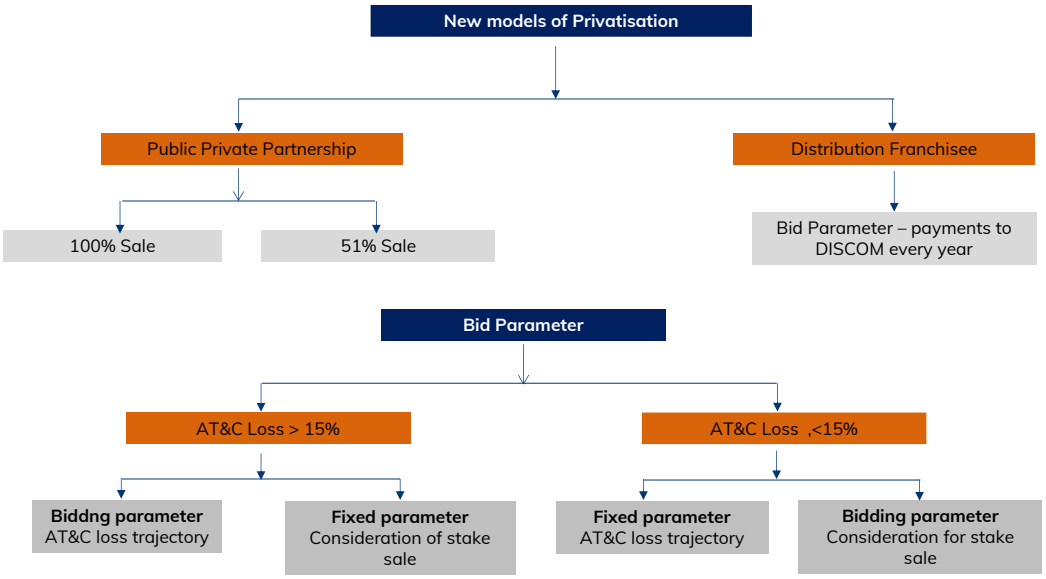
Year	Scheme	Details
2002	Bailout Package	States take over the debt of state electricity boards worth INR 350bn, 50% waiver of interest payable by state electricity boards to central PSUs
2012	Financial Restructuring Package	States take over 50% of the outstanding short-term liabilities worth INR 570bn
2015	Ujwal Discom Assurance Yojana	States take over 75% of the debt of discoms worth INR 2.3trn and also provide grants for any future losses
2020	Liquidity Infusion Scheme	Discoms get loans worth INR 1.4trn from PFC and REC to settle outstanding dues of generators, state governments provide guarantee
2022	Revamped Distribution Sector Scheme	Central government to provide result-linked financial assistance worth INR 1trn
2023	Liquidity Infusion Scheme - 2	Payment in equated monthly instalments of existing dues

Source: I-Sec research

Privatization is proposed

The government has been doing privatization in discom from 2000's but the pace has been slow. It has also looked to bring private expertise through franchisee. Some franchisee models had failed to yield results due to contractual issues, irrational bidding etc. Indian government announced a fresh round of privatization in FY21. It announced its intention to sell stake in all discoms of Union Territories. It came out with model documents for privatization.

Exhibit 37: Models of privatization adopted for discoms



Source: I-Sec research

However, private sectors have done a stupendous work

Private Distribution Licensees and franchisees have reduced the AT&C losses significantly in the areas. A few failures in private franchisees have dented the initial claim. Initial success, high competition and low entry barriers had led to a number of new players in bidding for franchisee and the failure has led to reduced competitive intensity in new opportunities.

Exhibit 38: Reduction in AT&C losses in distribution licensee

Private Sector	Year	2000	2024
Dadra Nagar Haveli	2022		2%
Delhi			
BRPL	2000	51.5%	6.6%
BYPL	2000	63.1%	6.4%
TPDDL	2000	53.0%	5.8%
Gujarat			
Torrent Power Ahmedabad	1996	18.1%*	4.2%
Torrent Power Surat	1996	14.6%*	2.8%
Maharashtra			
AEML	2001	11%*	6%
Odisha			
North	2020	25.3%	14%
South	2020	36.3%	26%
West	2020	28.6%	16%
Central	2020	30.4%	22%
Uttar Pradesh			
NPCL	1993	10.5%	7.5%
West Bengal			
CESC	1897	22.4%	7.0%

Source: I-Sec research; *data from 2005

Exhibit 39: Distribution franchisees

Circles	Year	Winner	Losses at start	Losses now
Bhiwandi	2006	Torrent Power	58%	9.64%
Agra	2009	Torrent Power	42%	9.16%
Bharatpur	2016	CESC	27%	12%
Kota	2016	CESC	30%	14%
Ajmer	2017	Tata Power	17%	8%
Bikaner	2016	CESC	24%	13%
Malegaon	2018	CESC	53%	39%
Shil Kalwa	2018	Torrent Power	53%	30%

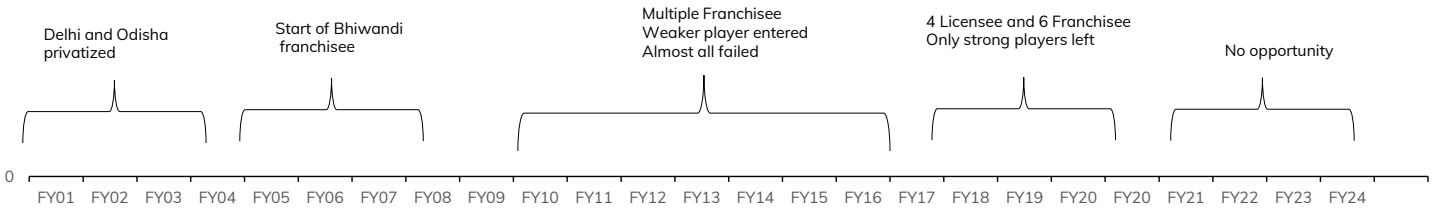
Source: I-Sec research

But Privatization continues to be in slow lane

In May'20, the central government announced the privatization of power departments and utilities in union territories (UTs). These privatized utilities in the UTs are expected to act as a model for the privatization of power distribution at the pan-India level. States have not been forthcoming to privatize leading to low opportunity for private entities

In fact, center has conducted bids for merely two union territories and only one has been transferred to private DISCOMs. Private player market share remains low at

Exhibit 40: Privatization opportunities have dried up in the recent years



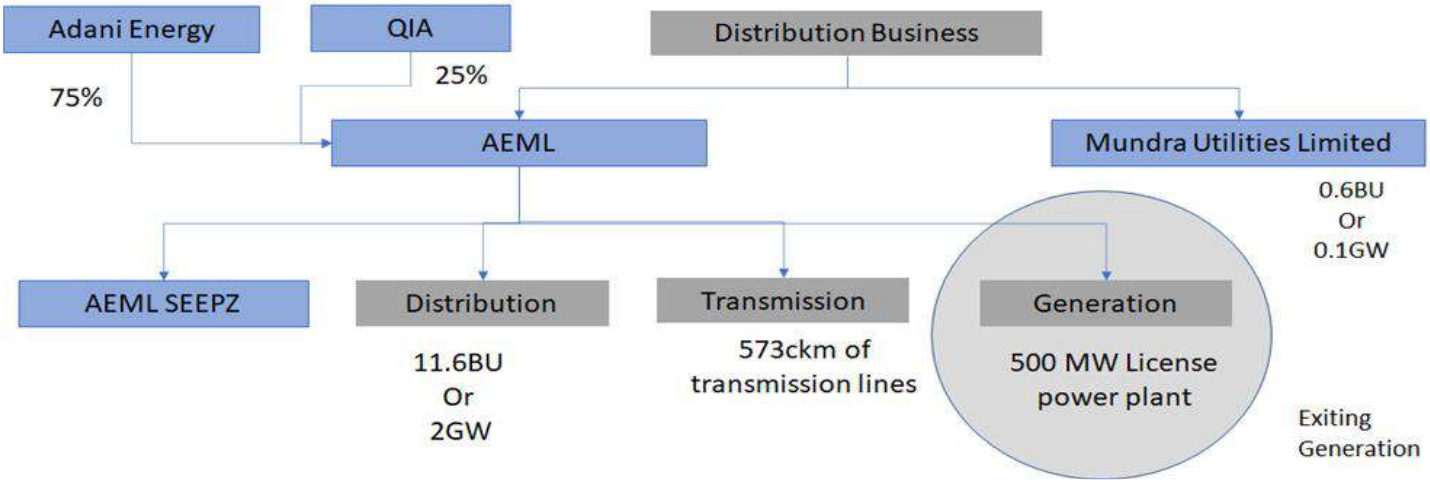
Source: I-Sec research

Adani made an entry through acquisition

- AESL made an entry into distribution licensee business in 2018 through the acquisition of Mumbai DISCOM (from Reliance Infra).
- It sold 25% in Mumbai DISCOM to QIA.
- It is operating one of the largest distribution areas in the country with 11BU of sales.
- It is also operating the second discom at Mundra, a small discom for meeting power requirements in Mundra SEZ.
- It has consistently operated at lower AT&C losses than allowed by the regulator, ensuring higher return than benchmark.

AESL entered into distribution business by acquiring Mumbai DISCOM from Reliance Infra. It has been operating the distribution business for the last six years, though, Mumbai DISCOM's business is almost 100 years old.

Exhibit 41: AESL's distribution assets



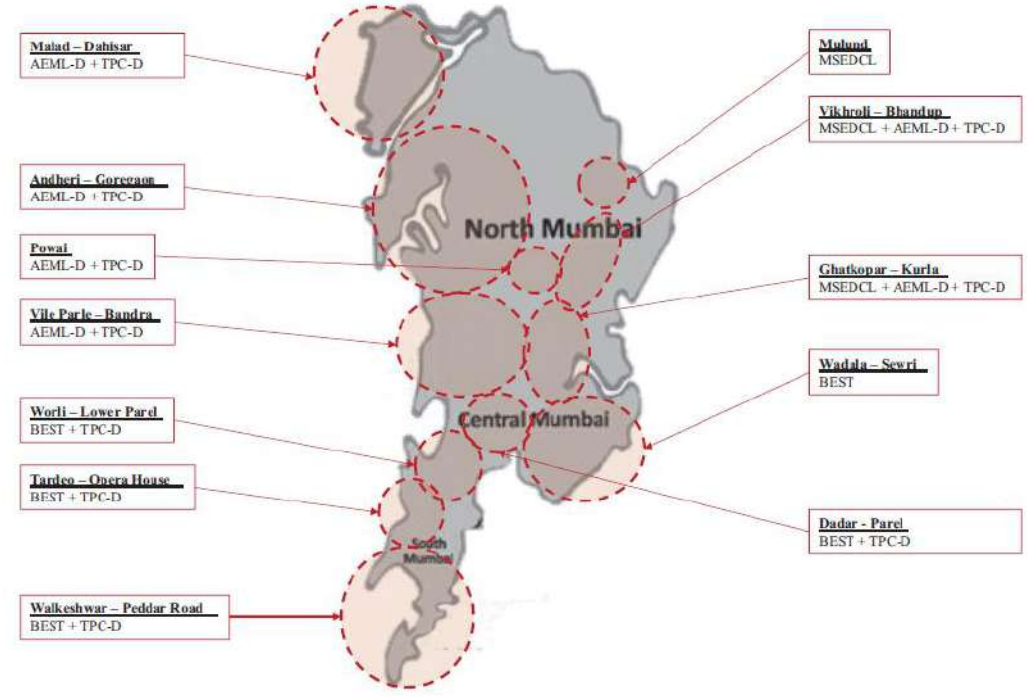
Source: I-Sec research, Company data

Acquisition of Mumbai DISCOM

It acquired Mumbai License area, which includes: a) Distribution licensee in Mumbai suburbs (sale of ~10BU), b) generation of 500MW of assets at Dahanu, and c) transmission assets of 538ckms of 220v and 8EHV substations.

It acquired the assets for INR 133bn with core business being valued at INR 121bn and regulatory assets at INR 12bn. The deal was valued at ~3x of regulated equity. The acquisition was funded by debt of INR 85bn and equity.

Exhibit 42: Mumbai district by discom jurisdiction



Source: Company data

Sold 25% to QIA

Adani Energy sold 25% stake to QIA (Qatar Investment Authority) in AEML at INR32bn (USD450 million, of which approximately USD282m was debt. The debt proceeds were utilized for repayment of existing debt.

Tariff fixation

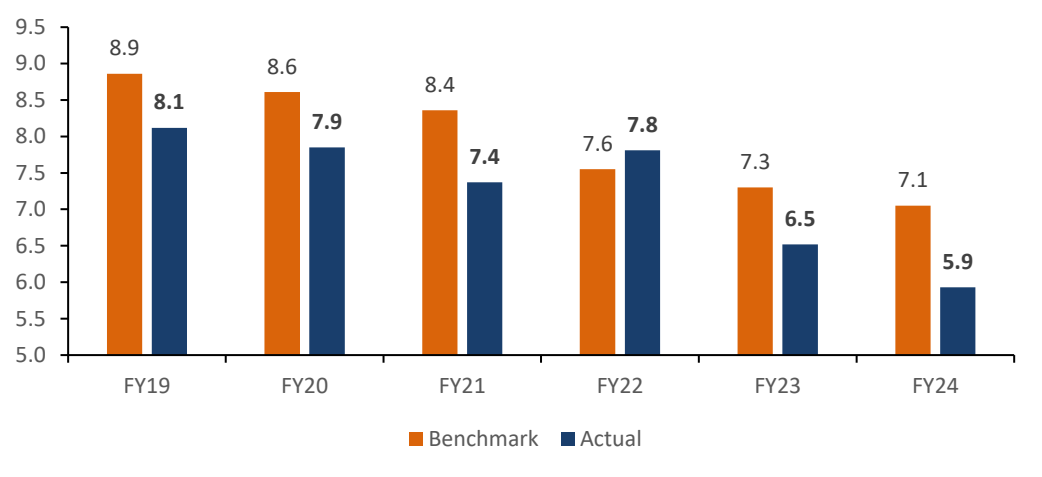
The tariff for fixed return- based projects (i.e. cost-plus) are based on the building blocks on multi-year (five years) reset basis where (i) return on equity is set by the regulator; (ii) norms for capital and operating costs the assets are determined. In addition, power procurement cost is passed through for DISCOMs.

The earnings are determined by AT&C loss benchmark and availability of wires and supply. Base return on equity is 14% for all businesses and return on equity increases to 15.5% on performance (linked to availability).

AT&C losses continue to below benchmark

Distribution losses has continuously below the benchmark. The recovery of fixed cost is linked to achievement of AT&C losses.

Exhibit 43: AT&C losses continue to below benchmark



Source: I-Sec research, Company data

Regulated equity has grown at 9%

Adani Energy has invested at a faster pace in last couple of years in Mumbai DISCOM. The regulated equity has grown at 9% CAGR (vs 4% CAGR from FY14-FY19).

Exhibit 44: Regulated Equity

INR bn	FY19	FY20	FY21	FY22	FY23	FY24	Growth
Regulated equity	33	37	40	43	46	48	8.0%
Regulated debt	24	27	29	32	32	33	6.4%
Regulated Asset Base	57	64	69	75	78	81	7.3%
Regulated equity break-up	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**Growth**
Wire	15.2	17.3	21.0	24.4	25.5	26.1	11%
Supply	0.7	6.2	0.4	-	3.5	6.7	57%
Transmission	4.7	6.0	6.6	5.9	5.0	4.7	0%
Generation	3.3	3.2	1.6	1.6	1.4	1.2	-18%

Source: I-Sec research, Company data

Challenging the status quo through parallel licensing

- Electricity Act 2003 introduced concept of parallel licensee – or additional license in an existing area to create competition.
- However, only one licensee continues to operate in an area as no license was willing to invest huge sum in a large geographical area (existing DISCOM).
- However, with a Supreme Court judgement, the licensee can demarcate smaller areas within an existing licensee.

- Consequently, Adani Energy has applied for parallel licensee in Maharashtra and Gujarat (Mundra taluka) and UP (Gautam Buddh Nagar).
- The clarity is yet to emerge on the proposed parallel licensing as regulators are yet to form the regulatory framework.

The provision of parallel licensing was introduced in the Electricity Act, 2003 to promote competition in power distribution segment and give more options to customers. However, it did not see much success.

Electricity act has parallel licensing provision

Electricity Act 2003 suggests opening up electricity distribution to the private sector. It states: "The appropriate commission may grant a **licence to two or more persons for distribution of electricity** through **their own distribution system** within the same area, subject to the conditions that the applicant for grant of licence.....other conditions or requirements under this Act, comply with the additional requirements (including the capital adequacy, credit-worthiness, or code of conduct) as may be prescribed by the Central Government."

However, the impediments were galore

The requirement of "own distribution system" was a major impediment to growth. The laying of a parallel distribution system in a city already penetrated by an incumbent utility, along with regulatory inertia in terms of granting parallel distribution licences and the capex investments for the entire area, can be a long-drawn process considering right-of-way and return-on-investment issues.

Supreme Court judgement

It was understood unless the area was a minimum of an area comprising a municipal council, municipal corporation or a revenue district, the parallel license cannot be granted by the regulatory commission.

Supreme Court has held that the 'authorized area of supply' specified by the Appropriate Commission 'shall be the minimum area of supply' for a distribution licensee to operate. Consequently, a parallel distribution license can be sought for and granted for any area, without any minimum criteria on the size of the area or the composition of the consumers in the area.

A surge of new applications

Adani Energy has applied for four parallel licenses close to its existing area. It has applied for parallel distribution licenses in Navi Mumbai, Thane, Gautam Buddha Nagar and Mundra subdistrict.

However, clarity is still missing and the process is likely to be very slow

Regulators are grappling with the new understanding of existing law. It is an opportunity to set the framework to mitigate several risks before the grant of license. Given the public interest, regulators are expected to approach this cautiously and a decision on parallel licensee could be delayed. We are not baking in any upside from the grant of parallel licensee.

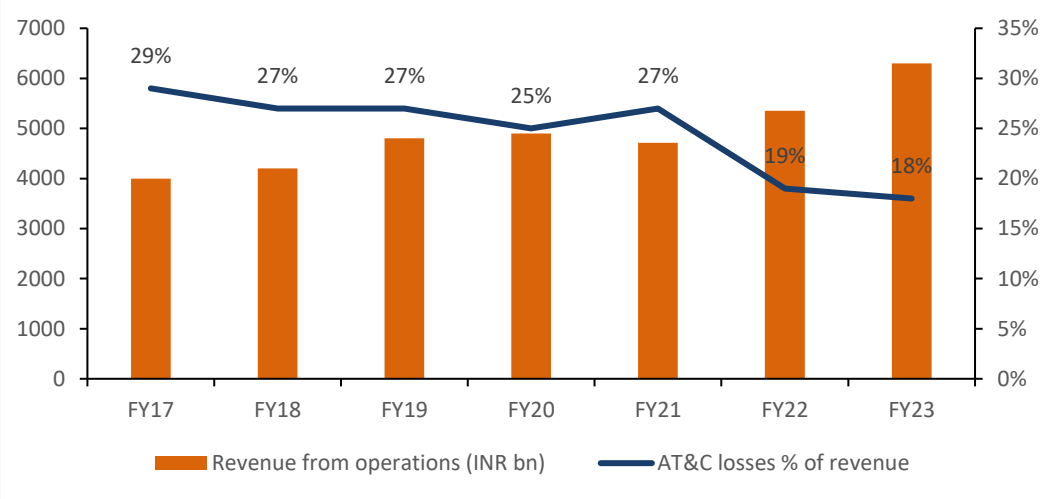
Smart Meters

- **The distribution sector is afflicted with AT&C losses leading to financial losses. The higher losses in discoms have been a concern for past several years.**
- **To reduce the losses of discoms, Indian government has rolled out a plan to install a smart meter in every household by Dec'25.**
- **India has completed bids of 112mn smart meter and has floated bids for another 60m smart meters.**
- **The bids are conducted based on monthly fees. The bidder shall quote the service charge for each meter type for the term of the contract on INR per meter per month basis.**

The need for discom reforms

Indian discoms have been plagued with AT&C losses over the years. AT&C losses have been in the range of 15-45% across states. Implementation of smart meters would be crucial for reducing losses to ~12% as envisaged by government agencies.

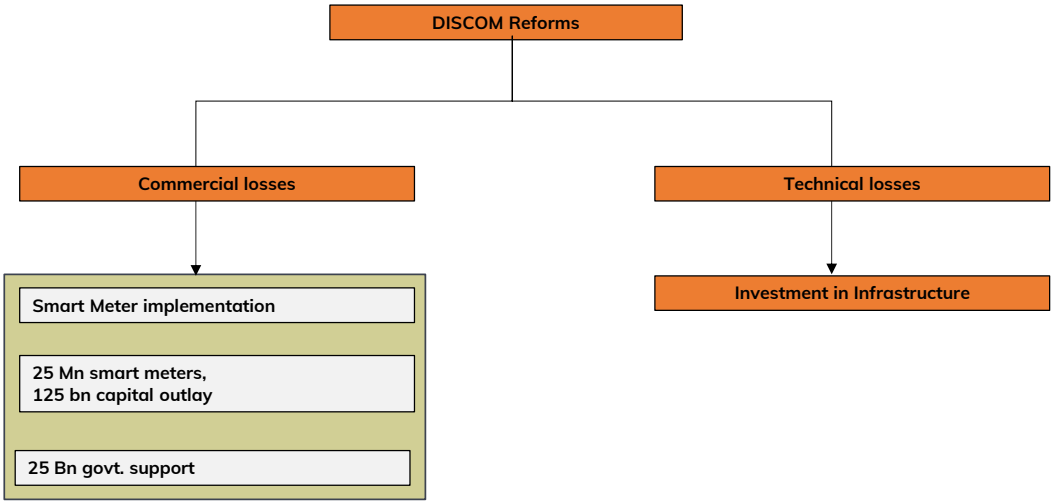
Exhibit 45: AT&C losses



Source: I-Sec research; PFC

The panacea: Discom Reforms

Exhibit 46: Indian DISCOM Reforms



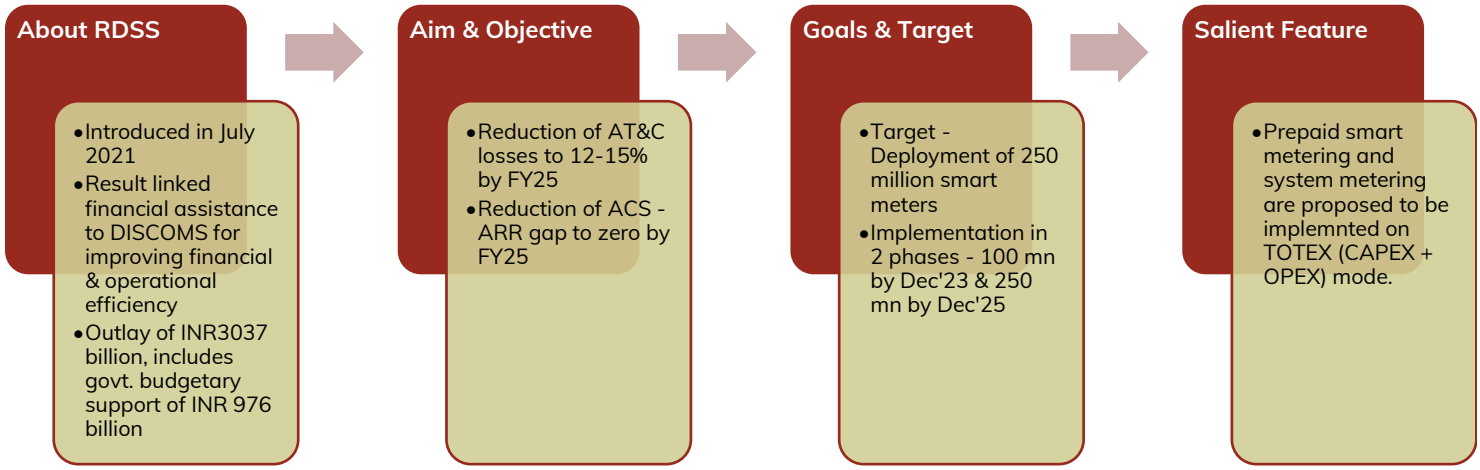
Source: I-Sec research, Company data

With the goal to reduce the losses, the Ministry of Power (MoP) had come up with multiple schemes to promote the installation of smart meters, such as the DeenDayal Upadhyay Gram Jyoti Yojana and Integrated Power Development Scheme.

However, the sector got a major push with the introduction of the Revamped Distribution Sector Scheme (RDSS) at an outlay of INR 3.03trn including gross budgetary support (GBS) of ~ INR 970bn during FY22-FY26.

Smart metering forms an integral part of RDSS. As on Dec 31, '23, MoP had approved INR 1.2trn for loss reduction and INR 1.3trn towards smart metering. GBS for smart metering is estimated at INR 240bn.

Exhibit 47: Discome Reforms: Revamped Distribution Sector Scheme (RDSS)

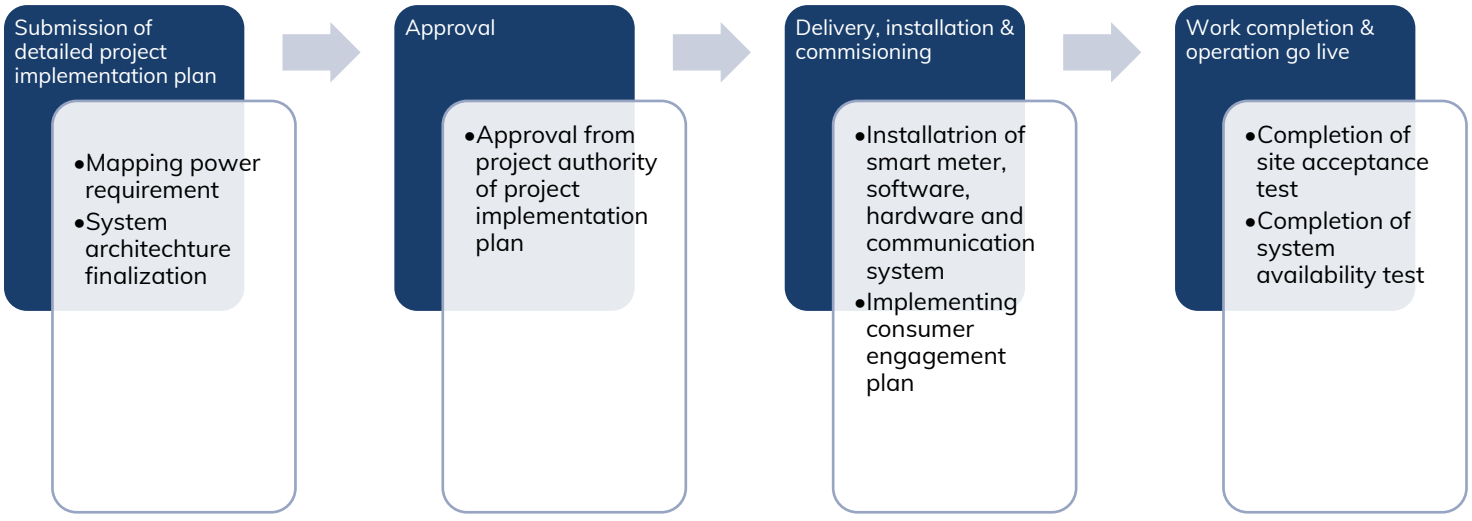


Source: I-Sec research, Ministry of Power

Implementation process for smart meters...

The RDSS facilitates installation of prepaid smart meters for consumers along with associated advance metering infrastructure (AMI) through public-private partnerships.

Exhibit 48: Implementation progress of smart meters



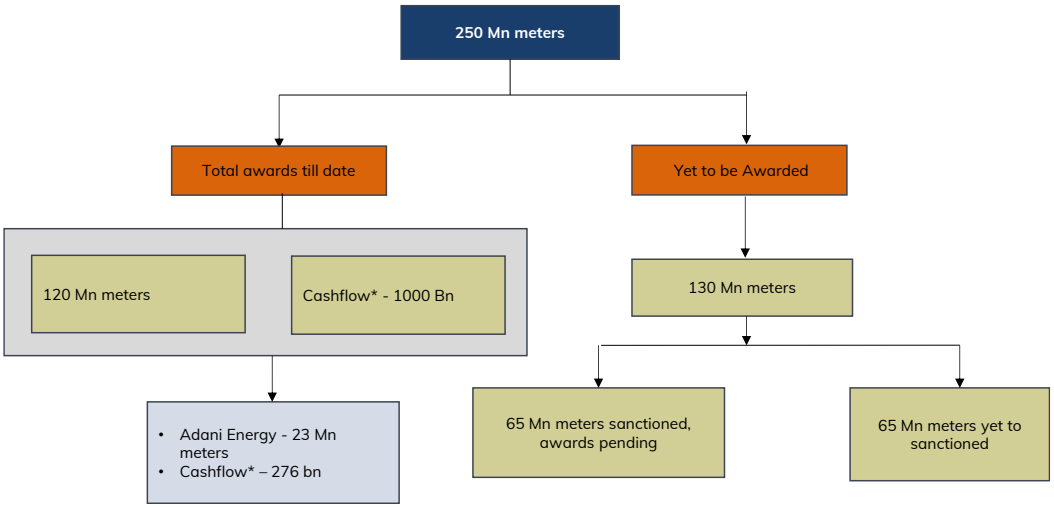
Source: I-Sec research; Ministry of Power

...and the massive roll out

Several states have been plagued with high AT&C losses leading to loss-making discoms as seen in Exhibit 31.

To curb these losses, the discoms have rolled out massive plans to install smart meters across all households.

Exhibit 49: Total addressable market



Source: I-Sec research, Company data, Ministry of Power

Stable cashflow generation

- INR 900 would be received within the first year during implementation and the rest would be received during the 90-month operation period on a monthly basis.
- The equity investment is 15-20% of the total capex (~50% of cashflow over 7.5 years). We expect the smart meter segment to generate a healthy RoE of 25%.

Exhibit 50: Estimated IRR

Particulars (per meter)		Month 9	Month 12	Month 30	Month 31 - 120
Total Bid value	**12000**				
Total Cost		(5958)			
Loan availed	**80%**	4766			
Upfront payment from authority			900		
Monthly payment from authority					11100
O&M expenses					(2496)
Debt repayment	**9% int. cost**				(5708)
Net Cash Flow		(1192)	900	(638)	2895
IRR	**24%**				

Source: I-Sec research

For smart business vertical, the key to generate returns would be a) the tariff at which they bid, b) cost of meter. Hence, these would be key monitorable.

Exhibit 51: Estimated capex per meter

Detailed break up of Capex	INR/unit
Meter	4,553
Meter box cost	388
Meter installation cost	556
Consumer Indexing	100
AMI Software	362
Total Capex Cost	**5,958**
O&M Charges	**896**
- O&M Charges	81
- Software charges	141
- Meter warranty extension charges	380
- Recurring operating GPRS	520
- Cloud hosting charges	5
Staff cost	**655**
Financing cost	**980**
Total cost	**8,489**

Source: I-Sec research

- **Adani Energy has won its fair share in new bids. Its market share in completed bids is close to 22%.**
- **The equity requirement for smart meter is ~15-20% of overall capex. We estimate this as a major catalyst for earnings over the next couple of years for Adani Energy.**
- **We estimate Adani Energy to win another 35-40mn new bids leading to an EBITDA of INR 60bn from smart meters.**

Combining with T&D businesses' synergies and customer insights, Adani Energy is favorably positioned to operate in smart metering projects.

Adani Energy's distribution experience in Mumbai helped it with the knowledge to deploy smart meters in the region.

The company entered the business in FY22. As of Jul'24, AESL has nine contracts totaling 23mn smart meters, representing approximately 20% of India's smart metering market share.

Exhibit 52: Bids won

Sr. No.	Meter Quantity (Mn)	Contract Value (INR bn)	Revenue Per Meter (INR)	Counterparty
1	1.1	13	12071	Mumbai
2	0.8	8	10928	Assam
3	0.8	10	12988	Andhra Package 1
3a	0.3	2	8926	Andhra Package 1
4	1	13	13105	Andhra Package 2
4a	0.7	8	10748	Andhra Package 2
5	1	14	14068	Andhra Package 3
5a	0.3	4	12176	Andhra Package 3
6	6.3	76	11971	Maharashtra Package 1
6a	1.7	21	11970	Maharashtra Package 1
7	5.2	63	11998	Maharashtra Package 2
8	2.8	31	10926	Bihar
9	0.7	8	12453	Uttarakhand
Total	**23**	**272**		

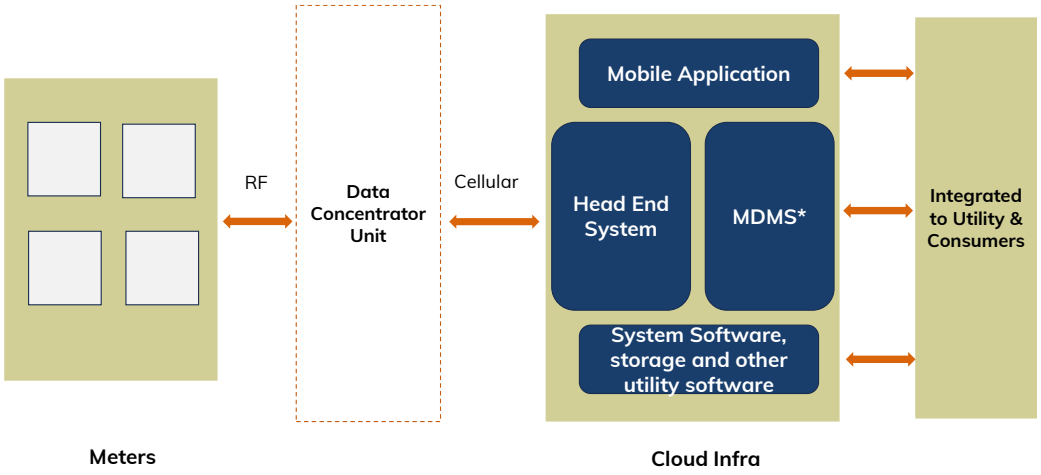
Source: I-Sec research, Company data

Out of total concessions awarded till date, the company has already implemented close to 0.3mn meter in BEST, Assam and Bihar. It has implemented about 0.5mn meters in AEML.

Strategic tie-ups

- Group company, Adani Enterprises, has acquired 49% stake in UAE-based Eysasoft Holdings. This partnership aims to pave the way for development of smart solutions. The company provides a comprehensive cloud infra platform in the smart meter system.
- The company has also executed a tie up for its 20mn meters with Airtel Business, helping deliver reliable and secure connectivity for AESL's all smart meter deployments.

Exhibit 53: Smart metering system



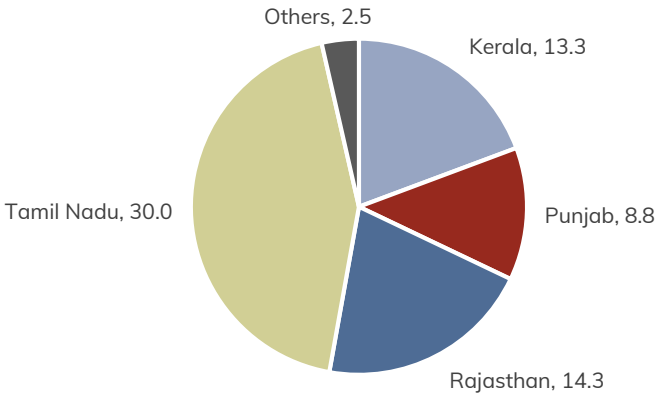
Source: I-Sec research, Company data

Poised to grab new opportunities

As far as the bidding pipeline is concerned, about 120mn meters are yet to be auctioned, with tendering coming from the states such as Telangana, Tamil Nadu, Karnataka, and Madhya Pradesh which are yet to issue a bid for smart meter. Some more states like Uttar Pradesh, Rajasthan, West Bengal have not been covered in their entirety, and we expect bidding for smart meters to be rolled out here as well.

With this opportunity size, we expect AESL to win another 30-35mn meters, leading to a portfolio of 60mn meters.

Exhibit 54: Smart meters have been sanctioned but are yet to be awarded



Source: I-Sec research, NSGM

We expect the company to implement about 0.6mn meter installations in FY25 and from next year, increase the implementation to about 15mn.

Implementation and new bid wins to drive growth

- Adani Energy has won projects at an average tariff of INR 12,000 per meter.
- Cost per meter is expected at INR 5,800. Adani Energy would receive INR 900 within the first year of implementation and the rest would be received during the 90-month operation period on a monthly basis.
- With the expectation of having a portfolio of 60-65mn meters, post 27 months of operational period, we expect smart meter portfolio to generate an EBITDA of ~INR 60bn on a yearly basis.

Incubating new unregulated businesses

- **Cooling as a service**
  - **Cooling as a service involves building and business owners paying for the cooling service instead of investing in the infrastructure that delivers the cooling.**
  - **District cooling will reduce cooling costs because of centralisation of equipment and operations, leading to lower maintenance and operational expenses.**
  - **As per study, total investment required to meet 10% penetration of district cooling system is ~USD 35bn by FY38, in optimistic case. The total benefit is close to 8BU with reduction in peak demand by 6GW.**
  - **Adani Energy is working on some projects with well-known builders' groups in Navi Mumbai and Adani Realty in Ahmedabad for providing cooling as a service.**
- **Energy business for C&I**
  - **Demand prospects for renewable energy capacity in C&I segment will continue to be strong.**
  - **Adani Energy is looking to acquire the inter-state trading license for doing business.**
  - **We are not factoring any upside in our estimates and valuations from these businesses.**

Adani Energy is looking to incubate new businesses to meet cooling and energy demand for large commercial and industrial consumer.

Cooling as a service

Cooling as a service (CaaS) distributes (supplies and collects back) cooling energy in the form of chilled water from a central district cooling plant to multiple buildings through a distribution network of insulated, underground pipes for space and process cooling. Individual users purchase chilled water for their own building from the operator of CaaS and do not have to install their own chillers or cooling towers.

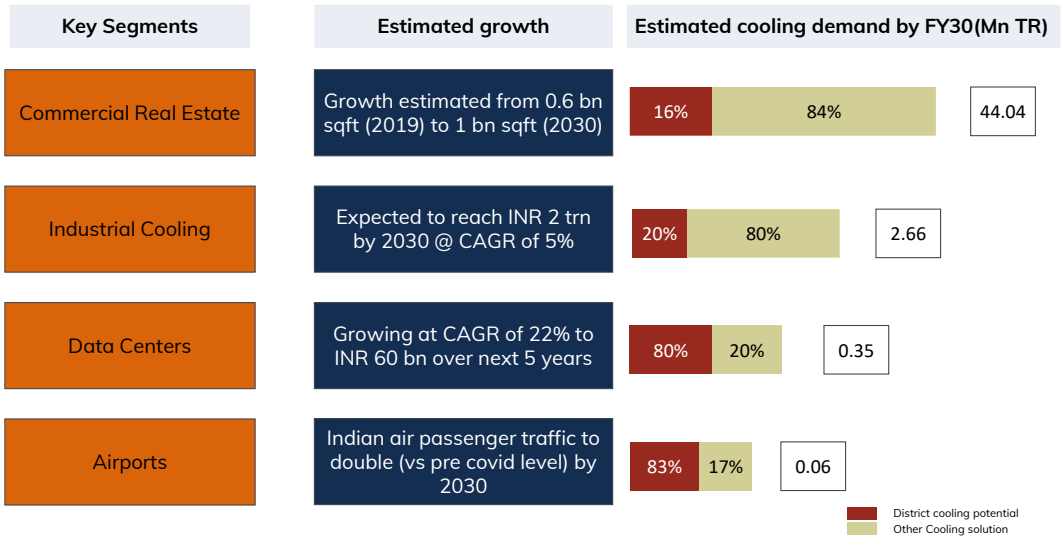
Global experience

CaaS has been a success globally as it delivers significant economic and environmental benefits, principally due to its high efficiency compared to stand-alone cooling systems. Countries like Sweden, UAE, Singapore, China, Colombia, France, Malaysia, and Egypt have started meeting their air conditioning demand with (DCS).

Benefits of cooling as a service

Standalone chiller system with requisite backup leads to higher capacities and associated costs. District cooling reduces 25-30% primary energy consumption and leads to lifecycle savings of 25-30%.

Exhibit 55: The opportunity size



Source: I-Sec research, Company data

Potential to leverage synergies

With the presence of group companies in diverse sectors across airports, data centres, SEZs, residential townships, opportunities are present to unlock the potential by providing cooling services.

The company is working on some projects with well-known builder groups in Navi Mumbai and Adani Realty in Ahmedabad providing CaaS.

Adani Energy will offer DCS under Cooling as a Service (CaaS) model with end-to-end integration responsibility (DBFOT). Integrated power solution with tailormade sourcing from grid, wholesale or captive sources. Cashflow may be generated through tariff recovery for capacity and consumption charge.

Commercial and industrial energy solutions

Adani Energy is looking to expand its footprint further in commercial and industrial energy solutions (C&I solutions) business; however, we expect revenue from this segment by FY30E. The C&I solution business refers to a range of energy-related products and services tailored specifically for commercial and industrial consumers which typically have large-scale energy needs and seek far more efficient, cost-effective and sustainable ways to manage their energy consumption.

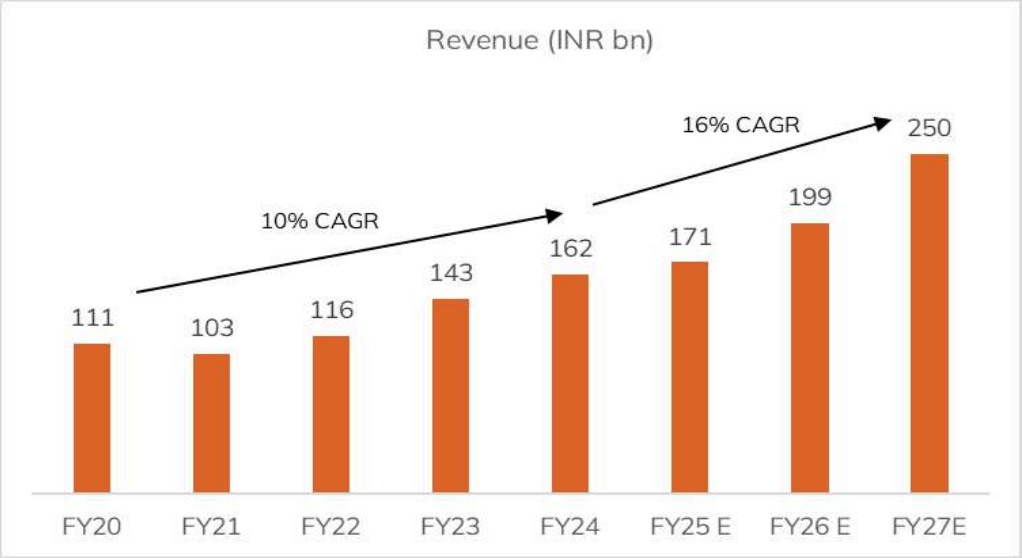
The demand prospects for renewable energy capacity in C&I segment continues to be strong, considering the tariff competitiveness and increasing sustainability initiatives to meet their energy requirements through renewables.

We estimate C&I segment to account for 40-45% share in Indian energy demand.

Financial Analysis – new wins to boost operating earnings

Execution of existing awards and new wins to boost revenue

Exhibit 1: Revenue projection for FY25-27E

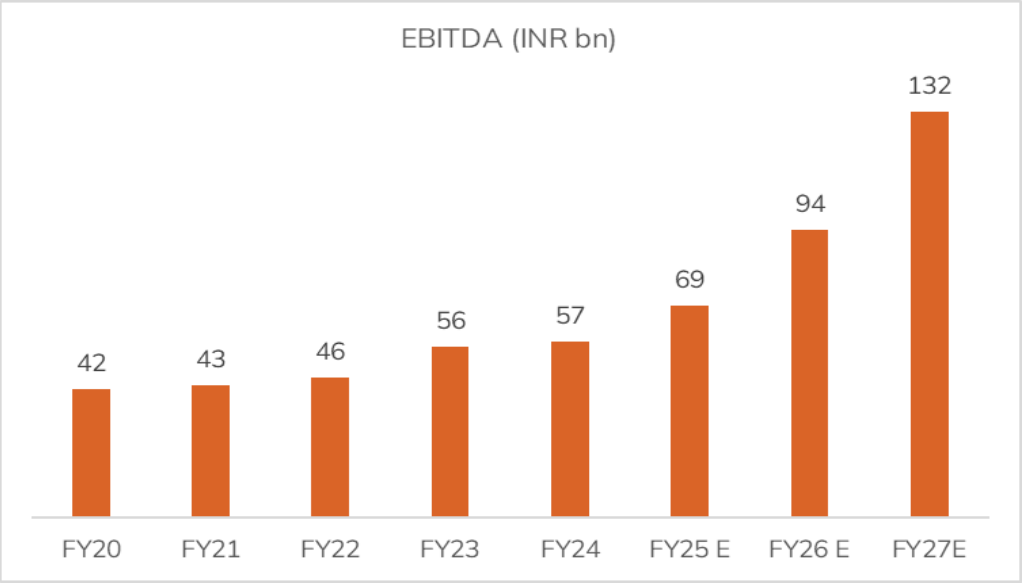


Source: I-Sec research

- On the back of execution of new project wins, the revenue is estimated to grow at 16% CAGR to INR 250bn in FY27E from INR162bn in FY24.

Increase in EBITDA powered by implementation of transmission and smart metering businesses

Exhibit 2: EBITDA



Source: I-Sec research

Exhibit 3: Segment-wise EBITDA contribution (INR mn)

EBITDA contribution	FY25E	FY26E	FY27E
Transmission	**39,148**	**49,782**	**61,083**
Existing	31,619	39,803	48,020
Under Construction	7,529	9,979	13,063
Distribution	**25,636**	**27,285**	**31,128**
Smart Meter	4,080	16,830	40,170
Total	**68,864**	**93,897**	**1,32,381**

Source: I-Sec research, Company data

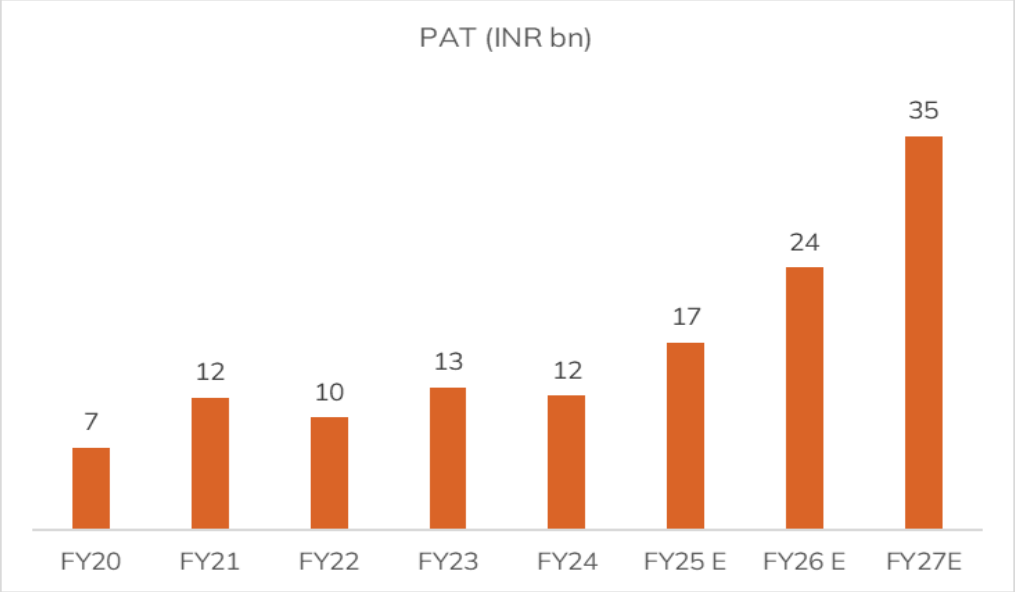
Exhibit 4: Estimated smart meter installations (no. mn)

	FY25	FY26	FY27
Estimated Installations	0.6	1.8	1.8
Cumulative meters	0.6	2.4	4.2

Source: I-Sec research, Company data

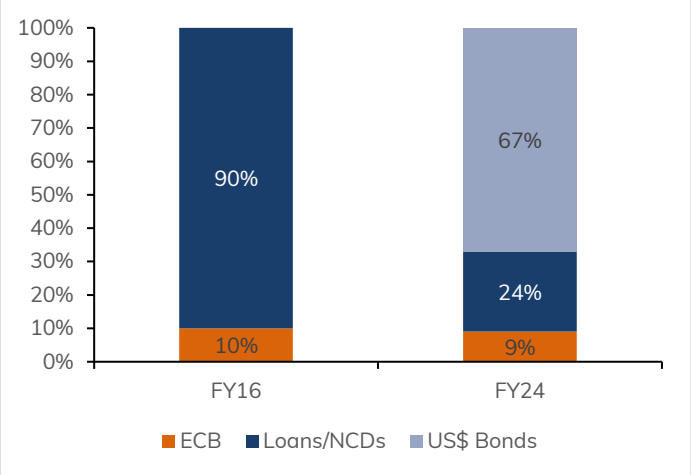
On the back of implementation of new projects won from transmission and smart meter, EBITDA is estimated to grow to INR 132bn in FY27E from INR 57bn in FY24.

Exhibit 5: PAT



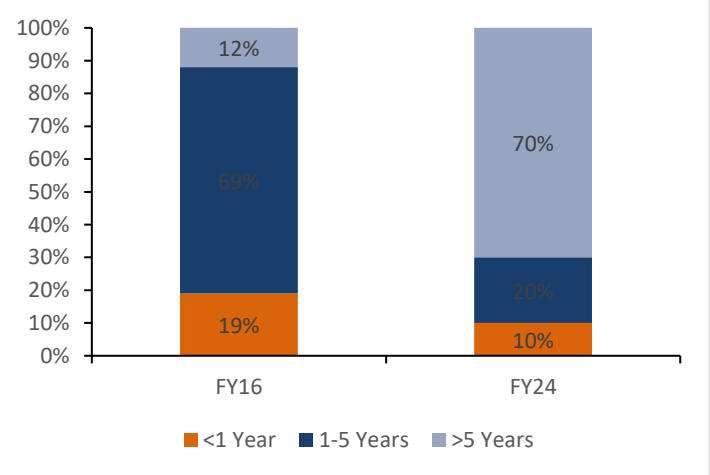
Source: I-Sec research, Company data

Exhibit 6: Debt sourcing profile



Source: I-Sec research, Company data

Exhibit 7: Debt maturity profile



Source: I-Sec research, Company data

Valuation and outlook

Adani Energy Solutions Limited is not only the second largest transmission player in the country with >40% market share in bids (Source: CEA) but also is the second largest player in smart meter bids. Note that both the segments are seeing favorable tailwinds. As a result, we estimate EBITDA is set to rise from INR 58bn in FY24 to INR 132bn in FY27E. The strong increase is on the back of a) INR ~30bn from new transmission bids b) +INR ~40bn from smart meter, c) + INR ~5bn from distribution areas. The stock is trading at 12xEV/EBITDA which we believe is comfortable given the strong growth in operating profits. We recommend BUY on the stock while valuing the businesses on SoTP-basis with target price of INR 1,318 per share.

Exhibit 8: SoTP-based valuation of INR 1,318

Transmission	Metrics (INR bn)	Valuation	Value (INR)	Outlook
Regulated	**Regulated equity**	**Multiple of regulated equity**		
Operating	38	3x	114	
Under construction	21	3x	63	Likely to be operational by mid FY26
New Wins expected	0			
Sub - total			177	
Bid based	**Locked in EBITDA***	**EV to EBITDA Multiples**		**High growth expected**
Operating	20	15x	300	
Under construction	10	15x	150	
New Wins expected	30	15x	450	Expect in FY25E
Debt			-360	
Sub - total			540	
Distribution	**Regulated equity**	**Multiple of regulated equity**		
Mumbai DISCOM	64	3x	192	
Mundra Utilities	3	3x	9	
Sub - total			201	
Smart meter	**Locked in EBITDA***	**EV to EBITDA Multiples**		**High growth expected**
Existing	31	12x	372	
New Wins expected	35	12x	420	Expect new wins of 25m in FY25E
Sub - total	66		792	
Debt			248	
Total Value			545	
Value			**1,583**	
Cash			120	Cash in the books (incl QIP)
Number of shares			1,201	
Total Value			**1,318**	

Source: I-Sec research; *Locked in EBITDA – Fully tied up EBITDA of the asset

Exhibit 9: Peer valuation

Companies	Price (INR)	Market Cap (INR trn)	P/E (x)			EV / EBITDA (x)		
			FY25E	FY26E	FY27E	FY25E	FY26E	FY27E
NTPC	437	4.32	22	19	17	11	10	9
Power Grid	354	3.29	22	19	16	10	9	9
Tata Power	486	1.55	46	32	24	16	15	13
JSW Energy	740	1.29	71	48	31	19	17	15
CESC	200	0.03	16	14	13	10	10	9
Adani Energy	**1013**	**1.25**	**98**	**78**	**55**	**23**	**19**	**14**
IEX	206	0.18	54	43	31	41	31	25
Torrent Power	1908	0.92	48	30	23	17	16	14
NHPC	95.3	0.96	24	19	17	21	15	11
SJVN	134	0.53	42	30	25	19	12	9
NLC	289	0.40	20	16	13	17	14	12

Source: Bloomberg,I-Sec research; Prices as on 27th Sep 2024;

Global peers

Exhibit 10: Global comps

Companies	Currency	Price	Market Cap (USD mn)	P/E		E/V EBITDA	
				CY24E	CY25E	CY24E	CY25E
NextEra Energy, Inc.	USD	84.54	1,73,730	24.8	23.5	15.9	14.3
Enel SpA	EUR	7.21	81,824	10.8	10.8	6.7	6.6
Iberdrola SA	EUR	13.72	97,411	16.3	15.9	9.6	9.5
Duke Energy Corporation	USD	115.97	89,413	19.4	18.3	12.6	11.9

Source: Bloomberg, I-Sec research

Key risks

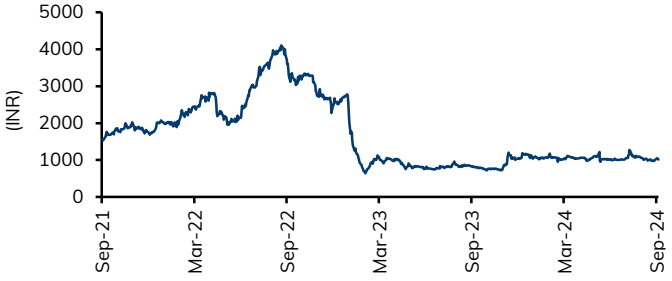
- **Lower projects awarded than expectation** – If there are lesser number of projects awarded in T&D and smart meters segment than what we estimate, this could translate to lower earnings growth in the next couple of years. The delay could also come from factors such as shortage of transmission equipment as is the case currently at global level.
- **High competitive intensity** – Centre, state and private players have all been part of the T&D and smart meter business verticals, with the former having greater market share. Historically, AESL has been bidding for assets that would generate higher returns than peers. This strategy could lead AESL to underbid which can result in lower revenue growth.
- **Counterparty risk:** It arises from the exposure to state utilities of Maharashtra, Rajasthan, Uttar Pradesh and Madhya Pradesh for transmission projects (including under construction projects). The credit profile of these utilities remains moderate to weak owing to the delays in issuing tariff orders, weak operating efficiencies and inadequate tariffs in relation to the cost of supply. While there has been a demonstrated payment track record for AESL's transmission business, timely payments under smart meter business are yet to be demonstrated.
- **Implementation risk:** AESL has 19 under-construction projects including ten transmission and nine smart meter projects.
    - **Transmission:** The company must get relevant clearances pertaining to land, right-of-way, no-objection certificates from relevant government authorities, liaise with various stakeholders, and tackle on-ground issues to ensure timely completion of projects. Further, these projects also remain exposed to risks such as input cost escalation or change in scope.
    - **Smart meters:** Implementation and operation of smart meters have a limited track record in India and the company may be exposed to risks such as unavailability of site or other on-ground compliance issues. Although contracts have the provision to de-scope meters and allied infrastructure, which is not implemented on account of such reasons, working of the business model is yet to be ascertained.
- **Refinancing and FX risks on dollar-bond issuance:** AESL's debt comprises a mix of NCDs, term loans and bonds with maturities varying from three to 30 years. A major refinancing requirement will arise in FY27 when bullet payment for its earlier bond issuance (USD 500mn issued in FY17) will be due. Further, AESL is exposed to forex risk as a significant proportion of the company's total debt at a consolidated level is in the form of forex bonds.

Exhibit 11: Shareholding pattern

%	Mar'24	Jun'24	Aug'24
Promoters	73.2	74.9	69.6
Institutional investors	21.3	19.4	24.5
MFs and others	0.1	0.3	1.4
FIs/Banks	0.0	0.0	0.0
Insurance	3.7	3.7	3.5
FIIs	17.5	15.4	19.6
Others	5.5	5.7	5.9

Source: Bloomberg

Exhibit 12: Price chart



Source: Bloomberg

Financial Summary

Exhibit 13: Profit & Loss

(INR mn, year ending March)

	FY24A	FY25E	FY26E	FY27E
Net Sales	1,61,526	1,70,544	1,99,264	2,50,120
Operating Expenses	-	-	-	-
EBITDA	57,164	68,865	93,897	1,32,381
EBITDA Margin (%)	**35.4**	**40.4**	**47.1**	**52.9**
Depreciation & Amortization	17,761	21,857	31,226	45,065
EBIT	39,403	47,008	62,671	87,317
Interest expenditure	27,665	31,905	39,104	48,901
Other Non-operating Income	6,110	7,510	7,865	8,009
Recurring PBT	17,847	22,612	31,432	46,425
Profit / (Loss) from Associates	-	-	-	-
Less: Taxes	**5,801**	**5,816**	**7,823**	**10,979**
PAT	12,046	16,796	23,608	35,446
Less: Minority Interest	(583)	(1,186)	(1,407)	(1,563)
Extraordinaries (Net)	-	-	-	-
Net Income (Reported)	11,463	15,611	22,201	33,884
Net Income (Adjusted)	**11,463**	**15,611**	**22,201**	**33,884**

Source Company data, I-Sec research

Exhibit 14: Balance sheet

(INR mn, year ending March)

	FY24A	FY25E	FY26E	FY27E
Total Current Assets	1,06,762	1,26,366	1,32,435	1,41,332
of which cash & cash eqv.	29,946	36,946	38,794	40,733
Total Current Liabilities & Provisions	45,787	33,787	82,660	99,005
Net Current Assets	**60,975**	**92,579**	**49,775**	**42,327**
Investments	-	-	-	-
Net Fixed Assets	4,11,393	4,72,492	6,96,510	8,96,393
ROU Assets	-	-	-	-
Capital Work-in-Progress	7,831	10,964	10,415	9,895
Total Intangible Assets	-	-	-	-
Other assets	27,529	41,293	41,706	42,123
Deferred Tax Assets	-	-	-	-
Total Assets	**5,07,728**	**6,17,327**	**7,98,406**	**9,90,737**
Liabilities				
Borrowings	**3,70,697**	**4,07,357**	**5,65,597**	**7,23,242**
Deferred Tax Liability	-	-	-	-
provisions	-	-	-	-
other Liabilities	(265)	(200)	(200)	(200)
Equity Share Capital	11,155	12,013	12,013	12,013
Reserves & Surplus	1,15,261	1,86,871	2,09,072	2,42,956
Total Net Worth	**1,26,416**	**1,98,884**	**2,21,085**	**2,54,969**
Minority Interest	10,881	11,287	11,924	12,727
Total Liabilities	**5,07,728**	**6,17,327**	**7,98,406**	**9,90,737**

Source Company data, I-Sec research

Exhibit 15: Cashflow statement

(INR mn, year ending March)

	FY24A	FY25E	FY26E	FY27E
Operating Cashflow	**31,253**	**12,863**	**98,079**	**88,336**
Working Capital Changes	2,029	(24,604)	44,652	9,388
Capital Commitments	(48,529)	(86,087)	(2,54,696)	(2,44,427)
Free Cashflow	**79,782**	**98,950**	**3,52,775**	**3,32,763**
Other investing cashflow	-	-	-	-
Cashflow from Investing Activities	(48,529)	(86,087)	(2,54,696)	(2,44,427)
Issue of Share Capital	153	57,264	637	803
Interest Cost	-	-	-	-
Inc (Dec) in Borrowings	27,996	36,660	1,58,240	1,57,645
Dividend paid	-	-	-	-
Others	(11,664)	(13,699)	(413)	(417)
Cash flow from Financing Activities	16,485	80,225	1,58,464	1,58,031
Chg. in Cash & Bank balance	**(792)**	**7,000**	**1,847**	**1,940**
Closing cash & balance	29,946	36,946	38,794	40,733

Source Company data, I-Sec research

Exhibit 16: Key ratios

(Year ending March)

	FY24A	FY25E	FY26E	FY27E
Per Share Data (INR)				
Reported EPS	10.3	13.0	18.5	28.2
Adjusted EPS (Diluted)	10.3	13.0	18.5	28.2
Cash EPS	26.2	31.2	44.5	65.7
Dividend per share (DPS)	-	-	-	-
Book Value per share (BV)	113.3	165.6	184.0	212.2
Dividend Payout (%)	-	-	-	-
Growth (%)				
Net Sales	12.7	5.6	16.8	25.5
EBITDA	2.9	20.5	36.3	41.0
EPS (INR)	(12.2)	26.5	42.2	52.6
Valuation Ratios (x)				
P/E	98.3	77.7	54.7	35.8
P/CEPS	-	-	-	-
P/BV	8.9	6.1	5.5	4.8
EV / EBITDA	25.7	23.0	18.5	14.3
P / Sales	7.0	7.1	6.1	4.9
Dividend Yield (%)	-	-	-	-
Operating Ratios				
Gross Profit Margins (%)	35.4	40.4	47.1	52.9
EBITDA Margins (%)	35.4	40.4	47.1	52.9
Effective Tax Rate (%)	32.5	25.7	24.9	23.6
Net Profit Margins (%)	7.5	9.8	11.8	14.2
NWC / Total Assets (%)	6.1	9.0	1.4	0.2
Net Debt / Equity (x)	2.7	1.9	2.4	2.7
Net Debt / EBITDA (x)	6.0	5.4	5.6	5.2
Profitability Ratios				
RoCE (%)	6.3	7.2	7.5	8.1
RoE (%)	8.7	9.0	10.0	13.5
RoIC (%)	6.3	7.2	7.5	8.1
Fixed Asset Turnover (x)	0.4	0.4	0.3	0.3
Inventory Turnover Days	6	8	8	6
Receivables Days	37	46	48	50
Payables Days	41	24	117	122

Source Company data, I-Sec research

Annexure

Exhibit 17: Key management personnel

Name	Designation	Details
Mr. Anil Sardana	Managing Director	Anil Sardana is the Managing Director of ASEL. He was the executive director on the Board of Tata Power. He has more than 40 years of experience in infrastructure space, particularly in energy and telecom sectors, having managed complex transitions, developments and operations as well as EPC assignments. He had also worked at NTPC for 14 years and BSES for 7 years prior to joining Tata Group where he spent 18 years.
Mr. Kandarp Patel	Chief Executive Officer	Kandarp Patel, Chief Executive Officer of the company, brings with him over two decades of multi-faceted experience in the areas of power trading, fuel management, legal and regulatory and commercial aspects of the power business. He joined Adani Enterprises in 2004 and led its power trading business. From 2009, he led the business development for Adani Power and mandated the execution of PPA for 1000+ MW.
Mr. Kunjal Mehta	Chief Financial Officer	Mr. Kunjal Mehta is a qualified Chartered Accountant and Cost Accountant with over 24 years of work experience across various sectors, such as power, steel, ports and logistics, technology & ITES sectors. In his previous positions, he has worked with Adani Electricity, Adani Ports & SEZ and Essar Steel. His expertise lies in the domains of finance resource mobilisation, working capital management, financial planning & analysis, auditing & budgetary controls, compliance and risk management functions of business.

Source: Company data

Exhibit 18: Adani Energy smart meter wins

Sr. No.	Meter Quantity (Mn)	Project Capex (INR bn)	Contract Value (INR bn)	Revenue Per Meter (INR '000)	Counterparty
1	1.1	6	13	12071	BEST - Mumbai
2	0.8	4	8	10928	APDCL - Assam
3	0.8	5	10	12988	APEPDCL, Andhra
3a	0.3		2	8926	APEPDCL, Andhra
4	1.0	6	13	13105	APCPDCL, Andhra
4a	0.7		8	10748	APCPDCL, Andhra
5	1.0	8	14	14068	APSPDCL, Andhra
5a	0.3		4	12176	APSPDCL, Andhra
6	6.3	47	76	11971	MSEDCL, Maharashtra
6a	1.7		21	11970	MSEDCL, Maharashtra
7	5.2	31	63	11998	MSEDCL, Maharashtra
8	2.8	17	31	10926	NBPDCL, Bihar
9	0.7	4	8	12453	UPCL, Uttarakhand
Total	**23**	**127**	**272**		

Source: I-Sec research, Company data

Exhibit 19: Transmission asset details

Transmission Assets	Bid Project Cost (INR bn)	Route Length (ckt km)	Levelised Tariff (INR)	Residual Life (Years)
TBCB Assets				
Aravali Transmission Service Company LTD. (ATSCL)	1	97	22	25
Maru Transmission Service Company LTD. (MTSCL)	3	300	36	25
Western Transmission (Gujarat) LTD. (WTGL)	6	974	50	26
Western Transco Power LTD. (WTPL)	10	2089	92	26
Adani Transmission Bikaner Sikar Pvt Ltd (ATBSPL)	2	343	31	28
Sipat Transmission Limited (STL)	5	348	93	30
Raipur Rajnandgaon-Warora Trans. Ltd (RRWTL)	12	611	182	30
Chhattisgarh-WR Transmission Limited (CWRTL)	9	434	168	30
Adani Transmission (Rajasthan) Limited (ATRL)	1	278	22	29
Hadoti Power Transmission Limited (PPP 8)	2	116	47	30
Barmer Power Transmission Limited (PPP 9)	1	133	38	30
Thar Power Transmission Limited (PPP 10)	1	164	34	30
Alipurduar Transmission Ltd.	11	650	150	31
Fatehgarh Bhadla Transmission Limited (FBTL)	6	292	72	32
Bikaner Khetri Transmission Limited (BKTL)	9	481	129	32
Ghatampur Transmission Limited (GTL)	16	897	258	32
Obra- C Badaun Transmission Limited (OBTL)	7	630	110	33
Lakadia Banaskantha Transco Limited (LBTL)	9	351	100	33
WRSS XXI(A) Transco Limited [WRSS-XXI(A)]	11	295	122	33
Jam Khambaliya Transco Limited (JKTL)	3	37	44	33
Warora Kurnool Transmission Ltd. (WKTL)	39	1756	410	34
Karur Transmission Ltd. (KTL)	2	9	22	34
Kharghar Vikroli Transmission Limited (KVTL)	12	74	288	34
Khavda Bhuj Transmission Ltd. (KBTL)	11	217	127	35
Total - Operational	**189**	**11576**		
North Karanpura Transco Limited (NKTL)		83		
MP Package 2**		1056		
Sangod Transmission Service Ltd (STSL)		0.4		
Khavda Phase-II, Part-A		50		
North Karanpura Transco Limited (NKTL)	10	221	56	35
MP Package 2**	14	31	133	35
WR-SR (Narendra-Pune)	21	630	213	35
Khavda Phase-II, Part-A	13	305	119	35
KPS - 1 (Khavda Pooling Station)	9	42	86	35
Sangod Transmission Service Ltd (STSL)	2	15	18	35
Khavda Phase-III Part-A (Halvad)	28	560	271	35
Khavda Phase IV Part A	41	596	509	35
Total - Under construction	**136**	**2400**		
Total - TBCB	**325**	**13975**		
Cost Plus				
Maha Eastern Grid Power Tran. Co. Ltd (MEGPTCL)	59	1217	-	26
Adani Transmission India Limited (ATIL)	51	3834	-	23
Adani Transmission Step-Two Limited (ATSTL)	19	673	0	29
Total - Operational	129	5724		
KPS - 1 (Khavda Pooling Station) Augmentation	2	-	-	35
KPS-1 Augmentation RTM (MIL)	0.3	-	-	35
Khavda Bhuj (KBTL RTM)- 412 Bay	0.1	-	-	35
Lakadia 765/400kV S/S along with 220kV line bays	1	-	-	35
NGR bypass in Warora-Warangal 765kV lines	0.0	-	-	35
Augmentation of Karur PS 2x500 MVA	1	-	-	35
Augmentation at PPP- 8, 9 & 10 GSS	0.7	-	-	35
Upgradtion of 400kV Mahendragarh Station	0.2	-	-	35
OPGW 400KV Parli-Pune line	0.0	-	-	35
Total - Under Construction	**6**			
Total- Cost Plus	**135**	**5724**		
HVDC Line	**70**	**80**		
Total - TBCB + Cost Plus +HVDC	**530**	**19779**		

Source: I-Sec research

Exhibit 20: Snapshot of AT&C losses and PAT losses by discoms in FY23 (state-wise)

Code	State	Net Input Energy (BU)	Net Energy Sold (BU)	Billing Efficiency (%)	Collection Efficiency (%)	AT&C Loss (%)	PAT (INR mn)
A&N	Andaman & Nicobar Islands	0	0	82%	98%	20%	(760)
AnP	Andhra Pradesh	69	64	93%	99%	8%	17,360
ArP	Arunachal Pradesh	1	1	56%	86%	52%	-
AS	Assam	11	9	84%	100%	16%	(8,000)
BR	Bihar	36	29	81%	93%	25%	1,810
CH	Chandigarh						
CG	Chhattisgarh	35	29	84%	100%	16%	(11,330)
DL	Delhi	1	1	89%	100%	11%	(1,390)
GA	Goa	4	4	99%	89%	12%	690
GU	Gujarat	114	103	90%	99%	11%	1,470
HR	Haryana	59	53	89%	99%	12%	9,750
HP	Himachal Pradesh	12	11	89%	100%	11%	(14,370)
JK	Jammu & Kashmir						
JH	Jharkhand	13	9	70%	100%	30%	(36,200)
KA	Karnataka	70	62	89%	97%	14%	(31,460)
KL	Kerala	27	25	93%	100%	7%	(10,220)
LK	Ladakh	0	0	70%	100%	30%	(570)
LD	Lakshadweep						
MP	Madhya Pradesh	85	68	79%	100%	21%	(26,830)
MH	Maharashtra	152	130	85%	95%	19%	(62,890)
MN	Manipur	1	1	86%	100%	14%	(1,290)
MA	Meghalaya	2	2	88%	86%	24%	(1,930)
MI	Mizoram	1	0	74%	100%	26%	(1,580)
NG	Nagaland	1	0	57%	95%	46%	330
PU	Puducherry	3	3	89%	93%	17%	(1,290)
PB	Punjab	66	59	89%	100%	11%	(47,760)
RJ	Rajasthan	94	79	85%	99%	16%	(25,140)
SK	Sikkim	1	0	74%	86%	37%	710
TN	Tamil Nadu	97	88	91%	99%	10%	(91,920)
TA	Telangana	72	66	92%	89%	19%	(1,11,030)
TR	Tripura	2	1	75%	95%	28%	(2,840)
UT	Uttar Pradesh	130	108	83%	93%	22%	(1,55,120)
UK	Uttarakhand	16	13	86%	99%	15%	(12,240)
WB	West Bengal	45	37	83%	99%	17%	210
	State Sector	**1,221**	**1,058**	**87%**	**97%**	**16%**	**(6,23,860)**
DNDD	Dadra & Nagar Haveli and Daman & Diu	10	10	98%	98%	4%	1,040
DL	Delhi	32	30	93%	100%	7%	20,960
GU	Gujarat	12	12	96%	100%	4%	6,270
MH	Maharashtra	10	9	94%	100%	6%	10,780
OD	Odisha	34	27	80%	98%	22%	2,530
UP	Uttar Pradesh	3	3	92%	99%	8%	1,610
WB	West Bengal	12	11	93%	99%	8%	8,440
	Private Sector	**113**	**102**	**90%**	**99%**	**11%**	**51,630**
	Grand Total	**1,333**	**1,160**	**87%**	**97%**	**15%**	**(5,72,230)**

Source: I-Sec research, PFC

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