

# Adani Energy Solutions Ltd

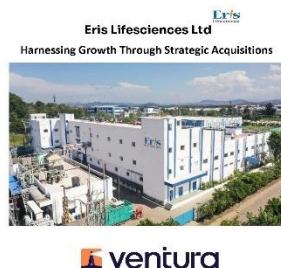
**Becoming a one-stop-solution provider in power sector**



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## Our recent initiating coverage reports



**Religare Ent**

**Eris Lifescience**

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**Tracxn**

BUY @ CMP INR 1,064

Target: INR 1,600 in 24 months

Upside Potential: 50.4%

## Becoming a one-stop-solution provider in power sector

The power transmission & distribution (T&D) sector in India is set for expansion, supported by favorable policy environments, substantial capacity enhancements, and increased openings for private sector involvement via tariff-based competitive bidding (TBCB). Adani Energy Solutions Ltd (AESL) stands out as the premier private T&D entity, managing 20,422 circuit kilometers (ckm) of transmission lines and 54,600 MVA of power transformation capacity. The company has set a goal to establish 30,000 ckm of transmission lines by 2030, capitalizing on both organic & inorganic growth prospects. We value AESL at 17X EV/EBITDA and recommend BUY with a target price of INR 1,600, which represents an upside potential of 50.4% from the CMP of INR 1,064. Our optimism stems from the following:

### Power Transmission – Strong industry tailwinds and leading position in private TBCB sector offers significant revenue growth

AESL is India's leading private sector power transmission company with over 35% market share in TBCB based private power transmission assets. With its superior execution and O&M skills, AESL has demonstrated high 'total availability factor' of 99.7%, best in class EBITDA margins of more than 91% and capital management excellence. As of Jan 2024, the company had 37 transmission assets (28 operational & 9 under-construction). These assets have a weighted average lifespan of 33 years and generate fixed/ROA based annual tariffs, offering long term visibility for revenue and cash flows.

Government's push to double the power generation & transmission infrastructure along with the replacement of older low KVA lines with higher KVA lines ensures strong growth visibility for AESL's power transmission business. The Indian government is expected to open bidding for INR 10 trillion worth of power transmission lines in the next 10 years. Out of this, 50% is expected to be allocated to private companies through TBCB route. As a result, over FY23-27E, we expect the company's power transmission revenues and EBITDA to grow at a CAGR of 18.7% and 19.7% to INR 7,822 cr and INR 6,649 cr respectively.

### Key consolidated financial data (INR Cr, unless specified)

	Net Revenue	Operational EBITDA	Adj Net Profit	EBITDA (%)	Net (%)	Adj EPS (₹)	BVPS (₹)	RoE (%)	RoIC (%)	P/E (X)	EV/EBITDA (X)
FY23	13,293	5,553	1,252	41.8	9.4	11.2	114.4	10.7	9.2	94.8	27.0
FY24E	15,726	5,703	788	36.3	5.0	7.1	121.5	6.3	9.0	144.0	26.0
FY25E	19,380	8,266	2,269	42.7	11.7	20.3	141.8	15.4	10.8	52.2	19.1
FY26E	24,824	11,648	3,738	46.9	15.1	33.5	175.3	20.3	12.7	31.7	14.5
FY27E	28,350	13,731	4,509	48.4	15.9	40.4	215.7	19.6	13.1	26.2	12.7

### Industry Power T&D

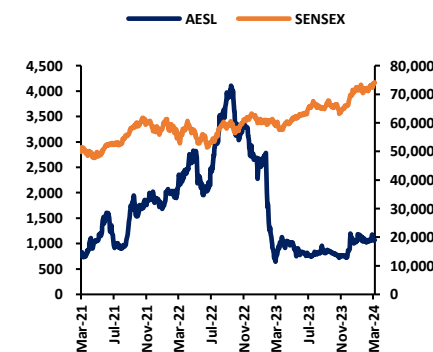
#### Scrip Details

Face Value (INR)	10.0
Market Cap (INR Cr)	1,18,688
Price (INR)	1,064
No of Sh O/S (Cr)	111.55
3M Avg Vol (000)	170.6
52W H/L (INR)	1,250/686
Dividend Yield (%)	0.00

### Shareholding (%) Dec 2023

Promoter	73.2
Institution	21.3
Public	5.5
<b>TOTAL</b>	<b>100.0</b>

### Price Chart



## **Power Distribution – Rising power consumption in Mumbai and growth in industrial power demand in Mundra ensure strong revenue visibility**

**AESL has power distribution licenses for Mumbai (Adani Mumbai Electricity Ltd – AEML) and Mundra (Mundra Utility Ltd – MUL):**

- **AEML's connections grew from 3.03 mn in FY19 to 3.16 mn in 9MFY24, with the annual consumption per household rising from 1,987 KWH to 2,895 KWH. The growth in the population, along with their enhanced use of white goods, mobile phones, and electronic devices, coupled with an increase in industrial production, has boosted both the number of household connections and power consumption in Mumbai. This trend of growth for AEML is expected to continue in the upcoming years.**
- **The new distribution geography of MUL in Mundra Port & SEZ region is a significant growth opportunity given the substantial investment commitments from various companies (including Adani Enterprises Ltd) in the areas of cement, steel, copper, aluminium, PVC, green hydrogen and wind turbine & solar manufacturing, etc.**

**Power distribution is a capex led model and generates a fixed annual RoE (15.5% for AEML and 14.0% for MUL). Citing increased offtake of power, AEML has committed an annual capex of ~INR 1,200 cr, which is to be incurred over FY24–27E to build a future ready infrastructure for power distribution. Over FY23–27E, we expect the company's power distribution revenues and EBITDA to grow at a CAGR of 15.4% and 14.9% to INR 15,245 cr and INR 3,659 cr respectively.**

**AESL is also exploring several areas in the power distribution segment and have applied for licenses in several geographies like Navi Mumbai in Maharashtra, Greater Noida (Gautam Buddha Nagar) in Uttar Pradesh, and Mundra subdistrict (excluding MUL's existing area) in Gujarat. But we have not factored in the growth and revenue prospects from these areas.**

## **Smart Meters – Fast emerging business segment is showing promising development and growth**

**The fast-emerging business segment of smart meters in India is showing promising development and is expected to significantly contribute to the company's revenue in the upcoming years. Till 31<sup>st</sup> Dec 2023, AESL has secured a letter of award (LOA) for 21.1 mn smart meters, with a total contract value of INR 251 bn and the contract period for each contract is 120 months. Given the untapped market potential of 135 mn smart meters, aligned with the government's target of 250 mn by 2026, we expect a significant revenue contribution of INR 3,898 cr from the smart metering segment by FY27E.**

**By utilizing smart meters, the company is able to observe and forecast electricity usage trends across small geographic areas, thereby enhancing its management of retail distribution. The integration of the IoT throughout its infrastructure enables the company to collect real-time data and perform predictive maintenance as required.**

## District cooling – A new extension in the power management vertical

AESL is entering into a new business vertical of district cooling. This system produces chilled water in a central plant and distributes cooling capacity in the form of chilled water from the central plant to multiple buildings through a network of underground pipes for use in space and process cooling. For this entire system, the company will undertake the full capex of the cooling system. For the real estate developer this will lower their project cost and for the end user, their cooling cost will come down by 20-25%.

However, this business is currently in the pilot phase and has not yet begun generating commercial revenue. As a result, we have not included the financials of this sector in our projections.

## Consolidated financial performance

During FY19-23, AESL's revenue/ EBITDA/ net earnings grew at a CAGR of 16.1%/ 19.1%/ 22.3% to INR 13,293 cr/ INR 5,553 cr/ INR 1,252 cr respectively, while EBITDA and net margins improved by 397bps to 41.8% and 177bps to 9.4% respectively. Transmission revenue grew at a CAGR of 15.8% to INR 3945 cr, while distribution revenue grew at a CAGR of 19.1% to INR 8,592 cr. Transmission line length increased from 13,562 ckm in FY19 to 19,779 ckm in FY23, while transformation capacity improved from 30,280 MVA to 46,001 MVA over the same period.

During 9MFY24, the company's revenue and EBITDA grew at a YoY rate of 19.8% to INR 11,901 cr and 2.6% to INR 4,090 cr respectively, while net earnings declined at a YoY rate of 10.2% to INR 778 cr. EBITDA and net margins declined by 574bps to 34.4% and 219bps to 6.5% respectively. Higher operating expenses related to newly commissioned projects impacted profitability. We believe that it's a one time impact and the profitability will normalize.

Over FY23-27E, the company's revenue/ EBITDA/ net earnings are expected to grow at a CAGR of 20.8%/ 25.8%/ 37.9% to INR 28,350 cr/ INR 13,904 cr/ INR 4,524 cr respectively, while EBITDA and net margins are expected to improve by 727bps to 49.0% and 654bps to 16.0% respectively. Transmission revenue is expected to grow at a CAGR of 18.7% to INR 7,822 cr, while distribution revenue is expected to grow at a CAGR of 15.4% to INR 15,245 cr by FY27E. We are expecting a new revenue of INR 3,898 cr from the smart meter segment by FY27E.



## AESL's segmentwise performance and forecast

Fig in INR cr, unless specified	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E	FY26E	FY27E	FY28E	FY29E	FY30E
<b>Power transmission</b>												
Operational transmission network length (ckm)	10,504	10,938	11,588	13,258	14,570	16,548	18,131	18,279	19,446	21,816	25,541	30,747
Under-construction transmission network length (ckm)	3,071	3,496	5,275	4,807	4,489	3,152	2,849	3,029	3,389	3,989	4,889	6,149
Total transmission network length (ckm)	13,575	14,434	16,863	18,065	19,059	19,700	20,979	21,308	22,835	25,805	30,430	36,895
<i>Total - Asset base per ckm</i>	<i>1.5</i>	<i>2.2</i>	<i>2.2</i>	<i>2.2</i>	<i>2.2</i>	<i>2.4</i>	<i>2.3</i>	<i>2.4</i>	<i>2.5</i>	<i>2.6</i>	<i>2.7</i>	<i>2.8</i>
Power transformation capacity (MVA)	20,280	28,280	30,905	40,001	46,001	54,661	60,309	63,384	70,209	81,921	99,647	124,510
<i>Transformation capacity to network length ratio (X)</i>	<i>1.5</i>	<i>2.0</i>	<i>1.8</i>	<i>2.2</i>	<i>2.4</i>	<i>2.8</i>	<i>2.9</i>	<i>3.0</i>	<i>3.1</i>	<i>3.2</i>	<i>3.3</i>	<i>3.4</i>
<i>Average system availability (%)</i>	<i>99.84</i>	<i>99.76</i>	<i>99.87</i>	<i>99.70</i>	<i>99.67</i>	<i>99.70</i>	<i>99.80</i>	<i>99.80</i>	<i>99.80</i>	<i>99.80</i>	<i>99.80</i>	<i>99.80</i>
Operational asset base (INR bn)	156	164	175	207	233	287	332	353	395	465	570	717
Under-construction asset base (INR bn)	43	154	188	182	193	178	142	151	169	199	244	307
Total asset base (INR bn)	199	318	363	390	426	465	475	505	565	665	815	1,025
<i>YoY Growth (%)</i>		<i>59.7</i>	<i>14.1</i>	<i>7.4</i>	<i>9.2</i>	<i>9.2</i>	<i>2.2</i>	<i>6.3</i>	<i>11.9</i>	<i>17.7</i>	<i>22.6</i>	<i>25.8</i>
Revenue	2,193	2,815	3,122	3,469	3,945	4,365	5,268	7,461	7,822	8,217	8,818	9,655
<i>YoY Growth (%)</i>		<i>28.4</i>	<i>10.9</i>	<i>11.1</i>	<i>13.7</i>	<i>10.6</i>	<i>20.7</i>	<i>41.6</i>	<i>4.8</i>	<i>5.0</i>	<i>7.3</i>	<i>9.5</i>
EBIT	1,348	1,873	2,192	2,429	2,607	2,685	3,424	4,849	5,084	5,341	5,732	6,276
<i>EBIT Margin (%)</i>	<i>61.5</i>	<i>66.5</i>	<i>70.2</i>	<i>70.0</i>	<i>66.1</i>	<i>61.5</i>	<i>65.0</i>	<i>65.0</i>	<i>65.0</i>	<i>65.0</i>	<i>65.0</i>	<i>65.0</i>
<i>EBIT as % of asset base (%)</i>	<i>6.8</i>	<i>5.9</i>	<i>6.0</i>	<i>6.2</i>	<i>6.1</i>	<i>5.8</i>	<i>7.2</i>	<i>9.6</i>	<i>9.0</i>	<i>8.0</i>	<i>7.0</i>	<i>6.1</i>
Capex	0	0	0	0	0	4,500	4,500	4,500	3,750	5,000	6,250	7,500
Debt	11,810	15,418	16,094	18,965	18,442	23,192	25,116	33,136	33,256	33,963	35,230	37,029
<i>Debt to EBIT (X)</i>	<i>8.8</i>	<i>8.2</i>	<i>7.3</i>	<i>7.8</i>	<i>7.1</i>	<i>8.6</i>	<i>7.3</i>	<i>6.8</i>	<i>6.5</i>	<i>6.4</i>	<i>6.1</i>	<i>5.9</i>
<i>Debt as % of asset base (%)</i>	<i>59.3</i>	<i>48.5</i>	<i>44.4</i>	<i>48.7</i>	<i>43.3</i>	<i>49.9</i>	<i>52.9</i>	<i>65.6</i>	<i>58.9</i>	<i>51.1</i>	<i>43.2</i>	<i>36.1</i>
<b>Power distribution</b>												
Asset base	56	56	56	70	75	170	196	221	245	269	295	323
<i>YoY Growth (%)</i>		<i>0.0</i>	<i>0.0</i>	<i>24.1</i>	<i>8.5</i>	<i>126.0</i>	<i>15.3</i>	<i>12.7</i>	<i>10.5</i>	<i>10.0</i>	<i>9.6</i>	<i>9.3</i>
Revenue	4,270	7,676	6,048	6,966	8,592	10,366	12,086	13,646	15,245	17,470	20,316	22,309
<i>YoY Growth (%)</i>		<i>79.8</i>	<i>(21.2)</i>	<i>15.2</i>	<i>23.3</i>	<i>20.6</i>	<i>16.6</i>	<i>12.9</i>	<i>11.7</i>	<i>14.6</i>	<i>16.3</i>	<i>9.8</i>
EBIT	624	1,206	1,012	1,032	1,338	1,251	1,870	2,091	2,315	2,643	3,062	3,358
<i>EBIT Margin (%)</i>	<i>14.6</i>	<i>15.7</i>	<i>16.7</i>	<i>14.8</i>	<i>15.6</i>	<i>12.1</i>	<i>15.5</i>	<i>15.3</i>	<i>15.2</i>	<i>15.1</i>	<i>15.1</i>	<i>15.1</i>
Capex	544	1,291	1,188	1,227	1,141	2,000	2,600	2,500	2,324	2,457	2,597	2,746
Debt	7,902	10,151	10,545	11,865	12,889	13,010	13,484	13,815	13,953	14,119	14,314	14,541
<i>Debt to EBIT (X)</i>	<i>12.7</i>	<i>8.4</i>	<i>10.4</i>	<i>11.5</i>	<i>9.6</i>	<i>10.4</i>	<i>7.2</i>	<i>6.6</i>	<i>6.0</i>	<i>5.3</i>	<i>4.7</i>	<i>4.3</i>
<i>Debt as % of asset base (%)</i>	<i>141.1</i>	<i>181.3</i>	<i>188.3</i>	<i>170.7</i>	<i>170.9</i>	<i>76.3</i>	<i>68.7</i>	<i>62.4</i>	<i>57.0</i>	<i>52.4</i>	<i>48.5</i>	<i>45.1</i>
<b>Smart meters</b>												
Number of smart meters (000)						4,078	9,859	10,622	11,074	10,000	10,000	10,000
<i>YoY Growth (%)</i>							<i>141.8</i>	<i>7.7</i>	<i>4.3</i>	<i>(9.7)</i>	<i>0.0</i>	<i>0.0</i>
Revenue						41	985	2,450	3,898	5,246	6,672	8,097
<i>YoY Growth (%)</i>							<i>2,302.5</i>	<i>148.8</i>	<i>59.1</i>	<i>34.6</i>	<i>27.2</i>	<i>21.4</i>
EBIT						35	837	2,083	3,314	4,459	5,671	6,883
<i>EBIT Margin (%)</i>							<i>85.0</i>	<i>85.0</i>	<i>85.0</i>	<i>85.0</i>	<i>85.0</i>	<i>85.0</i>
Capex						1,318	5,337	7,004	5,167	6,000	6,000	6,000
Debt						922	4,543	8,863	11,285	13,838	15,866	17,369
<i>Debt to EBIT (X)</i>							<i>26.5</i>	<i>5.4</i>	<i>4.3</i>	<i>3.4</i>	<i>3.1</i>	<i>2.8</i>

Source: Company Reports & Ventura Research

## Valuation

AESL has established itself as a key player in the power T&D sector. The government's push for greater private sector participation in the rapidly expanding power T&D market places AESL in a favorable position, thanks to its unparalleled project execution capabilities, superior capital management, and robust engagement in the private bidding arena.

The concern over growth funding is minimized, as the company's total debt is less than the value of the critical assets acquired through government-led bidding processes. AESL has an asset base in the power T&D sector worth INR 63,600 cr, with its total consolidated debt standing at INR 35,963 crore (comprising INR

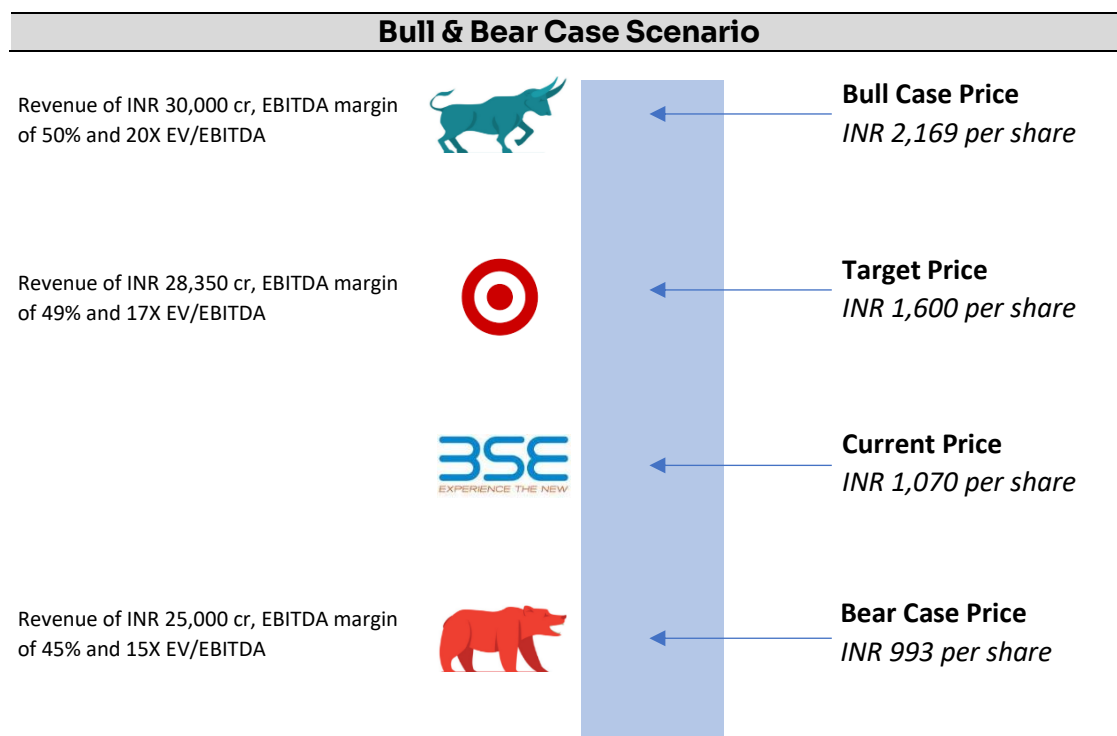
33,577 cr in long-term debt and INR 2,386 cr in short-term debt), amounting to 56.6% of its asset base. This proportion significantly mitigates the risk of default and provides a margin of safety.

Our outlook on AESL remains bullish, and we are reinstating our BUY recommendation with a price target of INR 1,600 (valued at 17X FY27 EV/EBITDA), indicating a potential upside of 50.4% from the current market price of INR 1,064.

## Our Bull and Bear Case Scenarios

We have prepared likely Bull and Bear case scenarios for FY27 price, based on revenue growth, EBITDA margins and EV/EBITDA multiples.

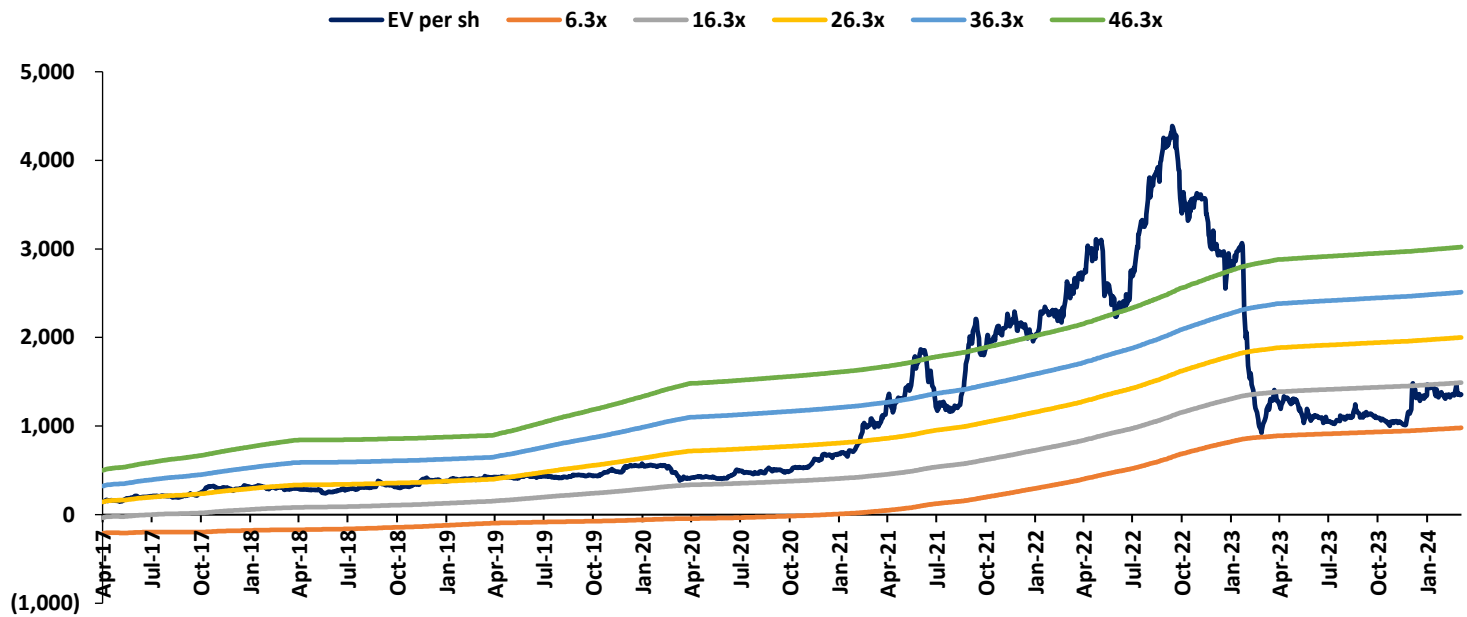
- **Bull Case:** We have assumed revenue of INR 30,000 cr and EBITDA margin of 50% at EV/EBITDA of 20X, which will result in a Bull Case price target of INR 2,169 per share (an upside of 103.9% from CMP).
- **Bear Case:** We have assumed revenue of INR 25,000 cr and EBITDA margin of 45% at EV/EBITDA of 15X, which will result in a Bear Case price target of INR 993 per share (a downside of 6.7% from CMP).



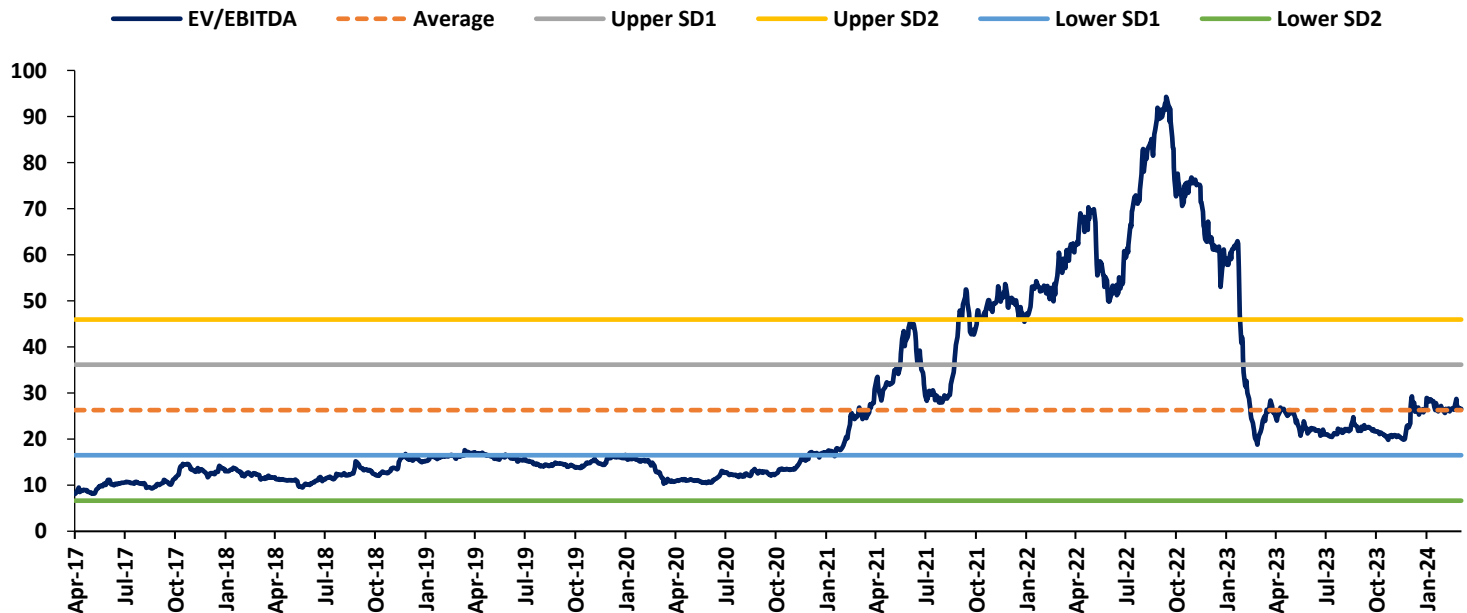
Source: BSE & Ventura Research

Strong growth outlook, improving profitability and healthy balance sheet could re-rate valuation

1 year forward EV/EBITDA



1 year forward EV/EBITDA and its Standard Deviation



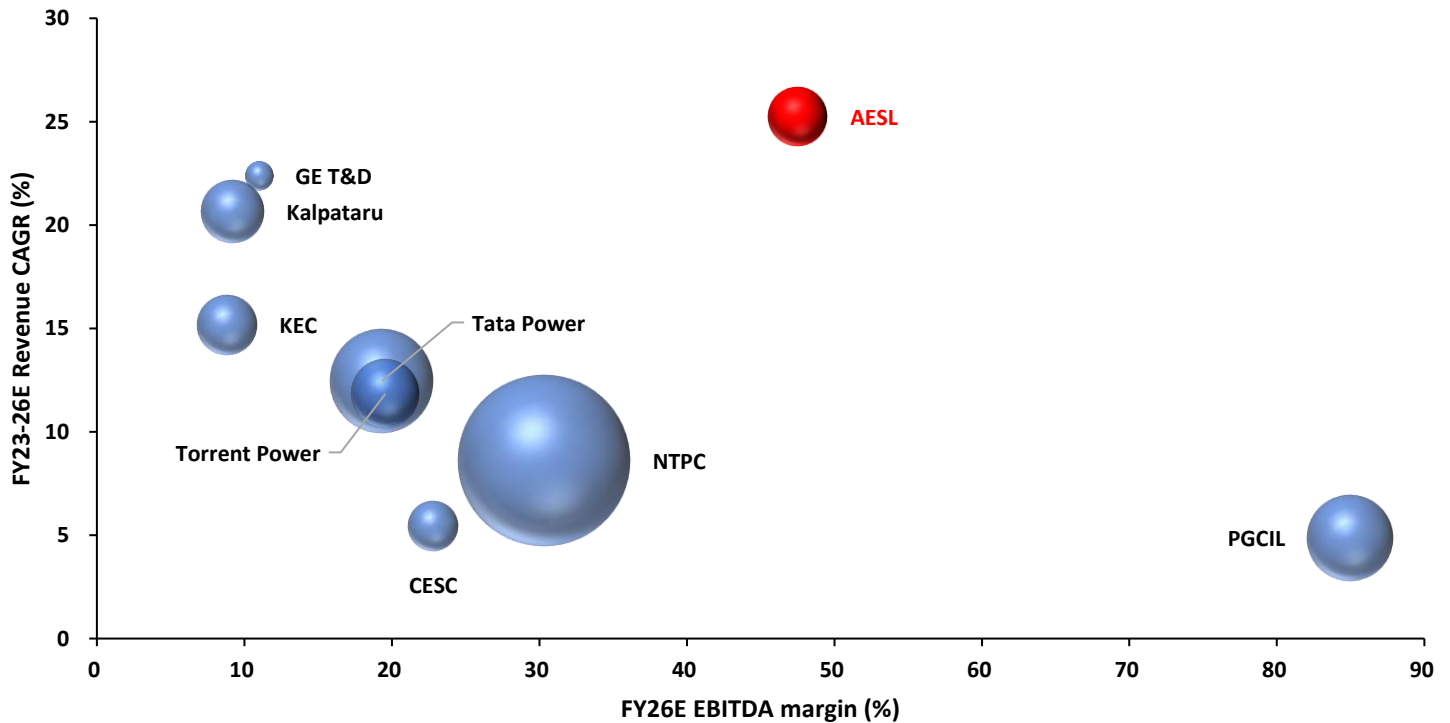
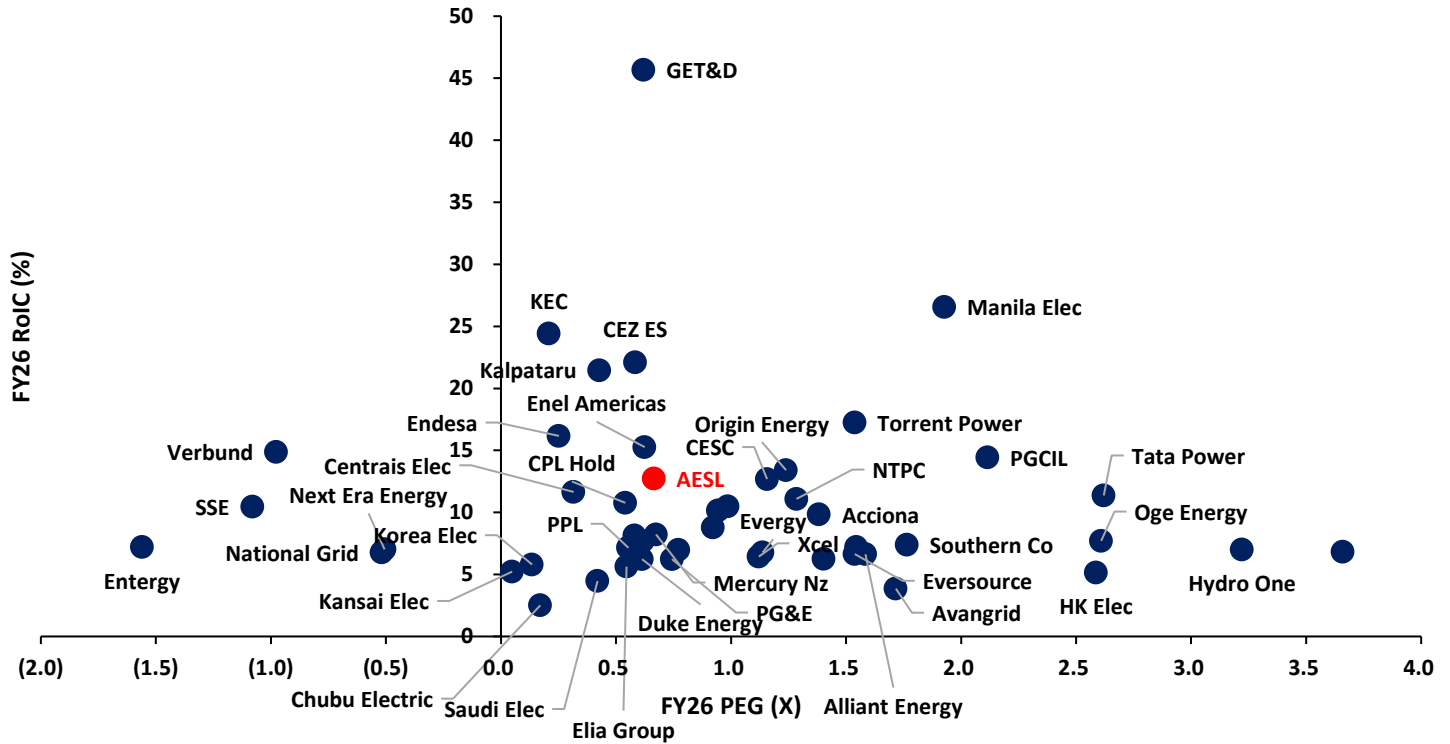
Source: Ventura Research



## Valuation and comparable metrics of domestic and global companies

Company Name	Mkt Cap	Price	PEG 2026	P/E (X)			P/B (X)			EV/EBITDA (X)			RoE (%)			RoIC (%)			Sales			EBITDA Margin (%)			Net Margin (%)		
				2024	2025	2026	2024	2025	2026	2024	2025	2026	2024	2025	2026	2024	2025	2026	2024	2025	2026	2024	2025	2026	2024	2025	2026
Domestic Peers (Fig in INR cr, unless specified)																											
Adani Energy Solutions Ltd	118,633	1,064	0.7	144.0	52.2	31.7	8.7	7.5	6.1	26.0	19.1	14.5	6.6	15.4	20.2	9.0	10.8	12.7	15,726	19,380	24,824	36.9	43.3	47.5	5.2	11.7	15.1
Power Grid Corp of India Ltd	265,579	286	2.1	16.7	15.9	15.0	2.8	2.9	2.7	9.2	8.7	8.4	17.0	18.2	18.2	13.6	14.4	14.4	46,517	49,679	51,876	88.2	86.0	85.0	34.2	33.5	34.1
GE T&D Ltd	25,089	980	0.6	163.6	88.9	62.9	21.1	17.9	14.6	88.2	59.4	41.6	12.9	20.1	23.2	20.3	24.7	45.7	3,118	4,175	5,361	9.1	10.2	11.0	4.9	6.8	7.4
Tata Power Co Ltd	132,015	413	2.6	35.7	30.6	26.8	4.2	3.8	3.4	16.2	14.5	12.8	11.8	12.4	12.6	9.8	10.6	11.4	62,188	68,758	75,186	17.5	18.2	19.3	5.9	6.3	6.5
NTPC Ltd	337,395	348	1.3	17.6	15.7	14.1	2.1	2.0	1.8	10.9	9.6	8.8	12.1	12.7	13.0	9.5	10.4	11.1	180,906	193,275	205,882	28.4	29.5	30.3	10.6	11.1	11.7
KEC International Ltd	19,240	748	0.2	49.5	24.5	17.6	4.7	4.1	3.4	17.1	12.1	9.8	9.6	16.5	19.1	16.3	21.8	24.4	19,895	22,575	25,493	6.5	8.1	8.8	2.0	3.5	4.3
Kalpataru Projects International Ltd	17,972	1,106	0.4	27.3	20.8	14.5	3.4	3.0	2.6	11.5	9.4	7.9	12.5	14.6	17.9	17.5	20.6	21.5	19,867	23,919	27,397	8.8	9.0	9.2	3.3	3.6	4.5
Torrent Power Ltd	55,711	1,159	1.5	28.8	19.9	18.5	4.4	3.9	3.4	13.8	11.3	10.5	15.3	19.4	18.3	16.8	17.8	17.2	28,189	30,091	32,547	16.9	19.6	19.6	6.9	9.3	9.3
CESC Ltd	16,092	121	1.2	11.1	10.0	9.2	1.4	1.3	1.2	8.2	7.1	6.4	12.6	12.6	12.7	10.3	12.1	12.7	16,019	16,898	17,718	20.8	22.2	22.8	9.1	9.6	9.9
Global Peers (Fig in USD mn, unless specified)																											
Next Era Energy Inc (UK)	49,994	13	(0.5)	15.3	14.1	13.5	1.3	1.3	1.3	12.2	11.2	10.9	8.5	9.1	9.5	6.3	6.8	7.0	27,774	27,536	27,422	31.6	34.4	37.3	11.8	12.9	13.5
Duke Energy Corp (USA)	73,199	95	0.6	15.9	14.9	13.9	1.4	1.4	1.3	11.1	10.8	10.5	9.0	9.2	9.4	6.1	6.2	6.2	30,157	31,141	32,070	46.1	47.4	48.8	15.3	15.8	16.4
Southern Company (USA)	75,325	69	1.8	17.1	15.9	14.9	2.3	2.1	2.1	12.2	11.6	11.4	13.5	13.4	14.1	6.9	7.1	7.4	27,333	28,123	28,962	41.4	43.0	43.3	16.1	16.9	17.5
The National Grid PLC (USA)	51,183	69	(0.5)	15.7	14.5	13.8	1.2	1.2	1.2	12.3	11.3	11.0	7.8	8.3	8.7	6.0	6.6	6.8	27,774	27,536	27,422	31.6	34.4	37.3	11.8	12.9	13.5
Saudi Electricity Co (S Arabia)	21,907	5	0.4	6.9	6.6	5.5	0.5	0.4	0.3	9.1	8.8	7.4	6.6	6.6	5.6	4.0	4.1	4.5	20,532	21,168	23,216	50.1	50.4	54.8	15.6	15.7	17.1
Eversource Energy (USA)	20,973	60	1.5	13.0	12.0	11.2	1.3	1.2	1.1	11.3	10.8	10.5	9.8	9.8	9.8	6.3	6.4	6.6	12,884	13,494	13,902	31.9	32.5	33.1	12.6	12.9	13.4
FORTUM OYJ	11,604	13	0.9	11.1	13.5	14.9	1.3	1.3	1.3	7.0	8.1	8.8	11.5	9.5	8.7	13.9	10.9	10.2	6,645	6,284	6,039	27.7	26.0	24.9	15.7	13.7	12.9
Edison International (HK)	26,594	69	0.6	13.8	12.0	11.2	1.7	1.6	1.5	8.9	8.5	8.2	12.5	13.5	13.5	7.9	8.3	8.1	17,941	18,719	19,444	37.7	39.3	40.7	10.7	11.8	12.3
CPL Holdings (HK)	20,549	8	0.5	13.1	12.5	12.6	1.5	1.4	1.4	8.8	8.2	7.9	11.3	11.2	10.9	9.9	9.9	10.8	11,532	11,490	11,909	28.0	29.4	28.6	13.6	14.3	13.7
P G & E Corp (USA)	35,331	17	0.7	12.2	11.2	10.5	1.3	1.1	1.0	9.4	8.8	8.9	10.4	10.2	9.9	6.9	7.1	6.2	24,626	25,551	26,327	38.8	40.7	42.3	11.8	12.3	12.7
ENDESA SA	19,125	18	0.3	10.5	9.6	9.3	2.7	2.5	2.2	5.8	5.6	5.4	25.9	25.9	24.0	16.6	16.8	16.2	24,982	24,367	26,304	21.5	23.0	21.7	7.3	8.2	7.8
SSE Plc (UK)	22,827	21	(1.1)	10.4	9.6	9.5	1.7	1.5	1.4	8.5	8.0	8.1	16.0	15.5	14.4	11.7	11.4	10.5	15,800	14,072	14,113	25.7	31.7	33.5	13.9	16.8	17.0
VERBUND AG	25,809	74	(1.0)	13.1	14.1	17.4	2.5	2.3	2.2	8.1	8.6	9.9	18.8	16.1	12.5	22.4	19.3	14.9	10,072	9,337	9,126	35.6	36.6	32.4	19.5	19.6	16.3
Xcel Energy (USA)	28,324	51	1.1	14.2	13.0	11.8	1.5	1.4	1.3	10.0	9.7	9.3	10.6	10.8	11.1	6.2	6.2	6.4	15,842	16,486	17,184	36.0	37.8	39.7	12.6	13.2	13.9
EDP-ENERGIAS DE PORTUGAL SA	17,336	4	1.0	12.6	12.6	11.9	1.4	1.3	1.2	6.4	6.5	6.4	10.8	10.2	9.9	11.1	10.6	10.5	21,210	21,376	20,441	26.0	26.6	29.0	6.5	6.4	7.1
ENTERGY CORP	21,994	103	(1.6)	14.3	13.1	11.8	1.5	1.4	1.4	9.7	9.4	9.0	10.8	11.0	11.8	6.9	7.0	7.2	13,667	14,117	14,717	37.7	39.3	41.4	11.2	11.9	12.7
PPL CORP	20,035	27	0.6	15.8	14.8	13.9	1.4	1.4	1.3	10.3	10.0	9.8	8.9	9.1	9.3	7.2	7.2	7.2	8,339	8,640	8,723	41.6	42.6	44.5	15.2	15.7	16.6
FIRSTENERGY CORP	21,880	38	0.6	14.1	12.7	11.8	1.9	1.8	1.7	10.3	9.9	9.9	13.5	14.1	14.2	7.8	8.1	7.7	13,265	13,690	14,044	32.6	34.1	35.1	11.7	12.6	13.2
FORTIS INC	19,682	40	3.7	16.9	15.9	15.0	1.3	1.2	1.2	11.1	10.3	9.9	7.5	7.7	8.0	6.4	6.5	6.8	8,939	9,326	9,861	42.8	45.1	45.0	13.0	13.3	13.3
AVANGRID INC	13,858	36	1.7	15.8	14.9	13.9	0.7	0.8	0.7	11.1	10.9	10.6	4.7	5.2	4.7	3.9	4.2	3.9	8,307	8,567	8,603	29.7	30.7	30.5	10.6	10.9	11.5
CEZ AS	19,883	37	0.6	13.1	14.5	8.6	2.1	2.1	2.0	4.8	5.4	5.5	16.0	14.5	14.8	26.3	20.4	22.1	13,906	12,993	13,344	39.2	38.1	36.0	10.9	10.6	17.4
CK INFRASTRUCTURE HOLDINGS L	14,629	6	20.8	139.9	134.0	124.6	0.9	0.9	0.9	40.6	38.6	42.5	0.6	0.7	0.7	2.1	2.1	2.2	854	868	871	45.0	46.0	40.6	12.2	12.6	13.5
TERNA-RETE ELETTRICA NAZIONA	16,476	8	5.7	15.7	16.1	16.1	2.3	2.2	2.1	11.3	11.6	11.8	14.7	13.8	13.3	8.6	8.0	7.6	3,648	3,736	3,831	70.4	70.3	70.7	28.8	27.5	26.8
EVERGY INC	11,837	52	1.1	13.4	12.7	12.0	1.2	1.1	1.1	9.9	9.6	9.4	8.9	9.1	9.3	6.6	6.6	6.8	5,890	6,078	6,240	43.6	44.8	46.0	15.0	15.3	15.8
AMERICAN ELECTRIC POWER	43,192	84	0.8	14.6	13.5	12.5	1.6	1.6	1.5	10.7	10.4	10.1	11.2	11.6	12.0	6.7	6.8	7.0	20,613	21,435	22,180	39.5	40.9	41.9	14.3	15.0	15.6
HYDRO ONE LTD	18,392	31	3.2	21.6	20.3	19.2	2.1	2.0	1.9	14.2	13.7	12.9	9.5	9.8	9.9	6.6	6.6	7.0	6,069	6,335	6,607	36.2	37.2	38.5	14.0	14.3	14.5
ALLIANT ENERGY CORP	12,469	49	1.6	15.9	14.8	13.8	1.8	1.7	1.5	12.1	11.5	11.5	11.1	11.2	11.2	6.6	6.7	6.6	4,369	4,397	4,505	42.4	45.4	45.7	18.0	19.2	20.1
TENAGA NASIONAL BHD	13,888	2	0.9	15.8	14.6	14.7	1.1	1.0	1.0	5.3	5.1	5.3	6.8	7.1	6.9	9.0	9.4	8.8	12,287	12,548	12,839	33.1	33.6	32.2	7.2	7.6	7.4
POWER ASSETS HOLDINGS LTD	12,578	6	29.3	158.5	157.0	144.0	1.1	1.1	1.1	76.1	75.2	68.4	0.7	0.7	0.8	1.5	1.5	1.6	172	174	178	94.4	94.2	98.6	46.2	46.0	49.0
ENEL AMERICAS SA	10,639	0	0.6	7.2	9.2	8.4	0.7	0.6	0.6	3.5	3.2	3.1	9.1	7.0	7.2	12.6	15.2	15.3	13,152	13,538	13,433	31.6	31.1	32.8	11.2	8.6	9.4
EMERA INC	10,295	36	5.2	15.0	13.7	12.4	1.3	1.2	1.2	10.6	10.3	9.7	8.5	9.1	9.8	6.4	6.6	7.0	5,754	6,030	6,313	41.3	41.7	42.7	11.9	12.5	13.2
KOREA ELECTRIC POWER CORP	11,769	18	0.1	4.3	3.5	3.1	0.4																				

**Strong revenue growth and margin expansion deserves re-rating in valuation**



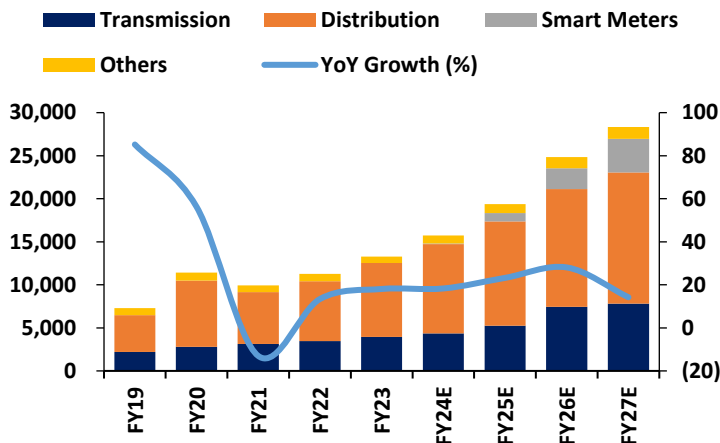
Source: Ventura Research, ACE Equity & Bloomberg  
Bubble size indicates the size of the company's revenue

## AESL's Financial Summary

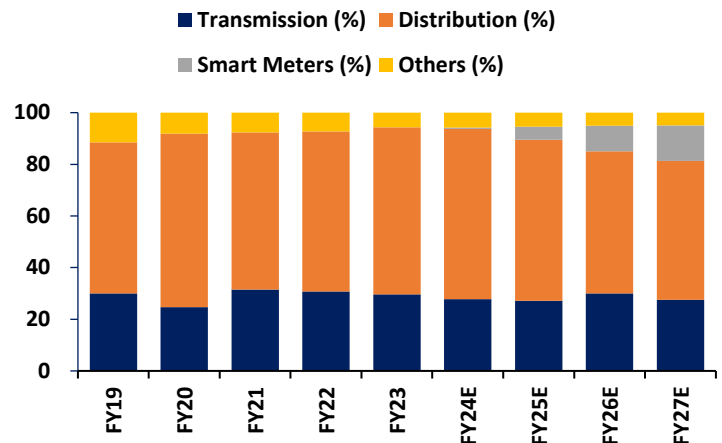
Fig in INR Cr (unless specified)	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E	FY26E	FY27E	FY28E	FY29E	FY30E
Power Transmission	2,124	3,129	2,193	2,815	3,122	3,469	3,945	4,365	5,268	7,461	7,822	8,217	8,818	9,655
Share in revenue (%)	73.9	79.3	30.0	24.7	31.5	30.8	29.7	27.8	27.2	30.1	27.6	25.3	23.5	23.0
Power Distribution	0	0	4,270	7,676	6,048	6,966	8,592	10,366	12,086	13,646	15,245	17,470	20,316	22,309
Share in revenue (%)	0.0	0.0	58.5	67.2	60.9	61.9	64.6	65.9	62.4	55.0	53.8	53.8	54.1	53.1
Smart Meter	0	0	0	0	0	0	0	41	985	2,450	3,898	5,246	6,672	8,097
Share in revenue (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	5.1	9.9	13.8	16.2	17.8	19.3
Other Operating Revenue	752	816	842	925	757	822	756	955	1,041	1,266	1,384	1,541	1,748	1,918
Share in revenue (%)	26.1	20.7	11.5	8.1	7.6	7.3	5.7	6.1	5.4	5.1	4.9	4.7	4.7	4.6
Revenue from operations	2,876	3,944	7,305	11,416	9,926	11,258	13,293	15,727	19,380	24,824	28,350	32,473	37,554	41,979
YoY Growth (%)	30.9	37.2	85.2	56.3	(13.0)	13.4	18.1	18.3	23.2	28.1	14.2	14.5	15.6	11.8
Cost of Power Purchase	38	432	750	3,697	2,887	3,845	5,224	5,576	6,466	7,301	8,156	9,346	10,869	11,936
RM Cost to Sales (%)	1.3	11.0	10.3	32.4	29.1	34.2	39.3	35.5	33.4	29.4	28.8	28.8	28.9	28.4
Raw Material Cost	752	816	842	925	757	822	756	955	1,041	1,266	1,384	1,541	1,748	1,918
RM Cost to Sales (%)	26.1	20.7	11.5	8.1	7.6	7.3	5.7	6.1	5.4	5.1	4.9	4.7	4.7	4.6
Employee Cost	46	42	587	973	931	885	987	1,167	1,439	1,843	2,104	2,410	2,787	3,116
Employee Cost to Sales (%)	1.6	1.1	8.0	8.5	9.4	7.9	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Other Expenses	56	(172)	2,364	1,567	1,402	1,500	1,809	1,746	1,247	2,616	2,802	3,044	3,446	3,655
Other Expenses to Sales (%)	2.0	(4.4)	32.4	13.7	14.1	13.3	13.6	11.1	6.4	10.5	9.9	9.4	9.2	8.7
Regulatory Deferral Account	0	0	0	0	(583)	(682)	(1,036)	516	800	0	0	0	0	0
EBITDA	1,983	2,826	2,762	4,254	4,533	4,889	5,553	5,767	8,388	11,798	13,904	16,132	18,703	21,355
EBITDA Margin (%)	69.0	71.6	37.8	37.3	45.7	43.4	41.8	36.7	43.3	47.5	49.0	49.7	49.8	50.9
Depreciation	569	579	882	1,174	1,329	1,427	1,608	1,796	2,257	2,775	3,191	3,689	4,238	4,839
EBIT	1,414	2,247	1,880	3,080	3,204	3,461	3,945	3,970	6,131	9,024	10,713	12,443	14,465	16,516
EBIT Margin (%)	49.2	57.0	25.7	27.0	32.3	30.7	29.7	25.2	31.6	36.4	37.8	38.3	38.5	39.3
Net Profit	416	1,143	559	742	1,224	1,205	1,252	799	2,271	3,746	4,523	5,464	6,571	7,737
Net Margin (%)	14.5	29.0	7.7	6.5	12.3	10.7	9.4	5.1	11.7	15.1	16.0	16.8	17.5	18.4
Net Profit to EBITDA (%)	21.0	40.4	20.2	17.4	27.0	24.6	22.5	13.9	27.1	31.7	32.5	33.9	35.1	36.2
Adjusted EPS	3.8	10.4	5.1	6.7	11.1	11.0	11.4	7.3	20.7	34.1	41.1	49.7	59.7	70.3
P/E (X)	281.0	102.4	209.3	157.7	95.6	97.1	93.5	146.5	51.5	31.2	25.9	21.4	17.8	15.1
Adjusted BVPS	26.8	38.3	42.1	47.5	55.4	62.3	106.0	113.3	134.0	168.0	209.1	258.8	318.6	388.9
P/BV (X)	39.7	27.8	25.2	22.4	19.2	17.1	10.0	9.4	7.9	6.3	5.1	4.1	3.3	2.7
Enterprise Value	127,165	130,300	141,317	143,604	147,014	149,869	150,126	150,605	160,563	171,187	176,743	183,412	190,375	196,641
EV/EBITDA (X)	64.1	46.1	51.2	33.8	32.4	30.7	27.0	26.1	19.1	14.5	12.7	11.4	10.2	9.2
Net Worth	2,947	4,208	4,635	5,220	6,090	6,857	11,662	12,461	14,733	18,478	23,001	28,465	35,036	42,773
ROE (%)	14.1	27.2	12.1	14.2	20.1	17.6	10.7	6.4	15.4	20.3	19.7	19.2	18.8	18.1
Capital Employed	11,921	16,485	28,180	32,745	35,880	39,727	45,861	52,085	60,876	76,294	86,995	98,885	112,446	126,212
ROCE (%)	9.3	10.6	4.4	6.0	7.1	6.3	6.4	5.7	7.5	8.9	9.2	9.4	9.6	9.8
Invested Capital	11,423	15,819	27,263	30,135	34,416	38,038	43,100	44,378	56,607	70,977	81,056	93,188	106,723	120,726
ROIC (%)	12.4	14.2	6.9	10.2	9.3	9.1	9.2	8.9	10.8	12.7	13.2	13.4	13.6	13.7
ROIIC (%)	13.9	18.9	(3.2)	41.8	2.9	7.1	9.6	2.0	17.7	20.1	16.8	14.3	14.9	14.7
Cash Flow from Operations	2,189	2,198	2,591	5,437	3,784	4,097	3,777	3,836	6,425	8,186	11,250	12,934	14,656	17,322
Cash Flow from Investing	(1,761)	(3,211)	(3,138)	(5,643)	(4,025)	(3,948)	(4,699)	(2,049)	(13,073)	(14,932)	(11,429)	(13,668)	(15,099)	(16,457)
Cash Flow from Financing	(455)	1,589	38	1,250	(745)	(235)	923	2,785	2,659	6,994	698	377	338	(1,210)
Net Cash Flow	(27)	577	(509)	1,045	(986)	(86)	1	4,572	(3,989)	248	519	(357)	(105)	(344)
Free Cash Flow	1,505	1,900	2,434	4,392	1,416	1,675	1,156	(1,496)	(3,124)	(2,317)	4,110	4,003	4,787	6,493
FCF to Revenue (%)	52.3	48.2	33.3	38.5	14.3	14.9	8.7	(9.5)	(16.1)	(9.3)	14.5	12.3	12.7	15.5
FCF to EBITDA (%)	75.9	67.2	88.1	103.3	31.2	34.3	20.8	(25.9)	(37.2)	(19.6)	29.6	24.8	25.6	30.4
FCF to Net Profit (%)	361.5	166.2	435.2	592.1	115.7	139.1	92.3	(187.3)	(137.5)	(61.9)	90.9	73.3	72.8	83.9
FCF to Net Worth (%)	51.1	45.1	52.5	84.1	23.3	24.4	9.9	(12.0)	(21.2)	(12.5)	17.9	14.1	13.7	15.2
CFO to EBITDA (%)	110.4	77.8	93.8	127.8	83.5	83.8	68.0	66.5	76.6	69.4	80.9	80.2	78.4	81.1
Total Debt	8,975	12,277	23,545	27,525	29,791	32,870	34,199	39,624	46,143	57,815	63,994	70,420	77,410	83,439
Net Debt	8,477	11,611	22,629	24,916	28,326	31,181	31,438	31,917	41,874	52,498	58,055	64,723	71,687	77,953
Net Debt to Equity (X)	2.9	2.8	4.9	4.8	4.7	4.5	2.7	2.6	2.8	2.8	2.5	2.3	2.0	1.8
Net Debt to EBITDA (X)	4.3	4.1	8.2	5.9	6.2	6.4	5.7	5.5	5.0	4.4	4.2	4.0	3.8	3.7
Interest Coverage Ratio (X)	1.6	2.5	1.4	1.3	1.5	1.5	1.4	1.2	1.6	1.9	2.0	2.1	2.2	2.3
Piotroski F-score (higher is better)	8.0	9.0	5.0	8.0	7.0	7.0	6.0	7.0	7.0	9.0	8.0	8.0	8.0	8.0
Altman Z-score (higher is better)	2.1	3.7	3.5	2.9	10.4	23.3	6.6	6.2	5.5	4.6	3.8	3.2	2.8	2.4
Beneish M-score (higher is better)	18.2	18.6	31.8	25.6	29.8	27.9	32.4	28.2	27.9	27.2	27.2	27.2	27.3	27.2

Source: ACE Equity, Company Reports & Ventura Research

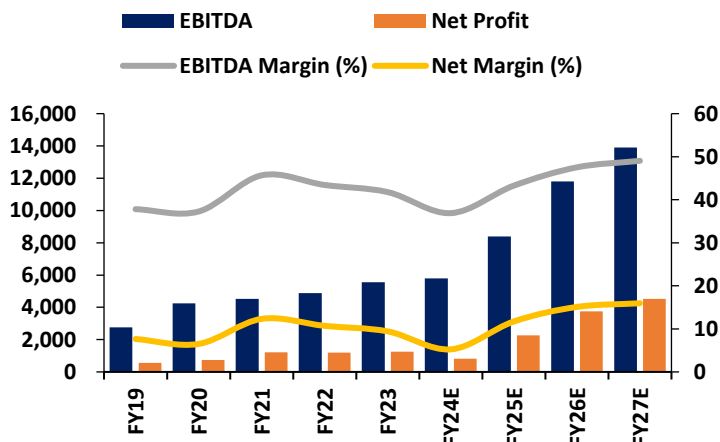
## All the business verticals of AESL are in the high growth phase



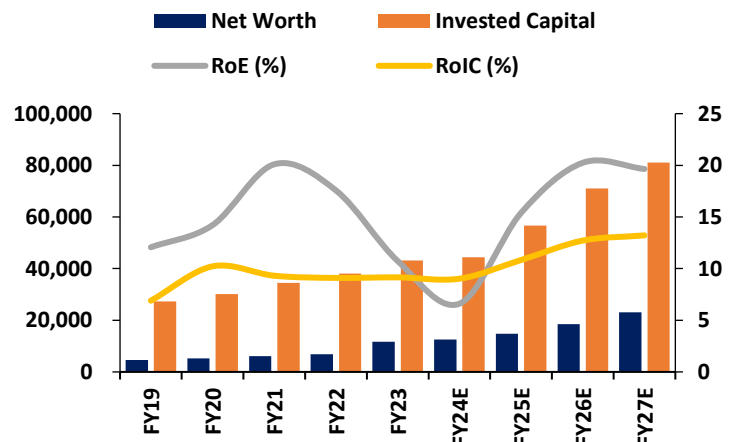
## Revenue share is expected to diversify with the growth in smart meter segment



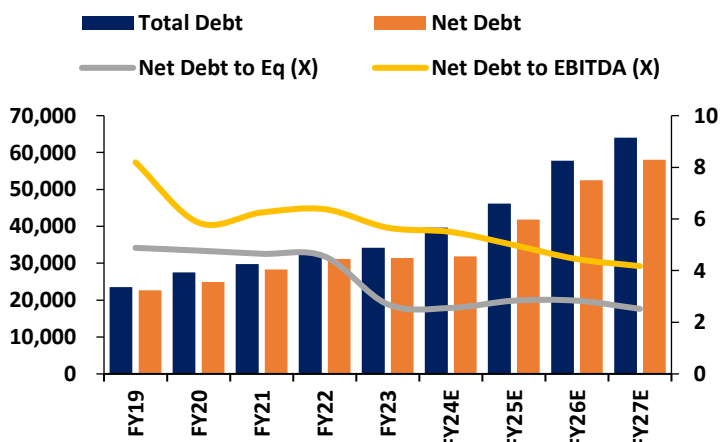
## Excellent execution and operating leverage to enhance profitability



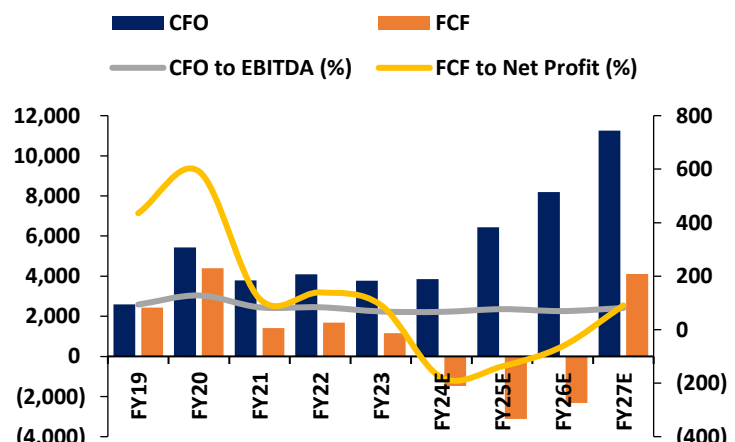
## Robust capital management & improvement in profitability is expected to enhance return ratios



## Despite the increase in debt, better margins & capital allocation to improve financial health



## Improvement in profitability and secured tariffs to enhance cash flows



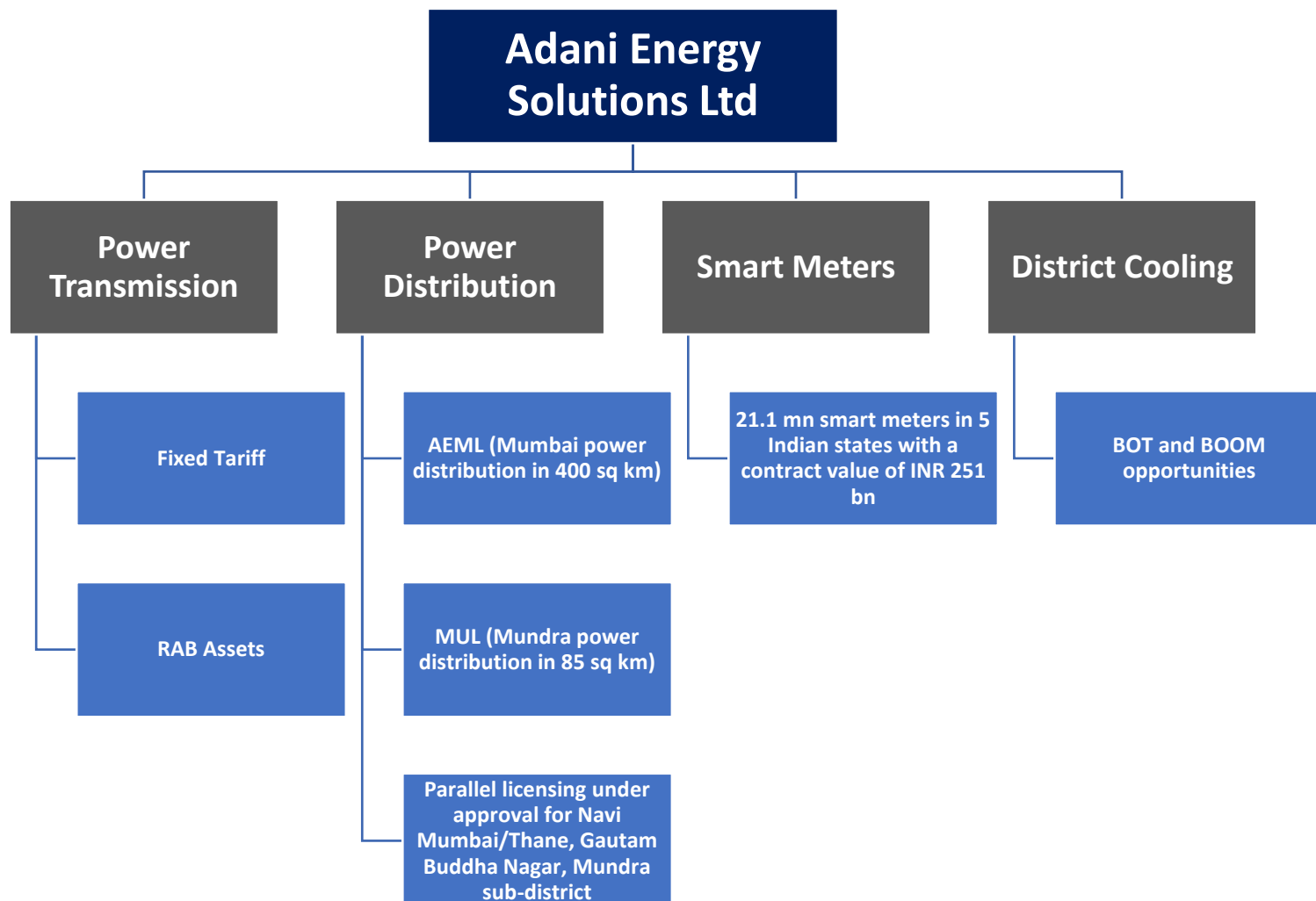
## AESL's business overview and its growth strategies

AESL is one of the leading private sector power T&D companies in India and commands over 35% market share. The company also has power distribution licenses for Mumbai and Mundra SEZ area. The company's business model, which involves earning fixed return/tariffs on its assets, provides strong predictability in cash flows for both its transmission and distribution operations.

Diversifying its offerings, AESL has ventured into the smart electricity meters market. It has secured 9 contracts for installing smart meters, with a collective target of 21.1 million smart meters and a total contract value of INR 251 billion.

Additionally, AESL is branching into the district cooling sector. This initiative will see the company developing comprehensive cooling solutions for buildings or campuses, with AESL covering all capital expenditures associated with these systems. This strategy is expected to reduce construction costs for real estate developers and lower cooling expenses by 20-25% for consumers.

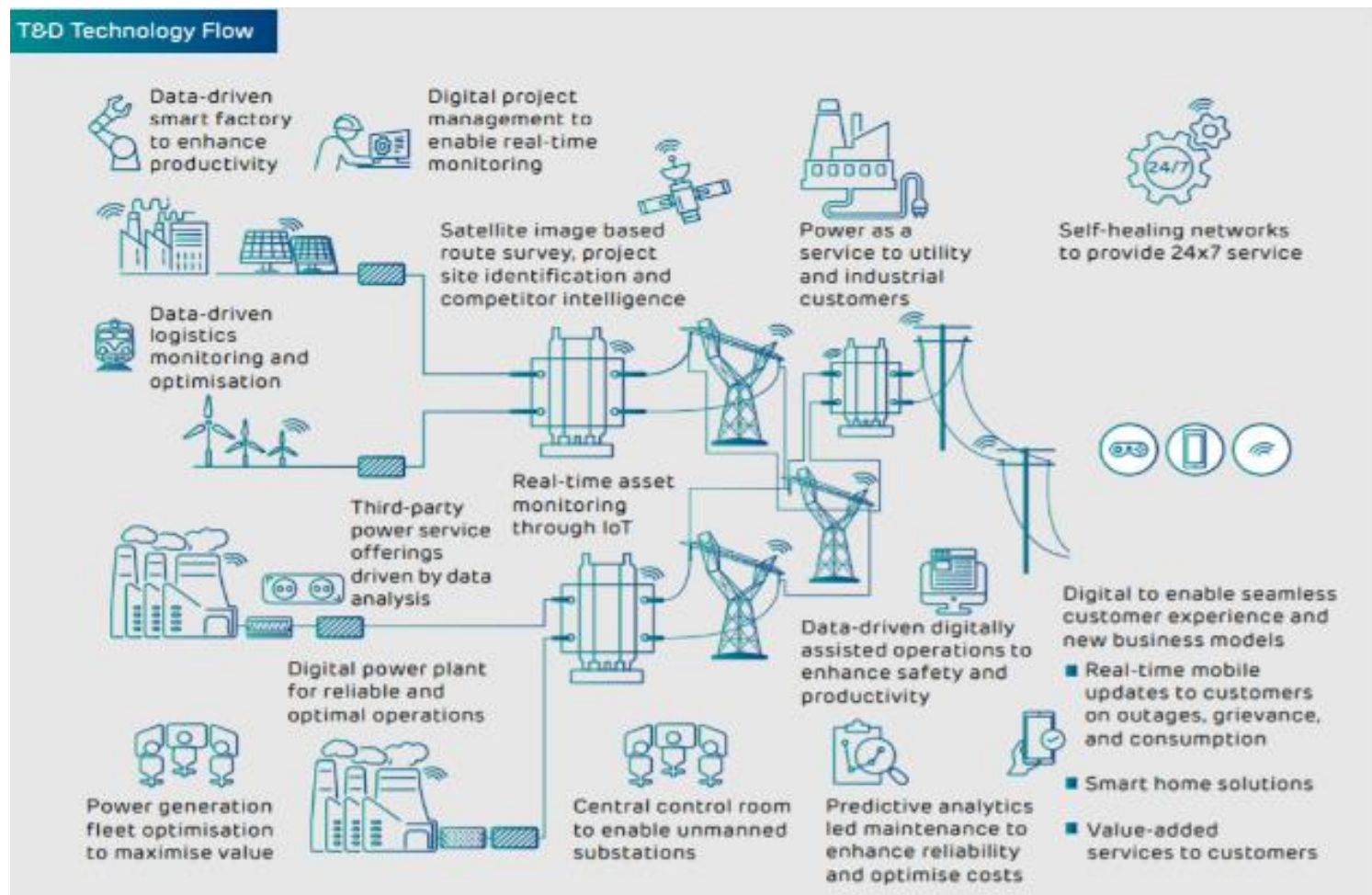
### AESL's current business structure



Source: Company Reports & Ventura Research

As an evolving and growing power T&D company, AESL is shifting from traditional 'Time based maintenance' to 'Reliability-centered maintenance' and building a technology driven robust power T&D operations.

### AESL's technology adoption in its power T&D business



Source: Company Reports & Ventura Research

### Power transmission – AESL is a frontrunner in the rapidly growing power transmission business

AESL is the largest private transmission company in India and operates more than 18,000 ckm of transmission lines and around 37,000 MVA of power transformation capacity. This segment of the company operates:

- Two regulated asset-based (RAB) power transmission lines where the RoE is fixed irrespective of cost volatility, thereby adjusting the inflation and protecting the profits of the asset.
- 33 fixed tariff power transmission lines (24 operational and 9 under construction). It's an annuity-based business model where the transmission company gets a pre-defined fixed annual payment for its assets for its entire residual life.



## AESL's power transmission assets

Power transmission line	Status	Contract type	Counterparty	Residual period of operations (years)	Transmission line length (ckm)	Transformation capacity (MVA)	Asse base (INR bn)
Maharashtra Eastern Grid Power Transmission Co Ltd (MEGPTCL)	Operational	ROA based	State	28	1,217	6,000	59
Adani Transmission India Ltd (ATIL)	Operational	ROA based	Centre/ State	25	3,834	6,630	50
Aravali Transmission Service Company LTD. (ATSCL)	Operational	TBCB	State	27	97	630	1
Maru Transmission Service Company LTD. (MTSCL)	Operational	TBCB	State	27	300	730	3
Western Transmission (Gujarat) LTD. (WTGL)	Operational	TBCB	Centre	28	974		7
Western Transco Power Ltd. (WTPL)	Operational	TBCB	Centre	28	2,089		10
Adani Electricity Mumbai Ltd (AEML)	Operational	ROA based	State	14	572	3,250	170
MPSEZ Utility Ltd (MUL)	Operational	ROA based	State	11	151	360	0
Adani Transmission Bikaner Sikar Private Ltd (ATBSPL)	Operational	TBCB	State	30	343		2
Sipat Transmission Ltd (STL)	Operational	TBCB	Centre	32	348		5
Raipur Rajnandgaon-Warora Transmission Ltd (RRWTL)	Operational	TBCB	Centre	32	611		12
Chhattisgarh-WR Transmission Ltd (CWRTL)	Operational	TBCB	Centre	32	434	630	9
Adani Transmission (Rajasthan) Ltd (ATRL)	Operational	TBCB	State	31	278		1
Hadoti Power Transmission Ltd (PPP 8)	Operational	TBCB	State	32	116	310	2
Barmer Power Transmission Ltd (PPP 9)	Operational	TBCB	State	32	133	150	1
Thar Power Transmission Ltd (PPP 10)	Operational	TBCB	State	32	164	125	1
Alipurduar Transmission Ltd.	Operational	TBCB	Centre	33	650		11
Fatehgarh Bhadla Transmission Ltd (FBTL)	Operational	TBCB	Centre	34	292		6
Bikaner Khetri Transmission Ltd (BKTL)	Operational	TBCB	Centre	34	481		9
Ghatampur Transmission Ltd (GTL)	Operational	TBCB	State	34	897		15
Obra- C Badaun Transmission Ltd (OBTL)	Operational	TBCB	State	35	630	950	7
Lakadia Banaskantha Transco Ltd (LBTL)	Operational	TBCB	Centre	35	351		9
WRSS XXI(A) Transco Ltd [WRSS-XXI(A)]	Operational	TBCB	Centre	35	295	3,000	10
Jam Khambaliya Transco Ltd (JKTL)	Operational	TBCB	Centre	35	37	2,500	3
Warora Kurnool Transmission Ltd. (WKTL)	Operational	TBCB	Centre	35	1,756	3,000	37
Karur Transmission Ltd. (KTL)	Operational	TBCB	Centre	35	9	1,000	2
Kharghar Vikroli Transmission Ltd (KVTL)	Operational	TBCB	State	35	74	1,500	17
Khavda Bhuj Transmission Ltd. (KBTL)	Operational	TBCB	State	35	217	3,000	12
North Karanpura Transco Ltd (NKTL)	Operational	TBCB	Centre		81	1,000	
Khavda Bhuj Transmission Ltd. (KBTL)	Operational	TBCB				1,500	
MP Package 2 (Phase I)	Operational	TBCB	State		684	1,126	
North Karanpura Transco Ltd (NKTL)	Under Construction	TBCB	Centre	35	223		10
MP Package 2 (Phase II)	Under Construction	TBCB	State	35	403	1,610	14
WR-SR (Narendra-Pune)	Under Construction	TBCB	Centre	35	630	6,000	21
Khavda Phase-II, Part-A	Under Construction	TBCB	Centre	35	355		13
KPS - 1 (Khavda Pooling Station)	Under Construction	TBCB	Centre	35	42	6,000	9
Sangod Transmission Service Ltd (STSL)	Under Construction	TBCB	State	35	15	1,160	2
Khavda Phase-III Part-A (Halvad)	Under Construction	TBCB	Centre	35	560		30
KPS - 1 (Khavda Pooling Station) Augmentation	Under Construction	ROA based	Centre	35		1,500	2
HVDC Line Mumbai	Under Construction	ROA based	State		80	1,000	70
<b>TOTAL</b>					<b>20,422</b>	<b>54,661</b>	<b>643</b>

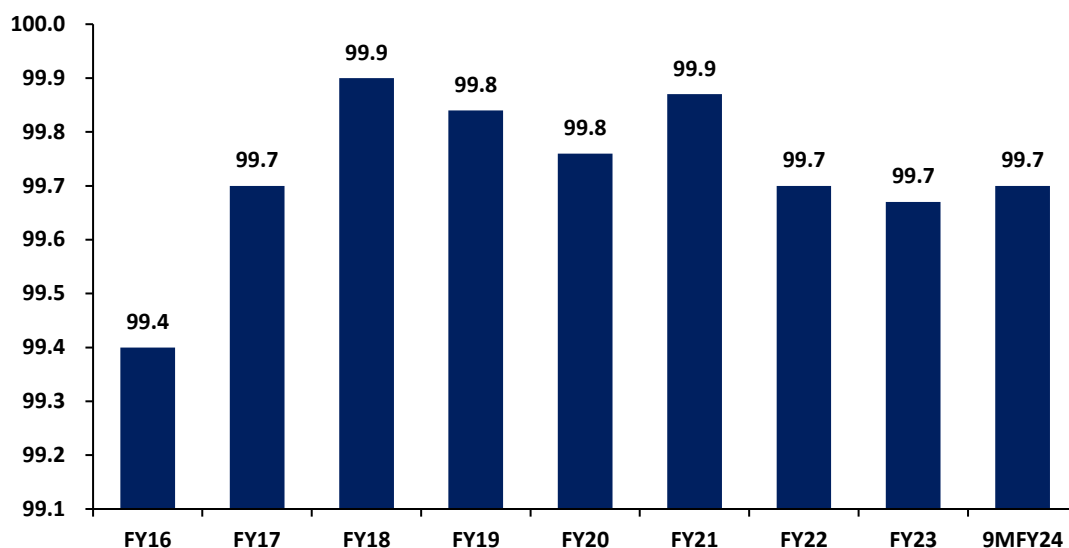
Source: Company Reports & Ventura Research

The power transmission lines, considered vital national assets, have been entrusted to AESL for a duration of 35 years via the TBCB (Tariff Based Competitive Bidding) method. The returns and annuities associated with these assets are predetermined, and there is no risk of counterparty default since the counterparties involve state and central governments.

### Large portfolio of power transmission assets and superior availability factor reflects operational excellence

All the power transmission lines of AESL have a strong operational track record and have maintained a total availability factor of more than 99% threshold limit set by Central Electricity Regulatory Commission (CERC), which reflects the company's operational excellence.

### AESL's power transmission availability factor



Source: Company Reports

### Strong project execution skills and operational excellence has maintained higher market share in the private power transmission space

Due to its outstanding operational performance and project execution skills, AESL has successfully secured the majority of private TBCB transmission projects, maintaining a market share exceeding 35%. We anticipate AESL will continue to hold this position in the foreseeable future.

### AESL has a strong share in private transmission lines

Data in circuit kms	FY17	FY18	FY19	FY20	FY21	FY22	FY23	Apr-Jan FY24
Transmission Line	367,851	390,970	413,407	425,071	441,821	456,716	471,341	481,326
5 years CAGR (%)		6.3	5.7	2.8	3.9	3.4	3.2	
Center	141,033	150,243	158,833	163,322	170,488	175,164	179,090	181,707
State	202,197	213,799	223,806	230,113	237,770	246,709	253,525	258,249
Private	24,621	26,928	30,768	31,636	33,563	34,843	38,726	41,370
Share of Private Players (%)	6.7	6.9	7.4	7.4	7.6	7.6	8.2	8.6
AESL Transmission Line	8,511	9,511	10,504	10,938	11,588	13,258	15,371	18,114
AESL's share in Industry (%)	2.3	2.4	2.5	2.6	2.6	2.9	3.3	3.8
AESL's share in Private Lines (%)	34.6	35.3	34.1	34.6	34.5	38.1	39.7	43.8
























Source: Central Electricity Authority, Company Reports & Ventura Research

### AESL enjoys strong contractual protection on its receivables and gets paid through a pooling mechanism

Power generation companies often experience extended trade receivables periods due to delayed payments from distribution companies (discoms). In contrast, transmission companies are not subjected to such delays and consistently receive payments on time, enjoying priority in the receivables hierarchy.

For interstate transmission projects, the counterparty risk is significantly reduced by the point of connection (POC) mechanism. This system pools transmission charges and allocates them to transmission companies in accordance with their annual transmission charges, ensuring full protection of their tariffs. Additionally, the risk is further diminished by the involvement of a central transmission utility (CTU), which is responsible for the billing, collection, and distribution of transmission charges among transmission companies. Power Grid Corporation currently serves as the CTU.

### Comparison of power transmission assets with other power segments

	Power Transmission	Conventional Power Generation	Solar Power Generation	Wind Power Generation
<b>Certainty of Cash Flow</b>	 Payments through pooling mechanism	 Oftake & Cost of Fuel	 Driven by long term agreements	 Driven by long term agreements
<b>Counterparty Risk</b>	 Faster clearance to payments	 Direct exposure to debt laden SEBs	 Faster clearance to payments	 Faster clearance to payments
<b>Operational Risk</b>	 Limited O&M requirements	 Substantial periodic maintenance needs	 Moderate O&M requirements	 High O&M requirements
<b>Future Growth Potential</b>	 High growth potential	 Moderate potential from baseload demand	 High growth potential	 High growth potential
<b>Competitive Environment</b>	 Few credible players	 High competitiveness given multiple players	 High competitiveness given multiple players	 High competitiveness given multiple players
 Most Favourable  Favourable  Marginally Favourable				

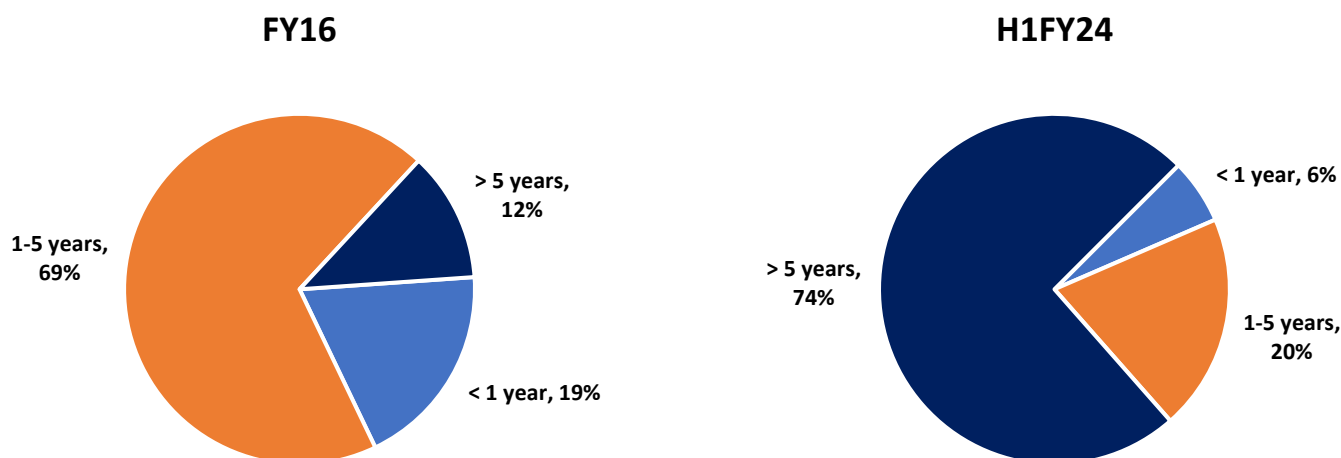
Source: Industry Reports & Ventura Research

### Secured long term cash flows on power transmission assets helps in regular debt repayment

Power transmission demands substantial capital investment, necessitating long-term debt financing for projects. The extended repayment duration of this debt enhances the operating cash flow. AESL's power transmission assets are all regulated, yielding either a fixed RoE or a fixed annual tariff, thereby guaranteeing steady cash flows.

AESL effectively increased the share of long-term maturity debt from 12% in FY16 to 74% in H1FY24 in its overall debt funding which has significantly minimized re-financing risk and increased the average maturity of term loans from 5.8 years in FY16 to 7.7 years in H1FY24. In addition, the company has also increased the share of long-term US\$ bonds, which has significantly reduced the cost of debt from 10.9% in FY16 to 9.3% in H1FY24.

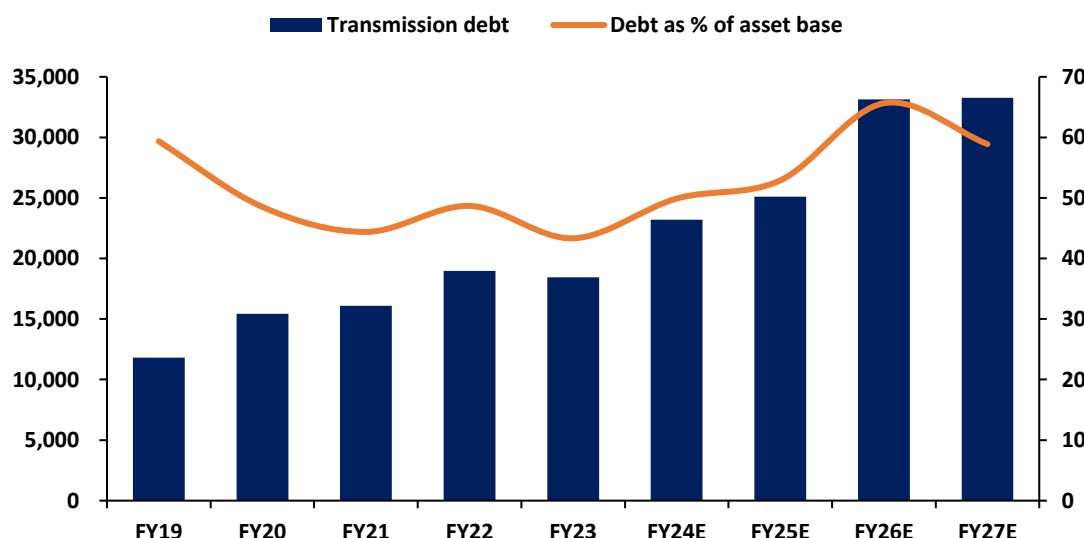
### Refinancing risk minimized – Share of more than 5 year maturity increased from 12% to 74%



Source: Company Reports & Ventura Research

Moreover, the company's total debt is markedly less than the value of its transmission line assets. Furthermore, the debt incurred by the company is of long-term maturity, which can be comfortably serviced through the regulated annual cash flows generated by the transmission lines and guaranteed by the counterparties (central & state governments).

### AESL's power transmission availability factor



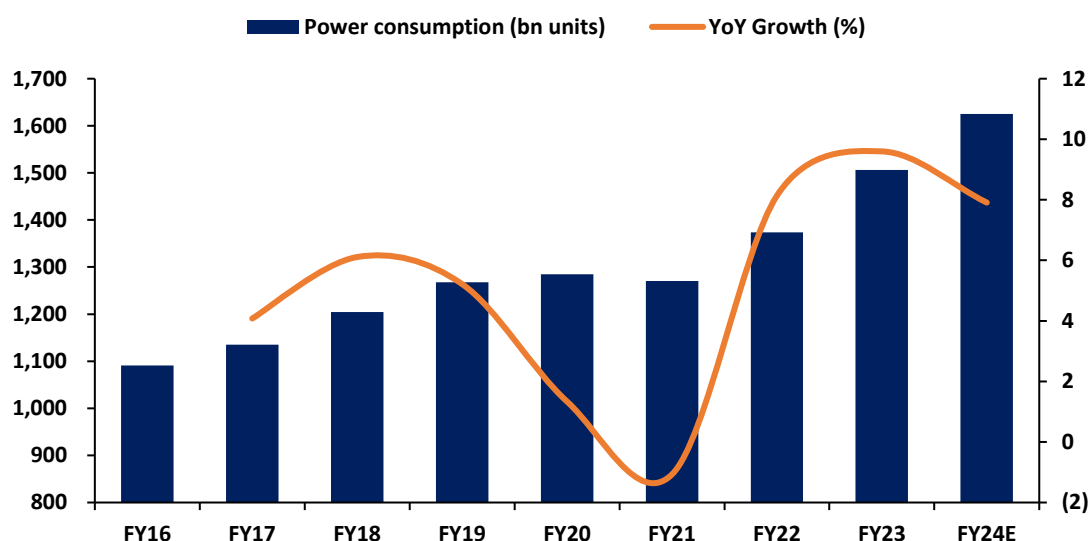
Source: Company Reports & Ventura Research

## Key growth drivers for power transmission sector

**India is targeting to double its power generation and transmission capacity in 6 years to meet growing demand**

The surge in manufacturing activities propelled by the Make-in-India and Atmanirbhar Bharat initiatives, along with increasing consumer demand for white goods, mobile phones, electric kitchen appliances, and similar products, is driving up power consumption in India.

### Power consumption in India gained traction after COVID



Source: Company Reports & Ventura Research

To accommodate this escalating demand for electricity, the government has committed to enhancing power infrastructure. It aims to double the current power production from 450 GW to 900 GW by 2030.

### 2X growth in generation necessitates a proportional enhancement in transmission infrastructure

Data in circuit kms	FY17	FY18	FY19	FY20	FY21	FY22	FY23	Apr-Jan FY24	FY24E	FY30E
Thermal power capacity	218.3	222.9	226.3	230.8	234.7	236.1	237.3	240.4	241.0	300.0
Share of thermal power (%)	66.8	64.8	63.5	62.4	61.4	59.1	57.0	55.9	55.3	33.3
Hydro power capacity	44.5	45.3	45.4	45.7	46.2	46.7	46.9	46.9	47.0	70.0
Share of hydro power (%)	13.6	13.2	12.7	12.3	12.1	11.7	11.3	10.9	10.8	7.8
Nuclear power capacity	6.8	6.8	6.8	6.8	6.8	6.8	6.8	7.5	7.5	10.0
Share of nuclear power (%)	2.1	2.0	1.9	1.8	1.8	1.7	1.6	1.7	1.7	1.1
Renewable power capacity	57.3	69.0	77.6	86.8	94.4	109.9	125.2	135.1	140.0	520.0
Share of renewable power (%)	17.5	20.1	21.8	23.4	24.7	27.5	30.1	31.4	32.1	57.8
Total power generation capacity	326.9	344.0	356.1	370.0	382.2	399.5	416.1	430.0	435.5	900.0
Transmission line (ckm)	367,851	390,970	413,407	425,071	441,821	456,716	471,341	481,326	500,825	1,035,000
Transmission line per GW (ckm)	1,125	1,137	1,161	1,149	1,156	1,143	1,133	1,119	1,150	1,150

Source: Central Electricity Authority, Company Reports & Ventura Research

This expansion necessitates a proportional enhancement in transmission infrastructure to ensure efficient delivery of electricity from generation sites to consumption areas. It's important to note that a significant portion of this increase in power generation is expected to be sourced from renewable energies, particularly wind and solar power.

Given that many wind and solar generation sites are located in remote areas, far from urban pollution, there will be a need for longer and higher KVA transmission lines and corresponding sub-stations. This development is poised to benefit power transmission companies significantly. Being a market leader and expertise in project execution, AESL is well positioned to benefit from this upcoming opportunity.

### Replacement of old low KVA transmission lines to reduce power losses

There has been substantial improvement in the transmission system of higher voltage transmission lines (above 220 KVA) due to increased requirements of the transmission network to transmit power over longer distances. It minimizes the distribution losses and improves grid reliability, which enhances the profitability of transmission companies.

### Strong demand for high voltage 765 KV lines to efficiently transmit power

Data in circuit kms	FY17	FY18	FY19	FY20	FY21	FY22	FY23	Apr-Jan FY24
220 KV AC Line	163,268	168,755	175,296	180,141	186,446	192,340	201,538	205,738
Share of 220 KV AC Line (%)	44.4	43.2	42.4	42.4	42.2	42.1	42.8	42.7
400 KV AC Line	157,787	171,600	180,746	184,521	189,910	193,978	197,750	201,541
Share of 400 KV AC Line (%)	42.9	43.9	43.7	43.4	43.0	42.5	42.0	41.9
765 KV AC Line	31,240	35,059	41,809	44,853	46,090	51,023	52,678	54,672
Share of 765 KV AC Line (%)	8.5	9.0	10.1	10.6	10.4	11.2	11.2	11.4
320 KV HVDC Line	0	0	0	0	288	288	288	288
Share of 320 KV HVDC Line (%)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
500 KV HVDC Line	9,432	9,432	9,432	9,432	9,432	9,432	9,432	9,432
Share of 500 KV HVDC Line (%)	2.6	2.4	2.3	2.2	2.1	2.1	2.0	2.0
800 KV HVDC Line	6,124	6,124	6,124	6,124	9,655	9,655	9,655	9,655
Share of 800 KV HVDC Line (%)	1.7	1.6	1.5	1.4	2.2	2.1	2.0	2.0

Source: Central Electricity Authority, Company Reports & Ventura Research

To reduce power loss, higher voltage KV lines and HVDC lines are used to transmit power from remote power plants and renewable capacities (mostly located far away from load centres). AESL becomes a natural qualifier for 765 KVA and HVDC projects coming on the tendering because it is the only player in the private sector to have an experience of operating Asia's longest HVDC line (990 ckm line between Mundra to Mohindergarh).

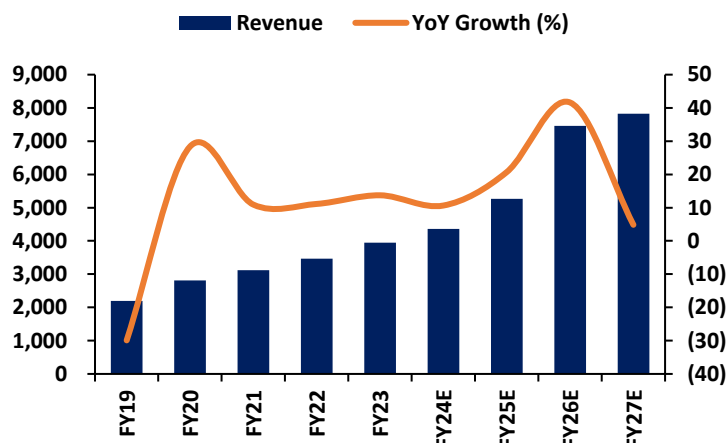
### AESL's power transmission financial performance

Over FY23-27E, we expect the company's power transmission revenues and EBITDA to grow at a CAGR of 18.7% and 19.7% to INR 7,822 cr and INR 6,649 cr respectively.

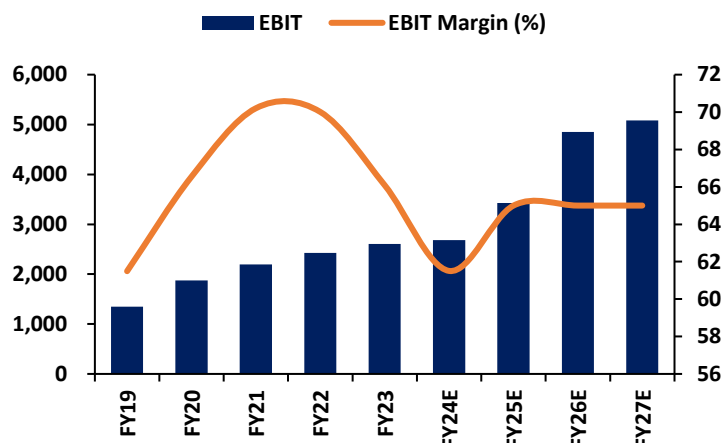


## AESL's power transmission revenue and EBIT performance

Regular asset addition and operational excellence is delivering strong revenue growth



Steady state EBIT margins are expected to remain at 65% over the long run



Source: Company Reports & Ventura Research

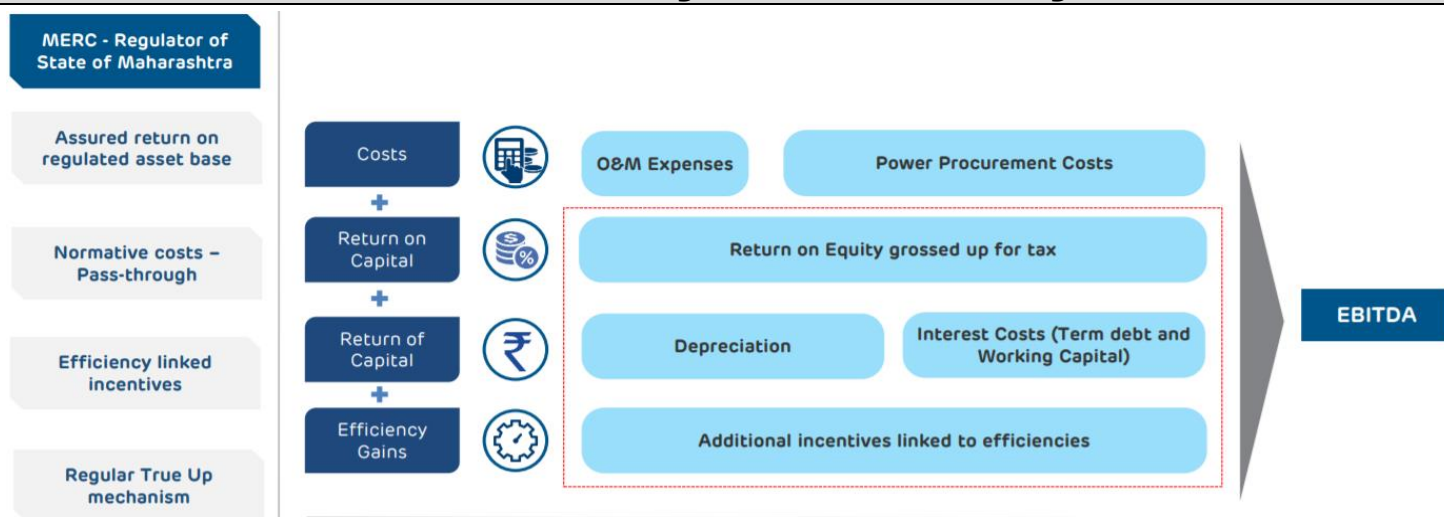
## Power distribution – Privatization of power distribution offers growth opportunities

Under its power distribution business, AESL has licenses for Mumbai and Mundra regions. The company has formed two subsidiaries to operate these geographies:

- Adani Electricity Mumbai Ltd (AEML), which distributes electricity to over 3.16 mn connections (households and industrial). AEML operates at a RoE of 15.5%.
- Mundra Utility Ltd (MUL), which distributes electricity in Mundra SEZ & port region. MUL operates at a RoE of 14%.

Both the licenses are regulated asset-based where the RoE is fixed irrespective of cost volatility, thereby protecting the profits of the asset.

## Power Distribution regulated tariff methodologies



Source: Company Reports

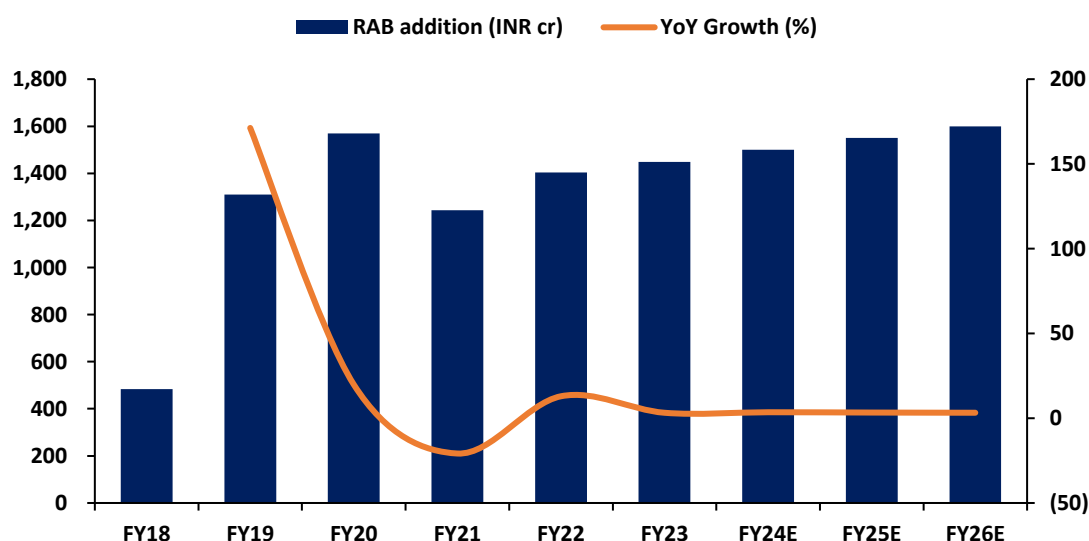
AEML calculates its total revenue by accounting for RoE, interest, depreciation, O&M costs, and power purchase expenses. This method guards against cost variability and inflation, ensuring operating profit remains stable even in exceptional situations. The business operates on a rate of return model, allowing most costs to be passed through. Any discrepancies in cash collection are adjusted during the mid-year review with the regulator. For new investments, approximately 30% is equity-funded, and 70% through debt, where greater equity contribution enhances assured returns and profitability.

### **Growth drivers for AEML**

The marked increase in connections within the Mumbai region highlights the strong electrification of informal households, as well as the influx of individuals and industries to the area. As Mumbai continues to enhance its infrastructure and economy, solidifying its position as a global economic hub, we anticipate a substantial rise in the number of connections in the forthcoming year.

With the growing power consumption along with the operational efficiency, we are expecting strong revenue growth and profitability for AEML. The parent company AESL will continue to invest in Mumbai's power infrastructure to sustain its operational advancements and generate higher returns.

### **AEML investment in Mumbai power infrastructure**



Source: Company Reports & Ventura Research

### **AEML's unique and India's 1<sup>st</sup> ADMS system ensures operational excellence**

The company has launched a new state-of-the-art Network Operation Center (NOC) in Mumbai, which can identify power disruption and detect problems before they cause large power outages. The center is equipped with India's first fully functional Advanced Distribution Management System (ADMS), which collects data from the network of sensors across the jurisdiction and analyzes it in real time to give a complete picture of the city's electricity infrastructure. This allows for a more proactive approach to power distribution.

### AEML's green initiative for Mumbai

AEML is advancing its green initiative in Mumbai by inviting bids for 600 MW of wind power to enhance renewable energy integration into the city's power grid. As of December 2023, AEML achieved a 35% renewable energy mix, aiming for 60% by FY27 to make Mumbai one of the only metropolises globally to have such large share of renewable power in their power supply mix.

### Growth drivers for MUL

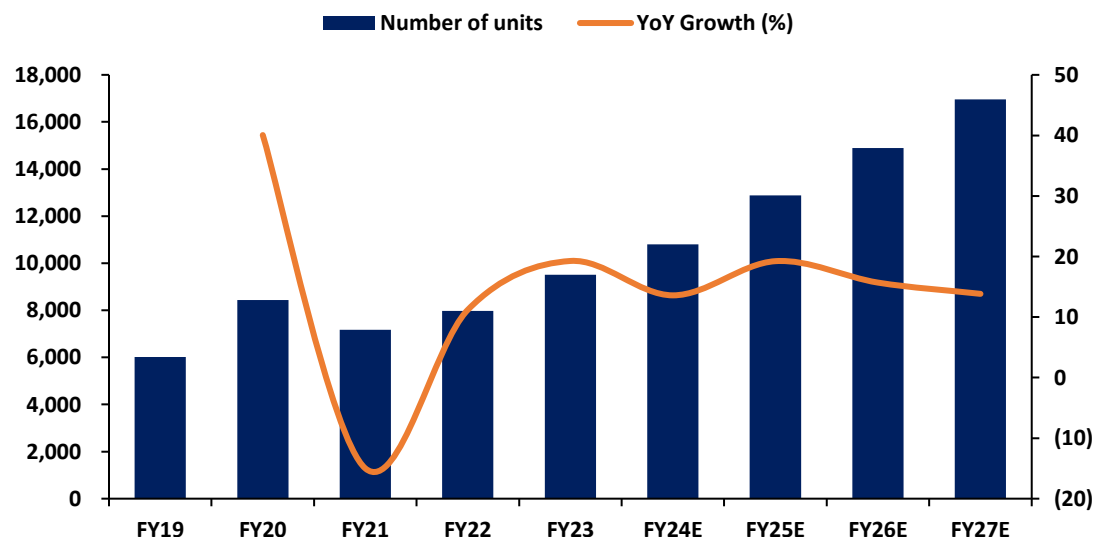
Power demand in MUL's region represents a considerable opportunity for growth, supported by significant investment pledges from several firms in Mundra port & SEZ, including Adani Enterprises Ltd, in sectors such as cement, steel, copper, aluminium, PVC, green hydrogen, and renewable energy equipment manufacturing. These investments are anticipated to drive a substantial increase in power demand in the forthcoming years.

### Key rationales for MUL

- Mundra SEZ is India's largest multi-product SEZ spread across 85 sq km
- Mundra port is India's largest private commercial port with capacity to handle cargo of over 300 MMT
- SEZ also has a huge land bank reserve for large-scale industries in future
- Given the large industry cluster opportunity in Mundra SEZ area and the accompanying expected growth in power demand, AESL is well placed to grow the MUL business

Although the current power usage in this area is less than in Mumbai, the rapid industrial development expected in the region is likely to lead to a significant surge in power demand soon.

### Strong demand to drive power consumption in AEML and MUL

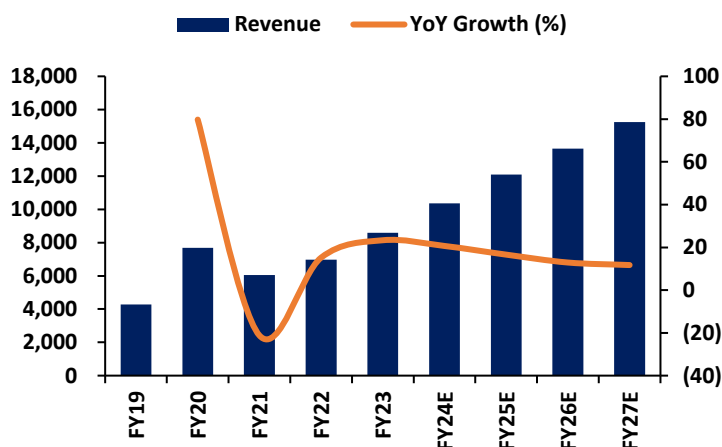


Source: Company Reports & Ventura Research

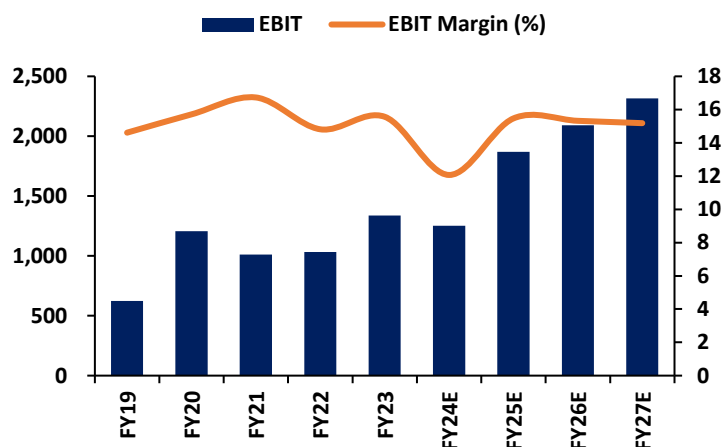
Power distribution is a capex led model and generates a fixed annual RoE (15.5% for AEML and 14.0% for MUL). Citing increased offtake of power, AEML and MUL have committed a capex of INR 48 bn and INR 15-20 bn respectively, which is to be incurred over FY24-27E to build a future ready infrastructure for power distribution. Over FY23-27E, we expect the company's power distribution revenues and EBITDA to grow at a CAGR of 15.4% and 14.9% to INR 15,245 cr and INR 3,659 cr respectively.

### AESL's power distribution revenue and EBIT performance

**Rising power demand in Mumbai and promising prospects for Mundra to accelerate growth**



**Secured RoE generates stable profits in the power distribution business**



Source: Company Reports & Ventura Research

AESL is also exploring several areas in the power distribution segment and have applied for licenses in several geographies like

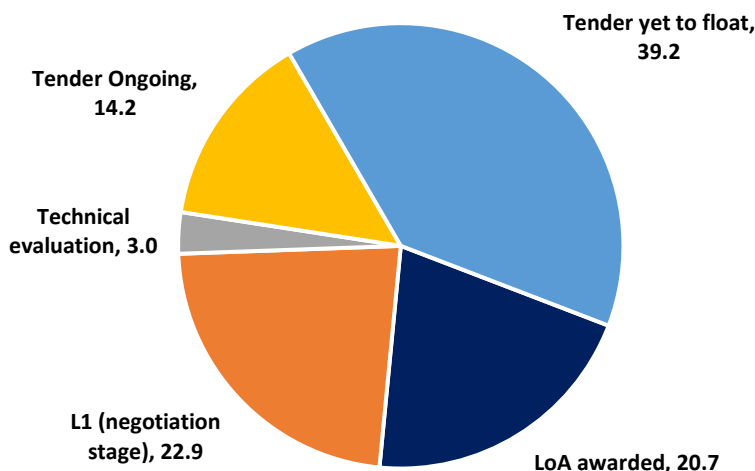
- Navi Mumbai in Maharashtra,
- Greater Noida (Gautam Buddha Nagar) in Uttar Pradesh, and
- Mundra subdistrict (excluding MUL area) in Gujarat.

AESL has not yet obtained approval for these geographies, and as a result, we have not included the potential growth and revenue from these areas in our forecast and valuation.

### Smart Meters – Fast emerging business segment is showing promising development and growth

Through the Revamped Distribution Sector Scheme (RDSS), the government aims to deploy 250 mn smart meters across India by the year 2026, supported by a funding allocation of INR 3 trillion (budgetary allocation of INR 1 trillion). This fast-emerging business segment of smart meters is showing promising development and is expected to significantly contribute to the AESL's revenue and profits in the upcoming years. Over 101 mn smart meters licenses have been awarded so far (AESL won contracts for 21.1 mn smart meter) and 14 mn are at negotiation stage, which still leaves the untapped market of 135 mn smart meters.

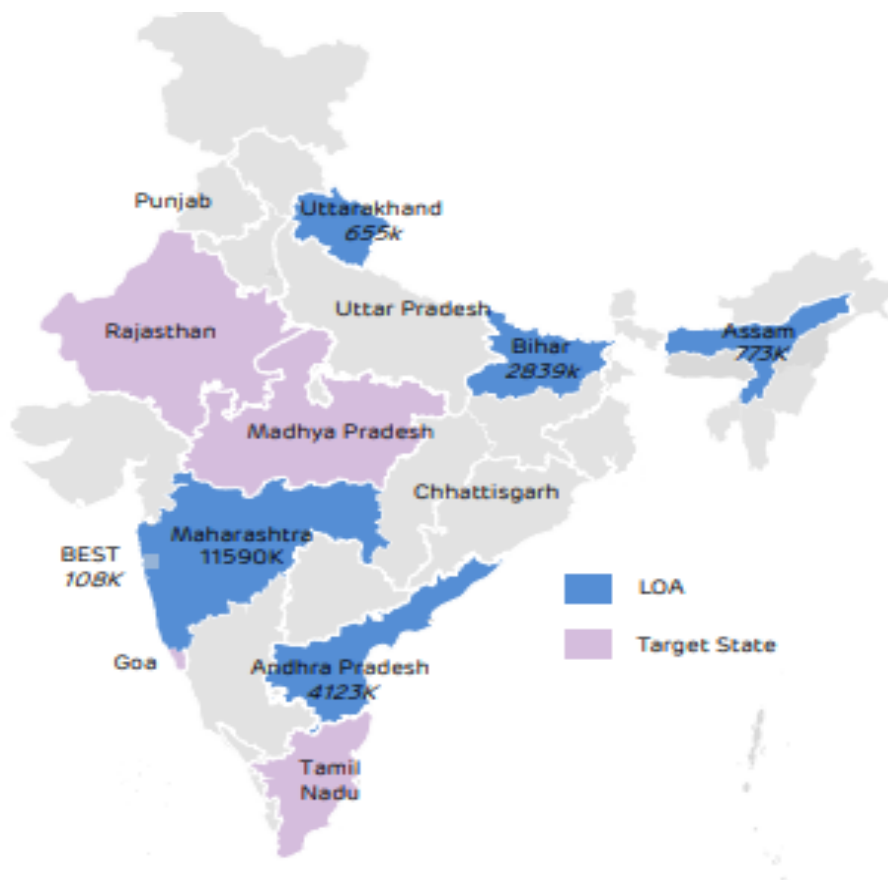
### Smart meter market size in India



Source: Company Reports & Ventura Research

Maharashtra has the largest requirements for smart meters, followed by Andhra Pradesh, Bihar, Assam and Uttarakhand. Rajasthan, Madhya Pradesh and Tamil Nadu are the next in line target states for the installation of smart meters.

### Statewise smart meter allocation



Source: Company Reports

As of Dec 31, 2023, AESL has successfully acquired contracts for 21.1 mn smart meters, totaling a contract value of INR 251 bn, with each contract spanning a duration of 120 months. The allocation of these contracts will be determined via a competitive bidding process.

### AESL's smart meter portfolio

Counter party	Geography	Contract value (INR bn)	No of smart meters (mn)	Per meter charges (INR)	Month of award
Brihanmumbai Electricity Supply & Transport (BEST)	Mumbai	13.0	1.1	11,818	Sep-22
Assam Power Distribution Company Ltd	Tejpur, Mangaldoi & North Lakhimpur	8.4	0.8	10,500	Feb-23
Andhra Pradesh Eastern Power Distribution Co Ltd	Srikakulam, Vizianagaram, Visakhapatnam & Godavari	13.0	1.1	11,818	Jun-Dec 2023
Andhra Pradesh Central Power Distribution Co Ltd	Krishna, Guntur & Prakasam	20.8	1.7	12,235	Jun-Nov 2023
Andhra Pradesh Southern Power Distribution Co Ltd	Nellore, Chittoor, Kadapa, Anantapuram, Kurnoolam & Kurnool	18.0	1.3	13,846	Jun-Sep 2023
Maharashtra State Electricity Distribution Co Ltd	Bhandup, Kalyan & Konkan	75.9	6.3	12,048	Aug-23
Maharashtra State Electricity Distribution Co Ltd	Baramati & Pune	62.9	5.2	12,096	Aug-23
North Bihar Power Distribution Co Ltd	Siwan, Suran, Gopalganj, Vaishali & Samastipur	31.0	2.8	11,071	Aug-23
Uttarakhand Power Corporation Ltd	Kumaon	8.1	0.7	11,571	Dec-23

Per meter charges includes the sourcing cost, O&M expenses and profits of the company, out of which the sourcing cost is capitalized by AESL

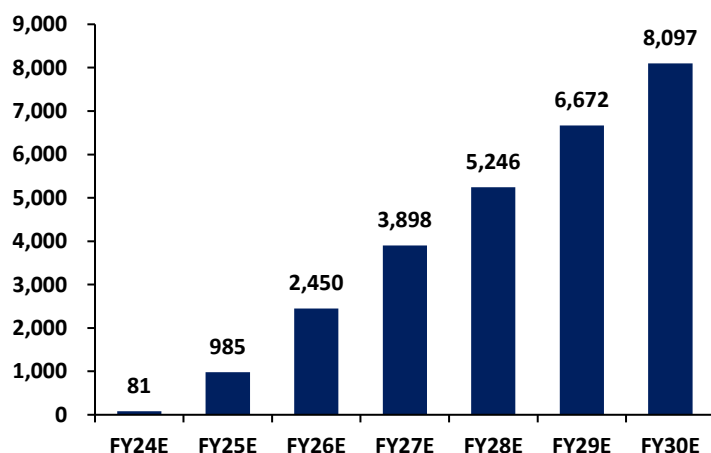
All the contracts have been awarded for 120 months and are based on DBFOOT (Design-Build-Finance-Own-Operate-Transfer) type

Source: Company Reports

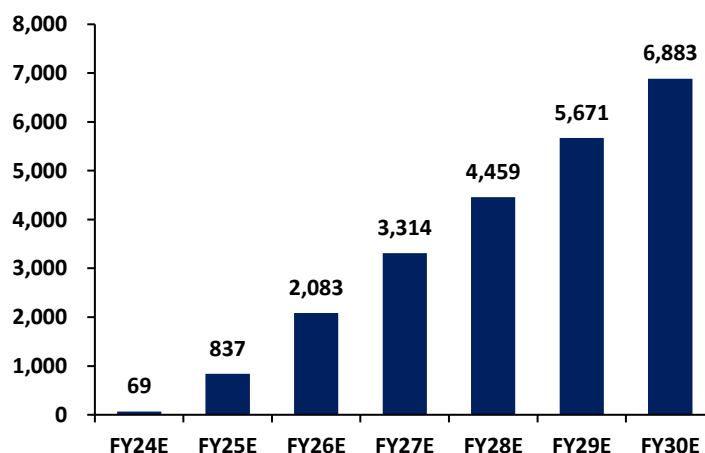
Given the untapped market potential of 135 mn smart meters, aligned with the government's target of 250 mn by 2026, AESL's smart meter segment is expected to contribute a significant revenue of INR 3,898 cr and EBIT of INR 3,314 cr from the smart metering segment by FY27E. We are expecting a capital outlay of INR 18,826 cr during FY24-27E (INR 11,826 cr from existing projects and INR 7,000 cr from additional future contracts).

### AESL's smart meter revenue and EBIT performance

Regulated and contracted revenue flow from smart meter projects



Approx 85% EBIT margins on smart meters. Procurement cost is capitalized by the company

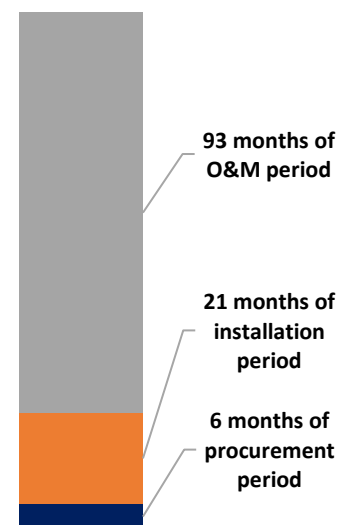


Source: Company Reports & Ventura Research



### Contract period split for smart meters installation and O&M

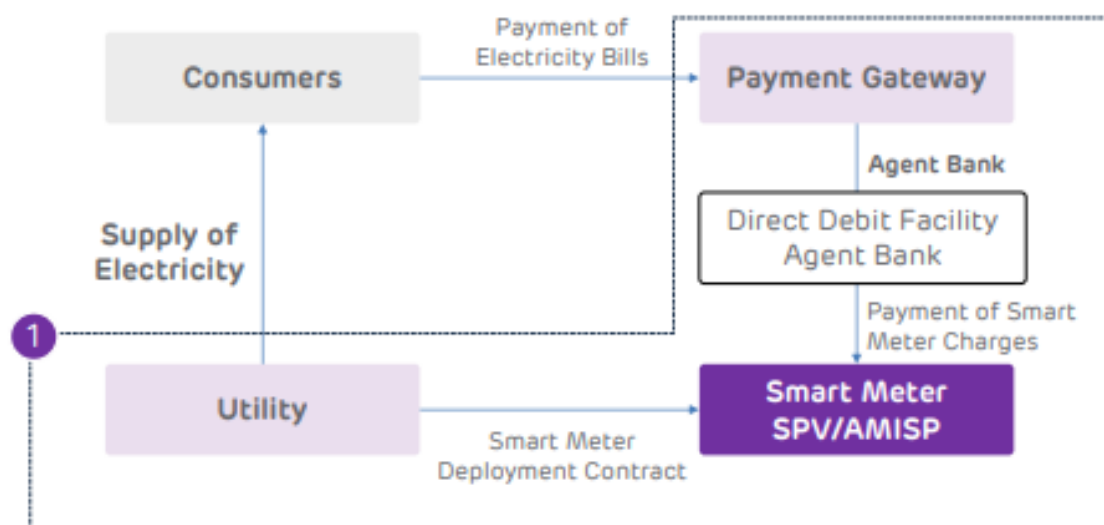
*Out of the contract period of 120 months, 6 months are for smart meter procurement and 21 months are for the installation, while the remaining 93 months are for the O&M. Revenue inflow starts from 7th month of the contract period.*



Source: Company Reports & Ventura Research

The payment of smart meter charges will be added to the monthly electricity bills of consumers and under the quadripartite agreement signed with discoms, the amount will be directly debited from the consumers' bank account. This agreement is uniform to all discoms and finalized by REC.

### Flow of revenue for smart meters



**1** Payment Security Mechanism (PSM) through Direct Debit Facility (DDF) agreement

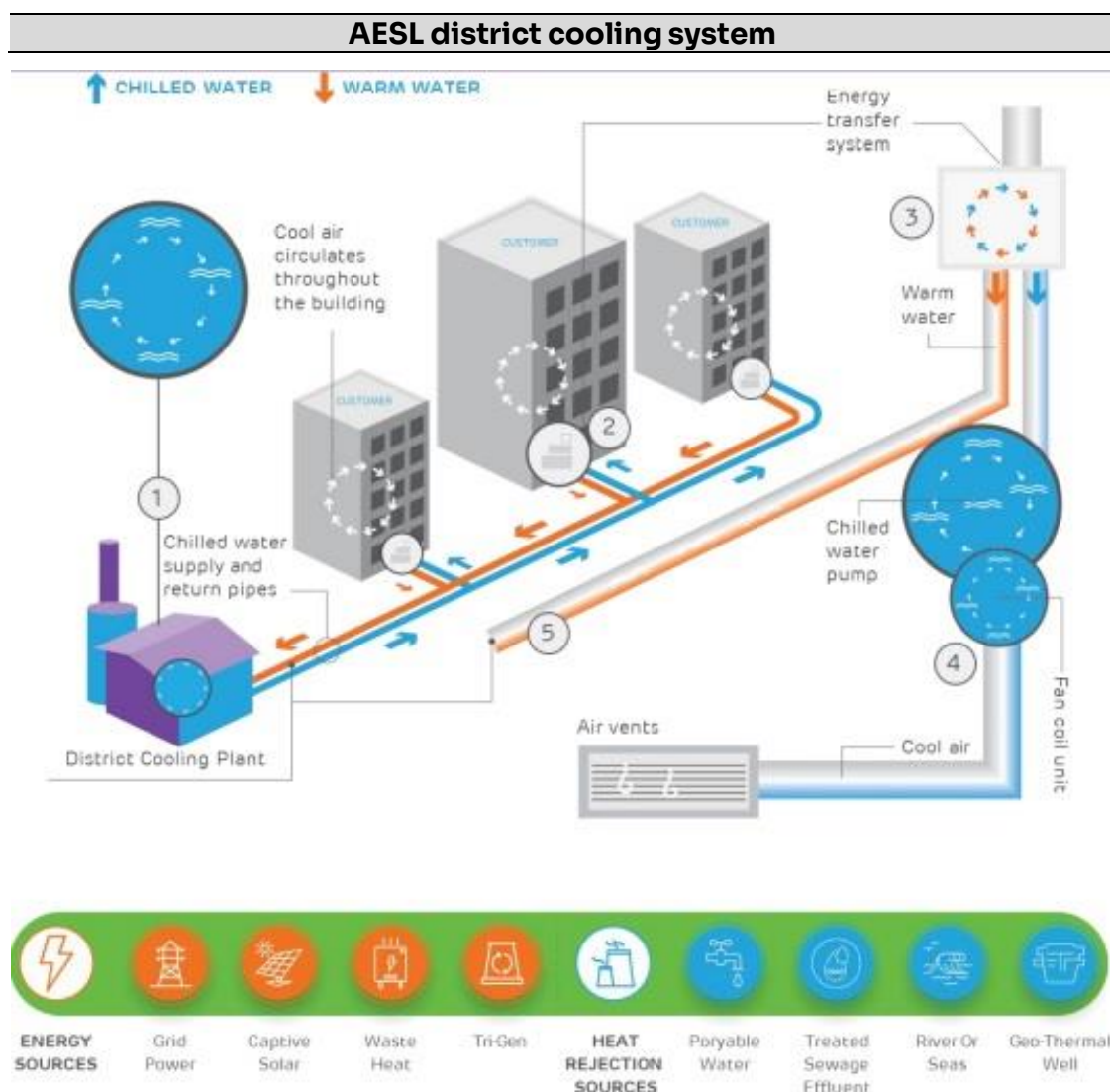
Source: Company Reports & Ventura Research

By utilizing smart meters, the company is able to observe and forecast electricity usage trends across small geographic areas, thereby enhancing its management of retail distribution. The integration of the IoT throughout its infrastructure enables the company to collect real-time data and perform predictive maintenance as required. Data analytics plays a crucial role in detecting theft and reducing

distribution losses for the company. Additionally, it aids in optimizing power procurement to better match demand.

### District cooling – A new extension in power management vertical

AESL is entering into a new business vertical of district cooling. This system produces chilled water in a central plant and distributes cooling capacity in the form of chilled water from the central plant to multiple buildings through a network of underground pipes for use in space and process cooling. For this entire system, the company will undertake the full capex of the cooling system. For the real estate developer this will lower their project cost and for the end user, their cooling cost will come down by 20-25%.



Source: Company Reports

However, this business is currently in the pilot phase and has not yet begun generating commercial revenue. As a result, we have not included the financials of this sector in our projections.

## Ventura Business Quality Score

Key Criteria	Score	Risk	Comments
<b>Management &amp; Leadership</b>			
Management Quality	9	Low	The management is of high quality. It has been able to deliver on its guidance; investor-friendly with timely updates on developments
Promoters Holding & Pledge	10	Low	The promoters are currently holding 73.2% stake in the company and there is no pledging
Board of Directors Profile	8	Low	The average experience of directors is >30 years with significant experience in their respective sectors and expert areas
<b>Industry Consideration</b>			
Industry Growth	8	Low	India is doubling its power generation and transmission capacities. Half of this expansion will be allocated to private companies through TBCB route, where AESL has a strong presence. Similarly, the government is inviting private companies for power distribution in cities to make an effective distribution infrastructure, which will open a significant opportunity for private players.
Regulatory Environment or Risk	8	Low	Power T&D business is subject to extensive regulatory risk which includes several laws, rules and directives issued by the government and regulatory authorities. To conduct T&D business, the companies must obtain various licenses, permits & approvals. The operations are also subject to continued review & audit by the governing bodies.
Entry Barriers / Competition	8	Low	Power T&D is a capital intensive business. It also requires expertise and strong B2G relations, which takes time. We believe that these are strong entry barriers.
<b>Business Prospects</b>			
New Business / Client Potential	8	Low	Strong growth in power generation and transmission in India along with opportunities in the power distribution space offers significant growth prospects to AESL.
Business Diversification	8	Low	AESL has ventured into smart meters installation and O&M. The company has bagged an order for 21.1 mn smart meters and there is a significant opportunity for more such orders in the coming years. It will significantly diversify the business.
Market Share Potential	8	Low	AESL has +35% market share in TBCB based private power transmission industry and it is also expanding its presence in the power distribution space.
Margin Expansion Potential	8	Low	Strong project execution skills and operational excellence has helped the company in improving its profitability.
Earnings Growth	8	Low	Rise in profitability along with strong business growth is expected to accelerate earnings growth in the coming years.
<b>Valuation and Risk</b>			
Balance Sheet Strength	8	Low	AESL has a strong balance sheet, and it is supported by the fixed cash flow structure from its regulated assets.
Debt Profile	6	Medium	As on 30 <sup>th</sup> Sep 2023, AESL had a consolidated net debt of INR 32,831 cr and reported a net debt to equity of 2.8X and net debt to EBITDA of 5.7X. This debt is backed by power T&D asset base of INR 47,140 cr.
FCF Generation	6	Medium	Power T&D business require regular capex towards new asset acquisition and O&M cost, which slows down the FCFF growth.
Dividend Policy	5	Medium	AESL is in the growth phase and therefore, the company is not paying dividend to its shareholders.
<b>Total Score</b>	<b>116</b>	<b>Low</b>	<b>The overall risk profile of the company is good and we consider it a</b>
<b>Ventura Score (%)</b>	<b>77%</b>		<b>LOW-risk company for investments</b>

Source: Company Reports & Ventura Research

## Management Team

Key person	Designation	Details
Mr. Anil Sardana	Managing Director	He holds an engineering degree from Delhi College of Engineering along with PG degree in cost accountancy from ICWAI and PGDBM & Executive Program from IIM Ahmedabad. He has +43 years of experience in the power & infrastructure space, particularly in the energy and telecom sector having managed complex transactions, developments and operations. Prior to joining Adani Group he has worked with NTPC (for 7 years), BSES (for 14 years) and Tata Power (for 18 years).
Mr. Kandarp Patel	CEO	He graduated with Bachelor's degree in Electrical Engineering from Birla Viswakarma Mahavidhyalaya Engineering College in 1994 and has an MBA degree in Finance from G.H. Patel PG Institute of Business Management in 1997. He has more than two decades of multi-faceted experience in the areas of Power Trading, Fuel Management, Legal and Regulatory and Commercial aspects of the Power Business.
Mr. Kunjal Mehta	CFO	He will be the CFO of AESL starting April 1, 2024. The official change will take place on March 31, 2024, when Mr. Rohit Soni will resign as CFO. Mr. Soni will become CFO at Adani New Industries Ltd (ANIL), the green hydrogen arm of Adani Enterprises. Mr. Mehta presently serves as CFO of AEML.

Source: Company Reports

## Key Risks & Concerns

- AESL has 9 under-construction power transmission projects (8 TBCB fixed tariff and 1 RAB based project). Such projects typically require substantial funding and a long gestation period of 2-5 years before the commencement of commercial operations. Any delay due to operational or macro reason could impact the projects' future cash flows.
- Private participation in the TBCB based bidding picked up since FY16 and it is also attracting more private companies due to its fixed cash flow model. Though AESL enjoys more than 35% market share in this space, increased competitive pressure could adversely affect the pricing and ability of AESL to successfully bid for projects.
- TBCB based fixed tariff transmission lines generate a fixed annuity-based cash flow. In the inflationary environment and surge in O&M cost could impact the profitability of AESL.
- AESL is regularly investing in its power distribution assets (AEML and MUL) to enhance the infrastructure and improve its equity portion to generate better returns. However, any slowdown in the power demand in these areas could materially impact the company's return on invested capital.
- Power T&D business is subject to extensive regulatory risk which includes several laws, rules and directives issued by the government and regulatory authorities. To conduct transmission business, the company must obtain various licenses, permits and approvals. In addition, the operations are subject to continued review and audit by the governing bodies.

## AESL's quarterly and annual performance

Fig in INR Cr (unless specified)	FY20	FY21	FY22	Q1FY23	Q2FY23	Q3FY23	Q4FY23	FY23	Q1FY24	Q2FY24	Q3FY24	FY24E	FY25E	FY26E	FY27E
Power Transmission	2,815	3,122	3,469	836	868	1,173	1,068	3,945	926	1,017	1,265	4,365	5,268	7,461	7,822
Share in revenue (%)	24.7	31.5	30.8	26.7	26.7	33.0	31.8	29.7	25.3	27.7	27.7	27.8	27.2	30.1	27.6
Power Distribution	7,676	6,048	6,966	2,213	2,164	2,104	2,111	8,592	2,738	2,480	2,560	10,366	12,086	13,646	15,245
Share in revenue (%)	67.2	60.9	61.9	70.7	66.6	59.2	62.9	64.6	74.7	67.5	56.1	65.9	62.4	55.0	53.8
Smart Meter	0	0	0	0	0	0	0	0	3	8	17	81	985	2,450	3,898
Share in revenue (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.5	5.1	9.9	13.8
Other Operating Revenue	925	757	822	83	219	275	178	756	0	177	738	915	1,041	1,266	1,384
Share in revenue (%)	8.1	7.6	7.3	2.7	6.7	7.7	5.3	5.7	0.0	4.8	16.2	5.8	5.4	5.1	4.9
Revenue from operations	11,416	9,926	11,258	3,132	3,251	3,552	3,358	13,293	3,664	3,674	4,563	15,726	19,380	24,824	28,350
YoY Growth (%)	56.3	(13.0)	13.4	10.7	27.9	22.0	12.9	18.1	17.0	13.0	28.5	18.3	23.2	28.1	14.2
Cost of Power Purchase	3,697	2,887	3,845	1,767	1,239	1,183	1,035	5,224	1,460	1,264	1,468	5,576	6,466	7,301	8,156
RM Cost to Sales (%)	32.4	29.1	34.2	56.4	38.1	33.3	30.8	39.3	39.8	34.4	32.2	35.5	33.4	29.4	28.8
Raw Material Cost	925	757	822	83	219	275	178	756	0	177	738	915	1,041	1,266	1,384
RM Cost to Sales (%)	8.1	7.6	7.3	2.7	6.7	7.7	5.3	5.7	0.0	4.8	16.2	5.8	5.4	5.1	4.9
Employee Cost	973	931	885	223	232	226	305	987	243	270	259	1,167	1,439	1,843	2,104
Employee Cost to Sales (%)	8.5	9.4	7.9	7.1	7.1	6.4	9.1	7.4	6.6	7.3	5.7	7.4	7.4	7.4	7.4
Other Expenses	1,567	1,402	1,500	385	397	390	636	1,809	388	458	570	1,752	1,247	2,616	2,802
Other Expenses to Sales (%)	13.7	14.1	13.3	12.3	12.2	11.0	18.9	13.6	10.6	12.5	12.5	11.1	6.4	10.5	9.9
Regulatory Deferral Account	0	(583)	(682)	(535)	(73)	(63)	(365)	(1,036)	304	154	57	516	800	0	0
EBITDA	4,254	4,533	4,889	1,208	1,237	1,540	1,568	5,553	1,269	1,350	1,471	5,801	8,388	11,798	13,904
EBITDA Margin (%)	37.3	45.7	43.4	38.6	38.0	43.4	46.7	41.8	34.6	36.7	32.2	36.9	43.3	47.5	49.0
Depreciation	1,174	1,329	1,427	384	398	410	416	1,608	419	432	458	1,796	2,257	2,775	3,191
EBIT	3,080	3,204	3,461	824	839	1,130	1,153	3,945	850	918	1,013	4,004	6,131	9,024	10,713
EBIT Margin (%)	27.0	32.3	30.7	26.3	25.8	31.8	34.3	29.7	23.2	25.0	22.2	25.5	31.6	36.4	37.8
Net Profit	742	1,224	1,205	185	206	475	386	1,252	176	277	325	824	2,272	3,747	4,524
Net Margin (%)	6.5	12.3	10.7	5.9	6.3	13.4	11.5	9.4	4.8	7.5	7.1	5.2	11.7	15.1	16.0
Net Profit to EBITDA (%)	17.4	27.0	24.6	15.3	16.7	30.8	24.6	22.5	13.8	20.5	22.1	14.2	27.1	31.8	32.5
Adjusted EPS	6.7	11.1	11.0					11.4				7.5	20.7	34.1	41.1
P/E (X)	157.7	95.6	97.1					93.5				142.0	51.5	31.2	25.9
Adjusted BVPS	47.5	55.4	62.3					106.0				113.5	134.2	168.3	209.4
P/BV (X)	22.4	19.2	17.1					10.0				9.4	7.9	6.3	5.1
Enterprise Value	143,604	147,014	149,869					150,126				150,583	160,537	171,160	176,715
EV/EBITDA (X)	33.8	32.4	30.7					27.0				26.0	19.1	14.5	12.7
Net Worth	5,220	6,090	6,857					11,662				12,487	14,759	18,505	23,029
ROE (%)	14.2	20.1	17.6					10.7				6.6	15.4	20.2	19.6
Capital Employed	32,745	35,880	39,727					45,861				52,111	60,902	76,321	87,023
ROCE (%)	6.0	7.1	6.3					6.4				5.7	7.5	8.8	9.2
Invested Capital	30,135	34,416	38,038					43,100				44,382	56,607	70,977	81,056
ROIC (%)	10.2	9.3	9.1					9.2				9.0	10.8	12.7	13.2
ROIIC (%)	41.8	2.9	7.1					9.6				4.6	17.4	20.1	16.8
Cash Flow from Operations	5,437	3,784	4,097					3,777				3,858	6,429	8,187	11,251
Cash Flow from Investing	(5,643)	(4,025)	(3,948)					(4,699)				(2,049)	(13,073)	(14,932)	(11,429)
Cash Flow from Financing	1,250	(745)	(235)					923				2,785	2,659	6,994	698
Net Cash Flow	1,045	(986)	(86)					1				4,594	(3,985)	249	520
Free Cash Flow	4,392	1,416	1,675					1,156				(1,474)	(3,120)	(2,316)	4,111
FCF to Revenue (%)	38.5	14.3	14.9					8.7				(9.4)	(16.1)	(9.3)	14.5
FCF to EBITDA (%)	103.3	31.2	34.3					20.8				(25.4)	(37.2)	(19.6)	29.6
FCF to Net Profit (%)	592.1	115.7	139.1					92.3				(178.9)	(137.3)	(61.8)	90.9
FCF to Net Worth (%)	84.1	23.3	24.4					9.9				(11.8)	(21.1)	(12.5)	17.9
CFO to EBITDA (%)	127.8	83.5	83.8					68.0				66.5	76.7	69.4	80.9
Total Debt	27,525	29,791	32,870					34,199				39,624	46,143	57,815	63,994
Net Debt	24,916	28,326	31,181					31,438				31,895	41,848	52,471	58,027
Net Debt to Equity (X)	4.8	4.7	4.5					2.7				2.6	2.8	2.8	2.5
Net Debt to EBITDA (X)	5.9	6.2	6.4					5.7				5.5	5.0	4.4	4.2
Interest Coverage Ratio (X)	1.3	1.5	1.5					1.4				1.2	1.6	1.9	2.0
Piotroski F-score (higher is better)	8.0	7.0	7.0					6.0				7.0	7.0	9.0	8.0
Altman Z-score (higher is better)	2.9	10.4	23.3					6.6				6.2	5.4	4.6	3.8
Beneish M-score (higher is better)	25.6	29.8	27.9					32.4				28.2	27.9	27.2	27.2

Source: ACE Equity, Company Reports & Ventura Research



## AESL's financial analysis & projections

Fig in INR Cr (unless specified)	FY22	FY23	FY24E	FY25E	FY26E	FY27E	Fig in INR Cr (unless specified)	FY22	FY23	FY24E	FY25E	FY26E	FY27E
Income Statement							Per share data & Yields/Performance						
Revenue	11,258	13,293	15,726	19,380	24,824	28,350	Adjusted EPS (INR)	10.8	11.2	7.4	20.4	33.6	40.6
YoY Growth (%)	13.4	18.1	18.3	23.2	28.1	14.2	Adjusted Cash EPS (INR)	23.6	25.6	23.5	40.6	58.5	69.2
Cost of Power Purchase	3,845	5,224	5,576	6,466	7,301	8,156	Adjusted BVPS (INR)	71.3	114.4	121.8	142.1	175.7	216.3
Power Purchase to Sales (%)	34.2	39.3	35.5	33.4	29.4	28.8	Adjusted CFO per share (INR)	36.7	33.9	34.6	57.6	73.4	100.9
Raw Material Cost	822	756	915	1,041	1,266	1,384	CFO Yield (%)	3.5	3.2	3.3	5.4	6.9	9.5
RM Cost to Sales (%)	7.3	5.7	5.8	5.4	5.1	4.9	Adjusted FCF per share (INR)	15.0	10.4	-13.2	-28.0	-20.8	36.9
Employee Cost	885	987	1,167	1,439	1,843	2,104	FCF Yield (%)	1.4	1.0	-1.2	-2.6	-2.0	3.5
Employee Cost to Sales (%)	7.9	7.4	7.4	7.4	7.4	7.4	CFO to EBITDA (%)	83.8	68.0	66.5	76.7	69.4	80.9
Other Expenses	1,500	1,809	1,752	1,247	2,616	2,802	FCF to Net Profit (%)	139.1	92.3	-178.9	-137.3	-61.8	90.9
Other Exp to Sales (%)	13.3	13.6	11.1	6.4	10.5	9.9	Solvency Ratio (X)						
Regulatory Deferral Account	-682	-1,036	516	800	0	0	Total Debt to Equity	4.1	2.7	2.9	2.9	2.9	2.7
RDA to Sales (%)	-6.1	-7.8	3.3	4.1	0.0	0.0	Net Debt to Equity	3.9	2.5	2.3	2.6	2.7	2.4
EBITDA	4,889	5,553	5,801	8,388	11,798	13,904	Net Debt to EBITDA	6.4	5.7	5.5	5.0	4.4	4.2
Margin (%)	43.4	41.8	36.9	43.3	47.5	49.0	Interest Coverage (X)	1.5	1.4	1.2	1.6	1.9	2.0
YoY Growth (%)	7.8	13.6	4.5	44.6	40.7	17.8	Return Ratios (%)						
Depreciation & Amortization	1,427	1,608	1,796	2,257	2,775	3,191	Return on Equity	17.6	10.7	6.6	15.4	20.2	19.6
EBIT	3,461	3,945	4,004	6,131	9,024	10,713	Return on Capital Employed	6.3	6.4	5.7	7.5	8.8	9.2
Margin (%)	30.7	29.7	25.5	31.6	36.4	37.8	Return on Invested Capital	9.1	9.2	9.0	10.8	12.7	13.2
YoY Growth (%)	8.0	14.0	1.5	53.1	47.2	18.7	Working Capital Ratios						
Other Income	604	548	471	765	661	814	Payable Days (Nos)	52	49	31	29	26	25
Finance Cost	2,365	2,781	3,322	3,860	4,678	5,481	Inventory Days (Nos)	8	4	11	11	10	10
Exceptional Item	0	0	0	0	0	0	Receivable Days (Nos)	35	39	35	35	34	34
PBT	1,700	1,712	1,153	3,037	5,007	6,045	Net Working Capital Days (Nos)	-9	-6	16	17	18	19
Margin (%)	15.1	12.9	7.3	15.7	20.2	21.3	Net Working Capital to Sales (%)	-2.5	-1.6	4.3	4.5	5.0	5.1
YoY Growth (%)	5.0	0.7	-32.7	163.4	64.9	20.7	Valuation (X)						
Tax Expense	465	435	290	764	1,260	1,522	P/E	98.5	94.8	144.0	52.2	31.7	26.2
Tax Rate (%)	27.3	25.4	25.2	25.2	25.2	25.2	P/BV	14.9	9.3	8.7	7.5	6.1	4.9
PAT	1,236	1,276	863	2,272	3,747	4,524	EV/EBITDA	30.7	27.0	26.0	19.1	14.5	12.7
Margin (%)	11.0	9.6	5.5	11.7	15.1	16.0	EV/Sales	13.3	11.3	9.6	8.3	6.9	6.2
YoY Growth (%)	-4.2	3.3	-32.4	163.4	64.9	20.7	Cash Flow Statement						
Min Int/Sh of Assoc	-31	-24	-38	0	0	0	PBT	1,700	1,712	1,153	3,037	5,007	6,045
Net Profit	1,205	1,252	824	2,272	3,747	4,524	Adjustments	2,567	2,576	3,877	4,358	4,798	6,926
Margin (%)	10.7	9.4	5.2	11.7	15.1	16.0	Change in Working Capital	293	-75	-882	-201	-358	-199
YoY Growth (%)	-1.6	3.9	-34.2	175.7	64.9	20.7	Less: Tax Paid	-465	-435	-290	-764	-1,260	-1,522
Balance Sheet							Cash Flow from Operations	4,097	3,777	3,858	6,429	8,187	11,251
Share Capital	1,100	1,115	1,115	1,115	1,115	1,115	Net Capital Expenditure	-4,191	-4,702	-7,818	-12,437	-14,004	-11,241
Total Reserves	6,851	11,645	12,469	14,741	18,487	23,011	Change in Investments	243	4	5,769	-636	-929	-187
Shareholders Fund	7,951	12,760	13,584	15,856	19,603	24,127	Cash Flow from Investing	-3,948	-4,699	-2,049	-13,073	-14,932	-11,429
Long Term Borrowings	30,830	31,330	37,124	43,143	55,815	58,494	Change in Borrowings	2,130	-145	6,107	6,519	11,672	6,179
Deferred Tax Assets / Liabilities	1,414	1,540	1,455	1,455	1,455	1,455	Less: Finance Cost	-2,365	-2,781	-3,322	-3,860	-4,678	-5,481
Other Long Term Liabilities	691	723	790	881	1,005	1,077	Proceeds from Equity	0	3,850	0	0	0	0
Long Term Trade Payables	32	33	36	40	46	49	Buyback of Shares	0	0	0	0	0	0
Long Term Provisions	617	528	624	769	986	1,126	Dividend Paid	0	0	0	0	0	0
Total Liabilities	41,536	46,914	53,613	62,145	78,909	86,327	Cash flow from Financing	-235	923	2,785	2,659	6,994	698
Net Block	30,272	32,645	38,667	48,847	60,076	68,127	Net Cash Flow	-86	2	4,594	-3,985	249	520
Capital Work in Progress	5,060	6,200	0	0	0	0	Forex Effect	0	0	0	0	0	0
Intangible assets under developme	0	0	0	0	0	0	Opening Balance of Cash	159	73	75	4,669	684	933
Non Current Investments	264	313	370	456	584	667	Closing Balance of Cash	73	75	4,669	684	933	1,453
Long Term Loans & Advances	2,872	1,782	2,108	2,598	3,328	3,801							
Other Non Current Assets	3,519	4,084	4,832	5,955	7,627	8,711							
Net Current Assets	-451	1,890	7,636	4,289	7,294	5,021							
Total Assets	41,536	46,914	53,613	62,145	78,909	86,327							

Source: Company Reports & Ventura Research



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