



**adani**  
Energy Solutions

## Adani Energy Solutions Limited

(Formerly known as Adani Transmission Limited)

### Investor Presentation

**November 2024**



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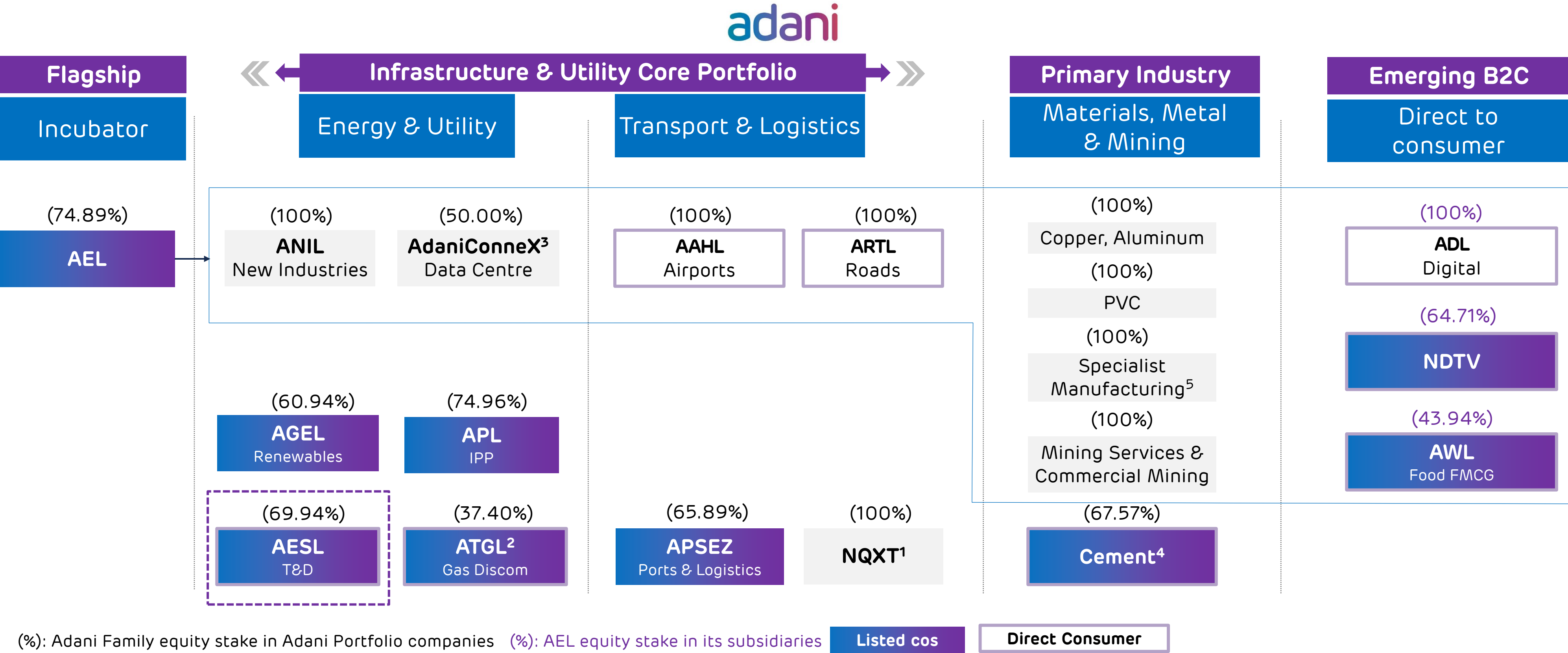


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**Adani Portfolio**



# Adani: A World Class Infrastructure & Utility Portfolio

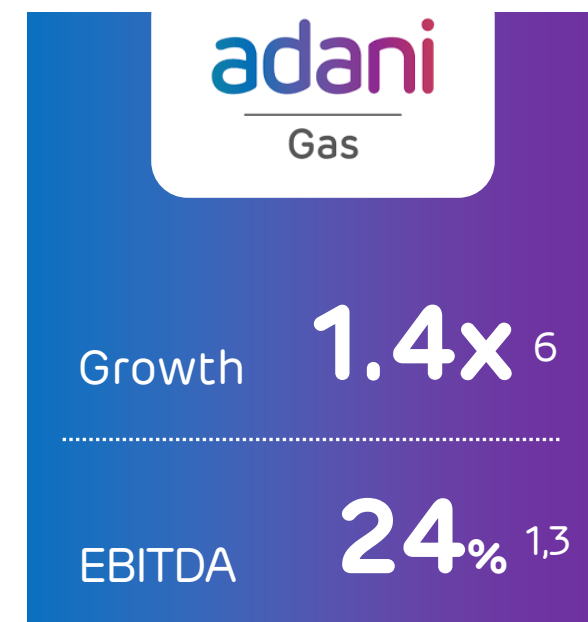
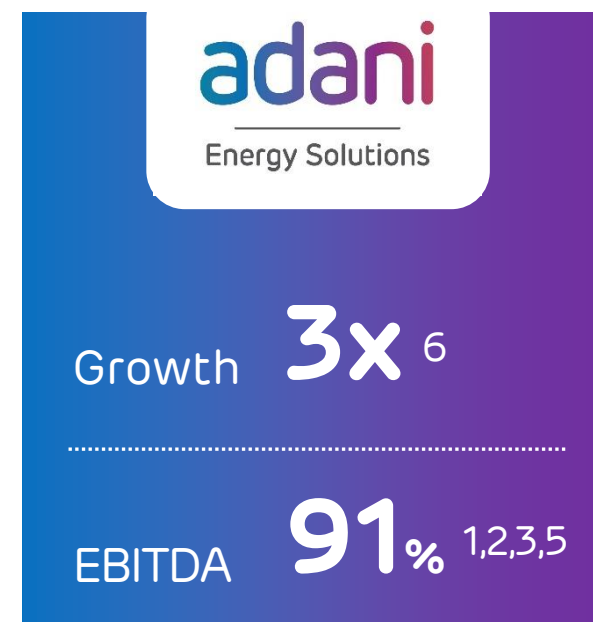
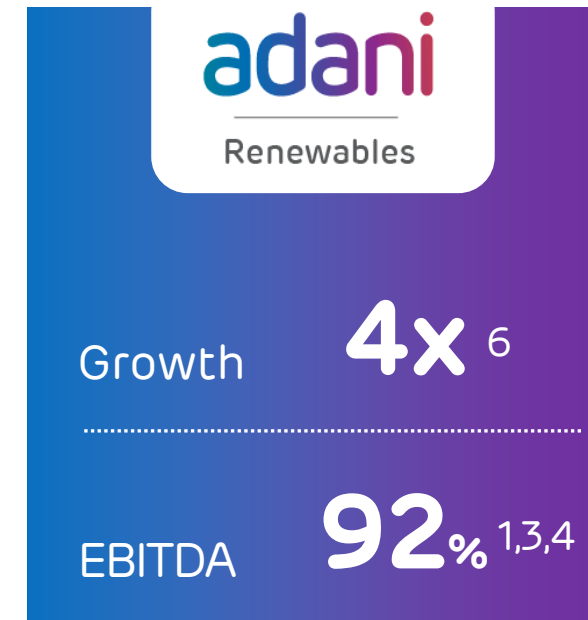
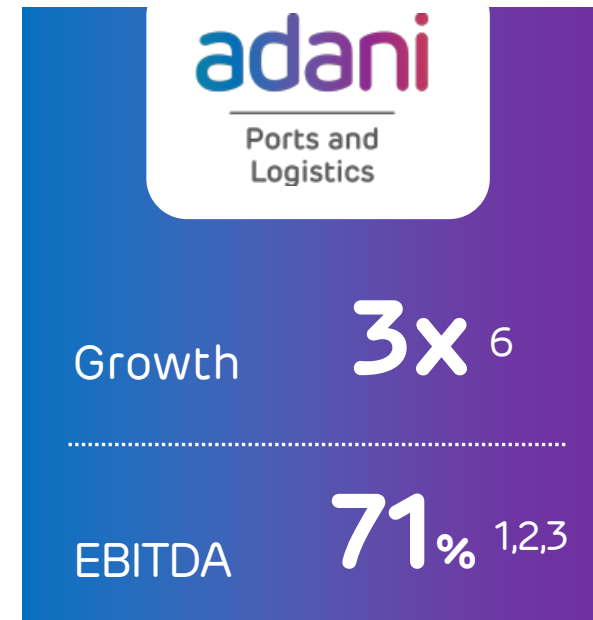


A multi-decade story of high growth centered around infrastructure & utility core

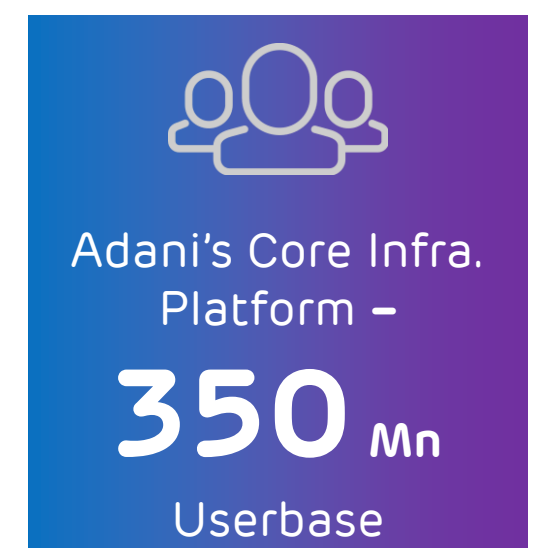
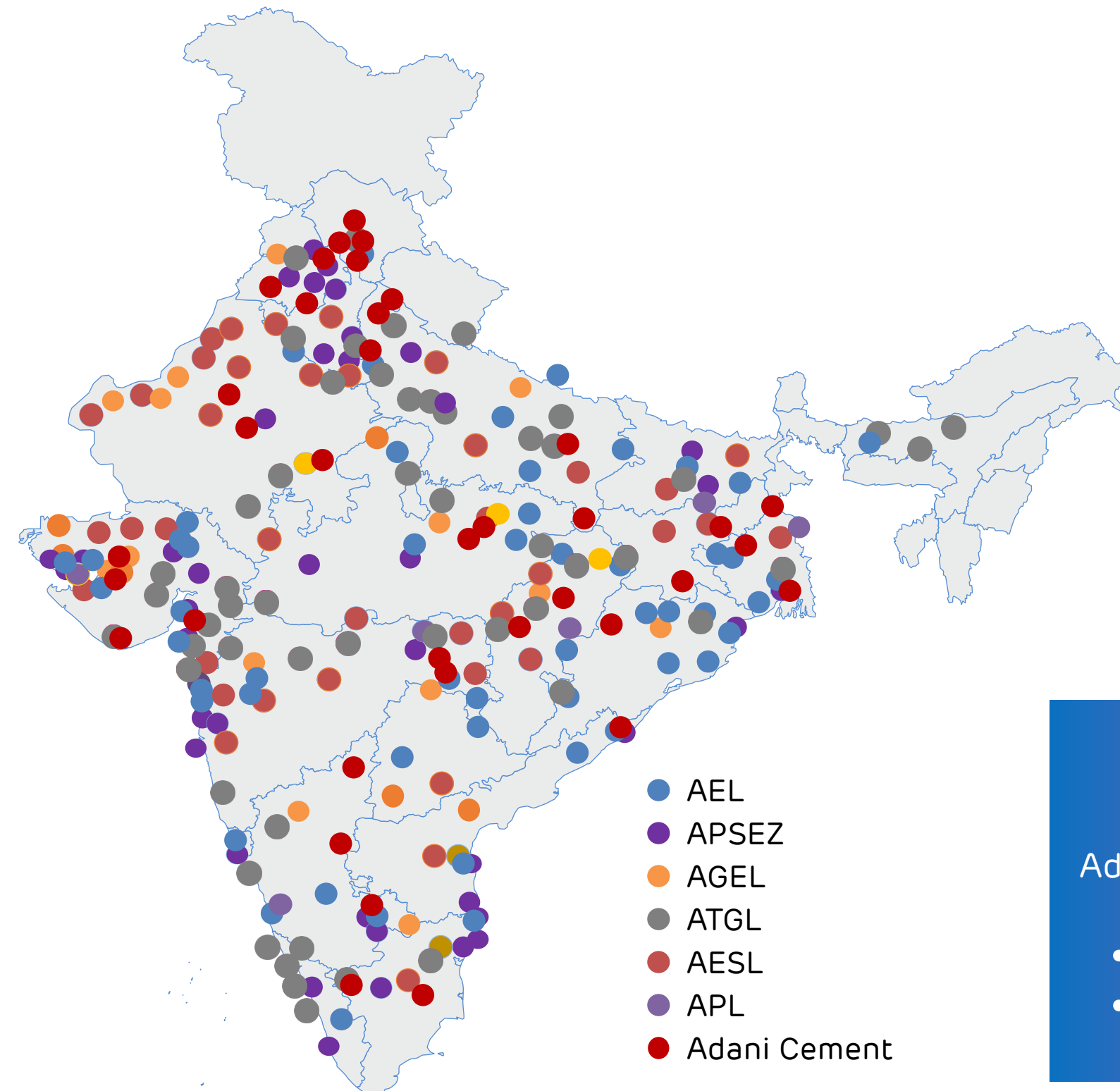
1. NQXT: North Queensland Export Terminal | 2. ATGL: Adani Total Gas Ltd, JV with Total Energies | 3. Data center, JV with EdgeConnex, | 4. Adani Cement includes 67.57% stake in Ambuja Cements as on 30<sup>th</sup> September 2024 which in turn owns 50.05% in ACC Limited. Adani directly owns 6.64% stake in ACC Limited. Ambuja Cements Ltd. holds 58.08% stake in Sanghi Industries Ltd. | 5. Includes the manufacturing of Defense and Aerospace Equipment | AEL: Adani Enterprises Limited; APSEZ: Adani Ports and Special Economic Zone Limited; AESL: Adani Energy Solutions Limited; T&D: Transmission & Distribution; APL: Adani Power Limited; AGEL: Adani Green Energy Limited; AAHL: Adani Airport Holdings Limited; ARTL: Adani Roads Transport Limited; ANIL: Adani New Industries Limited; AWL: Adani Wilmar Limited; ADL: Adani Digital Labs Pvt. Limited; IPP: Independent Power Producer | NDTV: New Delhi Television Ltd | PVC: Polyvinyl Chloride | Promoter's holdings are as on 30<sup>th</sup> September, 2024.

# Adani Portfolio: Decades long track record of industry best growth with national footprint

## Secular growth with world leading efficiency




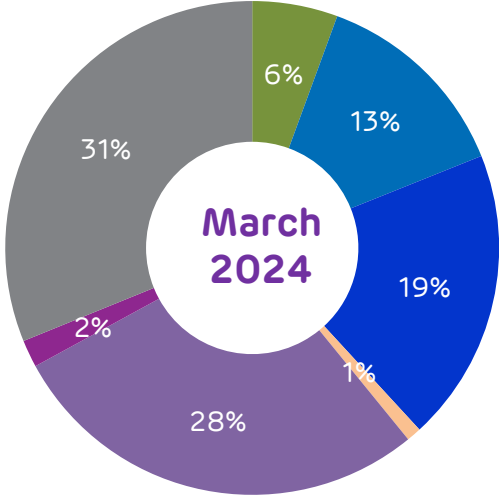
## National footprint with deep coverage



Note: 1. Data for FY24 ; 2. Margin for Indian ports business only | Excludes forex gains/losses; 3. EBITDA: Earning before Interest Tax Depreciation & Amortization | EBITDA: PAT + Share of profit from JV + Tax + Deferred Tax + Depreciation + Finance Cost + Forex Loss / (Gain) + Exceptional Items 4. EBITDA Margin represents EBITDA earned from power supply 5. Operating EBITDA margin of transmission business only, does not include distribution business | 6. Growth pertains to expansion and development aligned with market growth. Growth of respective Adani portfolio company vs. Industry growth is as follows: APSEZ's cargo volume surged from 113 MMT to 408 MMT (14%) between 2014 and 2024, outpacing the industry's growth from 972 MMT to 1539 MMT (5%). AGEL's operational capacity expanded from 0.3 GW to 10.9 GW (57%) between 2016 and 2024, surpassing the industry's growth from 46 GW to 143.6 GW (15%). AESL's transmission length increased from 6,950 ckm to 20,509 ckm (14%) between 2016 and 2024, surpassing the industry's growth from 3,41,551 ckm to 4,85,544 ckm (4%). ATGL expanded its geographical areas from 6 to 52 (27%) between 2015 and 2024, outperforming the industry's growth from 62 to 307 (19%). PBT: Profit before tax | ATGL: Adani Total Gas Limited | AEL: Adani Enterprises Limited | APSEZ: Adani Ports and Special Economic Zone Limited | AESL: Adani Energy Solutions Limited | APL: Adani Power Limited | AGEL: Adani Green Energy Limited | Growth represents the comparison with respective industry segment. Industry source: APSEZ (domestic cargo volume): <https://shipmin.gov.in/division/transport-research> | Renewable (operational capacity): Installed Capacity Report - [Central Electricity Authority \(cea.nic.in\)](http://Central Electricity Authority (cea.nic.in)) | AESL (ckms): [National Power Portal \(npp.gov.in\)](http://National Power Portal (npp.gov.in)) | ATGL (GAs): [Brochure petroleum.cdr \(pngrb.gov.in\)](http://Brochure petroleum.cdr (pngrb.gov.in)) | ckms: circuit kilometers | GA: Geographical Areas

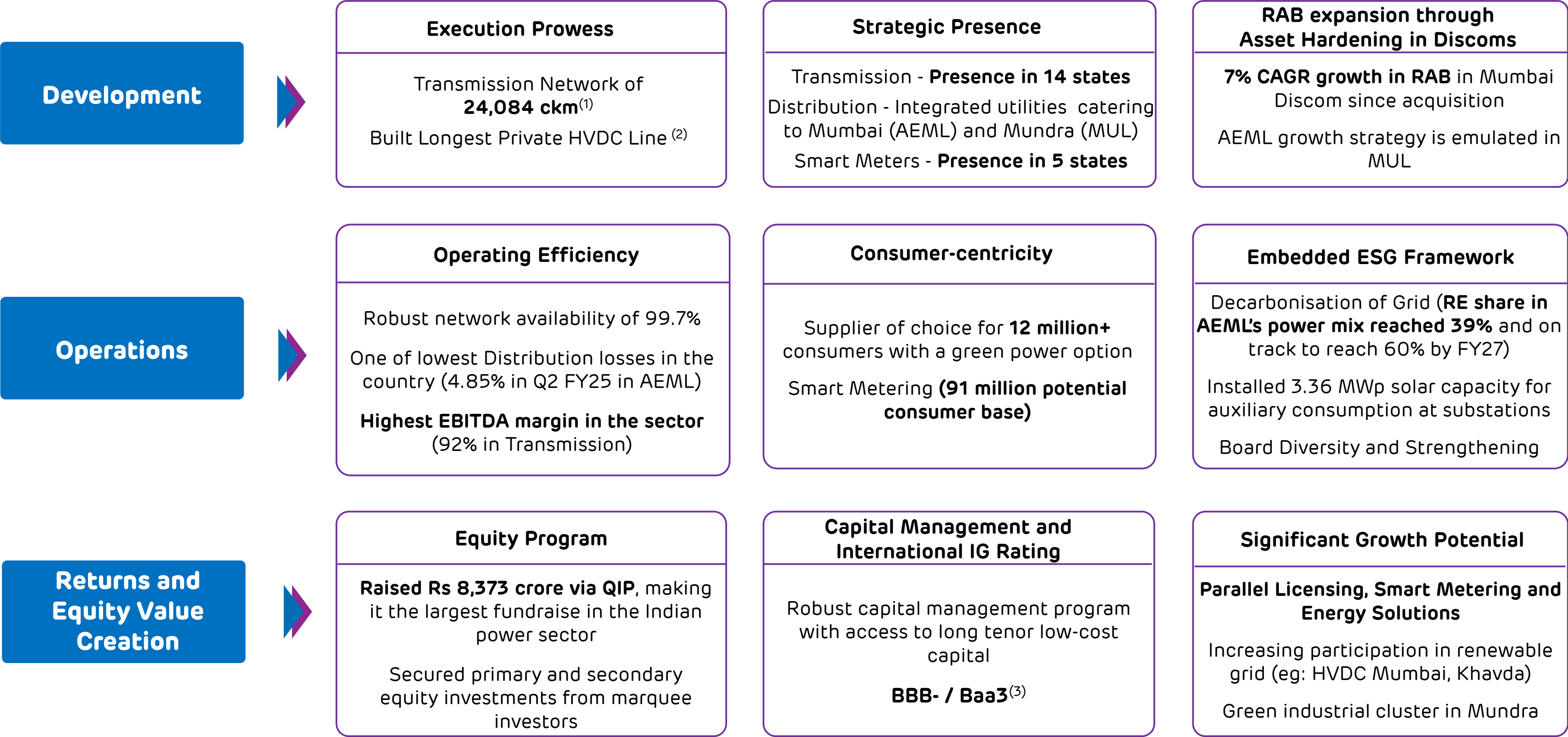


Adani: Repeatable, robust & proven transformative model of investment

	DEVELOPMENT			OPERATIONS	CONSUMERS
	Adani Infra (India) Limited (AAIL)			Operations (AIMSL) <sup>1</sup>	New C.E.O. Consumer   Employees   Other Stakeholders
ACTIVITY	<b>Origination</b> <ul style="list-style-type: none"><li>Analysis &amp; market intelligence</li><li>Viability analysis</li></ul>	<b>Site Development</b> <ul style="list-style-type: none"><li>Site acquisition</li><li>Concessions &amp; regulatory agreements</li></ul>	<b>Construction</b> <ul style="list-style-type: none"><li>Engineering &amp; design</li><li>Sourcing &amp; quality</li></ul>	<b>Operation</b> <ul style="list-style-type: none"><li>Life cycle O&amp;M planning</li><li>Asset Management plan</li></ul>	<b>Inspired Purpose &amp; Value Creation</b> <ul style="list-style-type: none"><li>Delivering exceptional products &amp; services for elevated engagement</li><li>Differentiated and many P&amp;Ls</li></ul>
PERFORMANCE	 <b>India's Largest Commercial Port</b> (at Mundra)	 <b>Longest Private HVDC Line</b> (Mundra - Mohindergarh)	 <b>World's largest Renewable Cluster</b> (at Khavda)	 <b>Energy Network Operation Center (ENOC)</b>	
CAPITAL MANAGEMENT	Strategic value Mapping  <b>Policy, Strategy &amp; Risk Framework</b>	Investment Case Development  <b>Duration Risk Matching Risk Management – Rate &amp; Currency Governance &amp; Assurance Diversified Source of Capital</b>	Growth Capital – Platform Infrastructure Financing Framework		 <b>Long Term Debt</b> <ul style="list-style-type: none"><li>PSU Banks</li><li>Pvt. Banks</li><li>Bonds</li><li>NBFCs &amp; FIs</li><li>DII</li><li>Global Int. Banks</li><li>Capex LC</li></ul>
ENABLER	<b>Continued Focus &amp; Investment</b>	<b>Human Capital Development</b> <ul style="list-style-type: none"><li>Leadership Development Initiatives</li><li>Investment in Human Capital</li></ul>	<b>AI enabled Digital Transformation</b> <ul style="list-style-type: none"><li>Power Utility Business - ENOC</li><li>City Gas Distribution - SOUL</li><li>Transportation Business - AOCC</li></ul>		

Note 1 Adani Environmental Resource Management Services Ltd. (additional company is being proposed)  
O&M: Operations & Maintenance | HVDC: High voltage direct current | PSU: Public Sector Undertaking (Public Banks in India) | GMTN: Global Medium-Term Notes | SLB: Sustainability Linked Bonds | AEML: Adani Electricity Mumbai Ltd. | AIMSL : Adani Infra Mgt Services Pvt Ltd | IG: Investment Grade | LC: Letter of Credit | DII: Domestic Institutional Investors | COP26: 2021 United Nations Climate Change Conference | AGEL: Adani Green Energy Ltd. | NBFC: Non-Banking Financial Company | AAIL: Adani Infra (India) Limited

# AESL: A platform well-positioned to leverage growth opportunities in energy domain



Note: 1) Transmission network is as of 31<sup>st</sup> October 2024 and includes operational, under-construction assets; 2) HVDC : High voltage direct current – Longest at the time of commissioning; 3) Fitch: BBB- / Moody's: Baa3

Notes: QIA: Qatar Investment Authority; TOD Tariff: Time of Day Tariff; AMI: Advanced Metering Infrastructure, MUL: MPSEZ Utilities Limited EBITDA: Earning before interest tax, depreciation & amortization; O&M: Operation and Maintenance , MWp: Megawatt Peak, SS: Sub-station, Ckm: Circuit Kilometer, ESG: Environmental, Social and Governance, ROE :Return on Equity, GMTN: Global Medium Term Note, AEML: Adani Electricity Mumbai Limited; CAGR: Compounded Annual Growth Rate; RE: Renewable Energy; CSAT: Consumer Satisfaction

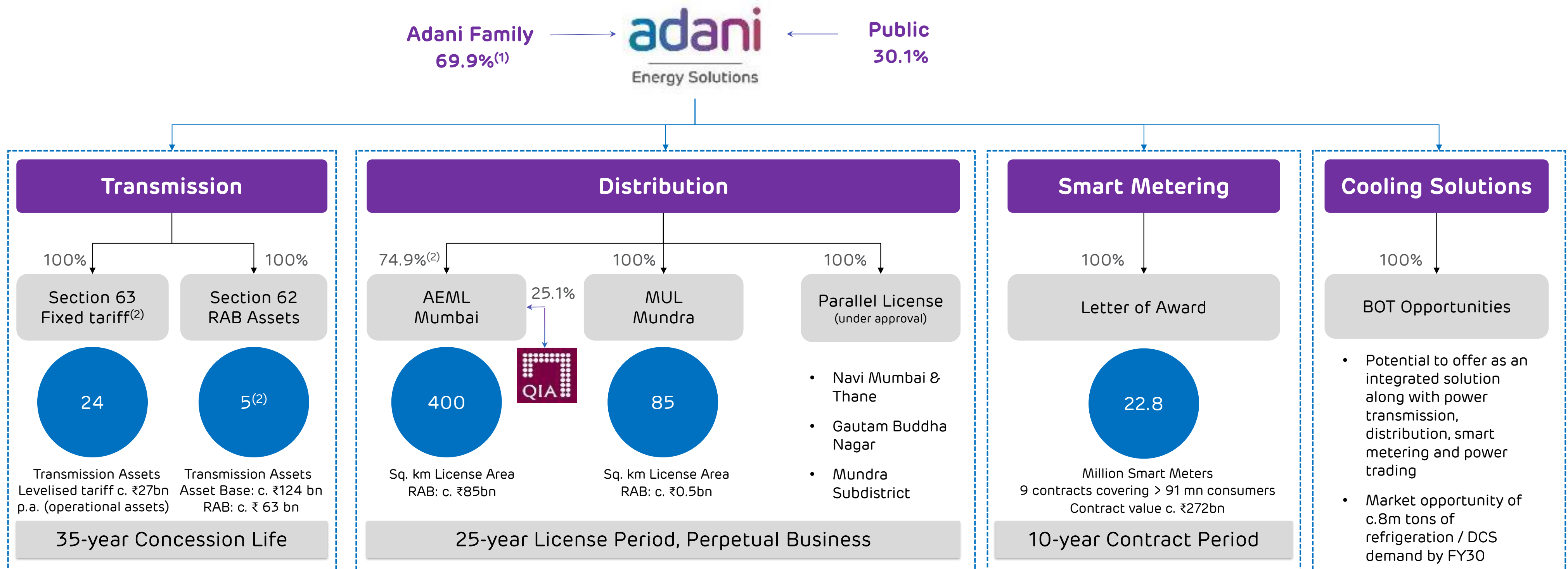
**Adani Energy Solutions Ltd.**  
(formerly known as Adani Transmission Ltd.)



**About AESL**



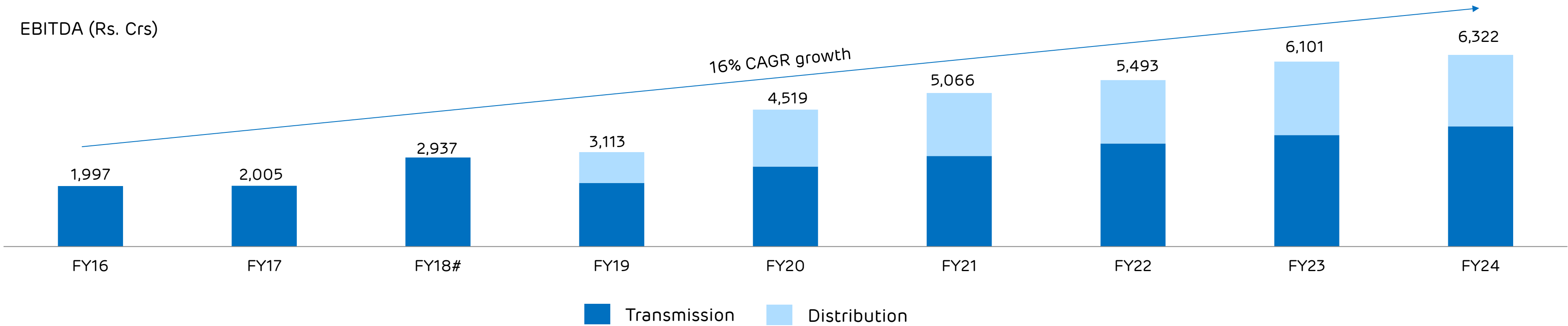
# Holding Structure and Portfolio Overview



Notes: 1) Shareholding as of September 30, 2024. 2) Primary Equity - QIA's Investment in AEML: US\$ 452 mn (Rs 32 bn) total investment (US\$ 170 mn of Equity and US\$ 282 mn of shareholder sub-debt) for 25.1% stake in AEML; 3) Tariff based competitive bidding (TBCB); 4) Smart Meter Project details: (i) Brihanmumbai Electric Supply & Transport Undertaking (BEST) – 10.8 lakh smart meters (Rs 13 bn) (ii) Assam Power Distribution Company Limited (APDCL) – 7.7 Lakh smart meters (Rs. 8.5 bn) (iii) 3 Andhra Discoms – 41.23 Lakh smart meters (Rs 52 bn) (iv) 2 MSEDCL projects – 133.2 Lakh smart meters (Rs 160 bn), (v) NBPDC - Bihar – 28 lakh meters (Rs 31 bn) (vi) Uttarakhand Power Corporation Limited (UPCL) – 6.5 lakh smart meters (Rs 8 bn); RAB: Regulatory Asset Base; AEML: Adani Electricity Mumbai Limited; MUL: MPSEZ Utility Limited; AMI: Advanced Metering Infrastructure; HVDC : High voltage direct current,, LOA: Letter of Award, LOL: Letter of Intent; Ckm: Circuit Kilometer, SEZ: Special Economic Zone, Sq.Km: Square Kilometer; BOT: Build Own Transfer; BOOM: Build Own Operate Manage; RAB: Regulated Asset Base

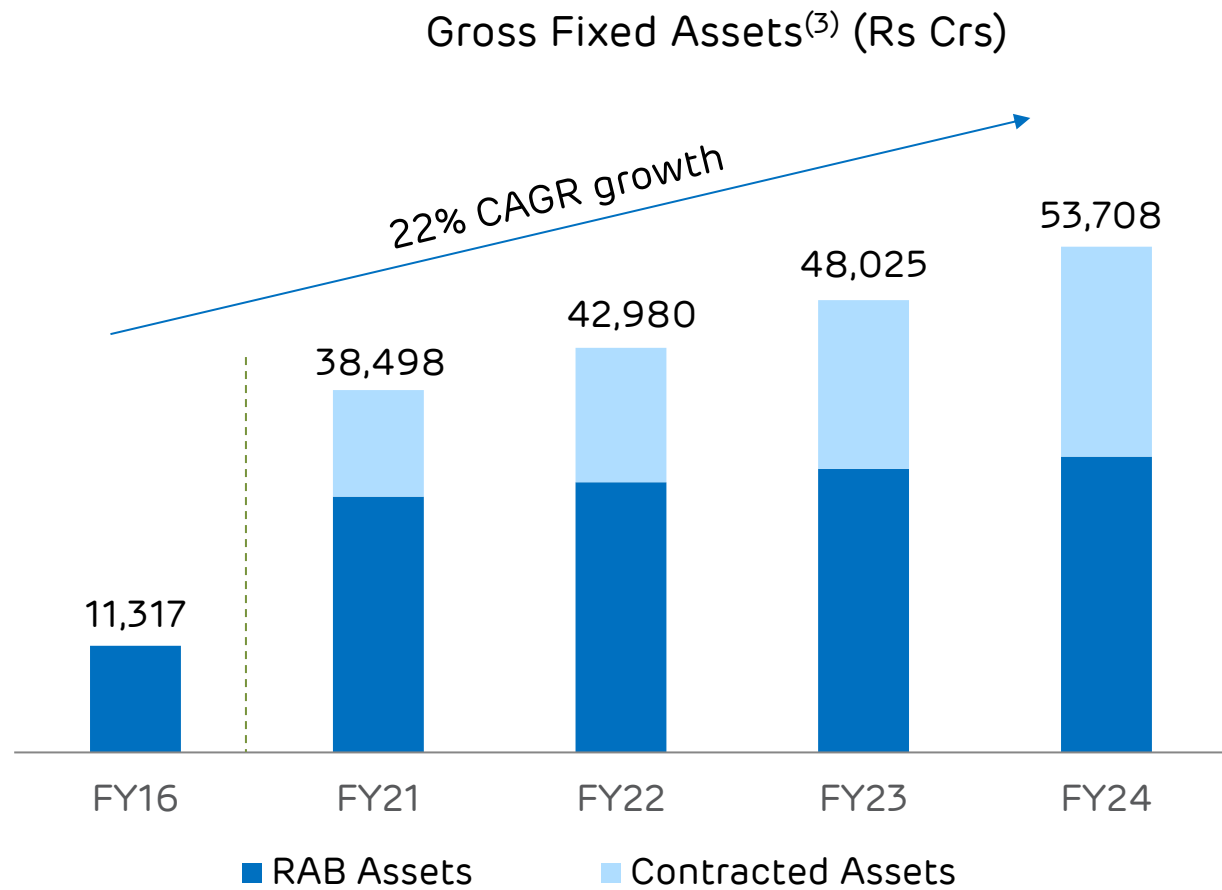
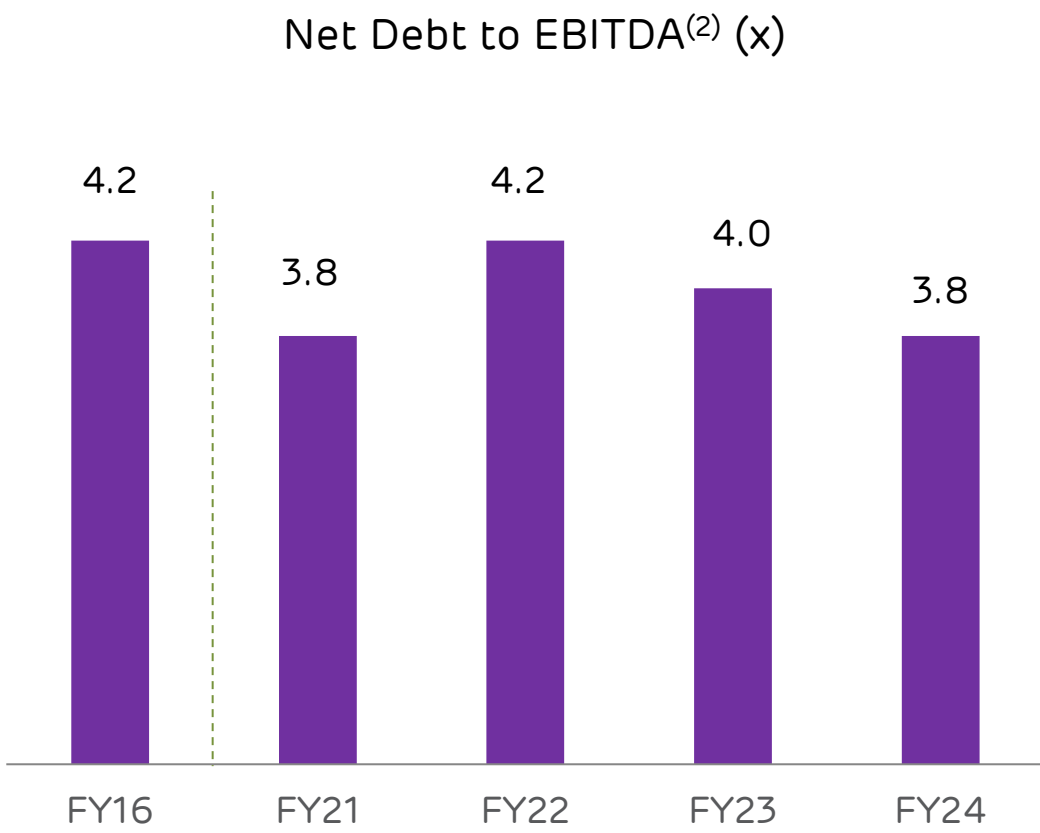


# Transformational Journey with Robust Growth and Credit Discipline



## AESL is Investment grade rated since FY16

	FY16	FY24
Credit Rating <sup>(1)</sup>	BBB- / Baa3	BBB- / Baa3
Average Maturity	5.8 years	7.3 years
Cost of debt (weighted average)	10.9%	9.5%



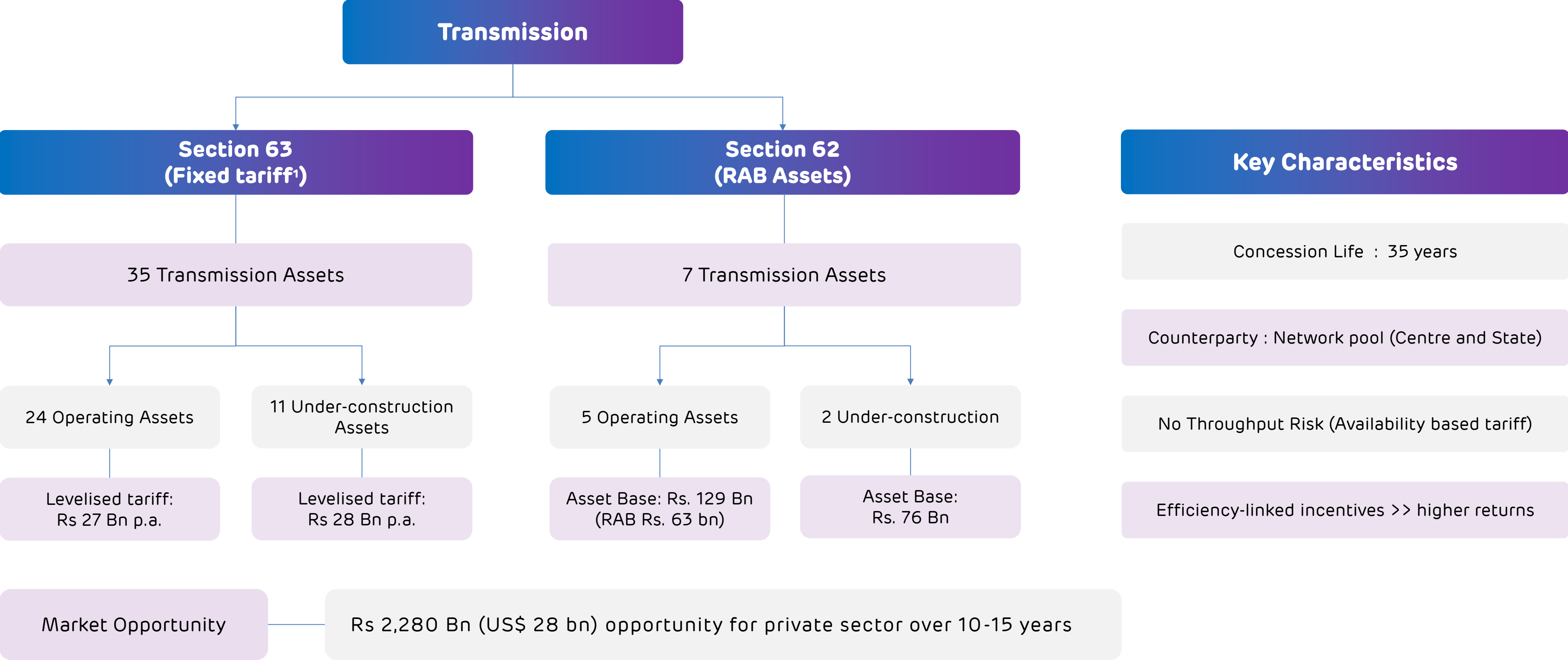
Notes: (1) Credit Rating: Fitch / Moody's ratings (2) Net-debt to EBITDA ratio calculation considered only long-term debt at hedge rate and excluded sub debt; (3) Gross Fixed Assets: Fixed Assets includes Property, Plant & Equipment, Right of Use Assets, Capital Work in Progress, Goodwill & Other Intangible Assets and excludes SCA assets; EBITDA : Earning before interest tax and depreciation, CAGR: Compounded Annual Growth Rate; #Includes one-time income of Rs. 873 Crores recognised during the year based on CERC order





# Transmission

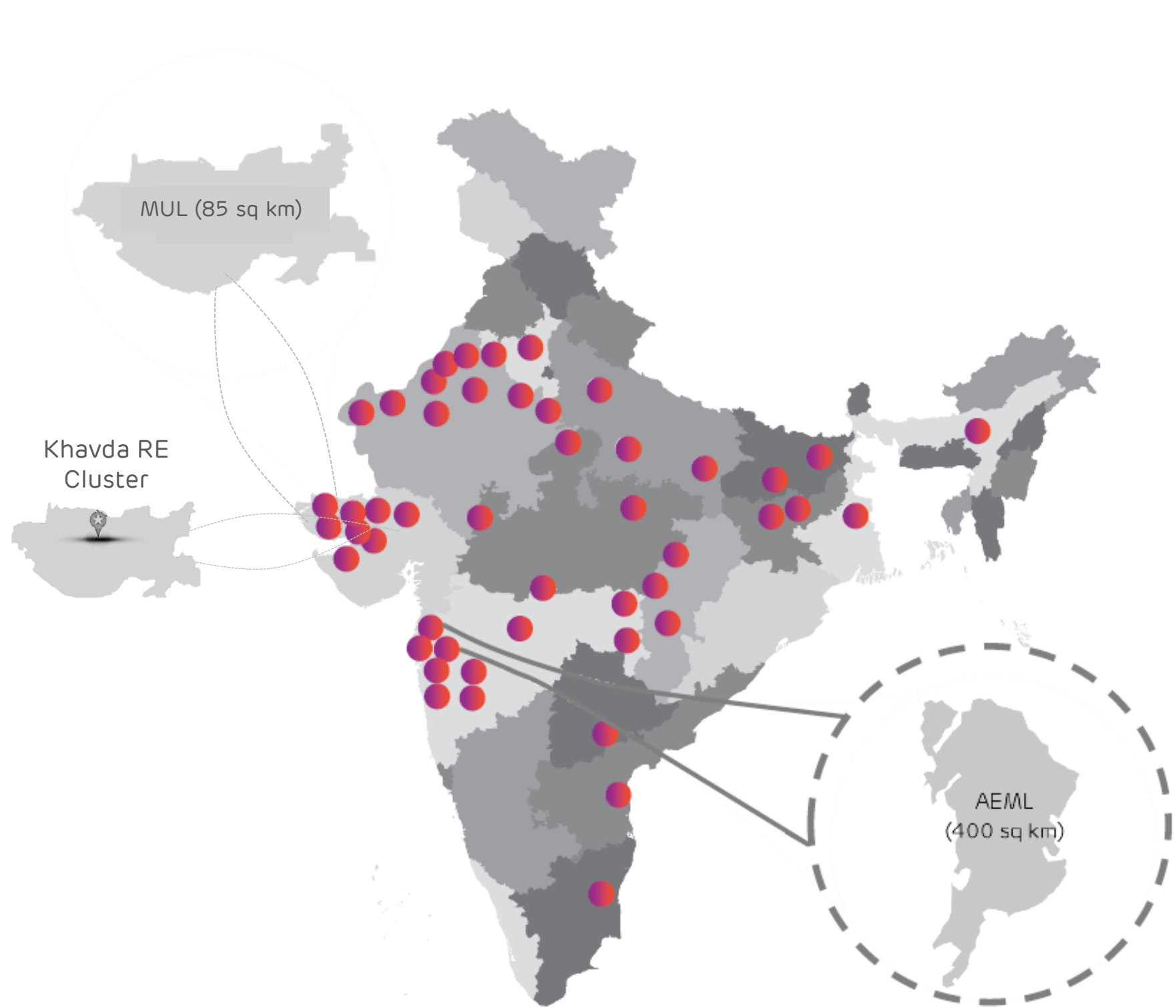




Notes: 1) Tariff based competitive bidding (TBCB); RAB: Regulatory Asset Base, p.a.: per annum; HVDC: High Voltage Direct Current



# Asset Portfolio: Presence Across the Country



No	Operational	Ckt Kms
1	MEGPTCL	1,217
2	ATIL (3 lines)	3,834
3	ATSCL	97
4	MTSCL	300
5	WTGL	974
6	WTPL	2,089
7	AEML	573
8	STL	348
9	RRWTL	611
10	CWRTL	434
11	ATRL	278
12	HPTSL	116
13	BPTSL	133
14	TPTSL	164
15	ALTL	650
16	GTL	897
17	FBTL	292
18	BKTL	481
19	ATBPSL	343
20	OBTL	630
21	WRSS_XXIA	295
22	LBTL	351
23	JKTL	37

24	MUL	242
25	WKTL	1,756
26	KTL	9
27	KVTL	74
28	KBTL	217
29	ATSTL (EPTCL)	673
Subtotal (A)		18,115
No	Under construction^	Ckt Kms
30	NKTL	304
31	AEMIL (HVDC)	80
32	MP II	1,088
33	WRSR	630
34	Khavda II Part A	355
35	KPS – 1	42
36	Sangod Trans	11
37	Khavda Ph III Part A	586
38	Line & SS Augmentation	-
39	Khavda Phase IV Part A	602
40	NES – Navinal (Mundra)	516
41	NES – Jamnagar	941
42	Khavda Phase IV Part D	816
Subtotal (B)		5,970
Total (A+B)		24,084

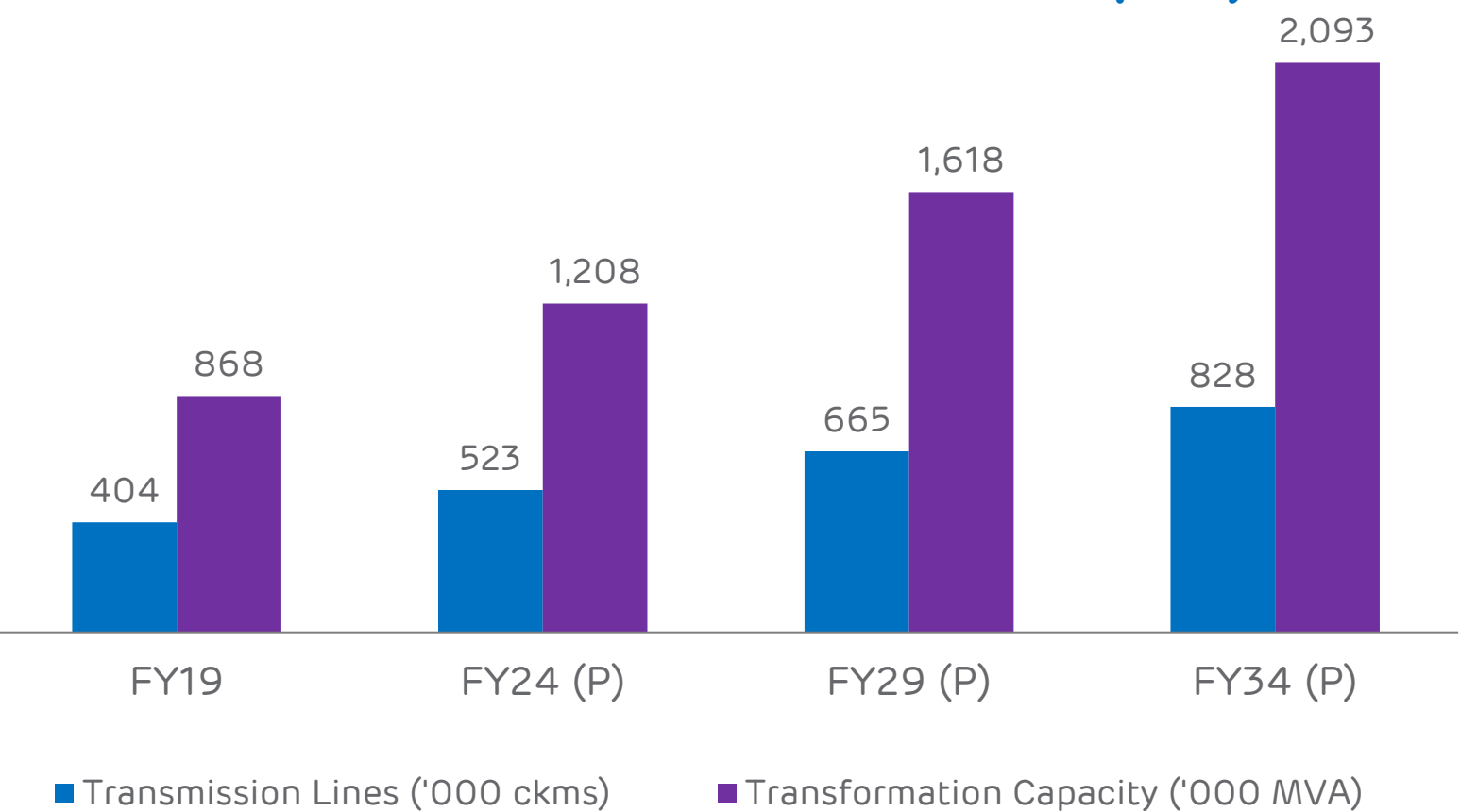
Red: Operational assets  
#Map not to scale  
^Partial commissioning of NKTL line: 85 ckm out of 304 ckm; MP II line: 1072 ckm out of 1088 ckm; Sangod line: 11.3 out of 11.4 ckm; Khavda Phase-II, Part-A: 142 ckm out of 355 ckm; KPS- 1: 19 out of 42 thus total 1,329 ckm has been commissioned out of total 5970 ckm in under-construction stage  
MEGPTCL: Maharashtra Eastern Grid Power Transmission Company Limited; ATIL: Adani Transmission (India) Limited; ATSCL: Aravali Transmission Service Company LTD.; MTSCL: Maru Transmission Service Company LTD; WTGL: Western Transmission (Gujarat) LTD.; WTPL: Western Transco Power LTD; AEML: Adani Electricity Mumbai Limited; STL: Sipat Transmission Limited; RRWTL: Raipur Rajnandgaon-Warora Transmission Limited; CWRTL: Chhattisgarh-WR Transmission Limited; ATRL: Adani Transmission (Rajasthan) Limited; HPTSL: Hadoti Power Transmission Limited; BPTSL: Barmer Power Transmission Limited; TPTSL: Thar Power Transmission Limited; ALTL: Alipurduar Transmission Ltd.; GTL: Ghatampur Transmission Limited; FBTL: Fatehgarh Bhadla Transmission Ltd; BKTL: Bikaner Khetri Transmission Limited; ATBPSL: Adani Transmission Bikaner Sikar Private Limited; OBTL: Obra- C Badaun Transmission Limited; WRSS\_XXIA: WRSS XXI(A) Transco Limited; LBTL: Lakadia Banaskantha Transco Limited ; JKTL: Jam Khambaliya Transco Limited; MUL: MPSEZ Utility Limited; NKTL: North Karanpura Transco Limited; KVTL: Kharghar Vikroli Transmission Limited; WKTL: Warora Kurnool Transmission Ltd.; AEMIL: Adani Electricity Mumbai Infra Limited; MP II: MP Power Transmission Package II Ltd; KHAVDA: Khavda Transmission Ltd.; KARUR: Karur Transmission Ltd.; NES: Network Expansion Scheme (NES)

# Transmission: Private Participants Opportunity of ~US\$ 28 bn over 10 years

## Attractive Industry Opportunity backed by strong policy support

- Mandatory competitive bidding introduced since 2006 (TBCB) has created a level playing field for private players
- Private sector has won 59 projects out of total 101 transmission TBCB projects awarded since 2011<sup>(2)</sup>
- Identified TBCB opportunity in near-term is about Rs. 840 Bn / US\$ 10 Bn<sup>(3)</sup> under RFP/RFQ stage
- Schemes like UDAY, 24x7 Power for All, Village Electrification etc. strengthening the value chain

## Growth in transmission lines and transformation capacity



## RE penetration & General Network Access to boost system strengthening

### Renewable Penetration

500 GW Target by 2030 and  
600 GW Target by 2032

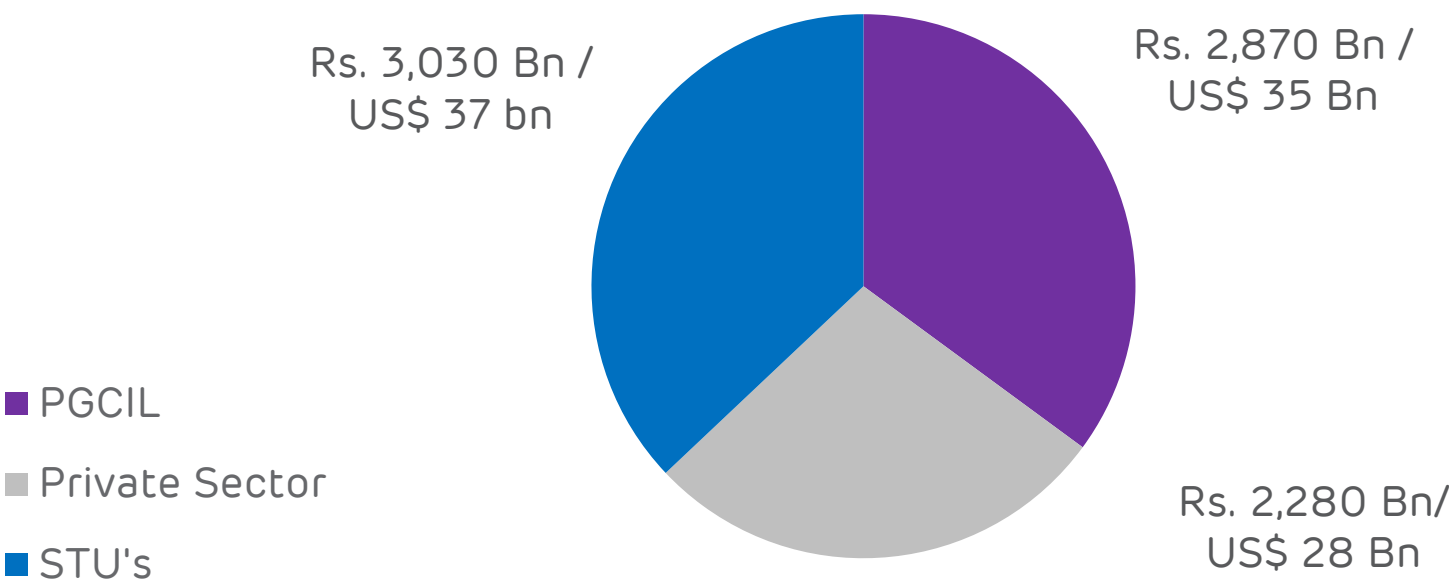
**Rs 4.76 Lakh Crs (US\$ 58 Bn) by 2027 and  
Rs 9.15 Lakh Crs (US\$ 110 Bn) by 2032**  
Transmission opportunity driven by RE and  
system strengthening (as per CEA)

### General network access (GNA)

GNA Regulations for access to inter-state  
transmission systems since 2017

Flexibility to Discoms to procure higher  
component of power under short term and  
medium-term tenders from generators across  
the country

## Overall investment of Rs. 8,180 Bn / US\$ 100 bn over 10 years



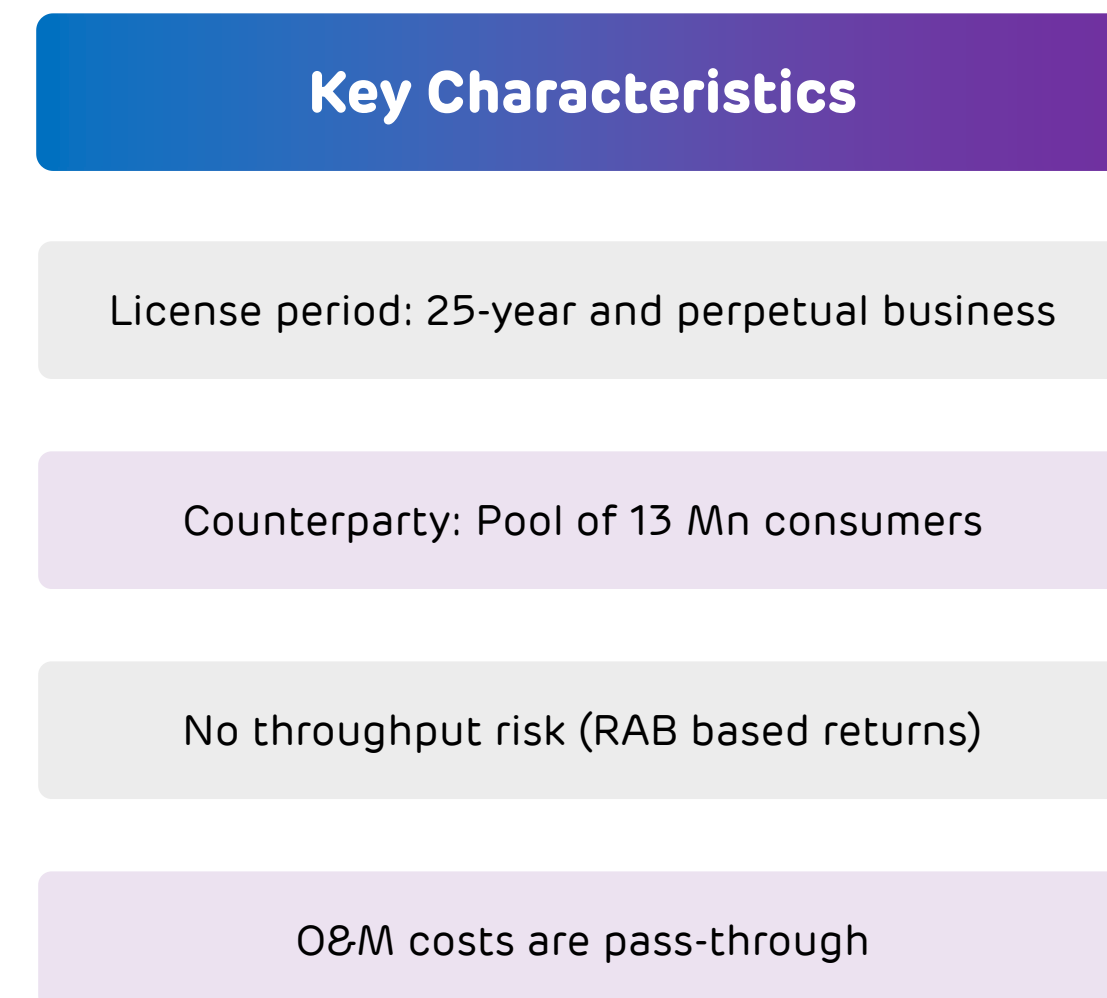
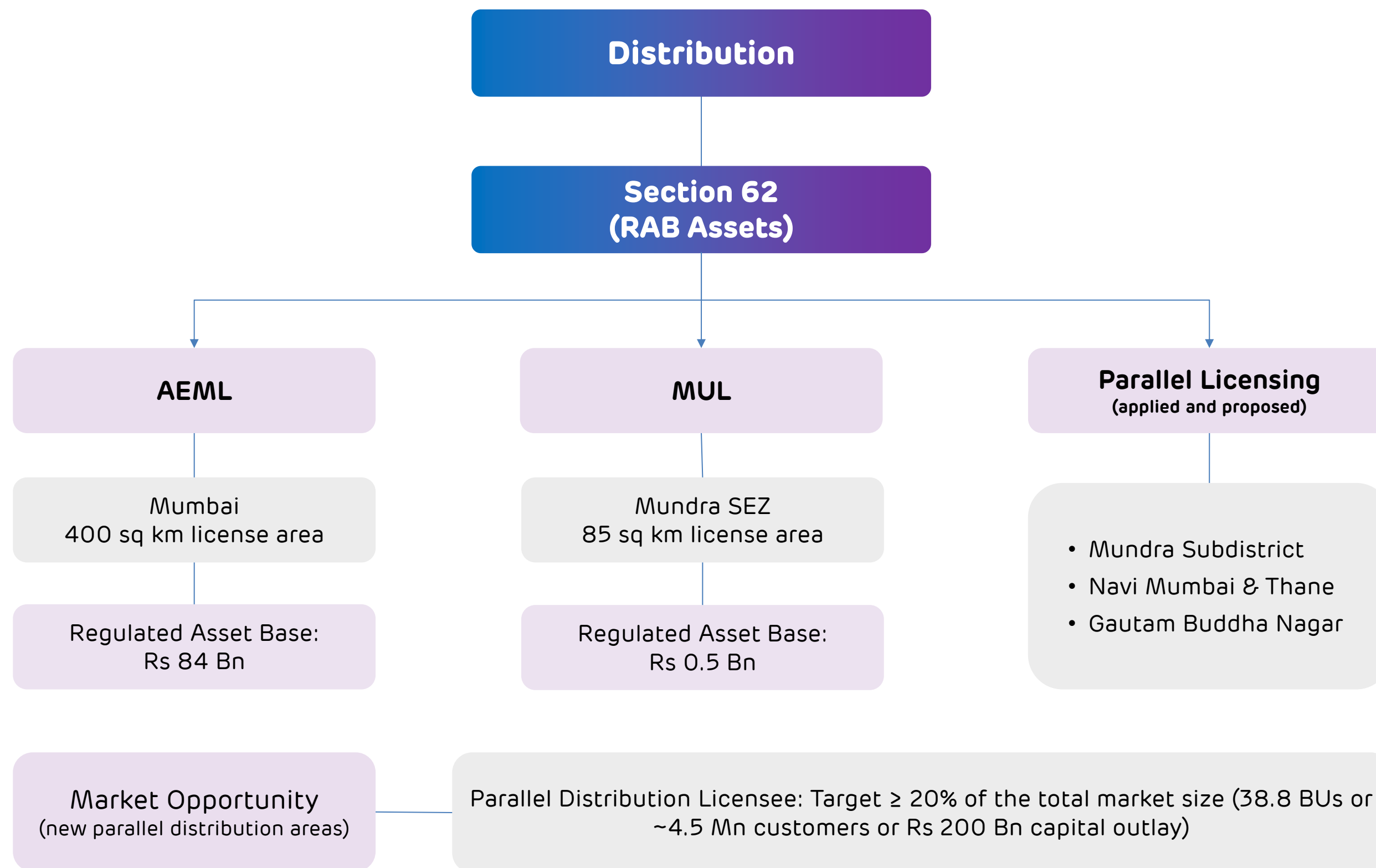
**Private Participants Opportunity of Rs. 2,280 Bn / US\$ 28 bn**





**Distribution**

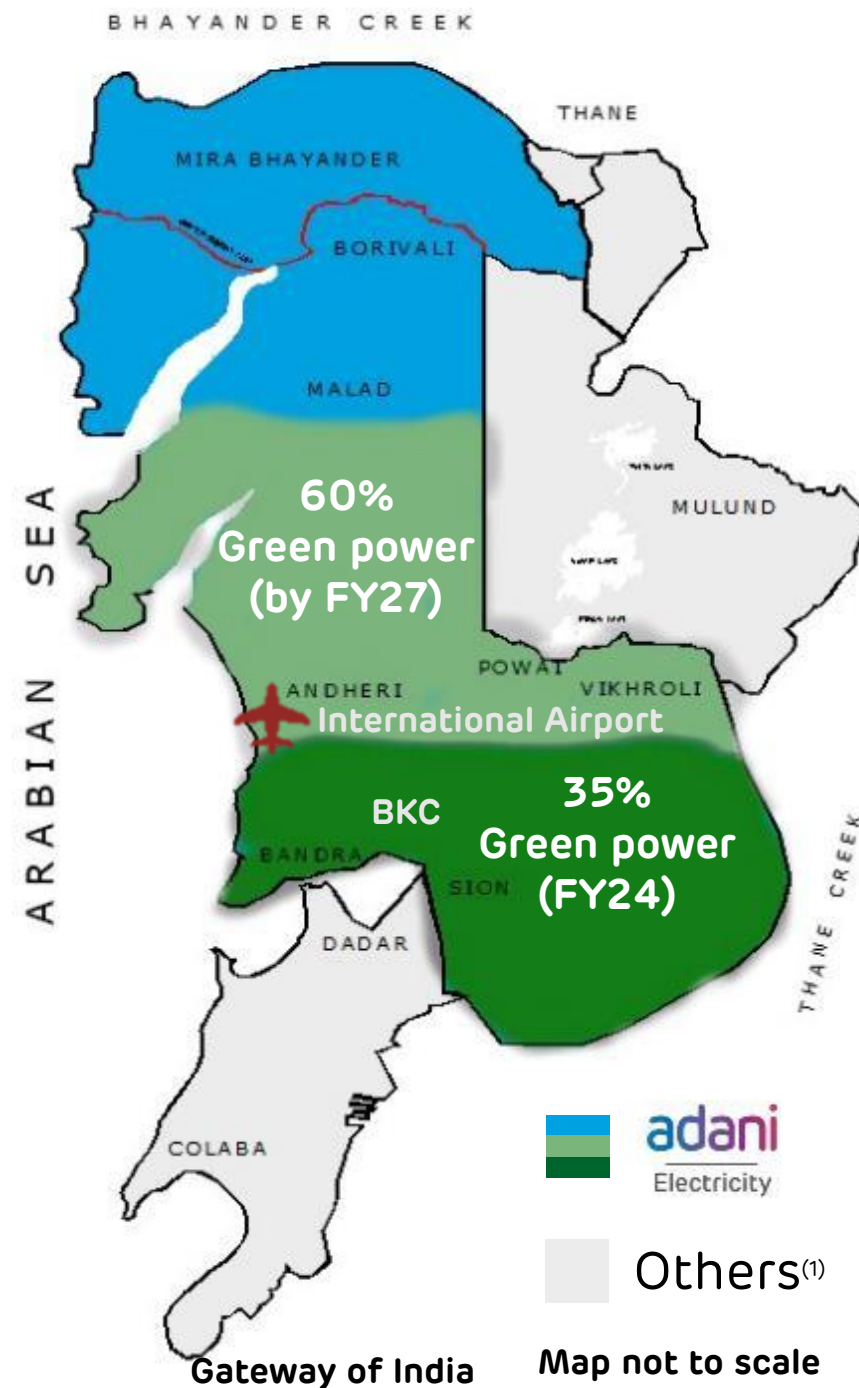






# AEML Distribution: India's No. 1 power utility, as per MoP, McKinsey, PFC (Scored 99.6/100)

## Largest Integrated utility in India's Commercial Capital - Mumbai



### About Mumbai

- 8<sup>th</sup> Most Populous City in World
- 25<sup>th</sup> Richest City in world based on GDP (US\$)

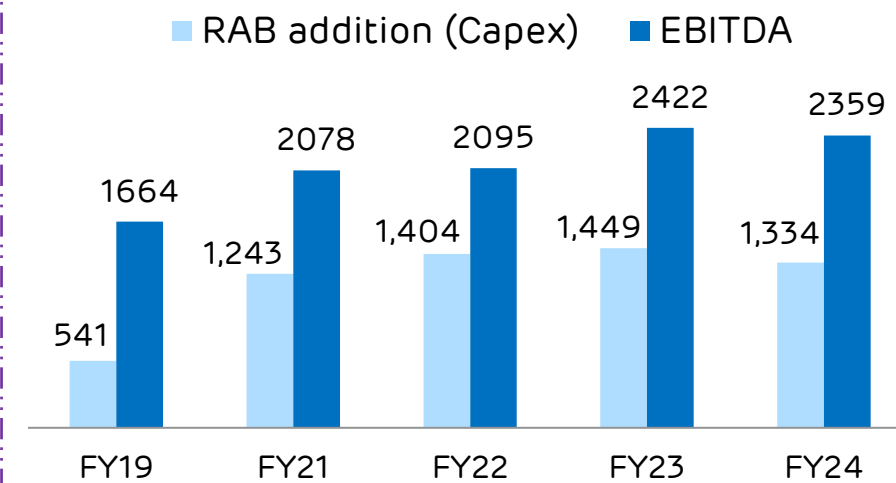
### Mumbai Consumers

- 2.2x Per capita income of India
- Rs 3,28,000 Per capita income of Mumbai (FY20)
- Rs 36,000 Avg Annual Electricity Bill of AEML Consumer
- ~6% Average electricity bill as % of per capita income

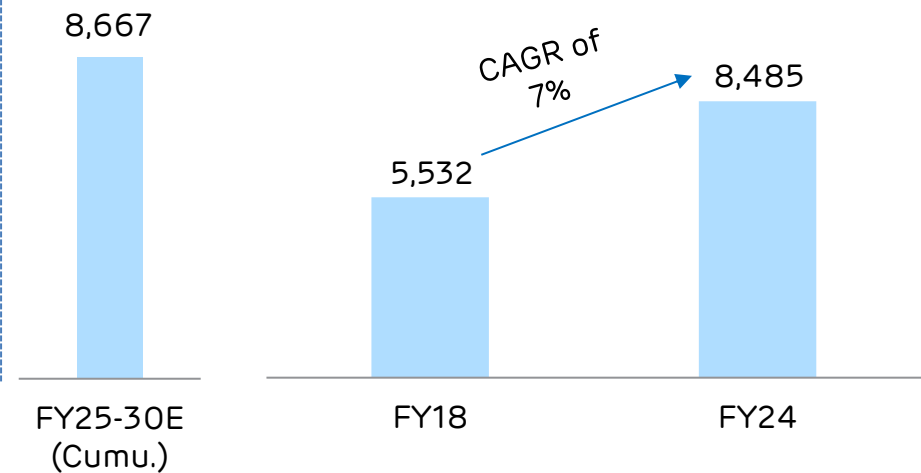
- Servicing 85% of Mumbai, touching 2/3 households of Mumbai
- One of the largest mega city in the world to achieve 35% renewable power

## AEML – Key Milestones Since Acquisition

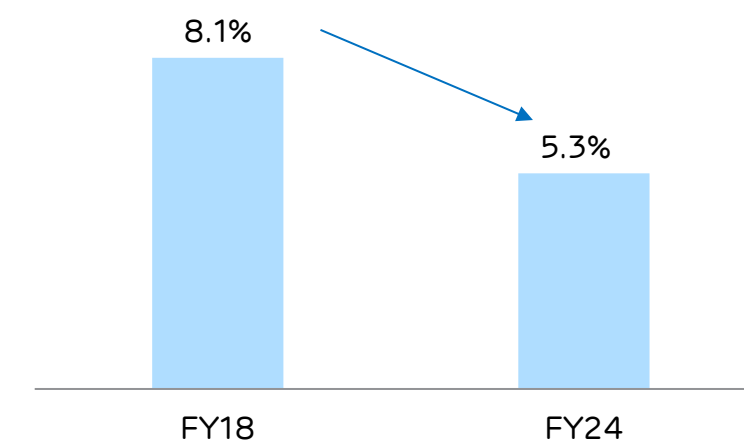
### Approved RAB Addition and EBITDA (Rs Crs)



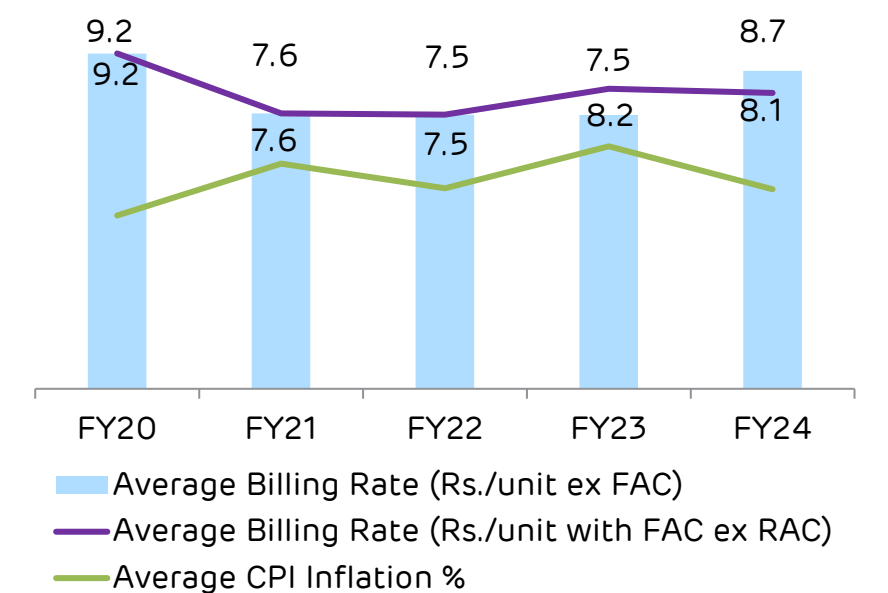
### Capitalised RAB (Rs Crs)



### Distribution losses %



### Average Billing Rate (Rs/unit ex FAC)



Capex-led growth in Regulated Asset Base to drive growth in returns (Rs. 87 Bn over FY25-30e)

# MPSEZ Utilities Limited (MUL): Overview

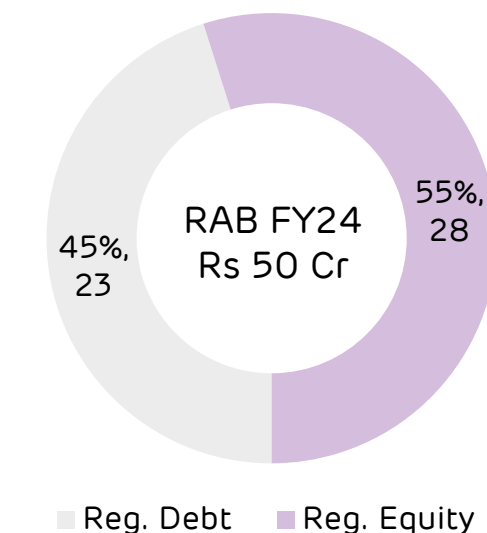
**Mundra SEZ is strategically located with well developed supporting infrastructure serving as an attractive industrial hub**



- Electricity Distribution for Mundra SEZ area
- Catering primarily to commercial and industrial consumers
- Section 62 (RAB Based) asset governed by Gujarat Electricity Regulatory Commission
- 237 ckm of distribution network

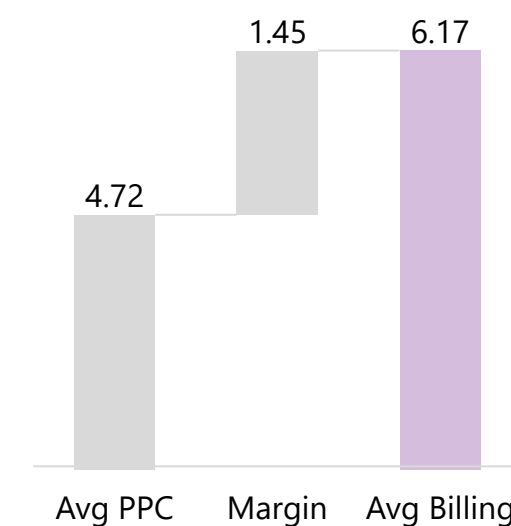
- Mundra SEZ is India's largest multi-product SEZ **spread across 85 sq km**
- Mundra port is **India's largest private commercial port** with capacity to handle cargo of ~264 MMT
- SEZ also has a huge land bank reserve for large-scale industries in future
- Given the large industry cluster opportunity in Mundra SEZ area and the accompanying expected growth in power demand, AESL is well placed to grow the MUL business

**RAB<sup>(1)</sup> (Rs Cr)**

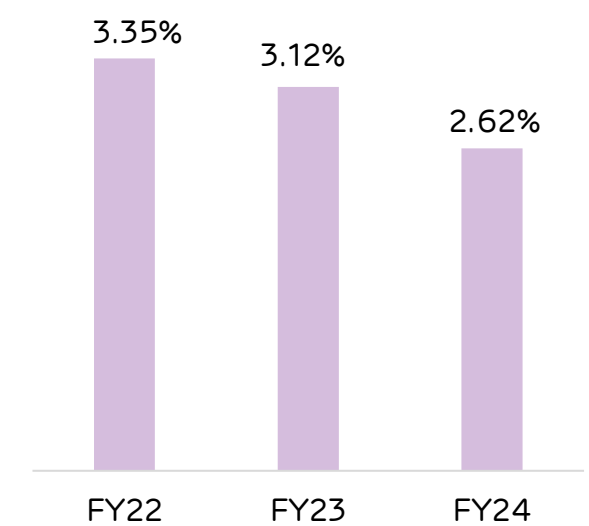


**Avg Billing Rate (Rs/ unit)**

*Power Sale of 658 MUs in FY24*



**Dist. Loss (%)**



MUL's average existing load is ~77MW in FY24, which is expected to grow multifold due to new investments in copper, petrochemicals and solar manufacturing & ancillary industries in the Mundra region



# Distribution and Parallel License Opportunity

- Power distribution is one of the largest consumer facing sectors in the country. 96.7% of ~270 mn households(1) in India are connected to the grid and primarily owned and operated by state governments
- AESL's Distribution platform intends to position as the electricity **supplier of choice**
- Parallel Distribution Licensee – enabled under **6<sup>th</sup> proviso to section 14 of Electricity Act 2003** as follows:
- *“The Appropriate Commission may **grant a license 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 license within the same area shall, without prejudice to the other conditions or requirements under this Act, comply with the additional requirements [relating to the capital adequacy, credit-worthiness, or code of conduct] as may be prescribed by the Central Government, and no such applicant, who complies with all the requirements for grant of license, shall be refused grant of license on the ground that there already exists a licensee in the same area for the same purpose”*
- Proposed Total Capital Outlay<sup>(2)</sup> of Rs. 200 Bn over 8 years
- Parallel Distribution Licensee<sup>(2)</sup> : Target ≥ 20% of the total market size – 38.8 BUs or approx. 4.5 million customers

Available Opportunities		Adani's Core Competency and Distribution Expertise	
Growth areas	Parallel Licensing in more than 3 new regions with potential 9x growth in the distribution area <sup>(3)</sup>	Our Competitive Advantage	• <b>Cost Competitiveness</b> – Cheap bulk power sourcing, Opex control
	Expansion of MUL Discom license area		• <b>Digitization</b> – Tech-enabled solutions for efficient operations
	Further RAB additions in AEML		• <b>Technical Expertise</b> – Regulatory framework, Network design & operations
	Distribution Platform for Group consumers and commercial and industrial customers		• <b>Value Added Services</b> – Green Power, Energy Audits, EV Charging
			• <b>Reliability</b> – Delivering world class reliability & quality of supply

## AESL's Core Strengths and Available Synergies in the Distribution space:

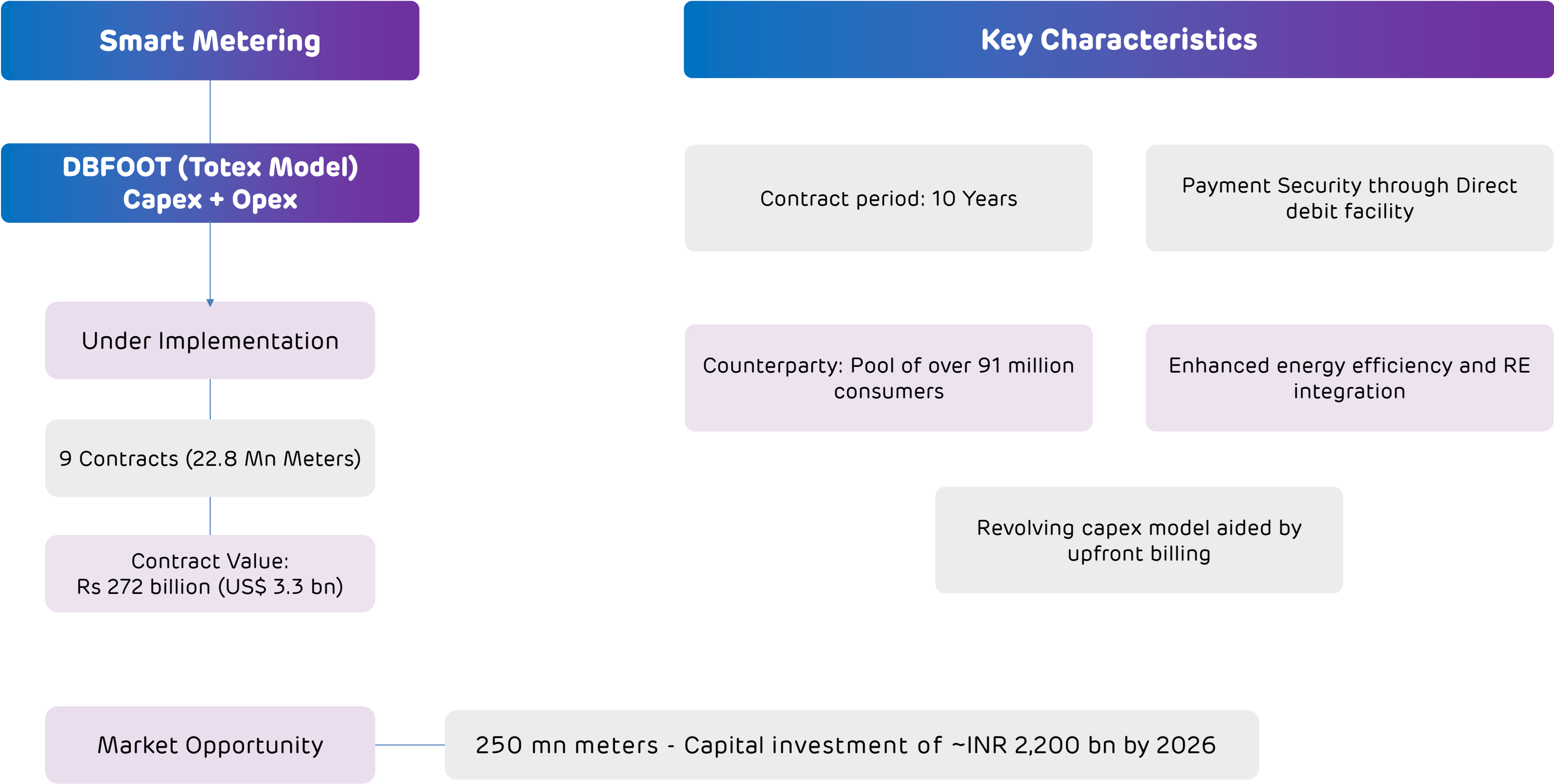
Experience of operating AEML – the No. 1 Discom in the country | Expertise of operating in a multi-player competitive environment

1) Source: India Residential Energy Survey (IRES 2020) 2) As per internal study; 3) Applied for Mundra subdistrict (1000 sq kms), Navi Mumbai (700 sq kms) and Gautambuddha Nagar (1,750 sq kms) and AEML (existing – 400 sq km) ; AMI: Advanced Metering Infrastructure; EV: Electric Vehicles; RAB: Regulatory Asset Base; AEML: Adani Electricity Mumbai Ltd; MUL: MPSEZ Utilities Ltd; BU: Billion Units



# Smart Metering

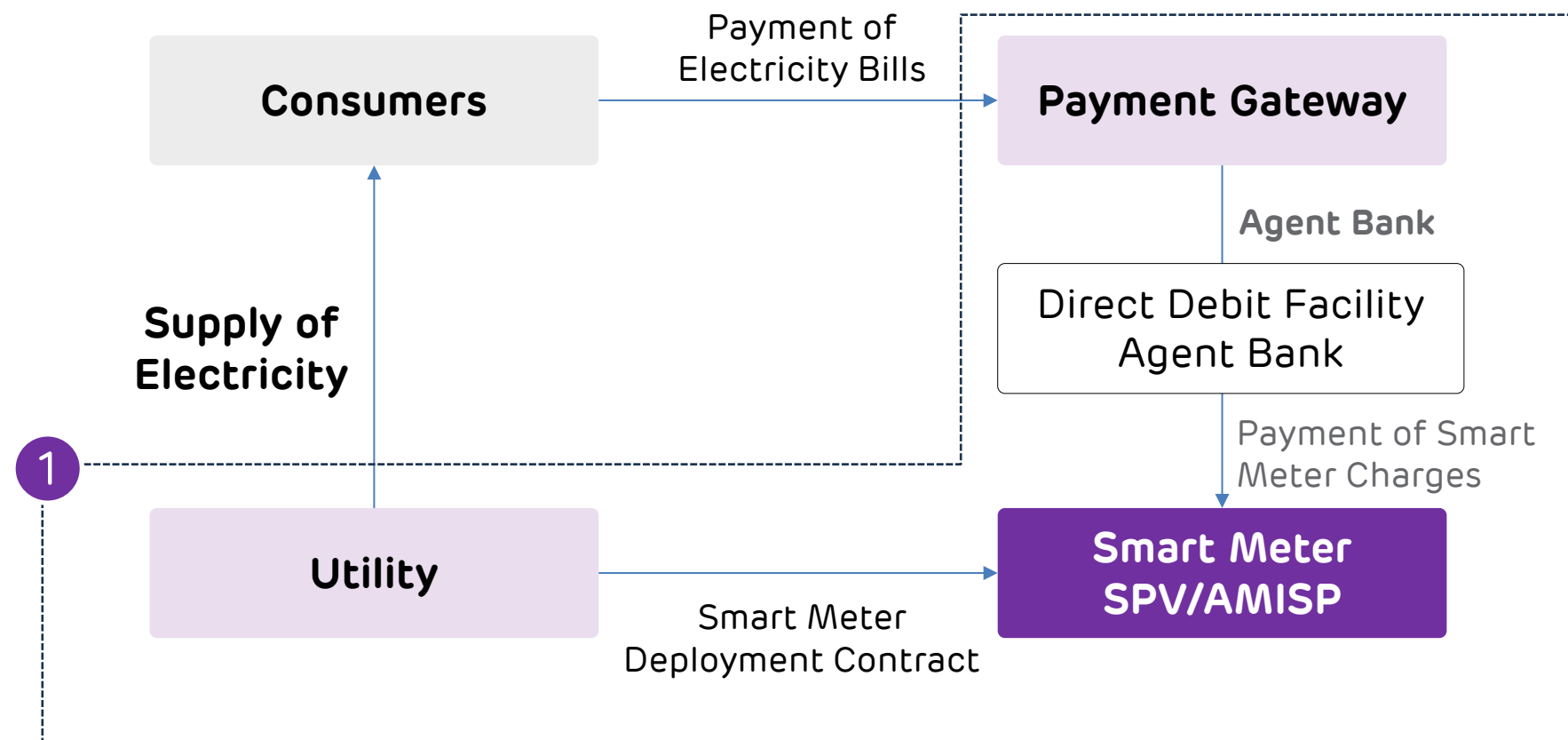




Note: LOA: Letter of Award: Selected as preferred bidder, contract under negotiation; DBFOOT: Design, Build, Finance, Own, Operate, Transfer; RE: Renewable Energy; Contract smart meters (million): Maharashtra (BEST) – 1.1 mn, Assam – 0.8 mn, Andhra – 4.1 mn, Maharashtra (MSEDCL): 13.3 mn, Bihar (NBPCL): 2.8 mn; Uttarakhand (UPCL) – 0.7 mn

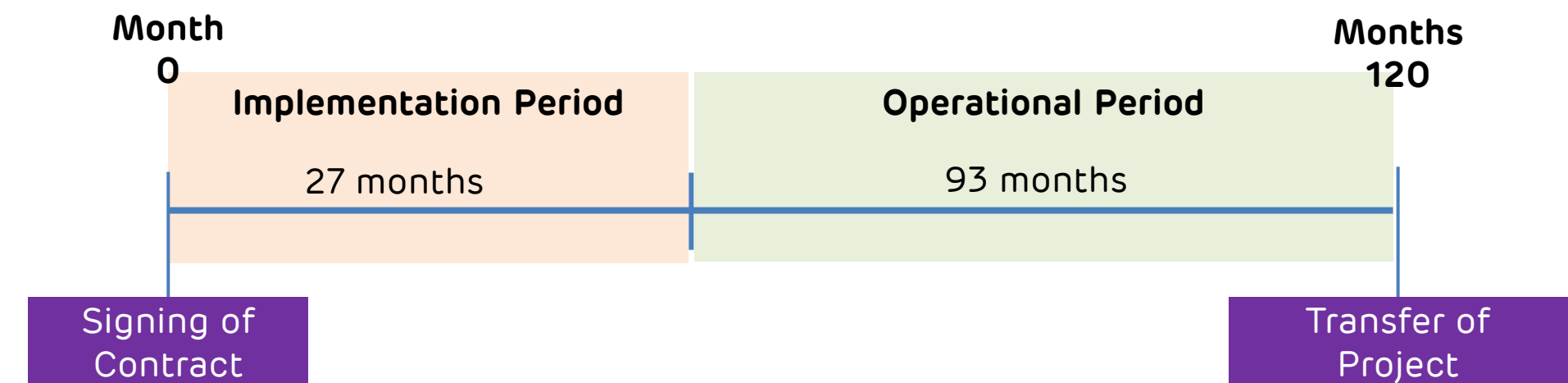
# Smart Metering Contractual Framework

## Flow of Revenue for Smart Meter SPV



- Assured Revenue for Smart Meter Implementing Agency;
- Pass through Expense under s.62 of electricity Act for Utility
- Ultimately recovered from the consumer

## Contract For Advanced Metering Infrastructure Service Provider (AMISP)



- Revenue inflows immediately on Operational Go live
- Operational Go Live: 5% of the Smart Meters being operational
- Revenue charged is based on Total Meter Months

1

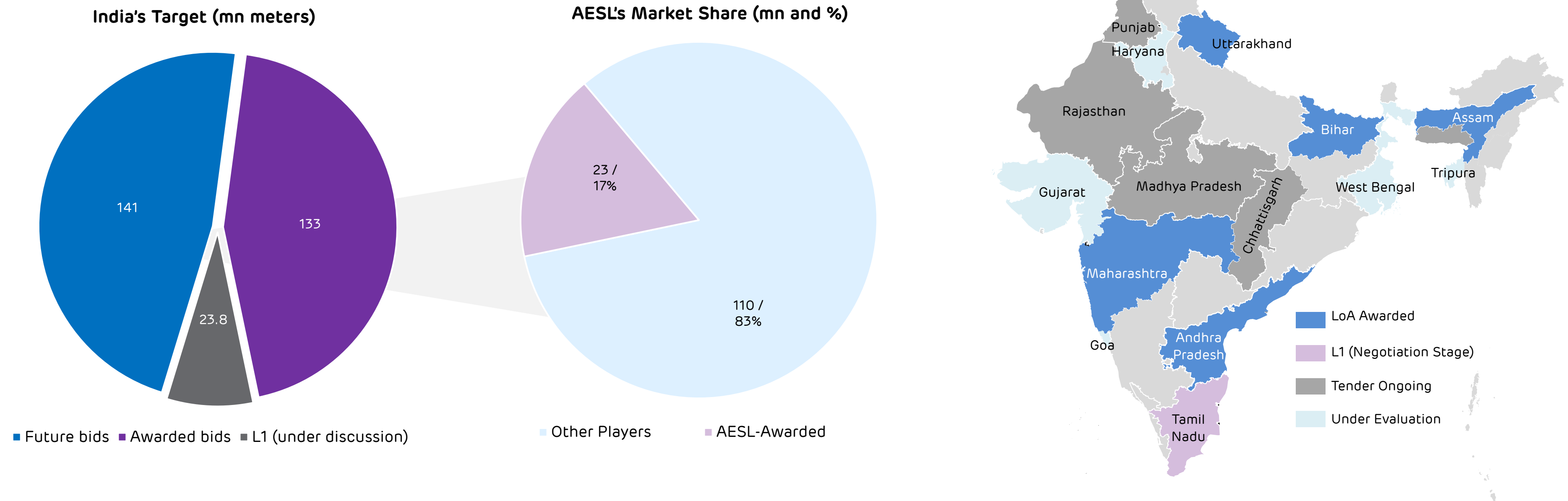
### Payment Security Mechanism through Direct Debit Facility Agreement (DDF)

- A Quadripartite agreement → governs all payments due to AMISP
- Agreement uniform to all discoms, finalized by REC being the Nodal Agency
- Direct Debit facility include bucket filling approach → all consumer bill payments will be routed through this account
- Irrevocable and Standing instruction to Agent Bank to directly pay to Smart Meter SPV from DDF account.



# Smart Metering Opportunity

- Awarded (LOA) and Negotiation (L1) stage: 157 Mn Smart Meters
- Untapped market: 93 Mn Smart meters



AESL has an LOA for 22.8 Mn smart meter qty. with an order value of Rs 272 billion (US\$ 3.3 bn)

## AESL's Core Strengths and Available Synergies:

Distribution & Smart Metering Experience | Expanding Distribution business across India | Pan India presence



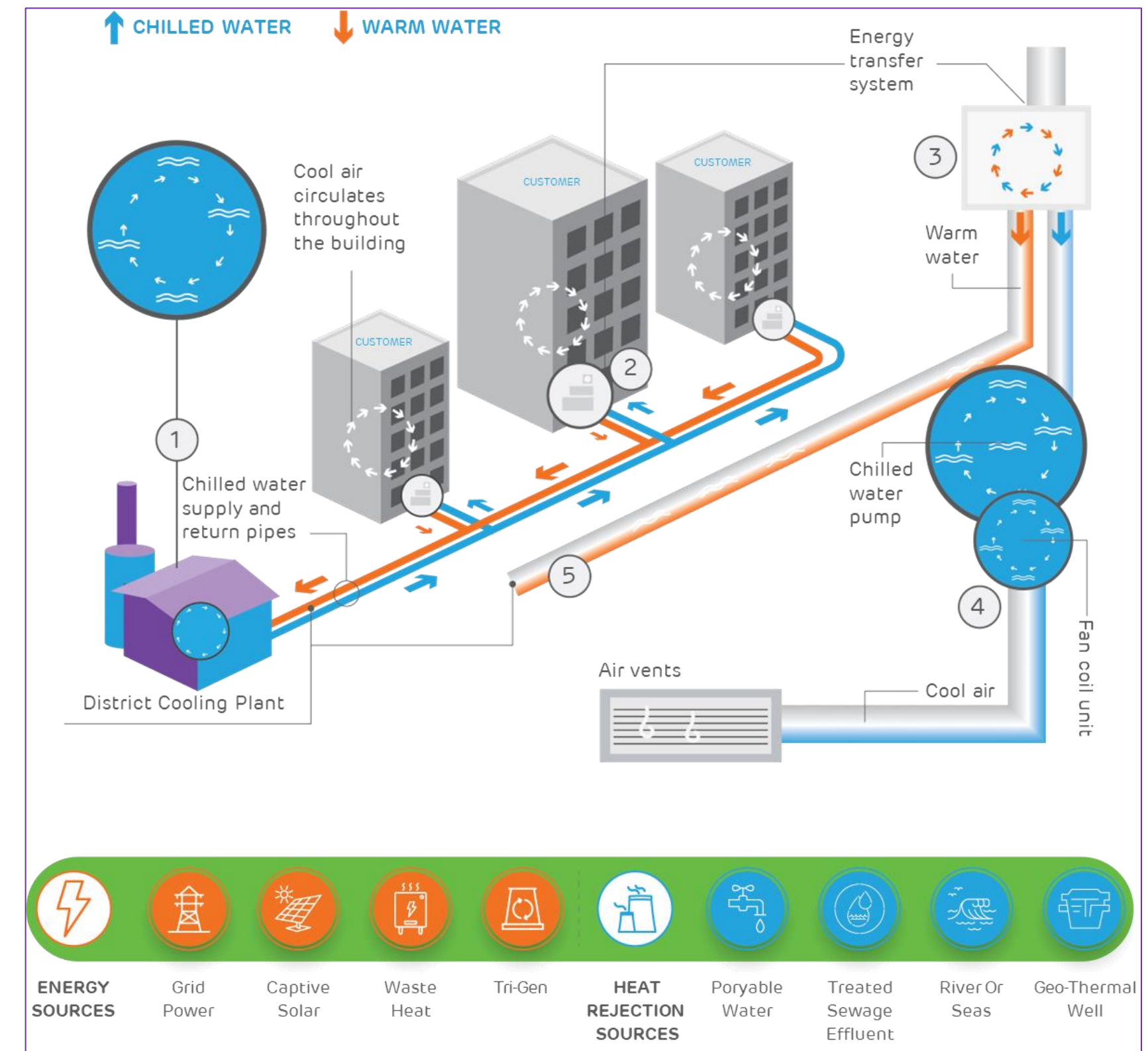
# Cooling Solutions



# Cooling Solutions: DSC Snapshot

The District Cooling System (DCS) 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.

- 1  
A central cooling plant produces chilled water by using eco-friendly refrigerants
- 2  
This chilled water is transported to the customer buildings through a network of insulated water carrying pipes.
- 3  
Energy Transfer Station (ETS) facilitates the heat transfer between the high-side chilled water circuit and low side (building) chilled water circuit with plate type heat exchanger to cool the building-side water.
- 4  
The cold low side chilled water circulates through fan coil units and cools the hot air which is blown over the cooling coil in the fan coil unit, to produce an air-conditioning environment, which is predictable and efficient.
- 5  
The warmer water from the ETS is returned to the central plant for re-cooling and recycling.



# Why District Cooling? – Business Rationale

## Changing Demographic and Economic Trends

- Large scale infrastructure development requires sustainable, energy efficient and low carbon cooling solutions
- Rising per capita income, urbanization, coupled with growing AC ownership to drive the cooling growth
- India's cooling demand projected to grow by 8 times in the next 20 years

## Growing Need for Alternative Cooling Solutions

- Standalone chiller system with requisite backup which will lead to higher capacities and associated costs
- Growing air-conditioning demand will choke-up the power supply in the medium term
- District Cooling reduces 25-30% primary energy consumption and leads to lifecycle savings of 25-30%

## Large Market and Existing Synergies

- Growing shift from distributed cooling to centralized cooling (deep penetration in the middle east)
- Opportunity to unlock potential in green-field infrastructure (Airports, Data Centers, SEZs, Residential Townships)

## Integrated Utility Offering

- AESL 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
- Tariff recovery through capacity charge and consumption charge

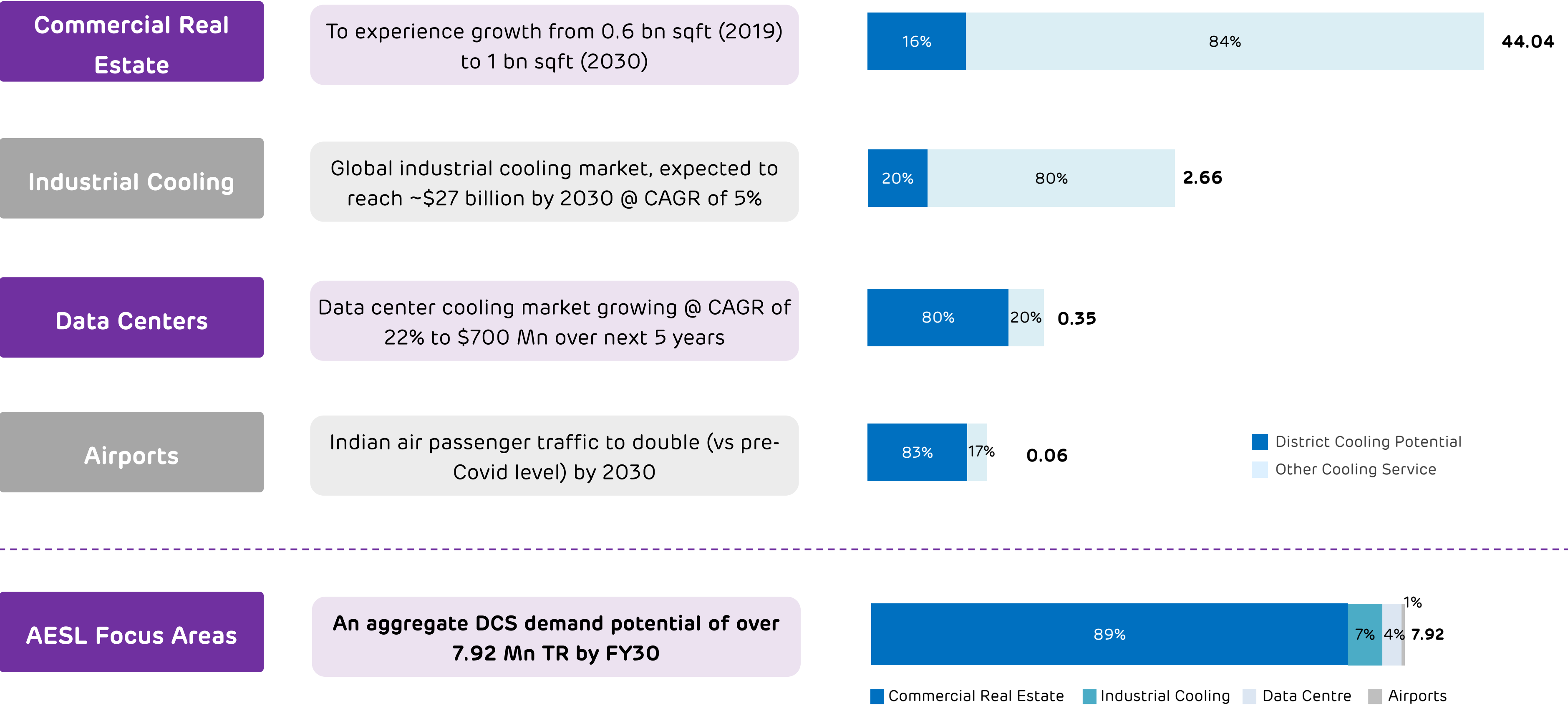
## Low Carbon Future

- Sustainable Cooling Solution for a Low Carbon Future (25-30% lower emissions)
- Contribute to India's net zero target by 2070



# Cooling Solutions Opportunity: Four key segments to drive DCS demand

Cumulative Cooling Demand from key segments by FY30<sup>(1)</sup> (in Mn TR)



Sources: Cooling India, ICAP, Praxis, CREDAI/CBRE, CEA, IEA, EIA, Adani Connex, Boeing, Internal analysis; Notes: 1) Cum. Cooling demand (new) and DCS market potential is considered from FY 24-25 onwards; TR: A ton of refrigeration; CAGR: Compounded Annual Growth Rate





# Business Philosophy



# Business Philosophy focusing on De-risking at every stage of project lifecycle

## DE-RISKING AT EVERY STAGE

### Route Identification & Survey

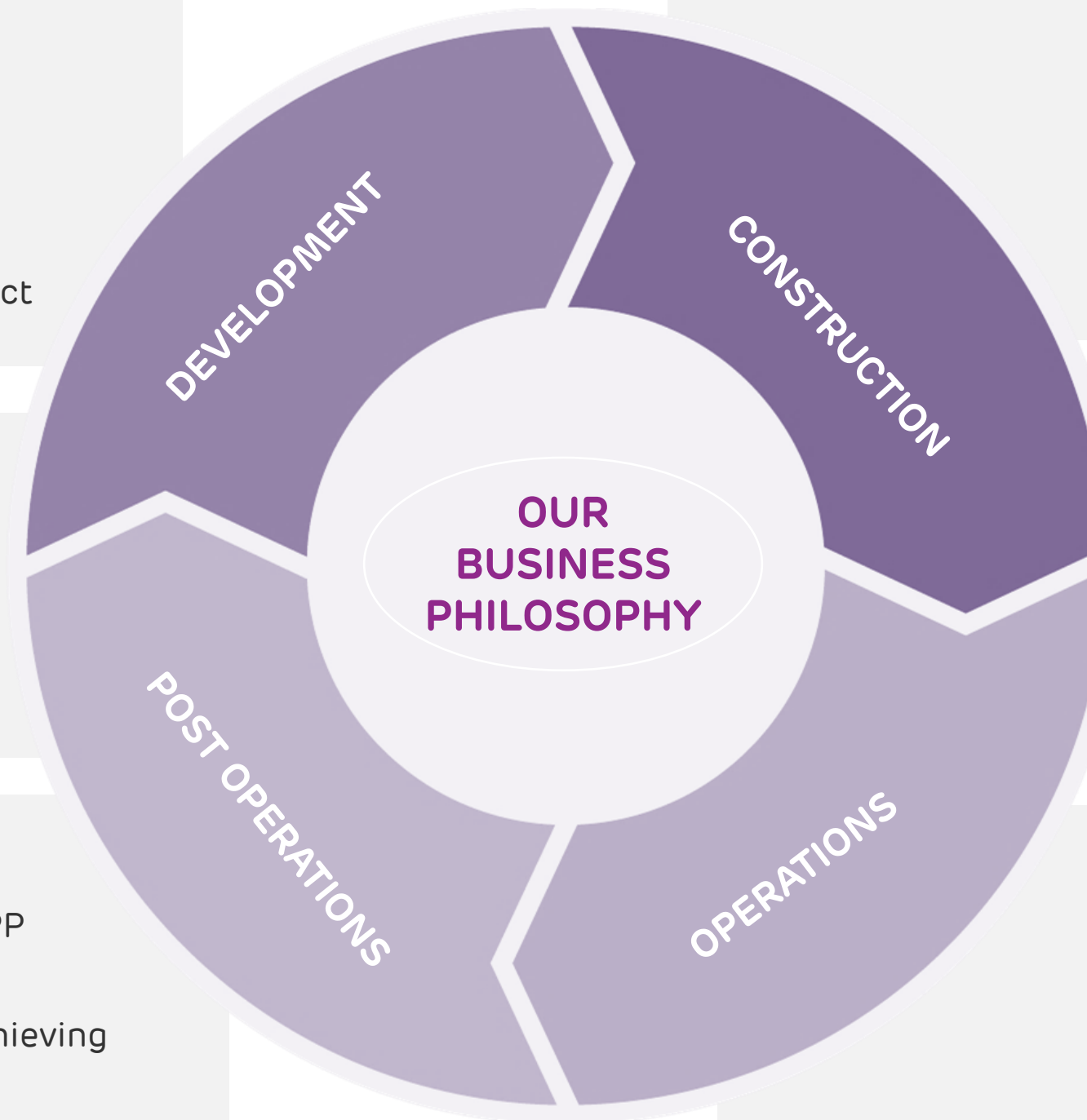
- **Route alignment** on topographic maps to optimize route & identify key parameters
- Utilization of Drones for route survey
- **Robust site diligence and route planning** to minimize project cost and ROW issues

### Project Planning & Scheduling

- **Robust Pre bid estimation** of ROW, Project Cost and Timelines resulting in **assurity of returns**
- **Solid vendor management** and strong relationships adds to business sustainability and **avoid cost escalations**

### Capital Management

- **Takeout of construction debt** post commissioning (eg: USPP issuance)
- Maintained international **investment grade rating** while achieving impressive growth



### Project Execution

- **Complex projects experience:** Completed HVDC project (~1000 kms) in a record time of 24 months
- Contracting methodology focused on derisking – competitively awarded on **fixed price & fixed time basis**
- Availability of large talent pool and in-house capabilities

### Construction Finance

- Derisked financing through **fully-funded plan**
- Revolving Construction facility of US\$ 700mn for transmission and GMTN program of US\$2 bn for AEML
- LC facility to reduce financing cost & optimize funding schedule

### Tech Enabled Operations

- Life cycle O&M planning
- Reliability centered Maintenance
- **Remote operation of sub-stations** and integration with Energy Network Operating Centre

## DE-RISKING AT EVERY STAGE

# Project Management & Assurance Group (PMAG): End to End Project Integration



**Strength: Team of 90 professionals having hands-on experience of 2,000+ man-years of complete project management cycle of small, medium & large projects**

Bidding Stage	Project Development	Project Execution	Project Close Out
<ul style="list-style-type: none"><li>▪ Integrating &amp; providing cross functional support for Bidding Process</li><li>▪ Site Location Assessment, coordinating for field visits</li><li>▪ Bid stage scope finalization &amp; technology adoption with engineering</li><li>▪ Bid Stage Cost Estimates</li><li>▪ In case of M&amp;A's, collaborating and assessment of asset</li></ul>	<ul style="list-style-type: none"><li>▪ Collaborates for Technology finalization &amp; Scope</li><li>▪ Execution Strategy</li><li>▪ Contracting Strategy</li><li>▪ Detailed Project Report</li><li>▪ Coordinating for connectivity &amp; evacuation</li><li>▪ Level 1 Project Schedule</li><li>▪ Capex Budgets and Estimates</li><li>▪ Risk Assessment &amp; plan</li><li>▪ Procurement Planning</li><li>▪ Financial Closure Plans</li></ul>	<ul style="list-style-type: none"><li>▪ Integrated L3 Project Schedule</li><li>▪ Baselining Cost and Resource plans</li><li>▪ Issue &amp; Risk Management</li><li>▪ Supply Chain Management and Contract Administration</li><li>▪ Contractor &amp; Vendor Management</li><li>▪ Change Management</li><li>▪ Monitoring Approvals , Permits &amp; Licenses</li><li>▪ Managing Lenders &amp; LIE interface</li><li>▪ Cash Flow Management</li><li>▪ Project Monitoring &amp; Control</li><li>▪ Mid Course Corrections ( Catch up)</li></ul>	<ul style="list-style-type: none"><li>▪ Facilitating the Handover &amp; punch list closure</li><li>▪ Contract Closures</li><li>▪ Close Out Report</li><li>▪ Material Reconciliation</li><li>▪ Spares Handover</li><li>▪ Closure of LIE and Lender Reports</li><li>▪ Stakeholder Recognition</li><li>▪ Finalizing the Final Costs</li><li>▪ Ensuring built as per Drawings</li></ul>



**Strong Project Controls**

M&A: Merger & Acquisition; LIE: Lender's Independent Engineer



**Collaborating & Convergence**



**Effective Project Delivery**



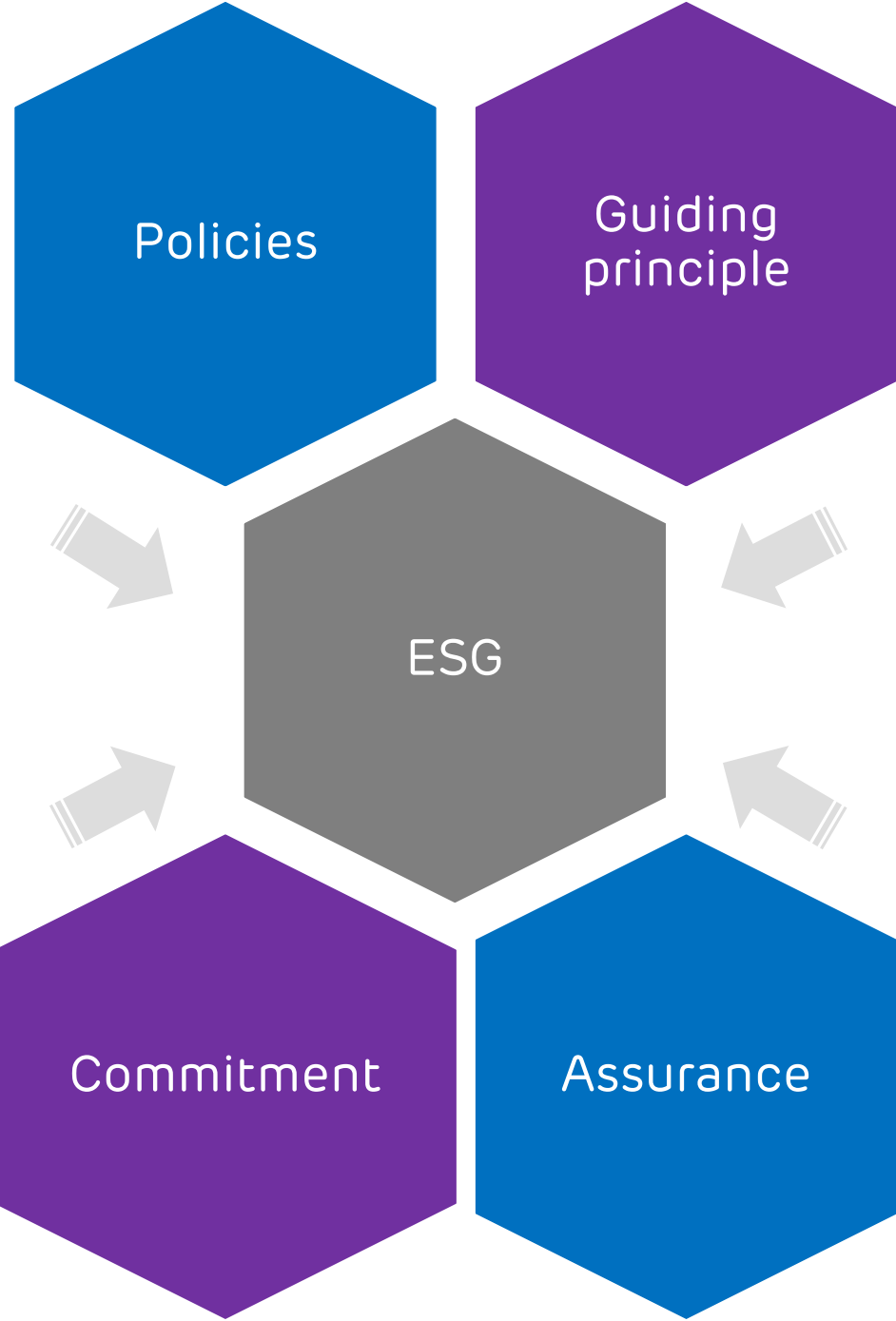


Growth with **Goodness**



# ESG Framework, Investment Case and Board and Management

# Assurance backed ESG framework





# Transforming through Green Energy Adoption



- AESL's pledge to 'Net Zero by 2050' to limiting the global temperature rise to 1.5°C with no or limited temperature overshoot.
- With interim ABSOLUTE GHG emissions targets:
  - Reduce 72.7% Scope (1 + 2) by FY 2032
  - Reduce 27.5% Scope 3 by FY 2031

- Green tariff and certificates for Mumbai customers choosing green energy options
- AEML is actively working towards goals:
  - Renewable energy : 60% by FY27, 70% by FY30 from 35% in FY24
  - GHG intensity [tCO<sub>2</sub>e/EBITA]: 48.5% reduction by FY 2029-30 w.r.t. FY 2018-19 baseline (tCO<sub>2</sub>e/EBITDA) (Targets have been aligned with National goal (tCO<sub>2</sub>e/GDP))
- AESL is developing an HVDC Transmission link for continuous supply of renewable power to Mumbai with commitment of \$1 billion (already commissioned 400 KV Kharghar Vikhroli line of 1000 MW)



# ESG Commitments & Targets

## ESG Commitments

- To be in Top 20 companies of the world in ESG benchmarking of electric utility sector by FY25
- To purchase RE power at AEML 60% by FY27 (committed under SLB framework) & 70% RE sources by FY2030
- To reduce Emission intensity [tCO2e/ EBITA] @ AEML by 40% by FY25, 50% by FY27 & 70% by FY2030 [w.r.t baseline FY19](#)
- To remain Single-use-Plastic-Free (SuPF) company
- To remain Zero-Waste-to-Landfill (ZWL) company
- To retain Water Positive status for the company
- To achieve No Net Loss of biodiversity on ongoing basis
- To complete ESG Evaluation and engage all Tier-1 critical suppliers through GHG Suppliers' Engagement Program for decarbonization of value chain by FY26

### AESL Targets

Indicator	FY25 Target	FY24 Status
Ranking in Global ESG benchmarking of electric utility sector	Top 10	Top 20 <sup>1</sup>
Water positive sites	100%	✓
Zero waste to landfill operating sites	100%	✓
Single use plastic free operating sites	100%	✓
No Net Loss of biodiversity	100%	In progress





### AEML Targets

Indicator	FY30 Target	FY27 Target	FY24 Status
RE power purchase	70%	60%	35%
Emission intensity reduction <sup>2</sup>	70%	50%	In progress

- AEML achieved it's stated target of 35% RE purchase by FY24
- Green tariff and certificates offered to Mumbai customers for choosing green energy options
- **Committed in the Companies Taking Action Table under SBTi**



# ESG Ratings, Awards and Recognition

ESG Commitments	
ESG Ratings	AESL's Rating
	Ranking of 87%, with consistent ranking above <u>Electric &amp; Gas Utilities</u> industry average [911 companies]
	ESG Risk Rating of 'Medium Risk' with a score of 25.3 in February 2024 (improved from High Risk - 32.8 in April 2023), better than global Electric Utility Industry average of 31.6; Part of Global Top 20 in Electric Utility Industry
<b>DJSI-S&amp;P Global Corporate Sustainability Assessment</b>	S&P CSA 2024: Scored 72/100 vs 62/100 in 2023, one of the best in Indian Electric Utility sector and significantly better than average World Electric Utility score of 41/100
	ESG Rating of 'BB'
	FTSE reaffirms AESL as a constituent of FTSE4Good index series with an improvement in ESG score from 4.0 to 4.4 in 2024. Also, AESL's Governance score stands at 5/5, Social score of 4/5 & Environment score 4.3/5 well above global Electric Utilities sector average of 2.8

Notes: \*S&P CSA 2024: Score of 79/100 without MSA aspects vs 68.5/100 in 2023; MSA: Media and Stakeholders Assessment

# AESL: Compelling Investment Case

## Favorable Industry Landscape

- Evolved and stable regulatory regime has enabled growth of AESL's business into multiple segments (Transmission, Distribution, Smart metering, District cooling) within energy domain
- Focus on Grid reliability, consumerism and shift to RE based power propelled investments in across the value chain

## Development and Construction Expertise

- Proven track record of excellence in development & construction of Transmission systems and asset hardening at AEML
- AESL remains competitive at bidding stage due to scale benefits and geographical presence across the country
- Solid vendor management and strong relationships adds to business sustainability and avoid cost escalations

## Operational and Execution excellence

- Energy network operation center (ENOC) allows remote monitoring and diagnostics to enhance O&M efficiency
- Robust operational metrics - line availability, supply reliability, distribution loss, affordable tariffs
- One of the lowest O&M cost through predictive maintenance and technology excellence

## Capital Management Philosophy

- Capital structure designed through debt financing at tenure matching concession life and terms akin to stable assets
- AESL is the only private sector transmission and distribution company in India with International IG Rating

## Capital Allocation and turnaround capability

- Disciplined approach towards new project bidding and acquisitions; stringent IRR (returns) threshold
- Commitment to maintain strong credit profile and investment grade rating
- Strong track record of acquisition and turn around of transmission and distribution assets



# AESL: Board and Management Team

## Board of Directors

### Independent Directors



**Meera Shankar**  
**45+ Yrs of Experience**  
 Skill & Expertise  
 • Strategic comm.  
 • Policy Formulation  
 • Economic & Trade Relations



**Lisa MacCallum**  
**25+ Yrs of Experience**  
 Skill & Expertise  
 • ESG  
 • Brand Strategy  
 • Global Affairs



**K Jairaj**     
**45+ Yrs of Experience**  
 Skill & Expertise  
 • Sector Expert  
 • Governance  
 • Regulatory

### Non-Independent Directors



**Gautam Adani**  
 Chairman and Promoter Director  
 Skill & Expertise  
 • Entrepreneurial Vision  
 • Business Leadership



**Rajesh Adani**  
 Promoter Director  
 Skill & Expertise  
 • Business relationship  
 • Execution



**Anil Sardana**  
 Managing Director  
**40+ Yrs of Experience**  
 Skill & Expertise  
 • Industry veteran  
 • Strategic leadership  
 • Transition & Development

## Board Committees

	100% IDs	Chaired by IDs	Chaired by NID	
Statutory Committees				
- Audit	✓			40% Comprised of only Independent Directors  100% of Statutory Committees Chaired by Independent Directors
- NRC	✓			
- Stakeholder Relationship		✓		
- CSR		✓		
- Risk Management		✓		
Non-statutory Committees				
- Public Consumer	✓			6 Additional Business specific committees  36% Fully comprised of Independent Directors  63% Chaired by Independent Directors
- IT & Data Security			✓	
- Corporate Responsibility	✓			
- Mergers and Acquisition			✓	
- Legal, Regulatory & Tax			✓	
- Reputation Risk			✓	

## Management



**Kandarp Patel**  
 Chief Executive Officer  
**25+ Yrs of Experience** in power trading, fuel mgmt., legal and commercial aspects of power industry



**Kunjal Mehta**  
 Chief Financial Officer  
**20+ Yrs of Experience** in corporate financing, risk mgmt., financial reporting, business partnering and process deployment,

# Annexures

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ESG Initiatives

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Smart Metering – Key Benefits

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Project Level Details – Asset Portfolio



# AESL: Key Environmental Indicators and Milestones

Environment

Key Performance Indicators		Current Status	Baseline	Short to Medium-term Targets	
Energy Mix & Emission Intensity					
- RE share in power procurement	AEML has <b>achieved 39.06% renewable</b> in power mix as of Sept 2024		3% FY19	60% by FY27	70% by FY30
- GHG Emission Intensity Reduction	AEML has reduced its GHG emission intensity to <b>36.82% (1424 tCO<sub>2</sub>e/ EBITA)</b> in <b>Q1FY25</b> . The target for GHG emissions reduction is in line with Nationally Determined Contribution (NDC) for climate change. Disclosed in terms of a reduction in GHG per unit of revenue.		FY19 2,254 tCO2e/EBITA	40% by FY25	70% by FY30
Waste Reduction and Biodiversity Management					
- Zero waste to landfill (ZWL)	<b>Secured ZWL status from Intertek &amp; BVCI</b> <ul style="list-style-type: none"><li>Covered all operational sites (substations and TLs) of AESL</li><li>Achieved landfill diversion rate exceeding 99%</li></ul>		No certification in FY19-20	To maintain ZWL certification for AESL	
- Single use plastic (SuP) free sites	<b>Attained SUP free status from CII-ITC CESD</b> <ul style="list-style-type: none"><li>Covered 37 operational sites of AESL</li><li>Strengthening alignment with UNSDG 12</li></ul>		No certification in FY19-20	To maintain SUP certification for AESL	
- India Business Biodiversity Initiative (IBBI) and ensure no net loss to biodiversity	<ul style="list-style-type: none"><li>Signatory to IBBI and submitted first progress report in 2020</li><li><b>Compensatory afforestation over 753 hectare</b> till FY24</li></ul>		FY20-21 289 hectares	Achieve Zero Net-Loss to Biodiversity. Achieve Net Positive Gain (NPG) in accordance with IBBI principles	
- Water Neutrality (Water conservation)	<ul style="list-style-type: none"><li>Achieved <b>“Net Water Positive” status for 30 substations and 07 TL clusters</b> under UNSDG 6</li><li>Carried-out rainwater harvesting feasibility study and implemented water metering across all sites</li></ul>		No water neutrality in FY 19-20	Secured Net Water Positive ReCertification for all O&M sites	
Energy Efficiency and Management					
- Reduction in auxiliary consumption through solar power	<b>3.362 MWp solar capacity</b> at Mahendragarh, Akola, Koradi, Sami, Morena, Rajnandgaon		Solar capacity of 1.7 MWp in FY19-20	100% auxiliary consumption from renewable sources by 2030	

# AESL: Key Social Indicators and Milestones

Social

Material Categories	Material Themes	Key Performance Indicators	Baseline	Actual (1HFY24-25)	Target (FY24-25)
Health & Safety	Work related injury	Rate of fatalities per million hours worked	Zero (FY 20-21)	Zero	Zero
		Rate of recordable work-related injuries per million man-hours worked	0.33 (FY 20-21)	0.23	Zero
	Safety awareness and training	Average hours of training provided per person on health and safety	15.6 (FY 20-21)	30.13 hours per person (FY 23-24)	Further improve from baseline
Diversity and Inclusion	Measurement of Diversity and Inclusion Metrics and Enforcement of policies	<ul style="list-style-type: none"> <li>Women as a percentage of new hires and total workforce (%)</li> <li>Mapping &amp; Disclosure of Regional &amp; ethnic diversity</li> <li>Mapping &amp; Disclosure of inclusiveness</li> </ul>	<ul style="list-style-type: none"> <li>New Hire: 5 %</li> <li>Total Workforce: 5%</li> <li>Regional &amp; Ethnic diversity: NO mapping</li> </ul>	<ul style="list-style-type: none"> <li>New Hire: 5.06%</li> <li>Total Workforce: 4.38%</li> <li>Regional &amp; Ethnic diversity: 100% mapping</li> </ul>	<ul style="list-style-type: none"> <li>New Hire: 30%</li> <li>Total Workforce: 6%</li> <li>Regional &amp; Ethnic diversity: 100% mapping</li> </ul>
Human Rights	Training on human rights	<ul style="list-style-type: none"> <li>Employees trained in human rights (%)</li> <li>Security Personal trained in human rights (%)</li> <li>Due diligence of business &amp; value chain</li> </ul>	-	100% new employees trained on human rights	100%
Skills for the future	Skill development trainings	Training and development expenditure for employees (Rs)	Rs 3.81 Cr (FY 20-21)	Rs 2.19 crore	Rs 4.69 Cr
Responsible Procurement	Proportion of spending on local suppliers (%)	<ul style="list-style-type: none"> <li>Spend on local suppliers against the total procurement budget (%)</li> <li>Due diligence of supply chain</li> </ul>	99.4 % (FY 20-21)	99.81% ESG Due diligence for all suppliers initiated	Maintain FY21 Performance
	Supplier screening on ESG metrics	Suppliers screened on ESG criteria (%)	100% (Critical New Suppliers)	All New suppliers	100% (Critical All Suppliers)



# AESL: Key Governance Indicators and Milestones

## Governance

Material Categories	Material Themes	Key Performance Indicators	Baseline	Actions Taken and Goals
<b>Board Gender Diversity</b>	Board Gender Diversity	Balance the board composition in terms of men and women directors	16.6% - women directors in board as of FY21	<ul style="list-style-type: none"> <li><b>% of women directors in board improved to 33.3%</b> (2 of 6 board members)</li> </ul>
<b>Board Independence</b>	Great Board Independence and Improved Disclosures	<ul style="list-style-type: none"> <li>Improve board strength and independence</li> <li>Incorporate non-statutory committees</li> <li>Enhance disclosures in board &amp; committee meetings</li> </ul>	<ul style="list-style-type: none"> <li>6 directors as of FY21</li> <li>Only statutory committees as of FY21</li> </ul>	<ul style="list-style-type: none"> <li><b>Board comprises of:</b> <ul style="list-style-type: none"> <li>3 (50%) Non-Executive &amp; independent</li> <li>2 (33%) Non-Executive &amp; Non-Independent</li> <li>1 (17%) Executive directors</li> </ul> </li> <li>Enhanced disclosures through formation of <b>new committees</b> with min. 50% IDs (CRC, RMC, PCC, IT &amp; Data Security)</li> <li>Committees chaired by Independent Directors (Audit, NRC, STC)</li> </ul>
<b>Code of Conduct</b>	Corruption and Bribery Cases	<ul style="list-style-type: none"> <li>Number of Corruption cases and Bribery and Associated Risks</li> <li>Adoption of Anti Corruption and Bribery Policy</li> <li>% of Governance body members and employees trained on anti-corruption</li> </ul>	<ul style="list-style-type: none"> <li>Zero corruption cases</li> </ul>	<ul style="list-style-type: none"> <li>Company Adopted Anti Corruption and Bribery Policy</li> <li>Zero Case on Corruption and Bribery</li> <li>Identification and Assessment of risks</li> <li>Yearly DD for CoC for board, employees, suppliers &amp; ABAC policy</li> </ul>
<b>Anti-competitive Practices</b>	Fines and Settlements	<ul style="list-style-type: none"> <li>Fines or settlements paid related to anti-competitive business practices (Rs)</li> </ul>	Zero as of FY21	<ul style="list-style-type: none"> <li><b>Zero in FY24</b> and beyond</li> <li>Yearly ABAC due diligence</li> </ul>
<b>Customer orientation and satisfaction</b>	Consumer Satisfaction	<ul style="list-style-type: none"> <li>Affordable tariffs</li> <li>Service reliability</li> <li>Sustainable power</li> </ul>	<ul style="list-style-type: none"> <li>Distribution loss reduction</li> <li>CSAT surveys</li> <li>Reliability metrics</li> </ul>	<ul style="list-style-type: none"> <li>Competitive tariff through RE power</li> <li>Option to switch to Green power tariff</li> <li>Advanced metering implementation for 20 million consumers</li> </ul>
<b>Corporate Governance Standing</b>	ESG Ratings	Improvement in ratings through improved disclosures and adoption of best practices	<ul style="list-style-type: none"> <li>CSA: 59/100 (2022);</li> <li>FTSE: 3.3/5 (2022)</li> </ul>	<b>Achieved:</b> <ul style="list-style-type: none"> <li>CSA – 62/100 (Achieved 69/100 w/o MSA)</li> <li>FTSE: 4.4/5 (Achieved in June'24)</li> </ul>

### Notes:

- A) List of non-statutory committees – CRC: Corporate Social Responsibility & Sustainability Committee; PRC: Public Consumer Committee; Information Technology & Data Security Committee; RMC: Risk Management Committee;  
 B) List of statutory committees: SRC: Stakeholders' Relationship Committee NRC: Nomination and Remuneration Committee; STC: Securities and Transfer Committee; Audit Committee;  
 C) Sub-committees under Risk Management Committee: Mergers & Acquisitions Committee; Legal, Regulatory & Tax Committee; Reputation Risk Committee

## Safety Initiatives During Q2FY25

- **Safety training:** 47,771 man-hours of safety training and awareness during Q2FY25
- **Positive Safety Culture:**
  - Conducted group safety campaign on energy isolation across various sites
  - Organized category 5 (fatality) incident stand-down meeting across AESL and AEML sites
  - Safety Management System audit was conducted at HVDC project site
  - Installed pilot feeder indicators in the existing switchgears at a distribution substation to mitigate the operational risk
  - Conducted mock drills and training sessions on emergency management systems and first aid
  - Executed quarterly safety performance assessments for O&M and project contractors across various sites
- **Sampark'** – An outreach program designed for AEML customers to understand their safety and commercial concerns.
- **'Saksham'** - Mandatory Contractor Workmen Incubation & Induction Program was conducted at various project sites to enhance training effectiveness. Trained 1,047 contract workers and employees across the project sites

## Safety Performance in Q2FY25

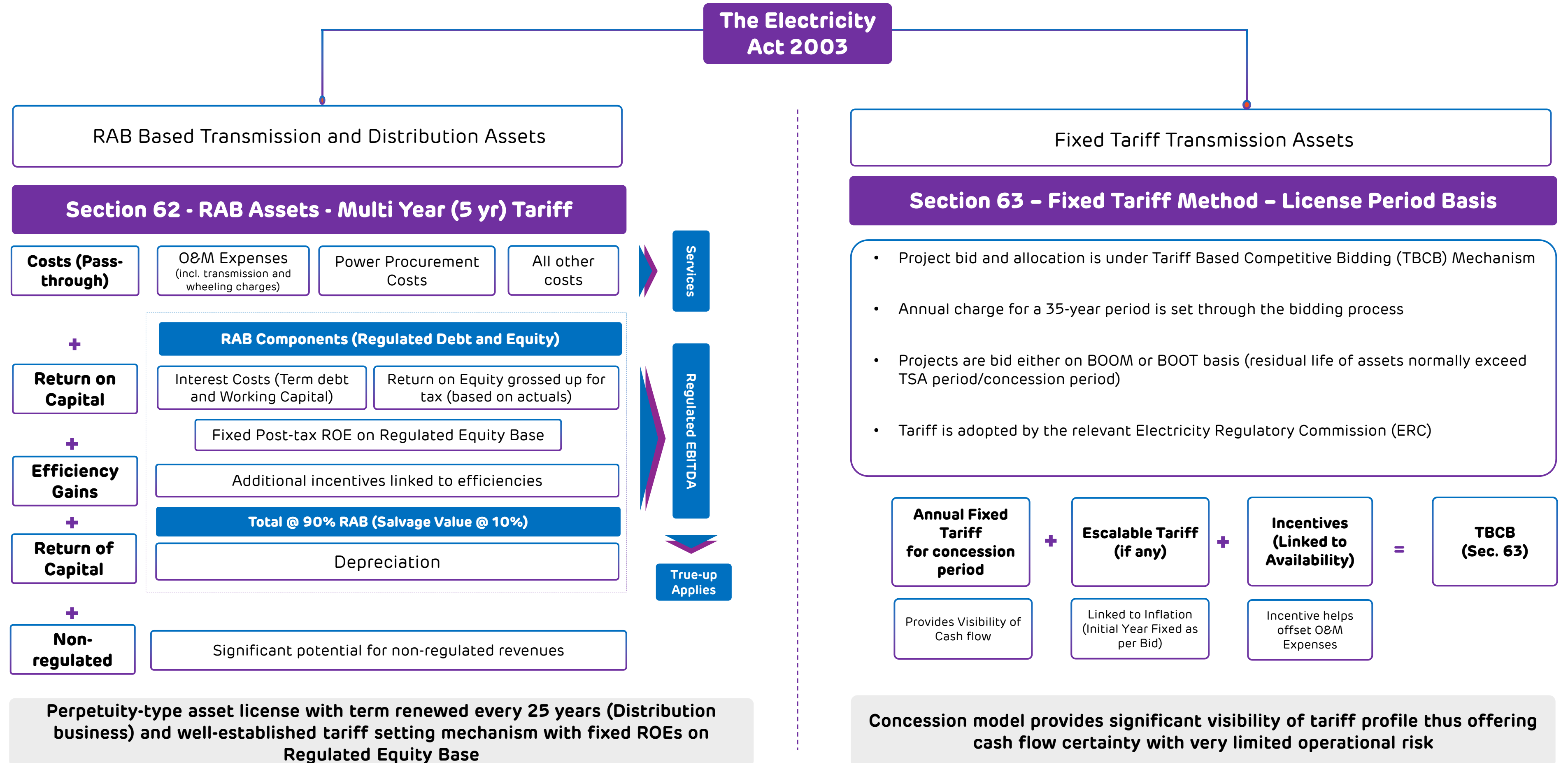
Safety Parameters	Transmission		Distribution (AEML)	
	Q2FY25	Q2FY24	Q2FY25	Q2FY24
Near Miss Reporting (Awareness)*	312	1,326	1,304	912
Suraksha Samwad (Safety Dialogue)#	1,156	1,578	2,025	2,246
LTI	1	1	1	3
Fatalities	0	0	0	0
LTIFR (LTI Frequency Rate)	0.33	0.35	0.15	0.59
LTI (LTI Severity Rate)	4.06	3.58	4.29	11.11
Safety training (in Man-Hours)	20,169	34,633	27,602	21,366



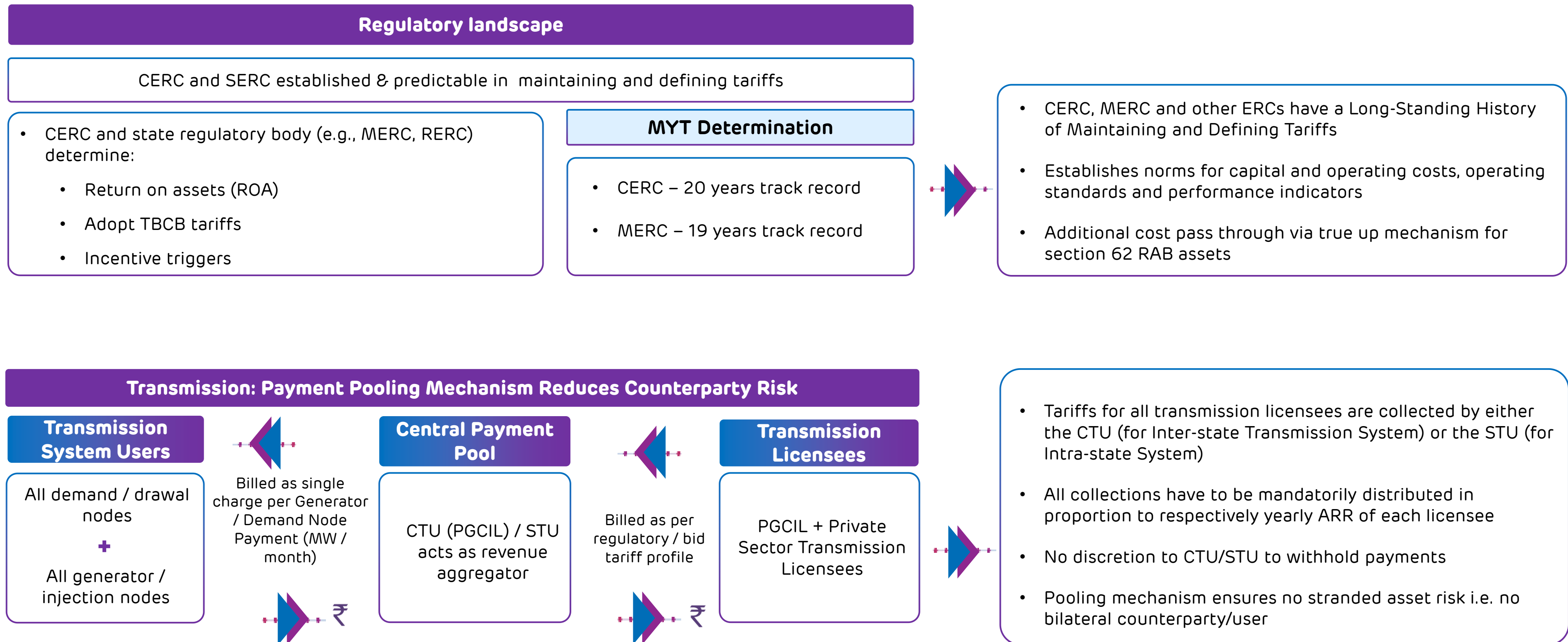
**Notes:** LTI frequency rate and LTI severity rate lower the better; LTI Frequency Rate: Reportable loss time injury (RLTI)\*1000000/Man hours worked; LTI severity Rate : Man days Lost (MDL)\*1000000/Man hours Worked; \*LTI SR improved significantly on a YoY basis dure to zero fatality; \*Near Miss Reporting in distribution business does not include safety concern numbers; #Suraksha Samwad for distribution business only includes safety interactions at AEML project sites



# Stable Regulatory Framework



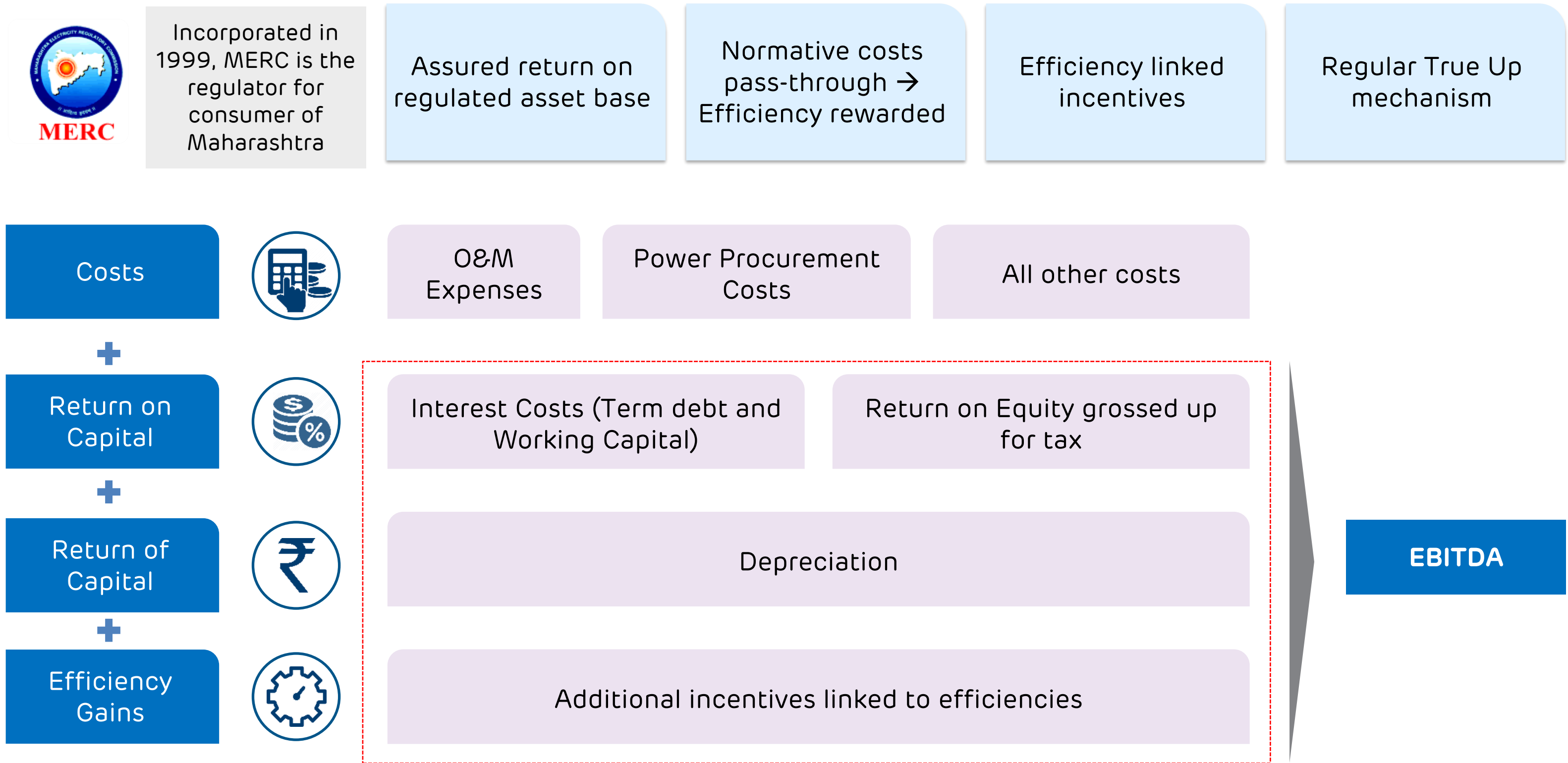
# Payment Pooling Mechanism Reduces Counterparty Risk





# AEML: Operating in a stable and evolved regulatory framework with predictable & robust returns

Tariff is based on assured return on capital model + pass-through of costs + efficiency linked incentives

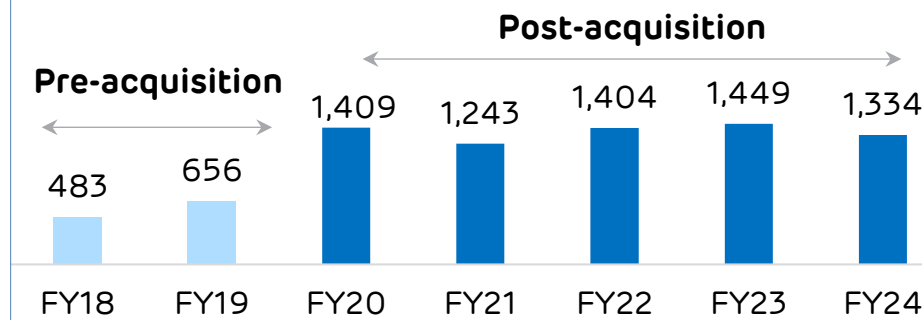


# AEML Case Study: Successful Acquisition and Turnaround

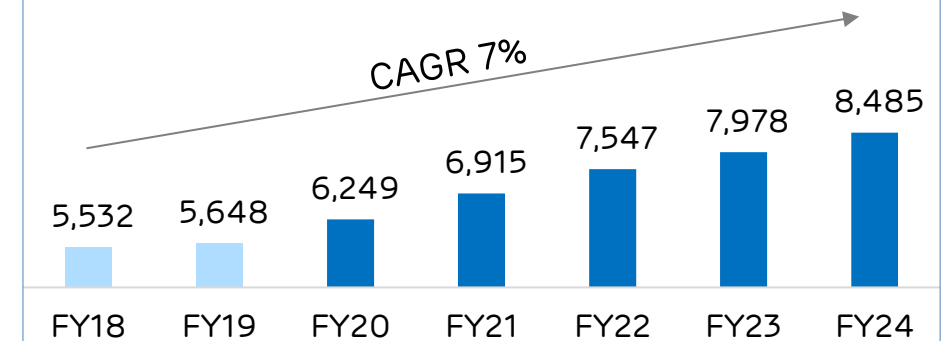
## Projection Execution Excellence

- Low capex pre-acquisition on account of liquidity constraints
- Investment in capex resulting in **asset hardening** → supply reliability and higher efficiencies
- **One of the highest ever regulated asset development** in the Covid period

### Uptick in regulated capex (INR cr)



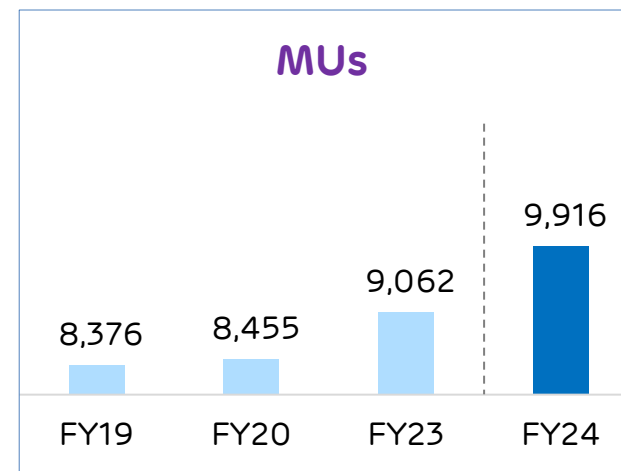
### RAB (INR cr)



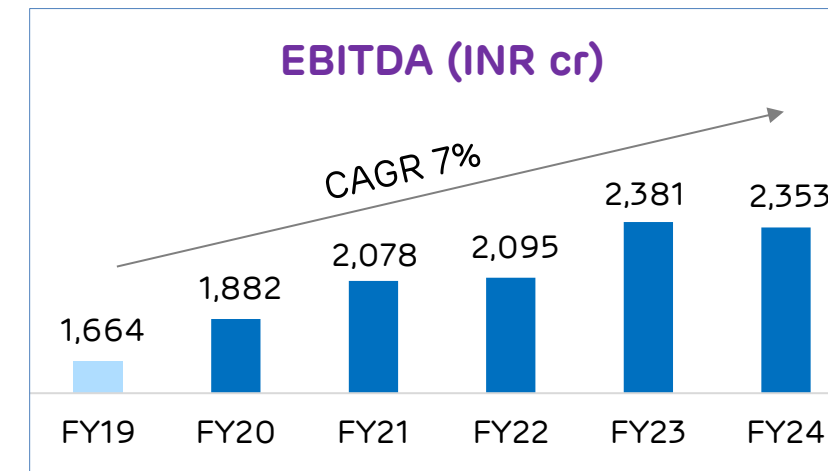
## Operational excellence

- Best practices implemented with technology integration to ensure supply reliability, responsiveness as well as profitability

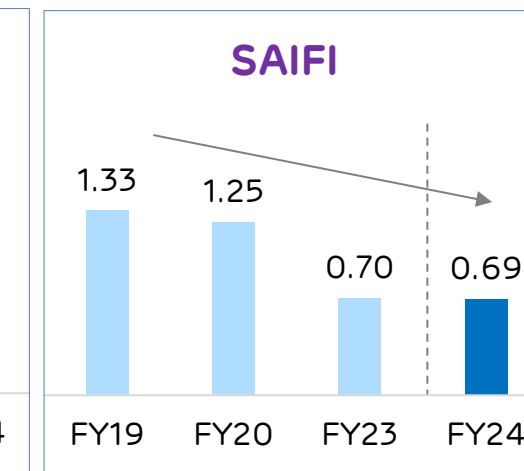
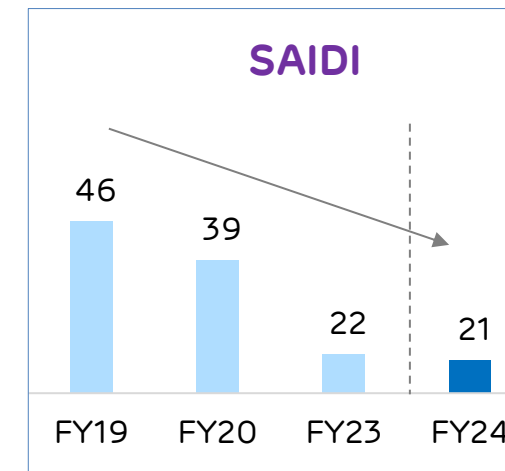
### Consistently delivering power



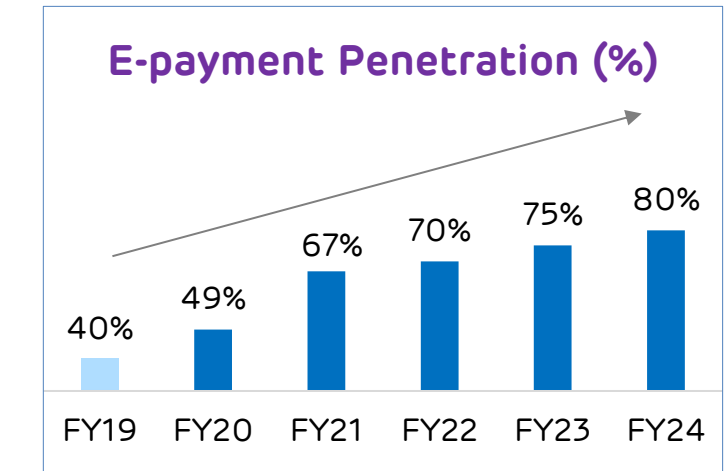
### Operating assets at increasing profitability



### Best O&M practices → improved supply reliability at 99.99% every year



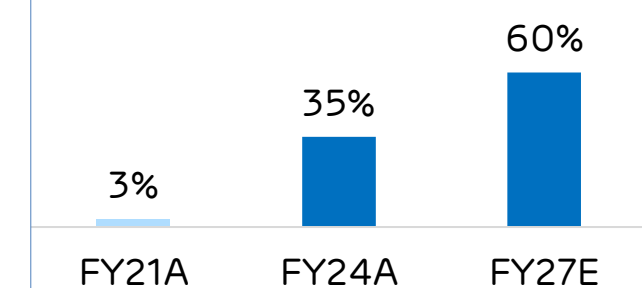
### Higher digital penetration among consumers



## Sustainability

- Sustainability is a key focus area post-acquisition to transform AEML into a **world class utility**
- AEML signed **700 MW wind-solar hybrid PPA** which increased renewable share from 3% to 35% in FY24
- First time ever **covenanted sustainability linked framework** by a utility in India

### Green Power (%)





# Smart Metering – Key Benefits

## Technology transformation

Key technology towards the **transformation of power sector** in India

## Real time information

Measures electricity consumption & communicates the consumption reading to the power utilities

## Two-way communication

Between the meter and the power utility through cellular communication or radio frequency

### Key Benefits



#### Improved Cash Flows

- Upfront collection of dues and “Pay-as-per-use model” to eradicate arrears
- Reducing working capital requirements



#### Reduction in Operational costs

- Reduced meter reading charges, bill printing, manpower cost
- Field situation awareness to reduce theft and average / estimated billing



#### Improved Supply Quality

- Automatic monitoring of SAIFI, SAIDI
- Quicker response time to fault removal / consumer complaints
- Control over consumption
- Accurate estimates for network upgradation
- Real-time assessment of system performance



#### Customer Satisfaction

- Enhancing consumer participation
- Consumer profile, consumption pattern on real time basis.
- Increases accuracy of meter reading



#### ESG & RE Integration

- Data analytics helps load disaggregation, forecasting & consumption
- Time of Day (TOD) tariff matched with RE generation
- Efficient & sustainable energy management
- Helps people revise their consumption habits



#### Improved Energy Accounting

- Enables mapping of consumer demand, feeder wise loading
- Identification of pilferage / high-loss pockets

# AESL's Operational Asset Portfolio as of October 2024 (1/2)

Adani Energy Solutions Limited																	
100%	100%	75%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
ATIL	MEGPTCL	AEML Discom	MUL Discom	AT&SCL MT&SCL	WTGL, WTPL	AT&BSPL	APTL	ATRL	RRWTL	CWRTL	STL	PPP 8/9/10	FBTL	Bikaner Khetri	GTL		
Mundra - Dehgam Mundra - Mohindergarh Tiroda - Warora	Tiroda - Aurangabad	Adani Electricity Mumbai Ltd.	MPSEZ Utilities (Mundra SEZ Area)	Maru & Aravali lines	Western Transmission (Gujarat) Western Transmission (Maharashtra)	Bikaner – Sikar	Alipurduar Transmission	Suratgarh-Sikar	Raipur -Rajnandgaon - Warora	Chhattisgarh - WR	Sipat -Rajnandgaon	Hadoti, Barmer & Thar Lines	Fategarh Bhadla	Bikaner – Sikar	Ghatampur		
Operating Assets																Total	
A	3,834 ckms	1,217 ckms	573 ckms	242 ckms	397 ckms	3,063 ckms	343 ckms	650 ckms	278 ckms	611 ckms	434 ckms	348 ckms	413 ckms	292 ckms	481 ckms	897 ckms	➔ 14,073 ckms
B	6,630 MVA	6,000 MVA	3,250 MVA	710 MVA	1,360 MVA	-	-	-	-	-	630 MVA	-	585 MVA	-	-	-	➔ 19,165 MVA
C	Regulated return (ROA)	Regulated return (ROA)	Regulated return (ROA)	Regulated return (ROA)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	
D	Centre / State	State	State	State	State	Centre	State	Centre	State	Centre	Centre	Centre	State	Centre	Centre	State	
E	INR 51 Bn	INR 59 Bn	INR 170 Bn	INR 0.4 Bn	INR 4 Bn	INR 16 Bn	INR 2 Bn	INR 11.Bn	INR 1 Bn	INR 12 Bn	INR 9 Bn	INR 5 Bn	INR 4 Bn	INR 6 Bn	INR 9 Bn	INR 16 Bn	➔ INR 376 Bn
A	Transmission line length		B	Transformation capacity		C	Contract Type		D	Counterparty		E	Asset Base <sup>(1)</sup>				

**Notes:** ATIL - Adani Energy Solutions (India) Limited; MEGPTCL - Maharashtra Eastern Grid Power Transmission Co. Limited; AEML: Adani Electricity Mumbai Limited (Distribution business); MUL: MPSEZ Utilities Limited; WTGL: Western Transmission Gujarat Limited; WTPL: Western Transco Power Limited; AT&BSPL: Adani Energy Solutions Bikaner Sikar Private Limited; STL - Sipat Transmission Limited; RRWTL - Raipur Rajnandgaon Warora Transmission Limited; CWRTL - Chhattisgarh WR Transmission Limited; ATRL - Adani Energy Solutions (Rajasthan) Limited; AT&SCL - Aravali Transmission Service Company Limited; MT&SCL - Maru Transmission Service Company Limited; FBTL: Fategarh Bhadla Transmission Limited; GTL: Ghatampur Transmission Limited; WRSS M - Western Region System Strengthening Scheme Maharashtra, WRSS G - Western Region System Strengthening Scheme Gujarat, (1) Asset base for operational assets as per project cost and Mumbai GTD (AEML) as per Regulated Asset Base



# AESL's Operational Asset Portfolio as of October 2024 (2/2)

Adani Energy Solutions Limited									
	100%	100%	100%	100%	100%	100%	100%	100%	
	Obra-C Badaun	Lakadia Banaskantha	WRSS – XXI (A)	Jam Khambaliya	WKTL	Karur Transmission	Kharghar - Vikhroli	Khavda-Bhuj	ATSTL (EPTCL)
	Obra	Lakadia Banaskantha	Lakadia - Bhuj	Jam Kham-baliya	Warora Kurnool	Karur Transmi ssion	Kharghar Vikhroli Transmission	Khavda Bhuj Transmission (KBTL)	Adani Transmission Step-Two Limited (ATSTL)
Projects Recently Commissioned									Total
<b>A</b> Transmission line length	630 ckms	351 ckms	295 ckms	37 ckms	1,756 ckms	9 ckms	74 ckms	217 ckms	➔ 4,042 ckms
<b>B</b> Transformation capacity	950 MVA	-	3000 MVA	2500 MVA	3000 MVA	1,000 MVA	1500 MVA	4,500 MVA	➔ 16,450 MVA
<b>C</b> Contract Type	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Regulated return (ROA)
<b>D</b> Counterparty	State	Centre	Centre	Centre	Centre	Centre	State	Centre	Center
<b>E</b> Asset Base <sup>(1)</sup>	INR 7 Bn	INR 9 Bn	INR 11 Bn	INR 3 Bn	INR 39 Bn	INR 2 Bn	INR 12 Bn	INR 11 Bn	➔ INR 112 Bn

**Notes:** ATIL - Adani Energy Solutions (India) Limited; MEGPTCL - Maharashtra Eastern Grid Power Transmission Co. Limited; AEML: Adani Electricity Mumbai Limited (Distribution business); ATBSPL: Adani Energy Solutions Bikaner Sikar Private Limited; STL - Sipat Transmission Limited; RRWLT - Raipur Rajnandgaon Warora Transmission Limited; CWTL – Chhattisgarh WR Transmission Limited; ATRL – Adani Energy Solutions (Rajasthan) Limited; ATSTL – Aravali Transmission Service Company Limited; WKTL: Warora Kurnool Transmission Limited; ATSTL: Adani Transmission Step-Two Limited; MTSTL – Maru Transmission Service Company Limited, WRSS M – Western Region System Strengthening Scheme Maharashtra, WRSS G – Western Region System Strengthening Scheme Gujarat, (1) Asset base for operational assets as per project cost and Mumbai GTD (AEML) as per Regulated Asset Base

# AESL's Transmission Under-construction Asset Portfolio as of October 2024

## Adani Energy Solutions Limited

	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	NKTL	MP Package II	AEMIL HVDC#	WR-SR	KTL	KPS-1	STSL	Khavda – III - A	Khavda – IV - A	Navinal	Jamnagar	Khavda Phase IV Part D	Line & SS Projects
	North Karanpura Trans System	MP Power Trans Package-II Ltd	HVDC Mumbai	WR SR Trans (Narendra -Pune Line)	Khavda-II-A Trans	Khavda Pooling Station 1	Sangod Trans	Khavda Phase-III Part-A	Khavda Phase- IVA	NES – Navinal (Mundra)	NES – Jamnagar	Khavda Phase IV Part D	Line and SS Augmenta tion Projects
	Under Construction												
A	304 ckms	1,088 ckms	80 ckms	630 ckms	355 ckms	42 ckms	11 ckms	586 ckms	602 ckms	516 ckms	941 ckms	816 ckms	-
B	1,000 MVA	2,736 MVA	1,000 MVA	6,000 MVA	-	6,000 MVA	1160 MVA	-	4500 MVA	6000 MVA	3000 MVA	4500 MVA	3675 MVA
C	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Regulated Return (ROA)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Regulated Return (ROA)
D	Centre	State	State	Centre	Centre	Centre	State	Centre	Centre	Centre	Centre	Centre	Centre / State
E	INR 9.7 bn	INR 13.6 bn	INR 70.0 bn	INR 21.1 bn	INR 12.7 bn	INR 8.7 bn	INR 1.6 bn	INR 27.9 bn	INR 40.9 bn	INR 23.8 bn	INR 38.2 bn	INR 34.6 bn	INR 6.0 bn
F	Sept.-22 - Dec'24	Jul-24	Mar-25	Jun-24	Jun-24	Jun-25	Dec-24	Dec-25	Jun-26	July-26	Oct-26	Oct-26	June'24-Feb'26

Total

➡ 5,970 ckms

➡ 39,571 MVA

➡ INR 309 bn

**A** Transmission line length   **B** Transformation capacity   **C** Contract type   **D** Counterparty   **E** Asset base<sup>(1)</sup>   **F** COD<sup>(2)</sup>

Notes: 1) Asset base for under-construction assets – as per the estimated project cost as of June 2024; (2) Provisional Commercial Operation Date (COD); NKTL – North Karanpura Transco Limited; KTL: Khavda Transmission Limited; KPS: Khavda Pooling Station; STSL: Sangod Transmission Service limited #AEMIL - Adani Electricity Mumba Infra Limited 100% shares are currently being held by AEML. Due to CERC restrictions 51% shares are pledged in favor of AESL



# AESL's Smart Metering Under-construction Portfolio as of October 2024

Adani Energy Solutions Limited											
	100%	100%	100%	100%	100%	100%	100%	100%			
	BEST	APDCL	APEPDCL	APCPDCL	APSPDCL	MSEDCL NSC-05	MSEDCL NSC-06	NBPDCL	UPCL		
	BEST Smart Metering Ltd. (Mumbai)	NE Smart Metering Ltd. (Assam)	Adani Transmission Step-Seven Ltd. (Andhra Pradesh)	Adani Transmission Step-Seven Ltd. (Andhra Pradesh)	Adani Transmission Step-Seven Ltd. (Andhra Pradesh)	Adani Transmission Step-Six Ltd. (Maharashtra)	Adani Transmission Step-Six Ltd. (Maharashtra)	Adani Energy Solutions Limited (Bihar)	Adani Transmission Step-Eight Ltd. (Uttarakhand)		
	Mumbai	Tejpur, Mangaldoi, North Lakhimpur	Srikakulam, Vizianagaram, Visakhapatnam, East Godavari and West Godavari	Krishna, Guntur & Prakasam	Nellore, Chittoor, Kadapa, Anantapuram & Kurnoolam & Kurnool	Bhandup Zone, Kalyan Zone and Konkan Zone (inc additional qty)	Baramati Zone and Pune Zone	Siwan, Suran, Gopalganj, Vaishali, and Samastipur	Kumaon Region		
	Under Construction								Total		
A	Smart Meters Qty (in million)	1.1	0.8	1.1	1.7	1.3	8.1	5.2	2.8	0.7	➡ 22.8 million
B	Contract Value (in Rs Billion)	13.0	8.4	13.0	20.8	18.0	96.7	62.9	31.0	8.1	➡ INR 272 Bn
C	Contract Period (months)	120	120	120	120	120	120	120	120	120	➡ 120 months per contract
D	Contract Type	DBFOOT	DBFOOT	DBFOOT	DBFOOT	DBFOOT	DBFOOT	DBFOOT	DBFOOT	DBFOOT	
E	Month of Award	Sept & Oct'22 (Amendment)	Feb'23	June & Dec'23	June & Nov'23	June & Sept'23	Aug'23 & Mar'24	Aug'23	Aug'23	Dec'23	
		1	2	3	4	5	6	7	8	9	

Notes: The Discoms are our customers and AESL is executing these contracts through 100% owned SPVs.; DBFOOT: Design-Build-Finance-Own-Operate-Transfer; BEST: Brihanmumbai Electricity Supply and Transport; APDCL: Assam Power Distribution Company Ltd; APEPDCL: Andhra Pradesh Eastern Power Distribution Co Ltd; APCPDCL: Andhra Pradesh Central Power Distribution Co Ltd; APSPDCL: Andhra Pradesh Southern Power Distribution Co Ltd.; MSEDCL: Maharashtra State Electricity Distribution Company Limited; NBPDCL: North Bihar Power Distribution Company Limited; UPCL: Uttarakhand Power Corporation Limited

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Thank You