



**adani**  
Energy Solutions

**Adani Energy Solutions Limited**  
(Formerly known as Adani Transmission Limited)

**Credit Presentation**

**August 2023**



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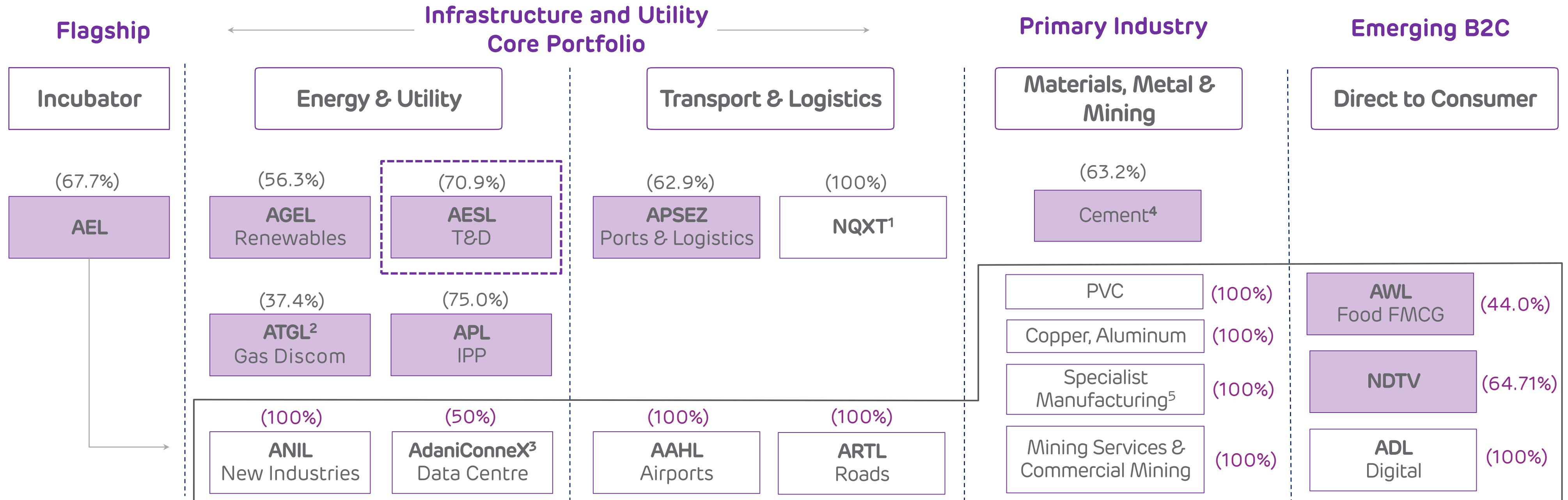


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**Adani Portfolio**



# Adani: A World Class Infrastructure & Utility Portfolio



(%): Promoter equity stake in Adani Portfolio companies  
 (%): AEL equity stake in its subsidiaries

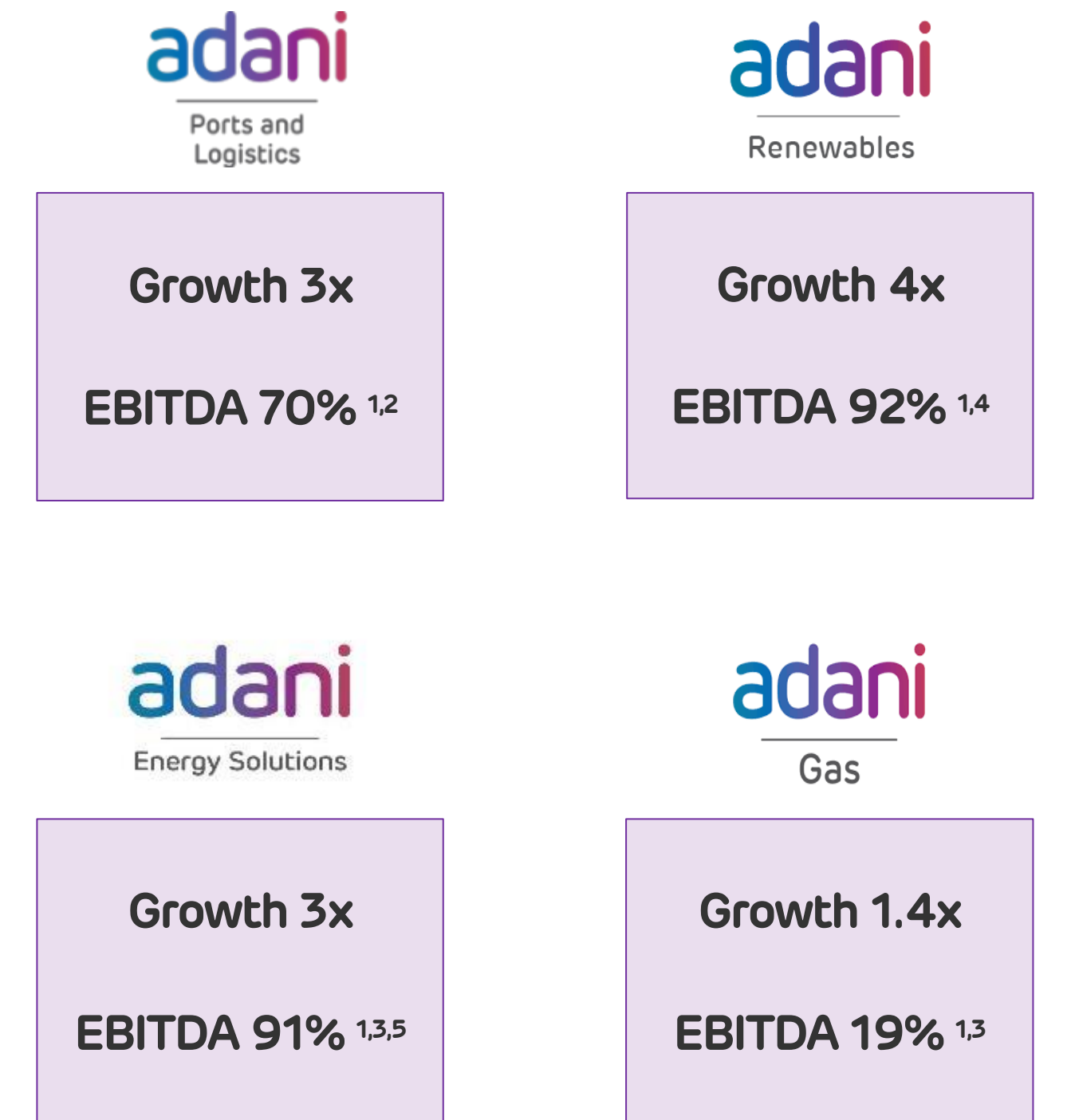
- Represents public traded listed verticals

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

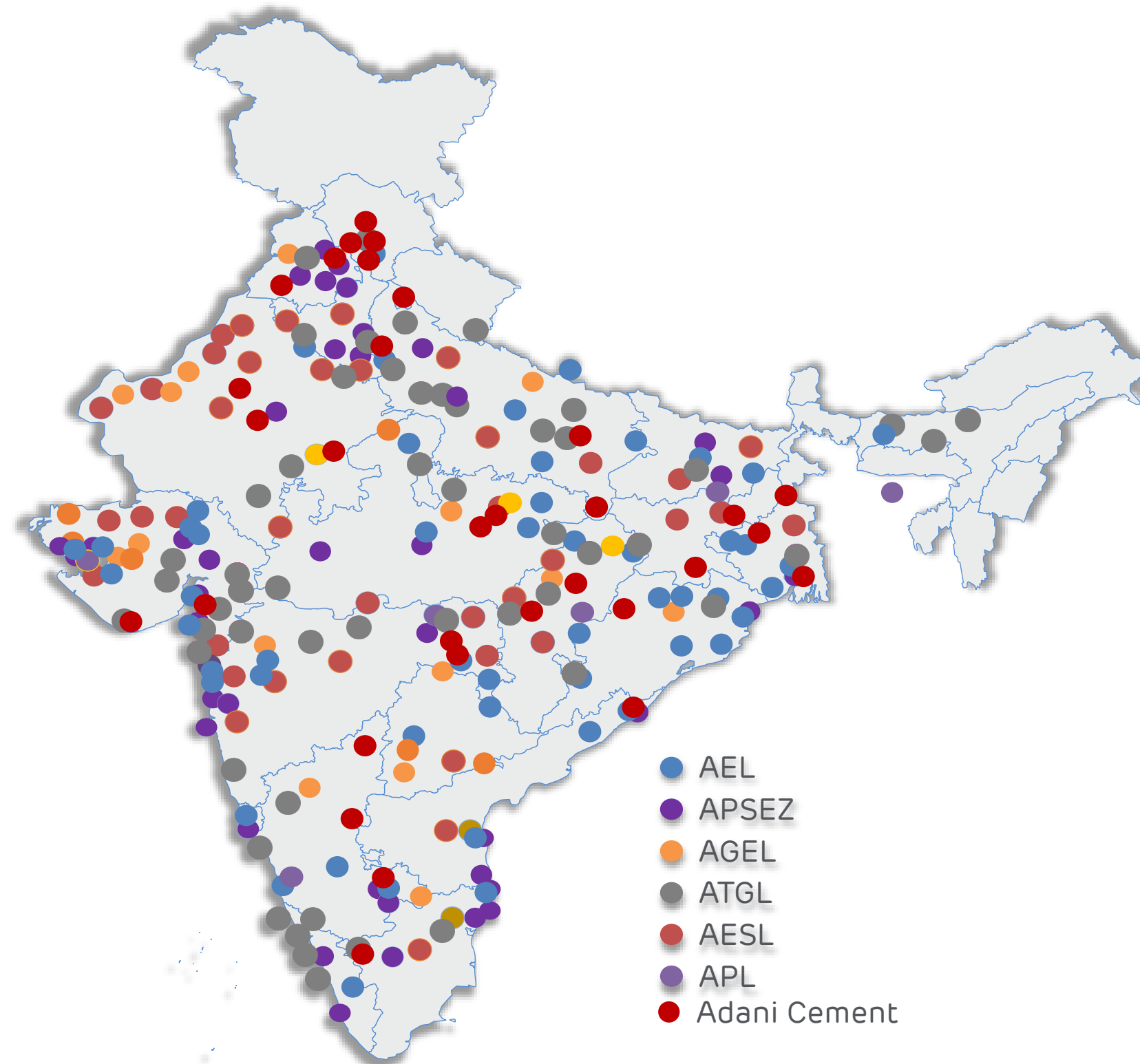
Data as of June 30, 2023. 1. NQXT: North Queensland Export Terminal | 2. ATGL: Adani Total Gas Ltd, JV with Total Energies | 3. Data center, JV with EdgeConnex | 4) Cement business includes 63.15% stake in Ambuja Cement which in turn owns 50.05% in ACC Limited. Adani directly owns 6.64% stake in ACC Limited | 5. Includes the manufacturing of Defense and Aerospace Equipment  
 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 Limited | Note - Purple color represent public traded listed verticals;

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

## Secular growth with world leading efficiency



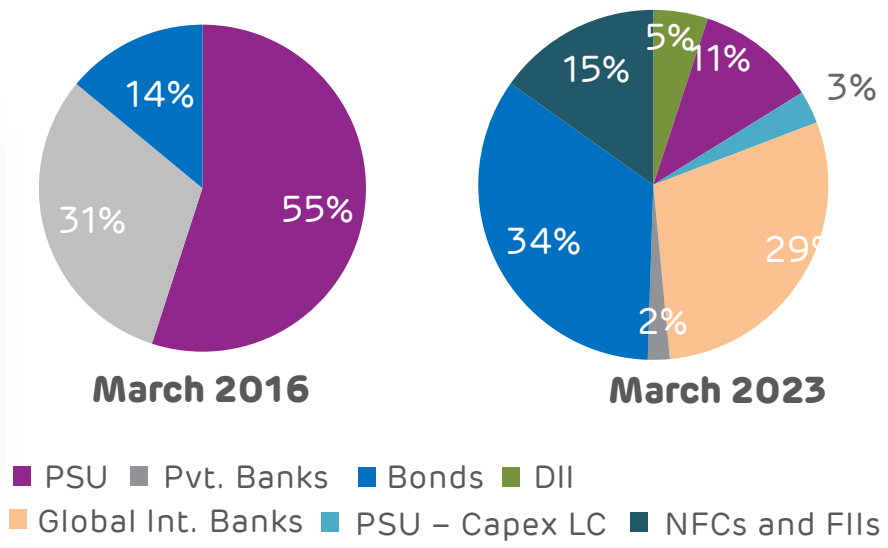
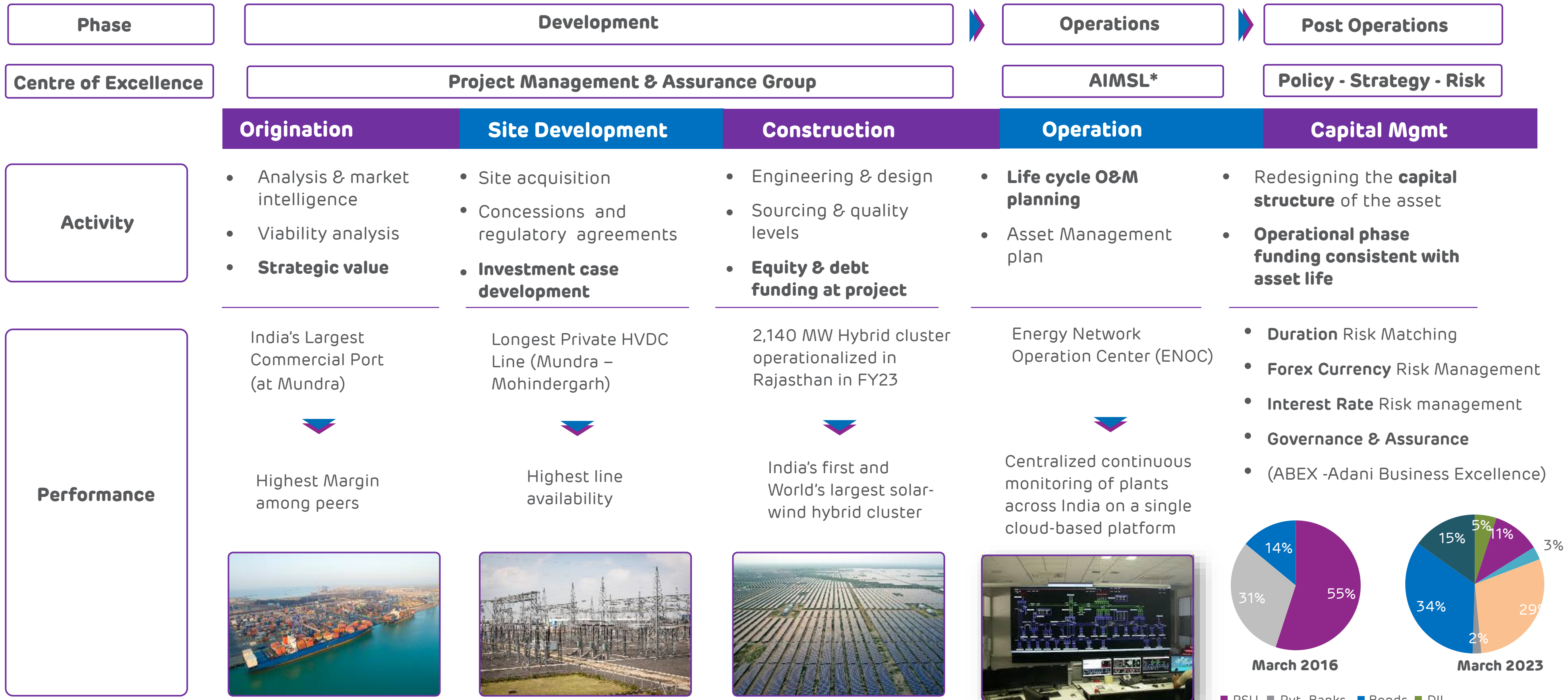
## National footprint with deep coverage



Adani's Core Infra. Platform - **320 Mn** Userbase

Note: 1. Data for FY23; 2. Margin for ports business only, excludes forex gains/losses; 3. EBITDA = PBT + Depreciation + Net Finance Costs – Other Income; 4. EBITDA Margin represents EBITDA earned from power supply 5. Operating EBITDA margin of transmission business only, does not include distribution business; 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; Map not to scale

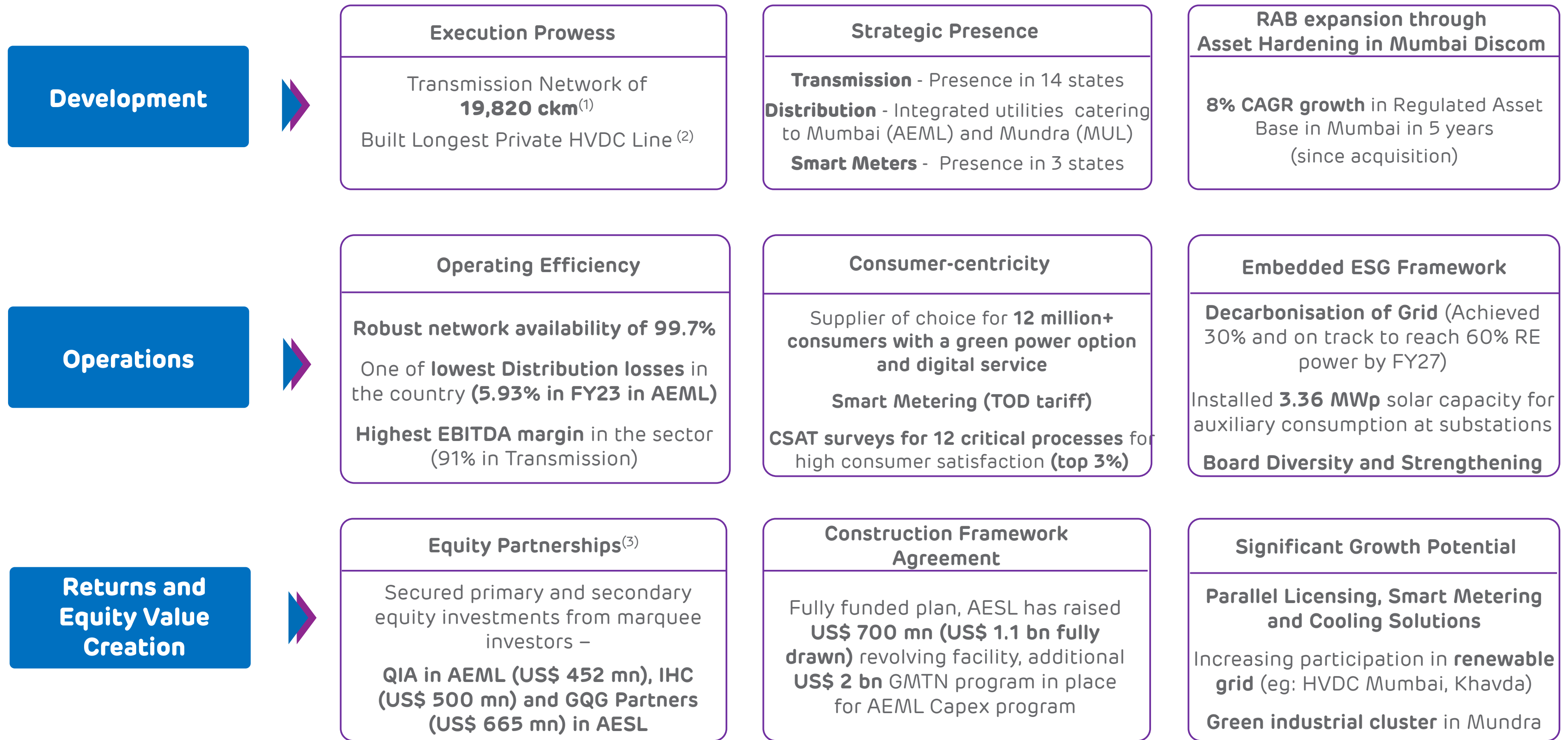
# Adani: Repeatable, robust & proven transformative model of investment



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. 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 | \*AIMSL - Adani Infrastructure Management Services Ltd



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



Note: 1) Transmission network is as of June 2023 and includes operational, under-construction assets; 2) HVDC : High voltage direct current – Longest at the time of commissioning, 3) 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), IHC Investment is Rs. 3850 Crs for 1.41% stake (US\$ 500 million), GQG Investment of Rs. 5,532 Cr (US\$ 665 million) for 6.63% stake based on closing price of Rs 878 dated August 20, 2023

QIA: Qatar Investment Authority, IHC: International Holding Company; 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

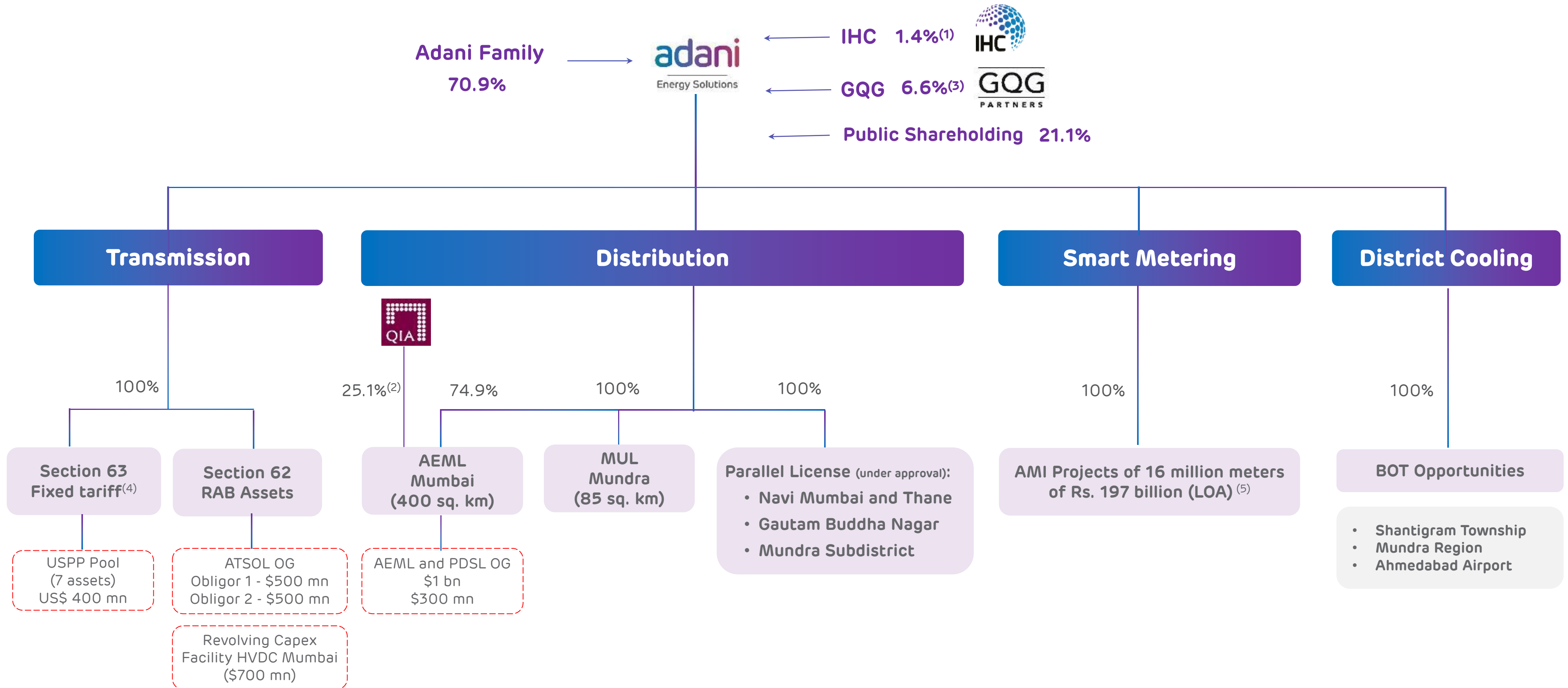
**Adani Energy Solutions Ltd.**  
(formerly known as Adani Transmission Ltd.)



# About AESL



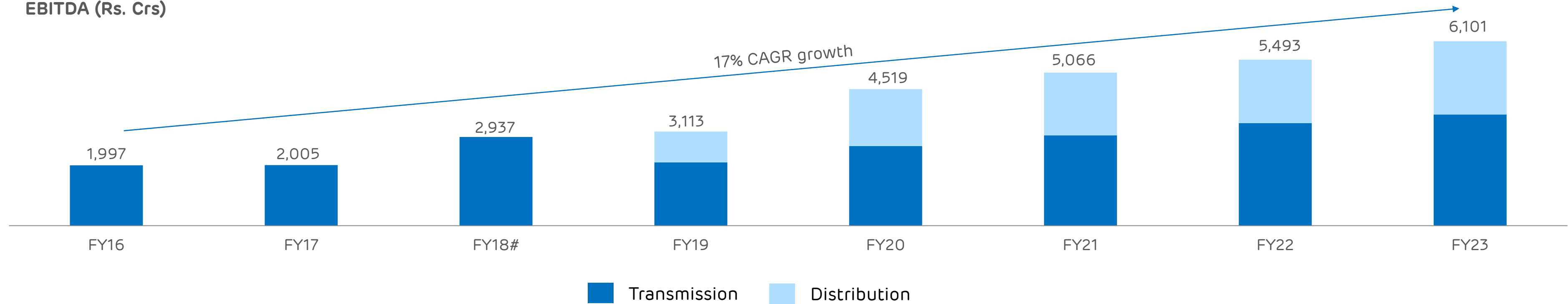
# AESL: Business Snapshot



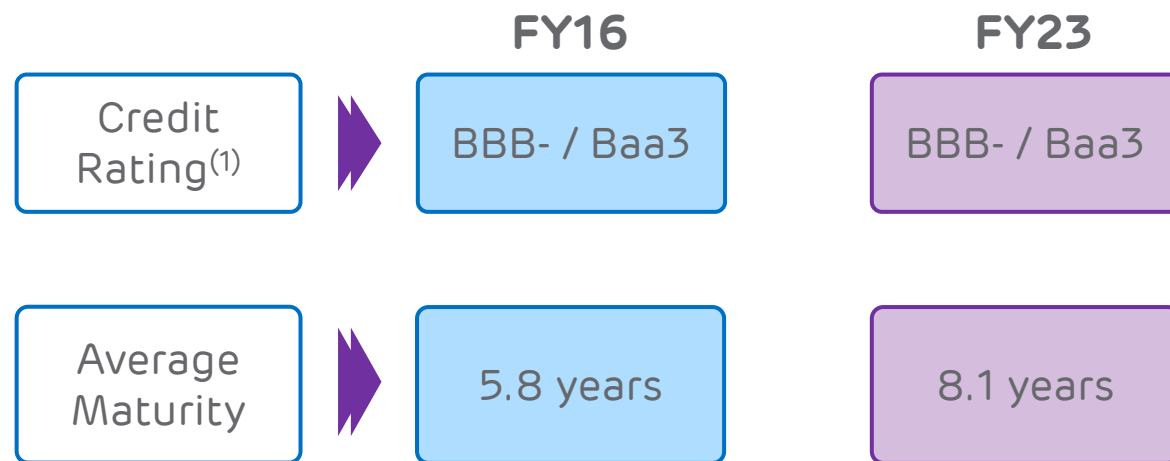
Notes: 1) Primary equity by IHC Investment: Rs. 3850 Cr for 1.41% stake (US\$ 500 million) ; 2) Primary Equity - QIA's Investment in AEML: US\$ 452 mn (Rs 32 bn) total investment (US\$ 170 mn of Equity and US\$ 282 mn of shareholder sub-debt) for 25.1% stake in AEML ; 3) GQG's Secondary Investment of Rs. 5,532 Cr (US\$ 665 million) for 6.63% stake based on closing price of Rs 878 dated August 20, 2023 ; 4) Tariff based competitive bidding (TBCB); 5) 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 – 27.7 Lakh smart meters (Rs 37 bn) (iv) 2 MSEDCL projects – 115.9 Lakh smart meters (Rs 139 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, LOI: Letter of Intent; Ckm: Circuit Kilometer, SEZ: Special Economic Zone, Sq.Km: Square Kilometer; PDSL: Power Distribution Services Ltd.

# Transformational Journey with Robust Growth and Credit Discipline

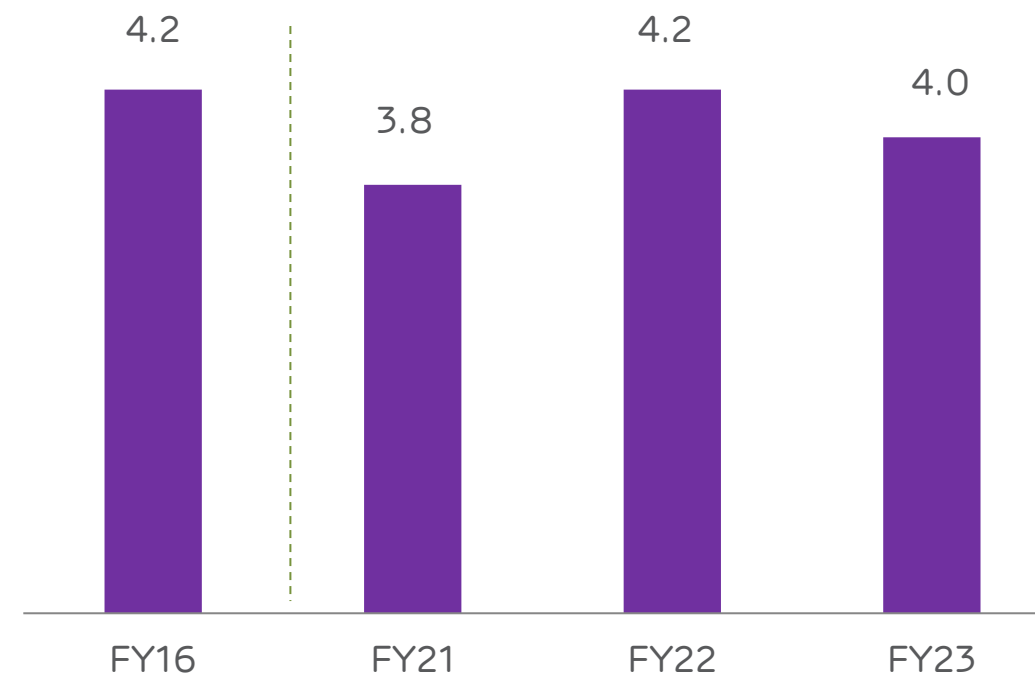
EBITDA (Rs. Crs)



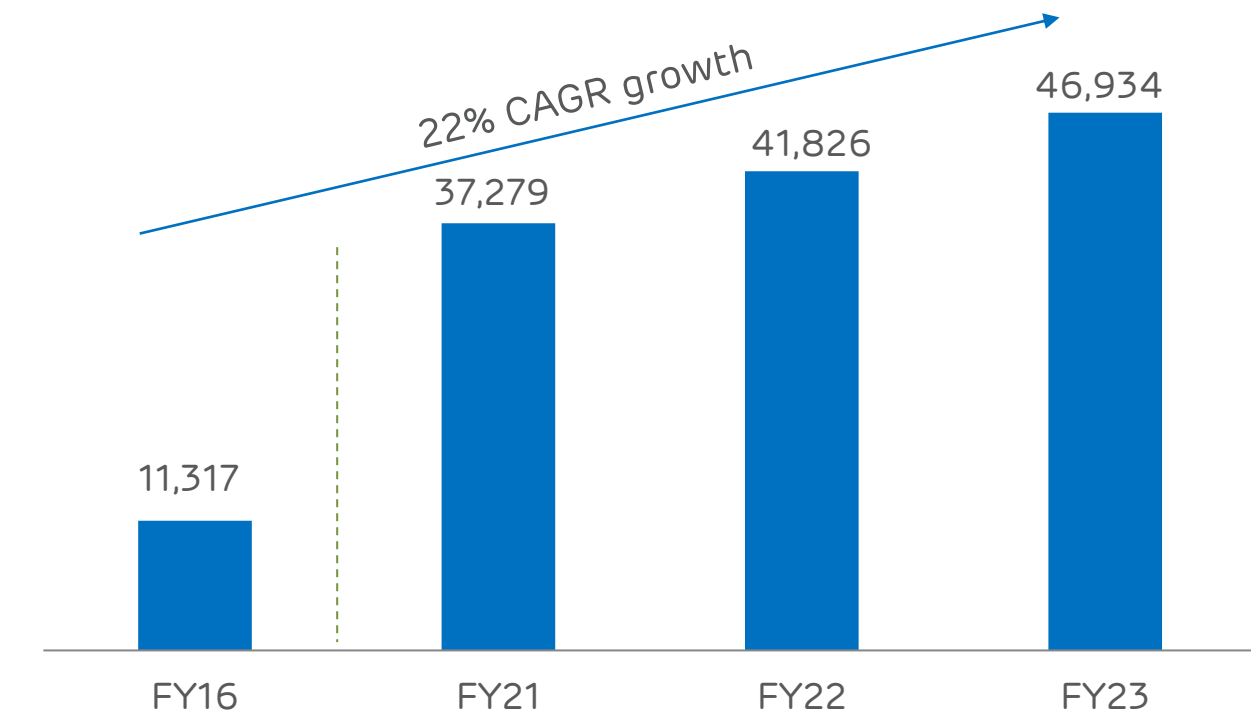
**AESL is Investment grade rated since FY16**



Net Debt to EBITDA<sup>(2)</sup> (x)



Gross Fixed Assets<sup>(3)</sup> (Rs Crs)



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; 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



# 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**



**Collaborating & Convergence**



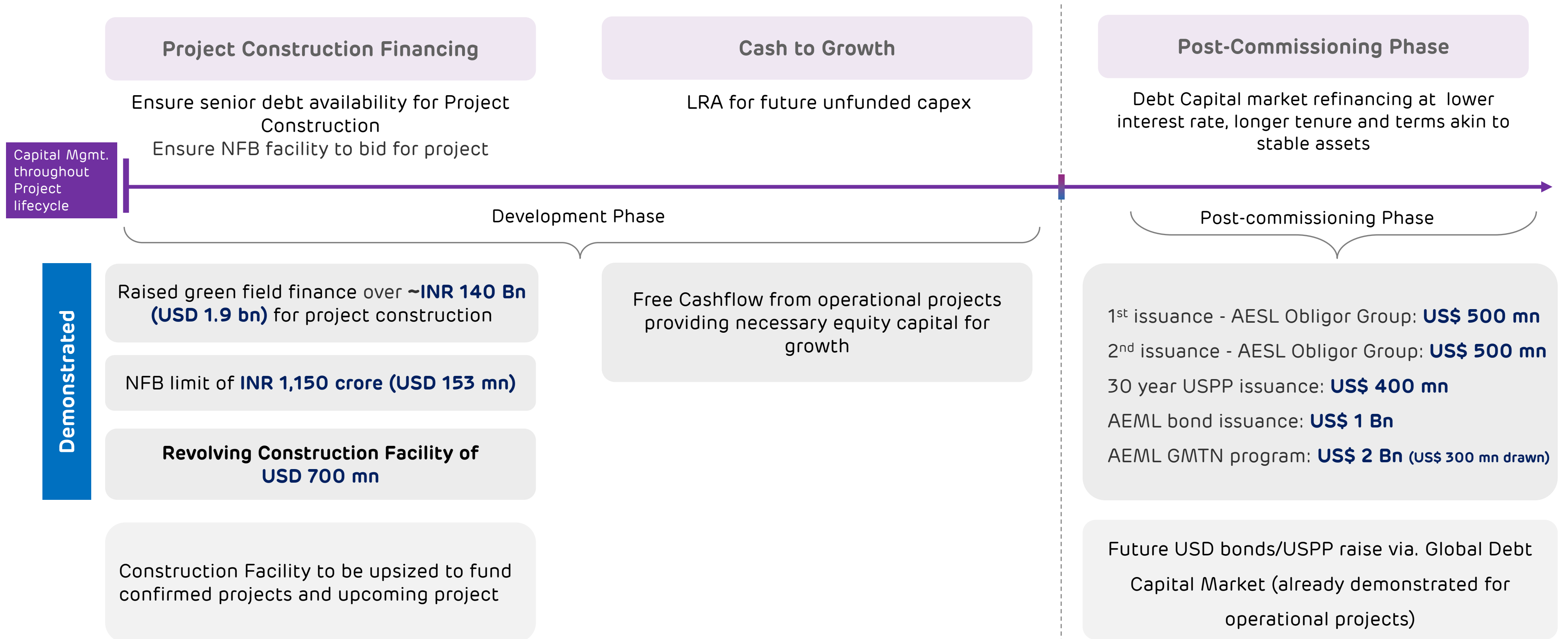
**Effective Project Delivery**



# Capital Management Philosophy to achieve growth at scale with capital discipline

## AESL is the only private sector transmission and distribution company in India with International IG Rating

- Long life contracted assets with sovereign counterparties in a stable regulatory regime (Transmission: 35 year concession, Distribution: Perpetual life)
- Capital structure designed through debt financing at longer tenure matching concession life and terms akin to stable assets



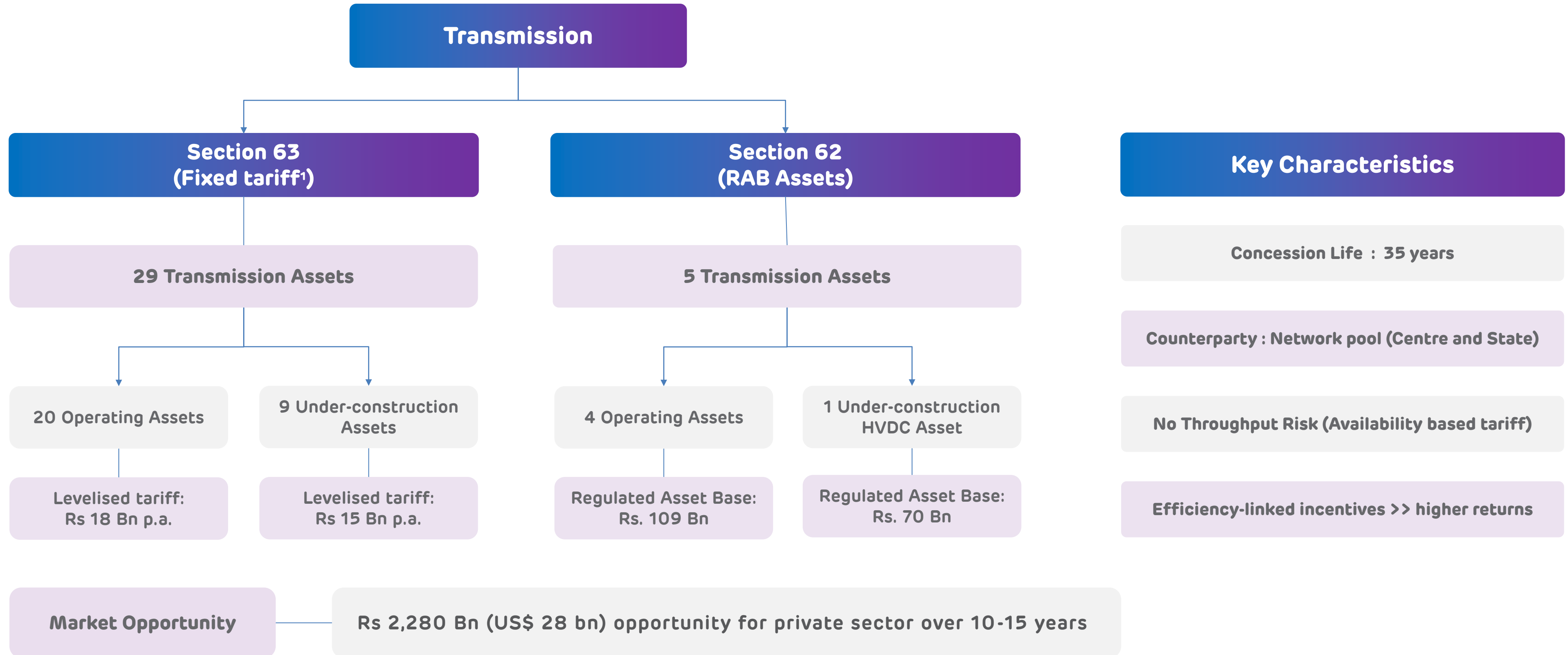




**adani**  
Energy Solutions

**Transmission**





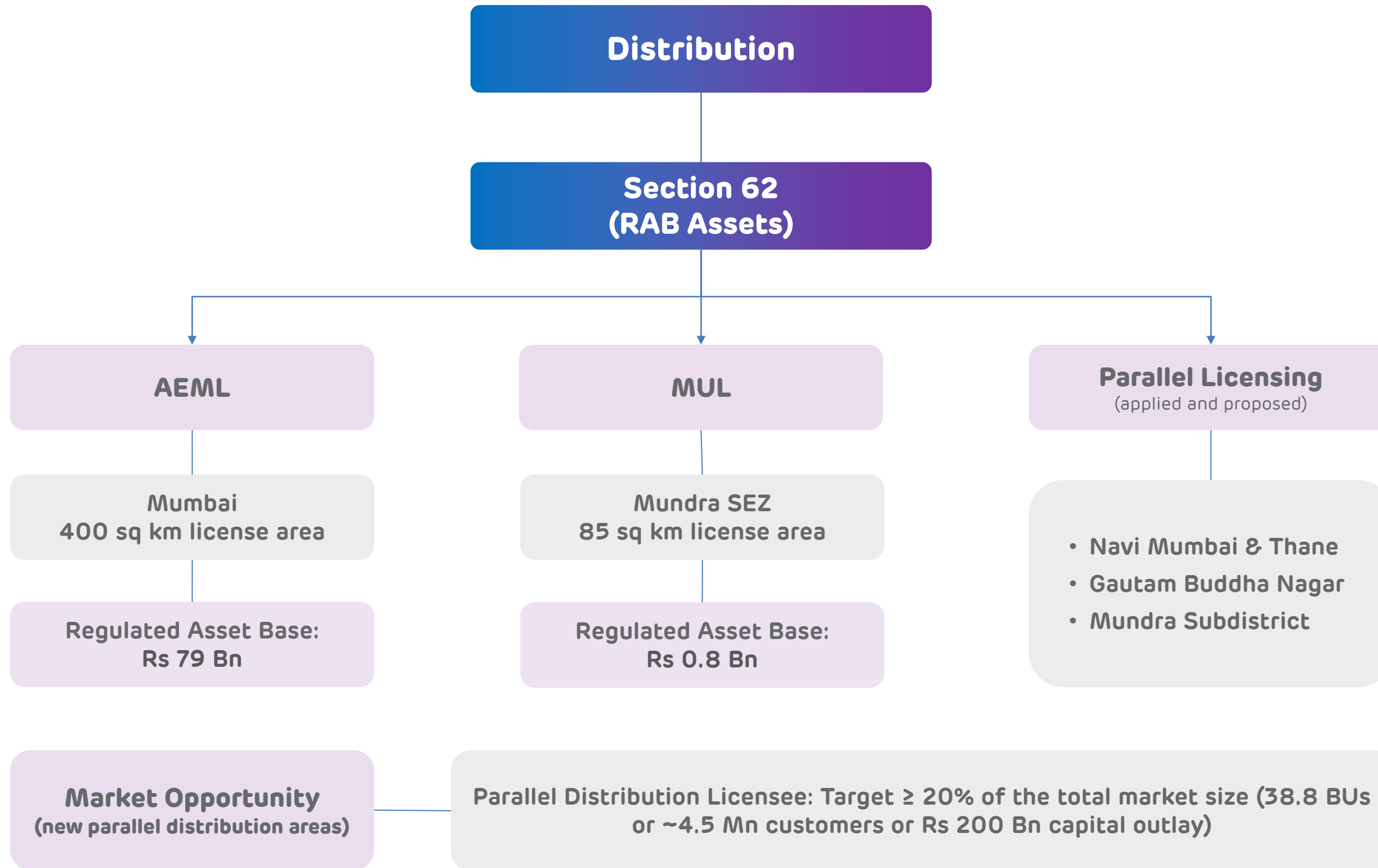
Notes: 1) Tariff based competitive bidding (TBCB); RAB: Regulatory Asset Base, p.a.: per annum; HVDC: High Voltage Direct Current





# Distribution



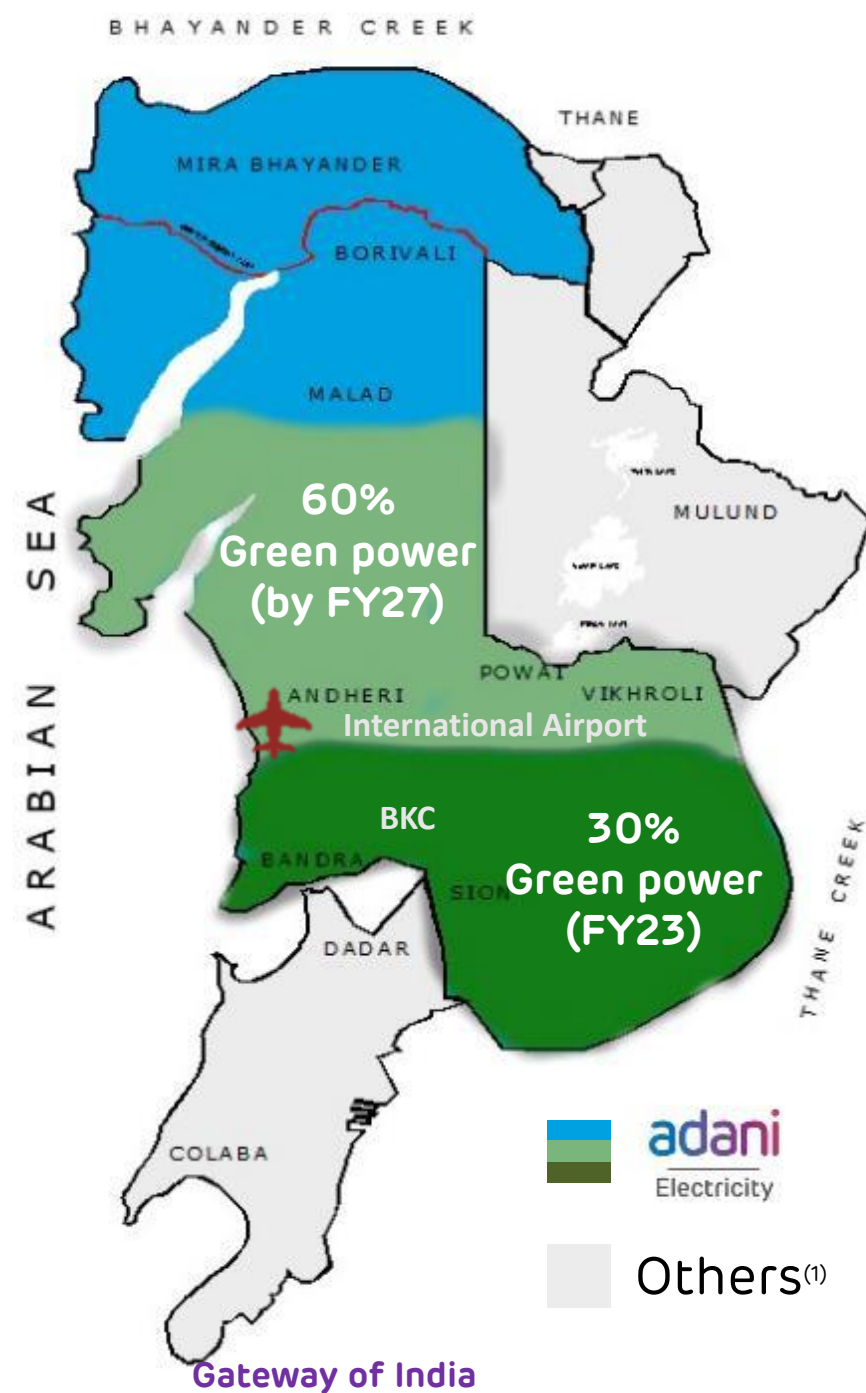


## Key Characteristics

- License period: Perpetual
- Counterparty: Pool of 12 Mn+ consumers
- No throughput risk (RAB based returns)
- O&M costs are pass-through

# 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\$)

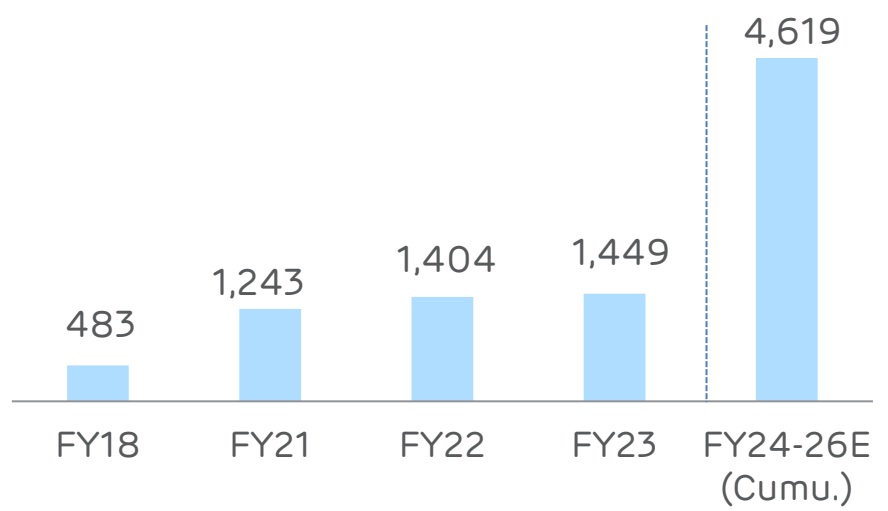
### Mumbai Consumers

- 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

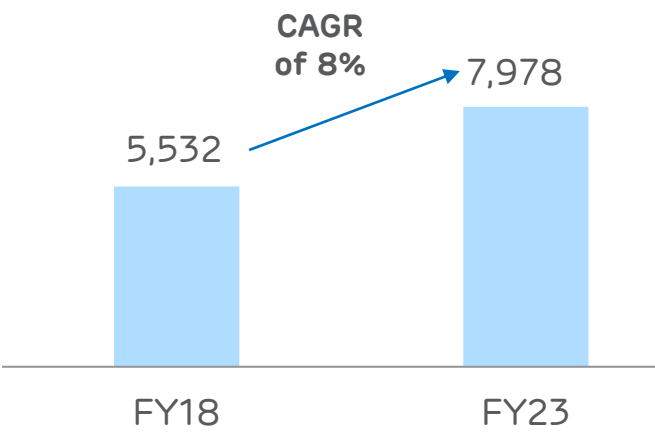
- Servicing 85% of Mumbai, touching 2/3 households of Mumbai
- Only mega city in the world to achieve 30% renewable power

## AEML – Key Milestones Since Acquisition

### RAB Addition (Rs Crs)



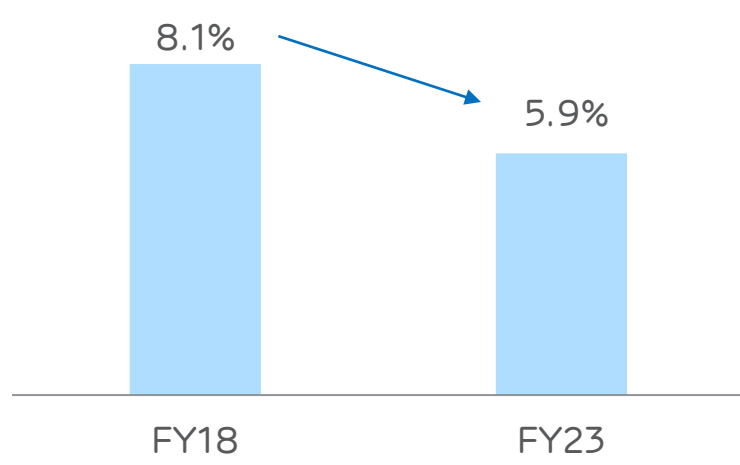
### Capitalised RAB (Rs Crs)



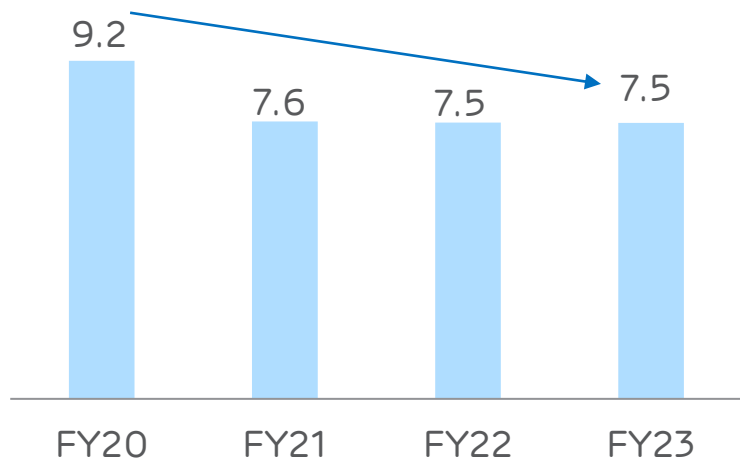
### Approved RAB

### Forecast

### Distribution losses %



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



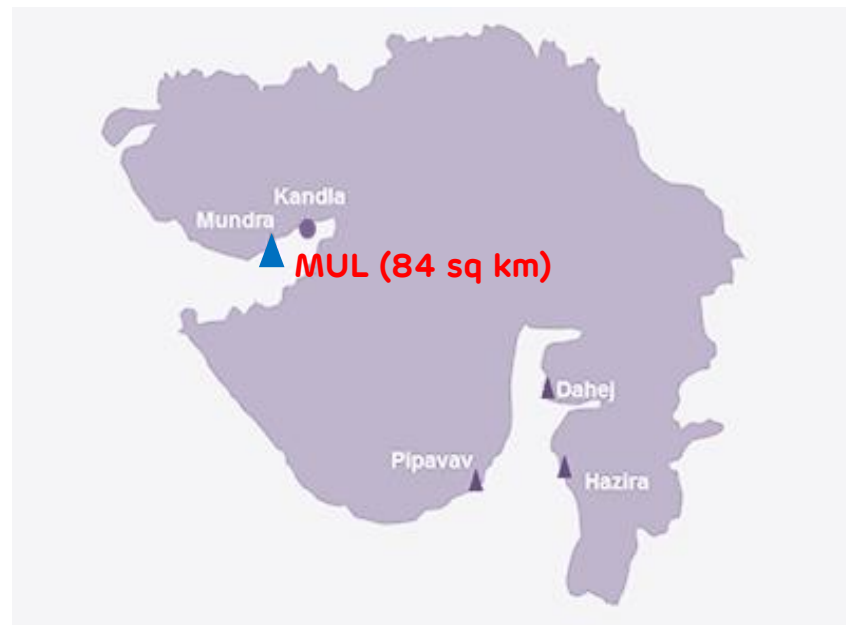
Capex-led growth in Regulated Asset Base to drive growth in returns (Rs. 46 Bn over FY24-26)

Note:- 1) Others include BEST, MSEDCCL & Tata Power; 2) Source – Population Of Mumbai 2020 (Demographic, Facts, etc.) – India Population 2020  
 MoP: Ministry of Power; PFC: Power Finance Corporation; BKC – Bandra Kurla Complex, MW- Mega Watt, GDP: Gross Domestic Product; CAGR: Compound Annual Growth Rate, RAB: Regulatory Assets Base; FAC: Fuel Adjustment Charges; Map not to scale



# MPSEZ Utilities Limited (MUL) - Overview

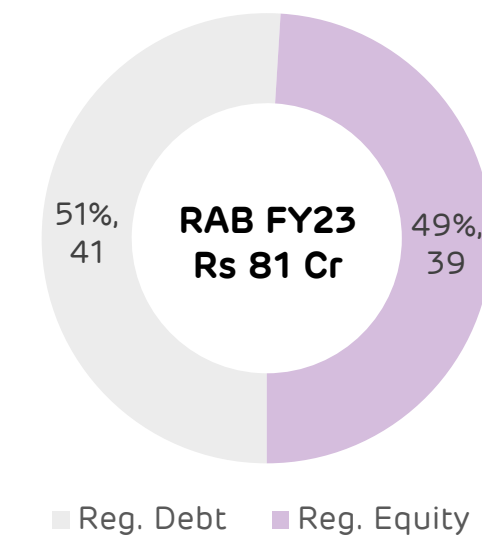
Mundra SEZ is strategically located with well developed supporting infrastructure serving as an attractive industrial hub



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

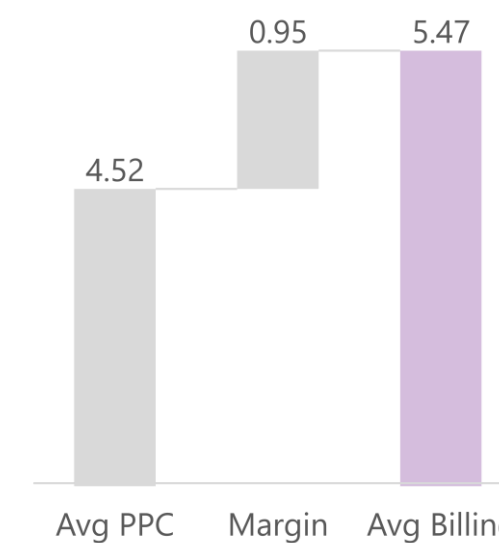
- Mundra SEZ is India's largest multi-product SEZ **spread across 84 sq km**
- Mundra port is **India's largest private commercial port** with capacity to handle cargo of ~264 MMT
- SEZ also has a huge land bank reserve for large-scale industries in future
- Given the large industry cluster opportunity in Mundra SEZ area and the accompanying expected growth in power demand, AESL is well placed to grow the MUL business

## RAB<sup>(1,2)</sup> (Rs Cr)

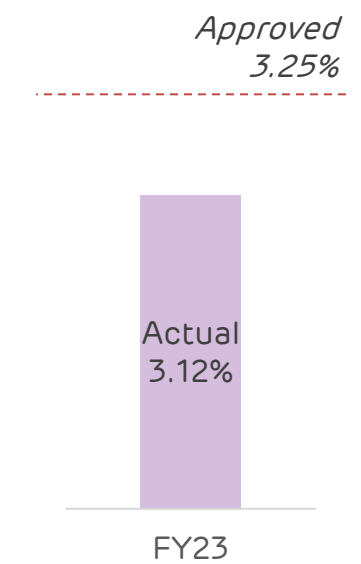


## Avg Billing Rate (Rs/ unit)

Power Sale of 289 MUs in FY23



## Dist. Loss (%)



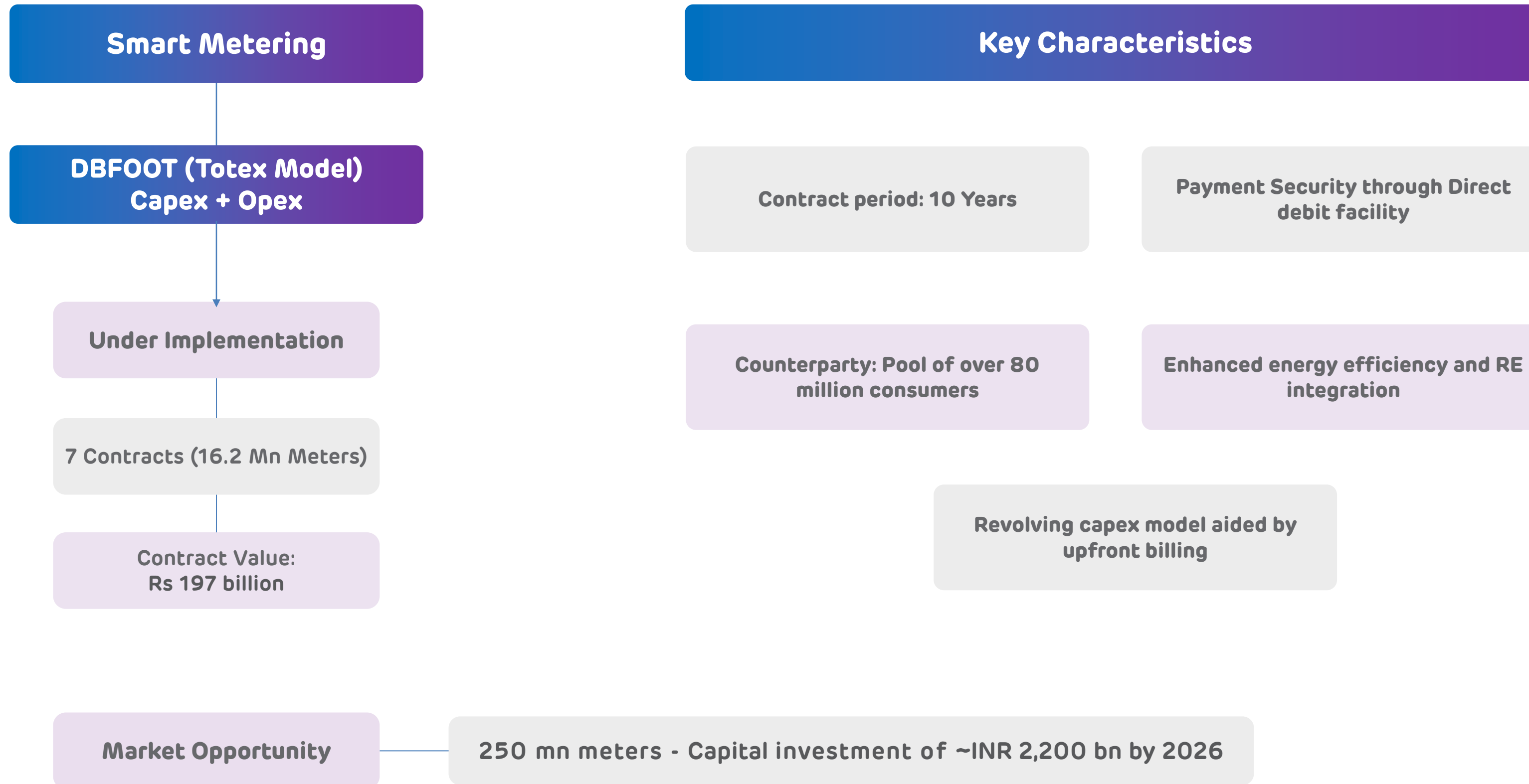
MUL's existing load of MUL is ~80MW, which is expected to grow multifold due to new investments in copper, petrochemicals and solar manufacturing & ancillary industries in the Mundra region

Note: 1) As per Tariff Petition for FY23 and True-up Order for 2020-21; 2) Normative level as per FY23 tariff order; 3) MUL signed a co-developer agreement with APSEZ providing it a deemed licensee status from 2011 for the SEZ license area valid till 2036  
MUL: MPSEZ Utilities Limited; AESL: Adani Energy Solutions Ltd.; MMT: Million Metric Tons; SEZ: Special Economic Zone; MU: Million Units Mn: Million, RAB: Regulated Asset Base; PPC: Power Purchase Cost; GW: Giga watts; Map not to scale



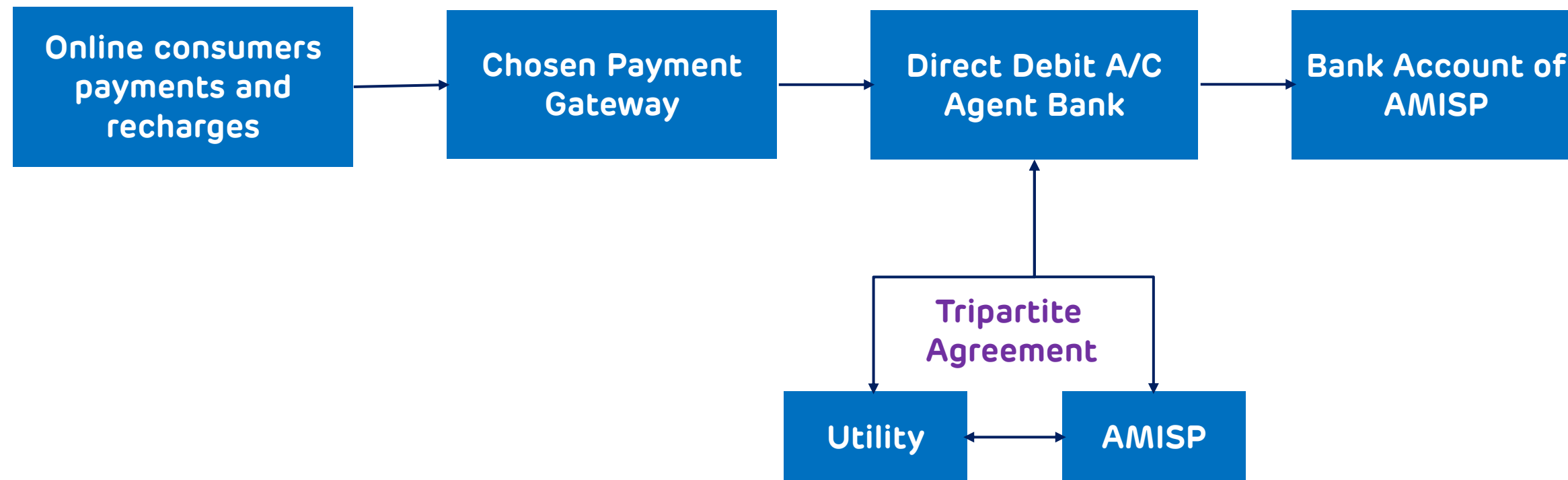
# Smart Metering





# Smart Metering Contractual Framework

## Payment Flow under the Direct Debit Facility Agreement (DDF Agreement)



- Payments shall commence one month after "Operational Go Live" Operational Go-Live shall be considered upon successfully installing 25K nos. of smart meters
- All payments due to AMISP shall be governed under the DDF Agreement
- Direct Debit Facility Agreement uniform to all discoms, finalized by REC being the Nodal Agency
- Payment shall be made through 'Direct Debit Facility' (DDF) from a dedicated account to the account of the SPV
- Direct Debit facility will include bucket filling approach whereby all consumer bill payments to the extent of the invoice smart meter will be routed to the SPV's Bank account

## Key Highlights of the Contractual Framework

Implementation model – Design, Build, Finance, Own, Operate, Transfer (DBFOOT) model with complete responsibility of development and O&M on Implementing agency (AMISP)

End to End Smart Metering services with a contract period of 10 years, and Smart Meter, including installation period of 27 months

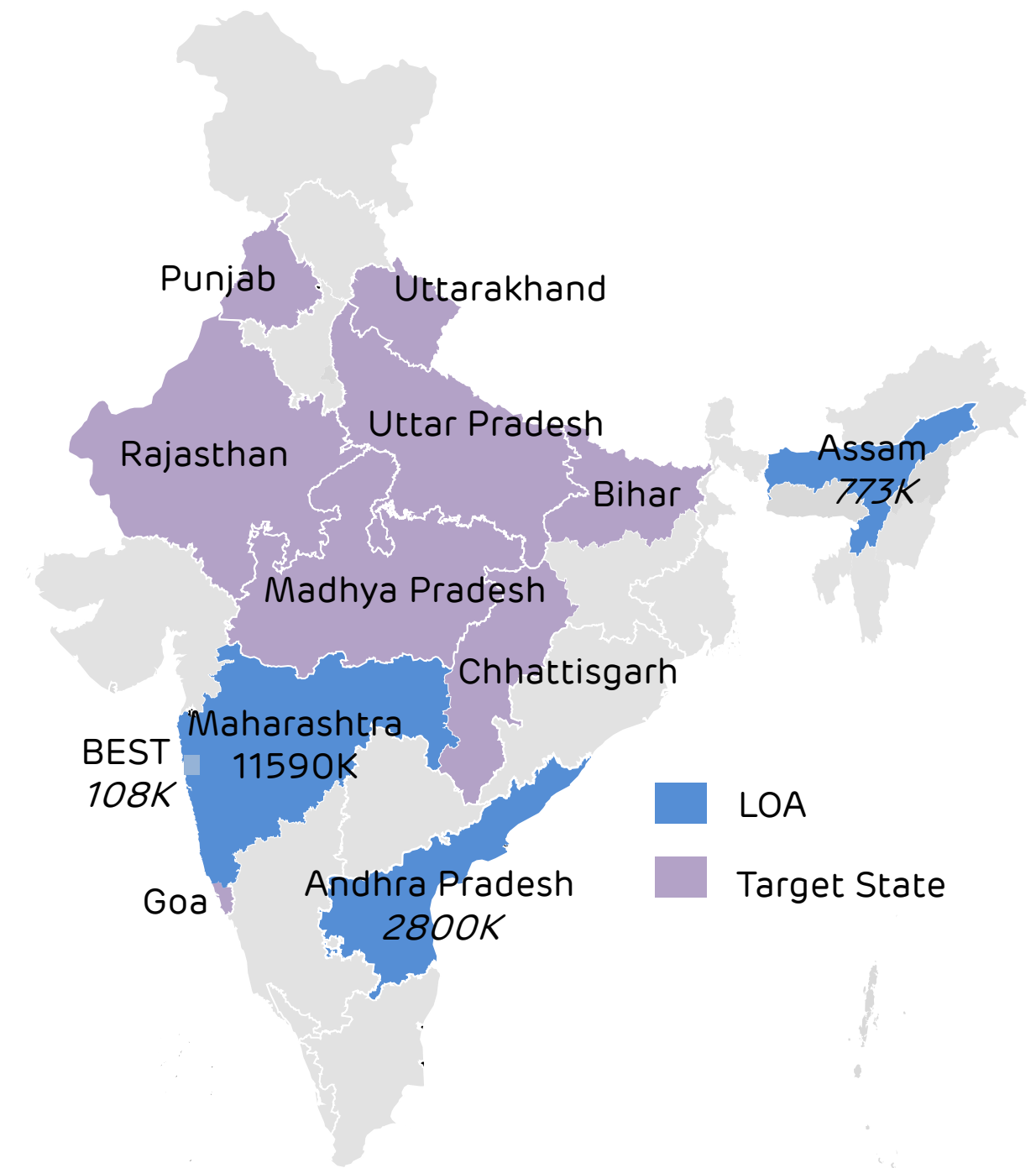
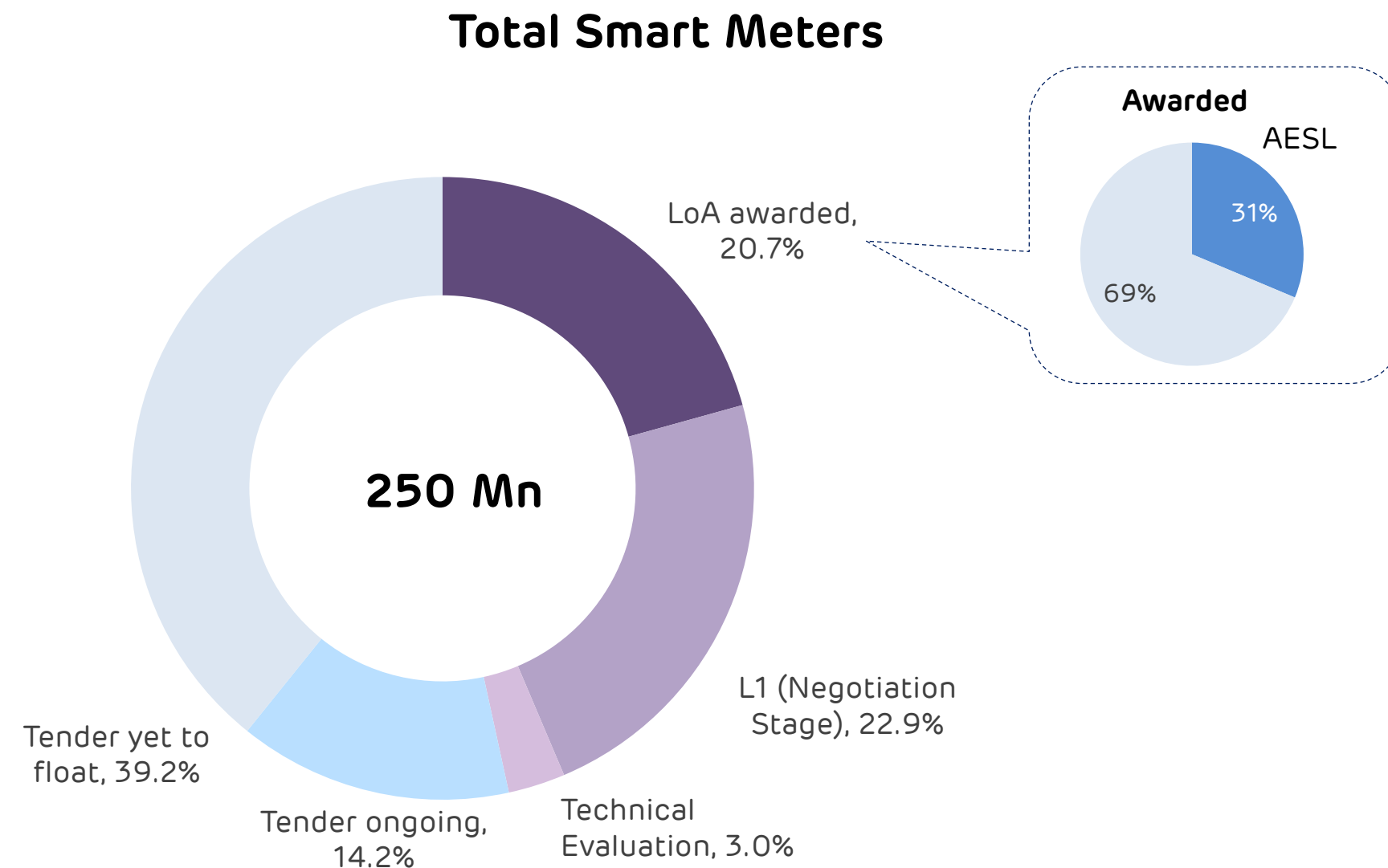
Revenue inflows are received immediately on installation

Monthly fees for assuring meter installation and its integration with system



# Market Dynamics – Smart Metering Business

- AESL's Market Share (LOA and L1) – 31% out of 109 Mn Smart Meters tendered so far
- Untapped market – 141 Mn Smart meters



Of the targeted 250 Mn meters, India has bid out <sup>(1)</sup> 44%, of which AESL Smart Meters has secured 31% market share

**AESL has an LOA for 16.2 Mn smart meter qty. with an order value of Rs 197 billion (US\$ 2.4 bn)**

**AESL's Core Strengths and Available Synergies:**  
Distribution & Smart Metering Experience | Expanding Distribution business across India | Pan India presence



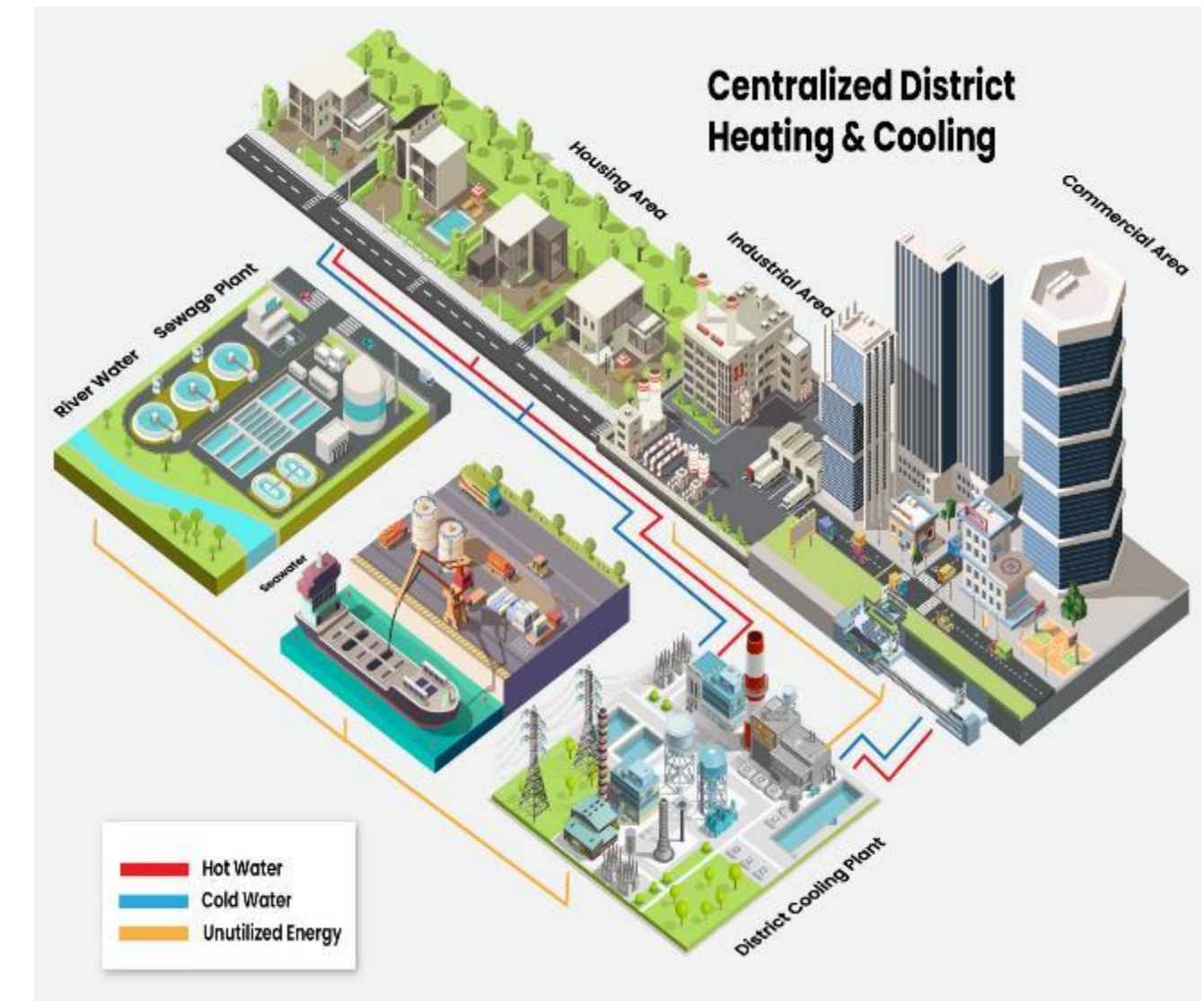
# District Cooling



# District Cooling Business

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.

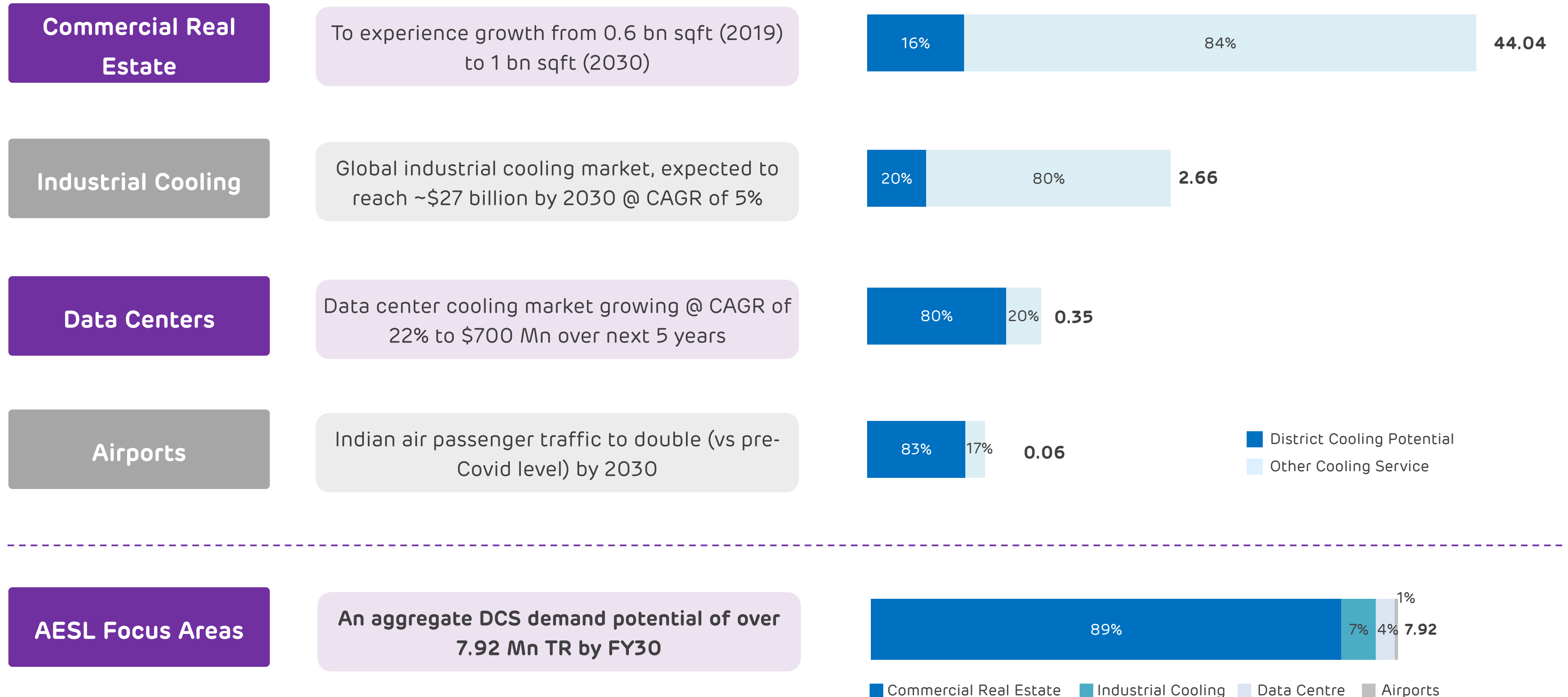
<p><b>Large Addressable Market and Existing Synergies</b></p>	<ul style="list-style-type: none"> <li>- Opportunity to unlock potential in nation-wide Infrastructure (airports, data centers, SEZs, reality space)</li> <li>- Limited competition and presence</li> </ul>
<p><b>Demographic and economic trends to drive cooling demand</b></p>	<ul style="list-style-type: none"> <li>- Rising per capita income &amp; urbanization coupled with higher AC ownership (penetration of 8% in 2022) cooling energy consumption will increase</li> </ul>
<p><b>DCS demand to be driven by four key segments</b></p>	<ul style="list-style-type: none"> <li>- Airports, Industrial Cooling, Commercial Real Estate and Data Centers are the primary segments which will drive the demand</li> </ul>
<p><b>Integrated Utility Offering</b></p>	<ul style="list-style-type: none"> <li>- Potential to offer as an integrated solution along with power transmission, distribution, smart metering and power trading</li> </ul>
<p><b>ESG Integration</b></p>	<ul style="list-style-type: none"> <li>- Sustainable Cooling Solution for a Low Carbon Future</li> </ul>



Picture source: Hisaka Asia

# Four key segments to drive India's DCS demand

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

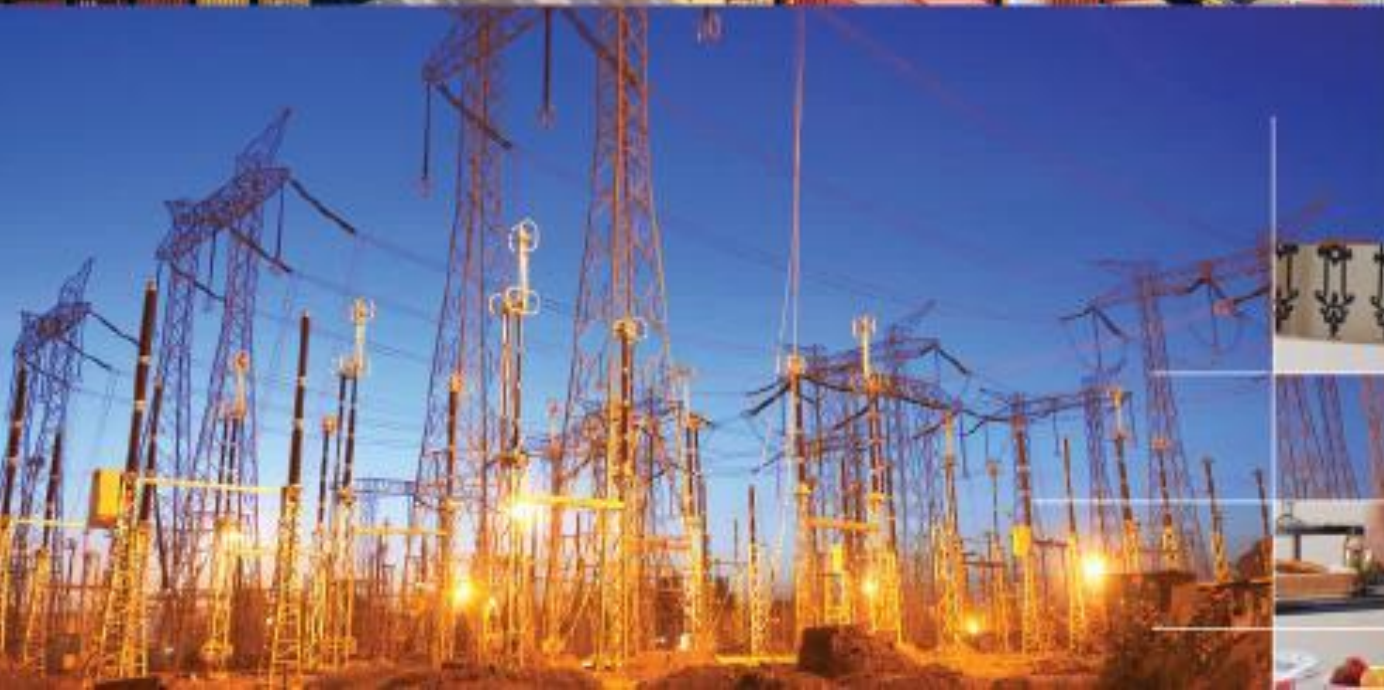


Sources: Cooling India, ICAP, Praxis, CREDAI/CBRE, CEA, IEA, EIA, Adani Connex, Boeing, Internal analysis  
 Notes: 1) Cum. Cooling demand (new) and DCS market potential is considered from FY 24-25 onwards  
 TR: A ton of refrigeration; CAGR: Compounded Annual Growth Rate





Growth with **Goodness**



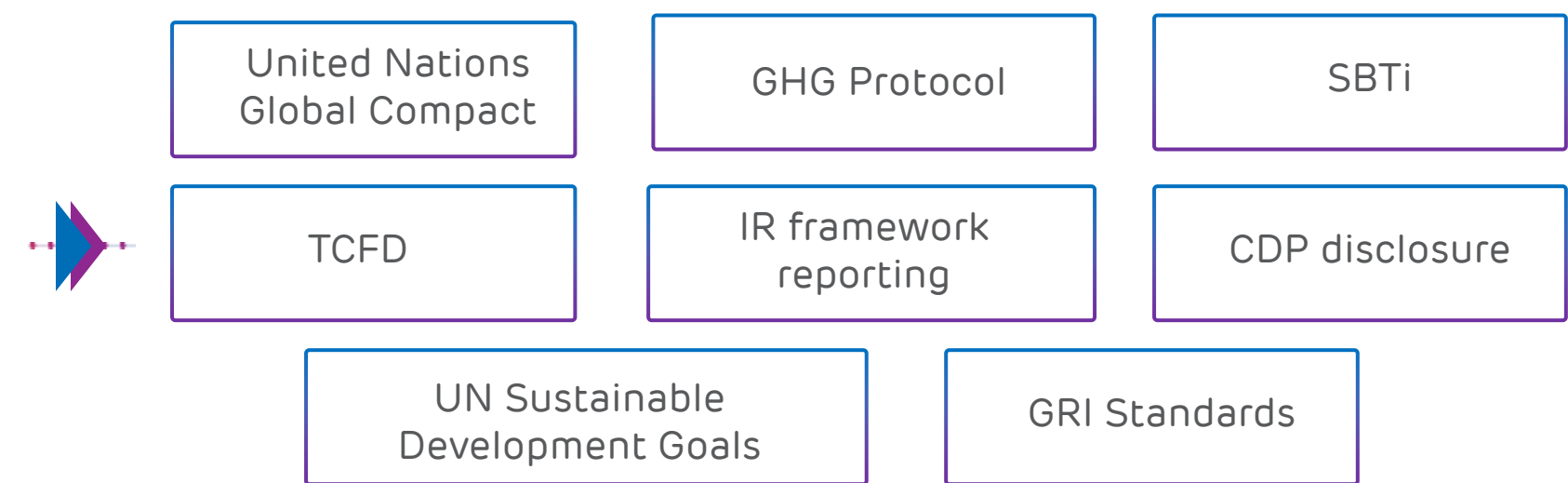
**ESG Framework and Investment Case**



# AESL: ESG Framework



## Guiding Principles and Disclosure Standards



Policy Structure	
<b>E</b>	<ul style="list-style-type: none"> <li>Environment Policy</li> <li>Energy Management System</li> </ul>
<b>S</b>	<ul style="list-style-type: none"> <li>Corporate Social Responsibility Policy</li> <li>Occupational Health &amp; Safety Policy</li> <li>Customer Grievance Redressal Mechanism</li> </ul>
<b>G</b>	<ul style="list-style-type: none"> <li>Corporate Social Responsibility Committee</li> <li>Corporate Responsibility Committee</li> <li>Risk Management Committees</li> <li>Stakeholders Relationship Committee</li> </ul>

Focus Areas
<p><u>UNSDG aligned:</u></p> <ul style="list-style-type: none"> <li>Affordable &amp; Clean Energy</li> <li>Sustainable Cities and Communities</li> <li>Climate Action</li> <li>Good Health &amp; well being</li> <li>Quality Education</li> <li>Industry, Innovation &amp; Infrastructure</li> </ul> <p><u>Others:</u></p> <ul style="list-style-type: none"> <li>Consumer empowerment</li> </ul>

ESG Ranking
<ul style="list-style-type: none"> <li>MSCI (2023): <b>BBB</b></li> <li>S&amp;P CSA (2022) <b>scored 59/100</b> vs. world electric utility average of 31</li> <li>FTSE (2023): <b>4/5</b> (world utilities avg. 2.7/5)</li> </ul>

Our Commitment:
<ul style="list-style-type: none"> <li>Increase renewable power procurement to 60% by FY27 (<i>achieved 30% RE in FY23</i>) (SDG 7)</li> <li>Reduce GHG Emission Intensity<sup>(1)</sup> to 40% by FY25, 50% by FY27 and 60% by FY29 (SDG 13)</li> <li>Achieve Zero Waste to Landfill<sup>(2)</sup> for all operational sites (achieved in FY23)</li> <li>Achieve Single Use Plastic Free<sup>(2)</sup> (achieved in FY23)</li> </ul>

Notes: 1) GHG Emission Intensity = tCO2 / Rs Cr EBITDA; 2) Confederation of Indian Industry-ITC Centre of Excellence for Sustainable Development (CII-ITC CESD) certified SUP Free status to 37 operational sites of AESL, i.e., 30 substations and 7 transmission line clusters including stores; 3) AEML, being subsidiary of AESL with ~40% of reported EBITDA share, reports disclosures through AESL; 4) AEML is in process to adopt the guiding principles for independent reporting | UNSDG – United Nation Sustainability Development Goals | TCFD - Task Force on Climate-Related Financial Disclosures | SBTi - Science Based Targets initiative | CDP - Carbon Disclosure Rating GHG – Green House Gas



# 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

## Strong Sponsorship



Mr. Gautam S. Adani  
*(Chairman)*



Mr. Rajesh S. Adani  
*(Director)*



Mr. Anil Sardana  
*(MD, AESL)*

## Managing Director



Mr. K. Jairaj

## Independent Directors



Dr. Ravindra H.  
Dholakia



Mrs. Meera Shankar



Ms. Lisa MacCallum

## Skilled and Experienced Management Team



Mr. Anil Sardana  
*(MD, AESL)*



Mr. Bimal Dayal  
*(CEO, Transmission)*



Mr. Kandarp Patel  
*(CEO, Distribution)*



Mr. Rohit Soni  
*(CFO, AESL)*



Mr. Kunjal Mehta  
*(CFO, AEML)*

Strong governance framework with focus on transparency and independence



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# AESL: Key Environmental Indicators and Milestones

Key Performance Indicators		Current Status	Baseline	Medium to Long-term Targets	
<b>Energy Mix &amp; Emission Intensity</b>					
- RE share in power procurement	AESL has <b>achieved 30% renewable</b> in power mix in March 2023		3%	30% by 2023 (achieved)	60% by FY27
- GHG Emission Intensity Reduction	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.		-	40% by FY25	70% by FY30
<b>Waste Reduction and Biodiversity Management</b>					
- Zero waste to landfill (ZWL)	<b>Secured ZWL status from Intertek</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	Achieved <b>ZWL for all O&amp;M</b> sites in May 2022	
- 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	Achieved <b>SUP free status for 37 sites</b> in March 2023	
- 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>Afforestation of 441 hectares area</b> in FY21-22</li> </ul>		FY20-21 289 hectares	No net loss to biodiversity and 100% alignment with IBBI and IBBI principles based public disclosures by FY23-24	
- 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 <b>Net Water Positive Certification</b> for all O&M sites in November 2022	
<b>Energy Efficiency and Management</b>					
- 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	Coverage across all transmission Sites	



# AESL: Key Social Indicators and Milestones

Social

Material Categories	Material Themes	Key Performance Indicators	Baseline	Target (FY23-24)
Health & Safety	Work related injury	Rate of fatalities per million hours worked	Zero (FY 20-21)	Zero
		Rate of recordable work-related injuries per million man-hours worked	0.33 (FY 20-21)	Zero
	Safety awareness and training	Average hours of training provided per person on health and safety	15.6 (FY 20-21)	Further improve from baseline
Diversity and Inclusion	Measurement of Diversity and Inclusion Metrics and Enforcement of policies	Women as a percentage of new hires and total workforce (%)	New Hire: 5 % Total Workforce: 5%	New Hire: 10% Total Workforce: 6%
Human Rights	Training on human rights	Employees trained in human rights policies or procedures (%)	-	100%
Skills for the future	Skill development trainings	Training and development expenditure for employees (INR)	Rs 3.81 Cr (FY 20-21)	Rs 4.69 Cr
Responsible Procurement	Proportion of spending on local suppliers (%)	Spend on local suppliers against the total procurement budget (%)	99.4 % (FY 20-21)	Maintain FY21 Performance
	Supplier screening on ESG metrics	Suppliers screened on ESG criteria (%)	100% (Critical Suppliers)	100% (Critical 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 28.5%</b></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>Board now comprises of <b>total 7 directors with 4 independent directors</b></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>Zero Case on Corruption and Bribery</li> <li>Board Adopted Anti Corruption and Bribery Policy</li> <li>Identification and Assessment of risks</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 (INR)</li> </ul>	Zero as of FY21	<ul style="list-style-type: none"> <li><b>Zero in FY23 and beyond</b></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>	Distribution loss reduction, CSAT surveys, Reliability metrics	<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 12 million consumers</li> </ul>
<b>Corporate Governance Standing</b>	ESG Ratings	Improvement in ratings through improved disclosures and adoption of best practices	CSA: 59/100; FTSE: 3.3/5	<b>Target 2023-24: CSA – 67/100 and FTSE: 3.6/5</b>

**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 Q1FY24

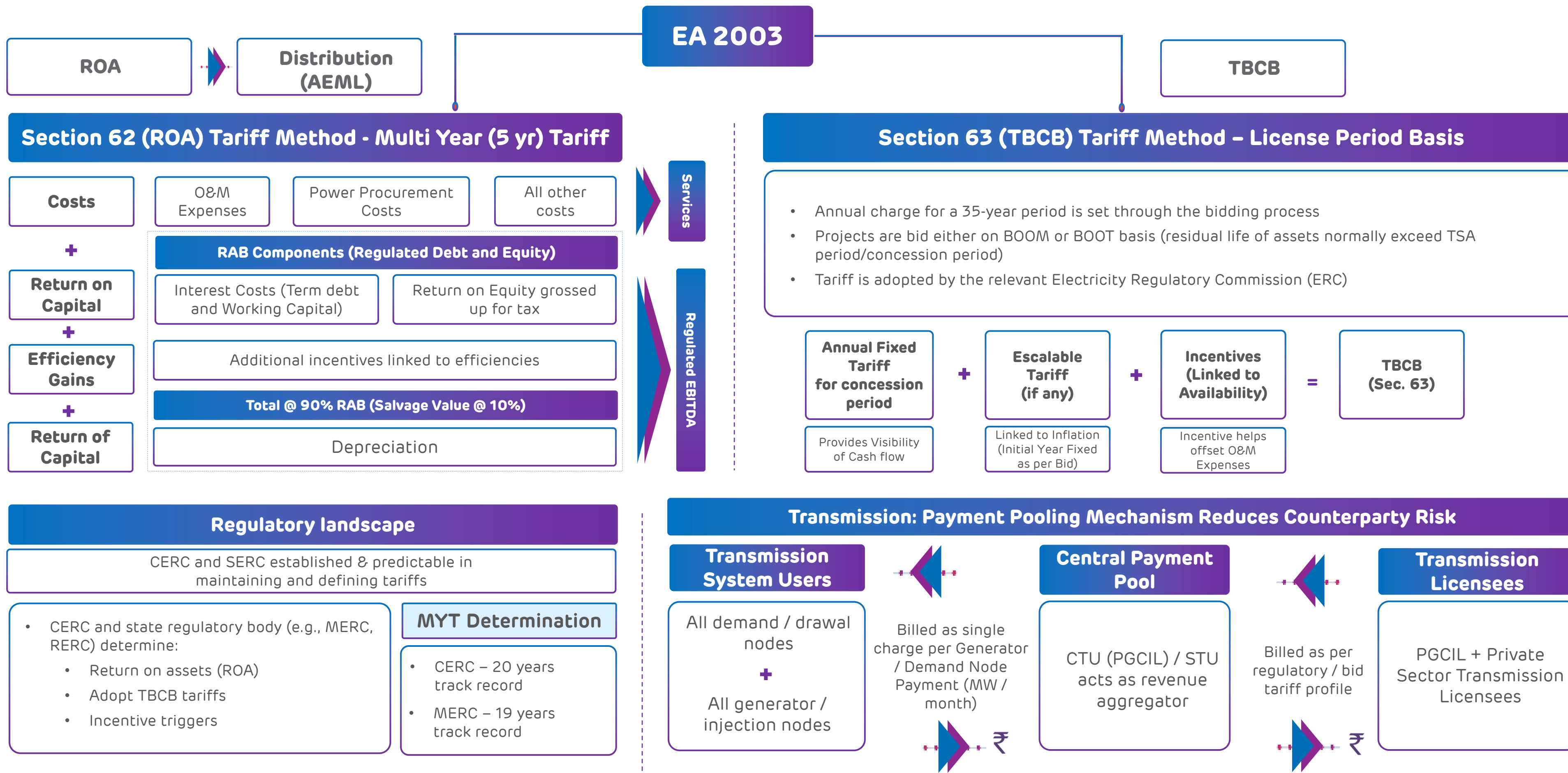
- **Safety training: 47,130** man-hours of safety training and awareness during Q1 FY24
- **Positive Safety Culture:**
  - Enhanced safety awareness through Monthly Safety Quiz Series (MSQS)
  - Conducted 'Electrical Safety at Home' & "Electrical , Fire Safety & Cracker Safety' Webinar for Consumers, Employees & General Public
  - Campaign on 'UCHAAI: Knowing Heights Better ' conducted at multiple sites on 5C model (Climb, Control, Competence, Capacity and Check)
- **Safety Checks and Assurances(SCA):** To strengthen safety and increase the effectiveness of safety management at sites, quarterly safety checks and assurance on 3 pre-declared topics are given by sites
- **"Saksham"** - Mandatory Contractor Workmen Incubation & Induction Program was conducted at various sites to enhance training effectiveness
- Awarded with **21<sup>st</sup> Annual Greentech Safety Award 2023** in safety excellence category
- Received **OHSSAI Foundation's Safety Award** in Gold Category in AEML business
- Observance of Fire Service Week across all locations.

## Safety Performance in Q1FY24

Safety Parameters	Transmission		Distribution (AEML)	
	Q1FY24	Q1FY23	Q1FY24	Q1FY23
Near Miss Reporting (Awareness)	1,370	1,391	1,472	1,364
Suraksha Samwad (Safety Dialogue)	1,902	2,925	7,306	8,546
LTI	1	0	1	5
Fatalities	0	0	0	1
LTIFR (LTI Frequency Rate)	0.32	0	0.2	0.94
LTI (LTI Severity Rate)	6.38	0	10.83	1148.67
Safety training (in Man-Hours)	34,178	39,192	12,952	7,718



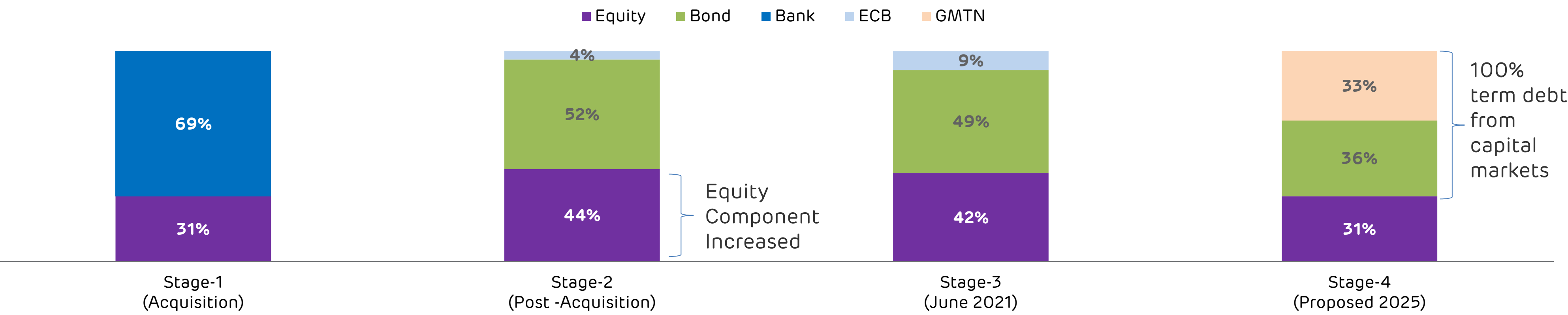
# Attractive Industry Opportunity supported by an Evolved and Stable Regulatory Regime





# Case Study: Transformational Capital Management Plan Resulting in Value Unlocking at AEML (India's No. 1 Power Utility)

- Capital structure consistent with underlying business philosophy
- Elongated maturity reflecting perpetual nature of business
- High quality stable cashflow profile to ensure IG metrics – reduced cost of debt
- Diversified and deep investor base, to provide stability
- Fully funded long term capex program



**Stage - 1 (Acquisition): Aug-18**

- On acquisition, introduced efficient capital structuring - debt financing of USD 1.1 bn
- Debt from Domestic Banks
- Fresh capex debt (D/E 70:30) at **competitive pricing**

**Stage - 2 (Post Acquisition): Feb-20**

- QIA's** acquisition of 25.1% stake
- Debt reduction** through shareholder sub-debt of US\$ 282 mn
- Refinancing** through US\$ 1 bn IG non amortizing bond
- US\$ 400 mn ECB Capex revolver facility to **fully fund** Capex program

**Stage - 3 (Recent): Jun-21**

- Revolving ECB Capex facility used for **RAB growth**
- Asset hardening improved operational efficiency promoting affordable tariff
- Successfully placed **US\$ 2bn GMTN program** to replace ECB in July 2021

**Stage - 4 (Proposed): Mar-25**

- 100%** of term debt placed in **international capital markets**,
- Diversified global investor base to provide stability
- Elongated maturity → liquidity
- Prudent Capital Management plan to enhance credit quality

# AESL and AEML Credit Ratings

## International – ATSOL Obligor Group (Transmission business) (Reg S/ 144A)

Rating Agency	Facility	Rating/Outlook
Fitch	Dollar Bond	BBB-/Stable
Moody's	Dollar Bond	Baa3/Negative

## International – AESL USPP (Transmission business) (Reg D)

Rating Agency	Facility	Rating/Outlook
Fitch	Dollar Bond	BBB-/Stable
Moody's	Dollar Bond	Baa3/Stable

## International – AEML US\$ 1 bn (Reg S/144A) and US\$ 300 mn GMTN (Distribution business)

Rating Agency	Facility	Rating/Outlook
Fitch	Dollar Bond (for both)	BBB-
S&P	Dollar Bond (US\$ 1 bn)	BBB-/Negative
Moody's	Dollar Bond (for both)	Baa3/Negative

## SPV Ratings - Domestic

Company	Rating Agency	Rating	Outlook
AESL	India Ratings	AA+	Negative
AESL	ICRA	A1+	Stable
MEGPTCL	India Ratings	AA+	Negative
ATIL	India Ratings	AA+	Negative
WTGL	India Ratings	<b>AAA</b>	Stable
WTPL	India Ratings	AA+	Stable
MTSCL	India Ratings	AA-	Stable
ATSCL	CARE	A	Stable
ATBSPL	India Ratings	AA-	Positive
FBTL	CARE	A+	Stable
OBTL	CARE	A	Stable
AEML	India Ratings / Crisil	AA+	Stable
JKTL	India Ratings	A-	Stable
WKTL	India Ratings	A-	Stable
Alipurduar	India Ratings / Crisil	<b>AAA</b>	Stable



# 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

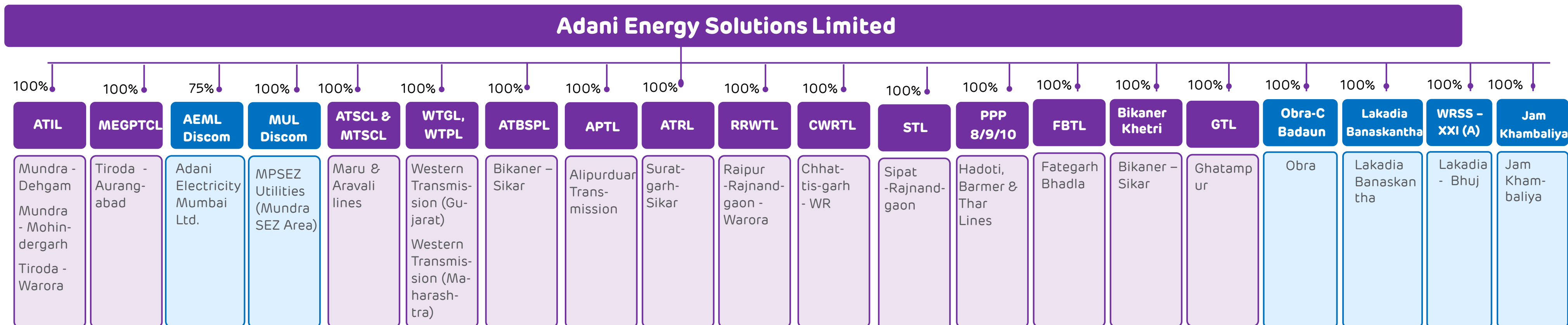
- Data analytics helps load disaggregation, forecasting & consumption
- Time of Day (TOD) tariff matched with RE generation
- Efficient & sustainable energy management
- Helps people revise their consumption habits



#### Improved Energy Accounting

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

# AESL's Operational Asset Portfolio (T&D) as of August 2023



## Operating Assets

## Projects Operationalised in FY23

<b>A</b>	3,834 ckms	1,217 ckms	573 ckms	148 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	630 ckms	352 ckms	292 ckms	38 ckms
<b>B</b>	6,630 MVA	6,000 MVA	3,250 MVA	360 MVA	1,360 MVA	-	-	-	-	-	630 MVA	-	585 MVA	-	-	-	950 MVA	-	3000 MVA	2500 MVA
<b>C</b>	c. 27 years	c. 30 years	c. 14 years	c. 11 years	c. 29 years	c. 30 years	c.32 years	c.35 years	c. 33 years	c. 34 years	c. 34 years	c. 34 years	c. 34 years	c. 35 years	c. 35 years	c. 35 years	N/A	c. 35 years	C. 35 years	c. 35 years
<b>D</b>	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)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)
<b>E</b>	Centre / State	State	State	State	State	Centre	State	Centre	State	Centre	Centre	Centre	State	Centre	Centre	State	State	Centre	Centre	Centre
<b>F</b>	INR 49.6 Bn	INR 57.7 Bn	INR 75 Bn	INR 0.4 Bn	INR 3.9 Bn	INR 18.2 Bn	INR 2.2 Bn	INR 10.8 Bn	INR 1.3 Bn	INR 12.1 Bn	INR 9.5 Bn	INR 5.4 Bn	INR 4.4 Bn	INR 5.5 Bn	INR 8.5 Bn	INR 18.2 Bn	INR 7.4 Bn	INR 7.0 Bn	INR 8.1 Bn	INR 3.2 Bn

**A** Transmission line length

**B** Transformation capacity

**C** Residual concession life / License period

**D** Contract Type

**E** Counterparty

**F** 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); ATBSPL: Adani Energy Solutions Bikaner Sikar Private Limited; STL - Sipat Transmission Limited; RRWTL - Raipur Rajnandgaon Warora Transmission Limited; CWTL – Chhattisgarh WR Transmission Limited; ATRL – Adani Energy Solutions (Rajasthan) Limited; ATSCL – Aravali Transmission Service Company Limited; MTSCl – 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

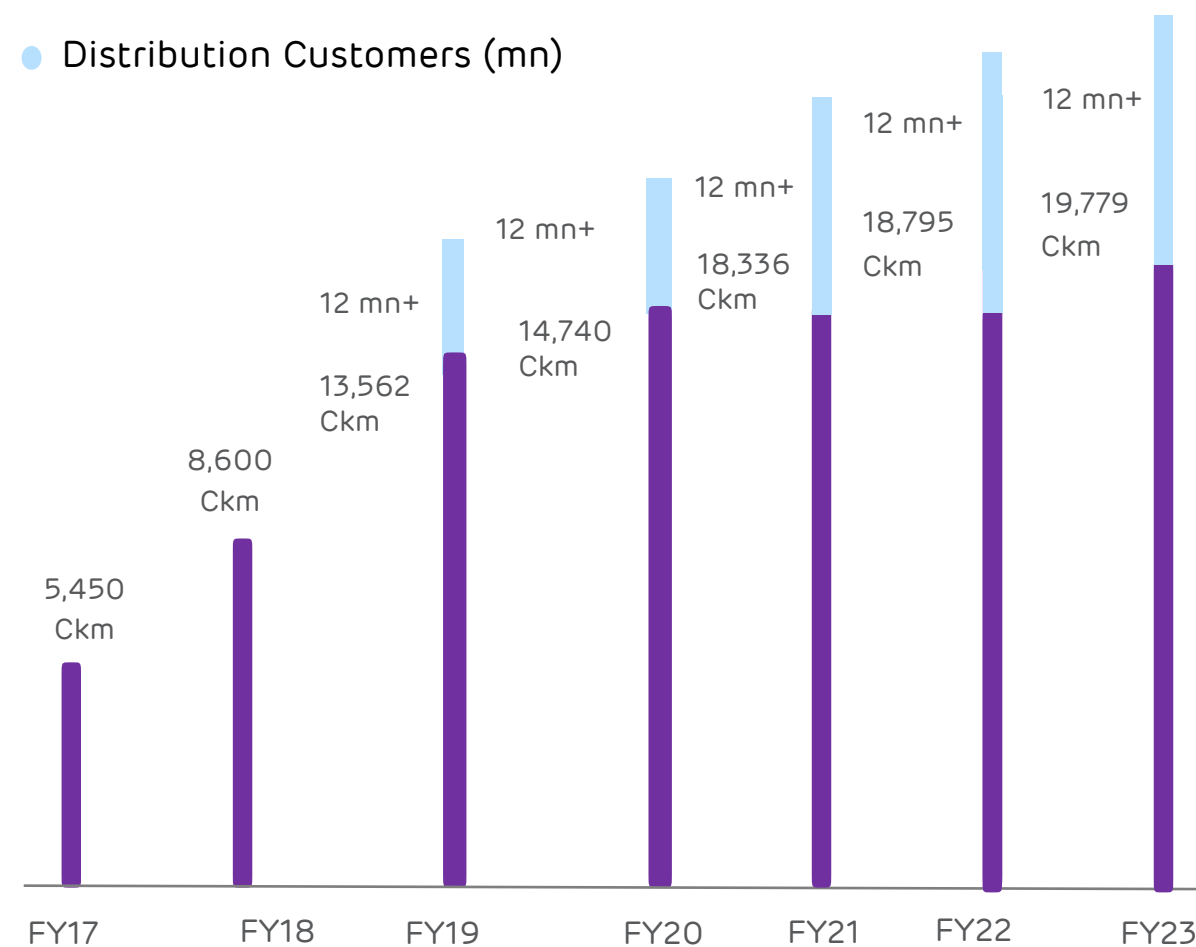


# AESL's Under-construction Transmission Asset Portfolio as of August 2023

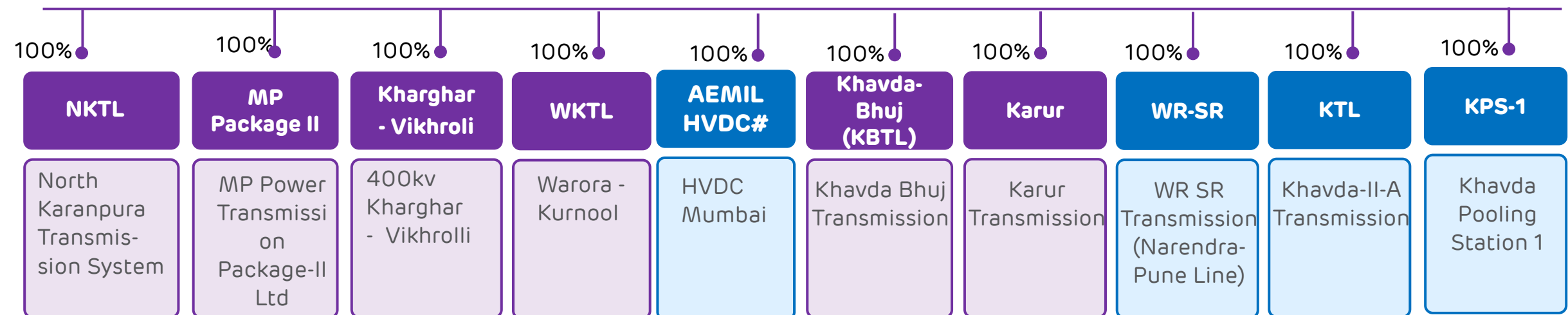
Since AESL's evolution its Transmission Network (ckms) has grown 3.5x and expanded into Distribution businesses

## AESL's "Grid-to-Switch" Integrated Platform

- Transmission Line (Ckms)
- Distribution Customers (mn)



## Adani Energy Solutions Limited



### Under Construction

	NKTL	MP Package II	Kharghar - Vikhroli	WKTL	AEMIL HVDC#	Khavda-Bhuj (KBTL)	Karur	WR-SR	KTL	KPS-1
<b>A</b>	304 ckms	1,060 ckms	74 ckms	1,756 ckms	80 ckms	221 ckms	10 ckms	630 ckms	354 ckms	42 ckms
<b>B</b>	1,000 MVA	2,736 MVA	1500 MVA	3500 MVA	1,000 MVA	4,500 MVA	1,000 MVA	6,000 MVA	-	6,000 MVA
<b>C</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>D</b>	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Regulated Return (ROA)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)	Fixed tariff (TBCB)
<b>E</b>	Centre	State	State	Centre	State	Centre	Centre	Centre	Centre	Centre
<b>F</b>	INR 6.7 Bn	INR 12 Bn	INR 18.9 Bn	INR 35 Bn	INR 70 bn	INR 12 bn	INR 2 bn	INR 22 bn	INR 12 bn	INR 8 bn
<b>G</b>	Sept.-22 - July'24	Dec-23	Dec-23	Aug-23	Mar-25	Jan-24	Aug-23	Aug-24	Mar-25	Jan-25

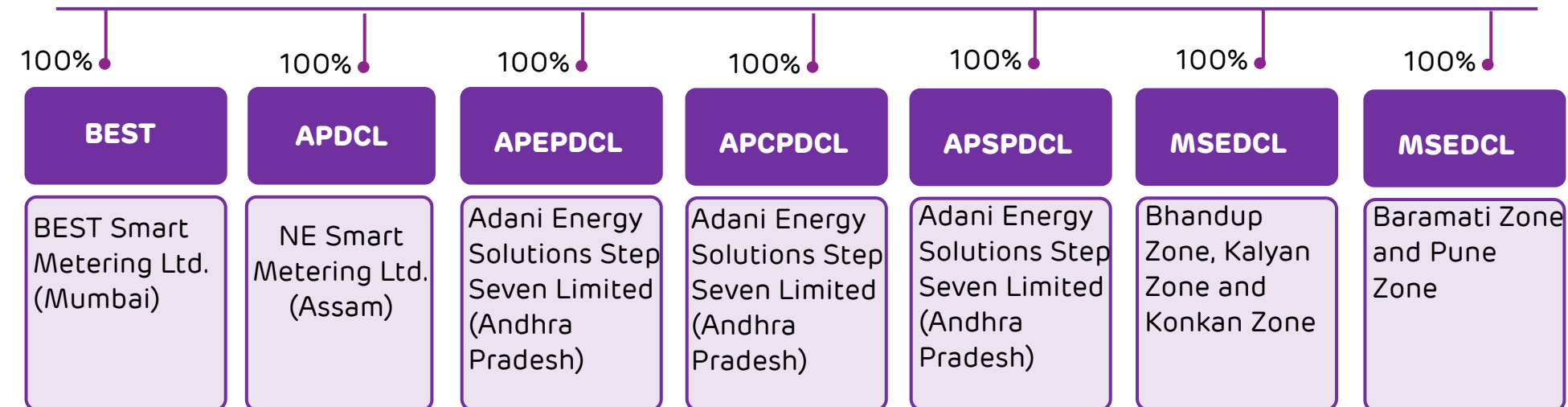
- A** Transmission line length
- B** Transformation capacity
- C** Residual concession life / License period
- D** Contract type
- E** Counterparty
- F** Asset base<sup>(1)</sup>
- G** COD<sup>(2)</sup>

Notes: 1) Asset base for under-construction assets – as per the estimated project cost as of March 2023; (2) Provisional Commercial Operation Date (COD); NKTL – North Karanpura Transco Limited; GTL: Ghatampur Transmission Limited; OBTL: Obra Transmission Limited; LBTL: Lakadia Bhuj Transmission Limited; JKTL: Jam Khambaliya Transmission Limited; KVTL: Kharghar Vikhroli Transmission Limited; WKTL: Warora Kurnool Transmission 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 August 2023

## Adani Energy Solutions Limited



### Under Construction

	BEST	APDCL	APEPDCL	APCPDCL	APSPDCL	MSEDCL	MSEDCL
<b>A</b>	1.1	0.8	0.8	1.0	1.0	6.3	5.2
<b>B</b>	13.0	8.4	10.5	12.8	13.9	75.9	62.9
<b>C</b>	120	120	120	120	120	120	120
<b>D</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>E</b>	DBFOOT	DBFOOT	DBFOOT	DBFOOT	DBFOOT	DBFOOT	DBFOOT
<b>F</b>	Oct'22	Feb'23	June'23	June'23	June'23	Aug'23	Aug'23

- A** Smart Meters Quantity (in million)
- B** Contract Value (in Rs Billion)
- C** Contract Period (months)
- D** Capex + O&M
- E** Contract Type
- F** Month of Award



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