

Adani Energy Solutions Limited – Climate Transition Plan

Entity: Adani Energy Solutions Limited (AESL)

Reporting Period: FY 2025–26 with outlook to 2030 / 2040 / 2050

Boundary: Consolidated approach for all Operational controlled entities, subsidiaries and JV's; includes Transmission, Distribution (AEML & MUL), Smart Metering, Cooling Solutions.

Assurance: Reasonable assurance provided on non-financial data (AA1000AS v3 / ISAE 3000) as disclosed in Sustainability Report 2025.

Executive Summary

AESL's Climate Transition Plan outlines the company's pathway to Net Zero by 2050, aligned with India's national decarbonisation objectives and global 1.5°C pathways. As India's largest private integrated transmission and distribution utility, AESL plays a system-enabling role in renewable energy evacuation, grid modernisation, and demand-side efficiency. The transition strategy is anchored in rapid decarbonisation of operations, climate-resilient infrastructure, digital grid transformation, and inclusive growth.

Key 2030 milestones include:

- (i) 72.7% reduction in Scope 1 & 2 emissions versus FY 2019–20 baseline,
- (ii) 60% renewable energy procurement by FY 2026–27 and 70% by FY 2029–30,
- (iii) significant reduction in AT&C losses, and
- (iv) deployment of over 100 million smart meters nationally.

Company Context and Baseline

AESL operates across **16** Indian states with **26,696** circuit km of transmission lines and **90,236** MVA of transformation capacity. Distribution operations in Mumbai and Mundra deliver industry-leading reliability (**99.99%**) with losses reduced to **4.21%**. The company has divested its only coal-based generation asset (Dahanu TPS) in FY 2024–25, eliminating direct fossil generation exposure.

Baseline year for Scope 1 and 2 emissions is FY 2019–20; for Scope 3 emissions FY 2020–21. In FY 2025–26, AESL reported Scope 1 emissions of **14,473** tCO₂e, Scope 2 emissions of **4,93,273** tCO₂e, and achieved a **51%** reduction in Scope 3 emissions versus baseline.

Governance^{1 2 3 4}

Climate governance is anchored at the Board level through the Corporate Responsibility Committee (CRC), comprising 100% independent directors. The CRC oversees climate strategy, transition planning, ESG disclosures, and sustainability-related risks. Operational oversight is provided by the ESG Apex Committee, ESG Core Working Group, and site-level Champions.

- Board-level oversight via **Corporate Responsibility Committee (CRC)**
- ESG Apex Committee → Core Working Group → Site Champions
- Climate KPIs linked to:
 - MD/CEO KRAs
 - Senior leadership including Chief Sustainability Officer / Chief Procurement Officer remuneration
- Policies: Climate, Energy, SF₆, Biodiversity, Procurement, Data Governance

Climate and ESG KPIs are embedded into executive remuneration, with 25% of leadership KRAs linked to decarbonisation, renewable integration, ESG ratings performance, and climate risk management.

Strategy

AESL's climate strategy focuses on four levers:

- (1) Grid-led decarbonisation through renewable evacuation corridors,
- (2) Operational efficiency and electrification,
- (3) Digitalisation and smart metering, and
- (4) Climate resilience and adaptation.

Based on,

→ Material transition risks & opportunities:

- a. Physical (heat, flood, cyclone, water stress)
- b. Transition (carbon pricing, regulation, technology shifts)

→ **Scenario analysis**^{5 6 7}

¹ SEBI BRSR Core: Principle 6 – Climate and Environment; Attribute 1 (GHG footprint).

² GRI: GRI 2-9, 2-12, 2-13 (Governance structure and oversight).

³ IFRS S1: Para 26–28 (Governance of sustainability-related risks).

⁴ IFRS S2: Para 5–6 (Governance of climate-related risks and opportunities).

⁵ SEBI BRSR Core: Principle 6 – Climate risk resilience.

⁶ GRI: GRI 201-2 (Financial implications of climate risks).

⁷ IFRS S2: Para 19–20 (Climate-related scenario analysis).

Scenario analysis has been conducted explicitly aligned to:

- ⊞ SSP 1-2.6 / 1.5°C
- ⊞ RCP 4.5 / SSP 2-4.5
- ⊞ RCP 8.5 / SSP 5-8.5
- ⊞ IEA NZE 2050

Leading to,

→ Business model transformation by segment:

- ⊞ Transmission (digitisation, green corridors, HVDC)
- ⊞ Distribution (RE procurement, T&D loss reduction)

Results inform asset design standards, capex prioritisation, and emergency restoration planning and

→ Entering into new businesses in India,

- ⊞ Smart metering (DSM, analytics)
- ⊞ Cooling-as-a-Service (energy intensity ↓ ~30%)

Implementation Strategy^{8 9 10 11}

Apart from ongoing awareness drives key decarbonisation levers adopted are:

→ **Scope-wise levers:**

- ⊞ **Scope 1:** Fleet electrification, SF₆ leak reduction, Divestment of sole thermal asset w.e.f. 26th Sept. 2024 and committed to no new thermal power stations.
- ⊞ **Scope 2:** enhancing Renewable PPAs, green tariffs, Solarisation of auxiliary loads, T&D losses reduction, smart metering, HVDC and low carbon technology adoption at scale.
- ⊞ **Scope 3:** Supplier ESG screening, Local sourcing & Green Procurement Policies, Supplier Collaboration & Technical Support, Enabling Customer Renewable & or EV Adoption, T&D losses reduction, smart metering, Demand Response/DSM, digitalisation, automation and storage, ongoing Zero waste to Landfill & Water positive certification since 2022. Carbon offsets.

⁸ GRI: GRI 201-1 (Economic value generated and distributed).

⁹ IFRS S1: Para 36 (Financial effects of sustainability risks and opportunities).

¹⁰ IFRS S2: Para 22 (Transition plan financial implications).

¹¹ SEBI BRSR Core: Principle 6 – Sustainable finance and capex alignment.

- **Capital allocation:** with a significant share directed toward green transmission corridors, HVDC projects, smart meters, and grid automation
 - ⊕ FY25 capex: ₹11,444 Cr
 - ⊕ FY26 planned: ₹16,000–18,000 Cr
- **Net Zero aligned capex for Modernizing Infrastructure and Storage, Strategic long-term collaboration and tie-ups.**
- **Leveraging Sustainable Financing:**
 - ⊕ Green Loans
 - ⊕ Sustainability-Linked Bonds (AEML)

Engagement Strategy^{12 13 14 15}

Supplier engagement includes 100% ESG screening of all new suppliers and significant Tier-1 suppliers, corrective action plans, and capacity building for ESG adoption & integration. **Supplier Development and Awareness, Technology providers and financial assistance for credible suppliers, ESG Integration in Contracts** and enforcement of through code of conduct, Incentivisation for performance improvements.

Customer engagement focuses on green tariffs, demand-side management, Energy audits, smart metering, and energy efficiency programs. Enabling Customer Renewable & or EV Adoption.

Policy engagement includes active participation in IRENA Utilities for Net Zero Alliance and advocacy for renewable-ready grids, Demand side Management programs for distribution customers.

Metrics and Targets^{16 17 18 19}

Key climate targets include Net Zero by 2050; with interim SBTi aligned 72.7% Scope 1+2 GHG emission reduction by FY 2030–31; 27.5% Scope 3 GHG emission reduction by FY 2031–32; 60% renewable procurement by FY 2026–27 and 70% by FY 2029–30.

¹² SEBI BRSR Core: Principle 6; disclosures on transition strategy and climate resilience

¹³ GRI: GRI 3-3 (Management of material topics – climate change)

¹⁴ IFRS S1: Para 29–31 (Strategy, business model and value chain)

¹⁵ IFRS S2: Para 9–15 (Climate-related risks, opportunities and transition plan)

¹⁶ SEBI BRSR Core: Attribute 1 – Absolute GHG emissions, intensity metrics

¹⁷ GRI: GRI 305-1, 305-2, 305-3, 305-4 (GHG emissions and intensity)

¹⁸ IFRS S1: Para 34–35 (Metrics and targets – general sustainability)

¹⁹ IFRS S2: Para 21–27 (Climate-related metrics, targets, and progress)

Performance is tracked through emissions intensity, grid losses, SAIDI/SAIFI, renewable share, and ESG ratings.

Clearly articulated transition targets:

- **Net Zero GHG emissions: Latest by 2050**
- **Scope 1+2 GHG emissions reduction: –72.7% by FY 2030–31**

Particulars	FY22	FY23	FY24	FY25*	FY26*	FY26 Target
Gross Scope 1 GHG emissions* (Gases covered: CO ₂ , CH ₄ , N ₂ O, SF ₆ , CFCs)	26,92,062	28,26,371	26,63,319	13,40,619	14,473	55,178
Gross Scope 2 GHG emissions (Market-based) (Gases covered: CO ₂)	5,57,775	4,35,852	4,26,436	4,22,206	4,93,273	4,98,059
Gross Scope 2 GHG emissions (Location-based) (Gases covered: CO ₂)	5,58,915	4,38,291	4,33,825	4,33,133	5,13,175	
Gross Scope 3 GHG emissions** (Gases covered: CO ₂ , CH ₄ , N ₂ O, SF ₆ , CFCs)	40,89,587	31,17,794	54,86,805	21,64,885	10,63,112	19,48,397

*Decrease in GHG emissions at Adani Energy Solutions can be primarily attributed to the divestment of the Adani Dahanu Thermal Power Station (ADTPS), effective from September 26, 2024.

Target	FY20	FY21	FY22	FY23	FY24	FY25	FY26	Target for FY 31
Absolute Emissions Scope 1+2	32,08,162	29,24,524	32,49,837	32,62,223	30,89,755	21,47,841	5,07,746	8,75,456
Reduction Achieved (%) w.r.t Baseline	-	8.8%	-1.3%	-1.7%	3.7%	33.1%	84%	
Targeted emissions reduction	Baseline	6%	12%	18%	24%	30%	36%	72.7%

- **Scope 3: -27.5% by FY 2031–32**

Particulars	FY21 (baseline)	FY22	FY23	FY24	FY25	FY26	FY32
Absolute Emissions	37,63,610	40,89,587	31,17,794	54,86,805	21,64,885	10,63,112	27,28,617
WB2D Reduction Achieved (%) w.r.t baseline	-	-8.7%	17.1%	-45.8%	42%	71.7%	27.5%
1.5°C Reduction Targeted (%) w.r.t baseline				baseline	60.5%	80.6%	46.2%

- **Renewable share in procurement mix:**

- ⊕ 60% by FY 2026–27
- ⊕ 70% by FY 2029–30

FY19 Baseline	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY30	2050
2.87%	3%	8%	30.04%	34.35%	35.2%	37.53% (without REC) 65.92% with REC's			
			30%				60%	70%	100% Aspiration aligned with Net Zero Goal

• **Operational resilience metrics:**

- ⊕ System Average Interruption Duration Index (SAIDI)
- ⊕ System Average Interruption Frequency Index (SAIFI)
- ⊕ Customer Average Interruption Duration Index (CAIDI)
- ⊕ Transmission & Distribution Losses
- ⊕ Grid availability (99.7%)

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024- 25*	FY 2025- 26*
Grid losses					
Transmission losses (%)	1.35	1.41	1.56	1.29	1.13
Distribution losses (%)	6.55	5.93	5.29	4.77	4.21
Grid reliability					
System Average Interruption Duration Index (SAIDI) Minutes per consumer per year	23.63	22.35	21.26	21.27	12.91
System Average Interruption Frequency Index (SAIFI) Events per consumer per year	0.82	0.70	0.69	0.67	0.42
Customer Average Interruption Duration Index (CAIDI) Minutes per event	28.95	31.74	30.63	31.58	30.82

Risk Management^{20 21 22 23}

Climate change poses a systemic threat to power transmission and distribution (T&D) companies like AESL in India, acting as a "threat multiplier" that exacerbates infrastructure vulnerabilities, increases operational costs, and complicates project

²⁰ SEBI BRSR Core: Principle 6 – Risk identification and mitigation

²¹ GRI: GRI 3-1, 3-2 (Materiality and risk assessment)

²² IFRS S1: Para 32–33 (Risk management processes)

²³ IFRS S2: Para 16–17 (Processes for identifying and managing climate risks)

execution. The Indian power sector faces intense heatwaves, increased cyclonic activity, and floods that are damaging assets and causing significant power outages.

Climate risks are integrated into AESL's Enterprise Risk Management framework aligned with ISO 31000 and COSO framework.

Key risks include extreme weather events, right-of-way challenges, cybersecurity, regulatory shifts, and supply chain disruptions. Mitigation measures include asset hardening, predictive maintenance, emergency restoration systems, and diversification of suppliers.

Potential Risks for AESL's T&D Business Across 14 States in India

- **Grid Infrastructure Damage:** AESL's transmission towers, substations, and overhead lines in its operational states are at risk of serious damage from rising sea levels, severe floods, and increasingly intense cyclones, especially along the Western & Eastern coast.
- **Reduced Capacity and Outages:** Extreme heatwaves (above 40°C) and high wind events may cause a significant increase in outage minutes (15%–60% for heat, 20%–70% for wind), as AESL's transmission lines struggle to operate efficiently under surging demand.
- **Aging Infrastructure Vulnerability:** Older transmission networks may fail to withstand extreme loads, resulting in cascading failures during heatwaves, as seen in recent summers in India.

Right-of-Way (RoW) Risks for AESL's T&D Business

- **Construction Disruptions:** Extreme weather hampers AESL's ability to build transmission lines, particularly in forested and rural regions, causing project delays.
- **Land Acquisition Conflicts:** Climate-driven changes in land value and use (e.g., drought-prone areas shifting) may lead to higher compensation demands, litigation, and slower project timelines from farmers and landowners.
- **Regulatory Obstacles:** AESL faces growing difficulty securing clearances for transmission routes through dense urban and forest areas due to stricter environmental regulations and local opposition.

Cybersecurity Threats Facing AESL's T&D Operations

- **Expanded Attack Surface:** The adoption of smart grids to integrate renewables introduces more IoT sensors and digital controls, increasing the risk of cyberattacks.
- **Targeted Attacks on Control Systems:** State Load Dispatch Centres (SLDCs) are at greater risk of targeted cyberattacks that could disrupt AESL's grid operations.
- **IT-OT Convergence Risks:** Connecting operational technology (OT) to IT networks removes legacy air gap protections, making AESL's systems more vulnerable to ransomware.

Regulatory Changes Affecting AESL's T&D Business

- **Stricter Grid Compliance:** Indian regulatory bodies are imposing tougher standards for renewable integration, including more demanding LVRT requirements, which require AESL to upgrade its technology for stable grid operations.
- **Renewable Integration Mandates:** Policies push for "Green Energy Corridors" and large-scale integration of solar and wind, necessitating both capacity expansion and efficient, flexible grid management by AESL.
- **Operational Constraints:** Increased regulatory use of "curtailment" to manage grid congestion may force generators to shut down temporarily, directly impacting AESL's projects and access arrangements.

Supply Chain Disruption Risks for AESL's T&D Business

- **Service Delays:** Extreme weather can damage supplier infrastructure, leading to delays in the delivery of essential components like transformers and high-voltage cables.
- **Import Dependency:** AESL's dependence on limited imported hardware and software exposes its T&D business to supply chain bottlenecks and embedded cyber vulnerabilities.
- **Rising Costs:** Disruptions in the supply chain and commodity price volatility may increase project costs, adding financial pressure to AESL's transmission and distribution operations.

Summary of Key Risks for AESL's T&D Utilities Across 14 States

- **Higher Costs:** AESL may need to invest more in maintenance and capital expenditures to reinforce infrastructure, such as deploying underground cables or reinforced stronger towers.
- **Operational Risk:** There is an increased risk of widespread blackouts, which could disrupt economic activity and raise AESL's liability exposure.
- **Stranded Capacity:** Transmission bottlenecks may leave thousands of megawatts of renewable power stranded, resulting in revenue losses for AESL and its development partners.

Physical climate risk identification and assessment methodology

The Company assesses physical climate risks using forward looking scenario analysis aligned with IPCC AR6 Shared Socio economic Pathways (SSPs) and the requirements of IFRS S2. Screening level risk ratings have been upgraded to quantitative, percentile based assessments using downscaled CMIP6 climate projections sourced from the World Bank Climate Change Knowledge Portal (CCKP). For key climate indicators relevant to power transmission, distribution, EPC and operations—such as changes in mean temperature (ΔT), frequency of extreme heat days, extreme precipitation (Rx1day/Rx5day), cooling degree days and drought proxies—the Company evaluates the P10 (lower bound), P50 (median) and P90 (upper bound) ensemble percentiles for each state, scenario and time horizon (2030, 2040, 2050 and 2070).

Physical risk severity is classified using percentile thresholds, where outcomes below the P50 percentile indicate low to moderate risk, outcomes between P50 and P90 indicate high risk, and outcomes at or above the P90 percentile indicate very high risk. A further “severe” classification is applied where high end risks ($\geq$ P90) show rapid escalation between time horizons or occur in combination with another extreme hazard, reflecting potential nonlinear impacts on asset performance and service continuity. This percentile based framework explicitly captures model uncertainty and enables evaluation of both central and stress case climate futures.

To assess exposure at an operational level, climate indicators are overlaid on the Company’s asset inventory, including substations, EHV transmission lines, cables, depots and ports, using asset coordinates and state location. This enables determination of the percentage of assets and replacement value exposed to high or very high physical climate risk under each scenario. Exposures are aggregated and reported across three primary lenses of business line (Transmission & Distribution EPC, Operations & Maintenance, Distribution and Trading), asset class, and geography to support decision making at both management and Board levels.

The Company further assesses compound physical risks, including concurrent heat, drought and wildfire stress, and the combination of coastal storm surge with extreme rainfall, where individual hazards may amplify overall impacts. The results of the physical risk assessment are linked to financial materiality proxies, including repair and reinforcement capital expenditure, outage and restoration cost estimates, and incremental operating expenditure, to inform resilience planning and capital allocation. This approach will be reviewed and refined periodically as higher resolution data and asset specific impact models become available.

Just Transition and People

AESL’s transition is anchored in a Just Transition approach, focusing on workforce reskilling, contractor safety, community engagement, and inclusive development. Over 10,000+ individuals were trained in transmission skills since FY 2024–25, and community programs reached over **1,71,749** beneficiaries.

A Just Transition in India’s power transmission and distribution (T&D) sector focuses on shifting to renewable energy while protecting workers, communities, and consumers, particularly in coal-dependent regions. We aim to create green jobs, enhance grid reliability via modernization, smart metering and ensure equitable access, supported by sustainable financing and policy frameworks, often engaging stakeholders in a “people-powered” approach.

Key aspects of Just Transition for India's T&D business include:

- **Impact on Workforce:** As AESL moves away from fossil fuels, the transition threatens jobs in traditional sectors but provides opportunities for retraining in renewable energy, smart-metering and green technology.
- **Decentralization & Modernization:** The focus is on adopting smarter, more resilient grid technologies, including Battery Energy Storage Systems (BESS),

which improves grid reliability and quality, AESL is creating specialized task forces to manage the shift, focusing on livelihoods and economic diversification.

- **Social Equity:** AESL supports Just Transition in India through capacity building for a socially and gender inclusive transition to net zero. The approach works to prevent an "energy transition divide," ensuring that the benefits of cleaner energy are distributed fairly among consumers and vulnerable communities.
- **Key Stakeholders & Financing:** Private capital, along with collaborations like PM Surya Ghar Yojana, plays a crucial role in enabling rooftop solar and decentralized projects, which empowers local communities and businesses.
- **Reporting and Policy:** Companies are being encouraged to use the Indian Business Responsibility and Sustainability Reporting (BRSR) framework to disclose and track their efforts in supporting workers and communities through the transition.

The transition aims for a "people-positive" energy shift that includes social dialogues and capacity building, ensuring that decarbonization efforts also address local socio-economic challenges.

AESL is actively supporting a just energy transition in India by deploying smart metering systems across six states. This initiative is central to modernizing the power sector, moving it from manual and inflexible operations to a digital, responsive, and data-driven infrastructure. Through smart meters, AESL is facilitating the integration of renewable energy sources, minimizing operational losses, and empowering prosumers—consumers who also generate energy to participate in the energy ecosystem. These efforts help drive India toward a more sustainable and low-carbon future, ensuring that the benefits of energy transition are shared equitably.

By advancing smart metering, AESL is also reshaping the employment landscape. The transition reduces reliance on manual meter reading, creating opportunities for roles in data analytics, IoT management, and advanced electrical maintenance. AESL is committed to upskilling the workforce, ensuring that employees are equipped for these new, technical jobs and that the transition is fair and inclusive.

How AESL's Smart Metering deployment enables Just Transition?

- **Grid Stability and Renewable Integration:** AESL's smart meters act as "nerve endings" in the power grid, providing real-time data to balance the volatility of renewables like solar and wind. This supports the integration of distributed renewable assets and helps maximize their utilization.
- **Reduced Losses and Enhanced Efficiency:** Smart meters deployed by AESL help lower technical and commercial losses through tamper detection and remote monitoring, improving overall network efficiency and reducing financial strain for utilities and consumers.

- **Demand-Side Management:** With real-time data and time-of-use tariffs, AESL's smart meters encourage consumption patterns that align with renewable generation peaks, making energy use more efficient and affordable.
- **Prosumer Empowerment:** AESL's smart meters measure bi-directional energy flows, enabling rooftop solar net metering and allowing households to sell excess energy back to the grid, promoting economic inclusion.
- **Reduced Operational Footprint:** By eliminating manual meter readings and field visits for disconnections/reconnections, AESL's smart meters streamline operations and reduce environmental impact.

Inclusive Skills Development and Workforce Transformation

AESL's deployment of smart meters is transforming job profiles, shifting from manual labour to technical and analytical roles. This strategy ensures that workers in the six states benefit from new opportunities and receive the necessary training for emerging roles in IoT support, smart meter installation, and data management.

- **Structural Changes:** AESL is replacing traditional manual meter reader positions with jobs requiring technical expertise, creating pathways for upskilling and career advancement.
- **Transformation of Existing Jobs:** Electricians and technicians are receiving training in smart meter installation, prepaid functionality, and field troubleshooting with digital tools.
- **New Skills Demand:** AESL is fostering expertise in IoT & networking protocols, data analytics for outage management and billing, and cybersecurity to protect the smart metering infrastructure.
- **Skills Development Initiatives:** AESL partners with technical institutions and government programs to ensure that the workforce is trained in smart grid management and sustainable energy practices, supporting a just and equitable transition.

Through policy support and targeted upskilling, AESL's smart metering deployment in six states is making the workforce "future ready," advancing India's energy transition in a manner that is inclusive, equitable, and sustainable for all stakeholders.

Data, MRV and Assurance

Climate data is managed through an Integrated Management System (ISO 9001, 14001, 50001, 45001, 55001) and an inhouse digital platform. Third-party assurance is provided on all ESG indicators, with a roadmap toward expanding assurance coverage to value chain partners.

This Climate Transition Plan demonstrates AESL's readiness to support India's clean energy transition while creating long-term value. Through grid-led decarbonisation, disciplined capital allocation, and strong governance, AESL is positioned as a resilient, future-ready utility aligned with SEBI BRSR Core, IFRS S2, and global climate expectations. Risk Scale:

5	High	4	Medium-High	3	Medium	2	Low-Medium	1	Low
Business Division	Scenario	Location	Coastal Flood	Tropical storms	Extreme Heat	Water Scarcity	River Flood	Urban Flood	Tsunami
Grid, Smart metering Division	SSP 1-2.6 / 1.5 °C	Andhra Pradesh	3	3	4	3	3	3	2
Grid, Smart metering Division	SSP 2-4.5 / RCP 4.5	Andhra Pradesh	3	4	4	3	4	3	1
Grid, Smart metering Division	SSP 3-7.0	Andhra Pradesh	4	4	4	4	3	3	2
Grid, Smart metering Division	SSP 5-8.5 / RCP 8.5	Andhra Pradesh	4	5	5	5	4	4	3
Smart metering division	SSP 1-2.6 / 1.5 °C	Assam	N/A	3	3	2	4	4	N/A
Smart metering division	SSP 2-4.5 / RCP 4.5	Assam	N/A	4	4	3	4	3	N/A
Smart metering division	SSP 3-7.0	Assam	N/A	3	2	3	5	4	N/A
Smart metering division	SSP 5-8.5 / RCP 8.5	Assam	N/A	4	4	3	5	4	N/A
Grid, Smart metering Division	SSP 1-2.6 / 1.5 °C	Bihar	N/A	2	4	3	4	3	N/A
Grid, Smart metering Division	SSP 2-4.5 / RCP 4.5	Bihar	N/A	4	4	3	4	3	N/A
Grid, Smart metering Division	SSP 3-7.0	Bihar	N/A	4	4	4	5	3	N/A
Grid, Smart metering Division	SSP 5-8.5 / RCP 8.5	Bihar	N/A	4	5	4	5	5	N/A
Grid Division	SSP 1-2.6 / 1.5 °C	Chhattisgarh	N/A	2	4	3	3	3	N/A
Grid Division	SSP 2-4.5 / RCP 4.5	Chhattisgarh	N/A	4	4	3	4	3	N/A
Grid Division	SSP 3-7.0	Chhattisgarh	N/A	4	4	4	3	3	N/A
Grid Division	SSP 5-8.5 / RCP 8.5	Chhattisgarh	N/A	4	5	5	4	4	N/A
Grid Division	SSP 1-2.6 / 1.5 °C	Delhi	N/A	1	4	4	2	3	N/A
Grid Division	SSP 2-4.5 / RCP 4.5	Delhi	N/A	4	4	3	4	3	N/A
Grid Division	SSP 3-7.0	Delhi	N/A	4	4	4	2	4	N/A
Grid Division	SSP 5-8.5 / RCP 8.5	Delhi	N/A	2	5	5	2	5	N/A
Grid Division	SSP 1-2.6 / 1.5 °C	Gujarat	3	3	4	4	3	3	1
Grid Division	SSP 2-4.5 / RCP 4.5	Gujarat	3	4	4	3	4	3	2
Grid Division	SSP 3-7.0	Gujarat	4	4	5	5	2	3	2

Grid Division	SSP 5-8.5 / RCP 8.5	Gujarat	4	4	5	5	4	4	3
Grid Division	SSP 1-2.6 / 1.5 °C	Haryana	N/A	2	4	3	3	3	N/A
Grid Division	SSP 2-4.5 / RCP 4.5	Haryana	N/A	4	4	3	4	3	N/A
Grid Division	SSP 3-7.0	Haryana	N/A	4	4	4	2	3	N/A
Grid Division	SSP 5-8.5 / RCP 8.5	Haryana	N/A	2	5	5	3	4	N/A
Grid Division	SSP 1-2.6 / 1.5 °C	Jharkhand	N/A	2	4	3	3	3	N/A
Grid Division	SSP 2-4.5 / RCP 4.5	Jharkhand	N/A	4	4	3	4	3	N/A
Grid Division	SSP 3-7.0	Jharkhand	N/A	4	4	3	3	3	N/A
Grid Division	SSP 5-8.5 / RCP 8.5	Jharkhand	N/A	4	4	4	4	4	N/A
Grid Division	SSP 1-2.6 / 1.5 °C	Madhya Pradesh	N/A	2	4	3	3	3	N/A
Grid Division	SSP 2-4.5 / RCP 4.5	Madhya Pradesh	N/A	4	4	3	4	3	N/A
Grid Division	SSP 3-7.0	Madhya Pradesh	N/A	4	4	4	3	3	N/A
Grid Division	SSP 5-8.5 / RCP 8.5	Madhya Pradesh	N/A	3	5	5	4	4	N/A
Grid, Smart metering Division	SSP 1-2.6 / 1.5 °C	Maharashtra	3	3	4	3	3	3	2
Grid, Smart metering Division	SSP 2-4.5 / RCP 4.5	Maharashtra	3	4	4	3	4	3	1
Grid, Smart metering Division	SSP 3-7.0	Maharashtra	4	5	5	5	3	4	3
Grid, Smart metering Division	SSP 5-8.5 / RCP 8.5	Maharashtra	5	5	5	5	4	5	4
Grid Division	SSP 1-2.6 / 1.5 °C	Punjab	N/A	2	4	3	3	3	N/A
Grid Division	SSP 2-4.5 / RCP 4.5	Punjab	N/A	4	4	3	4	3	N/A
Grid Division	SSP 3-7.0	Punjab	N/A	4	4	4	3	3	N/A
Grid Division	SSP 5-8.5 / RCP 8.5	Punjab	N/A	2	5	5	4	4	N/A
Grid Division	SSP 1-2.6 / 1.5 °C	Rajasthan	N/A	2	4	4	2	3	N/A
Grid Division	SSP 2-4.5 / RCP 4.5	Rajasthan	N/A	4	4	3	4	3	N/A
Grid Division	SSP 3-7.0	Rajasthan	N/A	4	5	5	2	3	N/A
Grid Division	SSP 5-8.5 / RCP 8.5	Rajasthan	N/A	4	5	5	3	4	N/A
Grid Division	SSP 1-2.6 / 1.5 °C	Tamil Nadu	3	3	4	3	3	3	3
Grid Division	SSP 2-4.5 / RCP 4.5	Tamil Nadu	3	4	4	3	4	3	1
Grid Division	SSP 3-7.0	Tamil Nadu	4	5	4	5	4	4	3

Grid Division	SSP 5-8.5 / RCP 8.5	Tamil Nadu	5	5	5	5	4	5	4
Grid Division	SSP 1-2.6 / 1.5 °C	Telangana	N/A	2	4	3	3	3	N/A
Grid Division	SSP 2-4.5 / RCP 4.5	Telangana	N/A	4	4	3	4	3	N/A
Grid Division	SSP 3-7.0	Telangana	N/A	4	4	4	3	3	N/A
Grid Division	SSP 5-8.5 / RCP 8.5	Telangana	N/A	4	5	5	4	4	N/A
Grid Division	SSP 1-2.6 / 1.5 °C	Uttar Pradesh	N/A	2	4	3	4	3	N/A
Grid Division	SSP 2-4.5 / RCP 4.5	Uttar Pradesh	N/A	4	4	3	4	3	N/A
Grid Division	SSP 3-7.0	Uttar Pradesh	N/A	4	4	4	5	4	N/A
Grid Division	SSP 5-8.5 / RCP 8.5	Uttar Pradesh	N/A	4	5	5	5	5	N/A
Grid Division	SSP 1-2.6 / 1.5 °C	West Bengal	3	3	4	3	4	4	2
Grid Division	SSP 2-4.5 / RCP 4.5	West Bengal	3	4	4	3	4	3	1
Grid Division	SSP 3-7.0	West Bengal	4	4	4	5	5	4	2
Grid Division	SSP 4	West Bengal	4	4	4	5	5	4	2
Grid Division	SSP 5-8.5 / RCP 8.5	West Bengal	5	5	4	5	5	5	4
Retail Electricity Division	SSP 1-2.6 / 1.5 °C	Mumbai, Maharashtra	4	3	3	3	3	4	2
Retail Electricity Division	SSP 2-4.5 / RCP 4.5	Mumbai, Maharashtra	4	3	3	3	3	4	2
Retail Electricity Division	SSP 3-7.0	Mumbai, Maharashtra	5	4	5	4	4	5	3
Retail Electricity Division	SSP 5-8.5 / RCP 8.5	Mumbai, Maharashtra	5	4	5	4	4	5	3
Retail Electricity Division	SSP 1-2.6 / 1.5 °C	Mundra, Gujrat	3	3	4	4	3	3	2
Retail Electricity Division	SSP 2-4.5 / RCP 4.5	Mundra, Gujrat	3	3	4	4	3	3	2
Retail Electricity Division	SSP 3-7.0	Mundra, Gujrat	4	4	5	5	4	4	3
Retail Electricity Division	SSP 5-8.5 / RCP 8.5	Mundra, Gujrat	4	4	5	5	4	4	3

Business Division	State/Location	Scenario	2,030	2,040	2,050	2,070
Grid, Smart metering Division	Andhra Pradesh	SSP1-2.6	3.1	3.3	3.9	4.1
Grid, Smart metering Division		SSP2-4.5	3.3	3.9	4.3	4.5
Grid, Smart metering Division		SSP3-7.0	3.9	4.3	4.5	4.8
Grid, Smart metering Division		SSP5-8.5	4.1	4.5	4.8	5.0

Smart metering division	Assam	SSP1-2.6	2.7	2.8	3.4	3.6
Smart metering division		SSP2-4.5	2.8	3.4	3.7	4.2
Smart metering division		SSP3-7.0	3.4	3.7	4.2	4.7
Smart metering division		SSP5-8.5	3.6	4.2	4.7	4.9
Grid, Smart metering Division	Bihar	SSP1-2.6	2.2	2.4	3.0	3.2
Grid, Smart metering Division		SSP2-4.5	2.4	3.0	3.4	3.9
Grid, Smart metering Division		SSP3-7.0	3.0	3.4	3.9	4.5
Grid, Smart metering Division		SSP5-8.5	3.2	3.9	4.5	4.8
Grid Division	Chhattisgarh	SSP1-2.6	2.4	2.5	3.1	3.4
Grid Division		SSP2-4.5	2.5	3.1	3.5	4.0
Grid Division		SSP3-7.0	3.1	3.5	4.0	4.5
Grid Division		SSP5-8.5	3.4	4.0	4.5	4.8
Grid Division	Delhi	SSP1-2.6	3.0	3.0	3.6	3.8
Grid Division		SSP2-4.5	3.0	3.6	3.8	4.2
Grid Division		SSP3-7.0	3.6	3.8	4.2	4.5
Grid Division		SSP5-8.5	3.8	4.2	4.5	4.9
Grid Division	Gujarat	SSP1-2.6	3.2	3.4	4.0	4.2
Grid Division		SSP2-4.5	3.4	4.0	4.2	4.5
Grid Division		SSP3-7.0	4.0	4.2	4.5	4.6
Grid Division		SSP5-8.5	4.2	4.5	4.6	4.8
Grid Division	Haryana	SSP1-2.6	2.2	2.4	3.0	3.2
Grid Division		SSP2-4.5	2.4	3.0	3.4	3.9
Grid Division		SSP3-7.0	3.0	3.4	3.9	4.5
Grid Division		SSP5-8.5	3.2	3.9	4.5	4.8
Grid Division	Jharkhand	SSP1-2.6	2.6	2.7	3.4	3.6

Grid Division		SSP2-4.5	2.7	3.4	3.7	4.2
Grid Division		SSP3-7.0	3.4	3.7	4.2	4.7
Grid Division		SSP5-8.5	3.6	4.2	4.7	4.9
Grid Division	Madhya Pradesh	SSP1-2.6	2.6	2.7	3.4	3.6
Grid Division		SSP2-4.5	2.7	3.4	3.7	4.2
Grid Division		SSP3-7.0	3.4	3.7	4.2	4.7
Grid Division		SSP5-8.5	3.6	4.2	4.7	4.9
Grid, Smart metering Division	Maharashtra	SSP1-2.6	3.4	3.5	4.1	4.4
Grid, Smart metering Division		SSP2-4.5	3.5	4.1	4.5	4.5
Grid, Smart metering Division		SSP3-7.0	4.1	4.5	4.5	5.0
Grid, Smart metering Division		SSP5-8.5	4.4	4.5	5.0	5.0
Retail Electricity Division	Mumbai, Maharashtra	SSP1-2.6	4.0	4.2	4.5	4.6
Retail Electricity Division		SSP2-4.5	4.2	4.5	4.6	4.7
Retail Electricity Division		SSP3-7.0	4.5	4.6	4.7	4.9
Retail Electricity Division		SSP5-8.5	4.6	4.7	4.9	5.0
Retail Electricity Division	Mundra, Gujarat	SSP1-2.6	3.2	3.4	4.0	4.2
Retail Electricity Division		SSP2-4.5	3.4	4.0	4.2	4.5
Retail Electricity Division		SSP3-7.0	4.0	4.2	4.5	4.6
Retail Electricity Division		SSP5-8.5	4.2	4.5	4.6	4.8
Grid Division	Punjab	SSP1-2.6	2.2	2.4	3.0	3.2
Grid Division		SSP2-4.5	2.4	3.0	3.4	3.9
Grid Division		SSP3-7.0	3.0	3.4	3.9	4.5
Grid Division		SSP5-8.5	3.2	3.9	4.5	4.8
Grid Division	Rajasthan	SSP1-2.6	2.8	2.8	3.4	3.5
Grid Division		SSP2-4.5	2.8	3.4	3.5	4.1

Grid Division		SSP3-7.0	3.4	3.5	4.1	4.4
Grid Division		SSP5-8.5	3.5	4.1	4.4	4.8
Grid Division	Tamil Nadu	SSP1-2.6	3.5	3.6	4.2	4.4
Grid Division		SSP2-4.5	3.6	4.2	4.4	4.5
Grid Division		SSP3-7.0	4.2	4.4	4.5	4.7
Grid Division		SSP5-8.5	4.4	4.5	4.7	4.9
Grid Division	Telangana	SSP1-2.6	2.5	2.6	3.3	3.5
Grid Division		SSP2-4.5	2.6	3.3	3.6	4.1
Grid Division		SSP3-7.0	3.3	3.6	4.1	4.6
Grid Division		SSP5-8.5	3.5	4.1	4.6	4.9
Grid Division	Uttar Pradesh	SSP1-2.6	2.5	2.6	3.3	3.5
Grid Division		SSP2-4.5	2.6	3.3	3.6	4.1
Grid Division		SSP3-7.0	3.3	3.6	4.1	4.6
Grid Division		SSP5-8.5	3.5	4.1	4.6	4.9
Grid Division	West Bengal	SSP1-2.6	3.3	3.5	4.0	4.2
Grid Division		SSP2-4.5	3.5	4.0	4.4	4.6
Grid Division		SSP3-7.0	4.0	4.4	4.6	4.9
Grid Division		SSP5-8.5	4.2	4.6	4.9	5.0

AESL – POWERING A CLIMATE-RESILIENT FUTURE

LEADING INDIA'S ENERGY TRANSITION THROUGH ADAPTATION AND MITIGATION



Adani Energy Solutions Limited (AESL) is at the forefront of building a sustainable and resilient energy future for India. As the nation's largest private transmission and distribution company, we are integrating climate action into our core business strategy, focusing on two key pillars: mitigating our carbon footprint and adapting our infrastructure to the unavoidable impacts of climate change.



CLIMATE CHANGE MITIGATION: Reducing Our Carbon Footprint

Our goal is to actively reduce greenhouse gas emissions through innovation and efficiency across our operations.



CLEAN ENERGY PROCUREMENT

We are increasing the proportion of renewable energy in our power procurement portfolio, prioritizing solar, wind, and hydro sources to decarbonize the grid.

Key Metric: 60% RENEWABLE ENERGY share in our power portfolio by FY2027.



SMART GRID & TRANSMISSION EFFICIENCY

By investing in and deploying advanced grid technologies, including smart grids and automation, we are minimizing transmission and distribution (T&D) losses...

Key Metric: Deploying India's first HVDC line. Robust work-on-hand of ~₹600Bn for transmission projects.



SMART METERING AS A SERVICE

Our Advanced Metering Infrastructure (AMI) empowers consumers with real-time data to optimize their energy consumption. Demand-side management reduces energy waste.

Key Metric: Leading player with order book of 22.8 million smart meters. Delivered 1 crore ahead of schedule.



COOLING AS A SERVICE (CaaS)

Through Adani Cooling Solutions Ltd (ACSL), we offer energy-efficient district cooling systems. Centralized model reduces primary energy consumption for cooling.

Key Metric: District cooling reduces primary energy consumption by 25-30% vs individual units. Cut cooling costs by up to 35%.

CLIMATE CHANGE ADAPTATION: Building a Resilient Network

We are fortifying our infrastructure and operations to withstand the increasing frequency of extreme weather events and ensure reliable energy supply for millions.



INFRASTRUCTURE RESILIENCE

We are strengthening our physical assets against climate hazards. Prioritizing underground and insulated cabling in ecologically sensitive and urban areas.

Key Impact: REDUCES NETWORK VULNERABILITY to extreme weather. Higher reliability and fewer outages.



CLIMATE RISK ASSESSMENT

We conduct rigorous Environmental and Social Impact Assessments (ESIAs) for all new projects. Identify potential climate risks, embedding resilience into design.

Key Impact: ENSURES CLIMATE-READY infrastructure from day one. Avoiding future costs and service disruptions.



BIODIVERSITY & ECOSYSTEM HEALTH

Sustainability policy includes preservation and restoration of local ecosystems. Healthy ecosystems provide natural defenses against flooding and soil erosion.

Key Impact: Projects designed to achieve 'NO NET LOSS' to biodiversity, contributing to natural climate resilience.



COMMUNITY AND STAKEHOLDER ENGAGEMENT

Through transparent grievance redressal and CSR initiatives focused on education and skill development, we empower local communities to be more resilient.

Key Impact: STRENGTHENS COMMUNITY adaptive capacity to climate disruptions.

Together, we can build a greener, more resilient India.