

## ADANI ENERGY SOLUTIONS LIMITED

## 2024 CDP Corporate Questionnaire 2024

#### Word version

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#### Important: this export excludes unanswered questions

This document is an export of your organization's CDP questionnaire response. It contains all data points for questions that are answered or in progress. There may be questions or data points that you have been requested to provide, which are missing from this document because they are currently unanswered. Please note that it is your responsibility to verify that your questionnaire response is complete prior to submission. CDP will not be liable for any failure to do so.

Terms of disclosure for corporate questionnaire 2024 - CDP

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#### **C1. Introduction**

(1.3) Provide an overview and introduction to your organization.

#### (1.3.2) Organization type

Select from:

Publicly traded organization

#### (1.3.3) Description of organization

Power transmission sector in India is well poised for growth with an enabling policy framework in place, large capacity additions and greater opportunities for private participation through tariff-based competitive bidding. The Adani Group's journey in the transmission sector started in 2006, well before Adani Energy Solutions Limited (AESL) was formally established. This was necessitated by need to evacuate power from Adani's Mundra thermal power plant. The dedicated lines, commissioned for evacuation of power spanned more than 3800 ckms connecting Mundra – Dehgam, Mundra – Mohindergarh and Tirora – Warora. Another line spanning more than 1200 ckms was commissioned in 2014 for evacuation of power from Adani's Tiroda power plant. Subsequently, in 2015, looking at the enormous business potential in transmission sector, Adani Energy Solutions Limited (AESL) was carved out of Adani Enterprises Limited (AEL) for a focused pursuit of opportunities in transmission sector. AESL has also tapped various inorganic avenues for growth and acquired GMR's transmission assets in Rajasthan (2016), Reliance Infrastructure's transmission assets in Gujarat, Madhya Pradesh and Maharashtra (2017) and KEC's Bikaner Sikar transmission asset in Rajasthan (2019) In 2018, AESL forayed into the distribution space with the acquisition of Reliance Infrastructure's Power Generation, Transmission & Distribution Business in Mumbai. Today, Adani Electricity Mumbai Limited (AEML) caters to electricity needs of over 3 million customers in Mumbai suburbs and Mira-Bhayender Municipal Corporation in Thane district with a distribution network spanning over 400 sg. kms. Today, AESL is the largest private transmission company and operates more than 21,182 ckm of transmission lines and around 57,011 MVA of power transformation capacity. AESL has further set an ambitious target to set up 30,000 ckm of transmission lines by 2030 by leveraging both organic and inorganic growth opportunities. AESL firmly believes that environmentally and socially sustainable businesses are cornerstones of prosperous society. Therefore, we continuously attempt to understand the needs and aspirations of the communities around us. AESL's initiatives in areas of inclusive decision making, education, occupational health and safety, environment conservation (etc) are aligned with different indicators under 17 Sustainable Development Goals (SDGs). We work actively with our implementation partner, Adani Foundation, on CSR programmes focused on education, community health, sustainable livelihoods and rural infrastructure development. Provision of better facilities for children in school / anaganwadi in Bhadai, Kheri Talwana, Ajwa, Saiyad Kherli villages of Gujarat / Rajasthan, construction of bus stands in Bhadai village, Mandvi, streetlight installation in Gokulpura and Piprali villages are some of our initiatives which have been appreciated by the local communities and made their lives better. As we continue to grow, we are also ensuring that we live by our philosophy – "Growth with Goodness". Key Milestones India's first private power sector player to secure an international investment grade rating India's first and only private HVDC transmission line First Private Company in India to execute 765 KV Transmission lines & Substations in the state of Maharashtra First company to have executed a typical  $\pi$  (Pi) shape tower at Sami substation with 6 phases Quad Moose strung on same beam First private company to use a Prefabricated steel structure valve hall in India [Fixed row]

(1.4) State the end date of the year for which you are reporting data. For emissions data, indicate whether you will be providing emissions data for past reporting years.

## (1.4.1) End date of reporting year

03/30/2024

#### (1.4.2) Alignment of this reporting period with your financial reporting period

Select from:

🗹 Yes

(1.4.3) Indicate if you are providing emissions data for past reporting years

Select from:

✓ Yes

(1.4.4) Number of past reporting years you will be providing Scope 1 emissions data for

Select from:

✓ 4 years

(1.4.5) Number of past reporting years you will be providing Scope 2 emissions data for

Select from:

✓ 4 years

(1.4.6) Number of past reporting years you will be providing Scope 3 emissions data for

Select from:

✓ 4 years

[Fixed row]

(1.5) Provide details on your reporting boundary.

Is your reporting boundary for your CDP disclosure the same as that used in your financial statements?
Select from: ✓ Yes

[Fixed row]

## (1.6) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

#### ISIN code - bond

#### (1.6.1) Does your organization use this unique identifier?

Select from:

🗹 No

ISIN code - equity

### (1.6.1) Does your organization use this unique identifier?

Select from:

🗹 Yes

## (1.6.2) Provide your unique identifier

INE931S01010

## **CUSIP** number

(1.6.1) Does your organization use this unique identifier?

Select from: ✓ No

#### **Ticker symbol**

(1.6.1) Does your organization use this unique identifier?

Select from:

🗹 Yes

(1.6.2) Provide your unique identifier

NSE: ADANIENSOL; BSE: 539254

#### SEDOL code

(1.6.1) Does your organization use this unique identifier?

Select from:

🗹 No

## LEI number

(1.6.1) Does your organization use this unique identifier?

Select from:

✓ Yes

## (1.6.2) Provide your unique identifier

549300PLH866JQ6LXE52

#### **D-U-N-S number**

(1.6.1) Does your organization use this unique identifier?

#### Select from:

✓ Yes

#### (1.6.2) Provide your unique identifier

650960821

## Other unique identifier

(1.6.1) Does your organization use this unique identifier?

Select from: ✓ No [Add row]

(1.16.1) For your electricity generation activities, provide details of your nameplate capacity and electricity generation specifics for each technology employed.

Coal - Hard

(1.16.1.1) Own or control operations which use this power generation source

Select from:

🗹 Yes

(1.16.1.2) Nameplate capacity (MW)

500

(1.16.1.3) Gross electricity generation (GWh)

3248.49

(1.16.1.4) Net electricity generation (GWh)

## (1.16.1.5) Comment

2 x 250 MW Thermal Power station

#### Lignite

## (1.16.1.1) Own or control operations which use this power generation source

Select from:

🗹 No

(1.16.1.5) Comment

#### Oil

## (1.16.1.1) Own or control operations which use this power generation source

Select from:

🗹 No

## (1.16.1.5) Comment

#### Gas

.

#### (1.16.1.1) Own or control operations which use this power generation source

Select from:

🗹 No

#### (1.16.1.5) Comment

#### Sustainable biomass

#### (1.16.1.1) Own or control operations which use this power generation source

Select from:

🗹 No

.

(1.16.1.5) Comment

#### **Other biomass**

(1.16.1.1) Own or control operations which use this power generation source

Select from:

🗹 No

## (1.16.1.5) Comment

#### Waste (non-biomass)

#### (1.16.1.1) Own or control operations which use this power generation source

Select from:

🗹 No

(1.16.1.5) Comment

#### Nuclear

## (1.16.1.1) Own or control operations which use this power generation source

Select from:

🗹 No

#### (1.16.1.5) Comment

#### Fossil-fuel plants fitted with carbon capture and storage

## (1.16.1.1) Own or control operations which use this power generation source

Select from:

🗹 No

#### (1.16.1.5) Comment

#### Geothermal

(1.16.1.1) Own or control operations which use this power generation source

Select from:

🗹 No

#### (1.16.1.5) Comment

#### Hydropower

## (1.16.1.1) Own or control operations which use this power generation source

Select from:

🗹 No

#### (1.16.1.5) Comment

#### Wind

(1.16.1.1) Own or control operations which use this power generation source

Select from:

🗹 No

#### (1.16.1.5) Comment

#### Solar

(1.16.1.1) Own or control operations which use this power generation source

Select from:

🗹 Yes

## (1.16.1.2) Nameplate capacity (MW)

3.36

(1.16.1.3) Gross electricity generation (GWh)

#### (1.16.1.4) Net electricity generation (GWh)

5.16

## (1.16.1.5) Comment

Captive solar PV Systems

#### Marine

(1.16.1.1) Own or control operations which use this power generation source

Select from:

🗹 No

## (1.16.1.5) Comment

#### Other renewable

(1.16.1.1) Own or control operations which use this power generation source

Select from:

🗹 Yes

## (1.16.1.2) Nameplate capacity (MW)

700

#### (1.16.1.3) Gross electricity generation (GWh)

2933.86

#### (1.16.1.4) Net electricity generation (GWh)

2933.86

#### (1.16.1.5) Comment

Wind-Solar PV Hybrid Power PPA @ Jaisalmer, Rajasthan

#### Other non-renewable

(1.16.1.1) Own or control operations which use this power generation source

Select from:

🗹 No

(1.16.1.5) Comment

#### Total

(1.16.1.1) Own or control operations which use this power generation source

Select from:

🗹 Yes

#### (1.16.1.2) Nameplate capacity (MW)

1203.36

(1.16.1.3) Gross electricity generation (GWh)

6187.5

(1.16.1.4) Net electricity generation (GWh)

#### (1.16.1.5) Comment

Coal Solar Wind Solar hybrid [Fixed row]

## (1.24) Has your organization mapped its value chain?

#### (1.24.1) Value chain mapped

Select from:

☑ Yes, we have mapped or are currently in the process of mapping our value chain

#### (1.24.2) Value chain stages covered in mapping

Select all that apply

✓ Upstream value chain

Downstream value chain

#### (1.24.3) Highest supplier tier mapped

Select from:

✓ Tier 1 suppliers

#### (1.24.4) Highest supplier tier known but not mapped

Select from:

✓ Tier 3 suppliers

#### (1.24.7) Description of mapping process and coverage

For mapping our supply chain, we used following steps: List all companies involved in our supply chain, including suppliers, manufacturers, distributors, retailers, and customers. Company engaged with each of the above stakeholders to data such as contact details, operational roles, and the flow of goods and services of each stakeholder using Surveys and interviews to gather qualitative data from stakeholders We used tools like Geographic Information Systems (GIS) to create visual

maps of our value chain. 1) to understand the interdependencies between different stakeholders and the flow of materials, information, and finances. 2) Identify potential risks at each stage of the supply chain and develop strategies to mitigate and adapt to them. 3) Track key performance indicators (KPIs) to evaluate the efficiency and effectiveness of the supply chain. 4) Use the insights gained from mapping to optimize processes, reduce costs, and improve sustainability. Coverage: Current mapping of Upstream covers 90% by spends all stages from raw material acquisition to electricity delivery to end consumer. 100% mapping of downstream value chain i.e. end consumers of electricity. [Fixed row]

# (1.24.1) Have you mapped where in your direct operations or elsewhere in your value chain plastics are produced, commercialized, used, and/or disposed of?

#### (1.24.1.1) Plastics mapping

Select from:

 $\blacksquare$  No, and we do not plan to within the next two years

#### (1.24.1.5) Primary reason for not mapping plastics in your value chain

Select from:

 $\blacksquare$  Judged to be unimportant or not relevant

#### (1.24.1.6) Explain why your organization has not mapped plastics in your value chain

Being responsible corporate, We are aware of plastic waste impacts when mis-managed. Due to nature of the business, we are in i.e. Generation, Purchase, Transmission & distribution of Electricity. Plastic is not required for packaging the good/services; hence Product use phase is ZERO; but we do use good / products that have plastic packaging in our project activities and hence we segregate and dispose the plastic waste as per the directives of State Pollution Control Board(s) of respective states where we have operations. Also, a per Company policy we don't use any Single use plastic and are periodically assessed and certified as Single Use plastic free by M/s. Bureau Veritas India Pvt. Ltd for our generation @ Dhanau, and by M/s. The Confederation of Indian Industry (CII) for Transmission & Distribution sites including corporate office. Adani Energy Solutions Limited is also certified for Zero Waste to Landfill YoY by M/s. Intertek India. [Fixed row] C2. Identification, assessment, and management of dependencies, impacts, risks, and opportunities

(2.1) How does your organization define short-, medium-, and long-term time horizons in relation to the identification, assessment, and management of your environmental dependencies, impacts, risks, and opportunities?

Short-term

(2.1.1) Fron	n (years)
--------------	-----------

0

#### (2.1.3) To (years)

1

#### (2.1.4) How this time horizon is linked to strategic and/or financial planning

AESL operates in a price sensitive market with increasing renewable energy penetration and faces significant price volatility. To manage its short-term risks, AESL: • Use forecasting tools to predict market supply, prices and demand patterns. • Enters into short-term power purchase agreements (PPAs) that allow for more flexibility in pricing and volume commitments. • Utilize financial derivatives to hedge against price volatility, ensuring stable cash flows and protecting against adverse price movements. • Collaborate with technology firms to implement advanced analytics for real-time decision-making. • AESL also conducts risk assessments associated with unethical practices and behaviours. Managing these risks is essential for maintaining customer trust and meeting regulatory requirements. By adopting above strategies, AESL links its strategic and financial planning to effectively manage short-term risks while positioning itself for long-term success and reviews regularly to adapt to the evolving market conditions.

#### **Medium-term**

#### (2.1.1) From (years)

1

#### (2.1.3) To (years)

#### (2.1.4) How this time horizon is linked to strategic and/or financial planning

AESL continuously analyzes the external and internal factors that can impact their operations in medium term [ between 1 to 3 year] such as market trends, regulatory changes, competitive landscape, and internal resources and capabilities. For AESL identifying potential financial risks like interest rate fluctuations, credit risks, market risks, and operational risks such as supply chain disruptions that could affect the company in the medium term is crucial. Strategic Alignment: The identified risks are mapped and aligned with the company's long-term strategic goals to ensure that risk management is not a standalone process but is integrated into the overall strategic planning. Financial Planning: Financial models incorporate the identified risks to forecast future financial performance. This includes adjusting cash flow projections, capital allocation, and investment strategies to mitigate identified risks The identified risks are mapped and aligned with the company's long-term strategic goals to ensure that risk management is not a standalone with the company's long-term strategic goals to ensure the identified risks are mapped and aligned with the company's long-term strategic goals to ensure that risk management is not a standalone process but is integrated into the overall strategic goals to ensure that risk management is not a standalone process but is integrated into the overall strategic planning. The risk management framework includes regular monitoring and review mechanisms by AESL Leadership team to ensure that the company can respond to changes in the risk profile promptly by making informed decisions that balance short-term gains with medium-term risks and long-term strategic goals.

#### Long-term

#### (2.1.1) From (years)

3

#### (2.1.2) Is your long-term time horizon open ended?

Select from:

🗹 No

#### (2.1.3) To (years)

20

#### (2.1.4) How this time horizon is linked to strategic and/or financial planning

To link strategic and long term financial planning: 1. Align Objectives: AESL leaders ensure that financial targets support the strategic objectives of the company. 2. Scenario Analysis: We develop & conduct scenario analysis to understand the financial implications of different strategic choices. 3. Performance Metrics: Leaders establish performance metrics that reflect both financial results and progress towards strategic goals. 4. Regular Reviews: Hold regular [monthly, Quarterly] review meetings to assess the progress of the strategic plan and make necessary adjustments to the financial plan. 5. Leaders maintain clear communication between the departments responsible for strategic and financial planning to ensure alignment. Senior management leverage Models and Frameworks for balancing financial and strategic planning. to manage the company's current operations, develop emerging opportunities, and create viable options for future growth simultaneously. AESL navigates uncertainties more effectively and positions itself for sustainable growth. AESL essentially has a dynamic planning process that adapts to changing

circumstances and incorporates risk management as a core component. This integrated approach helps the company to make informed decisions and achieve its long-term objectives. [Fixed row]

(2.2) Does your organization have a process for identifying, assessing, and managing environmental dependencies and/or impacts?

Process in place	Dependencies and/or impacts evaluated in this process
Select from: ✓ Yes	Select from: ✓ Both dependencies and impacts

[Fixed row]

(2.2.1) Does your organization have a process for identifying, assessing, and managing environmental risks and/or opportunities?

Process in place	Risks and/or opportunities evaluated in this process	Is this process informed by the dependencies and/or impacts process?
Select from:	Select from:	Select from:
✓ Yes	✓ Both risks and opportunities	✓ Yes

[Fixed row]

(2.2.2) Provide details of your organization's process for identifying, assessing, and managing environmental dependencies, impacts, risks, and/or opportunities.

## (2.2.2.1) Environmental issue

Select all that apply

✓ Climate change

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

✓ Dependencies

✓ Impacts

✓ Risks

✓ Opportunities

## (2.2.2.3) Value chain stages covered

Select all that apply

- ✓ Direct operations
- ☑ Upstream value chain
- ✓ Downstream value chain
- ✓ End of life management

#### (2.2.2.4) Coverage

Select from:

🗹 Full

#### (2.2.2.5) Supplier tiers covered

Select all that apply ✓ Tier 1 suppliers

#### (2.2.2.7) Type of assessment

Select from:

✓ Qualitative and quantitative

#### (2.2.2.8) Frequency of assessment

Select from:

✓ More than once a year

#### (2.2.2.9) Time horizons covered

Select all that apply

✓ Short-term

✓ Medium-term

✓ Long-term

#### (2.2.2.10) Integration of risk management process

Select from:

☑ Integrated into multi-disciplinary organization-wide risk management process

#### (2.2.2.11) Location-specificity used

Select all that apply

✓ Site-specific

🗹 Local

✓ Sub-national

National

#### (2.2.2.12) Tools and methods used

#### **Enterprise Risk Management**

☑ COSO Enterprise Risk Management Framework

Enterprise Risk Management

✓ ISO 31000 Risk Management Standard

✓ Stress tests

#### International methodologies and standards

- Environmental Impact Assessment
- ✓ IPCC Climate Change Projections
- ☑ ISO 14001 Environmental Management Standard

#### Databases

☑ Nation-specific databases, tools, or standards

#### Other

- ✓ Scenario analysis
- Desk-based research
- ✓ External consultants
- ✓ Materiality assessment
- ✓ Internal company methods

## (2.2.2.13) Risk types and criteria considered

#### Acute physical

- ✓ Landslide
- Heat waves
- ✓ Subsidence
- ✓ Cyclones, hurricanes, typhoons
- ✓ Heavy precipitation (rain, hail, snow/ice)

#### **Chronic physical**

- ✓ Heat stress
- ✓ Soil erosion

- ✓ Jurisdictional/landscape assessment
- ✓ Partner and stakeholder consultation/analysis

Flood (coastal, fluvial, pluvial, ground water)
Other acute physical risk, please specify :Water Stress & Depletion

Precipitation or hydrological variability
Increased severity of extreme weather events

- ✓ Water stress
- Changing wind patterns
- Temperature variability

#### Policy

- ✓ Carbon pricing mechanisms
- ✓ Changes to national legislation
- ☑ Increased difficulty in obtaining operations permits

#### Market

- ✓ Availability and/or increased cost of raw materials
- ☑ Changing customer behavior
- $\blacksquare$  Uncertainty in the market signals
- ☑ Other market, please specify

#### Reputation

- ✓ Impact on human health
- ☑ Increased partner and stakeholder concern and partner and stakeholder negative feedback
- ☑ Negative press coverage related to support of projects or activities with negative impacts on the environment (e.g. GHG emissions, deforestation & conversion, water stress)
- ☑ Stakeholder conflicts concerning water resources at a basin/catchment level
- ✓ Other reputation, please specify :ESG ratings

#### Technology

- $\blacksquare$  Dependency on water-intensive energy sources
- $\blacksquare$  Transition to lower emissions technology and products

#### (2.2.2.14) Partners and stakeholders considered

Select all that apply

✓ NGOs

Customers

RegulatorsLocal communities

Water availability at a basin/catchment levelChanging temperature (air, freshwater, marine water)

Employees

✓ Investors

✓ Suppliers

✓ Indigenous peoples
✓ Other, please specify :Media, Acadamia etc

#### (2.2.2.15) Has this process changed since the previous reporting year?

Select from:

🗹 No

#### (2.2.2.16) Further details of process

AESL's process for identifying, assessing, and managing environmental dependencies, impacts, risks, and opportunities is aligned with frameworks such as the Taskforce on Climate & Nature-related Financial Disclosures (TCFD & TNFD). AESL makes use of online tools such as Aqueduct, Encore, WWF's Risk filter to evaluate its Climate, Water, Biodiversity related dependences and impacts scenarios, based on the findings Risk and opportunities are identified and prioritized based on the strategic priorities of the organisation using ISO 31000 framework. AESL makes use of external experts as well to get latest upadtes that company might have overlooked. 1. Identification: o Dependencies and Impacts: Identify how the organization depends on and impacts the environment. This includes evaluating resource use, emissions, and other environmental interactions. o Risks and Opportunities: Identify potential environmental risks (e.g., regulatory changes, resource scarcity) and opportunities (e.g., sustainable practices, new markets). 2. Assessment: o Risk and Opportunity Analysis: Assess the identified risks and opportunities in terms of their likelihood and potential impact on the organization. o Materiality Assessment: Determine which risks and opportunities are material and should be prioritized based on their significance to the organization's operations and strategy. 3. Management: o Mitigation Strategies: Develop and implement strategies to mitigate identified risks. This involves adopting new technologies, changing operational practices, or engaging in conservation efforts. o

Adaptation strategies: Based on the cost effectiveness of the mitigation strategies, certain residual risks are further lowered by incorporating adaptation measures, such as changes to design, backup arrangements etc. o The mitigation & adaptation strategies are also documented and mapped with Integrated Management systems to study the cross impacts of certain environmental aspects that AESL has prioritized and is working on. o Opportunity Management: Leverage identified opportunities to enhance sustainability and create value. This might include investing in green technologies or developing new sustainable products. 4. Monitoring and Reporting: o Continuous Monitoring: Regularly monitor environmental performance and the effectiveness of mitigation strategies. o

Reporting: Disclose environmental dependencies, impacts, risks, and opportunities to stakeholders, ensuring transparency and accountability. eg. Corporate Responsibility Committee [CRC] & Corporate Risk committee of board are appraised on Quarterly basis. This process is iterative and involves continuous improvement to adapt to new information and changing environmental conditions

#### Row 2

#### (2.2.2.1) Environmental issue

Select all that apply

✓ Water

# (2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

- ☑ Dependencies
- ✓ Impacts
- ✓ Risks
- Opportunities

## (2.2.2.3) Value chain stages covered

Select all that apply

- ☑ Direct operations
- ✓ Upstream value chain
- ☑ Downstream value chain
- ☑ End of life management

## (2.2.2.4) Coverage

Select from:

✓ Full

## (2.2.2.5) Supplier tiers covered

Select all that apply

✓ Tier 1 suppliers

## (2.2.2.7) Type of assessment

Select from:

✓ Qualitative and quantitative

(2.2.2.8) Frequency of assessment

Select from:

✓ More than once a year

#### (2.2.2.9) Time horizons covered

Select all that apply

✓ Short-term

Medium-term

✓ Long-term

## (2.2.2.10) Integration of risk management process

Select from:

☑ Integrated into multi-disciplinary organization-wide risk management process

## (2.2.2.11) Location-specificity used

Select all that apply

✓ Site-specific

🗹 Local

✓ Sub-national

✓ National

## (2.2.2.12) Tools and methods used

#### Commercially/publicly available tools

✓ WRI Aqueduct

#### **Enterprise Risk Management**

✓ COSO Enterprise Risk Management Framework

- ✓ Enterprise Risk Management
- ☑ ISO 31000 Risk Management Standard
- ✓ Stress tests

#### International methodologies and standards

- ✓ Environmental Impact Assessment
- ✓ IPCC Climate Change Projections
- ✓ ISO 14001 Environmental Management Standard

#### Databases

☑ Nation-specific databases, tools, or standards

#### Other

- ✓ Scenario analysis
- Desk-based research
- External consultants
- ✓ Materiality assessment
- ✓ Internal company methods

#### (2.2.2.13) Risk types and criteria considered

#### Acute physical

- ✓ Landslide
- Heat waves
- ✓ Subsidence
- ✓ Cyclones, hurricanes, typhoons
- ✓ Heavy precipitation (rain, hail, snow/ice)

#### **Chronic physical**

- ✓ Soil erosion
- Water stress
- ✓ Sea level rise
- ✓ Groundwater depletion
- Declining water quality

Jurisdictional/landscape assessmentPartner and stakeholder consultation/analysis

- Flood (coastal, fluvial, pluvial, ground water)
- ☑ Other acute physical risk, please specify :Water Stress & Depletion

- ✓ Temperature variability
- ✓ Increased severity of extreme weather events
- ☑ Water availability at a basin/catchment level
- Changing temperature (air, freshwater, marine water)
- ☑ Increased levels of environmental pollutants in freshwater bodies

#### Policy

- ✓ Changes to national legislation
- ✓ Increased difficulty in obtaining operations permits

#### Market

- ☑ Availability and/or increased cost of raw materials
- ☑ Changing customer behavior
- ✓ Uncertainty in the market signals
- ✓ Other market, please specify

#### Reputation

- ✓ Impact on human health
- ☑ Increased partner and stakeholder concern and partner and stakeholder negative feedback
- Vegative press coverage related to support of projects or activities with negative impacts on the environment (e.g. GHG emissions, deforestation & conversion, water stress)
- ☑ Stakeholder conflicts concerning water resources at a basin/catchment level
- ✓ Other reputation, please specify :ESG ratings

#### Technology

- ☑ Dependency on water-intensive energy sources
- ✓ Transition to water efficient and low water intensity technologies and products

#### (2.2.2.14) Partners and stakeholders considered

#### Select all that apply

- ✓ NGOs
- Customers
- Employees
- Investors
- ✓ Suppliers

- ✓ Regulators
- ✓ Local communities
- ☑ Indigenous peoples
- ☑ Other, please specify :Media, Acadamia etc

#### (2.2.2.15) Has this process changed since the previous reporting year?

#### (2.2.2.16) Further details of process

AESL's process for identifying, assessing, and managing environmental dependencies, impacts, risks, and opportunities is aligned with frameworks such as the Taskforce on Climate & Nature-related Financial Disclosures (TCFD & TNFD). AESL makes use of online tools such as Aqueduct, Encore, WWF's Risk filter to evaluate its Climate, Water, Biodiversity related dependences and impacts scenarios, based on the findings Risk and opportunities are identified and prioritized based on the strategic priorities of the organisation using ISO 31000 framework. AESL makes use of external experts as well to get latest upadtes that company might have overlooked. 1. Identification: o Dependencies and Impacts: Identify how the organization depends on and impacts the environment. This includes evaluating resource use, emissions, and other environmental interactions. o Risks and Opportunities: Identify potential environmental risks (e.g., regulatory changes, resource scarcity) and opportunities (e.g., sustainable practices, new markets). 2. Assessment: o Risk and Opportunity Analysis: Assess the identified risks and opportunities in terms of their likelihood and potential impact on the organization. o Materiality Assessment: Determine which risks and opportunities are material and should be prioritized based on their significance to the organization's operations and strategy. 3. Management: o Mitigation Strategies: Develop and implement strategies to mitigate identified risks. This involves adopting new technologies, changing operational practices, or engaging in conservation efforts. o

Adaptation strategies: Based on the cost effectiveness of the mitigation strategies, certain residual risks are further lowered by incorporating adaptation measures, such as changes to design, backup arrangements etc. o The mitigation & adaptation strategies are also documented and mapped with Integrated Management systems to study the cross impacts of certain environmental aspects that AESL has prioritized and is working on. o Opportunity Management: Leverage identified opportunities to enhance sustainability and create value. This might include investing in green technologies or developing new sustainable products. 4. Monitoring and Reporting: o Continuous Monitoring: Regularly monitor environmental performance and the effectiveness of mitigation strategies. o

Reporting: Disclose environmental dependencies, impacts, risks, and opportunities to stakeholders, ensuring transparency and accountability. eg. Corporate Responsibility Committee [CRC] & Corporate Risk committee of board are appraised on Quarterly basis. This process is iterative and involves continuous improvement to adapt to new information and changing environmental conditions [Add row]

#### (2.2.7) Are the interconnections between environmental dependencies, impacts, risks and/or opportunities assessed?

#### (2.2.7.1) Interconnections between environmental dependencies, impacts, risks and/or opportunities assessed

Select from:

✓ Yes

#### (2.2.7.2) Description of how interconnections are assessed

AESL has a comprehensive process for identifying, assessing, and managing the interconnections between environmental dependencies, impacts, risks, and opportunities aligned to ISO 14001, COSO, TNFD frameworks. Identification of Environmental Dependencies and Impacts involves understanding how AESL's

operations depend on natural resources and services, and how these operations, in turn, impact the environment. AESL considers both direct and indirect interactions with the environment. We also use tools such as WRI's Aqueduct. Risk Assessment: Once dependencies and impacts are identified, We at AESL evaluate the potential environmental risks. These risks could range from regulatory changes and resource scarcity to environmental degradation and climate change impacts. Opportunity Identification: Alongside risks, AESL focuses on identifying opportunities related to environmental sustainability. Such as development of renewable energy sources, energy efficiency programs, and sustainable resource management practices. Integration into Business Strategy: The identified risks and opportunities are integrated into the AESL's overall business strategy to ensure that environmental considerations are embedded in decision-making processes at all levels of the organization. Example: AESL has committed to Net Zero by 2050 and set interim targets using Science based targets methodology to reduce 72.7% Scope 1 & 2 emissions & 27.5% Scope 3 reduction. AESL's retail division in Jul 2021, had also raised India's first Sustainability Linked bond and has 2 targets associated with it: KPI 1: Increase Renewable power in procurement mix 30% by FY2023, 60% by FY2027 & 70% by FY2030. KPI 2: Reduce GHG emission Intensity / EBITA Continuous Monitoring and Review: The environmental landscape is constantly changing, and as such, the AESL leadership regularly monitors and review its environmental dependencies, impacts, risks, and opportunities to stay ahead of potential challenges and leverage new opportunities. Stakeholder Engagement: AESL engages with stakeholders, including customers, regulators, and the community, to gain valuable insights and help build trust and transparency around the company's environmental practices. Disclosure and Reporting: Transparent reporting on environmental risks and opportunities, as well as the AESL's performance in managing these, is important. AESL through Integrated Annual report, sustainability reports, disclosures aligned with frameworks like Business Responsibility and Sustainability Reporting (BRSR), the Task Force on Climate-related Financial Disclosures (TCFD), and participation in initiatives like the CDP, S&P Global' s CSA, CII-Climate Action Program 2.0 etc. Adherence to Frameworks and Standards: Utilizing established frameworks such as the TNFD Nature-related Risk and Opportunity Management and Disclosure Framework also guides us in assessing and disclosing nature-related risks and opportunities. [Fixed row]

#### (2.3) Have you identified priority locations across your value chain?

#### (2.3.1) Identification of priority locations

Select from:

✓ Yes, we have identified priority locations

#### (2.3.2) Value chain stages where priority locations have been identified

Select all that apply

 $\blacksquare$  Direct operations

✓ Upstream value chain

✓ Downstream value chain

#### (2.3.3) Types of priority locations identified

#### Sensitive locations

- Areas important for biodiversity
- ✓ Areas of high ecosystem integrity
- ☑ Areas of limited water availability, flooding, and/or poor quality of water
- ☑ Areas of importance for ecosystem service provision

#### Locations with substantive dependencies, impacts, risks, and/or opportunities

- ☑ Locations with substantive dependencies, impacts, risks, and/or opportunities relating to forests
- ☑ Locations with substantive dependencies, impacts, risks, and/or opportunities relating to water
- ☑ Locations with substantive dependencies, impacts, risks, and/or opportunities relating to biodiversity

## (2.3.4) Description of process to identify priority locations

Our risk management system, based on COSO framework and ISO 27001, identifies strategic (including climate), tactical and operational risks impacting our business. The likelihood and impact of individual risks are assessed, their mitigation measures are determined for their effective management and their inter relatedness is mapped. Post risk identification, we select appropriate actions (reduce, accept, transfer or avoid) We assess & evaluate the potential impact and likelihood of physical & transitional risks on our current/future business strategy. The framework also identifies significant financial and strategic thresholds to identify implications of the risks identified. AESL's process for identifying, assessing, and managing environmental dependencies, impacts, risks, and opportunities is aligned with frameworks such as the Taskforce on Climate & Nature-related Financial Disclosures (TCFD & TNFD). AESL employs several tools to address nature-related issues and ensure operational stability by identifying and prioritizing locations with ecological sensitivity, based on the findings Risk and opportunities are identified and prioritized based on the strategic priorities of the organization using ISO 31000 framework. Here's a brief overview of how they utilize these tools: The WWF Biodiversity Risk Filter: By analyzing our operational substations and transmission lines with this screening tool, AESL prioritized action on what and where it matters the most to address biodiversity risks for enhancing business resilience. Aqueduct Tool: helped AESL understand the water dependency and risks associated with our operations, allowing AESL to take proactive measures to ensure water sustainability and reduce potential impacts on local ecosystems. Key Biodiversity Area (KBA) Maps: AESL used KBA maps to plot the proximity of our operational sites to key biodiversity areas that are ecologically sensitive and may require conservation efforts. Integrated Biodiversity Assessment Tool (IBAT): The IBAT tool is used to further analyze the identified substations and transmission lines with higher biodiversity risk scores. It provides detailed information on the biodiversity value of these areas, enabling AESL to make informed decisions on conservation and mitigation strategies. ENCORE Tool: The web-based tool, called ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure) has Geospatial datasets on natural capital assets and drivers of environmental change, and gualitative impact/ dependency ratings that link ecosystem services to production processes of the company. By leveraging these tools, AESL is working towards effectively addressing nature-related issues, prioritizing areas with ecological sensitivity, and ensuring operational stability while maximizing positive impacts on the environment.

#### (2.3.5) Will you be disclosing a list/spatial map of priority locations?

Select from:

☑ No, we have a list/geospatial map of priority locations, but we will not be disclosing it [Fixed row]

#### (2.4) How does your organization define substantive effects on your organization?

#### Risks

## (2.4.1) Type of definition

Select all that apply

✓ Qualitative

✓ Quantitative

#### (2.4.2) Indicator used to define substantive effect

Select from:

EBITDA

## (2.4.3) Change to indicator

Select from:

✓ % decrease

## (2.4.4) % change to indicator

Select from:

✓ 11-20

## (2.4.6) Metrics considered in definition

Select all that apply

✓ Frequency of effect occurring

✓ Time horizon over which the effect occurs
#### ✓ Likelihood of effect occurring

✓ Other, please specify :any one, or because of combined multiple cases to create an impact due to: - the proportion of business units [BU] affected - the size of the impact on those BU - our dependency on that BU - the potential for shareholder or customer concern

# (2.4.7) Application of definition

A matrix approach is employed where in multiple metrics such as 1) Frequency of Effect Occurring 2) Time Horizon of Effect and 3) The likelihood of the effect occurring are used together. anlong with, any one, or because of combined multiple cases to create an impact due to: - the proportion of business units [BU] affected - the size of the impact on those BU - our dependency on that BU - the potential for shareholder or customer concern For the selected metrics and their thresholds are reviewed collectively to understand their combined impact. Each metric's currently has equal weight within the matrix is also assessed and adjusted as needed. Regular reviews are scheduled, and any updates are being documented to maintain a transparent and accountable process. The frequency at which the effect occurs is selected, reviewed, and updated based on the nature and impact of the effect. Typically, this range from a one-time occurrence to quarterly, biennially, or even less frequently. Selection and review are conducted at a minimum on an annual basis to ensure relevance and accuracy. For critical effects, quarterly reviews are in place to promptly address any changes. By adhering to these guidelines, AESL plans to ensure that their metrics and thresholds remain relevant, accurate, and aligned with their strategic objectives. Time horizon over which the effect occurs: i.e., short-, medium-, and long-term are in line with our time horizons reported in 2.1.

# **Opportunities**

# (2.4.1) Type of definition

Select all that apply

✓ Qualitative

✓ Quantitative

#### (2.4.2) Indicator used to define substantive effect

Select from:

☑ Direct operating costs

# (2.4.3) Change to indicator

Select from:

✓ % increase

(2.4.4) % change to indicator

#### (2.4.6) Metrics considered in definition

Select all that apply

- ✓ Frequency of effect occurring
- ☑ Time horizon over which the effect occurs
- ✓ Likelihood of effect occurring

✓ Other, please specify :any one, or because of combined multiple cases to create an impact due to: - the proportion of business units [BU] affected - the size of the impact on those BU - our dependency on that BU - the potential for shareholder or customer concern

# (2.4.7) Application of definition

A matrix approach is employed where in multiple metrics such as 1) Frequency of Effect Occurring 2) Time Horizon of Effect and 3) The likelihood of the effect occurring are used together. For the selected metrics and their thresholds are reviewed collectively to understand their combined impact. Each metric's weight within the matrix is also assessed and adjusted as needed. Regular reviews are scheduled, and any updates are being documented to maintain a transparent and accountable process. The frequency at which the effect occurs is selected, reviewed, and updated based on the nature and impact of the effect. Typically, this can range from a one-time occurrence to quarterly, biennially, or even less frequently. Selection and review are conducted at a minimum on an annual basis to ensure relevance and accuracy. For critical effects, quarterly reviews are in place to promptly address any changes. By adhering to these guidelines, AESL plans to ensure that their metrics and thresholds remain relevant, accurate, and aligned with their strategic objectives.

### Risks

# (2.4.1) Type of definition

Select all that apply

✓ Quantitative

# (2.4.2) Indicator used to define substantive effect

Select from:

✓ Revenue

(2.4.3) Change to indicator

✓ % decrease

#### (2.4.4) % change to indicator

Select from:

✓ 11-20

## (2.4.6) Metrics considered in definition

Select all that apply

- ✓ Frequency of effect occurring
- ✓ Time horizon over which the effect occurs
- ✓ Likelihood of effect occurring
- ✓ Other, please specify

# (2.4.7) Application of definition

A matrix approach is employed where in multiple metrics such as 1) Frequency of Effect Occurring 2) Time Horizon of Effect and 3) The likelihood of the effect occurring are used together. anlong with, any one, or because of combined multiple cases to create an impact due to: - the proportion of business units [BU] affected - the size of the impact on those BU - our dependency on that BU - the potential for shareholder or customer concern For the selected metrics and their thresholds are reviewed collectively to understand their combined impact. Each metric's currently has equal weight within the matrix is also assessed and adjusted as needed. Regular reviews are scheduled, and any updates are being documented to maintain a transparent and accountable process. The frequency at which the effect occurs is selected, reviewed, and updated based on the nature and impact of the effect. Typically, this range from a one-time occurrence to quarterly, biennially, or even less frequently. Selection and review are conducted at a minimum on an annual basis to ensure relevance and accuracy. For critical effects, quarterly reviews are in place to promptly address any changes. By adhering to these guidelines, AESL plans to ensure that their metrics and thresholds remain relevant, accurate, and aligned with their strategic objectives. Time horizon over which the effect occurs: i.e., short-, medium-, and long-term are in line with our time horizons reported in 2.1.

# Risks

# (2.4.1) Type of definition

Select all that apply

✓ Quantitative

## (2.4.2) Indicator used to define substantive effect

Select from:

✓ Other, please specify :Profit

# (2.4.3) Change to indicator

Select from:

✓ % decrease

(2.4.4) % change to indicator

Select from:

✓ 1-10

# (2.4.6) Metrics considered in definition

Select all that apply

✓ Frequency of effect occurring

☑ Time horizon over which the effect occurs

✓ Likelihood of effect occurring

# (2.4.7) Application of definition

A matrix approach is employed where in multiple metrics such as 1) Frequency of Effect Occurring 2) Time Horizon of Effect and 3) The likelihood of the effect occurring are used together. anlong with, any one, or because of combined multiple cases to create an impact due to: - the proportion of business units [BU] affected - the size of the impact on those BU - our dependency on that BU - the potential for shareholder or customer concern For the selected metrics and their thresholds are reviewed collectively to understand their combined impact. Each metric's currently has equal weight within the matrix is also assessed and adjusted as needed. Regular reviews are scheduled, and any updates are being documented to maintain a transparent and accountable process. The frequency at which the effect occurs is selected, reviewed, and updated based on the nature and impact of the effect. Typically, this range from a one-time occurrence to quarterly, biennially, or even less frequently. Selection and review are conducted at a minimum on an annual basis to ensure relevance and accuracy. For critical effects, quarterly reviews are in place to promptly address any changes. By adhering to these guidelines, AESL plans to ensure that their metrics and thresholds remain relevant, accurate, and aligned with their strategic objectives. Time horizon over which the effect occurs i.e., short-, medium-, and long-term are in line with our time horizons reported in 2.1.

# Risks

# (2.4.1) Type of definition

Select all that apply

✓ Quantitative

### (2.4.2) Indicator used to define substantive effect

Select from:

Market share

# (2.4.3) Change to indicator

Select from:

✓ % decrease

# (2.4.4) % change to indicator

Select from:

✓ 1-10

# (2.4.6) Metrics considered in definition

Select all that apply

- ✓ Frequency of effect occurring
- ✓ Time horizon over which the effect occurs
- ✓ Likelihood of effect occurring

# (2.4.7) Application of definition

A matrix approach is employed where in multiple metrics such as 1) Frequency of Effect Occurring 2) Time Horizon of Effect and 3) The likelihood of the effect occurring are used together. anlong with, any one, or because of combined multiple cases to create an impact due to: - the proportion of business units [BU] affected - the size of the impact on those BU - our dependency on that BU - the potential for shareholder or customer concern For the selected metrics and their thresholds are reviewed collectively to understand their combined impact. Each metric's currently has equal weight within the matrix is also assessed and adjusted as needed. Regular reviews are scheduled, and any updates are being documented to maintain a transparent and accountable process. The frequency at which the effect occurs is selected, reviewed, and updated based on the nature and impact of the effect. Typically, this range from a one-time occurrence to quarterly, biennially, or even less

frequently. Selection and review are conducted at a minimum on an annual basis to ensure relevance and accuracy. For critical effects, quarterly reviews are in place to promptly address any changes. By adhering to these guidelines, AESL plans to ensure that their metrics and thresholds remain relevant, accurate, and aligned with their strategic objectives. Time horizon over which the effect occurs: i.e., short-, medium-, and long-term are in line with our time horizons reported in 2.1. [Add row]

# (2.5) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or human health?

### (2.5.1) Identification and classification of potential water pollutants

Select from:

☑ Yes, we identify and classify our potential water pollutants

### (2.5.2) How potential water pollutants are identified and classified

We have structured Policy framework approach such as Corporate EnvironmentPolicy, Corporate Sustainability Policy, These policies directs organization to use water (as a resource) in responsible manner. To have reduced impact of discharge on ecology, company primarily identifies the pollutants. Then improves the methods to reduce the same, dilute the same and increase reuse /recycle same so that pollutant discharge is nil or minimal. The company identifies the pollutants in following ways:(1) Schedule-1 of Environment (Protection) Rules, 1986 & its subsequent amendments hasidentified specific pollutants for generation business process (for thermal power plant). Company adheres to it.(2) The Environment Impact Assessment carried out while obtaining license for Generation business mentions the potential water pollutants. (For thermal power plants, waste heat re-covery plants ). Company monitors them. Our thermal power plant and waste heat recovery powerplant are operated as per the regulations stipulated by Pollution Control Board. The stipulations mention identified pollutants and their limiting value for compliance. Impact is determined based on the business requirements and applicable regulations.

(2.5.1) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities.

Row 1

# (2.5.1.1) Water pollutant category

#### ✓ Other nutrients and oxygen demanding pollutants

#### (2.5.1.2) Description of water pollutant and potential impacts

Oxygen-demanding wastes are the second category of water pollutants and these are the wastes that can be decomposed by oxygen requiring bacteria. The amount of oxygen consumed by bacteria and other microorganisms while they decompose organic matter under aerobic conditions at a specific temperature is known as Biochemical oxygen demand or BOD. The Biodegradable organic substances which are found in our wastewater, which is mainly due to human waste and food Residue in wastewater Potential impacts: BOD and COD can reduce the DO of lakes and rivers, and low concentrations can cause eutrophication and harm aquatic life. Our wastewater discharge can create water high in COD/BOD, requiring careful treatment before discharge to preserve the health of waterways. Biological oxygen demand is important for water quality because it provides an index to assess the effect discharged wastewater will have on our environment. BOD is used extensively for treating wastewater, as decomposition of organic waste by microorganisms is commonly used for treatment.

# (2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

✓ Upstream value chain

#### (2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

✓ Water recycling

- ✓ Upgrading of process equipment/methods
- ✓ Beyond compliance with regulatory requirements
- ☑ Requirement for suppliers to comply with regulatory requirements
- ☑ Industrial and chemical accidents prevention, preparedness, and response
- ☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements
- Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

# (2.5.1.5) Please explain

We do not only monitor water quality to minimize risks for our facilities, but we also check compliance with legal requirements (national, regional and local) of our water discharges to avoid fines or loss of operational permits and to protect the receiving ecosystems. AESL focuses on water quality (by controlling spillages and wastewater) and quality control of stored water in reservoirs. Water discharge legal requirements are periodically reviewed to ensure full compliance. Discharge

always takes place downstream of a treatment process that removes any pollutants present to a level where they will not have a negative impact on the receiving water body, in compliance with the limits provided under applicable regulations and by operating permits. We have following actions to manage water-related risks in our operations:- Spillage control;- Wastewater quality control and reutilization (adoption of zero liquid discharge process);- Quality control of stored water in hydro reservoirs to ensure the minimum ecological flows. By monitoring discharged water quality, we are able to respond more effectively to unpredicted impacts that might affect our facilities and develop appropriate response strategies to reduce risk exposure. We assess the success of the water quality programs based on: 1. Compliance with the legal requirements; 2. Requirements received from Authorities or any other stakeholders; and 3. The absence of complaints.

# Row 2

# (2.5.1.1) Water pollutant category

Select from:

☑ Other, please specify :Waterused for cleaning of Solar PV modules installed for meeting auxilary power requirements

# (2.5.1.2) Description of water pollutant and potential impacts

Description of water pollutant: Increase in Suspended Solids post cleaning of solar modules for the bird droppings, dust settlements etc. Potential impacts: No change in water quality except for suspended solids and is not harmful to Environment. the bird droppings & dust are bio degradable and within biocapacity limits of environment.

## (2.5.1.3) Value chain stage

Select all that apply

Direct operations

✓ Upstream value chain

✓ Downstream value chain

### (2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

✓ Water recycling

☑ Requirement for suppliers to comply with regulatory requirements

✓ Upgrading of process equipment/methods

# (2.5.1.5) Please explain

The water from the solar modules cleaning is sent to STP for treatment before it is discharged with in plant premises inform of horticulture requirements. This proactive approach helps in minimizing environmental impact, lowering costs, and maintaining competitive advantages. Implementing water recycling systems reduces the consumption of fresh water and minimizes wastewater discharge. This practice conserves natural resources and mitigates the environmental impact of water usage. Evaluation: The effectiveness of water recycling is evaluated by tracking the volume of water recycled, the reduction in fresh water usage, and compliance with water quality standards. Same is being shared with supply chain partners and are expected to adhere the regulatory requirements w.r.t. waste water recycling as per company's Supplier code of conduct. Evaluation: The success of this procedure is planned to be evaluated through regular audits, compliance checks, and performance reviews. Key metrics include the rate of compliance, the number of non-conformities identified, and corrective actions taken. We are also exploring water less cleaning processes to reduce the water required for solar module cleaning frequency. Evaluation: Success is measured through benchmarking against industry standards, monitoring process efficiency, and assessing improvements in key performance indicators (KPIs) such as production yield, energy consumption, and waste reduction

### Row 3

# (2.5.1.1) Water pollutant category

Select from:

✓ Other physical pollutants

## (2.5.1.2) Description of water pollutant and potential impacts

Thermal pollution: Success factor is temperature near discharge destination as advised by authority which is monitored on continual basis periodically. Our 500MW thermal powerplant in the vicinity of sea coast, sea water is used for cooling purpose. These are "once through" cooling systems where water post cooling is discharged into the sea. Temperatures higher than sea water cause thermal pollution. This may have adverse impact on aquatic eco-system depending on geography and level of temperature. The level of temperature is stipulated by regulations for power plant @ 5Deg C and company adheres to it. For the purpose, location has designed discharge water channels for natural cooling which achieves permitted exit temperature of water as stipulated and does not harm the marine ecosystem.

# (2.5.1.3) Value chain stage

Select all that apply

✓ Direct operations

### (2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

✓ Water recycling

✓ Resource recovery

- ✓ Upgrading of process equipment/methods
- ☑ Beyond compliance with regulatory requirements
- ✓ Reduction or phase out of hazardous substances
- ☑ Implementation of integrated solid waste management systems
- ☑ Requirement for suppliers to comply with regulatory requirements
- ☑ Industrial and chemical accidents prevention, preparedness, and response
- ☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements
- Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

# (2.5.1.5) Please explain

The level of discharge sea water temperature is stipulated by regulations for power plants and company adheres to it. Water used for cooling in our plants is not directly discharged into the environment, but stored/reused until temperature decreases and its quality has acceptable levels. In most of our thermal power plants, there is a surveillance plan to control the possible affection of the receiving aquatic environment. For the purpose, locations has designed discharge water channels for natural cooling which achieves permitted exit temperature of water as stipulated and does not harm the marine ecosystem. The discharged water is continuously monitored Apart from this company assess the critical infrastructure for spillage, leakage etc. and their resilience. Company partly reduces the temperature by recovering the heat carried by sea water beyond the compliance requirements by mixing with cold water and discharge to sea is after the chlorine shock treatment as process approved by pollution control board. company also follows waste management process to avoid mixing of waste streams and the management process is also validated by third party. Company is Zero Waste to landfill certified for the same. All Supply chain partners are screened and are expected to comply with all regulatory requirements as per AESL's Supplier Code of Conduct. [Add row]

# C3. Disclosure of risks and opportunities

(3.1) Have you identified any environmental risks which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?

**Climate change** 

## (3.1.1) Environmental risks identified

Select from:

☑ Yes, both in direct operations and upstream/downstream value chain

#### Water

# (3.1.1) Environmental risks identified

Select from:

☑ Yes, both in direct operations and upstream/downstream value chain

# **Plastics**

# (3.1.1) Environmental risks identified

#### Select from:

🗹 No

(3.1.2) Primary reason why your organization does not consider itself to have environmental risks in your direct operations and/or upstream/downstream value chain

Select from:

☑ Other, please specify :Judged to be unimportant or not relevant

#### (3.1.3) Please explain

Being responsible corporate, We are aware of plastic waste impacts when mis-managed. Due to nature of the business, we are in i.e., Generation, Purchase, Transmission & distribution of Electricity. Plastic is not required for packaging the good/services; hence Product use phase is ZERO; but we do use goods / products that have plastic packaging in our project activities and hence we segregate and dispose the plastic waste as per the directives of State Pollution Control Board(s) of respective states where we have operations. Also, as per Company policy we don't use any Single use plastic and are periodically assessed and certified as Single Use plastic free by M/s. Bureau Veritas India Pvt. Ltd for our generation @ Dahanu, and by M/s. The Confederation of Indian Industry (CII) for Transmission & Distribution sites including corporate office. Adani Energy Solutions Limited is also certified for Zero Waste to Landfill YoY by M/s. Intertek India. [Fixed row]

(3.1.1) Provide details of the environmental risks identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.

#### **Climate change**

#### (3.1.1.1) Risk identifier

Select from:

🗹 Risk1

# (3.1.1.3) Risk types and primary environmental risk driver

Acute physical

✓ Cyclone, hurricane, typhoon

## (3.1.1.4) Value chain stage where the risk occurs

Select from:

✓ Direct operations

#### (3.1.1.6) Country/area where the risk occurs

Select all that apply

#### (3.1.1.9) Organization-specific description of risk

According to recent trends, the frequency of major cyclones (category 3 and above) has been increasing over the past 38 years (1979-2017). These powerful storms have the potential to cause significant damage to our assets. If this trend continues as climate change persists, we may see an even greater number of major cyclones in the future. One of the primary threats associated with these cyclones is high wind speeds, which can cause devastating damage to our assets in Gujrat, Rajasthan. The western coast of India, including states such as Maharashtra, Goa, and Gujarat, where we have operational assests is experiencing a rise in the frequency and intensity of extreme weather events such as cyclones, storms, and heavy rainfall. These events can cause direct damage to transmission towers through strong winds, flying debris, and flooding. For example, Cyclone Tauktae in 2021 caused significant damage to the power infrastructure in Gujarat, Rajasthan including the collapse of several transmission towers of its competition.

#### (3.1.1.11) Primary financial effect of the risk

Select from:

☑ Decreased revenues due to reduced production capacity

# (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

✓ Short-term

Medium-term

✓ Long-term

# (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

✓ More likely than not

# (3.1.1.14) Magnitude

Select from:

✓ Medium

# (3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

These cyclones have potential to cause major damage. If this trend continues as the climate changes, the number of major cyclones may increase. High wind speeds are one of the major hazards associated with cyclones and have the potential to destroy our assets. To determine the impact of cyclones on assets, AESL has conducted a thorough climate risk assessment for its integrated units, grinding units, Bulk cement terminals, and blending units using scenarios SSP2-4.5 and SSP5-6.0. Our scenario analysis indicates that this risk has a potential financial impact of less than or equal to 2% of our earnings before interest, taxes, depreciation, and amortization (EBITDA).

## (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

Yes

(3.1.1.19) Anticipated financial effect figure in the short-term – minimum (currency)

15000000

#### (3.1.1.20) Anticipated financial effect figure in the short-term – maximum (currency)

350000000

(3.1.1.21) Anticipated financial effect figure in the medium-term – minimum (currency)

15000000

(3.1.1.22) Anticipated financial effect figure in the medium-term – maximum (currency)

105000000

(3.1.1.23) Anticipated financial effect figure in the long-term – minimum (currency)

105000000

(3.1.1.24) Anticipated financial effect figure in the long-term – maximum (currency)

## (3.1.1.25) Explanation of financial effect figure

Our financial impact numbers are estimated basis the cost of availability and cost of restoration of our assets in an event of acute physical event. The cost of availability assumes the outage time of 30 days following an event and has an implication of INR 1.5 to 35 Crore p.a. in short term, whereas the cost of restoration depends on voltage of the transmission lines- example: 132 kV- INR 1.5 to 2.5 Crore and more than 132 kV - INR 2.5 to 3.5 Crore.

#### (3.1.1.26) Primary response to risk

#### Infrastructure, technology and spending

✓ Other infrastructure, technology and spending, please specify :Infrastructure related expenses to ensure that plant's structural components, such as mounting systems and support structures, are designed and engineered to withstand fierce wind speeds and flying debris associated with tropical cyclones

# (3.1.1.27) Cost of response to risk

25000000

#### (3.1.1.28) Explanation of cost calculation

We have taken up adaptive and mitigative approaches to minimise any climate related impacts on our operational sites. Before the commencement of any project an Area Flood Study is conducted to understand the potential flooding risk, consequently an inundation of 0.5-0.8 meters is created to ensure project sustainability. The cost of response is taken as an average of cost of restoration. This further depends on voltage of the transmission lines i.e. for voltage of 132 kV- the cost varies between INR 1.5 to 2.5 Crore whereas for voltage more than 132 kV, the cost varies between INR 2.5 t 3.5 Crore.

# (3.1.1.29) Description of response

We have constituted a designated group to assess and mitigate acute physical risks. We triggered pre-emptive steps with our "Emergency Restoration System" (also known as "Emergency Response and Disasters Management") system. A disaster management plan for every site is carried out. Structures, machinery, and replacement parts were all inspected for possible dangers as specified in the plan. Teams were formed to enable an unhindered and simple flow of information during the tragedy, and the appropriate tasks and duties were assigned to members. Control rooms were ready to make the educated judgments that would be required to change the load as the circumstances required. Additionally, supplies were placed in the canteen and storerooms to serve as refuge homes in case of an unfortunate occurrence. Parties that may be impacted were notified and prepared to take quick action. For instance, the Vidharbha region of Maharashtra had severe thunderstorms and wind during the first week of June 2019. Several trees, poles, and transmission cables fell, worsening the situation. Maharashtra is where our 765 kV S/C Tiroda to Koradi Line-2 travels through. It serves as a crucial link for the electricity evacuation from Maharashtra's eastern region and meets the load requirement of western Maharashtra. Our 765 kV Tiroda-Koradi line # 2 witnessed the fall of one tower and partial damage to two successive towers near the Saoner

region on June 2, 2018, amid a strong thunderstorm and wind. The collapsed skyscrapers were put back on a war footing immediately. Initially, within a 15-day historical window, the line was restored on the Emergency Restoration System (ERS). To restore the line to record speed, the ERS is quite helpful. Guy wires were used to raise the towers since the framework was lightweight and modular, making it simple to carry to the site and build. The line was successfully charged at permanent coordinates within a month and restored.

#### Water

# (3.1.1.1) Risk identifier

Select from:

✓ Risk6

## (3.1.1.3) Risk types and primary environmental risk driver

#### **Chronic physical**

✓ Water stress

# (3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Direct operations

## (3.1.1.6) Country/area where the risk occurs

Select all that apply

🗹 India

# (3.1.1.7) River basin where the risk occurs

Select all that apply

✓ Ganges - Brahmaputra

✓ Other, please specify :Inland Drainage Basin

# (3.1.1.9) Organization-specific description of risk

For AESL, this presents a significant challenge, as water stress can impact our operations and result in potential financial losses. As a responsible and sustainabilityfocused organization, we recognize the importance of water conservation and management. We are committed to implementing measures to reduce our water footprint and ensure a reliable supply of water for our operations, while also protecting the environment and supporting local communities. By addressing water stress and risk management, we can ensure the long-term sustainability of our business and contribute to a more resilient future for our stakeholders.

#### (3.1.1.11) Primary financial effect of the risk

Select from:

✓ Increased indirect [operating] costs

## (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

Medium-term

# (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

✓ About as likely as not

# (3.1.1.14) Magnitude

Select from:

✓ Low

# (3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

The combination of this increased demand and an unchanging or depleting water supply results in water scarcity or water stress, which can have a significant impact on our operations and financial performance. To comprehensively assess the potential risks associated with water stress, AESL has conducted a thorough climate risk assessment for its integrated units, grinding units, bulk cement terminals, and blending units. Our analysis employs scenarios SSP2-4.5, and SSP5-6.0 to determine the potential impacts of water stress on our assets. The assessment is based on a hazard metric that considers current baseline water stress metrics from the World Resources Institute (WRI) Aqueduct as well as projections for the 2020s to 2040s. Our scenario analysis indicates that the potential financial impact of water stress on our earnings before interest, taxes, depreciation, and amortization (EBITDA) is less than or equal to 2%.

# (3.1.1.17) Are you able to quantify the financial effect of the risk?

✓ Yes

#### (3.1.1.21) Anticipated financial effect figure in the medium-term – minimum (currency)

15000000

# (3.1.1.22) Anticipated financial effect figure in the medium-term – maximum (currency)

#### 385000000

## (3.1.1.25) Explanation of financial effect figure

AESL calculated the values for 2022 & 2023 of facilities in water stressed areas using the water tool WRI Aqueduct. In this analysis, AESL identified which of their facilities are in water-stressed areas. Based on the classification provided by the WRI "Aqueduct Water Risk Atlas", the water stressed areas are those where the ratio between the total annual withdrawal of surface water or groundwater for different uses (civil, industrial, agricultural and livestock) and the total annual renewable water supply available ("base water stress", understood, therefore, as the level of competition between all users) is high (40-80%) or extremely high (80%). The information obtained allows us to: • compare our water needs with water availability at India and watershed levels; • determine the relevance of water risks in our portfolio in order to prioritize action; and • enable effective communications with our internal and external stakeholders. Although 11 transmission sub-stations operate in water stressed areas, dependency on water is negligible as 99% Water consumption is at 500MW thermal power plant for cooling (sea-water). Dahanu is the costal thermal power plant that uses sea water for cooling purpose which is returned back after negligible losses in Qty & Quality as per MPCB approved parameters. In the reporting period 3248.48 MU's were generated at Dahanu power plant out of total sold electricity of 9916 MU's during the reporting period, We have identified 1 generating thermal power plant in the Indian West coast river basin that are impacted by water risks as per WRI Aqueduct tool, which is subject to inherent water risk due to regulatory restrictions in our value chain with the potential to have a substantive impact on our operations. This plant currently contributes to 25% of the power supplied by AESL to Mumbai region. The percentage of our global revenue that could be affected is estimated and depends on a range of factors such as the impact type, magnitude and duration, as well as the unique nature of the kn

# (3.1.1.26) Primary response to risk

#### Compliance, monitoring and targets

☑ Implementation of environmental best practices in direct operations

# (3.1.1.27) Cost of response to risk

10400000

# (3.1.1.28) Explanation of cost calculation

The cost estimated is dependent on multiple factors: • Develop and implement comprehensive water management plans for all facilities. • Engage with local stakeholders to align water use priorities and practices. • Train staff on best practices for sustainable water use. • Participate in local and regional water governance forums. • Communicate water risk management strategies to stakeholders, including local communities and regulatory bodies. • Develop partnerships for community-based water conservation projects. cost associated with Implementing the above measures will not only mitigate the water risks identified but also contribute to the long-term sustainability of AESL's operations. Investing in water efficiency, alternative water sources, enhanced management practices, and stakeholder engagement is crucial to ensuring the reliability of AESL's power supply and safeguarding the company's revenue streams.

# (3.1.1.29) Description of response

Our financial impact numbers are estimated basis the cost of availability and cost of restoration of our assets in an event of acute physical event. The cost of availability assumes the outage time of 30 days following an event and has an implication of INR 1.5 to 35 Crore, whereas the cost of restoration depends actions required to be taken pre event, like engegening with regulators and other stakeholders, Water Efficiency Improvements within operations, • Develop and implement comprehensive water management plans for all facilities. • Engage with local stakeholders to align water use priorities and practices. • Train staff on best practices for sustainable water use. Water Efficiency Improvements, Enhanced Water Management Practices, Regulatory and Community Engagement INR 1600000 to INR 10400000 Implementing the above measures will not only mitigate the water risks identified but also contribute to the long-term sustainability of AESL's operations. Investing in water efficiency, alternative water sources, enhanced management practices, and stakeholder engagement is crucial to ensuring the reliability of AESL's power supply and safeguarding the company's revenue streams. This will contribute to Sustainable Development Goal 6 which goes beyond drinking water, sanitation and hygiene to also address the quality and sustainability of water resources, which are critical to the survival of people and the planet. This will contribute to Sustainable Development Goal 9 to build resilient infrastructure, promote sustainable industrialization and fosters innovation. and SDG 17 Partnership for the Goal for teh inclusive and collective resilient future.

### Climate change

### (3.1.1.1) Risk identifier

Select from:

🗹 Risk2

# (3.1.1.3) Risk types and primary environmental risk driver

**Chronic physical** 

✓ Temperature variability

#### (3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Direct operations

#### (3.1.1.6) Country/area where the risk occurs

Select all that apply

🗹 India

## (3.1.1.9) Organization-specific description of risk

To mitigate the risks associated with temperature rise changes, AESL has conducted a comprehensive climate risk assessment. The assessment utilized climate change scenarios - SSP2-4.5, and SSP5-6.0 - to determine the potential impacts of temperature extremes on its assets. By 2030, under moderate SSP scenarios, the global average temperature is expected to rise by 1.5 to 2 degrees C & can affect AESL's transmission business in the following ways: • Higher temperatures will lead to increased electricity demand for air conditioning & cooling systems, putting additional stress on transmission networks. • Elevated temperatures cause transmission lines to expand, leading to sagging, which can result in reduced clearance & potential safety hazards. • Transmission efficiency decreases with higher temperatures due to increased resistance in conductors, leading to higher energy losses. By 2040, under more severe SSP scenarios, the temperature rise could reach 2.5 to 3 degrees Celsius. The impact on the transmission business is likely to intensify: • Substations & transformers may overheat, leading to equipment failure & reduced lifespan. • The increased frequency of extreme weather events, such as heatwaves & storms, can damage damage transmission infrastructure, leading to higher maintenance costs & downtime. By analyzing these scenarios AESL aims to better understand the potential risks and develop strategies to minimize their exposure to the effects of climate change.

# (3.1.1.11) Primary financial effect of the risk

Select from:

✓ Increased indirect [operating] costs

### (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

✓ Long-term

## (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

✓ More likely than not

Select from:

✓ Low

# (3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

In response to the rising global temperatures and their associated impacts, AESL has conducted a thorough climate risk assessment to identify and mitigate the potential risks facing in the operation. The assessment utilized three climate change scenarios - SSP2-4.5, and SSP5-6.0 - to analyze the potential effects of temperature extremes on our assets. By examining these scenarios, we have gained a deeper understanding of the potential risks and are developing strategies to minimize our exposure to the effects of climate change. By 2030, under moderate SSP scenarios, the global average temperature is expected to rise by 1.5 to 2 degrees Celsius. This increase in temperature can affect the transmission business in the following ways: • Increased Demand for Cooling: Higher temperatures will lead to increased electricity demand for air conditioning and cooling systems, putting additional stress on transmission networks. • Thermal Expansion of Transmission Lines: Elevated temperatures cause transmission lines to expand, leading to sagging, which can result in reduced clearance and potential safety Efficiency Losses: Transmission efficiency decreases with higher temperatures due to increased resistance in conductors, leading to higher energy hazards. • losses. By 2040, under more severe SSP scenarios, the temperature rise could reach 2.5 to 3 degrees Celsius. The impact on the transmission business is likely to Overheating of Equipment: Substations and transformers may overheat, leading to equipment failure and reduced lifespan. intensify: • Infrastructure Vulnerability: The increased frequency of extreme weather events, such as heatwaves and storms, can damage transmission infrastructure, leading to higher maintenance costs and downtime. Looking beyond 2040, if climate change mitigation efforts are insufficient, temperatures could rise by over 3 degrees Celsius. This scenario presents severe challenges: •System Reliability Issues: The cumulative effects of higher temperatures and extreme weather events will challenge the reliability and stability of transmission networks, necessitating substantial upgrades and adaptations. Increased Operational Costs: The need for enhanced cooling systems, robust infrastructure, and frequent maintenance will drive up operational costs.

# (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

🗹 Yes

# (3.1.1.23) Anticipated financial effect figure in the long-term – minimum (currency)

40000000

# (3.1.1.24) Anticipated financial effect figure in the long-term – maximum (currency)

385000000

## (3.1.1.25) Explanation of financial effect figure

By 2030, under moderate SSP scenarios, the global average temperature is expected to rise by 1.5 to 2 degrees C & can affect AESL's transmission business in the following ways: • Higher temperatures will lead to increased electricity demand for air conditioning & cooling systems, putting additional stress on transmission networks. • Elevated temperatures cause transmission lines to expand, leading to sagging, which can result in reduced clearance & potential safety hazards. •

Transmission efficiency decreases with higher temperatures due to increased resistance in conductors, leading to higher energy losses. By 2040, under more severe SSP scenarios, the temperature rise could reach 2.5 to 3 degrees Celsius. The impact on the transmission business is likely to intensify: • Substations & transformers may overheat, leading to equipment failure & reduced lifespan. •The increased frequency of extreme weather events, such as heatwaves & storms, can damage transmission infrastructure, leading to higher maintenance costs & downtime. Looking beyond 2040, if climate change mitigation efforts are insufficient, temperatures could rise by over 3 degrees C, posing challenges: • The cumulative effects of higher temperatures & extreme weather events will challenge the reliability & stability of transmission networks, necessitating substantial upgrades & adaptations. • The need for enhanced cooling systems, robust infrastructure, & frequent maintenance will drive up operational costs. Investment in Advanced Technologies Adopting advanced technologies such as high-temperatures & reduce energy losses. Infrastructure Upgrades AESL shall invest in upgrading existing transmission infrastructure to handle higher thermal loads & prevent sagging. This includes replacing aging conductors with heat-resistant materials & reinforcing transmission towers. Enhanced Monitoring & Maintenance Implementing real-time monitoring systems for temperature, load, & equipment condition can help detect & address issues before they escalate. Regular maintenance schedules shall be adjusted to account for higher operational stress due to temperature rise. Diversifying Energy Sources Integrating renewable energy sources such as solar & wind can reduce the dependency on traditional power generation, which may be more vulnerable to temperature rises.

#### (3.1.1.26) Primary response to risk

#### Compliance, monitoring and targets

✓ Improve monitoring of direct operations

#### (3.1.1.27) Cost of response to risk

#### 125750000000

# (3.1.1.28) Explanation of cost calculation

The cost estimations are based on current market rates & assume a linear cost increase for scaling up measures. Costs may vary depending on technological advancements, labour rates, & regulatory changes over time. The methodology involves: • Identifying critical areas for upgrades & improvements. • Estimating the scope of implementation (in kilometers, substations, or MW). • Applying current cost rates to the estimated scope for each measure. • Summing up the costs to provide a comprehensive estimate. In conclusion, the transmission business faces significant challenges due to rising temperatures under SSP scenarios over the coming decades. Adopting advanced technologies, upgrading infrastructure, enhancing monitoring & maintenance, diversifying energy sources, & engaging in policy advocacy are essential measures. These actions, backed by substantial investment, will ensure the resilience & efficiency of transmission networks, safeguarding the reliable delivery of electricity in a chan

# (3.1.1.29) Description of response

With detailed Temperature rise projections study AESL has plans to: 1) Investment in Advanced Technologies Adopting advanced technologies such as hightemperature superconductors, modernized transformers, & smart grid systems can improve efficiency & resilience. These technologies can withstand higher temperatures & reduce energy losses. Infrastructure Upgrades 2) AESL shall invest in upgrading existing transmission infrastructure to handle higher thermal loads & prevent sagging. This includes replacing aging conductors with heat-resistant materials & reinforcing transmission towers. 3) Enhanced Monitoring & Maintenance Implementing real-time monitoring systems for temperature, load, & equipment condition can help detect & address issues before they escalate. Regular maintenance schedules shall be adjusted to account for higher operational stress due to temperature rise. 4) Diversifying Energy Sources Integrating renewable energy sources such as solar & wind can reduce the dependency on traditional power generation, which may be more vulnerable to temperature rises. This diversification can also alleviate the pressure on transmission networks. 5) Collaboration & Policy Advocacy AESL shall collaborate with policymakers to develop regulations & standards that promote resilience in transmission systems. Engaging in advocacy for policies that support climate adaptation & funding for infrastructure upgrades is crucial.

### **Climate change**

# (3.1.1.1) Risk identifier

Select from:

✓ Risk3

#### (3.1.1.3) Risk types and primary environmental risk driver

Policy

✓ Carbon pricing mechanisms

# (3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Direct operations

#### (3.1.1.6) Country/area where the risk occurs

Select all that apply India

# (3.1.1.9) Organization-specific description of risk

Carbon Pricing Risk: The introduction of carbon pricing mechanisms, such as carbon taxes or cap-and-trade systems, could significantly impact the Indian Electric Utility. These mechanisms would increase the operational costs of thermal power plants, which are major sources of greenhouse gas emissions. Consequently, the utility may face higher expenses in generating electricity from these plants, leading to increased electricity prices for consumers. Moreover, carbon pricing could necessitate extensive investment in carbon capture and storage (CCS) technologies to mitigate emissions and avoid hefty penalties. The financial burden of these investments, combined with the potential for reduced profitability due to higher generation costs, may compromise the utility's financial stability. Additionally, the transmission and distribution assets of the utility could also be indirectly affected. Increased electricity prices could reduce overall demand, leading to lower revenue from transmission and distribution services. Furthermore, the utility would need to invest in upgrading its grid infrastructure to integrate more renewable energy sources and ensure efficient energy distribution, aligning with decarbonization goals. Overall, carbon pricing risk underscores the need for the Indian Electric Utility like us to embrace sustainable practices, diversify its energy portfolio, and enhance its infrastructure to remain competitive and resilient in the evolving energy landscape.

# (3.1.1.11) Primary financial effect of the risk

Select from:

☑ Other, please specify :Postive and or Negative Impact our access to strategically important capital markets.

## (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

Medium-term

## (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

✓ More likely than not

# (3.1.1.14) Magnitude

Select from:

🗹 Low

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

The regulatory risks and growing litigation and activism against fossil fuels pose significant threats to the financial position, financial performance, and cash flows of the organization. A potential Carbon Tax could increase costs and impact our access to capital markets, potentially limiting our ability to secure funding for future projects. Stricter reporting obligations and mandates on renewable energy could also lead to increased costs and reduced profits. Furthermore, growing litigation and activism against fossil fuels could result in higher provisions for environmental and legal liabilities, negatively impacting our financial performance and potentially draining our cash reserves. Overall, these risks could have a material impact on our financial position, leading to reduced profits. Furthermore, growing litigation and potentially even a decline in our creditworthiness. Impact of Carbon Pricing Under SSP Scenarios Carbon pricing may affect AESL & the electric utility sector by increasing the cost of carbon emissions. This incentivizes utilities to reduce their carbon footprint by adopting cleaner technologies and improving efficiency. Under different SSP scenarios, the implications vary: In the SSP1 scenario, which focuses on sustainability, carbon pricing mechanisms are stringent. Utilities are likely to invest & or promote heavily in renewable energy sources, such as solar and wind, and enhance grid infrastructure to accommodate decentralized production. The SSP2 scenario represents a continuation of current trends with moderate policy interventions. Here, utilities would balance between fossil fuels and renewable energy, gradually phasing out the former as carbon pricing unities to focus on short-term compliance rather than long-term sustainability. Under the SSP4 scenario, where inequalities are pronounced, the impact of carbon pricing may exacerbate disparities. Wealthier regions might adopt cleaner technologies faster, while poorer areas struggle to comply. This scenario emphasizes rapid economic

#### (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

🗹 Yes

# (3.1.1.21) Anticipated financial effect figure in the medium-term – minimum (currency)

1936347861

## (3.1.1.22) Anticipated financial effect figure in the medium-term – maximum (currency)

82200000000

# (3.1.1.25) Explanation of financial effect figure

The implementation of carbon pricing represents a significant shift in policy designed to mitigate climate change. For Indian electric utilities like us, this policy could bring about profound changes, both operationally and financially. To effectively respond to carbon pricing, Indian electric utility like AESL must undertake several key actions: 1. Transition to Renewable Energy increase and or promote investments in renewable energy sources, such as solar, wind, and biomass. This transition will reduce dependency on fossil fuels and align with emission reduction targets. 2. Enhance Energy Efficiency Implementing advanced technologies and optimizing existing infrastructure can significantly improve energy efficiency, thereby reducing carbon emissions. 3. Develop Carbon Capture and Storage (CCS) Investing in CCS technologies can help utilities continue using fossil fuels while capturing and storing carbon emissions. 4. Modernize the Grid Upgrading the grid to handle the variability of renewable energy sources is crucial. Smart grid technologies and energy storage solutions can enhance reliability and efficiency. By transitioning to

renewable energy, enhancing energy efficiency, developing CCS technologies, and modernizing the grid, utilities can mitigate the financial impact of carbon pricing and contribute to sustainability goals. The estimated costs for these actions, while substantial, are investments towards a cleaner and more resilient energy sector. Impact values are estimated futuristic opportunities and or risks based on the internal assumptions, which shall be reviewed periodically.

#### (3.1.1.26) Primary response to risk

#### Engagement

✓ Introduce/strengthen environmental incentives

#### (3.1.1.27) Cost of response to risk

#### 82200000000

#### (3.1.1.28) Explanation of cost calculation

The cost estimations are based on current market rates & assume a linear cost increase for scaling up measures. Costs may vary depending on technological advancements, labour rates, & regulatory changes over time. The methodology involves: • Identifying critical areas for upgrades & improvements. • Estimating the scope of implementation (in kilometers, substations, or MW). • Applying current cost rates to the estimated scope for each measure. • Summing up the costs to provide a comprehensive estimate. 1. Transition to Renewable Energy - Estimated Cost: 500,00,000 per MW for solar, 600,00,000 per MW for wind. - Calculation: To add 500 MW of solar & 500 MW of wind capacity, the total cost (1000 MW \* 500,00,000) (500 MW \* 600,00,000) 500,00,000,000 800,00,000,000 800,00,000. 2. Enhance Energy Efficiency - Estimated Cost: 2,000 per kWh saved annually. Targeted saving 100,000 kWh annually, the total cost 100,000 kWh x 2000 similarly, Modernize the Grid 50Cr

#### (3.1.1.29) Description of response

The implementation of carbon pricing poses significant challenges and opportunities for Indian electric utilities. By transitioning to renewable energy, enhancing energy efficiency, developing CCS technologies, and modernizing the grid, utilities can mitigate the financial impact of carbon pricing and contribute to sustainability goals. The estimated costs for these actions, while substantial, are investments towards a cleaner and more resilient energy sector. 1. Transition to Renewable Energy - Estimated Cost: 500,00,000 per MW for solar, 600,00,000 per MW for wind. - Calculation: For AESL aiming to add 500 MW of solar and 500 MW of wind capacity, the total cost (1000 MW \* 500,00,000) (500 MW \* 600,00,000) 500,000,000 300,00,000,000 800,00,000,000. 2. Enhance Energy Efficiency - Estimated Cost: 2,000 per kWh saved annually. - Calculation: If AESL targets saving 100,000 kWh annually, the total cost 100,000 kWh \* 2,000 200,000,000. 3. Develop Carbon Capture and Storage (CCS) - Estimated Cost: 1,500 per tCO2 captured. - Calculation: For capturing 1 million tCO2 annually, the total cost 1,000,000 tonnes \* 1,500 1,500,000,000. 4. Modernize the Grid - Estimated Cost: 10,000,000 per substation upgrade. - Calculation: For upgrading 50 substations, the total cost 50 \* 10,000,000 500,000,000.

### **Climate change**

# (3.1.1.1) Risk identifier

Select from:

✓ Risk4

# (3.1.1.3) Risk types and primary environmental risk driver

#### Market

☑ Other market risk, please specify :Low carbon economy while limiting their exposure towards specific industries or projects

#### (3.1.1.4) Value chain stage where the risk occurs

Select from:

✓ Downstream value chain

#### (3.1.1.6) Country/area where the risk occurs

Select all that apply

🗹 India

# (3.1.1.9) Organization-specific description of risk

Growing investor preference for sustainable and climate-resilient projects might limit funding availability for thermal power projects, affecting financial stability. A substantial shift towards decentralized and renewable energy systems could reduce the relevance & demand for centralized thermal power generation. Moreover, carbon pricing could necessitate extensive investment in carbon capture and storage (CCS) technologies to mitigate emissions and avoid hefty penalties. The financial burden of these investments, combined with the potential for reduced profitability due to higher generation costs, may compromise the utility's financial stability. Additionally, the transmission and distribution assets of the utility could also be indirectly affected. Increased electricity prices could reduce overall demand, leading to lower revenue from transmission and distribution services. Furthermore, the utility would need to invest in upgrading its grid infrastructure to integrate more RE sources & ensure efficient energy distribution, aligning with decarbonization goals. Ensuring infrastructure resilience against frequent extreme weather events may require significant continuous investment. Societal & governmental pressure to achieve net-zero emissions could force accelerated closure of thermal plants, resulting in asset write-downs & financial losses. The shift towards a low-carbon economy may render traditional thermal power stations non-competitive, driving need for diversification

# (3.1.1.11) Primary financial effect of the risk

Select from:

✓ Disruption in upstream value chain

#### (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

Medium-term

### (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

More likely than not

# (3.1.1.14) Magnitude

Select from:

✓ Low

# (3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

The anticipated effect of the risks on the financial position, financial performance, and cash flows of the organization is a potential disruption to our access to capital markets, which could impact our ability to transition to a low-carbon economy. This could lead to reduced funding and increased financial constraints, thereby affecting our financial position and performance. Additionally, the increased demand for non-fossil, renewable-based power transmission and distribution and low-carbon technologies could result in higher costs for our services, potentially reducing our profitability and cash flows. Furthermore, market disruption could also lead to reduced revenue and increased uncertainty, further exacerbating the negative impact on our financial position and performance. Overall, the risks posed by shifting investor preferences and market disruption could have a significant impact on our financial well-being, potentially hindering our ability to adapt to a changing market and achieve our strategic goals.

# (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

🗹 Yes

# (3.1.1.21) Anticipated financial effect figure in the medium-term – minimum (currency)

#### (3.1.1.22) Anticipated financial effect figure in the medium-term – maximum (currency)

#### 30048400000

# (3.1.1.25) Explanation of financial effect figure

This is based on internal working committee estimation to assess the Financial Implications • Increased Capital Expenditure (CapEx): Investments in pollution control, water management, and efficiency improvements to comply with regulations and mitigate environmental impacts. • Operational Expenditure (OpEx): Higher operational costs due to increased fuel prices, maintenance, and compliance with stringent regulations. • Revenue Variability: Fluctuations in electricity demand and prices can affect the plant's revenue streams. • Insurance Costs: Higher insurance premiums due to increased environmental and operational risks. •

Market Disruption: Potential market disruptions could lead to decreased revenue and greater uncertainty, negatively affecting the organization's financial stability. Investor Preferences Shift: Changing investor preferences towards non-fossil fuel investments may result in reduced funding availability, posing significant risks to financial performance and strategic goal achievement. Finacial implication under worst case scenario is shutting down of the sole thermal asset of teh company resultion in indicative 100% revenue loss from teh asset.

#### (3.1.1.26) Primary response to risk

#### Diversification

✓ Increase supplier diversification

## (3.1.1.27) Cost of response to risk

#### 1550000000

#### (3.1.1.28) Explanation of cost calculation

Cost to mitigate the risk under worsk case is considered that AESL shall carve out the regualted asset with MERC [Regulators'] approval in FY25. For this the fare market valuation was carried out to understand the potential gap between the Book value and the actual price that AESL would get in case of the carveout process.

# (3.1.1.29) Description of response

Measures AESL plans to take 1. Regulatory Compliance and Environmental Management • Regularly update and maintain pollution control equipment to comply with evolving regulations. • Implement comprehensive water management practices to ensure sustainable water usage. • Engage with regulatory bodies to stay informed about forthcoming regulations and proactively plan for compliance. • Carve out the Thermal asset and eventually reduce dependency on the thermal power station totally, AESL is working towards 70% RE in power procurement mix by 2030 2. Economic and Market Strategies • Diversify the fuel supply chain to reduce dependency on a single source and mitigate price volatility. • Explore opportunities for integrating renewable energy sources to enhance the plant's sustainability and competitiveness. • Develop flexible pricing mechanisms to adapt to market demand shifts and optimize revenue. 3. Social Responsibility and Community Engagement • Engage with local communities through transparent communication and address their concerns regarding environmental and health impacts. • Develop and implement health and safety programs for both employees and local populations. • Invest in community development projects to build goodwill and support for the plant's operations. 4. Technological Innovation and Adaptation • Invest in research and development to stay ahead of technological advancements and integrate cutting-edge solutions. • Enhance grid integration capabilities to accommodate renewable energy sources and ensure reliable power supply. • Monitor international best practices and adopt proven technologies to improve efficiency and reduce emissions.

#### Climate change

# (3.1.1.1) Risk identifier

Select from:

✓ Risk5

# (3.1.1.3) Risk types and primary environmental risk driver

Technology

✓ Unsuccessful investment in new technologies

## (3.1.1.4) Value chain stage where the risk occurs

Select from:

✓ Upstream value chain

# (3.1.1.6) Country/area where the risk occurs

Select all that apply

🗹 India

## (3.1.1.9) Organization-specific description of risk

Unsuccessful investment in new technology for an Indian Electric Utility can be significantly attributed to the multifaceted impacts of climate change. As the we grapples with the pressing need to transition towards a low-carbon economy, a myriad of challenges and uncertainties associated with climate change can hinder the

effectiveness & profitability of these technological investments. One prominent factor is the accelerated pace of decarbonization necessitated by societal and governmental pressure to achieve net-zero emissions. This urgency often compels electric utilities to hastily adopt new technologies without ample time for thorough research, development, and testing. Consequently, the rushed implementation can lead to technical failures, underperformance, or incompatibility with existing infrastructure, thereby rendering the investments unsuccessful. Moreover, the physical impacts of climate change, such as increased frequency and intensity of extreme weather events, pose significant risks to the infrastructure supporting new technologies. For instance, renewable energy installations like solar panels & wind turbines are particularly susceptible to damage from storms, floods, and heatwaves. Such damage can lead to unforeseen maintenance costs, operational disruptions, & reduced energy output, ultimately undermining the financial viability of the investments. Rapid advancements in RE & storage technologies may necessitating strategic shifts and investment in Renewable

## (3.1.1.11) Primary financial effect of the risk

Select from:

✓ Increased capital expenditures

## (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

Medium-term

## (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

✓ More likely than not

# (3.1.1.14) Magnitude

Select from:

✓ Low

# (3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

The failure to adapt to emerging technologies can have a significant impact on the financial position, financial performance, and cash flows of the organization, rendering it obsolete and potentially leading to reduced profitability. On the other hand, timely adaptation of advanced technologies can enhance efficiencies and performance, providing a competitive edge and potentially leading to increased profitability. The adoption of new technologies also enables the organization to better monitor climate-related impacts, enabling swift action to mitigate actions and reduce potential risks. Furthermore, the deployment of advanced technologies across

business functions and modernization of transmission and distribution networks can lead to operational excellence, reducing costs and improving reliability of power supply. Additionally, assessing climate risks, mapping vulnerabilities, and quantifying risks can help the organization plan effective adaptations from the design stage to commissioning, reducing potential losses and improving overall financial performance.

## (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

🗹 Yes

# (3.1.1.21) Anticipated financial effect figure in the medium-term – minimum (currency)

0

#### (3.1.1.22) Anticipated financial effect figure in the medium-term – maximum (currency)

#### 1100000000

# (3.1.1.25) Explanation of financial effect figure

AESL has operationlised 700MW Wind Solar hybrid PPA w.e.f. 1st April 2023. The integration of renewable energy (RE) technologies, such as the 700MW Wind Solar hybrid system, into the energy mix is pivotal for India's ambitious energy transition goals. However, the financial implications of these technologies not performing up to the mark can be substantial, particularly for Indian electric utility like AESL. The potential financial repercussions under different Shared Socioeconomic Pathways (SSP) scenarios. The financial implications of a 700MW Wind Solar hybrid RE technology not performing up to the mark can be multifaceted and significant, varying across different SSP scenarios. While strong policy support and green technology investments can mitigate some risks, the overall impact on revenue, operational costs, market competitiveness, and social equity cannot be overlooked. AESL must strategize proactively to address these potential challenges and ensure a resilient energy future. 1. Affordability Issues: Underperformance could raise energy costs, disproportionately impacting lower-income groups and increasing unpaid bills and financial strain on the utility. 2. Funding Constraints: Inequalities in access to funding and investment might limit the utility's ability to secure capital needed to address underperformance. 3. Social Backlash: Increased energy costs and inadequate power access may lead to social backlash, pressuring the utility to implement quick, costly fixes. Under the SSP5 scenario, characterized by fossil-fueled development and high economic growth with limited sustainability efforts: 1. Operational Costs: Increased reliance on fossil fuels to compensate for underperformance are minimal, but long-term sustainability goals would be compromised. 3. Environmental Regulations: Despite fossil fuel focus, regulatory pressures to improve renewable energy performance could add financial challenges.

#### (3.1.1.26) Primary response to risk

#### Diversification

Other diversification, please specify :diversifying energy sources, enhancing operational efficiency, and engaging in proactive stakeholder communication

#### (3.1.1.27) Cost of response to risk

700000000

## (3.1.1.28) Explanation of cost calculation

AESL must consider implementing several risk mitigation strategies: Diversifying Energy Sources • Investment in Alternative Renewable Sources like biomass, geothermal, or hydro-energy. The initial capital expenditure for such investments is estimated to be approximately 300 crore annually, considering the infrastructure, technology, and resource allocation required. • To ensure a stable energy supply, AESL could invest in advanced energy storage systems. The cost of implementing such systems, including battery storage, is projected to be around 150 crore annually. Enhancing Operational Efficiency • Implementing state-of-the-art performance-improving technologies can significantly enhance operational efficiency. The estimated cost for technological upgrades, including smart grid systems & Al-based monitoring tools, is around 200 crore per year. • 5 Cr for Regular maintenance and training programs for staff are essential to maintain high operational standards.

#### (3.1.1.29) Description of response

Given the multifaceted nature of the risks associated with a 700MW Wind Solar hybrid RE technology underperforming, requires a detailed analysis of the potential financial setbacks and their quantifiable impact on AESL. 1. Increased Energy Costs: The underperformance could necessitate the purchase of additional fossil fuel energy to meet demand. Assuming an average cost of 4 per kWh for fossil fuel energy, and considering a shortfall of 20% in hybrid RE output, the additional annual cost could be around 560 crore. 2. Revenue Losses: Underperformance may lead to a reduction in energy sales. If the hybrid RE system is expected to generate 1,200 crore annually, a 20% underperformance could result in a revenue loss of 240 crore per year. 3. Operational Cost Increases: Shifting fossil fuels to compensate for the shortfall could increase operational costs. An estimated additional 100 crore annually could be incurred due to higher fuel costs, maintenance, and environmental compliance. 4. Funding Constraints: Limited access to funding could restrict AESL's ability to invest in performance-improving technologies. This could translate to a potential investment deficit of 150 crore annually, hindering the company's growth and adaptation efforts. 5. Social Equity Impact: The increase in energy costs could lead to higher unpaid bills. Estimating that 10% of the consumer base may default on payments, this could amount to an annual financial strain of approximately 50 crore on the utility. 6. Market Competitiveness: Failure to meet sustainability goals might attract market penalties. These penalties could be as high as 200 crore annually, affecting AESL's market standing and long-term growth prospects. AESL must deploy a strategic risk mitigation plan, including diversifying energy sources, enhancing operational efficiency, & engaging in proactive stakeholder communication. The total estimated annual cost to implement these risk mitigation strategies is 700 crore.

(3.1.2) Provide the amount and proportion of your financial metrics from the reporting year that are vulnerable to the substantive effects of environmental risks.

**Climate change** 

(3.1.2.1) Financial metric	
Select from: ✓ Revenue	
(3.1.2.2) Amount of financial metric vulnerable to transition risks for this environmental issue (unit curre 1.2)	ency as selected in
1	
(3.1.2.3) % of total financial metric vulnerable to transition risks for this environmental issue	
Select from:	

(3.1.2.4) Amount of financial metric vulnerable to physical risks for this environmental issue (unit currency as selected in 1.2)

17218310000

(3.1.2.5) % of total financial metric vulnerable to physical risks for this environmental issue

Select from:

**☑** 1-10%

# (3.1.2.7) Explanation of financial figures

The power sector contributes significantly to India's GDP and employs millions of people. It is essential for various industries, including manufacturing, agriculture, and services. Any adverse impact on this sector can have far-reaching consequences for the broader economy. Climate change poses multifaceted risks include

physical risks like extreme weather events, shifts in precipitation patterns, and temperature increases, as well as transitional risks such as regulatory changes and shifts in market preferences towards sustainable energy sources. Revenue Impacts of Climate Change A 10% reduction in revenue for a power sector company due to climate change is significant and material for several reasons. Reduced Energy Supply Extreme weather events can damage infrastructure, leading to outages and reduced energy supply. For instance, floods can inundate power plants, while heatwaves can reduce efficiency. This can directly diminish the revenue of power companies. Increased Operational Costs Adapting to climate change often requires substantial investments in resilient infrastructure, such as upgrading facilities to withstand extreme weather or implementing new technologies for energy efficiency. These increased operational costs can eat into profit margins, making a 10% revenue reduction even more impactful. Regulatory Costs The Indian government is increasingly focusing on mitigating climate change through regulatory measures. Compliance with these regulations often requires additional capital expenditure, further straining financial resources. Market Shifts As consumers and businesses become more environmentally conscious, there is a growing demand for sustainable energy solutions. Power sector company's financial health. It can lead to lower profitability, reduced cash flow, and diminished capacity to invest in future growth. This can also impact stock prices and investor confidence. Strategic Responses To mitigate the material impact of a 10% revenue reduction due to climate change, power sector companies in India need to adopt strategic responses. Diversification of Energy Sources Investing in renewable energy sources such as solar, wind, can help reduce dependence on fossil fuels & mitigate climate risks. Diversification can also open new revenue streams.10% FY24 revenue 1721.8Cr

## Water

# (3.1.2.1) Financial metric

Select from:

✓ Revenue

# (3.1.2.2) Amount of financial metric vulnerable to transition risks for this environmental issue (unit currency as selected in 1.2)

1

# (3.1.2.3) % of total financial metric vulnerable to transition risks for this environmental issue

Select from:

✓ Less than 1%

(3.1.2.4) Amount of financial metric vulnerable to physical risks for this environmental issue (unit currency as selected in 1.2)

#### 1721831000

Select from:

✓ Less than 1%

# (3.1.2.7) Explanation of financial figures

Water-related risks pose significant challenges to electric utilities, particularly in regions like India where water scarcity and guality issues are prevalent. This document explores how a 1% reduction in revenue due to water-related risks can have material financial impacts on an Indian electric utility, specifically AESL. High Fixed Costs Electric utilities, including AESL, operate with high fixed costs associated with infrastructure such as power plants, cooling systems, and transmission networks. Any reduction in revenue, even as small as 1%, can significantly impact profitability due to the inflexible nature of these costs. • Infrastructure Dependence: Large capital investments in power generation and cooling infrastructure depend heavily on consistent water supply. A reduction in revenue impairs the Operational Efficiency: Water scarcity can force AESL to operate less efficiently, leading to higher ability to maintain and upgrade these critical systems. operational costs and a further erosion of profit margins. Investor Perception EBITDA (Earnings Before Interest, Taxes, Depreciation, and Amortization) is a critical metric for investors. A 1% revenue drop can lead to a noticeable decline in EBITDA, affecting investor confidence and market perceptions. • Stock Price Volatility: A decline in EBITDA can result in negative market reactions, reducing AESL's stock price and market capitalization. • Capital Raising Challenges: Lower investor confidence makes it more difficult for AESL to raise capital through debt or equity, hindering expansion plans and innovation efforts. Debt Servicing Electric utilities like AESL often carry substantial debt, requiring robust EBITDA to meet interest and principal payments. • Debt Coverage Ratio: A reduction in revenue weakens the debt service coverage ratio, increasing the risk of default and potentially leading to higher borrowing costs. Interest Rates: Lenders may impose higher interest rates due to perceived increased risk, further straining financial resources. Operational Flexibility Reduced EBITDA limits AESL's ability to invest in new projects, upgrade infrastructure, or adopt innovative technologies. • Investment Constraints: Lower revenue impacts the budget available for crucial investments in sustainable and water-efficient technologies. • Competitive Disadvantage: Inability to invest in improvements can hinder long-term growth and reduce competitiveness in the energy market. 1% of FY24 Revenue 17218310

# Climate change

# (3.1.2.1) Financial metric

Select from:

☑ Other, please specify :EBITDA of Retail division of the company

(3.1.2.2) Amount of financial metric vulnerable to transition risks for this environmental issue (unit currency as selected in 1.2)

1
# (3.1.2.3) % of total financial metric vulnerable to transition risks for this environmental issue

Select from:

✓ 1-10%

(3.1.2.4) Amount of financial metric vulnerable to physical risks for this environmental issue (unit currency as selected in 1.2)

#### 6320000000

(3.1.2.5) % of total financial metric vulnerable to physical risks for this environmental issue

Select from:

✓ 1-10%

# (3.1.2.7) Explanation of financial figures

In the context of corporate financial performance, EBITDA (Earnings Before Interest, Taxes, Depreciation, and Amortization) is a critical measure of a company's profitability. For electric utilities in India, climate change poses significant risks and opportunities that can materially affect EBITDA. EBITDA serves as an indicator of a company's operating performance by excluding non-operational expenses and focusing on core profitability. It is particularly useful for comparing companies within the same industry as it eliminates the effects of financing and accounting decisions. For electric utilities, EBITDA reflects the efficiency & effectiveness of power generation, distribution, and sales operations. Climate change presents both physical and transitional risks to electric utilities. Physical risks include extreme weather events, such as floods, droughts, and heatwaves, which can disrupt operations, damage infrastructure, and increase maintenance costs. Transitional risks involve regulatory changes, shifts in market preferences towards renewable energy, and technological advancements aimed at reducing carbon emissions. A 1 to 2% change in EBITDA may seem small but can be material for several reasons: • High Fixed Costs: Electric utilities often have high fixed costs related to infrastructure, such as power plants and transmission networks. A small reduction in revenue or increase in costs can significantly affect profitability and EBITDA. •Investor Perception: EBITDA is a key metric for investors assessing a company's financial health and growth potential. A decline in EBITDA can lead to a negative market reaction, affecting the company's stock price and its ability to raise capital. • Debt Servicing: Many electric utilities carry substantial debt. A reduction in EBITDA can weaken the company's debt service coverage ratio, making it more challenging to meet interest and principal payments and potentially leading to higher borrowing costs. •

Operational Flexibility: Lower EBITDA can constrain a utility's ability to invest in new projects, upgrade infrastructure, or adopt innovative technologies, hindering its long-term growth and competitiveness. 1% EBITDA of FY24 INR 632 Cr [Add row]

# (3.2) Within each river basin, how many facilities are exposed to substantive effects of water-related risks, and what percentage of your total number of facilities does this represent?

## (3.2.1) Country/Area & River basin

#### India

✓ Ganges - Brahmaputra

## (3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply

Direct operations

(3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

2

(3.2.4) % of your organization's total facilities within direct operations exposed to water-related risk in this river basin

Select from:

✓ 1-25%

(3.2.8) % organization's annual electricity generation that could be affected by these facilities

Select from:

Less than 1%

(3.2.10) % organization's total global revenue that could be affected

Select from:

✓ Less than 1%

(3.2.11) Please explain

Using WRI Aqueduct tool, We have identified 2 Transmission O&M sub-stations in the Ganges & Brahmaputra river basin that may be impacted by water risks in our value chain with the potential to have a substantive impact on our operations. These sites are important for maintaining uptime of the transmission asset [failing which attract penalties] and are important for us because their continued functioning is key to ensuring business continuity at many of our transmission lines. Currently transmission division contributes to 32% of total revenue in FY24. The percentage of our global revenue that could be affected is estimated and depends on a range of factors such as the impact type, magnitude and duration, as well as the unique nature of the knock-on impacts on our transmission division from partial or full site closure.

# Row 2

# (3.2.1) Country/Area & River basin

#### India

☑ Other, please specify :Inland Drainage Basin

#### (3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply

Direct operations

## (3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

9

# (3.2.4) % of your organization's total facilities within direct operations exposed to water-related risk in this river basin

Select from:

✓ 76-99%

# (3.2.8) % organization's annual electricity generation that could be affected by these facilities

Select from:

✓ Less than 1%

#### (3.2.10) % organization's total global revenue that could be affected

### (3.2.11) Please explain

Using WRI Aqueduct tool, We have identified 9 Transmission O&M sub-stations in the Inland Drainage Basin that may be impacted by water risks in our value chain with the potential to have a substantive impact on our operations. These sites are important for maintaining uptime of the transmission asset [failing which attract penalties] and are important for us because their continued functioning is key to ensuring business continuity at many of our transmission lines. Currently transmission division contributes to 32% of total revenue in FY24. The percentage of our global revenue that could be affected is estimated and depends on a range of factors such as the impact type, magnitude and duration, as well as the unique nature of the knock-on impacts on our transmission division from partial or full site closure.

[Add row]

# (3.3) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

### (3.3.1) Water-related regulatory violations

Select from:

🗹 No

# (3.3.3) Comment

There were zero cases of non-compliances and payment of monetary fines or penalties for non-compliances in the reporting year. Further, no corrective actions taken against Adani Energy Solutions by any legislative or judicial institutions. [Fixed row]

# (3.5.3) Complete the following table for each of the tax systems you are regulated by.

# Other carbon tax, please specify

# (3.5.3.1) Period start date

## (3.5.3.2) Period end date

03/30/2026

#### (3.5.3.3) % of total Scope 1 emissions covered by tax

99

### (3.5.3.4) Total cost of tax paid

861800880

## (3.5.3.5) Comment

Since its inception, the coal cess has been increased three times, from INR 50 (USD 0.8) per tonne in 2010 to INR 200 (USD 1.6) per tonne in March 2015 and INR 400 (USD 3.2) per tonne in March 2016 (Garg et al., 2017). The cess was also called "Clean Energy Cess" and "Clean Environment Cess." In terms of a carbon tax equivalent, the 2016 increase in the Clean Energy Cess translates to a carbon price of around USD 4 per tonne of carbon dioxide levied at the point of production (Republic of India, 2015). With the introduction of the Goods and Service Tax (GST) in India in July 2017, the Clean Energy Cess was abolished by the Taxation Laws Amendment Act, 2017. A new cess on coal production, called the GST Compensation Cess, was put in its place at the same rate of INR 400 per tonne. The GST Compensation Cess is aimed at filling in the budget deficits that Indian states faced following the GST introduction. This last round of changes effectively means continued taxation of coal production as a source of funding for various regional development needs. So for the Carbon cess coal consumed by the company in the reporting period x 400 INR/ ton 2,15,45,02,200 kg /1000 x 400 INR / ton 861800880 INR for FY2024.

# (3.6) Have you identified any environmental opportunities which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?

	Environmental opportunities identified
Climate change	Select from: ✓ Yes, we have identified opportunities, and some/all are being realized
Water	Select from: ✓ Yes, we have identified opportunities, and some/all are being realized

[Fixed row]

(3.6.1) Provide details of the environmental opportunities identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.

#### Climate change

# (3.6.1.1) Opportunity identifier

Select from:

Opp1

## (3.6.1.3) Opportunity type and primary environmental opportunity driver

#### Markets

✓ Expansion into new markets

# (3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Downstream value chain

Select all that apply

🗹 India

# (3.6.1.8) Organization specific description

As the global decarbonization agenda gains momentum, the energy distribution sector is undergoing a significant transformation. This shift presents an unprecedented opportunity for AESL to integrate renewable energy sources into India's national power grid. By providing green solutions to our customers, we aim to become a preferred partner in the country's Net-zero journey. The widespread adoption of solar rooftops is expected to revolutionize the traditional energy mix, creating a decentralized network across the country. This offers a vast potential for AESL to tap into new markets. Furthermore, India's rapidly growing electric vehicle (EV) industry, which is expected to become a major hub for EVs, presents an emerging opportunity for AESL to commission EV charging stations and access new markets.

# (3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Increased revenues through access to new and emerging markets

# (3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

Medium-term

# (3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

✓ Very likely (90-100%)

# (3.6.1.12) Magnitude

Select from: ✓ High

# (3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

The expansion into low-carbon markets such as Renewable Energy and EV mobility presents significant opportunities for the organization to drive growth, improve financial performance, and enhance cash flows. By increasing the share of renewables in our energy mix, we can capitalize on new market opportunities and leverage from the increasing demand for decarbonization. This is likely to lead to improved financial performance through increased revenue and reduced costs. Additionally, the rapid growth of India's EV market provides a groundbreaking opportunity to enter new markets by commissioning EV charging stations, which can generate new revenue streams and increase cash flows. As we expand our footprint into these low-carbon markets, we anticipate a positive impact on our financial position, with increased profitability, improved liquidity, and enhanced creditworthiness.

#### (3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

✓ Yes

### (3.6.1.19) Anticipated financial effect figure in the medium-term - minimum (currency)

21000000

# (3.6.1.20) Anticipated financial effect figure in the medium-term - maximum (currency)

210000000

## (3.6.1.23) Explanation of financial effect figures

By leveraging its existing power grid, forming strategic partnerships, investing in renewable energy and fast charging technology, and implementing awareness and incentive programs, AESL can effectively address the EV charging infrastructure challenges in the Mumbai region. The total estimated cost for this strategic initiative is 390 crore. This investment will not only enhance EV adoption rates but also position AESL as a leader in sustainable energy solutions. Estimated EV Charging Infrastructure Power Requirements To estimate the power requirements in MWh per annum for AESL's EV charging infrastructure in the Mumbai region, we need to consider several factors such as the number of EVs, their average energy consumption, and the frequency of charging. Assuming an average EV consumes about 15 kWh per 100 km and is driven 20,000 km annually, the annual energy consumption per vehicle would be: 15 kWh/100 km x 20,000 km 3,000 kWh or 3 MWh If we estimate 10,000 EVs in the initial phase, the total power requirement would be: 10,000 vehicles x 3 MWh/vehicle 30,000 MWh/year Therefore, the estimated EV charging infrastructure power requirements for the Mumbai region would be approximately 30,000 MWh per annum x 7 INR / Kwh INR 210000000 p.a. revenue. Assuming EV chargers life of 10 year INR 2100000000 revenue opportunity. This figure will likely grow as EV adoption increases.

## (3.6.1.24) Cost to realize opportunity

## (3.6.1.25) Explanation of cost calculation

The estimated cost to tap the EV Charging infra business opportunities AESL has worked out broad cost structure as given below: 1. Infrastructure Development • Setting up 100 fast-charging stations along with Integration with renewable energy sources: 250 crore 2. Partnerships and Collaborations • Forming strategic alliances plus the cost towards Legal and consultancy fees: 30 crore 3. Technology Investment • Research and development of fast charging technology and its Deployment and testing: 70 crore 4. Awareness Programs • Marketing and outreach and Incentive schemes under DSM programs 40 crore Total Estimated Cost 390 crore By leveraging its existing power grid, forming strategic partnerships, investing in renewable energy and fast charging technology, and implementing awareness and incentive programs, AESL can effectively address the EV charging infrastructure challenges in the Mumbai region. The total estimated cost for this strategic initiative is 390 crore. This investment will not only enhance EV adoption rates but also position AESL as a leader in sustainable energy solutions.

# (3.6.1.26) Strategy to realize opportunity

1. Leveraging Existing Power Grid AESL's ownership of a power grid spanning 400 square meters in the Mumbai region offers a substantial advantage. The primary strategy involves utilizing this existing infrastructure to expedite the deployment of EV charging stations. 2. Establishing Partnerships To mitigate the high capital investment required, AESL can form strategic partnerships with private companies, government bodies, and international investors. These collaborations can help share the financial burden and provide technological expertise. 3. Deploying Renewable Energy Solutions Incorporating renewable energy sources, such as solar and wind power, in the EV charging infrastructure can reduce operating costs and enhance energy efficiency. This approach will also address geographical challenges by providing reliable charging solutions in waterlogged and remote areas. 4. Developing Fast Charging Technology Investing in fast charging technology will alleviate prospective EV owners' anxiety about vehicle range. AESL can pilot fast-charging stations in high-traffic urban areas and gradually expand to rural regions. 5. Awareness and Incentive Programs To encourage private sector participation, AESL can initiate awareness programs highlighting the long-term benefits of EV charging stations. Incentives such as tax breaks, subsidies, and revenue-sharing models can also be introduced to attract investment. By leveraging its existing power grid, forming strategic partnerships, investing in renewable energy and fast charging technology, and implementing awareness and incentive programs, AESL can effectively address the EV charging infrastructure challenges in the Mumbai region. The total estimated cost for this strategic initiative is 390 crore. This investment will not only enhance EV adoption rates but also position AESL as a leader in sustainable energy solutions.

#### Water

# (3.6.1.1) Opportunity identifier

Select from:

Орр3

# (3.6.1.3) Opportunity type and primary environmental opportunity driver

#### Resilience

✓ Improved resilience to future regulatory changes

#### (3.6.1.4) Value chain stage where the opportunity occurs

Select from:

Direct operations

#### (3.6.1.5) Country/area where the opportunity occurs

Select all that apply

🗹 India

## (3.6.1.6) River basin where the opportunity occurs

Select all that apply

✓ Ganges - Brahmaputra

☑ Other, please specify :Inland Drainage Basin

### (3.6.1.8) Organization specific description

Effective resource management is crucial for reducing costs and increasing efficiency. As AESL relies on natural resources, we prioritize optimal use of resources, minimize environmental impact, and reduce our carbon footprint through efficient operations. We have made energy efficiency and water management top priorities. Our goal is to achieve Net Water Neutrality by increasing the number of rainwater harvesting ponds at our substations operating in water-stressed and water-depletion areas, while reducing our dependence on freshwater. To achieve this, we have installed water harvesting systems in these regions, taking into account the topography and geological strata, and implementing surface ponds or recharge wells as needed.

### (3.6.1.9) Primary financial effect of the opportunity

Select from:

Reduced direct costs

(3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

#### (3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

☑ Likely (66–100%)

# (3.6.1.12) Magnitude

Select from:

🗹 Low

# (3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

The initiatives aimed at effective resource management and environmental sustainability are expected to have a positive impact on the financial position, financial performance, and cash flows of the organization. By optimizing resource usage and reducing environmental impact, we anticipate cost savings and increased efficiency, which can lead to improved profitability and reduced expenses. Our Net Water Neutrality target and water harvesting systems in water-stressed regions are expected to reduce our dependency on freshwater, minimizing potential costs and risks associated with water scarcity. Additionally, our focus on energy efficiency is likely to lead to reduced energy consumption and lower energy costs, further enhancing our financial performance. Overall, these opportunities are expected to contribute to a stronger financial position, improved financial performance, and enhanced cash flows, enabling the organization to achieve its strategic goals and create long-term value for stakeholders.

## (3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

🗹 No

# (3.6.1.24) Cost to realize opportunity

6500000

## (3.6.1.25) Explanation of cost calculation

The 11 Sub-stations identified in Extreme High-Water stress and Extreme Water depletion area uses 0.5% of total water consumed by the company primarily for the domestic requirements related to drinking and sanitation. As a risk minimisation mitigation measure rainwater harvesting systems are deployed. Effective resource management is key to cut costs and increase efficiency. While AESL depends on the raw materials sourced from nature, we ensure that through our efficient operations, we make optimum use of the resources, have a minimum environmental impact, and reduce our carbon footprint. Initiatives like Energy efficiency and water management are taken on priority. We have a Net Water Neutrality target that we aim to achieve by increasing the number of Rainwater Harvesting Ponds at the substations operating in Water stressed and water depletion areas, while reducing our dependency on freshwater. We have installed water harvesting systems in these water-stressed regions depending on the topography and geological strata surface ponds or recharge wells are implemented. The cost to realise this strategy include the Costs towards activities related to Water Efficiency Improvements, Enhanced Water Management Practices & Regulatory and Community Engagement such as engagement cost, Rain water harvesting structure maintenance and training ofstaff related expenses.

# (3.6.1.26) Strategy to realize opportunity

To address the identified water risks, AESL has implemented the following measures: 1. Water Efficiency Improvements Reducing water consumption in facilities located in water-stressed areas can lower the competition for resources and mitigate regulatory risks. Actions: • Install water-saving technologies such as lowflow fixtures and advanced sea water based cooling systems. • Implement water recycling and reuse practices, especially in thermal power plants. • Implemented ISO 46001:2019 - Water efficiency management systems • Conduct regular audits to identify and fix leaks or inefficiencies in water usage. Develop and implement comprehensive water management plans for all facilities. • Engage with local stakeholders to align water use priorities and Participate in local and regional water governance forums. • Communicate water risk practices. Train staff on best practices for sustainable water use. management strategies to stakeholders, including local communities and regulatory bodies. • Develop partnerships for community-based water conservation projects. Implementing the above measures will not only mitigate the water risks identified but also contribute to the long-term sustainability of AESL's operations. Investing in water efficiency, alternative water sources, enhanced management practices, and stakeholder engagement is crucial to ensuring the reliability of AESL's power supply and safeguarding the company's revenue streams. AESL has also set Water Positive goal for each site to ensure the water availability and avoide any solcial licence to operate related issue in future.

#### Climate change

### (3.6.1.1) Opportunity identifier

Select from:

✓ Opp2

## (3.6.1.3) Opportunity type and primary environmental opportunity driver

#### Markets

☑ Other markets opportunity, please specify :Green Tariff

# (3.6.1.4) Value chain stage where the opportunity occurs

Select from:

✓ Downstream value chain

## (3.6.1.5) Country/area where the opportunity occurs

Select all that apply

🗹 India

## (3.6.1.8) Organization specific description

As the world transitions towards a lower-carbon economy, consumers are increasingly seeking out greener energy options. This trend is prompting energy distribution companies to develop new markets that incorporate a higher proportion of renewable energy sources. By offering our customers sustainable solutions, we will establish ourselves as their trusted partner in their journey towards a lower-carbon future.

## (3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Increased revenues resulting from increased demand for products and services

## (3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

Medium-term

✓ Long-term

## (3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

☑ Likely (66-100%)

## (3.6.1.12) Magnitude

Select from:

# (3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

The global shift towards a lower-carbon economy and the increasing demand for greener energy alternatives presents significant opportunities for the organization. As the energy distribution companies accelerate the transition to a lower-carbon economy, we anticipate a new market landscape with a greater proportion of renewables in the energy mix. By positioning ourselves as a provider of greener solutions to our customers, we will capitalize on this trend and create new revenue streams. This is likely to have a positive impact on our financial position, leading to increased revenue growth and improved profitability. Additionally, as our customers transition to lower-carbon energy sources, we may also benefit from reduced operating costs and improved cash flows, as we will be able to generate electricity from renewable sources at a lower cost. Overall, we anticipate that this opportunity will drive long-term growth and stability, positioning us as a leader in the low-carbon economy and enhancing our competitive advantage.

#### (3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

🗹 Yes

## (3.6.1.19) Anticipated financial effect figure in the medium-term - minimum (currency)

2613242808

#### (3.6.1.20) Anticipated financial effect figure in the medium-term - maximum (currency)

5226485616

(3.6.1.21) Anticipated financial effect figure in the long-term - minimum (currency)

4057930540.36

(3.6.1.22) Anticipated financial effect figure in the long-term – maximum (currency)

8115861081

(3.6.1.23) Explanation of financial effect figures

MERC has approved INR 0.66/ unit as an incremental Green tariff for every RE unit sold by AESL. Assuming this remains constant. AESL sold 9916 Million units [MU's] in FY24 with 34.35%3410.88MU's RE in its procurement mix. This is equivalent to an additional green tariff revenue of INR 2248056360 in FY24. AESL has set targets for having 70% Re in its power procurement mix by FY30, which is 104% of the current levels and attainable with massive RE installation plan of India by 2030. Assuming 10% YOY increase in electricity units sales FY30 it is estimate that AESL will sell about 17,567 MU's i.e. 177% of FY24 levels. Estimate green tariff revenue 17,567 MU x 70% x 0.66 INR/ Kwh 12,297 MU's Green energy sold @ INR 0.66 / kwh translating to Additional revenue of INR 8115861081 p.a. INR 8115861081 p.a. [ Maximum @ 10% YOY increase from FY24 level in FY30] INR 4,05,79,30,540.36 p.a.[ Minimum @ 5% YOY increase p.a. from FY24 level in FY30] INR 4,05,79,30,540.36 p.a.[ Minimum @ 5% YOY increase p.a. from FY24 level in FY30] INR

# (3.6.1.24) Cost to realize opportunity

8000000000

#### (3.6.1.25) Explanation of cost calculation

In order to genrate and deliver the 17600 Million uinits by FY30 AESL needs to set up 1000 MW RE solar wind hybrid plant. Estimated Cost: 500,00,000 per MW for solar, 600,00,000 per MW for wind. - Calculation: For AESL aiming to add 500 MW of solar and 500 MW of wind capacity, the total cost (1000 MW \* 500,00,000) (500 MW \* 600,00,000) 500,000,000 300,000,000 800,000,000. i.e. CAPEX of INR 800,00,000,000/- would be required under maximum scenario by FY30. Fo minimum scenarion the CAPEX would be half. While AESL has option to opt for Power purchase agreement [PPA] to reduce the CAPEX.

# (3.6.1.26) Strategy to realize opportunity

To accomplish this ambitious objective of Key Objectives • Increase RE share in the procurement mix to 70% by FY2030. Set up 1000MW Wind-Solar Hybrid Solar plants to support the RE targets. Ensure a 10% year-on-year (YOY) increase in electricity unit sales. Phased Implementation Strategy Phase 1: Planning and Initial Setup (FY2024 - FY2025) A. Project Management: Oversee the entire project lifecycle from planning Formation of Internal AESL Teams to execution. Engineering: Design and develop the necessary infrastructure. Operations: Ensure smooth day-to-day operations and maintenance of the RE plants. Finance: Manage budgets, investments, and financial reporting. B. Stakeholder Engagement: Conduct consultations with regulatory bodies (MERC), government agencies, financial institutions, and potential technology partners. C. Feasibility Studies: Assess the feasibility of various RE projects and location suitability for the 1000MW Wind-Solar Hybrid Solar plant. D. Funding and Investment: Secure funding through public-private partnerships, green bonds, and international climate funds. Phase 2: Infrastructure Development (FY2026 - FY2028) • Site Acquisition: Identify and acquire land for solar and wind installations. • Technology Procurement: Source and procure advanced wind turbines and solar panels. • Construction: Begin construction of the 1000MW Wind-Grid Integration: Upgrade existing grid infrastructure to accommodate increased RE supply. Phase 3: Operationalization and Scaling Solar Hybrid Solar plant. (FY2029 - FY2030) • Testing and Commissioning: Conduct rigorous testing and commissioning of the plant to ensure optimal performance. • Full-scale Operation: Achieve full operational status, contributing significantly to the RE procurement mix. Performance Monitoring: Implement monitoring systems to track Scaling Up: Plan for additional RE projects to maintain the 10% YOY increase in electricity unit sales. performance metrics and make necessary adjustments.

## Climate change

✓ Opp5

### (3.6.1.3) Opportunity type and primary environmental opportunity driver

#### **Resource efficiency**

☑ Other resource efficiency opportunity, please specify :Focused Optimisation & Efficiency Measures

## (3.6.1.4) Value chain stage where the opportunity occurs

Select from:

✓ Direct operations

#### (3.6.1.5) Country/area where the opportunity occurs

Select all that apply

🗹 India

# (3.6.1.8) Organization specific description

We recognize that implementing energy efficiency measures to optimize our resource consumption, reducing emissions and waste, as well as investing in research and development to design more efficient systems, can lead to significant operational improvements and cost savings over the medium to long term.

## (3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Returns on investment in low-emission technology

(3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

Medium-term

✓ Long-term

# (3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

☑ Likely (66–100%)

# (3.6.1.12) Magnitude

Select from:

🗹 Low

(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

The opportunities to optimize resource consumption and enhance operational efficiency are expected to have a positive impact on the financial position, financial performance, and cash flows of the organization. By implementing energy efficiency measures, reducing emission intensities, waste and water consumption, and investing in research and development for design-driven efficiency, we anticipate achieving direct cost savings in the medium to longer term. This is expected to lead to improved profitability, as reduced operating costs will result in increased margins. Additionally, these initiatives will likely generate positive cash flows, as reduced energy and water consumption will lower our expenses and potentially lead to reduced waste disposal costs. Furthermore, the improved operational efficiency will also enable us to invest in growth initiatives, potentially driving revenue growth and enhancing our overall financial performance.

### (3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

🗹 Yes

# (3.6.1.19) Anticipated financial effect figure in the medium-term - minimum (currency)

2157483051

(3.6.1.20) Anticipated financial effect figure in the medium-term - maximum (currency)

19417347458

# (3.6.1.21) Anticipated financial effect figure in the long-term - minimum (currency)

7910771186

#### 23732313559

#### (3.6.1.23) Explanation of financial effect figures

Our operations are centred on collaborative lines where we foster innovation, research, technology development and integrated ecosystem. We have created a cohesive unit called "ENDORSE (Energy Diagnostic and Operation Support Entity)" which serves as a nerve centre providing technical and diagnostic services for Operations, Maintenance, and Innovation. The team adopts dynamic approaches like RCA and CAPA for improving the asset health and promotes the integration of new technologies for improved performance. We use modern Supervisory Control and Data Acquisition (SCADA) technology, one of the first utilities in India, to develop a platform that is seamlessly connected with Geographical Information Systems (GIS) for offering customers increased and higher service standards. Our implementation of new technologies and systems are guided by our robust digital technology roadmap which increase the productivity and profitability. Additionally, our engineering division is actively developing new and modified transmission tower designs which aims to improve resource efficiency by minimising the material consumption of steel and aluminium. Our new innovation and technologies intend not only the financial improvement but also the aims to minimise our environmental footprint. To meet our commitment on driving process innovation and new business models through technological innovations argeting the reduction of transmission and distribution losses. Our agile and qualified team innovates the deployment of new technologies across our operations which supports the accommodation of rising demand which demonstrating operational excellence. cost to realise the opportunity: is setting up of the "ENDORSE (Energy Diagnostic and Operation Support Entity)" which serves as a nerve centre providing technical and diagnostic services for Operations, Maintenance, and Innovation. The team adopts to realise the opportunity. AESL will leverage sophisticated technologies for supplying uninterrupted services to the consumers through innovation

## (3.6.1.24) Cost to realize opportunity

1530000000

## (3.6.1.25) Explanation of cost calculation

To meet our commitment on driving process innovation and new business models through technology adoption, we are developing resilient transmission infrastructure across the country by making significant investments to enhance our operations supported by technological innovations targeting the reduction of transmission and distribution losses. Our agile and qualified team innovates the deployment of new technologies across our operations which supports the accommodation of rising demand which demonstrating operational excellence. cost to realise the opportunity: is setting up of the "ENDORSE (Energy Diagnostic and Operation Support Entity)" which serves as a nerve centre providing technical and diagnostic services for Operations, Maintenance, and Innovation. Plus the recuring AMC charges and technical training to the team is considered as cost to realise the opportunity. This also include the cost of IoT devices & its O&M, training to the concerned team members

#### (3.6.1.26) Strategy to realize opportunity

Our operations are centred on collaborative lines where we foster innovation, research, technology development and integrated ecosystem. We have created a cohesive unit called "ENDORSE (Energy Diagnostic and Operation Support Entity)" which serves as a nerve centre providing technical and diagnostic services for Operations, Maintenance, and Innovation. The team adopts dynamic approaches like RCA and CAPA for improving the asset health and promotes the integration of new technologies for improved performance. We use modern Supervisory Control and Data Acquisition (SCADA) technology, one of the first utilities in India, to develop a platform that is seamlessly connected with Geographical Information Systems (GIS) for offering customers increased and higher service standards. Our implementation of new technologies and systems are guided by our robust digital technology roadmap which increase the productivity and profitability. Additionally, our engineering division is actively developing new and modified transmission tower designs which aims to improve resource efficiency by minimising the material consumption of steel and aluminium. Our new innovation and technologies intend not only the financial improvement but also the aims to minimise our environmental footprint. To meet our commitment on driving process innovation and new business models through technology adoption, we are developing resilient transmission infrastructure across the country by making significant investments to enhance our operations supported by technological innovations targeting the reduction of transmission and distribution losses. Our agile and qualified team innovates the deployment of new technologies across our operations which supports the accommodation of rising demand which demonstrating operational excellence. cost to realise the opportunity: is setting up of the "ENDORSE (Energy Diagnostic and Operation Support Entity)" which serves as a nerve centre providing technical and diagnostic services for Operations, Maintenance, and Innovation. Plus the recuring AMC charges and technical training to the team is considered as cost to realise the opportunity. AESL will leverage sophisticated technologies for supplying uninterrupted services to the consumers through innovation, research, and collaborations. [Add row]

(3.6.2) Provide the amount and proportion of your financial metrics in the reporting year that are aligned with the substantive effects of environmental opportunities.

#### Climate change

# (3.6.2.1) Financial metric

Select from:

🗹 Revenue

(3.6.2.2) Amount of financial metric aligned with opportunities for this environmental issue (unit currency as selected in 1.2)

34325596848.34

(3.6.2.3) % of total financial metric aligned with opportunities for this environmental issue

Select from:

#### (3.6.2.4) Explanation of financial figures

Currently, with a renewable energy (RE) share of 34.35% in its procurement mix, contributing approximately 20% to its revenue, the Retail division of AESL plans an ambitious expansion to achieve a 70% RE share by FY2030. This substantial shift presents an unprecedented opportunity to elevate its revenue streams while aligning with global environmental goals. Strategic Importance of Increasing RE Share This RE segment presently contributes around 20% of our total revenue, showcasing its financial viability & the growing market demand for green energy. Increasing the RE share to 70% by FY2030 is not merely about environmental stewardship; it's a strategic financial maneuver with multiple benefits: 1. Revenue Growth through Market Demand The global and domestic demand for renewable energy is on an upward trajectory. As industries and consumers increasingly prefer green energy, utilities with a higher RE share can command better pricing and secure long-term purchase agreements. This shift can significantly enhance the utility's revenue from RE sources. 2. Cost Savings & Efficiency RE technologies, particularly solar & wind, have seen substantial cost reductions over the years. Promoting Investing in these technologies can lead to lower production costs, higher efficiency, & improved margins, further bolstering revenue. 3. Diversification of Energy Portfolio A diversified energy portfolio minimizes risk & ensures stability. By increasing its RE share, AESL can mitigate the volatility associated with fossil fuel prices & reduce dependency on non-renewable sources, leading to more predictable and stable revenue streams. Revenue Increase Projections Base Calculation Given that 34.35% RE currently contributes 20% of the total revenue, AESL's total revenue from non-RE sources stands at 80%. By FY2030, with a planned RE share of 70%, the revenue dynamics will shift dramatically. Scenario Analysis Let's assume the current revenue from RE is X, and total revenue is Y. Currently, RE revenue 0.20Y and RE share 34.35%. Projected RE share 70%. If we assume that the revenue per unit of RE energy remains constant, the new revenue from RE can be estimated as follows: New RE Revenue (70/34.35) \* (0.20Y) 1.02 Y. This simple projection indicates that the revenue from RE alone could potentially equal or exceed effectively doubling AESL's the current total revenue by 2030, The plan to increase the RE share to 70% by FY2030 presents a transformative opportunity for AESL

#### Water

### (3.6.2.1) Financial metric

Select from:

✓ Revenue

(3.6.2.2) Amount of financial metric aligned with opportunities for this environmental issue (unit currency as selected in 1.2)

30048440000

# (3.6.2.3) % of total financial metric aligned with opportunities for this environmental issue

Select from:

#### (3.6.2.4) Explanation of financial figures

The 2 x 250 MW Thermal Power Station, which contributes to about 17% of the total revenue of AESL, utilizes fresh dam water for steam generation & sea water for cooling purposes. This existing setup presents a unique opportunity to enhance revenue through improved water efficiency. Opportunities for Increased Revenue through Water Efficiency Improving water efficiency in thermal power stations involves optimizing water usage to reduce waste, enhance sustainability, & lower operational costs. Key strategies & their potential revenue impacts: 1. Reducing Water Consumption Minimizing the volume of fresh dam water & sea water usage through advanced water management technologies can significantly reduce operational costs. This includes implementing dry cooling technologies, closed-loop cooling systems, & efficient steam generation processes. 2. Enhancing Condensate Recovery Maximizing condensate recovery from the steam cycle can reduce the need for fresh dam water. Using high-efficiency capture systems ensures more water returns to the system, cutting down on water procurement costs. 3. Implementing Water Recycling & Reuse Recycling & reusing water within the plant can drastically lower the intake of fresh dam water & sea water. Technologies such as desalination, reverse osmosis, & advanced filtration systems can treat & recycle water from various processes. 4. Leveraging Advanced Cooling Techniques Adopting advanced cooling techniques, such as hybrid cooling systems that use a combination of air & water, can reduce reliance on sea water. These systems are more efficient & require less water, resulting in cost savings. 5. Deploying Smart Water Management Systems Integrating smart water management systems that monitor & optimize water usage in real-time can enhance efficiency. IoT sensors, data analytics, & automated controls ensure optimal water distribution & usage, reducing waste & enhancing productivity. Economic Impact Analysis Cost Savings By reducing water procurement & treatment costs, the power station can save substantial amounts of money. These savings directly translate into increased profit margins. Enhanced Production Capacity Efficient water usage ensures uninterrupted operations & maximized electricity generation, leading to higher production output & revenue. Market Competitiveness Adopting sustainable practices enhances the company's market image, attracting more customers & potentially increasing market share, thereby boosting revenue. [Add row]

#### C4. Governance

(4.1) Does your organization have a board of directors or an equivalent governing body?

# (4.1.1) Board of directors or equivalent governing body

Select from:

🗹 Yes

### (4.1.2) Frequency with which the board or equivalent meets

Select from:

#### ✓ Quarterly

## (4.1.3) Types of directors your board or equivalent is comprised of

Select all that apply

- ✓ Executive directors or equivalent
- ✓ Non-executive directors or equivalent
- ✓ Independent non-executive directors or equivalent

# (4.1.4) Board diversity and inclusion policy

Select from:

✓ Yes, and it is publicly available

# (4.1.5) Briefly describe what the policy covers

The Policy on Board Diversity for the Board of Directors (the "Board") of Adani Energy Solutions Limited has been formulated by the Nomination and Remuneration Committee in accordance with SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 to assure that the Board is fully diversified and comprised of an ideal combination of Executive and Non-Executive Directors, including Independent Directors, with diverse backgrounds. The policy covers several key areas: Purpose: Emphasizes the importance of a diverse Board to harness unique skills and experiences for the benefit of the company. Clearly state the AESL's commitment to promoting diversity in all forms, including gender, race, ethnicity, age, disability, and more. • Policy Statement: Aims to enhance the Board effectiveness through diversity in gender, educational background, professional experience, professional skills, regional and industry experiences, race, ethnicity, nationality, and other distinctions. Composition: Ensures a balanced mix of executive, non-executive, and independent directors, with at least one woman director on the Board, as mandated by the Companies Act, 2013. The NRC is responsible for reviewing Board composition, recommending candidates, and conducting performance assessments. and to ensures that decisions regarding recruitment and remuneration of directors are based on performance and competence, with zero tolerance for unlawful discrimination and harassment.

# (4.1.6) Attach the policy (optional)

ATL\_Board-Diversity-Policy[1].pdf [Fixed row]

# (4.1.1) Is there board-level oversight of environmental issues within your organization?

	Board-level oversight of this environmental issue
Climate change	Select from: ✓ Yes
Water	Select from: ✓ Yes
Biodiversity	Select from: ✓ Yes

[Fixed row]

(4.1.2) Identify the positions (do not include any names) of the individuals or committees on the board with accountability for environmental issues and provide details of the board's oversight of environmental issues.

# Climate change

(4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

- ✓ Director on board
- ✓ Board-level committee
- ✓ Chief Risk Officer (CRO)
- ✓ Chief Executive Officer (CEO)
- ✓ Chief Procurement Officer (CPO)

✓ Chief Sustainability Officer (CSO)

☑ Other, please specify :Employees in Sustinability & Environment dept

# (4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

🗹 Yes

### (4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

- Board Terms of Reference
- ✓ Board mandate
- Individual role descriptions
- ✓ Other policy applicable to the board, please specify :Corporate governance policy Environment policy Biodiversity policy Group EHS policy

## (4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

☑ Scheduled agenda item in some board meetings – at least annually

## (4.1.2.5) Governance mechanisms into which this environmental issue is integrated

#### Select all that apply

- ✓ Overseeing and guiding scenario analysis
- ✓ Overseeing the setting of corporate targets
- ✓ Monitoring progress towards corporate targets
- ☑ Approving corporate policies and/or commitments

- $\blacksquare$  Overseeing and guiding public policy engagement
- ☑ Overseeing and guiding public policy engagement
- ☑ Approving and/or overseeing employee incentives
- ✓ Overseeing and guiding major capital expenditures
- ☑ Monitoring the implementation of the business strategy

- ✓ Overseeing reporting, audit, and verification processes
- ☑ Monitoring the implementation of a climate transition plan
- ☑ Overseeing and guiding the development of a business strategy
- ☑ Overseeing and guiding acquisitions, mergers, and divestitures
- ☑ Monitoring supplier compliance with organizational requirements
- ☑ Monitoring compliance with corporate policies and/or commitments
- ☑ Overseeing and guiding the development of a climate transition plan
- ☑ Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities
- ☑ Other, please specify :Ensuring compliance & Perfomance Reporting against State Polution Control Board Norms

## (4.1.2.7) Please explain

Our Corporate Responsibility Committee headed by the Board of Directors ensures effective execution of the Environmental, Social and Governance responsibilities across the organisation. This committee supervises our ESG commitments, evaluates and oversees sustainability performance, and identifies risks and opportunities that could impact our reputation and financial health. The Board has adopted a comprehensive top-down and bottom-up approach towards ESG. In this approach, the Board oversees and guides overall direction for ESG implementation. Responsibilities including ESG disclosures, value creation and strategic activities are spearheaded by the MD/CEO. The execution of the ESG strategies is overseen by the ESG Apex Committee, Chief Sustainability Officer (CSO) and Operational & Function leaders. Day to day execution ESG strategies is implemented by a cross functional team known as the ESG working group, which is headed by our Chief Sustainability Officer (CSO). This committee is also responsible for setting up targets for climate change and having an oversight of policy advocacy. The risk management infrastructure at the company is overseen by the Chief Risk Officer and is integrated throughout the organization. This framework allows employees and business partners to report any identified risks. The framework is built on the principles of the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In a demonstration of its commitment to tackling climate change, the company has incorporated climate change risks, encompassing both physical and transition risks, into its existing risk management protocols. Oversight of these climate-related risks falls under the purview of the Board's Audit and Risk Committee. We also have company wide policies on environmental management, biodiversity management and water management which helps us align our operations and strategies, showcasing the groups commitment to mitigating climate change. Employees and Supplychain partners are expected to adhere to s

### Water

# (4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

- ☑ Director on board
- ✓ Chief Executive Officer (CEO)
- ✓ Chief Sustainability Officer (CSO)

#### Board-level committee

✓ Other, please specify : Employees in Sustainability & Environment, Techno commercial functions.

## (4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

✓ Yes

#### (4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

- Board Terms of Reference
- Board mandate
- Individual role descriptions

#### (4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

✓ Scheduled agenda item in some board meetings – less than annually

# (4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

- Reviewing and guiding annual budgets
- ✓ Overseeing and guiding scenario analysis
- ✓ Overseeing the setting of corporate targets
- Monitoring progress towards corporate targets
- Approving corporate policies and/or commitments
- ✓ Overseeing and guiding the development of a business strategy
- Monitoring compliance with corporate policies and/or commitments

- Overseeing and guiding public policy engagement
- Approving and/or overseeing employee incentives
- ✓ Overseeing and guiding major capital expenditures
- Monitoring the implementation of the business strategy
- Overseeing reporting, audit, and verification processes
- Z Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities
- ☑ Other, please specify : Ensuring compliance & Perfomance Reporting against State Polution Control Board Norms

## (4.1.2.7) Please explain

Our Corporate Responsibility Committee headed by the Board of Directors ensures effective execution of the Environmental, Social and Governance responsibilities across the organisation. This committee supervises our ESG commitments, evaluates and oversees sustainability performance, and identifies risks and opportunities that could impact our reputation and financial health. The Board has adopted a comprehensive top-down and bottom-up approach towards ESG. In this approach, the Board oversees and guides overall direction for ESG implementation. Responsibilities including ESG disclosures, value creation and strategic activities are spearheaded by the MD/CEO. The execution of the ESG strategies is overseen by the ESG Apex Committee, Chief Sustainability Officer (CSO) and Operational & Function leaders. Day to day execution ESG strategies is implemented by a cross functional team known as the ESG working group, which is headed by our Chief Sustainability Officer (CSO). This committee is also responsible for setting up targets for climate change and having an oversight of policy advocacy. The risk management infrastructure at the company is overseen by the Chief Risk Officer and is integrated throughout the organization. This framework allows employees and business partners to report any identified risks. The framework is built on the principles of the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In a demonstration of its commitment to tackling climate change, the company has incorporated climate change risks, encompassing both physical and transition risks, into its existing risk management, biodiversity management and water management which helps us align our operations and strategies, showcasing the groups commitment to mitigating climate change Employees and Supplychain partners are expected to adhere to same in line with the Code of Conducts defined.

#### **Biodiversity**

# (4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

Director on board

#### functions

- Board-level committee
- ✓ Chief Risk Officer (CRO)
- ✓ Chief Executive Officer (CEO)
- ✓ Chief Sustainability Officer (CSO)

☑ Other, please specify :Employees in the Project, Sustainability & Environment

## (4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

✓ Yes

#### (4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

✓ Board Terms of Reference

✓ Board mandate

Individual role descriptions

## (4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

☑ Scheduled agenda item in some board meetings – at least annually

# (4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

- ☑ Overseeing reporting, audit, and verification processes
- ☑ Approving corporate policies and/or commitments
- ☑ Monitoring compliance with corporate policies and/or commitments
- ☑ Monitoring the implementation of the business strategy
- $\blacksquare$  Reviewing and guiding annual budgets

# (4.1.2.7) Please explain

Our Corporate Responsibility Committee headed by the Independent Board of Directors ensures effective execution of the Environmental, Social and Governance responsibilities across the organisation. This committee supervises our ESG commitments, evaluates and oversees sustainability performance, and identifies risks and opportunities that could impact our reputation and financial health. The Board has adopted a comprehensive top-down and bottom-up approach towards ESG. In this approach, the Board oversees and guides overall direction for ESG implementation. Responsibilities including ESG disclosures, value creation and strategic activities are spearheaded by the MD/CEO. The execution of the ESG strategies is overseen by the ESG Apex Committee, Chief Sustainability Officer (CSO) and Operational & Function leaders. Day to day executionof ESG strategies is implemented by a cross functional team known as the ESG working group, which is headed by our Chief Sustainability Officer (CSO). This committee is also responsible for setting up targets for climate change and having an oversight of policy advocacy. The risk management infrastructure at the company is overseen by the Chief Risk Officer and is integrated throughout the organization. This framework allows employees and business partners to report any identified risks. The framework is built on the principles of the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In a demonstration of its commitment to tackling climate change, the company has incorporated climate change risks, encompassing both physical and transition risks, into its existing risk management protocols. Oversight of these climate-related risks falls under the purview of the Board's Audit and Risk Committee. We also have company wide policies on environmental management, biodiversity management and water management which helps us align our operations and strategies, showcasing the company's commitment to mitigating biodiversity issues. Employees and Supplychain partners are e

# (4.2) Does your organization's board have competency on environmental issues?

#### **Climate change**

## (4.2.1) Board-level competency on this environmental issue

Select from:

✓ Yes

# (4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

- $\blacksquare$  Consulting regularly with an internal, permanent, subject-expert working group
- $\blacksquare$  Engaging regularly with external stakeholders and experts on environmental issues
- ☑ Having at least one board member with expertise on this environmental issue
- ☑ Other, please specify :Topic specific awareness and demonstration during onsite visits during Annual awareness and sharing sessions.

# (4.2.3) Environmental expertise of the board member

#### Experience

- ☑ Management-level experience in a role focused on environmental issues
- $\ensuremath{\overline{\ensuremath{\mathcal{M}}}}$  Active member of an environmental committee or organization

# Water

# (4.2.1) Board-level competency on this environmental issue

Select from:

🗹 Yes

# (4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

☑ Consulting regularly with an internal, permanent, subject-expert working group

☑ Engaging regularly with external stakeholders and experts on environmental issues

✓ Other, please specify :Topic specific awareness and demonstration during onsite visits during Annual awareness and sharing sessions. [Fixed row]

# (4.3) Is there management-level responsibility for environmental issues within your organization?

	Management-level responsibility for this environmental issue
Climate change	Select from: ✓ Yes
Water	Select from: ✓ Yes
Biodiversity	Select from: ✓ Yes

[Fixed row]

(4.3.1) Provide the highest senior management-level positions or committees with responsibility for environmental issues (do not include the names of individuals).

#### Climate change

# (4.3.1.1) Position of individual or committee with responsibility

#### Committee

Corporate responsibility committee

# (4.3.1.2) Environmental responsibilities of this position

#### Dependencies, impacts, risks and opportunities

- ☑ Assessing environmental dependencies, impacts, risks, and opportunities
- ☑ Assessing future trends in environmental dependencies, impacts, risks, and opportunities
- ☑ Managing environmental dependencies, impacts, risks, and opportunities

#### Engagement

- ☑ Managing engagement in landscapes and/or jurisdictions
- ☑ Managing public policy engagement related to environmental issues
- ☑ Managing supplier compliance with environmental requirements
- ☑ Managing value chain engagement related to environmental issues

#### Policies, commitments, and targets

- ☑ Monitoring compliance with corporate environmental policies and/or commitments
- ☑ Measuring progress towards environmental corporate targets
- Setting corporate environmental policies and/or commitments
- ✓ Setting corporate environmental targets

#### Strategy and financial planning

- ☑ Conducting environmental scenario analysis
- ☑ Developing a business strategy which considers environmental issues
- ✓ Developing a climate transition plan
- ☑ Managing environmental reporting, audit, and verification processes
- ☑ Managing major capital and/or operational expenditures relating to environmental issues

#### Other

- ✓ Providing employee incentives related to environmental performance
- ☑ Other, please specify :guiding and sharing best practise & Learnings from other sector for evaluation and deployment

# (4.3.1.4) Reporting line

#### Select from:

✓ Reports to the board directly

#### (4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

✓ Quarterly

# (4.3.1.6) Please explain

The Corporate Responsibility Committee, under the Board of Directors, ensures the effective management of our organization's Environmental, Social, and Governance (ESG) commitments. This committee oversees our ESG strategies, evaluates sustainability performance, and identifies potential risks and opportunities that could influence our reputation and financial health. Our approach to ESG implementation is both top-down, with the Board providing strategic direction, and bottom-up, involving a collaborative effort across various levels of the organization. The MD/CEO spearheads ESG disclosures, strategic value creation, and related activities. An ESG Apex Committee, headed by the Chief Sustainability Officer (CSO), alongside Operational & Function leaders, oversees the execution of ESG strategies. The CSO manages our corporate ESG commitments, engages with the value chain, sets targets, conducts environmental audits, and supports the development of a climate transition plan, ensuring supplier adherence to our code of conduct. Additionally, the Chief Risk Officer addresses environmental risks and opportunities. Regular updates are provided to the MD and CEO, maintaining a consistent flow of information on our ESG progress. This structure ensures a comprehensive and integrated approach to fulfilling our ESG responsibilities, aligning with public policy and regulatory requirements. Tier 1: Oversight & Guidance from the Board and Board-level Corporate Responsibility Committee (CRC) Tier 2: Execution of climate change, water-related strategic and operational responsibilities, value creation and disclosures are ensured by the MD/CEO Tier 3: Implementation of strategies are led, overseen and coordinated by the ESG Apex Committee, Chief Sustainability Officer (CSO) and Operational & Function leaders Tier 4: On ground execution of strategies by a cross-functional team called ESG Working Group guided by Chief Sustainability Officer (CSO)

#### Water

## (4.3.1.1) Position of individual or committee with responsibility

#### Committee

✓ Corporate responsibility committee

# (4.3.1.2) Environmental responsibilities of this position

#### Dependencies, impacts, risks and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

#### Engagement

- ☑ Managing engagement in landscapes and/or jurisdictions
- ☑ Managing public policy engagement related to environmental issues
- ☑ Managing value chain engagement related to environmental issues

#### Policies, commitments, and targets

- Monitoring compliance with corporate environmental policies and/or commitments
- ☑ Measuring progress towards environmental corporate targets
- ☑ Measuring progress towards environmental science-based targets
- Setting corporate environmental policies and/or commitments
- Setting corporate environmental targets

#### Strategy and financial planning

- ✓ Developing a climate transition plan
- ✓ Implementing a climate transition plan
- ✓ Conducting environmental scenario analysis environmental issues
- ☑ Managing annual budgets related to environmental issues
- ☑ Implementing the business strategy related to environmental issues

#### Other

✓ Providing employee incentives related to environmental performance

# (4.3.1.4) Reporting line

Select from:

Reports to the board directly

## (4.3.1.5) Frequency of reporting to the board on environmental issues

#### Select from:

- ☑ Developing a business strategy which considers environmental issues
- ☑ Managing environmental reporting, audit, and verification processes
- ☑ Managing major capital and/or operational expenditures relating to

## (4.3.1.6) Please explain

Our Corporate Responsibility Committee headed by the Board of Directors ensures effective execution of the Environmental, Social and Governance responsibilities across the organisation. This committee supervises our ESG commitments, evaluates and oversees sustainability performance, and identifies risks and opportunities that could impact our reputation and financial health. The Board has adopted a comprehensive top-down and bottom-up approach towards ESG. In this approach, the Board oversees and guides overall direction for ESG implementation. Responsibilities including ESG disclosures, value creation and strategic activities are spearheaded by the MD/CEO. The execution of the ESG strategies is overseen by the ESG Apex Committee, Chief Sustainability Officer (CSO) and Operational & Function leaders. Day to day executionof ESG strategies is implemented by a cross functional team known as the ESG working group, which is headed by our Chief Sustainability Officer (CSO). This committee is also responsible for setting up targets for climate change and having an oversight of policy advocacy, mon Tier 1: Oversight & Guidance from the Board and Board-level Corporate Responsibility Committee (CRC) Tier 2: Execution of climate change, water-related strategic and operational responsibilities, value creation and disclosures are ensured by the MD/CEO Tier 3: Implementation of strategies are led, overseen and coordinated by the ESG Apex Committee, Chief Sustainability Officer (CSO) and Operational & Function leaders Tier 4: On ground execution of strategies by a cross-functional team called ESG Working Group guided by Chief Sustainability Officer (CSO)

### **Biodiversity**

## (4.3.1.1) Position of individual or committee with responsibility

#### Committee

✓ Corporate responsibility committee

# (4.3.1.2) Environmental responsibilities of this position

#### Dependencies, impacts, risks and opportunities

- ☑ Assessing environmental dependencies, impacts, risks, and opportunities
- ☑ Assessing future trends in environmental dependencies, impacts, risks, and opportunities

#### Engagement

☑ Managing public policy engagement related to environmental issues

#### Policies, commitments, and targets

- ☑ Monitoring compliance with corporate environmental policies and/or commitments
- ☑ Measuring progress towards environmental corporate targets

✓ Setting corporate environmental targets

#### Strategy and financial planning

- ✓ Conducting environmental scenario analysis
- ☑ Developing a business strategy which considers environmental issues
- ☑ Implementing the business strategy related to environmental issues
- ☑ Managing environmental reporting, audit, and verification processes

#### Other

✓ Providing employee incentives related to environmental performance

✓ Other, please specify :updates the Corporate Responsibility Committee, Managing Director & CEO on the progress of the environmental issues. Guides Projects team for compliance of Environmental Social Impact Assessments and supports in getting reports, clearances, permits.

# (4.3.1.4) Reporting line

Select from:

✓ Other, please specify :Quaterly updates & Reports the Corporate Responsibility Committee, Managing Director & the CEO on the progress of the environmntal issues.

## (4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

✓ Quarterly

# (4.3.1.6) Please explain

Our Corporate Responsibility Committee headed by the Board of Directors ensures effective execution of the Environmental, Social and Governance responsibilities across the organisation. This committee supervises our ESG commitments, evaluates and oversees sustainability performance, and identifies risks and opportunities that could impact our reputation and financial health. The Board has adopted a comprehensive top-down and bottom-up approach towards ESG. In this approach, the Board oversees and guides overall direction for ESG implementation. Responsibilities including ESG disclosures, value creation and strategic activities are spearheaded by the MD/CEO. The execution of the ESG strategies is overseen by the ESG Apex Committee, Chief Sustainability Officer (CSO) and Operational & Function leaders. Day to day execution ESG strategies is implemented by a cross functional team known as the ESG working group, which is headed by our Chief Sustainability Officer (CSO). This committee is also responsible for setting up targets for climate change and having an oversight of policy advocacy, monitoring other environmental related aspects. Biodiversity policy: Adani Energy Solutions Limited (AESL) emphasizes environmental stewardship in its operations, aiming for

sustainable practices in energy generation, transmission, and distribution. The policy centers on complying with environmental laws, setting measurable objectives, optimizing resource use, preventing pollution, mitigating climate change, protecting biodiversity, and engaging stakeholders. AESL is committed to continuous improvement, integrating environmental considerations into business decisions, capital investments, and promoting a culture of environmental responsibility across all levels of the organization. Training and proactive risk assessments are key, along with circular procurement, and investing in research for resource efficiency. [Add row]

# (4.5) Do you provide monetary incentives for the management of environmental issues, including the attainment of targets?

# Climate change

## (4.5.1) Provision of monetary incentives related to this environmental issue

Select from:

Yes

# (4.5.2) % of total C-suite and board-level monetary incentives linked to the management of this environmental issue

15

# (4.5.3) Please explain

Sustainability related metrices forms part of our annual executive compensation. Furthermore, ESG and risks related performance holds 15% of the weightage as part of the KRA for our executive personnel. This comprises parameters on percentage of Renewable energy, GHG emission intensity, safety, talent and organisation development. AESL has a pre-defined financial metric relevant for the CEO's variable component including compensation influenced by the company's operational and financial performance. The compensation of the leadership roles has been linked to long-term sustainability goals and performance.

#### Water

# (4.5.1) Provision of monetary incentives related to this environmental issue

Select from:

🗹 Yes

(4.5.2) % of total C-suite and board-level monetary incentives linked to the management of this environmental issue
# (4.5.3) Please explain

Sustainability related metrices forms part of our annual executive compensation. Furthermore, ESG and risks related performance holds 15% of the weightage as part of the KRA for our executive personnel. This comprises parameters on percentage of Renewable energy, GHG emission intensity, safety, talent and organisation development. AESL has a pre-defined financial metric relevant for the CEO's variable component including compensation influenced by the company's operational and financial performance. The compensation of the leadership roles has been linked to long-term sustainability goals and performance. [Fixed row]

(4.5.1) Provide further details on the monetary incentives provided for the management of environmental issues (do not include the names of individuals).

**Climate change** 

### (4.5.1.1) Position entitled to monetary incentive

Board or executive level

✓ Chief Executive Officer (CEO)

## (4.5.1.2) Incentives

Select all that apply

☑ Bonus - % of salary

✓ Salary increase

# (4.5.1.3) Performance metrics

### Targets

✓ Progress towards environmental targets

Achievement of environmental targets

✓ Organization performance against an environmental sustainability index

#### Strategy and financial planning

✓ Board approval of climate transition plan

✓ Achievement of climate transition plan

#### **Emission reduction**

Reduction in emissions intensity

### (4.5.1.4) Incentive plan the incentives are linked to

Select from:

☑ Both Short-Term and Long-Term Incentive Plan, or equivalent

## (4.5.1.5) Further details of incentives

All responsibilities tied to strategic planning and operations, including those related to climate change, sustainability outcomes, and value generation, have been entrusted to the Managing Director (MD) and the Chief Executive Officer (CEO) by the board. Addressing climate change issues and meeting specific targets, such as the application of energy-saving initiatives, are included in the CEO's primary objectives. The MD evaluates the progress in Environmental, Social, and Governance (ESG) quarterly, while the CEO conducts monthly reviews of ESG advancements. These reviews occur during meetings scheduled specifically for discussing ESG issues or the overarching ESG strategy

# (4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

NA

### Water

## (4.5.1.1) Position entitled to monetary incentive

### Board or executive level

✓ Chief Executive Officer (CEO)

# (4.5.1.2) Incentives

Select all that apply

✓ Bonus - % of salary

✓ Salary increase

## (4.5.1.3) Performance metrics

### Targets

- ✓ Progress towards environmental targets
- Achievement of environmental targets
- ✓ Organization performance against an environmental sustainability index

### Strategy and financial planning

✓ Achievement of climate transition plan

### **Resource use and efficiency**

- ✓ Reduction in water consumption volumes direct operations
- ☑ Improvements in water efficiency direct operations
- ☑ Improvements in water accounting, reporting, and third-party verification

### Pollution

☑ Increase in discharge treatment compliance and meeting regulatory requirements – direct operations

# (4.5.1.4) Incentive plan the incentives are linked to

Select from:

☑ Both Short-Term and Long-Term Incentive Plan, or equivalent

# (4.5.1.5) Further details of incentives

CSO guides the core ESG Working Groups, formed at different locations at AESL. Additionally, performance of Integrated Management Systems, covering Quality, Environment, Health and Safety is regularly reviewed by the CSO. CSO reports to CEO's & MD office on monthly basis which is quaterly briefed to board CRC commitee. Tier 1: Oversight & Guidance from the Board and Board-level Corporate Responsibility Committee (CRC) Tier 2: Execution of climate change, waterrelated strategic and operational responsibilities, value creation and disclosures are ensured by the MD/CEO Tier 3: Implementation of strategies are led, overseen and coordinated by the ESG Apex Committee, Chief Sustainability Officer (CSO) and Operational & Function leaders Tier 4: On ground execution of strategies by a cross-functional team called ESG Working Group guided by Chief Sustainability Officer (CSO)

# (4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

NA

### **Climate change**

## (4.5.1.1) Position entitled to monetary incentive

### Board or executive level

✓ Chief Sustainability Officer (CSO)

# (4.5.1.2) Incentives

Select all that apply ✓ Bonus - % of salary

✓ Salary increase

# (4.5.1.3) Performance metrics

### Targets

- ✓ Progress towards environmental targets
- ✓ Achievement of environmental targets
- ✓ Organization performance against an environmental sustainability index
- ☑ Reduction in absolute emissions in line with net-zero target

### Strategy and financial planning

- ✓ Board approval of climate transition plan
- Achievement of climate transition plan

### **Emission reduction**

- ✓ Reduction in emissions intensity
- ☑ Increased share of renewable energy in total energy consumption

### **Resource use and efficiency**

- ✓ Reduction in total energy consumption
- Reduction of water withdrawals direct operations
- ✓ Improvements in water efficiency direct operations
- ☑ Reduction in water consumption volumes direct operations
- ☑ Improvements in emissions data, reporting, and third-party verification

### Pollution

- ✓ Improvements in wastewater quality direct operations
- ✓ Reduction or phase out of hazardous substances

### Engagement

✓ Increased value chain visibility (traceability, mapping)

# (4.5.1.4) Incentive plan the incentives are linked to

### Select from:

☑ Both Short-Term and Long-Term Incentive Plan, or equivalent

# (4.5.1.5) Further details of incentives

CSO guides the core ESG Working Groups, formed at different locations at AESL. Additionally, performance of Integrated Management Systems, covering Quality, Environment, Health and Safety is regularly reviewed by the CSO. CSO reports to CEO's & MD office on monthly basis which is quaterly briefed to board CRC commitee. Tier 1: Oversight & Guidance from the Board and Board-level Corporate Responsibility Committee (CRC) Tier 2: Execution of climate change, waterrelated strategic and operational responsibilities, value creation and disclosures are ensured by the MD/CEO Tier 3: Implementation of strategies are led, overseen and coordinated by the ESG Apex Committee, Chief Sustainability Officer (CSO) and Operational & Function leaders Tier 4: On ground execution of strategies by a cross-functional team called ESG Working Group guided by Chief Sustainability Officer (CSO)

☑ Improvements in water accounting, reporting, and third-party verification

# (4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

NA

### Water

### (4.5.1.1) Position entitled to monetary incentive

### Board or executive level

✓ Chief Sustainability Officer (CSO)

# (4.5.1.2) Incentives

- Select all that apply
- ✓ Bonus % of salary
- Promotion
- ✓ Salary increase

# (4.5.1.3) Performance metrics

#### Targets

- ✓ Progress towards environmental targets
- Achievement of environmental targets
- $\ensuremath{\overline{\mathbf{V}}}$  Reduction in absolute emissions in line with net-zero target

### Strategy and financial planning

- ✓ Achievement of climate transition plan
- ${\ensuremath{\overline{\mathrm{v}}}}$  Shift to a business model compatible with a net-zero carbon future

### **Emission reduction**

☑ Implementation of an emissions reduction initiative

- ✓ Reduction in emissions intensity
- ☑ Increased share of renewable energy in total energy consumption
- ✓ Reduction in absolute emissions

#### **Resource use and efficiency**

- ✓ Energy efficiency improvement
- ✓ Reduction in total energy consumption
- Reduction of water withdrawals direct operations
- ✓ Improvements in water efficiency direct operations
- ☑ Reduction in water consumption volumes direct operations

### Pollution

- ☑ Improvements in wastewater quality direct operations
- ✓ Reduction of water pollution incidents
- ✓ Reduction or phase out of hazardous substances

## (4.5.1.4) Incentive plan the incentives are linked to

Select from:

☑ The incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

# (4.5.1.5) Further details of incentives

Sustainability related metrices forms part of our annual executive compensation. Furthermore, ESG and risks related performance holds 15% of the weightage as part of the KRA for our executive personnel. eg. Chief Operating officer [COO] of Adani Dahanu Thermal Power station [ADTPS] which accounts for 98.5% of company level Water withdrawl and consumption has KRA linked to Water intensity per MWh generated, Sea Water intensity, Auxillary consumption /MWh generated safety, talent and organisation development. Tier 1: Oversight & Guidance from the Board and Board-level Corporate Responsibility Committee (CRC) Tier 2: Execution of climate change, water-related strategic and operational responsibilities, value creation and disclosures are ensured by the MD/CEO Tier 3: Implementation of strategies are led, overseen and coordinated by the ESG Apex Committee, Chief Sustainability Officer (CSO) and Operational & Function leaders Tier 4: On ground execution of strategies by a cross-functional team called ESG Working Group guided by Chief Sustainability Officer (CSO)

# (4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

- ☑ Improvements in emissions data, reporting, and third-party verification
- ☑ Improvements in water accounting, reporting, and third-party verification

### **Climate change**

### (4.5.1.1) Position entitled to monetary incentive

### Board or executive level

✓ Chief Procurement Officer (CPO)

# (4.5.1.2) Incentives

Select all that apply

Bonus - % of salary

✓ Salary increase

## (4.5.1.3) Performance metrics

Targets

✓ Progress towards environmental targets

# (4.5.1.4) Incentive plan the incentives are linked to

Select from:

☑ The incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

# (4.5.1.5) Further details of incentives

Sustainability related metrices forms part of our annual executive compensation. Furthermore, ESG and risks related performance holds 15% of the weightage as part of the KRA for our executive personnel. This comprises parameters on percentage of Supply chain sustinability in line with supplier code of conduct, safety, talent and organisation development.

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

### Water

### (4.5.1.1) Position entitled to monetary incentive

Facility/Unit/Site management

✓ Business unit manager

# (4.5.1.2) Incentives

Select all that apply

✓ Bonus - % of salary

Promotion

✓ Salary increase

### (4.5.1.3) Performance metrics

#### Targets

✓ Progress towards environmental targets

### (4.5.1.4) Incentive plan the incentives are linked to

Select from:

If the incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

## (4.5.1.5) Further details of incentives

Sustainability related metrices forms part of our annual executive compensation. Furthermore, ESG and risks related performance holds 15% of the weightage as part of the KRA for our executive personnel. This comprises parameters on percentage of Renewable energy, GHG emission & Fresh Water intensity, Sea water Intensity, safety, talent and organisation development.

# (4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

NA

### **Climate change**

# (4.5.1.1) Position entitled to monetary incentive

### Senior-mid management

Environment/Sustainability manager

# (4.5.1.2) Incentives

Select all that apply

☑ Bonus - % of salary

Promotion

✓ Salary increase

☑ Other, please specify :special award for contribution and or for innovative project implementation

# (4.5.1.3) Performance metrics

### Targets

✓ Progress towards environmental targets

# (4.5.1.4) Incentive plan the incentives are linked to

Select from:

☑ The incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

## (4.5.1.5) Further details of incentives

Sustainability related metrices forms part of our annual executive compensation. Furthermore, ESG and risks related performance holds 15% of the weightage as part of the KRA for our executive personnel. This comprises parameters on percentage of Renewable energy, GHG emission intensity, safety, talent and organisation development.

# (4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

NA

### Water

### (4.5.1.1) Position entitled to monetary incentive

### Senior-mid management

Environment/Sustainability manager

# (4.5.1.2) Incentives

Select all that apply

✓ Bonus - % of salary

Promotion

✓ Salary increase

☑ Other, please specify :special award for contribution and or for innovative project implementation

# (4.5.1.3) Performance metrics

### Targets

✓ Progress towards environmental targets

## (4.5.1.4) Incentive plan the incentives are linked to

Select from:

If the incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

# (4.5.1.5) Further details of incentives

Sustainability related metrices forms part of our annual executive compensation. Furthermore, ESG and risks related performance holds 15% of the weightage as part of the KRA for our executive personnel. This comprises parameters on percentage of Renewable energy, GHG emission intensity, Freash water & Sea water intensity, safety, talent and organisation development.

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

NA [Add row]

(4.6) Does your organization have an environmental policy that addresses environmental issues?

Does your organization have any environmental policies?
Select from: ✓ Yes

[Fixed row]

(4.6.1) Provide details of your environmental policies.

Row 1

### (4.6.1.1) Environmental issues covered

Select all that apply

✓ Climate change

# (4.6.1.2) Level of coverage

Select from:

✓ Organization-wide

## (4.6.1.3) Value chain stages covered

Select all that apply

- ☑ Direct operations
- ✓ Upstream value chain
- ✓ Downstream value chain
- Portfolio

# (4.6.1.4) Explain the coverage

Adani Energy Solutions Limited (AESL) emphasizes environmental stewardship in its operations, aiming for sustainable practices in energy generation, transmission, and distribution. The policy centers on complying with environmental laws, setting measurable objectives, optimizing resource use, preventing pollution, mitigating climate change, protecting biodiversity, and engaging stakeholders. AESL is committed to continuous improvement, integrating environmental considerations into business decisions, capital investments, and promoting a culture of environmental responsibility across all levels of the organization. Training and proactive risk assessments are key, along with circular procurement, and investing in research for resource efficiency. The policy advocates for transparency, reporting in line with ISO 14001:2018, and involves all employees and value chain partners. Endorsed by AESL's Board, it's communicated widely and reviewed for effectiveness periodically.

## (4.6.1.5) Environmental policy content

#### **Environmental commitments**

- ☑ Commitment to comply with regulations and mandatory standards
- Commitment to take environmental action beyond regulatory compliance
- Commitment to implementation of nature-based solutions that support landscape restoration and long-term protection of natural ecosystems
- Commitment to stakeholder engagement and capacity building on environmental issues

#### **Climate-specific commitments**

- ✓ Commitment to 100% renewable energy
- ✓ Commitment to net-zero emissions

☑ Commitment to not funding climate-denial or lobbying against climate regulations

#### Additional references/Descriptions

- ☑ Description of impacts on natural resources and ecosystems
- ☑ Description of environmental requirements for procurement

Description of grievance/whistleblower mechanism to monitor non-compliance with the environmental policy and raise/address/escalate any other greenwashing concerns

☑ Reference to timebound environmental milestones and targets

## (4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

Select all that apply

- ✓ Yes, in line with the Paris Agreement
- ☑ Yes, in line with Sustainable Development Goal 6 on Clean Water and Sanitation

# (4.6.1.7) Public availability

Select from:

✓ Publicly available

## (4.6.1.8) Attach the policy

Environment Policy.pdf

# Row 2

### (4.6.1.1) Environmental issues covered

Select all that apply

✓ Biodiversity

# (4.6.1.2) Level of coverage

Select from:

✓ Organization-wide

### (4.6.1.3) Value chain stages covered

Select all that apply

- ☑ Direct operations
- ✓ Upstream value chain
- ✓ Downstream value chain

# (4.6.1.4) Explain the coverage

Adani Energy Solutions Limited (AESL) has instituted a Biodiversity Policy underlining its dedication to conserving biodiversity across its operations. The policy advocates for the protection of rare and endangered species, emphasizing strategic integration of biodiversity considerations into AESL's operational planning and decision-making processes. It mandates compliance with local and international environmental laws and frameworks, engaging various stakeholders including local communities, NGOs, and academic institutions to bolster conservation efforts. AESL also commits to sustainable sourcing, minimizing impacts on biodiversity, and fostering habitat restoration through the mitigation hierarchy approach. Education and training for employees on biodiversity conservation are prioritized, ensuring widespread awareness and commitment. The policy underscores transparency through regular reporting on AESL's conservation activities and supports ongoing research and innovation aimed at achieving a Net Positive Gain in biodiversity. This living document reflects AESL's holistic approach to environmental stewardship, aligning with its vision for sustainable energy solutions.

# (4.6.1.5) Environmental policy content

#### **Environmental commitments**

- ☑ Commitment to avoidance of negative impacts on threatened and protected species
- Commitment to implementation of nature-based solutions that support landscape restoration and long-term protection of natural ecosystems
- ✓ Commitment to Net Positive Gain
- Commitment to No Net Loss
- ☑ Commitment to respect legally designated protected areas

### Additional references/Descriptions

- ☑ Description of biodiversity-related performance standards
- ☑ Description of dependencies on natural resources and ecosystems
- ☑ Description of impacts on natural resources and ecosystems

### (4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

Select all that apply

✓ Yes, in line with the Paris Agreement

Ves, in line with another global environmental treaty or policy goal, please specify :Indian Business and Biodiversity Initiative

# (4.6.1.7) Public availability

Select from:

✓ Publicly available

## (4.6.1.8) Attach the policy

Biodiversity-Policy.pdf

Row 3

## (4.6.1.1) Environmental issues covered

Select all that apply

✓ Water

# (4.6.1.2) Level of coverage

Select from:

✓ Organization-wide

## (4.6.1.3) Value chain stages covered

Select all that apply

☑ Direct operations

✓ Upstream value chain

Portfolio

## (4.6.1.4) Explain the coverage

Adani Energy Solutions Limited (AESL) commits to optimizing water use across its operations to address the critical challenge of water conservation. The company's Environment Policy outlines targets for reducing water consumption and enhancing water efficiency in power generation, transmission, and distribution processes. AESL strives to implement cutting-edge water-saving technologies and practices, advocating for the recycling and reuse of water where feasible. Emphasizing the prevention of water pollution, the policy also entails rigorous measures to ensure that discharges meet or surpass environmental standards, safeguarding local water bodies and ecosystems. These efforts are aligned with AESL's broader sustainability goals, demonstrating a proactive approach to preserving vital water resources for future generations.

### (4.6.1.5) Environmental policy content

#### Water-specific commitments

- ☑ Commitment to control/reduce/eliminate water pollution
- ✓ Commitment to reduce water consumption volumes
- Commitment to reduce water withdrawal volumes
- ☑ Commitment to the conservation of freshwater ecosystems
- ☑ Commitment to water stewardship and/or collective action

## (4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

Select all that apply

- ✓ Yes, in line with the Paris Agreement
- ☑ Yes, in line with Sustainable Development Goal 6 on Clean Water and Sanitation

# (4.6.1.7) Public availability

Select from:

✓ Publicly available

## (4.6.1.8) Attach the policy

# (4.10) Are you a signatory or member of any environmental collaborative frameworks or initiatives?

(4.10.1) Are you a signatory or member of any environmental collaborative frameworks or initiatives?

Select from:

🗹 Yes

### (4.10.2) Collaborative framework or initiative

Select all that apply

UN Global Compact

### (4.10.3) Describe your organization's role within each framework or initiative

Adani Energy Solutions Limited's participation in the UN Global Compact demonstrates its commitment to responsible and sustainable business practices. The company actively collaborates with other like-minded organizations to advance sustainability and promote positive environmental and social impact. Through its participation in various UN Global Compact aligned initiatives, AESL is at the forefront of driving sustainable innovation and enhancing the quality of life for its stakeholders. AESL also shows the alignment of its initiatives through its Sustainability Report. [Fixed row]

# (4.11) In the reporting year, did your organization engage in activities that could directly or indirectly influence policy, law, or regulation that may (positively or negatively) impact the environment?

(4.11.1) External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the environment

### Select all that apply

✓ Yes, we engaged directly with policy makers

Ves, we engaged indirectly through, and/or provided financial or in-kind support to a trade association or other intermediary organization or individual whose activities could influence policy, law, or regulation

# (4.11.2) Indicate whether your organization has a public commitment or position statement to conduct your engagement activities in line with global environmental treaties or policy goals

Select from:

✓ Yes, we have a public commitment or position statement in line with global environmental treaties or policy goals

### (4.11.3) Global environmental treaties or policy goals in line with public commitment or position statement

Select all that apply

✓ Paris Agreement

☑ Sustainable Development Goal 6 on Clean Water and Sanitation

Another global environmental treaty or policy goal, please specify :1) United Nations Energy Compact 2) United Nations Global compact 3) Sustainable Development Goal 7 on affordable and clean energy

## (4.11.4) Attach commitment or position statement

AESL - Annual Report 2024.pdf

### (4.11.5) Indicate whether your organization is registered on a transparency register

Select from:

Unknown

# (4.11.8) Describe the process your organization has in place to ensure that your external engagement activities are consistent with your environmental commitments and/or transition plan

Adani Electricity Mumbai Limited (AEML), a part of Adani Electricity Limited (AESL), is committed to reducing its environmental impact. AESL has submitted its target to the Science-Based Targets initiative (SBTi) and has committed to becoming a "net zero company" by 2050. The company has set short-term and medium-term targets to reduce its absolute Scope-1 and Scope-2 greenhouse gas (GHG) emissions by 72.7% by FY 2031-32 and Scope-3 GHG emissions by 27.5% by FY 2031, using FY 2019-20 as the base year. AEML's goal is to increase the share of renewable power procurement from 3% to 30% by FY 2022-23, which was achieved, and to 60% by FY2026-27 & 70% by FY2029-30. This aligns with the United Nations' Sustainable Development Goal (SDG) 07. AEML has successfully increased its renewable energy share to 34.35% in FY 2023-24, resulting in a 23.87% reduction in GHG emissions from the previous year. The company aims to achieve a 40% reduction in GHG emission intensity by FY 2024-25, a 50% reduction by FY 2026-27, and a 70% reduction by FY 2029-30, aligning with SDG 13 for Climate Change Mitigation. AEML also empowers its customers in Mumbai to select renewable energy options and earn Green Power Certificates, making them active participants in reducing carbon emissions. The company's water targets are aligned with SDGs priorities and material issues identified by AESL. As industry leaders, AESL actively

participates in and regularly interacts with government bodies, institutions, NGOs, and industry players through various member platforms for best practice sharing. AESL collaborates with organizations such as the Center of Electricity Authority of India (CEA), Confederation of Indian Industry (CII), Indian Energy Exchange, Association of Power Producers, and CDP India for benchmarking purposes. The company provides data through public disclosures and has developed specific policies regarding environmental management, including an Environmental Policy supported by Commitment documents that define strategy and milestones. AESL engages with the Ministry of Environment, Forest and Climate Change (MoEFCC) and the Maharashtra state pollution control board to provide annual compliance reports and suggestions for draft regulations related to water and wastewater management for power plants in India. [Fixed row]

# (4.11.1) On what policies, laws, or regulations that may (positively or negatively) impact the environment has your organization been engaging directly with policy makers in the reporting year?

Row 1

### (4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

Maharashtra Electricity Regulatory Commission (Multi Year Tariff) 2019 Regulations'). Maharashtra Electricity Regulatory Commission (Terms and Conditions for determination of RE Tariff) Regulations, 2021.

## (4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

Climate change

### (4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

#### **Energy and renewables**

- Electricity grid access for renewables
- ✓ Green electricity tariffs/renewable energy PPAs

## (4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

🗹 National

### (4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

🗹 India

# (4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

✓ Support with no exceptions

# (4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

✓ Regular meetings

☑ Participation in working groups organized by policy makers

- ✓ Discussion in public forums
- Responding to consultations
- ✓ Submitting written proposals/inquiries
- $\blacksquare$  Participation in voluntary government programs

(4.11.1.9) Funding figure your organization provided to policy makers in the reporting year relevant to this policy, law, or regulation (currency)

### 0

# (4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

We worked together with other distribution companies (discoms) to develop a consensus and business case for green tariffs, highlighting the benefits for both customers and discoms. This proposal was submitted to regulatory authorities, who evaluated its relevance and benefits before approving and adopting it. Building on this success, we proposed a national mandate that 60% of new vehicles on Indian roads from 2030 onwards should be electric vehicles (EVs). We collaborated with EV manufacturers and other discoms to build a strong case, which we presented to NITI Aayog. In addition, we worked with the Maharashtra Electricity Regulatory Commission (MERC) to develop a procedure and offered to establish EV charging stations, called "Share Charge," in residential societies and malls. This initiative aims to promote the adoption of electric vehicles and support the transition to a more sustainable transportation system.

(4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

 $\checkmark$  Yes, we have evaluated, and it is aligned

(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply

Paris Agreement

Another global environmental treaty or policy goal, please specify :United Nations Net ZERO Alliance for Electric Utilities

## Row 2

(4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

Maharashtra Pollution Control Board for Statelevel Climate action plan

# (4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

✓ Climate change

# (4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

### Environmental protection and management procedures

☑ Other environmental protection and management procedures, please specify :Net Zero plan for Industries

### (4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

✓ Regional

## (4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

🗹 India

# (4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

✓ Support with minor exceptions

# (4.11.1.7) Details of any exceptions and your organization's proposed alternative approach to the policy, law, or regulation

Time frame proposed by MPCB for Net Zero plan was proposed to be revised from within 30 days to about 90-120 days, inorder to Industries prepare an effective Net Zero plan instead of submitting a on paper plan alone.

# (4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

- ✓ Ad-hoc meetings
- ✓ Regular meetings
- ☑ Discussion in public forums
- Responding to consultations
- but not limited to awareness session.
- ✓ Provided funding or in-kind support

- ✓ Submitting written proposals/inquiries
- ✓ Participation in voluntary government programs
- ☑ Participation in working groups organized by policy makers
- ☑ Other, please specify :Providing Technical assistance on need basis including

(4.11.1.9) Funding figure your organization provided to policy makers in the reporting year relevant to this policy, law, or regulation (currency)

0

(4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

We worked together with other industries and companies to develop a consensus and business case for Net Zero transition, highlighting the benefits for both industry and scoiety at large. This proposal was submitted to regulatory authorities, who evaluated its relevance and benefits before approving and adopting it.

(4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply

Paris Agreement

Another global environmental treaty or policy goal, please specify :United Nations Net ZERO Alliance for Electric Utilities

## Row 3

# (4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

Confederation of Indian Industries [CII] for IBBI (Indian Business and Biodiversity Initiative)

### (4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

Climate change

✓ Water

### (4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

#### Other

✓ Corporate environmental targets

✓ Other, please specify :Mainstreaming biodiversity and ecosystem services into the private sector (target 8.4 & 15.9) and through the business led multistakeholder platform that promotes private sector leadership in order to make businesses efficient and sustainable (targe

## (4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

National

# (4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

🗹 India

# (4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

✓ Support with no exceptions

# (4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

✓ Ad-hoc meetings

Regular meetings

☑ Discussion in public forums

✓ Responding to consultations

✓ Submitting written proposals/inquiries

✓ Participation in voluntary government programs

✓ Participation in working groups organized by policy makers

**☑** Other, please specify :**Participate in voluantary Impact assessment studies** 

and disclosure of the study for desimination of the information, insights to peers and working group.

✓ Provided funding or in-kind support

# (4.11.1.9) Funding figure your organization provided to policy makers in the reporting year relevant to this policy, law, or regulation (currency)

0

(4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

Participated in the consulation workshops and shared the progress thru public disclosures and views on the IBBI declaration 2.0 revision from the IBBI declaration orginaly drafted in 2014. This declaration outlines a series of actionable steps to integrate biodiversity considerations into business practices. Assess, measure, and monitor biodiversity-related risks and opportunities across the business value chain, product, and service lines.

# (4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply Kunming-Montreal Global Biodiversity Framework [Add row]

(4.11.2) Provide details of your indirect engagement on policy, law, or regulation that may (positively or negatively) impact the environment through trade associations or other intermediary organizations or individuals in the reporting year.

Row 1

# (4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

# (4.11.2.4) Trade association

### Global

✓ Other global trade association, please specify :United Nations Global Compact United Nations Energy Compact United Nations Net Zero Alliance for Electric Utilities

# (4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

✓ Climate change

### (4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

✓ Yes, we publicly promoted their current position

# (4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

To accelerate SDG7 action on a trajectory in line with the Paris Agreement and the SDGs, Energy Compacts are being mobilized by UN-Energy as part of the Highlevel Dialogue on Energy in September 2021. Energy Compacts are ongoing or new commitments with clear, underlying actions that will advance progress on one or more of SDG7's three core targets. These could be policies, investment, analytical work, etc. to achieve affordable and clean energy for all by 2030. AESL Acknowledged that the Electric Utilities sector has a major role to play regarding climate change and energy efficiency through the promotion of renewable energy sources, energy efficiency and reduction in greenhouse gas emissions from power plants. Companies are expected to set ambitious climate change strategies, backed by relevant targets and widespread environmental management systems. In line with India's national environmental targets and its own environmental strategy, AEML [AESL's retail division ]has selected two relevant KPIs for its first issuance of a Sustainability-Linked Bond (SLB) with an expected amount of USD 300 million. We at AESL being an electric utility are enabling Energy transition for our 3.18 Million customers in Mumbai, India distribution network. AESL has committed to increase RE in our power procurement mix from 3% in FY2019 to 30% by FY2023 Achieved 30.04% in FY2023 and 34.35% in FY2024 [current reporting period], 60% by FY2027 and 70% by 2030. The United Nations Global Compact is a key initiative that promotes responsible business practices among global companies. AESL has comThemitted to upholding the principles of the United Nations Global Compact and the International Labour Organisation's Declaration on Fundamental Principles and Rights at Work. In line with these standards, we take a proactive approach to prevent and address various forms of workplace misconduct. Specifically, we are committed to eliminating child labour, forced and compulsory labour, discrimination, and harassment, including sexual and nonsexual harassment. As part of our ongoing efforts to promote human rights, we are currently revisiting an internal human rights due diligence framework. This framework is expected to be completed by fiscal year 2025 and will serve as a critical tool in ensuring that our operations are conducted in accordance with internationally recognized human rights standards.

## (4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

5837.395

# (4.11.2.10) Describe the aim of this funding and how it could influence policy, law or regulation that may impact the environment

During the reporting period, AESL did not make any contributions to affiliated trade associations. Instead, we dedicated a significant portion of our resources to our membership with the United Nations Global Compact. Specifically, we made an annual subscription fee payment of INR 4.85 lakhs, demonstrating our commitment to upholding the principles of responsible business practices and sustainable development. Funding figure conversion: 1 dollar 83.085 INR as per 31st March 2024 Therefore, Dollar 4,85,000/83.085 5837.40

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

 $\blacksquare$  Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

Another global environmental treaty or policy goal, please specify :Paris Climate Agreement [Add row]

(4.12.1) Provide details on the information published about your organization's response to environmental issues for this reporting year in places other than your CDP response. Please attach the publication.

Row 1

(4.12.1.1) Publication

Select from:

### (4.12.1.3) Environmental issues covered in publication

Select all that apply

✓ Climate change

✓ Water

✓ Biodiversity

## (4.12.1.4) Status of the publication

Select from:

✓ Complete

# (4.12.1.5) Content elements

- Select all that apply
- Strategy
  Strategy
  Dependencies & Impacts
  Biodiversity indicators
  Emission targets
  Public policy engagement
  Emissions figures
  Water accounting figures
  Risks & Opportunities
  Content of environmental policies
- ☑ Other, please specify :Waste generated, disposed and diverted from landfill

# (4.12.1.6) Page/section reference

Integrated Annual Report pages: Page 125 Content of environmental policies FY 2023-24, Page 216 Governance, Page 362 Public Policy engagement, Page 76 Risk & Opportunities, Page 81 Strategy, Page 149 Biodiversity indicators, Page 130 Emission figures, Page 123 Emission targets, Page 146 Water accounting figures, Page 352-354 Water accounting figures Sustainability Report Pages: Page 34 Impacts and Dependencies

# (4.12.1.7) Attach the relevant publication

AESL - Annual Report 2024.pdf

# (4.12.1.8) Comment

Adani Energy Solutions Limited - Sustainability Report link: https://www.adanienergysolutions.com/-/media/Project/Transmission/Sustainability/document/AESL%20Sustainability%20Report%202024

### Row 2

# (4.12.1.1) Publication

Select from:

✓ In voluntary sustainability reports

# (4.12.1.3) Environmental issues covered in publication

Select all that apply

- ✓ Climate change
- ✓ Water
- ✓ Biodiversity

## (4.12.1.4) Status of the publication

Select from:

Complete

## (4.12.1.5) Content elements

Select all that apply

- ✓ Strategy
- ✓ Governance
- Emission targets
- ✓ Emissions figures
- ✓ Risks & Opportunities landfill.

- ✓ Value chain engagement
- ✓ Dependencies & Impacts
- ✓ Public policy engagement
- ✓ Water accounting figures
- ☑ Other, please specify :Waste generated , disposed and diversted from

## (4.12.1.6) Page/section reference

Integrated Annual Report pages: Page 125 Content of environmental policies FY 2023-24, Page 216 Governance, Page 362 Public Policy engagement, Page 76 Risk & Opportunities, Page 81 Strategy, Page 149 Biodiversity indicators, Page 130 Emission figures, Page 123 Emission targets, Page 146 Water accounting figures, Page 352-354 Water accounting figures Sustainability Report Pages: Page 34 Impacts and Dependencies

# (4.12.1.7) Attach the relevant publication

AESL - Annual Report 2024.pdf

### (4.12.1.8) Comment

Adani Energy Solutions Limited - Sustainability Report link: https://www.adanienergysolutions.com/-/media/Project/Transmission/Sustainability/document/AESL%20Sustainability%20Report%202024 [Add row]

## **C5. Business strategy**

## (5.1) Does your organization use scenario analysis to identify environmental outcomes?

## **Climate change**

### (5.1.1) Use of scenario analysis

Select from:

✓ Yes

# (5.1.2) Frequency of analysis

Select from:

Every three years or less frequently

## Water

# (5.1.1) Use of scenario analysis

Select from:

🗹 Yes

# (5.1.2) Frequency of analysis

Select from: Every three years or less frequently [Fixed row]

# (5.1.1) Provide details of the scenarios used in your organization's scenario analysis.

# **Climate change**

## (5.1.1.1) Scenario used

### **Physical climate scenarios**

✓ RCP 6.0

## (5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

✓ SSP4

# (5.1.1.3) Approach to scenario

Select from:

✓ Qualitative and quantitative

# (5.1.1.4) Scenario coverage

Select from:

✓ Organization-wide

# (5.1.1.5) Risk types considered in scenario

Select all that apply

- ✓ Policy
- ✓ Market
- ✓ Liability
- ✓ Reputation
- Technology

## (5.1.1.6) Temperature alignment of scenario

Select from:

☑ 3.0°C - 3.4°C

- Acute physical
- ✓ Chronic physical

### (5.1.1.7) Reference year

2020

### (5.1.1.8) Timeframes covered

Select all that apply

✓ 2030

✓ 2050

## (5.1.1.9) Driving forces in scenario

### Local ecosystem asset interactions, dependencies and impacts

- ✓ Number of ecosystems impacted
- ✓ Changes to the state of nature
- ✓ Changes in ecosystem services provision
- ☑ Climate change (one of five drivers of nature change)
- ☑ Speed of change (to state of nature and/or ecosystem services)
- ☑ Other local ecosystem asset interactions, dependencies and impacts driving forces, please specify

### Finance and insurance

✓ Cost of capital

### Stakeholder and customer demands

- ✓ Consumer attention to impact
- ✓ Impact of nature footprint on reputation
- ✓ Impact of nature service delivery on consumer

#### Regulators, legal and policy regimes

- ✓ Global regulation
- ☑ Methodologies and expectations for science-based targets

#### **Relevant technology and science**

✓ Data regime (from closed to open)

#### **Direct interaction with climate**

✓ On asset values, on the corporate

#### Macro and microeconomy

✓ Domestic growth

### (5.1.1.10) Assumptions, uncertainties and constraints in scenario

Assumptions • RCP 6.0 assumes a stabilization scenario where radiative forcing stabilizes at 6.0 W/m<sup>2</sup> by 2100. This requires moderate emission pathways, balancing between high (RCP 8.5) and low (RCP 2.6) emission scenarios. • The scenario includes the assumption that climate policies and technologies aimed at reducing emissions will be implemented. This reflects a future where governments and institutions take moderate measures to control greenhouse gas emissions. • Scenario assumes the development and adoption of new technologies that contribute to emission reduction. This includes advancements in renewable energy, energy efficiency, carbon capture and storage. • Assumes continued economic growth, particularly in rapidly developing regions like India where AESL operates, which will drive energy demand and shape emission trajectories. Uncertainties • Policy Effectiveness: The effectiveness of climate policies in reducing emissions is uncertain. Especially variations in policy implementation and compliance across different regions and countries can significantly impact emission trajectories. •

Technological Development: The pace and success of technological advancements that the scenario assumes are uncertain. As adoption of new technologies, actual development, scalability, and market acceptance remain unpredictable. Socio-Economic Factors: Changes in population growth, economic development, and energy consumption patterns are uncertain and can influence emission levels and climate impacts. Natural climate variability, such as volcanic eruptions or variations in solar radiation, can introduce additional uncertainties in the scenario. Constraints Balancing the costs of mitigation & adaptation strategies with economic development goals presents a significant constraint as low-carbon technologies & infrastructure resilience require substantial financial resources. The scenario hinges on moderate international cooperation & political commitment to climate action. Inconsistent political will & international disputes can constrain the effectiveness of global emission reduction efforts. Limited natural resources & competition for these resources can constrain the implementation practices. Existing infrastructure may not be easily adaptable to new technologies or resilient to climate impacts, posing constraints on effective implementation of adaptation measures.

### (5.1.1.11) Rationale for choice of scenario

The rationale for selecting the RCP 6.0 scenario for assessing climate change impacts on an Indian electric utility like AESL involved several key considerations: 1. Moderate Emission Pathway: RCP 6.0 represents a stabilization scenario where radiative forcing stabilizes at 6.0 W/m<sup>2</sup> by 2100. This scenario assumes moderate greenhouse gas emissions, making it a balanced choice between more extreme scenarios like RCP 8.5 (high emissions) and RCP 2.6 (low emissions). 2. Realistic Policy Assumptions: RCP 6.0 includes assumptions about the implementation of climate policies and technologies aimed at reducing emissions. This makes it a practical choice for AESL planning for future regulatory environments and technological advancements. 3. Impact on Infrastructure: For AESL, understanding the impacts of a moderate climate change scenario helps in planning for infrastructure resilience. This includes anticipating changes in energy demand, supply disruptions, and the need for adaptive measures. 4. Economic Considerations: The scenario provided a middle-ground projection that helped AESL balance the costs of mitigation and adaptation strategies with the potential economic impacts of climate change1. 5. Regional Relevance: The impacts projected under RCP 6.0 are relevant for regions like India, where rapid economic growth and urbanization are expected. This scenario helps in understanding how climate change might interact with these factors. By using RCP 6.0, AESL intended to develop robust strategies to help mitigate risks and capitalize on opportunities presented by climate change. For physical risks, we have conducted scenario analysis against latest IPCC scenarios released in sixth AR. These scenarios are an extension to RCPs and are know as Shared Socioeconomic Pathways (SSPs) which project socioeconomic global changes up to 2100. They are used to derive greenhouse gas emissions scenarios with different climate policies. We have considered the scenario to understand the implications, of high emissions. Climateinduced temperature risk can significantly impact transmission and distribution efficiency and reliability due to energy losses. Projected chronic physical risks could further impact transmission efficiency and grid infrastructure. Further to analyse the financial impact of regulations such as carbon pricing on business, market disruptions, and failure of adoption to new technologies, high emissions scenario has been considered.

### Water

### (5.1.1.1) Scenario used

### Physical climate scenarios

✓ RCP 4.5

### (5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

✓ SSP2

# (5.1.1.3) Approach to scenario

Select from:

✓ Qualitative and quantitative

# (5.1.1.4) Scenario coverage

Select from:

✓ Organization-wide

# (5.1.1.5) Risk types considered in scenario

Select all that apply
Policy

✓ Market

✓ Liability

✓ Reputation

✓ Acute physical

# (5.1.1.6) Temperature alignment of scenario

Select from:

✓ 2.5°C - 2.9°C

# (5.1.1.7) Reference year

2019

### (5.1.1.8) Timeframes covered

Select all that apply

✓ 2030

✓ 2050

# (5.1.1.9) Driving forces in scenario

### Local ecosystem asset interactions, dependencies and impacts

- ✓ Number of ecosystems impacted
- ✓ Changes to the state of nature
- ✓ Changes in ecosystem services provision
- ✓ Climate change (one of five drivers of nature change)
- ☑ Speed of change (to state of nature and/or ecosystem services)
- ☑ Other local ecosystem asset interactions, dependencies and impacts driving forces, please specify

### Finance and insurance

✓ Cost of capital

### Sensitivity of capital (to nature impacts and dependencies)

### Stakeholder and customer demands

- ✓ Consumer attention to impact
- ✓ Impact of nature footprint on reputation

### Regulators, legal and policy regimes

- ✓ Global regulation
- ✓ Political impact of science (from galvanizing to paralyzing)
- ✓ Level of action (from local to global)

### (5.1.1.10) Assumptions, uncertainties and constraints in scenario

We use globally recognised WRI Aqueduct tool and India Water Tool, to conduct periodic and thorough water risk assessments across all our sites. We employed the IPCC's RCP 4.5 scenario analysis to study various impacts such as a projected change in the monthly maximum temperature, monthly precipitation, severe drought likelihood and land projected to be below the annual flood level for 'Period: Impacts Projection' during 2020 to 2039. The scenario analysis allowed the identification of operations in water-stressed areas and anticipated potential water-related conflict as well as group of stakeholders that could be involved. Drought risk analysis was conducted to estimate probable changes in water availability to formulate a proactive approach towards future needs.

### (5.1.1.11) Rationale for choice of scenario

The rationale for selecting the RCP 4.5 scenario for assessing climate change impacts on an Indian electric utility like AESL involves several key considerations: 1. Stabilization Scenario: RCP 4.5 is a stabilization scenario where radiative forcing stabilizes at 4.5 W/m<sup>2</sup> by 21001. This scenario assumes that global greenhouse gas emissions peak around 2040 and then decline, making it a moderate pathway that balances between high and low emission scenarios. 2. Policy and Technology Assumptions: RCP 4.5 includes assumptions about the implementation of climate policies and the adoption of technologies aimed at reducing emissions1. This makes it a practical choice for AESL's planning for future regulatory environments and technological advancements. 3. Infrastructure Resilience: For AESL, understanding the impacts of a moderate climate change scenario helps in planning for infrastructure resilience. This includes anticipating changes in energy demand, supply disruptions, and the need for adaptive measures2. 4. Economic Considerations: The scenario provided a balanced projection that can help AESL manage the costs of mitigation and adaptation strategies with the potential economic impacts of climate change1. 5. Regional Relevance: The impacts projected under RCP 4.5 are relevant for regions like India, where rapid economic growth and urbanization are expected. This scenario helpd in understanding how climate change. For physical risks, we have conducted scenario analysis against latest IPCC scenarios released in sixth AR. These scenarios are an extension to RCPs and are know as Shared Socioeconomic Pathways (SSPs) which project socioeconomic global changes up to 2100. They are used to derive greenhouse gas emissions scenarios with different climate policies.

# **Climate change**

# (5.1.1.1) Scenario used

**Climate transition scenarios** 

✓ IEA NZE 2050

# (5.1.1.3) Approach to scenario

Select from:

✓ Qualitative and quantitative

## (5.1.1.4) Scenario coverage

Select from:

✓ Organization-wide

### (5.1.1.5) Risk types considered in scenario

Select all that apply

Policy

✓ Market

✓ Liability

✓ Reputation

✓ Technology

# (5.1.1.6) Temperature alignment of scenario

### Select from:

✓ 1.5°C or lower

# (5.1.1.7) Reference year

2019

Acute physicalChronic physical

### (5.1.1.8) Timeframes covered

Select all that apply

✓ 2030

✓ 2050

# (5.1.1.9) Driving forces in scenario

### Local ecosystem asset interactions, dependencies and impacts

☑ Climate change (one of five drivers of nature change)

### Finance and insurance

- ✓ Cost of capital
- ☑ Sensitivity of capital (to nature impacts and dependencies)

### Stakeholder and customer demands

- ✓ Consumer sentiment
- ✓ Consumer attention to impact
- ✓ Impact of nature footprint on reputation
- ✓ Impact of nature service delivery on consumer

### Regulators, legal and policy regimes

- ✓ Global regulation
- ✓ Political impact of science (from galvanizing to paralyzing)
- ✓ Level of action (from local to global)
- ✓ Global targets
- ☑ Methodologies and expectations for science-based targets

### Relevant technology and science

☑ Granularity of available data (from aggregated to local)

### Direct interaction with climate

 $\checkmark$  On asset values, on the corporate

#### Macro and microeconomy

✓ Domestic growth

### (5.1.1.10) Assumptions, uncertainties and constraints in scenario

The International Energy Agency's Net Zero by 2050 (IEA NZE 2050) scenario outlines a comprehensive pathway to achieve net-zero emissions by mid-century. AESL aims to strategically position itself to thrive in a future-oriented energy market by closely monitoring policy developments, macroeconomic trends, regional specificities, technological advancements, and shifts in energy usage. The Indian government's commitment to renewable energy targets and climate action policies, such as the National Solar Mission and wind energy targets, will play a pivotal role. AESL has also considered the potential introduction of a carbon tax or cap-andtrade systems, along with assumptions about the implementation and escalation of carbon pricing and stricter emission norms. India's adherence to international climate agreements, such as the Paris Agreement, and potential future commitments will influence policy landscape assumptions. Collaboration with global bodies in meeting climate targets is expected. AESL anticipates increased government funding and incentives for innovation in the energy sector, with policies supporting R&D in clean technologies and grid infrastructure enhancements being crucial. AESL has considered a steady GDP growth rate of about 6-7%, driven by industrialization, urbanization, and a growing middle class, leading to increased electricity demand. Assumptions on the pace and scale of electrification in rural and urban areas will be key. The availability of domestic and foreign investment in the energy sector will shape AESL's financial strategies, assuming favorable investment climates, ease of doing business, and financial incentives. Macroeconomic stability, including manageable inflation and stable currency exchange rates, will influence cost projections for infrastructure and technology imports, which are highly capital-intensive. Assumptions about future climate conditions and weather variability will impact renewable energy generation and thermal power plant cooling needs. AESL has considered scenarios of increased frequency of extreme weather events. Advancements in solar, wind, and other renewable technologies will dictate the feasibility and cost-effectiveness of clean energy projects. Assumptions about technology costs, efficiency gains, and deployment rates are fundamental. Breakthroughs in battery technologies and other storage solutions will be critical for managing intermittent renewable energy sources. Increasing electrification.

### (5.1.1.11) Rationale for choice of scenario

The International Energy Agency's Net Zero by 2050 (IEA NZE 2050) scenario, which provides a comprehensive framework for countries, companies, and utilities to mitigate and adapt to climate change. For an Indian electric utility like AESL, adopting this scenario offers numerous strategic benefits, aligning its operational goals with global sustainability standards. By adopting the IEA NZE 2050 scenario, AESL ensures compliance with global climate policies and frameworks, positioning itself as a forward-thinking and responsible utility. The scenario provides AESL with a credible pathway to model different future states and their implications, allowing the utility to test various strategies, enhance its adaptive capacity, and make informed decisions based on plausible futures. This approach helps AESL build resilience against a range of potential climate impacts. The scenario emphasizes technological innovation, highlighting the importance of advanced renewable energy sources, grid modernization, and energy storage solutions. For AESL, adopting these technologies is crucial for reducing greenhouse gas emissions and enhancing operational efficiency and reliability. The NZE 2050 pathway identifies specific technologies and investment areas that AESL can prioritize to stay at the forefront of the energy transition. Transitioning to a net-zero pathway can yield significant financial and economic benefits for AESL. By investing in renewable energy and energy efficiency measures, AESL can reduce operational costs, hedge against volatile fossil fuel prices, and tap into new revenue streams from green energy markets5. Additionally, aligning with the NZE 2050 scenario can attract sustainability-focused investors and unlock access to green financing opportunities, further bolstering

AESL's financial health. The scenario also emphasizes the need for a just and inclusive transition, considering the social and environmental dimensions of climate action6. For AESL, this approach aligns with corporate social responsibility goals and community engagement efforts. By adopting the NZE 2050 scenario, AESL can ensure that its climate actions benefit not only the environment but also the local communities it serves. India's commitment to climate action, as demonstrated by its Nationally Determined Contributions (NDCs) under the Paris Agreement, underscores the importance of aligning with credible climate scenarios. The IEA NZE 2050 scenario provides a scientifically sound basis [Add row]

# (5.1.2) Provide details of the outcomes of your organization's scenario analysis.

### Climate change

### (5.1.2.1) Business processes influenced by your analysis of the reported scenarios

Select all that apply

- ☑ Risk and opportunities identification, assessment and management
- ✓ Strategy and financial planning
- ☑ Resilience of business model and strategy
- ✓ Capacity building
- ✓ Target setting and transition planning

# (5.1.2.2) Coverage of analysis

Select from:

✓ Organization-wide

# (5.1.2.3) Summarize the outcomes of the scenario analysis and any implications for other environmental issues

By using scenario analysis, we have gained a more in-depth understanding of the various impacts associated to different greenhouse gas reduction scenarios. This methodology has provided us with the ability to holistically assess the impacts of physical and transitional risks of climate change on our operations in both short and long-term scenarios. It has also helped in evaluating our current transmission and distribution infrastructure and investment possibilities in relation to these scenarios, assess the resilience of our strategic plans, and identify opportunities enhancing resilience against climate-related risks and opportunities. Consequently, this has enabled us with the necessary knowledge to make well-versed modifications to our strategic and fiscal plans, ultimately positioning our company for better resilience and adaptability when dealing with climate change.

### (5.1.2.1) Business processes influenced by your analysis of the reported scenarios

Select all that apply

- ☑ Risk and opportunities identification, assessment and management
- ✓ Strategy and financial planning
- ✓ Resilience of business model and strategy
- ✓ Capacity building
- ✓ Target setting and transition planning

### (5.1.2.2) Coverage of analysis

Select from:

✓ Organization-wide

### (5.1.2.3) Summarize the outcomes of the scenario analysis and any implications for other environmental issues

The assessment is based upon World Resources Institute (WRIs) Aqueduct tool which uses a hazard metric to quantify and map water related risks. The baseline water stress analysis measures the ratio of total water demand to available renewable surface and groundwater supplies. The tool encompasses two elements-current water stress levels and projected future stress levels from 2020s to 2040s. The projected changes in water stress are translated into fractional indicators that span from 0 to 1, where higher values represent a more severe level of water stress. [Fixed row]

# (5.2) Does your organization's strategy include a climate transition plan?

# (5.2.1) Transition plan

Select from:

 $\blacksquare$  Yes, we have a climate transition plan which aligns with a 1.5°C world

### (5.2.3) Publicly available climate transition plan

### Select from:

✓ Yes

(5.2.4) Plan explicitly commits to cease all spending on, and revenue generation from, activities that contribute to fossil fuel expansion

Select from:

🗹 Yes

### (5.2.5) Description of activities included in commitment and implementation of commitment

A comprehensive set of activities included in the commitment and implementation phases of AESL's transition plan: Commitment Phase 1 Setting Clear Goals: Establishing specific, measurable, achievable, relevant, and time-bound (SMART) goals for the transition. Net Zero Emissions by 2050. 2 Stakeholder Engagement: Involving key stakeholders, including government bodies, regulatory authorities, customers, and employees, to gain support and input. 3 Policy and Regulatory Alignment: Ensuring that the transition plan aligns with national and regional policies, such as India's commitments under the Paris Agreement and the Panchamrit Statement. 4 Financial Planning: Securing funding and investment for the transition, including exploring options for government grants, subsidies, and private investments is crucial being in a regulated business. 5 Technology Assessment: Evaluating and selecting the appropriate technologies for renewable energy generation, energy storage, and grid modernization. E.g. Deployment of 700 Wind Solar hybrid technology in FY2023. Implementation Phase 1 Infrastructure Development: Building and upgrading infrastructure to support renewable energy sources like solar, wind, and hydroelectric power. 2 Grid Modernization: Implementing smart grid technologies to enhance grid reliability, efficiency, and integration of renewable energy sources. Eq. Use of HVDC lines, conversion of Air Insulated Substation [AIS] to Gas Insulated Substations [GIS]. 3 Energy Efficiency Programs: Launching initiatives to improve energy efficiency across the utility's operations and customer base. 4 Workforce Training: Providing training and development programs for employees to equip them with the skills needed for new technologies and processes. Eq. HVDC and digital dexterity for AI based analytics being provide to exiting employees. 5 Monitoring and Evaluation: Establishing systems to monitor progress, evaluate performance, and make necessary adjustments to the transition plan. 6 Public Awareness Campaigns: Educating the public about the benefits of the transition and encouraging energy-saving behaviors thru DSM programs, Green tariff offerings in distribution business. 7 Partnerships and Collaborations: Forming partnerships with technology providers, research institutions, and other utilities to share knowledge and resources. 8 Regulatory Compliance: Ensuring ongoing compliance with all relevant regulations and standards throughout the transition process.

### (5.2.7) Mechanism by which feedback is collected from shareholders on your climate transition plan

Select from:

### (5.2.8) Description of feedback mechanism

In the evolving landscape of the power sector in India, transitioning to more sustainable and efficient energy systems is imperative. As AESL in this sector embarks on ambitious transition plans, feedback mechanisms become crucial for ensuring effective implementation and continuous improvement. Industry Working Groups

Forming working groups with other industry players, regulatory bodies, and NGOs can facilitate the exchange of best practices and constructive criticism. These group meet biannually to review progress and suggest improvements, fostering a collaborative environment. Online Surveys and Polls Implementing online surveys and polls allows for real-time feedback from employees, customers, and other stakeholders. These digital tools can be tailored to gather specific insights on various aspects of the transition plan, making it easier to identify areas needing attention. Social Media Monitoring Monitoring social media platforms provides an unfiltered view of public perception and reactions. Using advanced analytics tools, the company tries to track sentiment and gather valuable feedback that might not be captured through formal channels. Employee Suggestion Programs Encouraging employees to submit suggestions through a structured program helps uncover practical insights and ideas from those directly involved in the implementation. Recognizing and rewarding valuable contributions ensures motivate continued engagement. Regular Internal Audits Conducting regular internal audits to assess the progress and effectiveness of the transition plan helps in identifying gaps and areas for improvement. These audits includes comprehensive reviews of processes, resource allocation, and outcomes. Third-Party Reviews and Audits Engaging third-party experts to review and audit the transition plan ensures an unbiased assessment. These reviews provide critical insights and recommendations that internal teams might have overlook. Collaboration with Academic Institutions Partnering with academic institutions for research and development initiatives provide access to cutting-edge knowledge and innovative solutions. Feedback from academic experts guide the company in adopting best practices and emerging technologies. - Policy and Regulatory Feedback: to receive feedback on compliance and policy alignment ensures that the transition plan adhe

### (5.2.9) Frequency of feedback collection

Select from:

✓ Annually

### (5.2.10) Description of key assumptions and dependencies on which the transition plan relies

When AESL Developed a transition plan, following key assumptions and dependencies were considered crucial for its success: Key Assumptions 1. Market Conditions: Assumptions about future market trends, customer demand, and competitive landscape. 2. Regulatory Environment: Expectations regarding future regulations and compliance requirements. 3. Technological Advancements: Assumptions about the availability and adoption of new technologies. 4. Financial Projections: Estimates of future financial performance, including revenue, costs, and funding availability. 5. Resource Availability: Assumptions about the availability of necessary resources, such as skilled labor and raw materials. Key Dependencies 1. Stakeholder Support: Dependence on the support and cooperation of key stakeholders, including employees, suppliers, regulators, customers, and investors. 2. Supply Chain Stability: Reliance on a stable and efficient supply chain to ensure the timely delivery of goods and services. 3. Operational Capabilities: Dependence on the organization's ability to execute the plan effectively, including having the right processes and systems in place. 4. External Partnerships: Reliance on partnerships with external entities, such as suppliers, technology providers, and regulatory bodies. 5. Economic Conditions: Dependence on broader economic conditions, such as inflation rates, interest rates, and economic growth. If any of these assumptions or dependencies change, AESL may require adjustments to the plan to stay on track.

### (5.2.11) Description of progress against transition plan disclosed in current or previous reporting period

We at AESL are striving to address climate change and nurture the ecosystems in the most effective way. We are committed to becoming Net Zero by 2050 and our strategies and actions are fully aligned with the Net Zero Goals. We are making strides towards harnessing opportunities to create low carbon operations and services as our response to climate change. Board Oversight and Governance on ESG Issues We have established a dedicated Sustainability and ESG Governance

Framework to benchmark, implement, and monitor our sustainability aligned decisions and actions. Our Board of Directors assisted by Board-led Corporate Responsibility Committee (CRC) establishes, drives and oversees the overall implementation of ESG commitments and disclosures. The Board's vision is strategically implemented and executed through a top-down and bottom-up approach with coordination from ESG Apex Committee. Senior Leadership, Executive Management and on ground ESG working group. Tier 1: Oversight & Guidance from the Board and Board-level Corporate Responsibility Committee (CRC) Tier 2: Execution of climate change, water-related strategic and operational responsibilities, value creation and disclosures are ensured by the MD/CEO Tier 3: Implementation of strategies are led, overseen and coordinated by the ESG Apex Committee, Chief Sustainability Officer (CSO) and Operational & Function leaders Tier 4: On ground execution of strategies by a cross-functional team called ESG Working Group guided by CSO Our Net Zero 2050 goals have been adopted in alignment with SBTi targets using SBTi tools, and have been submitted to SBTi for validation and is awaiting response from SBTi team and hence Company has been temporarily listed as "commitment removed". Climate performance is linked to the overall remuneration of all Key Management Personnel. Climate change related transition plans and targets for its accomplishment are a part of our CEO's Key Result Areas (KRAs). Climate change and sustainability-related performancebased incentives are integrated into the overall compensation of the senior management including Chief Sustainability Officer and Chief Operating Officer of Dahanu Thermal Power Plant. Senior executives, including Plant Heads, Energy Managers and Station Heads have their remuneration linked to the climate change and sustainability-related performance-based incentives. Non-monetary rewards are also provided to contributing employees and workmen. Please refer Page 122-143 of AESL's Integrated Annual report 2024 for details of our Governance structure, Alignment with Strategic Priorities, SDG's, Commitments and Targets, our approach for Building Resilience for Climate Change Adaptation, Climate related strategic Risks R5, R8 on Page 73 to 79 Scenario Analysis, Risk & Opportunities, Targets & Progress, Strategic approach available at (https://www.adanienergysolutions.com/-/media/Project/Transmission/Investor/documents/Annual-Report/AESL---Annual-Report-2024.pdf)

### (5.2.12) Attach any relevant documents which detail your climate transition plan (optional)

AESL---Annual-Report-2024[1].pdf

### (5.2.13) Other environmental issues that your climate transition plan considers

Select all that apply

✓ Water

✓ Biodiversity

☑ Other, please specify :Waste generated and disposed by the company

# (5.2.14) Explain how the other environmental issues are considered in your climate transition plan

Water Management 1. Water Usage Efficiency: Implementing measures to reduce water consumption in power generation processes, such as using sea water for cooling and 100% recycling of Fresh water. AESL site with 98% of company's water withdrawal & usage is certified for ISO 46001:2019 - Water efficiency management systems 2. Water Quality Monitoring: Continuous monitoring and managing the quality of Thermal discharge of sea water from AESL's thermal power plants to prevent contamination of local water bodies. 3. Rainwater Harvesting: Installing systems to capture and utilize rainwater for plant operations, reducing dependency on external water sources. 4. Drought Resilience: Developing strategies to maintain operations during periods of water scarcity, such as using alternative water sources or improving water storage capacities. Biodiversity Conservation 1. Habitat Protection: AESL following mitigation hierarchy of Avoid,

Reduce, Rehabilitation/restoration and offset ensure that power plant operations & Transmission projects do not encroach on or degrade natural habitats, particularly those of endangered species. 2. Reforestation and Afforestation: Engaging in tree planting initiatives to offset carbon emissions and enhance local biodiversity.eg. commitment to 1t.org 3. Wildlife Corridors: Creating and maintaining corridors to allow safe passage for wildlife around Transmission sites. 4.

Environmental Impact Assessments (EIAs): Conducting thorough EIAs before starting new projects to understand and mitigate potential impacts on local ecosystems. Waste Management 1. Waste Reduction: Implementing practices to minimize waste generation, such as optimizing resource use and adopting circular economy. Committed to maintain Zero waste to landfill [i.e. Waste diversion rate 99% from landfills] 2. Recycling and Reuse: Establishing systems for recycling and reusing materials, including metals, plastics, and other by-products. 3. Safe Disposal: Ensuring that hazardous waste is disposed of safely and in compliance with environmental regulations to prevent soil and water contamination. 4. Circular Economy Practices: Adopting circular economy principles to create a closed-loop system where waste is minimized, and materials are continuously reused. By integrating these considerations into our climate transition plans, AESL plans to significantly reduce its environmental footprint and contribute to broader sustainability goals. [Fixed row]

# (5.3) Have environmental risks and opportunities affected your strategy and/or financial planning?

### (5.3.1) Environmental risks and/or opportunities have affected your strategy and/or financial planning

Select from:

✓ Yes, both strategy and financial planning

# (5.3.2) Business areas where environmental risks and/or opportunities have affected your strategy

Select all that apply

✓ Products and services

✓ Upstream/downstream value chain

✓ Operations

[Fixed row]

(5.3.1) Describe where and how environmental risks and opportunities have affected your strategy.

### **Products and services**

# (5.3.1.1) Effect type

Select all that apply

#### ✓ Risks

✓ Opportunities

### (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

✓ Climate change

✓ Water

### (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

Our business prepares adequately to potential business disruptions to its operations, while ensuring achieving strategic goals to expand its electrical grid to 30,000 ckt (Circuit Kilometer) by 2030, respectively. As one of India's largest transmission and distribution company, AESL possesses the potential to aid India in its shift towards a low-carbon economy while also facing the country's vulnerability to physical risks presented by extreme weather conditions. The company possess a good understanding of possible interruptions, particularly those associated with environmental factors and regulatory procedures, and exhibits excellent capability to evaluate their impact on business operations. However, the process of embedding sustainability considerations into AESL's operations is still in the early stages. The water risk assessment helped in comparing the water needs with water availability at India and watershed levels, determine the relevance of water risks in our portfolio in order to prioritize action, and enable effective communications with our internal and external stakeholders.

### Upstream/downstream value chain

### (5.3.1.1) Effect type

Select all that apply

✓ Risks

✓ Opportunities

# (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

✓ Climate change

✓ Water

### (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

Risk (Climate)- AESL established a Supplier Screening and Risk Assessment framework as part of the vendor onboarding process. Within this framework, the Company developed a comprehensive Supplier Risk Assessment Score Card which incorporated significant screening/pre-qualification criteria, including ESG aspects, credentials, capability to execute assignments, quality norms, and compliance with statutory requirements. The Scorecard was utilized to evaluate the mechanisms and performance of all suppliers under consideration against the ESG parameters. Suppliers scoring below 60% in the individual ESG risk category and overall below 70% are termed as high-risk suppliers. A supplier with a score below 60% in the ESG criteria is not considered for further evaluation. Risk (Water)- Our operations at Dahanu Thermal power plant requires adequate amount of good quality freshwater. In absence of the same, there will be an increase in water treatment cost, leading to financial implications for the organization. Further, we ensure that water being used for drinking and sanitation purpose is within the permissible limit. We procure material such as steel for our operations which is a water intensive process. Absence or scarcity of water may impact the operations and further lead to disruptions in the value chain.

### Operations

# (5.3.1.1) Effect type

Select all that apply

🗹 Risks

Opportunities

### (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

✓ Climate change

✓ Water

# (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

To effectively address environmental risks and opportunities, AESL needs to integrate biodiversity, climate change & water considerations into their strategic planning in terms of: 1. Risk Assessment and Management: Impact Assessments: Conduct thorough assessments to understand how operations or new projects affect local ecosystems and species. This helps in identifying potential risks and mitigating them early specially for the transmission division of the company. The ability to obtain right of way requires conducting all the important investigations associated with operations in eco sensitive zones and biodiversity assessments in the region so that no harm is done to any species. Regulatory Compliance: Ensure compliance with national and local regulations to avoid legal risks and penalties 2. Sustainable Practices Renewable Energy Adoption: Prioritize renewable energy sources like solar, wind power, has lower impacts on biodiversity, eco systems compared to fossil fuels. Resource Efficiency: Implement measures to reduce energy, water, other resources and land use, minimizing habitat disruption and resource depletion. 3. Conservation Initiatives Engage in projects that restore and conserve natural habitats affected by our transmission corridors, distribution & Generation operations. We follow Mitigation hierarchy of Avoid, Reduce, Mitigate/adapt, restore and or compensate which also a part of our biodiversity policy available at (https://www.adanienergysolutions.com/-/media/Project/Transmission/Investor/documents/Policies/Biodiversity-Policy.pdf) This include reforestation, wetland restoration, and creating wildlife corridors. Offsetting: Compensate for biodiversity, water, Energy loss in one area by conserving or restoring habitats elsewhere thru

compensatory afforestation or paying the compensatory afforestation fund. 4. Stakeholder Engagement AESL work with local communities, NGOs, and government bodies to develop and implement biodiversity conservation projects example our mangrove restoration and conservation project at Dahanu, Maharashtra Regularly report on biodiversity impacts and conservation efforts thru Indian Business and Biodiversity Initiative [IBBI] to stakeholders, enhancing transparency and accountability 5. Innovation and Technology • Utilize smart grid technology and IoT to optimize energy distribution and reduce environmental impacts including reducing land use. • promote invest in R&D for new technologies that minimize biodiversity impacts, such as avian-friendly solar & transmission lines installation. Green tariffs in distribution [retail division of AESL] Integrate biodiversity conservation into CSR initiatives under our 1t.org commitment, demonstrating a commitment to sustainable development and enhancing corporate reputation. By adopting these strategies, AESL plans to not only mitigate environmental risks but also seize opportunities for sustainable growth and contribute positively to the society. [Add row]

# (5.3.2) Describe where and how environmental risks and opportunities have affected your financial planning.

### Row 1

### (5.3.2.1) Financial planning elements that have been affected

Select all that apply

- ✓ Revenues
- ✓ Direct costs
- ✓ Capital expenditures
- ✓ Capital allocation
- ✓ Assets

# (5.3.2.2) Effect type

Select all that apply

✓ Risks

(5.3.2.3) Environmental issues relevant to the risks and/or opportunities that have affected these financial planning elements

Select all that apply

- ✓ Climate change
- ✓ Water

### (5.3.2.4) Describe how environmental risks and/or opportunities have affected these financial planning elements

Climate change has significantly increased physical risks, including floods, droughts, and cyclones. Rising global temperatures have far-reaching impacts, such as chronic water stress, which worsens droughts and heatwaves. These events can lead to disruptions to the operations impacting the infrastructure and transmission and distribution efficiency, thereby causing loss of revenue. Furthermore, we need to possibly raise resources to manage extreme weather occurrences, analyze the vulnerability of equipment, and allocate capital to replace ageing infrastructure to assure reliability will have an impact on financial planning. We have established a Business Continuity Management Systems to manage potential risks which can cause disruption in the business processes. As part of our decarbonization strategy, we have achieved 34.35% share of renewable energy procurement. We have invested INR 155 crore in environment friendly technologies to tackle climate change. Furthermore, INR 1,343.34 crore incurred in capitalizing the opportunity to increase renewable energy mix in our portfolio. Water risk assessment is integrated in our enterprise risk management, risk identification, assessment and management processes. Our water optimization approach focuses on finding opportunities to replenish natural water sources by extracting lesser than what we utilize. We have installed water metering – flow meters and flow transmitters, across all our sites. creating rainwater harvesting structures at our O&M sites to meet the daily requirements. Rainwater harvesting studies have also been conducted for the operational sites.

### Row 2

### (5.3.2.1) Financial planning elements that have been affected

Select all that apply

- Revenues
- ✓ Direct costs
- ✓ Capital expenditures
- ✓ Capital allocation
- Assets

# (5.3.2.2) Effect type

Select all that apply

Opportunities

(5.3.2.3) Environmental issues relevant to the risks and/or opportunities that have affected these financial planning elements

Select all that apply

### ✓ Climate change

### (5.3.2.4) Describe how environmental risks and/or opportunities have affected these financial planning elements

Climate related opportunities have created a positive impact on revenues of the company. We are committed to adopting technologies to enhance energy efficiency. The Perform Achieve and Trade scheme has led to generation of Energy Certificates at Dahanu plant which can be traded to generate additional income. We are also expanding our footprint in low carbon markets- Renewable energy and EV segment. The shift in consumer preference towards greener energy alternatives are giving us opportunity to create new markets with greater proportion of green energy in the existing energy mix. As part of distributed energy segment, we are supporting Solar PV installation on roofs of the residential and industrial /commercial consumers. With reference to Government of India Smart Meter National program which aims at replacing 25 crore conventional meters with smart meters by 2025, we have aligned our business strategy. We initiated our smart metering business and FY 24. With our prior experience in distribution and project management in the sector, we secured INR 2.28 crore smart meter contracts out of which INR 11.28 crore has been awarded. Effective resource management aids in building resilience to physical risks such as extreme weather events and transition risk such as regulatory changes. To leverage on the opportunity of building resilience in terms of water management we have undertaken the target of water neutrality for our business. We aim to reduce our freshwater consumption at our substations by undertaking water conservation initiatives such as constructing rainwater harvesting ponds at substations etc. We have established 24 rainwater harvesting ponds structures. [Add row]

# (5.4) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

Identification of spending/revenue that is aligned with your organization's climate transition	Methodology or framework used to assess alignment with your organization's climate transition
Select from: ✓ Yes	Select all that apply ✓ Other methodology or framework

[Fixed row]

(5.4.1) Quantify the amount and percentage share of your spending/revenue that is aligned with your organization's climate transition.

Row 1

### (5.4.1.1) Methodology or framework used to assess alignment

Select from:

✓ Other, please specify :Sustainability Linked Bond framework of the Retail division of the company developed in Jul 2021. Same was used to raise USD 3 Million for 10 year.

### (5.4.1.5) Financial metric

Select from:

✓ Revenue/Turnover

# (5.4.1.6) Amount of selected financial metric that is aligned in the reporting year (currency)

34325596848

(5.4.1.7) Percentage share of selected financial metric aligned in the reporting year (%)

19.94

# (5.4.1.8) Percentage share of selected financial metric planned to align in 2025 (%)

25

# (5.4.1.9) Percentage share of selected financial metric planned to align in 2030 (%)

40

# (5.4.1.12) Details of the methodology or framework used to assess alignment with your organization's climate transition

India's First Energy Sector Sustainability Linked Bond with legally binding ESG targets for renewable energy penetration and reduction of GHG emission intensity in line with COP26 goals. The company's distribution arm, Adani Electricity Mumbai Limited (AEML), had setup of a USD 2 billion Global Medium-Term Notes program (GMTN). The GMTN program in Jul 2021 was the Sustainability Linked Bond issuance was the next step in AEML's Capital Management Plan. the first Sustainability Linked Bond (SLB) issuance from an Indian utility, The Key Performance Indicators chosen for the SLB framework contribute to UN Sustainable Development Goals SDG 7 (Affordable Clean Energy), SDG 11 (Sustainable Cities and Communities) and SDG 13 (Climate Change). "The challenging short-term targets of increasing the renewable energy penetration in AEML's power purchase mix from the current 3% to 30% by 2023 and then 60% by 2027 are legally covenanted targets which are consistent with the COP26 targets," AEML has set for itself some of the nation's most challenging renewable penetration targets in the short term, thereby

showcasing our commitment towards net zero emissions. We have also committed to the short-term target of reductions of Green House Gas (GHG) Emission Intensity by 60% from FY19 levels to stay in line with COP26 targets. In addition to the legally covenanted targets, we have publicly announced a target of 70% renewable penetration by 2030. The assurance of the Sustainability Framework was completed through external agencies. Vigeo Eiris, a subsidiary of Moody's Investor Service, provided a second party opinion on AEML's Sustainability Framework. The baselines for the targets have been assured by third party verifiers – British Standards Institute and the statutory auditor of AEML. [Add row]

# (5.5) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

### (5.5.1) Investment in low-carbon R&D

Select from:

🗹 Yes

### (5.5.2) Comment

Today, AESL has portfolio of more than 21,100 ckt km of transmission lines and around 57,000 MVA of power transformation capacity. AESL has set an ambitious target to set up 30,000 circuit km of transmission lines by 2030. AESL has invested in the latest technologies resulting in the highest network availability of over 99.6% in the country, which corresponds to the best global standards. In line with India's notable Initiatives and Programs • FAME India Scheme: Focuses on promoting electric mobility through incentives for EVs and charging infrastructure. • National Solar Mission: Aims to establish India as a global leader in solar energy by promoting solar power generation and R&D. • National Smart Grid Mission (NSGM): A government initiative aimed at modernizing the power grid to improve efficiency and reliability. The company is Investing in research and development (R&D) of low-carbon products and services within the Indian electric utilities sector as a promising strategy for both environmental sustainability and economic growth. Some key areas and initiatives being considered are: 1. Renewable Energy Promoting Solar and Wind Power – Company deployed 700 MW Wind solar hybrid project in FY2023 2. Energy Storage Solutions: o Technologies: o Grid Storage: Developing large-Battery Technologies: plans to Invest in advanced battery storage systems to support renewable energy integration. o scale storage solutions to stabilize the grid. 3. Smart Grid Technologies: o Smart Meters: Implementing smart metering for better energy management not only in own operations but helping other utility peers in Maharashtra, Assam, Andhra Pradesh states in India etc. o Grid Modernization: Upgrading its infrastructure to handle renewable energy sources efficiently. Company operates India's 1st private sector HVDC line and in process of setting up another with a Capital outlay of Promoting Charging Infrastructure: Expanding EV charging networks in its Retail Electricity division @ Mumbai. USD 1billion. 4. Electric Vehicles (EVs): o The company believes that Investing in Low-Carbon R&D & CAPEX benefits: •Environmental Impact: Reducing greenhouse gas emissions and combating climate change. •Economic Growth: Creating jobs and fostering innovation in the green technology sector. •Energy Security: Reducing dependence on fossil fuels and enhancing energy independence. [Fixed row]

(5.5.7) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years.

### Row 1

# (5.5.7.1) Technology area

Select from:

✓ Smart grid integration

### (5.5.7.2) Stage of development in the reporting year

Select from:

✓ Large scale commercial deployment

### (5.5.7.3) Average % of total R&D investment over the last 3 years

55

# (5.5.7.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

119000000

# (5.5.7.5) Average % of total R&D investment planned over the next 5 years

55

# (5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Investments in the National Smart Grid Mission (NSGM) align closely with the climate transition plans of AESL in several key ways: 1. Integration of Renewable Energy Sources • Enhanced Grid Flexibility: The NSGM facilitates the integration of renewable energy sources like solar and wind into the grid, which are crucial for reducing carbon emissions • Distributed Generation: Promotes the use of rooftop solar panels and other distributed generation systems, reducing reliance on fossil fuels 2. Improved Energy Efficiency • Smart Meters and Automation: By deploying smart meters and automating grid operations, the NSGM helps in reducing energy losses and improving overall efficiency. • Demand Response Programs: These programs enable utilities to manage and reduce peak demand, leading to more efficient energy use and lower emissions. 3. Support for Electric Vehicles (EVs) • EV Charging Infrastructure: The NSGM supports the development of EV charging infrastructure, which is essential for the widespread adoption of electric vehicles. This shift from conventional vehicles to EVs significantly reduces greenhouse gas emissions. 4. Grid Modernization and Reliability • Advanced Monitoring and Control: The implementation of advanced monitoring and control systems ensures a more reliable and resilient grid, capable of handling the variability of renewable energy sources. • Substation Modernization: Upgrading substations with modern technology reduces transmission and distribution losses, contributing to lower carbon emissions. 5. Carbon Capture and Storage (CCS) • CCS Technologies: While not a primary focus, the modernization efforts under NSGM can support the integration of CCS technologies in power plants, further reducing carbon emissions. Benefits to Climate Transition Plans • Reduction in Greenhouse Gas Emissions: By integrating more renewable energy and improving efficiency, the NSGM directly contributes to lowering the carbon footprint of the power sector. • Enhanced Energy Security: Reducing dependence on fossil fuels and increasing the use of renewable energy create new job opportunities and drive economic growth in the green technology sector. These initiatives are pivotal for AESL to meet their climate goals and transition towards a more sustainable development. CAPEX invested reported as R&D here.

### Row 2

### (5.5.7.1) Technology area

Select from:

Efficient transmission technology

### (5.5.7.2) Stage of development in the reporting year

Select from:

✓ Large scale commercial deployment

### (5.5.7.3) Average % of total R&D investment over the last 3 years

30

(5.5.7.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

69000000

(5.5.7.5) Average % of total R&D investment planned over the next 5 years

# (5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

The integration of efficient transmission infrastructure, such as Smart Meters and High Voltage Direct Current (HVDC) systems, is crucial for aligning with India's ambitious climate transition plans. These technologies play a pivotal role in enhancing the reliability, efficiency, and sustainability of the power sector, paving the way for a greener future. Smart Meters: Enhancing Energy Efficiency and Consumer Awareness Real-Time Energy Monitoring Smart meters provide real-time data on energy consumption, enabling consumers to monitor and manage their electricity usage more effectively. This increased awareness encourages energy-saving behaviors, reducing overall demand and associated carbon emissions. Grid Reliability and Efficiency By providing detailed insights into consumption patterns, smart meters help utilities optimize grid management. This includes balancing supply and demand, reducing transmission losses, and identifying areas for infrastructure improvements. Enhanced grid efficiency directly contributes to lower greenhouse gas emissions. Integration of Renewable Energy Sources Smart meters facilitate the integration of distributed renewable energy sources by providing precise data on energy production and consumption. This supports the seamless incorporation of solar, wind, and other renewables into the grid, further reducing dependency on fossil fuels. HVDC: A Crucial Component for Long-Distance Power Transmission Reduced Transmission Losses HVDC technology is highly efficient for transmitting electricity over long distances with minimal losses. This efficiency is particularly beneficial for integrating remote renewable energy sources, such as large-scale wind farms and solar parks, into the national grid. Improved Grid Stability HVDC systems enhance grid stability by providing a more consistent and controllable flow of electricity. This is essential for accommodating the intermittent nature of renewable energy sources, ensuring a reliable supply of clean energy. Alignment with India's & AESL's Climate Transition Plan: 1) Reducing Greenhouse Gas Emissions 2) Enhancing Energy Security: Efficient transmission infrastructure reduces dependence on fossil fuels by maximizing the use of renewable energy sources. This enhances energy security, ensuring a stable and sustainable supply of electricity for the nation. 3) Creates new job opportunities supports the development of a skilled workforce. CAPEX invested reported as R&D here.

### Row 3

### (5.5.7.1) Technology area

Select from:

✓ Other, please specify :Wind + Solar hybrid generation

### (5.5.7.2) Stage of development in the reporting year

### Select from:

✓ Large scale commercial deployment

### (5.5.7.3) Average % of total R&D investment over the last 3 years

9975125345

### (5.5.7.5) Average % of total R&D investment planned over the next 5 years

10

# (5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

This is part of the combined operational generation capacity of this newly added hybrid power plant is 700 MWac Wind & Solar plants under a Power Purchase Agreement (PPA) at fixed tariff for 25 years. The latest hybrid plant deploys advanced renewable technologies like bifacial solar PV modules and horizontal singleaxis trackers (HSAT) systems to enable maximum electricity generation from solar energy. The plant is co-located and is designed to deliver CUF of minimum 50%, the highest CUF of any renewable project in India. The plant harnesses the potential of renewable energy by resolving intermittency of the generation and provides a more reliable solution to meet the rising power demand. The project was India's first collocated Hybrid power project commisioned in FY2023, trying to demonstrate and set way for the future projects overcoming several challenges posed while Integrating solar and wind energy into existing power grids such as: 1. Solar and wind energy are inherently intermittent. The sun doesn't always shine, and the wind doesn't always blow, leading to fluctuations in power generation. This variability can cause imbalances between supply and demand, potentially leading to grid instability and blackouts 2. Traditional power grids were designed for consistent, controllable power sources like coal or natural gas. Integrating renewable energy sources generally leads to voltage fluctuations, frequency inconsistencies, and harmonic distortions, which at times affect the overall stability and reliability of the grid 3. Many existing grids lack the physical capacity to accommodate the increased load from renewable energy sources. Upgrading infrastructure to handle these new inputs is costly and time-consuming 4.To mitigate the effects of intermittency, effective energy storage solutions are needed. However, current storage technologies, like batteries, are still expensive and have limitations in terms of capacity and lifespan 5. Accurate forecasting of solar and wind energy production is crucial for grid management. Inaccurate predictions can lead to either overproduction or shortages, complicating the balancing of supply and demand and further may hamper AESL's revenue, reputation and potential customer loss. 6. Integrating renewable energy also requires supportive regulatory frameworks and policies. Inconsistent or outdated regulations can hinder the adoption and integration of these technologies. R&D numbers cost w.r.t reporting period generation. [Add row]

### (5.7) Break down, by source, your organization's CAPEX in the reporting year and CAPEX planned over the next 5 years.

### Coal – hard

# (5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

# (5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

28.7

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

### (5.7.4) Most recent year in which a new power plant using this source was approved for development

1990

### (5.7.5) Explain your CAPEX calculations, including any assumptions

CAPEX Calculations corresponds to the total CAPEX spend on the upkeep of the exiting 2 x 250 MW thermal power station which is also the most energy efficient thermal power station in India. Adani Dahanu Thermal power station was awarded 5 times in row India's best thermal power station with best in class heat rate and effcient delivery of the units. In line with companies Net Zero goal of 2050 plan, The company has obtained board approval to carv out the Dahanu thermal power station from its portfolio in FY25 Q1 and FINAL regulatory approval is expected any time now for the same. Also company is committed to its commitment of 2023 to not to invest in new thermal power assest hence forth.

### Lignite

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

## (5.7.5) Explain your CAPEX calculations, including any assumptions

Not planning for this in medium to long term

Oil

### (5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

### (5.7.5) Explain your CAPEX calculations, including any assumptions

Not planning for this in medium to long term

Gas

### (5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

## (5.7.5) Explain your CAPEX calculations, including any assumptions

Not planning for this in medium to long term

### Sustainable biomass

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

Not evaluating currently

### **Other biomass**

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

### 0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

#### 0

(5.7.5) Explain your CAPEX calculations, including any assumptions

Not evaluating currently

### Waste (non-biomass)

### (5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

#### 0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

### (5.7.5) Explain your CAPEX calculations, including any assumptions

Not evaluating currently

### Nuclear

### (5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

### 0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

#### 0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

### (5.7.5) Explain your CAPEX calculations, including any assumptions

Not evaluating currently

### Geothermal

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

### (5.7.5) Explain your CAPEX calculations, including any assumptions

Not evaluating currently

### Hydropower

### (5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

### (5.7.5) Explain your CAPEX calculations, including any assumptions

Not evaluating currently

### Wind

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

6925587025.03

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

19

### (5.7.4) Most recent year in which a new power plant using this source was approved for development

2021

### (5.7.5) Explain your CAPEX calculations, including any assumptions

This is part of the combined operational generation capacity of this newly added hybrid power plant is 700 MWac and has a Power Purchase Agreement (PPA) at Rs 3.24/kwh for 25 years. This new hybrid power plant consists of a combination of 600 MWdc solar and 510 MWac wind plants. The latest hybrid plant deploys advanced renewable technologies like bifacial solar PV modules and horizontal single-axis trackers (HSAT) systems to enable maximum electricity generation from solar energy. The plant is co-located and is designed to deliver CUF of minimum 50%, the highest CUF of any renewable project in India. The plant harnesses the potential of renewable energy by resolving intermittency of the generation and provides a more reliable solution to meet the rising power demand. The CAPEX amount calculated is in proportion to the fixed PPA rate tariff of INR 3.24 /unit x 2137Million units [no of units supplied by wind power] 6,92,55,87,025.03 INR in FY24 We have plans to add another 1000 MW Wind Solar hybrid in next 5 year subject to regulatory clearance.

### Solar

### (5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

2580120656.39

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

3.69

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

2021

### (5.7.5) Explain your CAPEX calculations, including any assumptions

his is part of the combined operational generation capacity of this newly added hybrid power plant is 700 MWac and has a Power Purchase Agreement (PPA) at Rs 3.24/kwh for 25 years. This new hybrid power plant consists of a combination of 600 MWdc solar and 510 MWac wind plants. The latest hybrid plant deploys advanced renewable technologies like bifacial solar PV modules and horizontal single-axis trackers (HSAT) systems to enable maximum electricity generation from solar energy. The plant is co-located and is designed to deliver CUF of minimum 50%, the highest CUF of any renewable project in India. The plant harnesses the potential of renewable energy by resolving intermittency of the generation and provides a more reliable solution to meet the rising power demand. The CAPEX amount calculated is in proportion to the fixed PPA rate tariff of INR 3.24 /unit x 796.33 Million units [no of units supplied by wind power] 2,58,01,20,656.39 INR in FY24 We have plans to add another 1000 MW Wind Solar hybrid in next 5 year subject to regulatory clearance

### Marine

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

### (5.7.5) Explain your CAPEX calculations, including any assumptions

Not planning for this in medium to long term

### Fossil-fuel plants fitted with CCS

## (5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

Not evaluating currently

```
Other renewable (e.g. renewable hydrogen)
```

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

### (5.7.5) Explain your CAPEX calculations, including any assumptions

Not evaluating currently

### Other non-renewable (e.g. non-renewable hydrogen)

### (5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

### (5.7.5) Explain your CAPEX calculations, including any assumptions

Not evaluating currently [Fixed row]

(5.7.1) Break down your total planned CAPEX in your current CAPEX plan for products and services (e.g. smart grids, digitalization, etc.).

Row 1

### (5.7.1.1) Products and services

Select from:

### (5.7.1.2) Description of product/service

The Energy Audit scheme under Demand Side Management (DSM) of AESL's Retail division in India is a crucial initiative aimed at improving energy efficiency & reducing overall energy consumption across various sectors. The Bureau of Energy Efficiency (BEE), under the Ministry of Power, mandates all Electricity Distribution Companies (DISCOMs) to conduct annual energy audits and periodic energy accounting on a quarterly basis. This initiative is part of a broader DSM strategy to manage energy demand effectively and promote energy efficiency. For Residential Customers •Energy Savings: Residential customers can benefit from reduced energy bills through the adoption of energy-efficient appliances and practices encouraged by the DSM programs. •Awareness and Education: The scheme promotes awareness about energy conservation, helping households understand their energy consumption patterns and ways to reduce wastage. •Incentives: There may be incentives or rebates for adopting energy-efficient technologies, such as LED lighting, energy-efficient air conditioners, and other appliances. For Commercial Customers •Cost Reduction: Commercial establishments can significantly lower their operational costs by implementing energy-efficient measures identified through energy audits. •Enhanced Competitiveness: Reduced energy costs can enhance the competitiveness of businesses by lowering overhead expenses. •Compliance and Standards: Commercial entities are encouraged to comply with energy efficiency standards, which can also improve their market reputation and customer trust. Operational Efficiency: Energy audits help industries identify areas where energy is being wasted and recommend measures to For Industrial Customers • improve efficiency, leading to lower production costs. Sustainability Goals: Implementing DSM measures can help industries meet their sustainability and environmental goals by reducing their carbon footprint. • Regulatory Compliance: Industries are often subject to stricter energy regulations, and participating in DSM programs can ensure compliance with these regulations. Benefits of the Scheme for Electric utilities •By reducing and shifting energy consumption, the scheme helps managing peak load demands, thereby reducing the need for additional power generation capacity & costs. • Lower energy consumption Lower Environmental Impact

### (5.7.1.3) CAPEX planned for product/service

30000000

### (5.7.1.4) Percentage of total CAPEX planned for products and services

0

### (5.7.1.5) End year of CAPEX plan

2030

Row 2

### (5.7.1.1) Products and services

✓ Charging networks

### (5.7.1.2) Description of product/service

The solution: ShareCharge powered by Adani Adani Electricity presents the concept of share charging. From permission to installation to billing, we have made shifting to EVs and installing mandatory EV Chargers easier - ShareCharge eliminates the need for individual charging stations - Negates safety concerns that unprofessional cable mash-ups can cause - Removes the need for individual meter boxes leading in the meter cabin - Does not require separate consent letters - Avoids various third party charging stations that can create a problem for installation and maintenance while affecting society's security No one understands EV infrastructure like an electric utility company. One-Stop-Shop for EV Setup with all the charging requisites Innovated the 'Common ShareCharge Area' Concept in societies for EV Free of cost EV Chargers @@ lowest electricity tariff under the DSM - night charging scheme Government-certified Lab (ARAI / ICAT) EV Chargers Universally compatible chargers for EVs Providing with 7 years of annual maintenance service, freeing the customer from maintenance costs Dedicated key account managers for quick resolutions Specialist engineers for just-in-time resolutions for a particular charger unit (if any) Minimum Space Requirement Ready to install charger unit for quick installation Take advantage of Demand Side Management Scheme (DSM) from ShareCharge DSM provides overnight charging helps Adani Electricity utilise non-peak hours and even out demand peaks. All Adani Electricity Consumers/Societies having EVs are eligible for the DSM Scheme It is a limited offer Scheme for Societies having EVs and on First-serve basis The earlier you apply the higher the chances \*Charges are subject to change as approved by the regulator Control using a Mobile App - Check the availability and status of any nearby chargers at your convenience -Reserve your EV Charging time slot through your mobile app -Online bill payment option available -register complaints and feedback directly in the mobile app

### (5.7.1.3) CAPEX planned for product/service

90000000

### (5.7.1.4) Percentage of total CAPEX planned for products and services

0

### (5.7.1.5) End year of CAPEX plan

2030

Row 3

### (5.7.1.1) Products and services

✓ Smart appliances

### (5.7.1.2) Description of product/service

In Mumbai region, where AESL's as a responsible electric utility have implemented Demand Side Management (DSM) programs to promote the use of smart appliances. These programs aim to optimize energy consumption and reduce peak demand, contributing to climate transition plans. Smart Appliances Offered 1.

Smart Thermostats: These devices allow users to control their heating and cooling systems remotely, optimizing energy use based on real-time data and weather conditions. 2. Energy-Efficient Air Conditioners: These AC units are designed to consume less electricity while providing the same level of cooling. They often come with smart features that adjust cooling based on occupancy and ambient temperature. 3. Smart Lighting Systems: These systems use LED bulbs and can be controlled remotely. They adjust lighting based on occupancy and natural light availability, significantly reducing energy consumption. 4. Smart Meters: These devices provide real-time data on energy usage, helping consumers monitor and manage their electricity consumption more effectively. 5. Smart Appliances: This includes refrigerators, and BEE 5 star rated Fans, that are designed to operate more efficiently and can be scheduled to run during off-peak hours. Contribution to Climate Transition Plan 1. Energy Efficiency: Smart appliances reduce overall energy consumption, which helps in lowering greenhouse gas emissions. For example, energy-efficient air conditioners and smart lighting systems consume significantly less power compared to traditional appliances. 2. Peak Load Management: By shifting energy use to off-peak hours, smart appliances help in reducing the strain on the grid during peak times. This not only improves grid stability but also reduces the need for additional power generation from fossil fuels. 3. Integration with Renewable Energy: Smart appliances can be programmed to operate when renewable energy sources like solar or wind are generating power, maximizing the use of clean energy. 4. Consumer Awareness and Engagement: Smart meters and real-time data empower consumers to make informed decisions about their energy use, promoting more sustainable practices. 5. Reduction in Carbon Footprint: By optimizing energy use and integrating renewable energy, smart appliances contribute to a significant reduction in the carbon footprint of households and businesses.

### (5.7.1.3) CAPEX planned for product/service

34000000000

### (5.7.1.4) Percentage of total CAPEX planned for products and services

31

# (5.7.1.5) End year of CAPEX plan

2030

Row 4

(5.7.1.1) Products and services

### (5.7.1.2) Description of product/service

A smart grid is an advanced electrical grid that uses digital technology to monitor and manage the transport of electricity from all generation sources to meet the varying electricity demands of end users. It incorporates information and communication technologies (ICTs) to enable real-time, two-way communication between suppliers and consumers. Smart Grids contributes in AESL's Climate Transition Plans: 1. Integration of Renewable Energy: Smart grids can efficiently integrate renewable energy sources like wind and solar into the electricity network. This is crucial for reducing greenhouse gas emissions and transitioning to a low-carbon energy system. 2. Enhanced Flexibility and Reliability: By using advanced sensors and automated controls, smart grids can quickly respond to changes in electricity demand and supply. This flexibility helps in maintaining a stable and reliable power supply, even with the variable nature of renewable energy sources. 3.

Energy Efficiency: Smart grids enable more efficient electricity distribution and usage. They can reduce energy losses during transmission and distribution, and help consumers optimize their energy consumption through real-time data and smart meters. 4. Decarbonization: Smart grids support the electrification of other sectors, such as transportation and heating, which can further reduce carbon emissions. They also facilitate the integration of electric vehicles and energy storage systems, which are key components of a sustainable energy future. 5. Consumer Engagement: By providing consumers with detailed information about their energy usage, smart grids empower them to make more informed decisions about their energy consumption, leading to more sustainable practices. Smart grids are essential for modernizing our electricity infrastructure and achieving climate goals. They not only enhance the efficiency and reliability of the power supply but also play a pivotal role in reducing carbon emissions and supporting the transition to a sustainable energy future.

### (5.7.1.3) CAPEX planned for product/service

65000000000

### (5.7.1.4) Percentage of total CAPEX planned for products and services

64

### (5.7.1.5) End year of CAPEX plan

2030

Row 5

### (5.7.1.1) Products and services

Select from:

**VAVH**
## (5.7.1.2) Description of product/service

Adani Cooling Solutions Limited (ACSL), a wholly owned subsidiary company of Adani Energy Solutions Limited (AESL), delivers a centralized, energy-efficient, sustainable, and low-carbon cooling solutions through the development of the District Cooling System (DCS). ACSL aims to become market leader in DCS market by capturing 40% of the addressable market in India. Through its distinguished offering, ACSL aims to offer cooling solutions for real estate, industrial, and other allied sectors on a managed services basis, as well as other build-to-suit and fit-for-purpose solutions. The District Cooling Solutions (DCS) has become a cornerstone of energy-efficient infrastructure in the Middle East, with a very high penetration rate in the cooling space. The India Cooling Action Plan (ICAP) estimates that India's cooling demand will surge eightfold in the next two decades. The rising urban population, coupled with a growing per capita cooling need and the emergence of large data centers, has led to a significant shift in the energy landscape. This shift enabled AESL to pivot into the cooling solutions business. It is well positioned to capitalize on the growing DCS opportunity by leveraging existing development, 0&M, and consumer expertise. District cooling is the modern, centralized and energy-efficient way to air condition cluster of buildings. In a district cooling system, a central cooling plant supplies chilled water through a network of insulated underground pipelines to the buildings, through a heat exchanger absorbing heat from the buildings space and providing air conditioning. By aggregating the cooling needs of multiple buildings, District Cooling Systems (DCS) utilize eco-friendly refrigerant by harnessing natural water sources such as lakes, rivers, and seawater for efficient heat rejection. Key benefits: - Enhanced building aesthetics, reliability -Promotes low-carbon lifestyle -improves quality of life -Reduced noise -Eliminates HVAC fire risk -Optimize energy usage - Reduction of up to 20-25% in water,

#### (5.7.1.3) CAPEX planned for product/service

4700000000

#### (5.7.1.4) Percentage of total CAPEX planned for products and services

5

## (5.7.1.5) End year of CAPEX plan

2030 [Add row]

(5.9) What is the trend in your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?

0

#### (5.9.2) Anticipated forward trend for CAPEX (+/- % change)

0

# (5.9.3) Water-related OPEX (+/- % change)

0

## (5.9.4) Anticipated forward trend for OPEX (+/- % change)

-90

## (5.9.5) Please explain

AESL has undertaken a strategic decision to carve out its sole thermal asset @ Dahanu, which has been the primary contributor to the company's water withdrawal and consumption, accounting for 98% of the total usage. This move is aligned with our Climate transition plan to achieve Net Zero by 2050. Key Points: 1. Significant Decrease in Water Withdrawal and Consumption: The thermal asset was responsible for most of our water usage due to its cooling and steam generation processes. By divesting this asset, we anticipate a substantial [98%] reduction in our overall water withdrawal and consumption. 2. Reduction in Water-Related Operating Expenses: The operational costs associated with water procurement, treatment, disposal and compliance will see a marked decrease. This includes savings on water purchase costs, chemical treatments for water purification, and wastewater management expenses. 3. Enhanced Regulatory Compliance [Fixed row]

#### (5.10) Does your organization use an internal price on environmental externalities?

Use of internal pricing of environmental externalities	Environmental externality priced
Select from:	Select all that apply

Use of internal pricing of environmental externalities	Environmental externality priced
✓ Yes	✓ Carbon

[Fixed row]

# (5.10.1) Provide details of your organization's internal price on carbon.

# Row 1

# (5.10.1.1) Type of pricing scheme

Select from:

✓ Implicit price

# (5.10.1.2) Objectives for implementing internal price

Select all that apply

- ✓ Navigate regulations
- ☑ Drive low-carbon investment
- ✓ Reduce upstream value chain emissions
- ☑ Identify and seize low-carbon opportunities
- ☑ Influence strategy and/or financial planning

# (5.10.1.3) Factors considered when determining the price

Select all that apply

 $\checkmark$  Alignment with the price of a carbon tax

# (5.10.1.4) Calculation methodology and assumptions made in determining the price

✓ Other, please specify :Stakeholder expectations

To set & use an implicit carbon price to earn a Regulator approved premium of Rs 0.66 per unit of RE electricity sold, AESL has consider several key assumptions: The implicit carbon price is calculated based on the cost of implementing emissions reduction projects, such as RE purchases or energy-efficiency upgrades. AESL needs to assess the cost-effectiveness of these projects and ensure they align with the desired emissions cuts. AESL has considered the existing & anticipated government policies related to carbon emissions and RE. This includes understanding the potential impact of carbon taxes, emissions trading schemes, and other regulatory measures on their operations. AESL has evaluated the market demand for green energy and the willingness of consumers to pay a premium for electricity generated from renewable sources. This involves market research and understanding consumer preferences. AESL has various internal carbon pricing mechanisms, such as shadow pricing, internal carbon tax, Each mechanism has its own set of assumptions and implications for strategic planning, risk management, and capital investment decisions. AESL has ensured that the implicit carbon price is financially viable and does not adversely affect its profitability. This includes analyzing the potential ROI and the overall impact on its financial performance. Engaging with stakeholders for transparent communication about its sustainability goals and the benefits of adopting an implicit carbon price.

#### (5.10.1.5) Scopes covered

Select all that apply

✓ Scope 3, Category 3 - Fuel- and energy-related activities (not included in Scope 1 or 2)

#### (5.10.1.6) Pricing approach used – spatial variance

Select from:

Uniform

#### (5.10.1.8) Pricing approach used – temporal variance

Select from:

✓ Static

# (5.10.1.10) Minimum actual price used (currency per metric ton CO2e)

800

# (5.10.1.11) Maximum actual price used (currency per metric ton CO2e)

4737

#### (5.10.1.12) Business decision-making processes the internal price is applied to

Select all that apply

- Dependencies management
- ✓ Impact management
- ✓ Operations
- ✓ Product and R&D
- Opportunity management

## (5.10.1.13) Internal price is mandatory within business decision-making processes

Select from:

☑ Yes, for some decision-making processes, please specify :For all major investments over INR 5000000/-

#### (5.10.1.14) % total emissions in the reporting year in selected scopes this internal price covers

65

#### (5.10.1.15) Pricing approach is monitored and evaluated to achieve objectives

Select from:

✓ Yes

# (5.10.1.16) Details of how the pricing approach is monitored and evaluated to achieve your objectives

AESL has established a comprehensive carbon pricing strategy by gathering historical data on emissions and energy consumption, benchmarking against industry standards, and setting clear emission reduction targets with defined KPIs aligned to achieve Net Zero by 2050. Monitoring involves using carbon accounting using GHG protocol and IPCC / DEFRA emission factors, Energy Management Systems, for reliable data collection. Regular evaluations include monthly reports, quarterly reviews, and annual assurance third-party audits. Data analysis focuses on trends, cost-benefit assessments, and reporting to internal and external stakeholders as per their expectations. Both internal and external assurance audits ensure accuracy, reliability, completeness, and compliance, while continuous improvement is supported by feedback loops and staff training on best practices in carbon management and reporting. AESL stay updated with changes in regulations and adjust strategies accordingly to ensure compliance with national and international standards AESL plans to utilise advanced analytics and machine learning to predict future trends and optimize carbon pricing strategies to effectively monitor and evaluate its carbon pricing strategy, ensuring it meets its emissions reduction targets and regulatory requirements. To achieve the goal of offering a Green tariff of current Rs 0.66/unit approved by Maharashtra Electricity Regulatory commission, AESL plans to increasing the renewable energy (RE) share in the procurement mix from 3% in FY2019 to 60% by FY2027 and 70% by FY2030, as an electric utility operating in Mumbai, India AESL leverages implicit carbon pricing in several ways: 1. By calculating the implicit carbon price, AESL quantifies the capital investments required for emissions abatement. This helps in understanding the financial implications of transitioning to a higher share of RE and setting a competitive Green tariff. 2. It allows AESL to evaluate the cost-effectiveness of different RE projects and prioritize investments

that reflects the true cost of carbon and incentivizes customers to opt for cleaner energy options. 4. Engaging with policymakers to support favorable regulations and incentives for RE can help in achieving the target. [Add row]

	Engaging with this stakeholder on environmental issues	Environmental issues covered
Suppliers	Select from: ✓ Yes	Select all that apply ✓ Climate change ✓ Water
Customers	Select from: ✓ Yes	Select all that apply ✓ Climate change ✓ Water
Investors and shareholders	Select from: ✓ Yes	Select all that apply ✓ Climate change ✓ Water
Other value chain stakeholders	Select from: ✓ Yes	Select all that apply ✓ Climate change

# (5.11) Do you engage with your value chain on environmental issues?

[Fixed row]

(5.11.1) Does your organization assess and classify suppliers according to their dependencies and/or impacts on the environment?

#### Climate change

(5.11.1.1) Assessment of supplier dependencies and/or impacts on the environment

Select from:

✓ Yes, we assess the dependencies and/or impacts of our suppliers

#### (5.11.1.2) Criteria for assessing supplier dependencies and/or impacts on the environment

Select all that apply

✓ Contribution to supplier-related Scope 3 emissions

☑ Dependence on water

Impact on water availability

#### (5.11.1.3) % Tier 1 suppliers assessed

Select from:

✓ 1-25%

# (5.11.1.4) Define a threshold for classifying suppliers as having substantive dependencies and/or impacts on the environment

They are identified based on our dependence & business value generation that covers High Volume Suppliers, Critical Component Suppliers & Non-substitutable Suppliers for our business operations. We regularly engage with them thru multiple medium such as annual vendor meet, industrial events, in person meetings & assessments. A Supplier with score below 60% not consider for further evaluation & provided feedback to improve. Selected suppliers, Vendor annual performance score is generated on portal

#### (5.11.1.5) % Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

Select from:

None

#### Water

#### (5.11.1.1) Assessment of supplier dependencies and/or impacts on the environment

Select from:

✓ Yes, we assess the dependencies and/or impacts of our suppliers

#### (5.11.1.2) Criteria for assessing supplier dependencies and/or impacts on the environment

Select all that apply

Dependence on water

Impact on water availability

#### (5.11.1.3) % Tier 1 suppliers assessed

Select from:

**☑** 1-25%

(5.11.1.4) Define a threshold for classifying suppliers as having substantive dependencies and/or impacts on the environment

They are identified based on our dependence & business value generation that covers High Volume Suppliers, Critical Component Suppliers & Non-substitutable Suppliers for our business operations. We regularly engage with them thru multiple medium such as annual vendor meet, industrial events, in person meetings & assessments. A Supplier with score below 60% not consider for further evaluation & provided feedback to improve. Selected suppliers, Vendor annual performance score is generated on portal

## (5.11.1.5) % Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

Select from:

None

[Fixed row]

(5.11.2) Does your organization prioritize which suppliers to engage with on environmental issues?

#### **Climate change**

## (5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

✓ Yes, we prioritize which suppliers to engage with on this environmental issue

#### (5.11.2.2) Criteria informing which suppliers are prioritized for engagement on this environmental issue

Select all that apply

- ✓ Procurement spend
- ✓ Regulatory compliance
- ✓ Business risk mitigation
- Leverage over suppliers
- ✓ Strategic status of suppliers
- ✓ Supplier performance improvement
- In line with the criteria used to classify suppliers as having substantive dependencies and/or impacts relating to climate change

# (5.11.2.4) Please explain

Prioritizing suppliers for AESL's environmental engagement involve several criteria: 1. Business risk mitigation ensures suppliers do not pose threats to service continuity or operational efficiency through environmental non-compliance. 2. Leverage on suppliers means focusing on those with significant influence and resources to drive widespread environmental improvements. 3. Procurement spending prioritizes high-spending suppliers to ensure significant investments meet environmental standards. 4. Reputation management involves partnering with suppliers known for their environmental practices to enhance AESL's public image. 5. Regulatory compliance ensures suppliers adhere to environmental laws, thereby safeguarding the company from legal and reputational risks. 6. Strategic status of suppliers willing to collaborate and enhance their environmental practices aligning with AESL's environmental footprint. 7. Supplier performance improvement focuses on suppliers willing to collaborate and enhance their environmental practices aligning with AESL's sustainability goals. This methodology is crucial for AESL's engagement on climate change issues, particularly in Transmission & Distribution of Electricity activities where environmental performance can significantly impact operational efficiency, ensuring compliance with BRSR regulations & aspiration of Net Zero by 2050. This structured approach helps create a resilient, sustainable, and environmentally responsible supply chain.

# Water

## (5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

✓ Yes, we prioritize which suppliers to engage with on this environmental issue

# (5.11.2.2) Criteria informing which suppliers are prioritized for engagement on this environmental issue

Select all that apply

Procurement spend

- Regulatory compliance
- ✓ Reputation management
- ✓ Business risk mitigation
- ✓ Leverage over suppliers
- ✓ Strategic status of suppliers
- ✓ Supplier performance improvement
- ☑ In line with the criteria used to classify suppliers as having substantive dependencies and/or impacts relating to water

# (5.11.2.4) Please explain

Prioritizing suppliers for AESL's environmental engagement involves several criteria: 1. Business risk mitigation ensures suppliers do not pose threats to service continuity or operational efficiency through water security non-compliance. 2. Leverage on suppliers means focusing on those with significant influence and resources to drive widespread improvements in water management practices. 3. Procurement spending prioritizes high-spending suppliers to ensure significant investments meet water security standards. 4. Reputation management involves partnering with suppliers known for their responsible water use practices to enhance AESL's public image. 5. Regulatory compliance ensures suppliers adhere to water security laws, thereby safeguarding the company from legal and reputational risks. 6. Strategic status of suppliers prioritizes those critical to core operations due to their direct impact on AESL's water footprint. 7. Supplier performance improvement focuses on suppliers willing to collaborate and enhance their water security practices aligning with AESL's sustainability goals. This methodology is crucial for AESL's engagement on water security issues, particularly in Transmission & Distribution of Electricity activities where water management performance can significantly impact operational efficiency, ensuring compliance with BRSR regulations. This structured approach helps create a resilient, sustainable, and environmentally responsible supply chain.

[Fixed row]

# (5.11.5) Do your suppliers have to meet environmental requirements as part of your organization's purchasing process?

## **Climate change**

(5.11.5.1) Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process

Select from:

☑ Yes, environmental requirements related to this environmental issue are included in our supplier contracts

# (5.11.5.2) Policy in place for addressing supplier non-compliance

#### Select from:

✓ Yes, we have a policy in place for addressing non-compliance

#### (5.11.5.3) Comment

Details of engagement • Collect GHG & Energy management information at least annually from suppliers • Collect GHG & Energy Emissions quantity information at least annually from suppliers Mechanisms for monitoring compliance with this Climate-related requirement • Certification such as ISO 14001, ISO 50001 etc • Fines and penalties • Grievance mechanism/Whistleblowing hotline • Off-site third-party audit • On-site third-party audit • Supplier self-assessment Response to supplier non-compliance with this Climate change-related requirement: Retain and engage Retain and engage: We continue to purchase the product or service while engaging with the supplier to resolve the non-compliance(s) up to 3 months, if the non-compliance persist, supplier is temporarily suspended for next orders till compliance requirement is meet and evidence for the same are submitted to demonstrate the compliance.

#### Water

(5.11.5.1) Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process

Select from:

✓ Yes, environmental requirements related to this environmental issue are included in our supplier contracts

#### (5.11.5.2) Policy in place for addressing supplier non-compliance

Select from:

✓ Yes, we have a policy in place for addressing non-compliance

#### (5.11.5.3) Comment

Details of engagement • Collect water management information at least annually from suppliers • Collect water quantity information at least annually from suppliers • Collect water quantity information at least annually from suppliers Water-related requirement: Reporting against a sustainability index with water-related factors (e.g., DJSI, CDP Water Security questionnaire, etc.) % of suppliers with a substantive impact required to comply with this water-related requirement: 100% % of suppliers with a substantive impact in compliance with this water-related requirement • Certification • Fines and penalties • Grievance mechanism/Whistleblowing hotline • Off-site third-party audit • On-site third-party audit • Supplier self-assessment Response to supplier non-compliance with this water-related requirement: Retain and engage Retain and engage: We continue to purchase the product or service while engaging with the supplier to resolve the non-compliance(s) up to 3 months, if the non-compliance persist, supplier is temporarily suspended for next orders till compliance requirement is meet and evidence for the same are submitted to demonstrate the compliance.

[Fixed row]

(5.11.6) Provide details of the environmental requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance measures in place.

Climate change

#### (5.11.6.1) Environmental requirement

Select from:

☑ Environmental disclosure through a non-public platform

#### (5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

Certification

✓ Fines and penalties

☑ Grievance mechanism/ Whistleblowing hotline

Off-site third-party audit

✓ Supplier self-assessment

# (5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

Select from:

✓ 100%

#### (5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:

76-99%

(5.11.6.7) % tier 1 supplier-related scope 3 emissions attributable to the suppliers required to comply with this environmental requirement

#### Select from:

✓ 26-50%

(5.11.6.8) % tier 1 supplier-related scope 3 emissions attributable to the suppliers in compliance with this environmental requirement

#### Select from:

✓ 26-50%

# (5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:

Retain and engage

# (5.11.6.10) % of non-compliant suppliers engaged

Select from:

None

# (5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

- ☑ Assessing the efficacy and efforts of non-compliant supplier actions through consistent and quantified metrics
- ☑ Developing quantifiable, time-bound targets and milestones to bring suppliers back into compliance
- ☑ Providing information on appropriate actions that can be taken to address non-compliance
- Z Re-integrating suppliers back into upstream value chain based on the successful and verifiable completion of activities

☑ Other, please specify :Suspend the supplier if the compliance is not meet after the grace period granted [3 months] until full compliance is demonstrated and commitment to adhere and maintain teh complaince in future

# (5.11.6.12) Comment

The criteria used for assessing the severity of non-compliance [NC] considers several critical factors: •Impact on Operations: Evaluating how NC affects the efficiency & reliability of the supplier's operations &, consequently, AESL's operations •Environmental Impact: Assessing the extent to which NC exacerbates environmental degradation, particularly in Climate change & environmental conservation. •Regulatory Breach: Determining the severity of the breach in relation to local, national,

international water security regulations & laws. •Duration & Frequency: Considering how long NC has been ongoing and how frequently it has occurred. •Supplier Responsiveness: Gauging the supplier's willingness & ability to address & rectify the NC promptly. •Reputational Risk: Analyzing the potential damage to AESL's public image & stakeholder trust resulting from the supplier's NC. Once the severity of NC is established, AESL's response is tailored to the level of severity: •Low Severity: Minor breaches with negligible operational or environmental impact are addressed with corrective action plans, including guidance, training, and support for suppliers. •Moderate Severity: NC posing moderate risks may trigger formal warnings, clear improvement targets, and regular monitoring. Temporary suspension of contracts is considered until supplier improvement is demonstrated. •High Severity: Severe NC affecting AESL's operations, environmental goals, necessitates immediate terminating contracts etc.

#### Water

# (5.11.6.1) Environmental requirement

Select from:

☑ Environmental disclosure through a non-public platform

# (5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

- Certification
- ✓ Fines and penalties
- ☑ Grievance mechanism/ Whistleblowing hotline
- ☑ Off-site third-party audit
- ✓ Supplier self-assessment

# (5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

Select from:

**☑** 100%

# (5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:

**√** 76-99%

# (5.11.6.9) Response to supplier non-compliance with this environmental requirement

#### Select from:

✓ Retain and engage

#### (5.11.6.10) % of non-compliant suppliers engaged

Select from:

✓ None

## (5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

☑ Assessing the efficacy and efforts of non-compliant supplier actions through consistent and quantified metrics

☑ Developing quantifiable, time-bound targets and milestones to bring suppliers back into compliance

✓ Providing information on appropriate actions that can be taken to address non-compliance

Z Re-integrating suppliers back into upstream value chain based on the successful and verifiable completion of activities

☑ Other, please specify :Suspend the supplier if the compliance is not meet after the grace period granted [3 months] until full compliance is demonstrated and commitment to adhere and maintain teh complaince in future

# (5.11.6.12) Comment

The criteria used for assessing the severity of non-compliance [NC] considers several critical factors: •Impact on Operations: Evaluating how NC affects the efficiency & reliability of the supplier's operations &, consequently, AESL's operations •Environmental Impact: Assessing the extent to which NC exacerbates environmental degradation, particularly in water management & environmental conservation. •Regulatory Breach: Determining the severity of the breach in relation to local, national, international water security regulations & laws. •Duration & Frequency: Considering how long NC has been ongoing and how frequently it has occurred. •Supplier Responsiveness: Gauging the supplier's willingness & ability to address & rectify the NC promptly. •Reputational Risk: Analyzing the potential damage to AESL's public image & stakeholder trust resulting from the supplier's NC. Once the severity of NC is established, AESL's response is tailored to the level of severity: •Low Severity: Minor breaches with negligible operational or environmental impact are addressed with corrective action plans, including guidance, training, and support for suppliers. •Moderate Severity: NC posing moderate risks may trigger formal warnings, clear improvement targets, and regular monitoring. Temporary suspension of contracts is considered until supplier improvement is demonstrated. •High Severity: Severe NC affecting AESL's operations, environmental goals, necessitates immediate terminating contracts etc. [Add row]

# (5.11.7) Provide further details of your organization's supplier engagement on environmental issues.

# **Climate change**

#### (5.11.7.2) Action driven by supplier engagement

Select from:

✓ Other, please specify :Engagement & incentivization (changing supplier behaviour)

#### (5.11.7.3) Type and details of engagement

#### **Capacity building**

- ✓ Provide training, support and best practices on how to measure GHG emissions
- ✓ Provide training, support and best practices on how to mitigate environmental impact
- ☑ Support suppliers to set their own environmental commitments across their operations

#### **Financial incentives**

✓ Feature environmental performance in supplier awards scheme

#### Information collection

- ✓ Collect GHG emissions data at least annually from suppliers
- ☑ Other information collection activity, please specify :9 Business Responsibility & Sustainability Reporting Core indicators

#### Innovation and collaboration

Ingage with suppliers to advocate for policy or regulatory change to address environmental challenges

# (5.11.7.4) Upstream value chain coverage

Select all that apply

✓ Tier 1 suppliers

# (5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

Select from:

✓ 51-75%

#### Select from:

✓ 51-75%

# (5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

This involves integrating ESG criteria into procurement practices, starting from the screening of new vendors to annual performance evaluations. This systematic approach helps us manage supply chain risks effectively and build resilience, thereby supporting our long-term sustainability goals. Our supplier engagement strategy assess helps us assess our supplier environmental and social footprint. It also helps us understand risks in the supply chain and initiate mechanism to mitigate contain them on a timely basis. Further, it helps understand the product footprint received from our suppliers, identify improvement areas and opportunities to reduce resource consumption and increase cost efficiency. By regularly collecting supplier information, it helps us identify supplier behaviour. It also forms the backbone of our supplier assessment and vendor on boarding. Vendors are assessed across parameters like ESG, guality, financial stability, manufacturing and testing facilities, adherence to legal standards etc. Quality assurance is followed by factory assessment and internal evaluation and upon satisfactory performance at all levels, the vendor requests are approved, and they are onboarded. We proactively engage with our suppliers to promote their adoption of their sustainability practices. Quality assurance for each supplier is followed by factory assessment and internal evaluation and upon satisfactory performance at all levels, the vendor requests are approved, and they are onboarded. While onboarding, in cases of any new supplier rejection due to non-compliance found in assessment, the same is reported and conveyed to the vendors. We understand some of our vendors are low scale and investments are required to ensure compliances at all levels. Thus, we provide them with feedback for improvements, invests in and handholds them as required. Suppliers are supported on implementation of corrective and improvement actions as required. We also encourage our suppliers to be compliant with various social and environmental standards such as SA 8000. The UNGC principles, ISO 14001 and ISO 45001. Results: 41% of suppliers have GHG emission & or Water reduction targets 8% have SBTi targets in place 40% of suppliers cascad teh ESG Requirements in thier Tier-1 supply chain 20 Suppliers use RE in their operations 15 Suppliers reported YOY GHG emissions reduction 11 Supplier reported YOY increase in GHG emissions

# (5.11.7.10) Engagement is helping your tier 1 suppliers meet an environmental requirement related to this environmental issue

Select from:

Ves, please specify the environmental requirement : For select supplier in Mumbai we offer Green tariffs helping them acheive decarbonisation goal

#### (5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

🗹 Yes

Water

# (5.11.7.2) Action driven by supplier engagement

Select from:

☑ Other, please specify :Engagement & incentivization (changing supplier behaviour)

## (5.11.7.3) Type and details of engagement

#### **Capacity building**

- ✓ Provide training, support and best practices on how to mitigate environmental impact
- ☑ Support suppliers to set their own environmental commitments across their operations

#### **Financial incentives**

✓ Feature environmental performance in supplier awards scheme

#### Information collection

- Collect water quality information at least annually from suppliers (e.g., discharge quality, pollution incidents, hazardous substances)
- Collect water quantity information at least annually from suppliers (e.g., withdrawal and discharge volumes)

#### Innovation and collaboration

☑ Engage with suppliers to advocate for policy or regulatory change to address environmental challenges

## (5.11.7.4) Upstream value chain coverage

Select all that apply

✓ Tier 1 suppliers

# (5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

Select from: ✓ 51-75%

(5.11.7.7) % tier 1 suppliers with substantive impacts and/or dependencies related to this environmental issue covered by engagement

#### (5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

This involves integrating ESG criteria into procurement practices, starting from the screening of new vendors to annual performance evaluations. This systematic approach helps us manage supply chain risks effectively and build resilience, thereby supporting our long-term sustainability goals. Our supplier engagement strategy assess helps us assess our supplier environmental and social footprint. It also helps us understand risks in the supply chain and initiate mechanism to mitigate contain them on a timely basis. Further, it helps understand the product footprint received from our suppliers, identify improvement areas and opportunities to reduce resource consumption and increase cost efficiency. By regularly collecting supplier information, it helps us identify supplier behaviour. It also forms the backbone of our supplier assessment and vendor on boarding. Vendors are assessed across parameters like ESG, guality, financial stability, manufacturing and testing facilities, adherence to legal standards etc. Quality assurance is followed by factory assessment and internal evaluation and upon satisfactory performance at all levels, the vendor requests are approved, and they are onboarded. We proactively engage with our suppliers to promote their adoption of their sustainability practices. Quality assurance for each supplier is followed by factory assessment and internal evaluation and upon satisfactory performance at all levels, the vendor requests are approved, and they are onboarded. While onboarding, in cases of any new supplier rejection due to non-compliance found in assessment, the same is reported and conveyed to the vendors. We understand some of our vendors are low scale and investments are required to ensure compliances at all levels. Thus, we provide them with feedback for improvements, invests in and handholds them as required. Suppliers are supported on implementation of corrective and improvement actions as required. We also encourage our suppliers to be compliant with various social and environmental standards such as SA 8000, The UNGC principles, ISO 14001 and ISO 45001. Results: 41% of suppliers have GHG emission & or Water reduction targets 8% have SBTi targets in place 40% of suppliers cascad teh ESG Requirements in thier Tier-1 supply chain 20 Suppliers use RE in their operations 15 Suppliers reported YOY GHG emissions reduction 11 Supplier reported YOY increase in GHG emissions

# (5.11.7.10) Engagement is helping your tier 1 suppliers meet an environmental requirement related to this environmental issue

Select from:

✓ Yes, please specify the environmental requirement :Suppliers are able to understand the requirements and few of they are cascading the requirements in their supplychain

# (5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

✓ Yes

[Add row]

# (5.11.9) Provide details of any environmental engagement activity with other stakeholders in the value chain.

## **Climate change**

# (5.11.9.1) Type of stakeholder

Select from:

Customers

## (5.11.9.2) Type and details of engagement

#### Education/Information sharing

- Z Run an engagement campaign to educate stakeholders about the environmental impacts about your products, goods and/or services
- ☑ Share information on environmental initiatives, progress and achievements

#### Innovation and collaboration

- ☑ Collaborate with stakeholders in creation and review of your climate transition plan
- ☑ Engage with stakeholders to advocate for policy or regulatory change

#### Other

Other, please specify :Adoption of Energy efficiecnt appliances, Energy Audits, Shared EV charing infra etc thru Demand side management programs

#### (5.11.9.3) % of stakeholder type engaged

Select from:

**√** 76-99%

#### (5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

76-99%

# (5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

We cater to customers in both B2B and B2C segments, offering diverse solutions: Stakeholder Importance Voice of customer is critical for process improvement, service quality enhancement and cost optimisation. Regular engagement gives us insights into their preferences enabling tailored services leading to elevated

customer delight & loyalty. Stakeholder Expectations: • Differentiated service offerings & product portfolio • Support in Decarbonisation • Digitally-enabled positive experience • Participation in various industrial forums • Digital disruption • Customer need identification and satisfaction • Brand reputation • Customer privacy and feedback AESL's response: • Maintaining customer-centric digital approach through digital transformation and value-added competitive solutions addressing present and future needs of the end users • Undertake several initiatives for enhanced responsiveness superior value delivery • Comprehensive grievance redressal mechanism for effective resolution • Integration of data privacy system into our risk management framework to safeguard customer data • Embracing new technologies and data-driven solutions for cost savings, efficiency & informed decisions • Expanding into new market areas, such as renewable energy sources • Implementing cost reduction programmes and effective cash management • Alignment with Sustainable Development Goals for responsible business practices • Providing sustainable, affordable, and innovative energy solutions • Prioritising environmental sustainability in operations and services offered through demand side management programmes • Advocating customer concerns to regulators for consumer-friendly policies and schemes As the world continues to transition to low Carbon economy, our customers are also demanding low carbon energy solutions for their daily operations. Therefore, we cover 100% of our customers to promote the adoption of green energy. This not only help us become a preferred partner in their low carbon journey but also enables us to reduce our emissions and cut our T&D losses. Additionally, renewable energy penetration in grid will mean cost efficiency for our customers.

#### (5.11.9.6) Effect of engagement and measures of success

1) Distribution loss has been improving consistently 5.93%[FY2023] to 5.29% [FY2024]due to focussed loss mitigation activities and maintained supply reliability at over 99.99%. 2) No of customers increased from 3.13 Million [FY2023] to 3.18 Million [FY2024] 3) nearly 1 Lakh customers have opted for Green tariff even with INR 0.66 / unit premium. 4) No. of operational EV chargers for FY2024 224 Nos. contributing to 80Million units p.a. 5) Increase in RE power Procurement from 30.04% [FY2023] to 34.35% [FY2024] Increasing renewable energy in power mix helped reduce Scope 3 Category 3 by 26,56,987 tCO2 emissions from end customers (Commercial, industrial and institutional ). This also helped us generate additional revenue of INR 2449.2 Million in FY 2024. We were yet again recognised as Indian's Best Discom in FY 2024 for our service excellence and quality and became the only private company in India to be rated in the top five 'Annual Integrated Rating and Ranking' covering 71 power distribution utilities across India.

#### Water

# (5.11.9.1) Type of stakeholder

Select from:

✓ Investors and shareholders

## (5.11.9.2) Type and details of engagement

#### **Education/Information sharing**

Z Educate and work with stakeholders on understanding and measuring exposure to environmental risks

## (5.11.9.3) % of stakeholder type engaged

#### (5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

Stakeholder Importance: They are the providers of capital. Continuous engagement helps build trust, transparency, and alignment with organisational goals, attracting financial support and long-term financial stability. Engagement Channels • Investor Meets • Annual Reports and Shareholder Meetings [Annual General Periodic declaration on performance • Public disclosures, Sustainability reports and ESG rating reports • Industry forums, panels, and discussions Meetinas1 • Investor Relations (IR) webpage on company website • Investor Conferences and Roadshows • Webinars, webcasts, and virtual tours • Regulatory filings, newsletters, • One-on-One meetings • media relations, market intelligence reports • Investor days AESL's Response • Prioritise environmental and social impact along with the economic performance • Robust governance structure to ensure ethical business conduct and compliance • Continuous progress on management of business and ESG topics through clear and measurable goals • Transparent & timely communication as well as disclosures on business as well as ESG performances • Prioritising transparent and prompt communication with during unforeseen events or crises • Adopting new technologies for better grid management and energy accounting for operational efficiencies and cost savings • Have a dedicated

Investor Relations Officer as the primary contact for investor enquiries and communications Outcome: • Trust & Confidence in Company's Management • Investors' & Shareholders' Value Enhancement • Personalised Communication • Opportunity to meet/address stakeholders' expectations, concerns and

grievances

#### (5.11.9.6) Effect of engagement and measures of success

Engaging with investors and shareholders on climate change and water security-related environmental issues can have several potential effects: 1. Education and Awareness: Engaging with investors and shareholders can help educate them about the company's water-related performance and strategy. This lead to a better understanding of the risks and opportunities associated with water-related issues. 2. Regulatory Compliance: As climate change and water-related challenges escalate, governments may tighten controls on water use and wastewater discharge. Engaging with stakeholders helps companies stay ahead of these regulations and avoid potential legal issues. 3. Reputation Management: Companies that are perceived as mismanaging scarce water resources may suffer reputational damage. Engaging with investors and shareholders help mitigate this risk by demonstrating the company's commitment to sustainable water management. 4.

Policy Advocacy: Companies advocate for policies that support the transition to a low-carbon economy and sustainable energy practices. This helps enhance the company's reputation and align its operations with broader societal goals.

## **Climate change**

# (5.11.9.1) Type of stakeholder

Select from:

☑ Other value chain stakeholder, please specify :Regulator

# (5.11.9.2) Type and details of engagement

#### **Education/Information sharing**

- Z Educate and work with stakeholders on understanding and measuring exposure to environmental risks
- Z Run an engagement campaign to educate stakeholders about the environmental impacts about your products, goods and/or services
- ☑ Share information on environmental initiatives, progress and achievements

#### Innovation and collaboration

☑ Engage with stakeholders to advocate for policy or regulatory change

#### (5.11.9.3) % of stakeholder type engaged

Select from:

76-99%

## (5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

✓ 76-99%

#### (5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

Stakeholder Importance Being in policy-shaping and regulatory roles, the engagement is pivotal to maintain a conducive business environment. Advocating for regulatory independence helps ensuring compliances, enables fair competition, reducing legal risks, strengthening brand reputation and running uninterrupted power operations. Participation in regulatory forums not only helps harmonising regulations across power sector but also fosters consumer satisfaction. Engagement Channels •Policy advocacy •Direct interactions on a case-to-case basis •Public consultations and hearings •Regulatory audits and inspections •Collaborative initiatives with regulators for development of sector-specific policies and regulations affecting the power sector •Compliance management •Regulatory forums & Awards Stakeholder Expectations • Compliance with regulatory standards and contribution to country's energy transition • Abidance by adjudicated disputes and compliance with performance standards • Adoption of technology on a scale and support for digital transformation • Strong capital base and liquidity position • Adoption of robust code of conduct • Positive development on ESG parameters • Robust governance, transparency in reporting Frequency of

engagement • Periodic and Need-based AESL's Response • Adoption of practices and procedures for 100% compliance with applicable laws and regulations •

Collaborations with stakeholders to ensure compliance, foster business-friendly environment and overall industry growth • Robust procedures and systems to proactively mitigate non-compliance risks • Transparent and timely compliance disclosures via Website, Annual Reports, • Sustainability Reports and other standalone reports • Embracing digital transformation to stay ahead of the competition • Power Purchase Agreements (PPAs) with renewable energy developers to support a country's energy transition for a sustainable future • Promoting adoption of energy-efficient appliances by end consumers through • Demand-side Management programmes Outcomes: • Enhanced regulatory compliance • Stronger brand reputation & credibility • Contribution to wards national goals • Improved decision-making legitimacy • Commitment to transparency & responsible business practices • Grievance redressal mechanism & performance

#### (5.11.9.6) Effect of engagement and measures of success

To measure the effectiveness of engagement with regulatory authorities and the utility's performance in climate change mitigation, specific success metrics and KPIs in Mumbai include: 1. Reduction in Greenhouse Gas Emissions Metric: Percentage reduction in energy & GHG emissions intensity KPI 1: Achieved 59% reduction in Energy Intensity against target of 50% reduction by FY 2026-27, and 70% reduction by FY 2029-30 from a baseline of 481.30 GJ/million INR revenue in FY 2019-20 KPI 2: In alignment with SDG13, achieved: 41.8% reduction [1,310 tCO2e/EBITDA] against target of 40% reduction in GHG emission intensity per EBITDA by FY 2024-25 50% reduction by FY 2026-27, and 70% reduction by FY 2029-30 from baseline of 2,254 tCO2e/EBITA In FY 2018-19 2. Renewable Energy Integration Metric: Increase the share of renewable energy in procurement mix KPI: from 3% in FY2021 to 30% by FY2023, 60% by FY2027 and 70% by FY2030 of total electricity purchased and sold to end consumers. Achieved 34.35% in FY24. 3. Energy Efficiency Improvements Metric: Reduction in energy loss during transmission and distribution. KPI: Achieved 26% reduction in energy loss by FY2024 from a FY2021 baseline. 4. Customer Satisfaction and Engagement Metric: Customer satisfaction index [CSI] related to sustainability initiatives. KPI: Achieve a 90% customer satisfaction rate by 2030. FY24 CSI 79% 5. Compliance with Regulatory Standards Metric: Maintain zero compliance issues per annum KPI: No compliance issues [Add row]

# **C6.** Environmental Performance - Consolidation Approach

(6.1) Provide details on your chosen consolidation approach for the calculation of environmental performance data.

#### Climate change

#### (6.1.1) Consolidation approach used

Select from:

Operational control

#### (6.1.2) Provide the rationale for the choice of consolidation approach

To calculate our energy and emissions related data, we have adopted operational control approach for climate change. The approach involves identification of entities relevant to the environmental impact of our organization, including our subsidiaries, joint ventures, and controlled businesses. The operational control approach has aided in accurately capturing the climate change related impacts of our operations and supply chain, and report the associated data in a comprehensive and transparent manner. All the associated data and information is disclosed in a comprehensive report.

#### Water

# (6.1.1) Consolidation approach used

Select from:

Operational control

## (6.1.2) Provide the rationale for the choice of consolidation approach

To calculate our water related data, we have adopted operational control approach. The approach involves identification of entities relevant to the environmental impact of our organization, including our subsidiaries, joint ventures, and controlled businesses. The operational control approach has aided in accurately capturing the water related impacts of our operations and supply chain, and report the associated data in a comprehensive and transparent manner. All the associated data and information is disclosed in a comprehensive report.

# Plastics

## (6.1.1) Consolidation approach used

Select from:

✓ Operational control

#### (6.1.2) Provide the rationale for the choice of consolidation approach

Not applicable

## **Biodiversity**

#### (6.1.1) Consolidation approach used

Select from:

✓ Operational control

# (6.1.2) Provide the rationale for the choice of consolidation approach

To calculate our biodiversity related data, we have adopted operational control approach. The approach involves identification of entities relevant to the environmental impact of our organization, including our subsidiaries, joint ventures, and controlled businesses. The operational control approach has aided in accurately capturing the biodiversity related impacts of our operations and supply chain, and report the associated data in a comprehensive and transparent manner. All the associated data and information is disclosed in a comprehensive report. [Fixed row]

# **C7. Environmental performance - Climate Change**

(7.1.1) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Has there been a structural change?
Select all that apply ☑ No

[Fixed row]

(7.1.2) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

#### (7.1.2.1) Change(s) in methodology, boundary, and/or reporting year definition?

Select all that apply

✓ Yes, a change in boundary

## (7.1.2.2) Details of methodology, boundary, and/or reporting year definition change(s)

During the reporting period company added new transmission sites which were not operational during previous reporting period. Methodology: Base year emissions and any historic data are not recalculated for organic growth and decline. Organic growth/decline refers to increases or decreases in production output, changes in product mix, and closures and openings of operating units that are owned or controlled by the company. The rationale for this is that organic growth or decline results in a change of emissions to the atmosphere and therefore needs to be accounted for as an increase or decrease in the company's emissions profile over time. [Fixed row]

(7.1.3) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in 7.1.1 and/or 7.1.2?

# (7.1.3.1) Base year recalculation

Select from:

☑ No, because the operations acquired or divested did not exist in the base year

## (7.1.3.3) Base year emissions recalculation policy, including significance threshold

The base year recalculations policy is defined not only to support our regulatory compliance but also to enhance the transparency and credibility of our company's sustainability initiatives. We understand and acknowledge that establishing ideal significance thresholds is vital for ensuring the accuracy and reliability of emissions reporting over time. The company has set threshold of 5% inline with SBTi's thresholds policy, to account for substantial changes in the emissions profiles due to mergers, acquisitions, operational changes, or divestments. During the reporting period, new transmission sites were added, because the impact does not meet our significance threshold as defined in our base year recalculation policy and we have evaluated that the changes or errors identified in 7.1.1 and/or 7.1.2 do not meet our policy's significance threshold and therefore the impact on emissions is deemed to be non-material.

# (7.1.3.4) Past years' recalculation

Select from:

✓ No [Fixed row]

(7.3) Describe your organization's approach to reporting Scope 2 emissions.

# (7.3.1) Scope 2, location-based

Select from:

☑ We are reporting a Scope 2, location-based figure

# (7.3.2) Scope 2, market-based

#### Select from:

✓ We are reporting a Scope 2, market-based figure

#### (7.3.3) Comment

Scope 2 is calculated as per the guidance in GHG Protocol. We selected the emission factor from grid to 0.716 tCO2/MWh for grid consumption for inventorisation of Scope 2 category (CEA CO2 Baseline Database) In the market-based method we account 0 emissions for renewable electricity usage whereas location-based method assigns National grid emission factor of 0.716 tCO2/MWh for grid consumption for inventorisation of Scope 2 category (CEA CO2 Baseline Database) to RE electricity consumption aswell.

[Fixed row]

## (7.5) Provide your base year and base year emissions.

#### Scope 1

#### (7.5.1) Base year end

03/30/2022

#### (7.5.2) Base year emissions (metric tons CO2e)

2691062

## (7.5.3) Methodological details

Scope 1 direct emissions from operations that are owned or controlled by the company, including fuels combusted in vehicles and or boilers, fugitive or vented emissions from process equipment, and or process emissions such as Fire extinguishers used. For the calculation of Scope 1- Direct emissions due to fuels, the figure obtained is a product of the total fuel and the relevant emission factors. Emission factors: 1) DEFRA [Defra - Department for Environment Food and Rural Affairs] UK 2) Defra - Department for Environment Food and Rural Affairs 3 ) IPCC GWP for SF6 and refrigerants Emission calculation methodology followed: As per GHG protocol guidance Data Source: Primary data monitored and recorded for the fuel, Gases [Refrigerants, Fire extinguishers] consumed from sources that are controlled or owned by the company in its operational control boundary and all were verified by Independent Third Party [TUV Nord for the reporting period] for Relevance, Completeness, Consistency, Transparency and Accuracy. Note: Aligning to SBTi methodology and reconsidering the business operation, we have taken base year for scope 12 as FY2022, and for scope 3 as FY2021.

# Scope 2 (location-based)

03/30/2022

#### (7.5.2) Base year emissions (metric tons CO2e)

558915

# (7.5.3) Methodological details

Emission calculation methodology followed: As per GHG protocol guidance Calculation: Electricity consumed x emission factor Data Source: Primary data monitored and recorded for the Electricity consumed and loss in the transmission & Distribution network that are controlled or owned by the company in its operational control boundary, and all were verified by Independent Third Party [TUV Nord for the reporting period] for Relevance, Completeness, Consistency, Transparency and Accuracy. Emission Factor Source: Purchased electricity emission factor is taken from Central Electricity Authority (CEA), a statutory body under the Ministry of Power, Government of India. In India a one grid system is in place, which accounts for the renewable energy mixed in the grid as well. Thus, the emission factor for both location and market based is the same. Note: Aligning to SBTi methodology and reconsidering the business operation, we have taken base year for scope 12 as FY2022, and for scope 3 as FY2021.

# Scope 2 (market-based)

#### (7.5.1) Base year end

03/30/2022

#### (7.5.2) Base year emissions (metric tons CO2e)

557775

# (7.5.3) Methodological details

Purchased electricity emission factor is taken from Central Electricity Authority (CEA), a statutory body under the Ministry of Power, Government of India. In India a one grid system is in place, which accounts for the renewable energy mixed in the grid as well. Thus, the emission factor for both location and market based is the same. Note: Aligning to SBTi methodology and reconsidering the business operation, we have taken base year for scope 12 as FY2022, and for scope 3 as FY2021.

#### Scope 3 category 1: Purchased goods and services

03/31/2021

#### (7.5.2) Base year emissions (metric tons CO2e)

2809089

# (7.5.3) Methodological details

Our inventory of Scope 3 category 1 emissions was conducted in accordance with the GHG Protocol guidelines The GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (referred to as the Scope 3 Standard), using the "spend-based method." Spend-based method – estimates emissions for goods and services by collecting data on the economic value of goods and services purchased and multiplying it by relevant secondary (e.g., industry average) emission factors (e.g., average emissions per monetary value of goods). where the spend data for different commodities purchased is taken as an input for the activity data. Emission factors for this category were referred from Climatiq.io dataset for India. Note: Aligning to SBTi methodology and reconsidering the business operation, we have taken base year for scope 12 as FY2022, and for scope 3 as FY2021.

#### Scope 3 category 2: Capital goods

(7.5.1) Base year end

03/31/2021

#### (7.5.2) Base year emissions (metric tons CO2e)

1294910

## (7.5.3) Methodological details

Our inventory of Scope 3 emissions was conducted in accordance with the GHG Protocol guidelines, employing a spend-based method. This approach utilizes the expenditure data on various commodities we purchase as the input for activity data. The emissions for this category are calculated using the Scope 3 Evaluator tool, developed by the GHG Protocol and Quantis. Note: Aligning to SBTi methodology and reconsidering the business operation, we have taken base year for scope 12 as FY2022, and for scope 3 as FY2021.

## Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

03/31/2021

#### (7.5.2) Base year emissions (metric tons CO2e)

0.0

# (7.5.3) Methodological details

We determine the importance of each Scope 3 category by evaluating its proportion in our overall Scope 3 emissions inventory and our ability to influence reductions within that category. Based on these criteria, we have concluded that Category 3 is not applicable to our context and have accordingly reported it as zero.

#### Scope 3 category 4: Upstream transportation and distribution

#### (7.5.1) Base year end

03/31/2021

#### (7.5.2) Base year emissions (metric tons CO2e)

45434

# (7.5.3) Methodological details

We conducted an inventory of our Scope 3 emissions following the GHG Protocol guidelines, utilizing a hybrid method to gather emissions data in this category. For road transport, we employed a supplier-specific method, where the fuel consumption was the primary data point. Meanwhile, for transportation via other modes, including train, sea, and air, we used the distance traveled as the activity data. Note: Aligning to SBTi methodology and reconsidering the business operation, we have taken base year for scope 12 as FY2022, and for scope 3 as FY2021.

## Scope 3 category 5: Waste generated in operations

## (7.5.1) Base year end

03/31/2021

0

# (7.5.3) Methodological details

We did not include this category in our base year calculations. The significance of each Scope 3 category is determined by its proportion in our total Scope 3 emissions inventory and our capacity to drive reductions within that category. Therefore, we have reported this category as zero.

## Scope 3 category 6: Business travel

(7.5.1) Base year end

03/31/2021

#### (7.5.2) Base year emissions (metric tons CO2e)

0

# (7.5.3) Methodological details

We did not include this category in our base year calculations. The significance of each Scope 3 category is determined by its proportion in our total Scope 3 emissions inventory and our capacity to drive reductions within that category. Therefore, we have reported this category as zero.

## Scope 3 category 7: Employee commuting

## (7.5.1) Base year end

03/31/2021

#### (7.5.2) Base year emissions (metric tons CO2e)

0.0

(7.5.3) Methodological details

We did not include this category in our base year calculations. The significance of each Scope 3 category is determined by its proportion in our total Scope 3 emissions inventory and our capacity to drive reductions within that category. Therefore, we have reported this category as zero.

## Scope 3 category 8: Upstream leased assets

(7.5.1) Base year end

03/31/2021

#### (7.5.2) Base year emissions (metric tons CO2e)

0.0

# (7.5.3) Methodological details

No upstream leased assets other than logistics vehicles which are already covered under Scope 1 as fuel used is paid by Adani Energy Solutions, thus emissions under this category are 0 for the reporting period.

#### Scope 3 category 9: Downstream transportation and distribution

# (7.5.1) Base year end

03/31/2021

#### (7.5.2) Base year emissions (metric tons CO2e)

0.0

# (7.5.3) Methodological details

No downstream leased assets other than customer care offices and logistics vehicles used for the distribution & transmission line inspection, O&M teams, which are already covered under Scope 1 as fuel used is paid by Adani Energy Solutions, thus emissions under this category are 0 for the reporting period.

## Scope 3 category 10: Processing of sold products

# (7.5.1) Base year end

# (7.5.2) Base year emissions (metric tons CO2e)

0.0

# (7.5.3) Methodological details

No processing required for use of our services and thus, emissions under this category is reported 0.

# Scope 3 category 11: Use of sold products

# (7.5.1) Base year end

03/31/2021

## (7.5.2) Base year emissions (metric tons CO2e)

0.0

# (7.5.3) Methodological details

No additional energy required for use of our services, thus reported 0.

# Scope 3 category 12: End of life treatment of sold products

# (7.5.1) Base year end

03/31/2021

# (7.5.2) Base year emissions (metric tons CO2e)

0.0

(7.5.3) Methodological details

No end-of-life treatment for our services, hence reported 0.

#### Scope 3 category 13: Downstream leased assets

(7.5.1) Base year end

03/31/2021

## (7.5.2) Base year emissions (metric tons CO2e)

0.0

## (7.5.3) Methodological details

Downstream leased assets for customer care are included in Scope 2, hence this category of emissions is reported 0.

## Scope 3 category 14: Franchises

# (7.5.1) Base year end

03/31/2021

#### (7.5.2) Base year emissions (metric tons CO2e)

0.0

# (7.5.3) Methodological details

No franchises for our services, therefore disclosed as 0.

#### Scope 3 category 15: Investments

# (7.5.1) Base year end

03/31/2021
0

## (7.5.3) Methodological details

Investments made in other entity is yet to start operations, hence emissions under this category are not relevant for tracking and monitoring, thus disclosed as 0. Also company does not have any operatonal control.

## Scope 3: Other (upstream)

(7.5.1) Base year end

03/31/2021

#### (7.5.2) Base year emissions (metric tons CO2e)

0

## (7.5.3) Methodological details

We do not track activity data under this category as we believe the relevant Scope 3 emissions are already covered in the specific categories, thus reported 0.

# Scope 3: Other (downstream)

## (7.5.1) Base year end

03/31/2021

#### (7.5.2) Base year emissions (metric tons CO2e)

0

## (7.5.3) Methodological details

We do not track activity data under this category as we believe the relevant Scope 3 emissions are already covered in the specific categories, thus reported 0.

[Fixed row]

## (7.6) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

**Reporting year** 

## (7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

2663319

## (7.6.3) Methodological details

Scope 1 emissions are calculated for the fuel we consume during our operational process. The emission factor is taken as per IPCC recommendations. Value for coal emissions is obtained using ultimate coal analysis.

#### Past year 1

#### (7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

2826371

## (7.6.2) End date

03/30/2023

# (7.6.3) Methodological details

Scope 1 emissions are calculated for the fuel we consume during our operational process. The emission factor is taken as per IPCC recommendations. Value for coal emissions is obtained using ultimate coal analysis.

# Past year 2

# (7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

#### 2691062

03/30/2022

## (7.6.3) Methodological details

Scope 1 emissions are calculated for the fuel we consume during our operational process. The emission factor is taken as per IPCC recommendations. Value for coal emissions is obtained using ultimate coal analysis.

## Past year 3

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

2592313

#### (7.6.2) End date

03/30/2021

## (7.6.3) Methodological details

Scope 1 emissions are calculated for the fuel we consume during our operational process. The emission factor is taken as per IPCC recommendations. Value for coal emissions is obtained using ultimate coal analysis.

## Past year 4

## (7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

3187007

## (7.6.2) End date

03/30/2020

(7.6.3) Methodological details

Scope 1 emissions are calculated for the fuel we consume during our operational process. The emission factor is taken as per IPCC recommendations. Value for coal emissions is obtained using ultimate coal analysis. [Fixed row]

# (7.7) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

#### **Reporting year**

#### (7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

433825

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

426436

## (7.7.4) Methodological details

We take aid of the GHG protocol guidelines for the calculation of emissions. The emissions have been arrived at using emission factors prescribed by Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6) and Department for Environment, Food and Rural Affairs (DEFRA) and also the emission factor provided by CEA.

## Past year 1

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

438291

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

435852

(7.7.3) End date

03/30/2023

## (7.7.4) Methodological details

We take aid of the GHG protocol guidelines for the calculation of emissions. The emissions have been arrived at using emission factors prescribed by Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6) and Department for Environment, Food and Rural Affairs (DEFRA) and also the emission factor provided by CEA.

#### Past year 2

#### (7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

558915

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

557775

#### (7.7.3) End date

03/30/2022

# (7.7.4) Methodological details

We take aid of the GHG protocol guidelines for the calculation of emissions. The emissions have been arrived at using emission factors prescribed by Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6) and Department for Environment, Food and Rural Affairs (DEFRA) and also the emission factor provided by CEA.

## Past year 3

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

333942

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

332211

03/30/2021

## (7.7.4) Methodological details

We take aid of the GHG protocol guidelines for the calculation of emissions. The emissions have been arrived at using emission factors prescribed by Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6) and Department for Environment, Food and Rural Affairs (DEFRA) and also the emission factor provided by CEA.

## Past year 4

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

21155

## (7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

22804

# (7.7.3) End date

03/30/2020

## (7.7.4) Methodological details

We take aid of the GHG protocol guidelines for the calculation of emissions. The emissions have been arrived at using emission factors prescribed by Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6) and Department for Environment, Food and Rural Affairs (DEFRA) and also the emission factor provided by CEA. [Fixed row]

## (7.8) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

#### Purchased goods and services

#### (7.8.1) Evaluation status

Select from:

Relevant, calculated

#### (7.8.2) Emissions in reporting year (metric tons CO2e)

1187106

#### (7.8.3) Emissions calculation methodology

Select all that apply

✓ Supplier-specific method

✓ Hybrid method

- ✓ Average data method
- ✓ Spend-based method

## (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

99

# (7.8.5) Please explain

Spend based method was used, where the spend data for different commodities purchased is taken as an input for the activity data. The emissions for this category are calculated through Scope 3 evaluator tool by GHG Protocol and Quantis

## **Capital goods**

## (7.8.1) Evaluation status

Select from:

✓ Relevant, calculated

## (7.8.2) Emissions in reporting year (metric tons CO2e)

#### (7.8.3) Emissions calculation methodology

Select all that apply

- ✓ Supplier-specific method
- ✓ Hybrid method
- ✓ Average data method
- ✓ Spend-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

99

## (7.8.5) Please explain

Our inventory of Scope 3 emissions was conducted in accordance with the GHG Protocol guidelines, employing a spend-based method. This approach utilizes the expenditure data on various commodities we purchase as the input for activity data. The emissions for this category are calculated using the Scope 3 Evaluator tool, developed by the GHG Protocol and Quantis

## Fuel-and-energy-related activities (not included in Scope 1 or 2)

## (7.8.1) Evaluation status

Select from:

✓ Relevant, calculated

## (7.8.2) Emissions in reporting year (metric tons CO2e)

3553651

#### (7.8.3) Emissions calculation methodology

Select all that apply

✓ Hybrid method

✓ Fuel-based method

#### (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

99

## (7.8.5) Please explain

Our inventory of Scope 3 emissions was conducted in accordance with the GHG Protocol guidelinesCentral Electricity Authority of India published emissions factors and declared T&D Losses. T&D losses occurring in the grid for the consumed electricity were accounted using and emissions due to extraction, production, and transportation of fuels consumed by the organisation. Plus emissions accounted from the generation of purchased energy.

#### Upstream transportation and distribution

## (7.8.1) Evaluation status

Select from:

Relevant, calculated

#### (7.8.2) Emissions in reporting year (metric tons CO2e)

3585

## (7.8.3) Emissions calculation methodology

Select all that apply

- Hybrid method
- ✓ Average data method
- ✓ Fuel-based method
- ✓ Distance-based method

## (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

#### (7.8.5) Please explain

We conducted an inventory of our Scope 3 emissions following the GHG Protocol guidelines, utilizing a hybrid method to gather emissions data in this category. For road transport, we employed a supplier-specific method, where the fuel consumption was the primary data point. Meanwhile, for transportation via other modes, including train, sea, and air, we used the distance traveled as the activity data.

#### Waste generated in operations

#### (7.8.1) Evaluation status

Select from:

Relevant, calculated

#### (7.8.2) Emissions in reporting year (metric tons CO2e)

50.78

#### (7.8.3) Emissions calculation methodology

Select all that apply

✓ Average data method

✓ Waste-type-specific method

#### (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

99

## (7.8.5) Please explain

Waste-type-specific method was used following the GHG Protocol, which involves using emission factors for specific waste types and waste treatment methods. We considered the average emission factors for each disposal method published by DEFRA

#### **Business travel**

(7.8.1) Evaluation status

Select from:

✓ Relevant, calculated

#### (7.8.2) Emissions in reporting year (metric tons CO2e)

399

#### (7.8.3) Emissions calculation methodology

Select all that apply

✓ Hybrid method

✓ Average data method

✓ Distance-based method

## (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

99

# (7.8.5) Please explain

Primary Distance based data for air, rail and road mode of travel was used as data input. The ICAO Carbon Emissions Calculator was used to estimate the emissions attributed to their air travel. We refer secondary references to identify the context specific emission factor for rail and road transport.

## **Employee commuting**

## (7.8.1) Evaluation status

Select from:

✓ Not relevant, calculated

## (7.8.2) Emissions in reporting year (metric tons CO2e)

72

(7.8.3) Emissions calculation methodology

Select all that apply

- ✓ Hybrid method
- ✓ Average data method
- ✓ Fuel-based method
- ✓ Distance-based method

#### (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

76

# (7.8.5) Please explain

Average data method based on survey responses received from employees. Data inputs include mode of travel, fuel and distance. Referred DEFRA and GHG Protocol mobile combustion guidance for determining the emission factors.

# **Upstream leased assets**

## (7.8.1) Evaluation status

Select from:

✓ Not relevant, calculated

## (7.8.2) Emissions in reporting year (metric tons CO2e)

0

## (7.8.3) Emissions calculation methodology

Select all that apply

✓ Supplier-specific method

✓ Hybrid method

- ✓ Average data method
- ✓ Fuel-based method
- ✓ Distance-based method

#### (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

## (7.8.5) Please explain

No upstream leased assets other than logistics vehicles which are already covered under Scope 1 as fuel used is paid by Adani Energy Solutions, thus emissions under this category are 0 for the reporting period.

## Downstream transportation and distribution

## (7.8.1) Evaluation status

Select from:

Not relevant, calculated

#### (7.8.2) Emissions in reporting year (metric tons CO2e)

0

## (7.8.3) Emissions calculation methodology

Select all that apply

✓ Fuel-based method

## (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

# (7.8.5) Please explain

No downstream leased assets other than customer care offices and logistics vehicles used for the distribution & transmission line inspection, O&M teams, which are already covered under Scope 1 & 2 as fuel & or electricity [if any] used is paid by Adani Energy Solutions, thus emissions under this category are 0 for the reporting period.

# Processing of sold products

#### (7.8.1) Evaluation status

Select from:

✓ Not relevant, calculated

## (7.8.2) Emissions in reporting year (metric tons CO2e)

0

#### (7.8.3) Emissions calculation methodology

Select all that apply

✓ Other, please specify :We are into business of generation, transmission and distribution of electricity, smart metering which does not require any kind of processing where in GHG would be emmitted. Cooling solutions division was not operationalised in the reporting period.

#### (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

# (7.8.5) Please explain

We are into business of generation, transmission and distribution of electricity, smart metering which does not require any kind of processing where in GHG would be emmitted. Cooling solutions division was not operationalised in the reporting period. No processing required for use of our product or services [Electricity] and thus, emissions under this category is reported 0.

## Use of sold products

## (7.8.1) Evaluation status

Select from: ✓ Not relevant, calculated

#### (7.8.2) Emissions in reporting year (metric tons CO2e)

## (7.8.3) Emissions calculation methodology

#### Select all that apply

✓ Other, please specify :our product is electricity which does not need any energy or any input further for use. Also emission occur at generation stage are accounted for under Scope 1 & 2 [T&D losses].

#### (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

# (7.8.5) Please explain

We are into business of generation, transmission and distribution of electricity, smart metering which does not require any kind of processing or use where in GHG would be emmitted. Cooling solutions division was not operationalised in the reporting period. Our product is electricity which does not need any energy or any input further for use. Also emission occur at generation stage are accounted for under Scope 1 & 2 [T&D losses] thus reported 0.

## End of life treatment of sold products

## (7.8.1) Evaluation status

Select from:

✓ Not relevant, calculated

#### (7.8.2) Emissions in reporting year (metric tons CO2e)

0

#### (7.8.3) Emissions calculation methodology

Select all that apply

✓ Waste-type-specific method

#### (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

## (7.8.5) Please explain

No end-of-life treatment required for our product [Electricity] or services, hence reported 0.

#### **Downstream leased assets**

## (7.8.1) Evaluation status

Select from:

✓ Not relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

0

## (7.8.3) Emissions calculation methodology

Select all that apply

✓ Asset-specific method

✓ Site-specific method

#### (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

## (7.8.5) Please explain

Downstream leased assets for customer care are included in Scope 2, hence this category of emissions is reported 0

# Franchises

## (7.8.1) Evaluation status

Select from:

✓ Not relevant, explanation provided

## (7.8.5) Please explain

No franchises for our services, therefore disclosed as 0.

#### Investments

#### (7.8.1) Evaluation status

Select from:

✓ Not relevant, explanation provided

## (7.8.5) Please explain

Investments made in other entity wher we donot have operational control, hence emissions under this category are not relevant for tracking and monitoring, thus disclosed as 0.

## Other (upstream)

## (7.8.1) Evaluation status

Select from:

✓ Not relevant, explanation provided

## (7.8.5) Please explain

We do not track activity data under this category as we believe the relevant Scope 3 emissions are already covered in the specific categories, thus reported 0.

## Other (downstream)

## (7.8.1) Evaluation status

Select from:

✓ Not relevant, explanation provided

## (7.8.5) Please explain

We do not track activity data under this category as we believe the relevant Scope 3 emissions are already covered in the specific categories, thus reported 0. [Fixed row]

## (7.8.1) Disclose or restate your Scope 3 emissions data for previous years.

#### Past year 1

(7.8.1.1) End date

03/30/2023

(7.8.1.2) Scope 3: Purchased goods and services (metric tons CO2e)

3081140

(7.8.1.3) Scope 3: Capital goods (metric tons CO2e)

0

(7.8.1.4) Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

0

(7.8.1.5) Scope 3: Upstream transportation and distribution (metric tons CO2e)

36450

(7.8.1.6) Scope 3: Waste generated in operations (metric tons CO2e)

0

(7.8.1.7) Scope 3: Business travel (metric tons CO2e)

190

## (7.8.1.8) Scope 3: Employee commuting (metric tons CO2e)

12

## (7.8.1.9) Scope 3: Upstream leased assets (metric tons CO2e)

0

(7.8.1.10) Scope 3: Downstream transportation and distribution (metric tons CO2e)

0

(7.8.1.11) Scope 3: Processing of sold products (metric tons CO2e)

0

(7.8.1.12) Scope 3: Use of sold products (metric tons CO2e)

0

(7.8.1.13) Scope 3: End of life treatment of sold products (metric tons CO2e)

0

(7.8.1.14) Scope 3: Downstream leased assets (metric tons CO2e)

0

(7.8.1.15) Scope 3: Franchises (metric tons CO2e)

0

(7.8.1.16) Scope 3: Investments (metric tons CO2e)

0

0

#### (7.8.1.18) Scope 3: Other (downstream) (metric tons CO2e)

0

## (7.8.1.19) Comment

The GHG inventorisation related to Scope 3 emissions was carried out with the support of an external agency using reputable tools and references, including the IPCC cross-sector tool (AR6), India GHG programme, GABI software, and the EPA simplified GHG emission calculator.

#### Past year 2

#### (7.8.1.1) End date

03/30/2022

(7.8.1.2) Scope 3: Purchased goods and services (metric tons CO2e)

4056540

#### (7.8.1.3) Scope 3: Capital goods (metric tons CO2e)

30095

(7.8.1.4) Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

78.83

(7.8.1.5) Scope 3: Upstream transportation and distribution (metric tons CO2e)

2774.5

(7.8.1.6) Scope 3: Waste generated in operations (metric tons CO2e)

(7.8.1.7) Scope 3: Business travel (metric tons CO2e)
6.3
(7.8.1.8) Scope 3: Employee commuting (metric tons CO2e)
62
(7.8.1.9) Scope 3: Upstream leased assets (metric tons CO2e)
0
(7.8.1.10) Scope 3: Downstream transportation and distribution (metric tons CO2e)
0
(7.8.1.11) Scope 3: Processing of sold products (metric tons CO2e)
0
(7.8.1.12) Scope 3: Use of sold products (metric tons CO2e)
0
(7.8.1.13) Scope 3: End of life treatment of sold products (metric tons CO2e)
0
(7.8.1.14) Scope 3: Downstream leased assets (metric tons CO2e)
0

(7.8.1.15) Scope 3: Franchises (metric tons CO2e)

#### (7.8.1.16) Scope 3: Investments (metric tons CO2e)

0

#### (7.8.1.17) Scope 3: Other (upstream) (metric tons CO2e)

0

#### (7.8.1.18) Scope 3: Other (downstream) (metric tons CO2e)

0

#### (7.8.1.19) Comment

The GHG inventorisation related to Scope 3 emissions was carried out with the support of an external agency using reputable tools and references, including the IPCC cross-sector tool (AR6), India GHG programme, GABI software, and the EPA simplified GHG emission calculator.

#### Past year 3

#### (7.8.1.1) End date

03/30/2021

(7.8.1.2) Scope 3: Purchased goods and services (metric tons CO2e)

2809089

#### (7.8.1.3) Scope 3: Capital goods (metric tons CO2e)

1294910

(7.8.1.4) Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

0

#### (7.8.1.5) Scope 3: Upstream transportation and distribution (metric tons CO2e)

45434

(7.8.1.6) Scope 3: Waste generated in operations (metric tons CO2e)

0

(7.8.1.7) Scope 3: Business travel (metric tons CO2e)

0

(7.8.1.8) Scope 3: Employee commuting (metric tons CO2e)

0

(7.8.1.9) Scope 3: Upstream leased assets (metric tons CO2e)

0

(7.8.1.10) Scope 3: Downstream transportation and distribution (metric tons CO2e)

0

(7.8.1.11) Scope 3: Processing of sold products (metric tons CO2e)

0

(7.8.1.12) Scope 3: Use of sold products (metric tons CO2e)

0

(7.8.1.13) Scope 3: End of life treatment of sold products (metric tons CO2e)

0

0

#### (7.8.1.15) Scope 3: Franchises (metric tons CO2e)

0

(7.8.1.16) Scope 3: Investments (metric tons CO2e)

0

(7.8.1.17) Scope 3: Other (upstream) (metric tons CO2e)

0

(7.8.1.18) Scope 3: Other (downstream) (metric tons CO2e)

0

## (7.8.1.19) Comment

The GHG inventorisation related to Scope 3 emissions was carried out with the support of an external agency using reputable tools and references, including the IPCC cross-sector tool (AR6), India GHG programme, GABI software, and the EPA simplified GHG emission calculator.

#### Past year 4

## (7.8.1.1) End date

03/30/2020

(7.8.1.2) Scope 3: Purchased goods and services (metric tons CO2e)

2809089

(7.8.1.3) Scope 3: Capital goods (metric tons CO2e)

1294910

## (7.8.1.4) Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

0

(7.8.1.5) Scope 3: Upstream transportation and distribution (metric tons CO2e)

45434

(7.8.1.6) Scope 3: Waste generated in operations (metric tons CO2e)

0

(7.8.1.7) Scope 3: Business travel (metric tons CO2e)

0

(7.8.1.8) Scope 3: Employee commuting (metric tons CO2e)

0

(7.8.1.9) Scope 3: Upstream leased assets (metric tons CO2e)

0

(7.8.1.10) Scope 3: Downstream transportation and distribution (metric tons CO2e)

0

(7.8.1.11) Scope 3: Processing of sold products (metric tons CO2e)

0

(7.8.1.12) Scope 3: Use of sold products (metric tons CO2e)

## (7.8.1.13) Scope 3: End of life treatment of sold products (metric tons CO2e)

0

#### (7.8.1.14) Scope 3: Downstream leased assets (metric tons CO2e)

0

(7.8.1.15) Scope 3: Franchises (metric tons CO2e)

0

(7.8.1.16) Scope 3: Investments (metric tons CO2e)

0

(7.8.1.17) Scope 3: Other (upstream) (metric tons CO2e)

0

#### (7.8.1.18) Scope 3: Other (downstream) (metric tons CO2e)

0

#### (7.8.1.19) Comment

The GHG inventorisation related to Scope 3 emissions was carried out with the support of an external agency using reputable tools and references, including the IPCC cross-sector tool (AR6), India GHG programme, GABI software, and the EPA simplified GHG emission calculator. [Fixed row]

#### (7.9) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Select from: ✓ Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Select from: ✓ Third-party verification or assurance process in place
Scope 3	Select from: ☑ Third-party verification or assurance process in place

[Fixed row]

# (7.9.1) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Row 1

## (7.9.1.1) Verification or assurance cycle in place

Select from:

✓ Annual process

# (7.9.1.2) Status in the current reporting year

Select from:

✓ Complete

# (7.9.1.3) Type of verification or assurance

Select from:

☑ Reasonable assurance

## (7.9.1.5) Page/section reference

Pls refer Page No. 1, to find details on the reasonable assurance conducted by TUV India Private Limited for scope 1 emissions disclosed in the sustainability report FY 23-24.

#### (7.9.1.6) Relevant standard

Select from:

✓ ISAE3000

#### (7.9.1.7) Proportion of reported emissions verified (%)

100 [Add row]

(7.9.2) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Row 1

## (7.9.2.1) Scope 2 approach

Select from:

✓ Scope 2 location-based

# (7.9.2.2) Verification or assurance cycle in place

Select from:

✓ Annual process

## (7.9.2.3) Status in the current reporting year

Select from:

✓ Complete

# (7.9.2.4) Type of verification or assurance

Select from:

✓ Reasonable assurance

#### (7.9.2.6) Page/ section reference

Pls refer Page No. 1, to find details on the reasonable assurance conducted by TUV India Private Limited for scope 2 emissions disclosed in the sustainability report FY 23-24.

#### (7.9.2.7) Relevant standard

Select from:

✓ ISAE3000

#### (7.9.2.8) Proportion of reported emissions verified (%)

100

Row 2

# (7.9.2.1) Scope 2 approach

Select from:

✓ Scope 2 market-based

#### (7.9.2.2) Verification or assurance cycle in place

Select from:

✓ Annual process

## (7.9.2.3) Status in the current reporting year

Select from:

✓ Complete

#### (7.9.2.4) Type of verification or assurance

Select from:

✓ Reasonable assurance

#### (7.9.2.5) Attach the statement

ESG Assurance\_AESL\_R2 (002).pdf

#### (7.9.2.6) Page/ section reference

Pls refer Page No. 1, to find details on the reasonable assurance conducted by TUV India Private Limited for scope 2 emissions disclosed in the sustainability report FY 23-24.

## (7.9.2.7) Relevant standard

Select from:

✓ ISAE3000

# (7.9.2.8) Proportion of reported emissions verified (%)

100 [Add row]

(7.9.3) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Row 1

## (7.9.3.1) Scope 3 category

Select all that apply

☑ Scope 3: Franchises

✓ Scope 3: Investments

Scope 3: Use of sold productsScope 3: Upstream leased assets

- ✓ Scope 3: Capital goods
- ✓ Scope 3: Business travel
- ✓ Scope 3: Employee commuting
- ✓ Scope 3: Waste generated in operations
- ✓ Scope 3: End-of-life treatment of sold products
- ☑ Scope 3: Upstream transportation and distribution
- ☑ Scope 3: Downstream transportation and distribution
- ✓ Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

#### (7.9.3.2) Verification or assurance cycle in place

Select from:

✓ Annual process

## (7.9.3.3) Status in the current reporting year

Select from:

✓ Complete

#### (7.9.3.4) Type of verification or assurance

Select from:

✓ Reasonable assurance

#### (7.9.3.5) Attach the statement

ESG Assurance\_AESL\_R2 (002).pdf

#### (7.9.3.6) Page/section reference

Pls refer Page No. 1, to find details on the reasonable assurance conducted by TUV India Private Limited for scope 3 emissions disclosed in the sustainability report FY 23-24.

(7.9.3.7) Relevant standard

- ✓ Scope 3: Downstream leased assets
- ✓ Scope 3: Processing of sold products
- ✓ Scope 3: Purchased goods and services

#### (7.9.3.8) Proportion of reported emissions verified (%)

100 [Add row]

(7.10.1) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

Change in renewable energy consumption

#### (7.10.1.1) Change in emissions (metric tons CO2e)

9419

#### (7.10.1.2) Direction of change in emissions

Select from:

Decreased

#### (7.10.1.3) Emissions value (percentage)

0.29

## (7.10.1.4) Please explain calculation

The gross global emissions (Scope 1 2) of the company for this reporting year are 3089755.44 tCO2e. Its gross global emissions for the previous reporting year were 3262223 tCO2e. This means that the total change in emissions is -172467 CO2e, equal to a 5.29% Reduction, according to the formula in the explanation of terms, Change in Scope 12 GHG Emissions / Scope 12 GHG Emissions in previous year: (-172467/3262223) \* 100 -5.29%. The change from 3262223 to 3089755.44 tCO2e is attributed to Multiple reasons: 1) 5.77% Reduction in Scope 1 GHG emissions i.e. 163052 tCO2e emissions due to Reduction in self-generation (i.e. a change in output); including an estimated reduction of 1099 tCO2e achieved due to emissions reduction activities.; and 2) 2.16% Reduction in Scope 2 due to change in RE purchase in procurement mix from 30.04% last year to 34.35% in the reporting period FY2024. Calculation for Change in RE: A) Scope 2 GHG emissions in Previous year [FY2023] was 4,35,852 tCO2e B) Scope 2 GHG emissions in Current year [FY2024] is 4,26,436.15 tCO2e due increase in RE share from 30.04%

[FY2023] to 34.35% in FY2024, C) Change in Scope 2 emissions (B - A) 4,26,436.15 - 4,35,852 - 9416 tCO2 9416/4,35,852 2.16% reduction compared to previous year D) FY2023 Scope 12 GHG emissions 3262223 tCO2e E) % change in Scope 12 GHG emissions C / D x 100 -9416 / 3262223 - 0.29% i.e. Reduction compared to FY2023 This also accounts for Transmission & Distribution losses Reduced from 7.34% [FY2023] to 6.85% [FY2024] applicable for RE units purchased and sold to end customers accounted under Scope 2 GHG emissions.

#### Other emissions reduction activities

#### (7.10.1.1) Change in emissions (metric tons CO2e)

1099.31

#### (7.10.1.2) Direction of change in emissions

Select from:

Decreased

#### (7.10.1.3) Emissions value (percentage)

0.034

## (7.10.1.4) Please explain calculation

This refer to Energy Conservation projects implemented during the year resulted in reduction of 1099.31 tCO2e. List of key projects implemented that had effect in reporting period: Unit 01 (U1) replacement of HP (High Pressure) & IP (Intermediate Pressure) Turbine - OH (Over Hauling) of LP (Low Pressure) Turbine. • Reduction in slip loss of BFP 1B (Boiler Feed Pump Unit 1B) hydraulic coupling in U-1. • Monitoring and optimisation of utilisation of diesel in the DG set. • Monitoring SF6 (Sulphur Hexafluoride) gas leak through contemporary technology cameras. • HP heater performance improvement by attending parting plate leakage (improvement in heat rate by 7.8 kcal/kWh). • Replacement of BFP cartridge in Boiler Feed Pump Unit1 A (reduction in auxiliary power consumption by 582 kW per hour). • Installation of energy-efficient lighting (reduction in auxiliary power consumption of 448 MWh per annum). • Nano molecular thermos conductive additive treatment for air conditioning system. Our corporate offices have lighting automation and handling units have sensors to keep a check on our energy consumption.

#### **Divestment**

## (7.10.1.1) Change in emissions (metric tons CO2e)

0

## (7.10.1.2) Direction of change in emissions

Select from:

✓ No change

(7.10.1.3) Emissions value (percentage)

0

# (7.10.1.4) Please explain calculation

Not applicable during the reporting year.

#### Acquisitions

# (7.10.1.1) Change in emissions (metric tons CO2e)

0

## (7.10.1.2) Direction of change in emissions

Select from:

✓ No change

(7.10.1.3) Emissions value (percentage)

0

# (7.10.1.4) Please explain calculation

Not applicable during the reporting year.

#### Mergers

(7.10.1.1) Change in emissions (metric tons CO2e)

#### (7.10.1.2) Direction of change in emissions

Select from:

✓ No change

#### (7.10.1.3) Emissions value (percentage)

0

#### (7.10.1.4) Please explain calculation

Not applicable during the reporting year.

#### Change in output

#### (7.10.1.1) Change in emissions (metric tons CO2e)

161953

#### (7.10.1.2) Direction of change in emissions

Select from:

Decreased

#### (7.10.1.3) Emissions value (percentage)

4.96

#### (7.10.1.4) Please explain calculation

The gross global emissions (Scope 1 2) of the company for this reporting year are 3089755.44 tCO2e. Its gross global emissions for the previous reporting year were 3262223 tCO2e. This means that the total change in emissions is -172467 CO2e, equal to a 5.29% Reduction, according to the formula in the explanation of terms, Change in Scope 12 GHG Emissions / Scope 12 GHG Emissions in previous year: (-172467/3262223) \* 100 -5.29%. The change from 3262223 to 3089755.44 tCO2e is attributed to Multiple reasons: 1) 5.77% Reduction in Scope 1 GHG emissions i.e. 163052 tCO2e emissions due to Reduction in self-generation (i.e. a

change in output); including an estimated reduction of 1099 tCO2e achieved due to emissions reduction activities.; and 2) 2.16% Reduction in Scope 2 due to change in RE purchase in procurement mix from 30.04% last year to 34.35% in the reporting period FY2024. Calculation for Change in RE: A) Scope 2 GHG emissions in Previous year [FY2023] was 4,35,852 tCO2e B) Scope 2 GHG emissions in Current year [FY2024] is 4,26,436.15 tCO2e due increase in RE share from 30.04% [FY2023] to 34.35% in FY2024, C) Change in Scope 2 emissions (B - A) 4,26,436.15 - 4,35,852 - 9416 tCO2 9416/4,35,852 2.16% reduction compared to previous year D) FY2023 Scope 12 GHG emissions 3262223 tCO2e E) % change in Scope 12 GHG emissions C / D x 100 -9416 / 3262223 - 0.29% i.e. Reduction compared to previous year Calculations Change in Output: A) Scope 1 GHG emissions in Previous year [FY2023] was 2826371 tCO2e due to self-generation of 3498.915 Million units B) Scope 1 GHG emissions in Current year [FY2024] is 2663319 tCO2e due to self-generation of 3248.48 Million units, i.e. 7.16% Less as compared to previous year. C) Change in Scope 1 emissions (B - A) 2826371 - 2663319 -163052 tCO2e 1633052/2826371 5.77% reduction compared to previous year including due to change in Energy efficiency project impact of 1099 tCO2e i.e.change in output impact 163052-1099161953 tCO2e D) Change in Output [Generated energy] in FY2024 compared to FY2023(3248.48 - 3498.915) Million units - 250 Million units -250 / 3498.915 - 7.16% i.e. Decrease compared to previous year. E) FY2023 Scope 12 GHG emissions 3262223 tCO2e F) % change in Scope 12 GHG emissions C / E x 100 -161953 / 3262223 - 4.96% i.e. Reduction compared to previous year.

## Change in methodology

#### (7.10.1.1) Change in emissions (metric tons CO2e)

0

#### (7.10.1.2) Direction of change in emissions

Select from:

✓ No change

#### (7.10.1.3) Emissions value (percentage)

0

#### (7.10.1.4) Please explain calculation

Not applicable during the reporting year.

#### Change in boundary

#### (7.10.1.1) Change in emissions (metric tons CO2e)
#### (7.10.1.2) Direction of change in emissions

Select from:

✓ No change

(7.10.1.3) Emissions value (percentage)

0

#### (7.10.1.4) Please explain calculation

Not applicable during the reporting year.

#### Change in physical operating conditions

# (7.10.1.1) Change in emissions (metric tons CO2e)

0

#### (7.10.1.2) Direction of change in emissions

Select from:

✓ No change

(7.10.1.3) Emissions value (percentage)

0

#### (7.10.1.4) Please explain calculation

Not applicable during the reporting year.

#### Unidentified

(7.10.1.1) Change in emissions (metric tons CO2e)

#### (7.10.1.2) Direction of change in emissions

Select from:

✓ No change

# (7.10.1.3) Emissions value (percentage)

0

#### (7.10.1.4) Please explain calculation

Not applicable during the reporting year.

#### Other

### (7.10.1.1) Change in emissions (metric tons CO2e)

0

#### (7.10.1.2) Direction of change in emissions

Select from:

✓ No change

### (7.10.1.3) Emissions value (percentage)

0

### (7.10.1.4) Please explain calculation

Not applicable during the reporting year. [Fixed row]

(7.15.1) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used global warming potential (GWP).

Row 1

### (7.15.1.1) Greenhouse gas

Select from:

✓ CO2

#### (7.15.1.2) Scope 1 emissions (metric tons of CO2e)

2643465.22

### (7.15.1.3) GWP Reference

Select from:

☑ IPCC Sixth Assessment Report (AR6 - 100 year)

#### Row 2

### (7.15.1.1) Greenhouse gas

Select from:

CH4

# (7.15.1.2) Scope 1 emissions (metric tons of CO2e)

278.2

### (7.15.1.3) GWP Reference

Select from:

☑ IPCC Fifth Assessment Report (AR5 – 100 year)

### (7.15.1.1) Greenhouse gas

Select from:

🗹 N20

### (7.15.1.2) Scope 1 emissions (metric tons of CO2e)

0.04

#### (7.15.1.3) GWP Reference

Select from:

✓ IPCC Sixth Assessment Report (AR6 - 100 year)

#### Row 4

(7.15.1.1) Greenhouse gas

Select from:

✓ HFCs

#### (7.15.1.2) Scope 1 emissions (metric tons of CO2e)

1147.97

# (7.15.1.3) GWP Reference

Select from:

✓ IPCC Sixth Assessment Report (AR6 - 100 year)

#### Row 5

(7.15.1.1) Greenhouse gas

#### Select from:

✓ PFCs

#### (7.15.1.2) Scope 1 emissions (metric tons of CO2e)

0

# (7.15.1.3) GWP Reference

Select from:

✓ IPCC Sixth Assessment Report (AR6 - 100 year)

#### Row 6

### (7.15.1.1) Greenhouse gas

Select from:

✓ SF6

### (7.15.1.2) Scope 1 emissions (metric tons of CO2e)

58.75

# (7.15.1.3) GWP Reference

Select from: ✓ IPCC Sixth Assessment Report (AR6 - 100 year)

#### Row 7

# (7.15.1.1) Greenhouse gas

Select from: ✓ NF3 0

#### (7.15.1.3) GWP Reference

Select from: ✓ IPCC Sixth Assessment Report (AR6 - 100 year) [Add row]

(7.15.3) Break down your total gross global Scope 1 emissions from electric utilities value chain activities by greenhouse gas type.

#### **Fugitives**

#### (7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2)

1149.35

(7.15.3.2) Gross Scope 1 methane emissions (metric tons CH4)

0

# (7.15.3.3) Gross Scope 1 SF6 emissions (metric tons SF6)

58.75

(7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e)

1208.096

### (7.15.3.5) Comment

GHG emissions due to refrigerants and fireextinguishers and SF6 used in the switchgears are accounted here using IPCC AR5 GWP references

#### **Combustion (Electric utilities)**

#### (7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2)

2662111.203

#### (7.15.3.2) Gross Scope 1 methane emissions (metric tons CH4)

278.199

(7.15.3.3) Gross Scope 1 SF6 emissions (metric tons SF6)

0

(7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e)

2662389.403

#### (7.15.3.5) Comment

tCO2 & tCH4 emissions due to comustion of Coal, Diesle, LDO, Petrol are accounted for and reported here.

### **Combustion (Gas utilities)**

#### (7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2)

0

(7.15.3.2) Gross Scope <u>1 methane emissions (metric tons CH4)</u>

0

(7.15.3.3) Gross Scope 1 SF6 emissions (metric tons SF6)

0

0

### (7.15.3.5) Comment

We are not into gas transmission and distribution

**Combustion (Other)** 

(7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2)

0

(7.15.3.2) Gross Scope 1 methane emissions (metric tons CH4)

0

(7.15.3.3) Gross Scope 1 SF6 emissions (metric tons SF6)

0

(7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e)

0

#### (7.15.3.5) Comment

Not applicable as all sources are accounted for in above categories

#### **Emissions not elsewhere classified**

#### (7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2)

0.036

0

#### (7.15.3.3) Gross Scope 1 SF6 emissions (metric tons SF6)

0

#### (7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e)

0

### (7.15.3.5) Comment

N2O emissions due to combution of fuels related emisisons accounted above are reported here. [Fixed row]

### (7.16) Break down your total gross global Scope 1 and 2 emissions by country/area.

	Scope 1 emissions (metric tons CO2e)
India	3089755

[Fixed row]

(7.17.1) Break down your total gross global Scope 1 emissions by business division.

	Business division	Scope 1 emissions (metric ton CO2e)
Row 1	AESL Grid [Transmission] division	663
Row 2	AESL Retail Electricity [distribution] division	2662657
Row 6	AESL- Cooling division	0
Row 7	AESL Smart metering division	0

[Add row]

#### (7.17.2) Break down your total gross global Scope 1 emissions by business facility.

#### Row 1

# (7.17.2.1) Facility

O&M SS - Ahore

# (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.49

# (7.17.2.3) Latitude

25.371061

### (7.17.2.4) Longitude

72.756239

O&M SS - Akola

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

8.88

### (7.17.2.3) Latitude

#### 20.632014

(7.17.2.4) Longitude

77.155998

#### Row 3

# (7.17.2.1) Facility

O&M SS - Alwar

# (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.28

# (7.17.2.3) Latitude

27.486131

# (7.17.2.4) Longitude

76.684028

O&M SS - Badaun

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.49

### (7.17.2.3) Latitude

28.177656

(7.17.2.4) Longitude

79.284372

#### Row 5

(7.17.2.1) Facility

O&M SS - Bambora

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.87

# (7.17.2.3) Latitude

24.385108

# (7.17.2.4) Longitude

74.059553

O&M SS - Bar

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.69

### (7.17.2.3) Latitude

26.110353

(7.17.2.4) Longitude

74.071972

Row 7

# (7.17.2.1) Facility

O&M SS - Baytu

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.68

# (7.17.2.3) Latitude

26.083453

# (7.17.2.4) Longitude

71.780908

O&M SS - Bengantikalan

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.79

### (7.17.2.3) Latitude

27.148853

(7.17.2.4) Longitude

72.173519

#### Row 9

(7.17.2.1) Facility

O&M SS - Chitri

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.97

# (7.17.2.3) Latitude

23.565119

# (7.17.2.4) Longitude

73.950411

O&M SS - Darbhanga Bays

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.05

### (7.17.2.3) Latitude

26.083858

(7.17.2.4) Longitude

85.929155

#### Row 12

(7.17.2.1) Facility

O&M SS - Deedwana

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.14

# (7.17.2.3) Latitude

27.446294

# (7.17.2.4) Longitude

74.533675

O&M SS - Dhanbad

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.28

### (7.17.2.3) Latitude

23.744811

(7.17.2.4) Longitude

86.607994

#### **Row 14**

### (7.17.2.1) Facility

O&M SS - FBTL Fatehgarh

# (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.09

# (7.17.2.3) Latitude

26.852639

### (7.17.2.4) Longitude

71.508211

O&M SS - Ghamurwali

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.53

### (7.17.2.3) Latitude

29.639811

(7.17.2.4) Longitude

73.782378

#### Row 16

(7.17.2.1) Facility

O&M SS - Ghumati

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.64

# (7.17.2.3) Latitude

25.805153

### (7.17.2.4) Longitude

73.241697

O&M SS - Jam-khambhaliya

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0

### (7.17.2.3) Latitude

22.144

(7.17.2.4) Longitude

69.67725

#### Row 18

(7.17.2.1) Facility

O&M SS - Khatoti

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.44

# (7.17.2.3) Latitude

27.181536

### (7.17.2.4) Longitude

77.243444

O&M SS - Koradi

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

4.15

### (7.17.2.3) Latitude

21.383161

(7.17.2.4) Longitude

78.787861

**Row 20** 

### (7.17.2.1) Facility

O&M SS - Mahendragarh

# (7.17.2.2) Scope 1 emissions (metric tons CO2e)

73.91

# (7.17.2.3) Latitude

28.361361

# (7.17.2.4) Longitude

76.215797

O&M SS - Morena

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

2.38

### (7.17.2.3) Latitude

26.383567

(7.17.2.4) Longitude

78.249961

#### Row 22

### (7.17.2.1) Facility

O&M SS - MP PKG-II- Keolari

# (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.02

# (7.17.2.3) Latitude

26.382131

### (7.17.2.4) Longitude

78.250563

O&M SS - MP PKG-II- Chand

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.16

### (7.17.2.3) Latitude

22.39124

(7.17.2.4) Longitude

79.902442

**Row 24** 

### (7.17.2.1) Facility

O&M SS - MP PKG-II- Devendra nagar

# (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0

# (7.17.2.3) Latitude

21.120675

### (7.17.2.4) Longitude

77.778421

O&M SS - MP PKG-II- Gopalganj (Kurai)

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.03

### (7.17.2.3) Latitude

#### 24.643175

(7.17.2.4) Longitude

80.571357

#### Row 26

### (7.17.2.1) Facility

O&M SS - MP PKG-II- Khaira

# (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0

# (7.17.2.3) Latitude

24.547453

### (7.17.2.4) Longitude

81.544222

O&M SS - MP PKG-II- Khaniyadana

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.16

### (7.17.2.3) Latitude

25.098347

(7.17.2.4) Longitude

77.340145

#### **Row 28**

### (7.17.2.1) Facility

O&M SS - MP PKG-II- Mehluwa Chauraha

### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0

# (7.17.2.3) Latitude

25.054064

#### (7.17.2.4) Longitude

78.252926

O&M SS - MP PKG-II- Narwar

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.03

### (7.17.2.3) Latitude

24.094499

(7.17.2.4) Longitude

77.990736

**Row 30** 

### (7.17.2.1) Facility

O&M SS - MP PKG-II- Semariya

# (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.02

# (7.17.2.3) Latitude

25.643329

# (7.17.2.4) Longitude

77.93585

O&M SS - Mundra

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

1.66

### (7.17.2.3) Latitude

24.256543

(7.17.2.4) Longitude

79.894038

#### **Row 32**

(7.17.2.1) Facility

O&M SS - Peeplu

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.73

# (7.17.2.3) Latitude

22.829619

# (7.17.2.4) Longitude

69.556192

O&M SS - Rajmatai

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.48

### (7.17.2.3) Latitude

26.354828

(7.17.2.4) Longitude

75.697392

#### **Row 34**

(7.17.2.1) Facility

O&M SS - Rajnandgaon

# (7.17.2.2) Scope 1 emissions (metric tons CO2e)

1.88

# (7.17.2.3) Latitude

26.496972

# (7.17.2.4) Longitude

71.677822

O&M SS - Ramji ki gol

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.64

### (7.17.2.3) Latitude

21.307844

(7.17.2.4) Longitude

81.002628

#### **Row 36**

(7.17.2.1) Facility

O&M SS - Ranpur

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

1.62

# (7.17.2.3) Latitude

25.071531

# (7.17.2.4) Longitude

71.635111

O&M SS - Riyabari

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.47

### (7.17.2.3) Latitude

#### 25.055581

(7.17.2.4) Longitude

75.825892

#### Row 38

# (7.17.2.1) Facility

O&M SS - Sami

# (7.17.2.2) Scope 1 emissions (metric tons CO2e)

3.84

# (7.17.2.3) Latitude

26.538506

# (7.17.2.4) Longitude

74.286803

O&M SS - Shekhsar

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.41

### (7.17.2.3) Latitude

#### 23.672322

(7.17.2.4) Longitude

71.761039

#### **Row 40**

(7.17.2.1) Facility

O&M SS - Sorda

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.93

# (7.17.2.3) Latitude

28.607839

# (7.17.2.4) Longitude

73.946111

O&M SS - Vikhroli

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0

### (7.17.2.3) Latitude

#### 24.584506

(7.17.2.4) Longitude

72.357286

#### Row 42

### (7.17.2.1) Facility

O&M SS - WKTL- Warangal

# (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0

# (7.17.2.3) Latitude

19.109208

### (7.17.2.4) Longitude

72.92295

O&M SS - WRSS- XXI Lakadia

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

52.35

### (7.17.2.3) Latitude

17.213749

(7.17.2.4) Longitude

79.653894

#### **Row 44**

(7.17.2.1) Facility

TL - ALTL T/L

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.72

# (7.17.2.3) Latitude

0

# (7.17.2.4) Longitude

0

TL - CG & MP TL O&M

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.07

### (7.17.2.3) Latitude

26.699211

(7.17.2.4) Longitude

88.413995

#### **Row 46**

(7.17.2.1) Facility

TL - GTL & OBTL T/L

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.97

# (7.17.2.3) Latitude

22.088343

# (7.17.2.4) Longitude

82.175896

TL - Gujarat T/L

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

1.51

### (7.17.2.3) Latitude

28.1894

(7.17.2.4) Longitude

79.281231

#### Row 48

# (7.17.2.1) Facility

TL - Maharashtra T/L

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

4.6

# (7.17.2.3) Latitude

23.394551

# (7.17.2.4) Longitude

70.59893

TL - MP Pkg 2 -TL

### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0

# (7.17.2.3) Latitude

#### 21.383199

(7.17.2.4) Longitude

78.788133

#### **Row 50**

# (7.17.2.1) Facility

TL - NKTL O&M

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

0

# (7.17.2.3) Latitude

26.39161

# (7.17.2.4) Longitude

78.24735

TL - Rajasthan & Haryana O&M TL

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

33.09

### (7.17.2.3) Latitude

23.823783

(7.17.2.4) Longitude

84.787964

#### **Row 52**

(7.17.2.1) Facility

TL - WKTL-TL

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

0

# (7.17.2.3) Latitude

26.811853

### (7.17.2.4) Longitude

71.509752

TL - WTPL T/L

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

0.5

### (7.17.2.3) Latitude

#### 17.213749

(7.17.2.4) Longitude

79.653894

#### **Row 54**

# (7.17.2.1) Facility

AEML Generation

# (7.17.2.2) Scope 1 emissions (metric tons CO2e)

2660578.4

# (7.17.2.3) Latitude

19.951666

# (7.17.2.4) Longitude

72.750272
# (7.17.2.1) Facility

AEML Distribution

#### (7.17.2.2) Scope 1 emissions (metric tons CO2e)

1951.71

# (7.17.2.3) Latitude

19.130408

(7.17.2.4) Longitude

72.881473

#### **Row 56**

(7.17.2.1) Facility

AEML Transmission

# (7.17.2.2) Scope 1 emissions (metric tons CO2e)

126.89

# (7.17.2.3) Latitude

19.15

# (7.17.2.4) Longitude

72.84

Row 57

# (7.17.2.1) Facility

AESL Projects

## (7.17.2.2) Scope 1 emissions (metric tons CO2e)

458.65

# (7.17.2.3) Latitude

23.39

(7.17.2.4) Longitude

70.59 [Add row]

# (7.17.3) Break down your total gross global Scope 1 emissions by business activity.

	Activity	Scope 1 emissions (metric tons CO2e)
Row 1	AEML Transmission	168.36
Row 2	AEML- Generation	2660578.4
Row 3	AESL -Projects	458.65
Row 4	AEML- O&M	162.18
Row 5	AESL-Distribution	1951.71
[Add row]	•	

(7.19) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

**Electric utility activities** 

#### (7.19.1) Gross Scope 1 emissions, metric tons CO2e

2663319

## (7.19.3) Comment

As an Electric utility company, we engage in Generation, Transmission & Distribution of electricity, smart metering & cooling solutions division started in FY2024 [yet to have any operational assets]. [Fixed row]

(7.22) Break down your gross Scope 1 and Scope 2 emissions between your consolidated accounting group and other entities included in your response.

Consolidated accounting group

## (7.22.1) Scope 1 emissions (metric tons CO2e)

2663319

(7.22.2) Scope 2, location-based emissions (metric tons CO2e)

433825

(7.22.3) Scope 2, market-based emissions (metric tons CO2e)

426436

(7.22.4) Please explain

Since all our associated operations and subsidiaries fall under consolidated accounting group, all our Scope 1 and Scope 2 (location based and market based) emissions fall here.

#### All other entities

#### (7.22.1) Scope 1 emissions (metric tons CO2e)

0

(7.22.2) Scope 2, location-based emissions (metric tons CO2e)

0

(7.22.3) Scope 2, market-based emissions (metric tons CO2e)

0

## (7.22.4) Please explain

We use the operational control method, hence the values for emissions for all other enitites would be zero, since all our operations would come under the first group [Fixed row]

#### (7.23.1) Break down your gross Scope 1 and Scope 2 emissions by subsidiary.

#### Row 1

## (7.23.1.1) Subsidiary name

ATL O&MDarbhangha Bays

### (7.23.1.2) Primary activity

Select from:

✓ Electricity networks

## (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

✓ No unique identifier

#### (7.23.1.12) Scope 1 emissions (metric tons CO2e)

0.09

#### (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

47.03

#### (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

47.03

# (7.23.1.15) Comment

It is an AESL's operational transmission substation

## Row 2

## (7.23.1.1) Subsidiary name

AESL O&MMaharashtra T/L

## (7.23.1.2) Primary activity

Select from:

Electricity networks

## (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

#### ✓ No unique identifier

#### (7.23.1.12) Scope 1 emissions (metric tons CO2e)

8.21

## (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

4.84

### (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

4.84

# (7.23.1.15) Comment

It is an AESL 's operational transmission substation.

#### Row 3

## (7.23.1.1) Subsidiary name

AESL O&MGhumati

(7.23.1.2) Primary activity

Select from:

Electricity networks

# (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

✓ No unique identifier

## (7.23.1.12) Scope 1 emissions (metric tons CO2e)

## (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

53.74

## (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

#### 53.74

## (7.23.1.15) Comment

It is an AESL 's operational transmission substation.

#### Row 4

## (7.23.1.1) Subsidiary name

AESL O&MDhanbad

# (7.23.1.2) Primary activity

Select from:

Electricity networks

# (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

# (7.23.1.12) Scope 1 emissions (metric tons CO2e)

0.79

## (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

## (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

228.76

# (7.23.1.15) Comment

It is an AESL 's operational transmission substation.

#### Row 5

(7.23.1.1) Subsidiary name

AESL O&MWTPL T/L

#### (7.23.1.2) Primary activity

Select from:

Electricity networks

# (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

## (7.23.1.12) Scope 1 emissions (metric tons CO2e)

35.15

# (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

6.6

## (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

## (7.23.1.15) Comment

It is an AESL 's operational transmission substation.

#### Row 6

## (7.23.1.1) Subsidiary name

AESL O&M-GTL & OBTL T/L

(7.23.1.2) Primary activity

Select from:

Electricity networks

## (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

#### (7.23.1.12) Scope 1 emissions (metric tons CO2e)

38.08

## (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

15.15

## (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

15.15

# (7.23.1.15) Comment

It is an AESL 's operational transmission substation.

#### Row 7

## (7.23.1.1) Subsidiary name

AEML Transmission

## (7.23.1.2) Primary activity

Select from:

Electricity networks

## (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

✓ No unique identifier

## (7.23.1.12) Scope 1 emissions (metric tons CO2e)

111.0

## (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

80899.0

## (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

80758.0

# (7.23.1.15) Comment

Emissions from AEML Transmission.

## Row 8

## (7.23.1.1) Subsidiary name

AEML Generation

## (7.23.1.2) Primary activity

Select from:

Electricity networks

## (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

#### (7.23.1.12) Scope 1 emissions (metric tons CO2e)

2822800.0

#### (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

156.0

## (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

156.0

# (7.23.1.15) Comment

Emissions from AEML Generation.

#### Row 9

# (7.23.1.1) Subsidiary name

AESL O&MBadaun

## (7.23.1.2) Primary activity

Select from:

Electricity networks

## (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

#### (7.23.1.12) Scope 1 emissions (metric tons CO2e)

0.23

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

307.03

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

307.03

## (7.23.1.15) Comment

It is an AESL 's operational transmission substation.

Row 10

## (7.23.1.1) Subsidiary name

AESL O&MJam-khambhaliya

(7.23.1.2) Primary activity

Select from:

#### ✓ Electricity networks

#### (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

✓ No unique identifier

#### (7.23.1.12) Scope 1 emissions (metric tons CO2e)

21.55

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

336.47

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

336.47

## (7.23.1.15) Comment

It is an AESL 's operational transmission substation.

Row 11

(7.23.1.1) Subsidiary name

ATL O&MMorena

(7.23.1.2) Primary activity

Select from:

✓ Electricity networks

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

✓ No unique identifier

#### (7.23.1.12) Scope 1 emissions (metric tons CO2e)

48.51

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

267.65

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

159.01

# (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

#### Row 12

## (7.23.1.1) Subsidiary name

ATL O&MMundra

## (7.23.1.2) Primary activity

Select from:

Electricity networks

## (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

✓ No unique identifier

## (7.23.1.12) Scope 1 emissions (metric tons CO2e)

#### 371.99

#### (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

3883.58

#### (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

3883.58

(7.23.1.15) Comment

It is an ATL 's operational transmission substation.

## Row 13

# (7.23.1.1) Subsidiary name

ATL O&MDidwana

## (7.23.1.2) Primary activity

Select from:

Electricity networks

## (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

## (7.23.1.12) Scope 1 emissions (metric tons CO2e)

### (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

143.98

#### (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

143.98

# (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

#### Row 14

#### (7.23.1.1) Subsidiary name

#### ATL O&MRamji ki gol

## (7.23.1.2) Primary activity

Select from:

Electricity networks

## (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

✓ No unique identifier

# (7.23.1.12) Scope 1 emissions (metric tons CO2e)

1.4

## (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

## (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

31.45

## (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

## Row 15

## (7.23.1.1) Subsidiary name

ATL O&MChitri

(7.23.1.2) Primary activity

Select from:

Electricity networks

# (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

# (7.23.1.12) Scope 1 emissions (metric tons CO2e)

493.6

## (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

57.73

## (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

## (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

#### Row 16

### (7.23.1.1) Subsidiary name

ATL O&M Ahore

(7.23.1.2) Primary activity

Select from:

Electricity networks

## (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

#### (7.23.1.12) Scope 1 emissions (metric tons CO2e)

0.53

## (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

48.93

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

48.93

## (7.23.1.15) Comment

ATL O&M Ahore is an ATL 's operational transmission substation.

#### (7.23.1.1) Subsidiary name

ATL O&MRanpur

## (7.23.1.2) Primary activity

Select from:

Electricity networks

## (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

## (7.23.1.12) Scope 1 emissions (metric tons CO2e)

1.05

## (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

101.45

# (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

101.45

# (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

## Row 18

(7.23.1.1) Subsidiary name

## (7.23.1.2) Primary activity

Select from:

Electricity networks

## (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

349.0

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

46.0

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

46.0

## (7.23.1.15) Comment

Emissions from ATL Projects.

Row 19

## (7.23.1.1) Subsidiary name

ATL O&MPeeplu

(7.23.1.2) Primary activity

Select from:

✓ Electricity networks

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

## (7.23.1.12) Scope 1 emissions (metric tons CO2e)

0.99

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

59.69

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

59.69

# (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

#### Row 20

# (7.23.1.1) Subsidiary name

ATL O&MSami

## (7.23.1.2) Primary activity

Select from:

Electricity networks

## (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

✓ No unique identifier

#### (7.23.1.12) Scope 1 emissions (metric tons CO2e)

2.0

#### (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

125.83

#### (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

93.85

# (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

Row 21

## (7.23.1.1) Subsidiary name

ATL O&MKhatoti

# (7.23.1.2) Primary activity

Select from:

Electricity networks

# (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

#### ✓ No unique identifier

#### (7.23.1.12) Scope 1 emissions (metric tons CO2e)

0.88

#### (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

58.55

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

58.55

# (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

#### Row 22

## (7.23.1.1) Subsidiary name

ATL O&MRiyabari

(7.23.1.2) Primary activity

Select from:

Electricity networks

# (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

✓ No unique identifier

## (7.23.1.12) Scope 1 emissions (metric tons CO2e)

## (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

61.14

## (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

61.14

## (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

## **Row 23**

# (7.23.1.1) Subsidiary name

ATL O&MRajmatai

# (7.23.1.2) Primary activity

Select from:

Electricity networks

# (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

# (7.23.1.12) Scope 1 emissions (metric tons CO2e)

1.95

## (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

## (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

51.82

# (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

## Row 24

(7.23.1.1) Subsidiary name

ATL O&MALTL T/L

#### (7.23.1.2) Primary activity

Select from:

Electricity networks

# (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

## (7.23.1.12) Scope 1 emissions (metric tons CO2e)

0.35

# (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

6.11

## (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

## (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

#### Row 25

## (7.23.1.1) Subsidiary name

ATL O&MBengantikalan

(7.23.1.2) Primary activity

Select from:

Electricity networks

## (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

✓ No unique identifier

#### (7.23.1.12) Scope 1 emissions (metric tons CO2e)

1.1

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

67.07

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

67.07

(7.23.1.15) Comment

It is an ATL 's operational transmission substation.

#### **Row 26**

## (7.23.1.1) Subsidiary name

ATL O&MRajnandgaon

## (7.23.1.2) Primary activity

Select from:

Electricity networks

## (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

✓ No unique identifier

#### (7.23.1.12) Scope 1 emissions (metric tons CO2e)

11.26

## (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

269.72

## (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

171.36

# (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

Row 27

## (7.23.1.1) Subsidiary name

ATL O&MRajasthan & Harya0 O&M TL

#### (7.23.1.2) Primary activity

Select from:

Electricity networks

#### (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

#### (7.23.1.12) Scope 1 emissions (metric tons CO2e)

33.85

#### (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

35.69

#### (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

35.69

## (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

#### **Row 28**

## (7.23.1.1) Subsidiary name

ATL O&MKoradi

## (7.23.1.2) Primary activity

Select from:

Electricity networks

## (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

# (7.23.1.12) Scope 1 emissions (metric tons CO2e)

5.88

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

187.51

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

56.96

## (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

Row 29

## (7.23.1.1) Subsidiary name

AEML Distribution

(7.23.1.2) Primary activity

Select from:

#### ✓ Electricity networks

#### (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

✓ No unique identifier

#### (7.23.1.12) Scope 1 emissions (metric tons CO2e)

1794.0

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

344625.0

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

344609.0

## (7.23.1.15) Comment

Emissions from AEML Distribution.

**Row 30** 

(7.23.1.1) Subsidiary name

ATL O&MSorda

(7.23.1.2) Primary activity

Select from:

✓ Electricity networks

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

✓ No unique identifier

#### (7.23.1.12) Scope 1 emissions (metric tons CO2e)

0.69

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

50.68

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

50.68

## (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

**Row 31** 

## (7.23.1.1) Subsidiary name

ATL O&MGhamurwali

## (7.23.1.2) Primary activity

Select from:

Electricity networks

## (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

✓ No unique identifier

## (7.23.1.12) Scope 1 emissions (metric tons CO2e)

#### 0.77

#### (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

61.68

#### (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

61.68

## (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

#### **Row 32**

# (7.23.1.1) Subsidiary name

ATL O&MBambora

## (7.23.1.2) Primary activity

Select from:

Electricity networks

## (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

## (7.23.1.12) Scope 1 emissions (metric tons CO2e)

## (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

57.97

#### (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

57.97

# (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

**Row 33** 

#### (7.23.1.1) Subsidiary name

ATL O&MCG & MP TL O&M

#### (7.23.1.2) Primary activity

Select from:

Electricity networks

## (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

# (7.23.1.12) Scope 1 emissions (metric tons CO2e)

0.17

## (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

## (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

6.85

#### (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

Row 34

## (7.23.1.1) Subsidiary name

ATL O&MWRSS- XXI Lakadia

(7.23.1.2) Primary activity

Select from:

Electricity networks

# (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

# (7.23.1.12) Scope 1 emissions (metric tons CO2e)

8.4

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

51.53

# (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

## (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

#### **Row 35**

### (7.23.1.1) Subsidiary name

ATL O&MFBTL Fatehgarh

## (7.23.1.2) Primary activity

Select from:

Electricity networks

## (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

#### (7.23.1.12) Scope 1 emissions (metric tons CO2e)

0.25

## (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

5.46

## (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

5.46

## (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

#### (7.23.1.1) Subsidiary name

ATL O&MShekhsar

## (7.23.1.2) Primary activity

Select from:

Electricity networks

## (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

## (7.23.1.12) Scope 1 emissions (metric tons CO2e)

1.14

## (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

63.55

## (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

63.55

# (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

## Row 37

(7.23.1.1) Subsidiary name
### (7.23.1.2) Primary activity

Select from:

Electricity networks

# (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

#### (7.23.1.12) Scope 1 emissions (metric tons CO2e)

47.11

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

5159.9

# (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

3374.45

## (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

#### **Row 38**

## (7.23.1.1) Subsidiary name

ATL O&MBar

(7.23.1.2) Primary activity

Select from:

✓ Electricity networks

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

#### (7.23.1.12) Scope 1 emissions (metric tons CO2e)

19.32

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

59.44

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

59.44

# (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

#### Row 39

# (7.23.1.1) Subsidiary name

ATL O&MAkola

## (7.23.1.2) Primary activity

Select from:

Electricity networks

#### (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

✓ No unique identifier

#### (7.23.1.12) Scope 1 emissions (metric tons CO2e)

146.79

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

390.86

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

263.6

# (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

Row 40

## (7.23.1.1) Subsidiary name

ATL O&MBaytu

## (7.23.1.2) Primary activity

Select from:

✓ Electricity networks

## (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

#### ✓ No unique identifier

#### (7.23.1.12) Scope 1 emissions (metric tons CO2e)

2.04

#### (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

21.06

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

21.06

# (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

#### Row 41

### (7.23.1.1) Subsidiary name

ATL O&MGujarat T/L

(7.23.1.2) Primary activity

Select from:

Electricity networks

# (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

✓ No unique identifier

#### (7.23.1.12) Scope 1 emissions (metric tons CO2e)

## (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

19.74

## (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

19.74

## (7.23.1.15) Comment

It is an ATL 's operational transmission substation.

#### Row 42

# (7.23.1.1) Subsidiary name

ATL O&MAlwar

# (7.23.1.2) Primary activity

Select from:

Electricity networks

## (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

# (7.23.1.12) Scope 1 emissions (metric tons CO2e)

7.2

#### (7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

# (7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

158.63

# (7.23.1.15) Comment

It is an ATL 's operational transmission substation. [Add row]

# (7.30) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Select from: ✓ Yes
Consumption of purchased or acquired electricity	Select from: ✓ Yes
Consumption of purchased or acquired heat	Select from: ✓ No
Consumption of purchased or acquired steam	Select from: ✓ No
Consumption of purchased or acquired cooling	Select from: ✓ No
Generation of electricity, heat, steam, or cooling	Select from: ✓ Yes

[Fixed row]

## (7.30.1) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

## Consumption of fuel (excluding feedstock)

## (7.30.1.1) Heating value

Select from: ✓ LHV (lower heating value)

#### (7.30.1.2) MWh from renewable sources

0

## (7.30.1.3) MWh from non-renewable sources

8849343

## (7.30.1.4) Total (renewable and non-renewable) MWh

8849343

## Consumption of purchased or acquired electricity

#### (7.30.1.1) Heating value

Select from:

✓ Unable to confirm heating value

#### (7.30.1.2) MWh from renewable sources

0

(7.30.1.3) MWh from non-renewable sources

29874

## (7.30.1.4) Total (renewable and non-renewable) MWh

29874

#### Consumption of self-generated non-fuel renewable energy

## (7.30.1.1) Heating value

Select from:

✓ Unable to confirm heating value

## (7.30.1.2) MWh from renewable sources

2433

## (7.30.1.4) Total (renewable and non-renewable) MWh

2433

#### Total energy consumption

# (7.30.1.1) Heating value

Select from:

✓ Unable to confirm heating value

#### (7.30.1.2) MWh from renewable sources

2433

### (7.30.1.3) MWh from non-renewable sources

8879217

# (7.30.1.4) Total (renewable and non-renewable) MWh

8881650 [Fixed row]

## (7.30.6) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Select from: ✓ Yes
Consumption of fuel for the generation of heat	Select from: ✓ Yes
Consumption of fuel for the generation of steam	Select from: ✓ No
Consumption of fuel for the generation of cooling	Select from: ✓ No
Consumption of fuel for co-generation or tri-generation	Select from: ✓ No

[Fixed row]

(7.30.7) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

#### Sustainable biomass

(7.30.7.1) Heating value

Select from:

✓ Unable to confirm heating value

## (7.30.7.2) Total fuel MWh consumed by the organization

0

## (7.30.7.3) MWh fuel consumed for self-generation of electricity

0

#### (7.30.7.4) MWh fuel consumed for self-generation of heat

0

## (7.30.7.8) Comment

Not used in FY 23-24

#### **Other biomass**

# (7.30.7.1) Heating value

Select from:

✓ Unable to confirm heating value

# (7.30.7.2) Total fuel MWh consumed by the organization

0

# (7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

## (7.30.7.8) Comment

Not used in FY 23-24

# Other renewable fuels (e.g. renewable hydrogen)

## (7.30.7.1) Heating value

Select from:

✓ Unable to confirm heating value

(7.30.7.2) Total fuel MWh consumed by the organization

0

# (7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

### (7.30.7.8) Comment

Not used in FY 23-24

Coal

# (7.30.7.1) Heating value

Select from:

🗹 LHV

#### (7.30.7.2) Total fuel MWh consumed by the organization

#### 8833767.5

### (7.30.7.3) MWh fuel consumed for self-generation of electricity

8833767.5

## (7.30.7.4) MWh fuel consumed for self-generation of heat

0

## (7.30.7.8) Comment

21,54,502 kg of Coal was used for 3,18,01,563 GJ energy for electricity generation @ Adani Dahanu Thermal Power Station.

Oil

# (7.30.7.1) Heating value

Select from:

🗹 LHV

## (7.30.7.2) Total fuel MWh consumed by the organization

15396.9

#### (7.30.7.3) MWh fuel consumed for self-generation of electricity

0

# (7.30.7.4) MWh fuel consumed for self-generation of heat

9697.5

#### (7.30.7.8) Comment

5,68,060 Liter of Light Diesel Oil [LDO] was used in boilers to generate steam to produce electricity, whereas 8,78,887 Liter Diesel and 96,570 Liter Petrol was used to generate heat.

#### Gas

## (7.30.7.1) Heating value

Select from:

🗹 LHV

#### (7.30.7.2) Total fuel MWh consumed by the organization

178.6

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

## (7.30.7.4) MWh fuel consumed for self-generation of heat

178.6

## (7.30.7.8) Comment

13604 kg of Liquid Petroleum Gas [LPG] was used in the canteen for food preparation.[643 GJ]

#### Other non-renewable fuels (e.g. non-renewable hydrogen)

### (7.30.7.1) Heating value

Select from:

✓ Unable to confirm heating value

## (7.30.7.2) Total fuel MWh consumed by the organization

## (7.30.7.3) MWh fuel consumed for self-generation of electricity

#### 0

#### (7.30.7.4) MWh fuel consumed for self-generation of heat

0

## (7.30.7.8) Comment

Not used in FY 23-24

#### **Total fuel**

#### (7.30.7.1) Heating value

Select from:

🗹 LHV

## (7.30.7.2) Total fuel MWh consumed by the organization

8849343

## (7.30.7.3) MWh fuel consumed for self-generation of electricity

8833767.5

#### (7.30.7.4) MWh fuel consumed for self-generation of heat

9876.1

# (7.30.7.8) Comment

Diesel, LPG and Petrol is utilized for heat generation, LDO is utilized for steam generation whereas coal is utilized for self generation heat. [Fixed row] (7.30.16) Provide a breakdown by country/area of your electricity/heat/steam/cooling consumption in the reporting year.

#### India

(7.30.16.1) Consumption of purchased electricity (MWh)

598308

(7.30.16.2) Consumption of self-generated electricity (MWh)

2433

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

8849343

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

9450084.00 [Fixed row]

(7.33.1) Disclose the following information about your transmission and distribution business.

Row 1

## (7.33.1.1) Country/area/region

Select from:

🗹 India

## (7.33.1.2) Voltage level

#### Select from:

✓ Transmission (high voltage)

## (7.33.1.3) Annual load (GWh)

249708

#### (7.33.1.4) Annual energy losses (% of annual load)

1.56

## (7.33.1.5) Scope where emissions from energy losses are accounted for

Select from:

✓ Scope 2 (location-based)

#### (7.33.1.6) Emissions from energy losses (metric tons CO2e)

568556

## (7.33.1.7) Length of network (km)

20509

# (7.33.1.10) Comment

Transmission loss has gone up from 1.41 % in FY 2022-23 to 1.56% FY 2023-24.

#### Row 2

# (7.33.1.1) Country/area/region

Select from:

# (7.33.1.2) Voltage level

Select from:

✓ Distribution (low voltage)

## (7.33.1.3) Annual load (GWh)

10804.69

# (7.33.1.4) Annual energy losses (% of annual load)

5.29

#### (7.33.1.5) Scope where emissions from energy losses are accounted for

Select from:

✓ Scope 2 (location-based)

## (7.33.1.6) Emissions from energy losses (metric tons CO2e)

268668

#### (7.33.1.7) Length of network (km)

13027.0

# (7.33.1.8) Number of connections

3180000

#### (7.33.1.9) Area covered (km2)

400.0

## (7.33.1.10) Comment

Distribution loss has decreased from 5.93 % in FY 2022-23 to 5.29% FY 2023-24. [Add row]

(7.45) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Row 1

(7.45.1) Intensity figure

0.9511

(7.45.2) Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

3089755

#### (7.45.3) Metric denominator

Select from:

✓ megawatt hour generated (MWh)

(7.45.4) Metric denominator: Unit total

3248480

#### (7.45.5) Scope 2 figure used

Select from:

✓ Market-based

(7.45.6) % change from previous year

#### (7.45.7) Direction of change

Select from:

Decreased

#### (7.45.8) Reasons for change

Select all that apply

- ✓ Change in renewable energy consumption
- ✓ Other emissions reduction activities
- ✓ Change in output

#### (7.45.9) Please explain

FY2023 Calculations: 1.034 tCO2e/ MWh generated FY2023 Numerator calculations: Scope 1 emissions 28,26,371 tCO2e------ A Scope 2 Market based emissions 4,35,852 tCO2e------ B Scope 12 emissions32,62,223 tCO2e ------ C A B FY2023 Denominator: Generation 31,54,000 MWh ------ D FY2023 GHG intensity C / D 32,62,223 / 3,154000 FY2023 GHG intensity 1.034 tCO2e/ MWh ------- E FY2024 Calculations: 0.951 tCO2e/ MWh generated FY2024 Numerator calculations: Scope 1 emissions 26,63,319.30 tCO2e------ F Scope 2 Market based emissions 4,26,436.15 tCO2e------ G Scope 12 emissions 30,89,755.45 tCO2e ------- H F G FY2024 Denominator: Generation 32,48,480 MWh ------- I FY2024 GHG intensity H / I 30,89,755.45 / 3248480 FY2024 GHG intensity 0.951 tCO2e/ MWh generated ------- J Change in FY2024 Vs FY2023: E – J 1.034 – 0.951 0.083 tCO2e/ MWh generated % Reduction (E – J) / E (1.034 – 0.951)/ 1.034 - 8.01% [i.e. Reduction compared to previous year] 8.01% Reduction was mainly on account of increase in electricity generation from 31,54,000 MWh in FY2023 to 32,48,480 MWh And Increase in Renewable Energy in Procurement mix from 30.04% in FY2023 to 34.45% in FY2024.

#### Row 2

#### (7.45.1) Intensity figure

0.3115928949

(7.45.2) Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

3089755

(7.45.3) Metric denominator

#### Select from:

☑ Other, please specify :megawatt hour Purchased, Generated and sold

#### (7.45.4) Metric denominator: Unit total

9916000

## (7.45.5) Scope 2 figure used

Select from:

✓ Market-based

#### (7.45.6) % change from previous year

13.44

#### (7.45.7) Direction of change

Select from:

Decreased

#### (7.45.8) Reasons for change

Select all that apply

- ✓ Change in renewable energy consumption
- ✓ Other emissions reduction activities
- ☑ Other, please specify :Increase in electricty sold as compared to previous year

# (7.45.9) Please explain

FY2023 Calculations: 0.360 tCO2e/ MWh sold FY2023 Numerator calculations: Scope 1 emissions 28,26,371 tCO2e------ A Scope 1 Market based emissions 4,35,852 tCO2e------ B Scope 12 emissions32,62,223 tCO2e ----- C A B FY2023 Denominator: Electricity sold 90,62,000 MWh sold ------ D FY2023 GHG intensity C / D 32,62,223 / 90,62,000 FY2023 GHG intensity 0.360 tCO2e/ MWh sold ------ E FY2024 Calculations: 0.312 tCO2e/ MWh sold FY2024 Numerator calculations: Scope 1 emissions 26,63,319.30 tCO2e----- F Scope 1 Market based emissions 4,26,436.15 tCO2e------ G Scope 12 emissions 30,89,755.45 tCO2e ------ H F G FY2024 Denominator: Electricity sold 99,16,000 MWh sold ------- I FY2024 GHG intensity H / I 30,89,755.45 / 9916000 FY2024 GHG intensity 0.312 tCO2e/ MWh generated ------ J Change in FY2024 Vs FY2023: E – J 0.360 – 0.312 0.048 tCO2e/ MWh generated % Reduction (E – J) / E (0.360

- 0.312)/ 0.360 - 13.44% [i.e. Reduction compared to previous year] 13.44% Reduction was mainly on account of increase in electricity sold from 90,62,000 MWh in FY2023 to 99,16,000 MWh in FY2024 And Increase in Renewable Energy in Procurement mix from 30.04% in FY2023 to 34.45% in FY2024.

#### Row 3

#### (7.45.1) Intensity figure

17.94

#### (7.45.2) Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

3089755

#### (7.45.3) Metric denominator

Select from:

☑ Other, please specify :Total Revenue in Million INR

# (7.45.4) Metric denominator: Unit total

172180

#### (7.45.5) Scope 2 figure used

Select from:

✓ Market-based

#### (7.45.6) % change from previous year

23.87

# (7.45.7) Direction of change

Select from:

Decreased

Select all that apply

- ✓ Change in renewable energy consumption
- ✓ Other emissions reduction activities
- ✓ Change in revenue

## (7.45.9) Please explain

FY2023 Calculations: 23.57 tCO2e/ Million INR Revenue FY2023 Numerator calculations: Scope 1 emissions 28,26,371 tCO2e------ A Scope 2 Market based emissions 4,35,852 tCO2e------- B Scope 12 emissions32,62,223 tCO2e ------ C A B FY2023 Denominator: Revenue 138404.6 Million INR ------ D FY2023 GHG intensity C/D 32,62,223 / 138404.6 FY2023 GHG intensity 23.57 tCO2e/ Million INR Revenue ------ E FY2024 Calculations: 17.94 tCO2e/ Million INR Revenue FY2024 Numerator calculations: Scope 1 emissions 26,63,319.30 tCO2e------ F Scope 2 Market based emissions 4,26,436.15 tCO2e------ G Scope 12 emissions 30,89,755.45 tCO2e ------- H F G FY2024 Denominator: Revenue 172183 Million INR ------- I FY2024 GHG intensity H / I 30,89,755.45 / 172183 FY2024 GHG intensity 17.94 tCO2e/ Million INR Revenue ------ J Change in FY2024 Vs FY2023: E – J 23.57 – 17.94 5.63 tCO2e/ Million INR Revenue % Reduction (E – J) / E (23.57 – 17.94)/23.57 - 23.87% [i.e. Reduction compared to previous year] 23.87% Reduction was mainly on account of Increase in revenue from 138,405 Million INR in FY2023 to 172183 Million INR And Increase in Renewable Energy in Procurement mix from 30.04% in FY2023 to 34.45% in FY2024. [Add row]

(7.46) For your electric utility activities, provide a breakdown of your Scope 1 emissions and emissions intensity relating to your total power plant capacity and generation during the reporting year by source.

Coal – hard

#### (7.46.1) Absolute scope 1 emissions (metric tons CO2e)

2663319

(7.46.2) Emissions intensity based on gross or net electricity generation

Select from:

✓ Gross

(7.46.3) Scope 1 emissions intensity (Gross generation)

#### 819.86

#### (7.46.4) Scope 1 emissions intensity (Net generation)

913.80

#### Solar

## (7.46.1) Absolute scope 1 emissions (metric tons CO2e)

0

#### (7.46.2) Emissions intensity based on gross or net electricity generation

Select from:

#### ✓ Gross

(7.46.3) Scope 1 emissions intensity (Gross generation)

0.00

(7.46.4) Scope 1 emissions intensity (Net generation)

0.00

#### Other renewable

#### (7.46.1) Absolute scope 1 emissions (metric tons CO2e)

0

(7.46.2) Emissions intensity based on gross or net electricity generation

Select from:

✓ Gross

#### (7.46.3) Scope 1 emissions intensity (Gross generation)

#### 0.00

(7.46.4) Scope 1 emissions intensity (Net generation)

0.00

#### Total

(7.46.1) Absolute scope 1 emissions (metric tons CO2e)

2663319

(7.46.2) Emissions intensity based on gross or net electricity generation

Select from:

Net

(7.46.4) Scope 1 emissions intensity (Net generation)

454.99 [Fixed row]

(7.52) Provide any additional climate-related metrics relevant to your business.

Row 1

# (7.52.1) Description

Select from:

✓ Energy usage

(7.52.2) Metric value

#### (7.52.3) Metric numerator

GJ

## (7.52.4) Metric denominator (intensity metric only)

1

### (7.52.5) % change from previous year

3

## (7.52.6) Direction of change

Select from:

Decreased

## (7.52.7) Please explain

We have undertaken various energy reduction initiatives to conserve energy and make our operations green. Some of these initiatives include- structural changes in equipment, parts replacement to plug leakages and inefficiencies reduction. [Add row]

## (7.53.1) Provide details of your absolute emissions targets and progress made against those targets.

#### Row 1

## (7.53.1.1) Target reference number

Select from:

🗹 Abs 1

#### (7.53.1.2) Is this a science-based target?

#### Select from:

Ves, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

## (7.53.1.4) Target ambition

Select from:

✓ 1.5°C aligned

#### (7.53.1.5) Date target was set

03/30/2019

#### (7.53.1.6) Target coverage

Select from:

✓ Organization-wide

#### (7.53.1.7) Greenhouse gases covered by target

Select all that apply

✓ Carbon dioxide (CO2)

✓ Methane (CH4)

☑ Nitrous oxide (N2O)

✓ Sulphur hexafluoride (SF6)

## (7.53.1.8) Scopes

Select all that apply

✓ Scope 1

✓ Scope 2

# (7.53.1.9) Scope 2 accounting method

#### Select from:

✓ Location-based

#### (7.53.1.11) End date of base year

03/30/2019

(7.53.1.12) Base year Scope 1 emissions covered by target (metric tons CO2e)

3446189.13

(7.53.1.13) Base year Scope 2 emissions covered by target (metric tons CO2e)

24078.59

(7.53.1.31) Base year total Scope 3 emissions covered by target (metric tons CO2e)

0.000

(7.53.1.32) Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

3470267.720

(7.53.1.33) Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

(7.53.1.34) Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

(7.53.1.53) Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

## (7.53.1.54) End date of target

03/30/2032

#### (7.53.1.55) Targeted reduction from base year (%)

72.7

(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

947383.088

(7.53.1.57) Scope 1 emissions in reporting year covered by target (metric tons CO2e)

2663319

(7.53.1.58) Scope 2 emissions in reporting year covered by target (metric tons CO2e)

426435

(7.53.1.77) Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

3089754.000

(7.53.1.78) Land-related emissions covered by target

Select from:

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.1.79) % of target achieved relative to base year

15.08

(7.53.1.80) Target status in reporting year

Select from:

#### (7.53.1.82) Explain target coverage and identify any exclusions

100% coverage of our entire operations. No exclusions. The targets were set using SBTi tools. The base year for our targets is FY 2018-19.

#### (7.53.1.83) Target objective

Transition to low carbon economy and help other acheive net zero goals.

#### (7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

✓ Yes

#### (7.53.1.86) List the emissions reduction initiatives which contributed most to achieving this target

Carving out & exiting of 2x 250MW thermal asset contributing the 99.6% of Scope 1 emission of the company. Company plans to complete the process in FY25 against ealier target of FY2030. Increase in RE share in Power procurement mix from 3% in FY2021 to 30% by FY2023, 60% by FY2027 & 70% by FY2030 w.r.t baseline of 3% in FY2021. Currnt RE share in procuremnt mix 34.35% in FY2024 was 30.04% in FY2023. No new thermal assets to be developed and funded, already committed in public domain in FY2023 sustainbility report.

#### Row 3

#### (7.53.1.1) Target reference number

Select from:

🗹 Abs 2

#### (7.53.1.2) Is this a science-based target?

Select from:

Z Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

(7.53.1.4) Target ambition

✓ 1.5°C aligned

#### (7.53.1.5) Date target was set

03/30/2019

## (7.53.1.6) Target coverage

Select from:

✓ Organization-wide

### (7.53.1.7) Greenhouse gases covered by target

Select all that apply

- ✓ Methane (CH4)
- ✓ Nitrous oxide (N2O)
- ✓ Carbon dioxide (CO2)
- Perfluorocarbons (PFCs)
- ✓ Hydrofluorocarbons (HFCs)

#### (7.53.1.8) Scopes

Select all that apply

✓ Scope 3

## (7.53.1.10) Scope 3 categories

Select all that apply

- ✓ Scope 3, Category 14 Franchises
- ✓ Scope 3, Category 15 Investments
- ✓ Scope 3, Category 2 Capital goods
- ✓ Scope 3, Category 6 Business travel
- ✓ Scope 3, Category 7 Employee commuting

✓ Sulphur hexafluoride (SF6)✓ Nitrogen trifluoride (NF3)

- ✓ Scope 3, Category 11 Use of sold products
- ✓ Scope 3, Category 8 Upstream leased assets
- ☑ Scope 3, Category 13 Downstream leased assets
- ☑ Scope 3, Category 1 Purchased goods and services
- ☑ Scope 3, Category 10 Processing of sold products

- ✓ Scope 3, Category 5 Waste generated in operations
- ✓ Scope 3, Category 12 End-of-life treatment of sold products
- ☑ Scope 3, Category 4 Upstream transportation and distribution
- ☑ Scope 3, Category 9 Downstream transportation and distribution
- ✓ Scope 3, Category 3 Fuel- and energy- related activities (not included in Scope 1 or 2)

## (7.53.1.11) End date of base year

03/30/2021

(7.53.1.14) Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

2809089

(7.53.1.15) Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

1294910

(7.53.1.16) Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

0

(7.53.1.17) Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

45434

(7.53.1.18) Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

0

(7.53.1.19) Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

0

(7.53.1.20) Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

0

(7.53.1.21) Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

0

(7.53.1.22) Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

1618

(7.53.1.23) Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

0

(7.53.1.24) Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

0

(7.53.1.25) Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

0

(7.53.1.26) Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

0

(7.53.1.27) Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

0

(7.53.1.28) Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

(7.53.1.31) Base year total Scope 3 emissions covered by target (metric tons CO2e)

#### 4151051.000

(7.53.1.32) Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

4151051.000

(7.53.1.35) Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

100

(7.53.1.36) Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

100

(7.53.1.37) Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

100

(7.53.1.38) Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

100

(7.53.1.39) Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

(7.53.1.40) Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

100

(7.53.1.41) Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

100

(7.53.1.42) Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

100

(7.53.1.43) Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

100

(7.53.1.44) Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

100

(7.53.1.45) Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

100

(7.53.1.46) Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

(7.53.1.47) Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

100

(7.53.1.48) Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

100

(7.53.1.49) Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

100

(7.53.1.52) Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

100

(7.53.1.53) Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100.0

#### (7.53.1.54) End date of target

03/30/2031

(7.53.1.55) Targeted reduction from base year (%)

27.5

(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

3009511.975

(7.53.1.59) Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

1187106

(7.53.1.60) Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

741941

(7.53.1.61) Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

3553651

(7.53.1.62) Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

3585

(7.53.1.63) Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

50.78

(7.53.1.64) Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

399

(7.53.1.65) Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

72
(7.53.1.66) Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

0

(7.53.1.67) Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

0

(7.53.1.68) Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

0

(7.53.1.69) Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

0

(7.53.1.70) Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

0

(7.53.1.71) Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

0

(7.53.1.72) Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

0

(7.53.1.73) Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

0

#### (7.53.1.76) Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

#### 5486804.780

(7.53.1.77) Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

5486804.780

#### (7.53.1.78) Land-related emissions covered by target

Select from:

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

#### (7.53.1.79) % of target achieved relative to base year

#### -117.01

#### (7.53.1.80) Target status in reporting year

Select from:

Underway

#### (7.53.1.82) Explain target coverage and identify any exclusions

100% coverage of our entire operations. No exclusions. The targets were set using SBTi tools. The base year for our targets is FY 2018-19.

## (7.53.1.83) Target objective

Transition to low carbon economy and help other acheive net zero goals.

## (7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year

Carving out & exiting of 2x 250MW thermal asset contributing the 99.6% of Scope 1 emission f the company. Company plans to complete the process in FY25 against ealier target of FY2030. Increase in RE share in Power procurement mix from 3% in FY2021 to 30% by FY2023, 60% by FY2027 & 70% by FY2030 w.r.t baseline of 3% in FY2021. Currnt RE share in procuremnt mix 34.35% in FY2024 was 30.04% in FY2023. No new thermal assets to be developed and funded,

already committed in public domain in FY2023 sustainbility report. This contributes to Scope 3 Category 3 emission reduction which is a major category 65% to 70% of total emissions.

#### (7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

🗹 Yes

[Add row]

## (7.53.2) Provide details of your emissions intensity targets and progress made against those targets.

Row 1

#### (7.53.2.1) Target reference number

Select from:

Int 1

## (7.53.2.2) Is this a science-based target?

Select from:

Ves, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

## (7.53.2.4) Target ambition

Select from:

✓ 1.5°C aligned

#### (7.53.2.5) Date target was set

06/30/2021

(7.53.2.6) Target coverage

✓ Business division

## (7.53.2.7) Greenhouse gases covered by target

Select all that apply

- ✓ Methane (CH4)
- ☑ Nitrous oxide (N2O)
- ✓ Carbon dioxide (CO2)
- ✓ Perfluorocarbons (PFCs)
- ✓ Hydrofluorocarbons (HFCs)

## (7.53.2.8) Scopes

- Select all that apply
- ✓ Scope 1
- ✓ Scope 2

#### (7.53.2.9) Scope 2 accounting method

Select from:

✓ Market-based

## (7.53.2.11) Intensity metric

Select from:

☑ Other, please specify :tCO2e / EDITDA in

## (7.53.2.12) End date of base year

03/30/2022

(7.53.2.13) Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity)

Nitrogen trifluoride (NF3)Sulphur hexafluoride (SF6)

2071.44

## (7.53.2.14) Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity)

182.66

(7.53.2.33) Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)

2254.100000000

(7.53.2.34) % of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

100

(7.53.2.35) % of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

100

(7.53.2.54) % of total base year emissions in all selected Scopes covered by this intensity figure

100

(7.53.2.55) End date of target

03/30/2030

(7.53.2.56) Targeted reduction from base year (%)

70

(7.53.2.57) Intensity figure at end date of target for all selected Scopes (metric tons CO2e per unit of activity)

676.230000000

(7.53.2.58) % change anticipated in absolute Scope 1+2 emissions

#### (7.53.2.60) Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)

1132.925009

(7.53.2.61) Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)

178.491925

(7.53.2.80) Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)

1311.4169340000

(7.53.2.81) Land-related emissions covered by target

Select from:

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.2.82) % of target achieved relative to base year

59.74

### (7.53.2.83) Target status in reporting year

Select from:

✓ Underway

(7.53.2.85) Explain target coverage and identify any exclusions

No Exclusions

## (7.53.2.86) Target objective

To acheive Net Zero by 2050 with interim GHG emission reductions as per the Sustainability Linked Bond committments.

## (7.53.2.87) Plan for achieving target, and progress made to the end of the reporting year

Carving out & exiting of 2x 250MW thermal asset contributing the 99.6% of Scope 1 emission f the company. Company plans to complete the process in FY25 against ealier target of FY2030. Increase in RE share in Power procurement mix from 3% in FY2021 to 30% by FY2023, 60% by FY2027 & 70% by FY2030 w.r.t baseline of 3% in FY2021. Currnt RE share in procuremnt mix 34.35% in FY2024 was 30.04% in FY2023. No new thermal assets to be developed and funded, already committed in public domain in FY2023 sustainbility report. This contributes to Scope 3 Category 3 emission reduction which is a major category 65% to 70% of total emissions.

#### (7.53.2.88) Target derived using a sectoral decarbonization approach

Select from:

✓ Yes

[Add row]

#### (7.54.1) Provide details of your targets to increase or maintain low-carbon energy consumption or production.

#### Row 2

#### (7.54.1.1) Target reference number

Select from:

✓ Low 1

## (7.54.1.3) Target coverage

Select from:

✓ Organization-wide

## (7.54.1.4) Target type: energy carrier

Select from:

Electricity

(7.54.1.5) Target type: activity

✓ Consumption

#### (7.54.1.6) Target type: energy source

Select from:

✓ Low-carbon energy source(s)

### (7.54.1.8) Consumption or production of selected energy carrier in base year (MWh)

0.0

(7.54.1.9) % share of low-carbon or renewable energy in base year

0.0

## (7.54.1.16) Is this target part of an emissions target?

Yes, this has been in alignment with the emission target strategy. Various initiatives for the reduction of emissions have been taken up. They include Using Solar to Offset Auxiliary consumption from Grid, Monitoring and optimized utilization of Diesel in Diesel Generating (DG) Set, Monitoring Sulfur Hexafluoride (SF6) Gas leakage through the latest technology cameras, Replacement of HP (High Pressure) & Intermittent Pressure (IP) Turbine – Over Hauling (OH) of LP Turbine and Reduction in slip loss of Boiler Feed Pump (BFP).

## (7.54.1.17) Is this target part of an overarching initiative?

Select all that apply

✓ Science Based Targets initiative

## (7.54.1.19) Explain target coverage and identify any exclusions

Target coverage: AEML T&D, Target is for sourcing and supply of Renewable Energy to the end cosnumers of elctricity supplied in the 100% transmission & distribution business catering to Mumbai region energy supply of the company.No Exclusions.

Row 3

## (7.54.1.1) Target reference number

#### Select from:

✓ Low 2

# (7.54.1.3) Target coverage

Select from:

✓ Organization-wide

#### (7.54.1.4) Target type: energy carrier

Select from:

Electricity

## (7.54.1.5) Target type: activity

Select from:

Production

#### (7.54.1.6) Target type: energy source

Select from:

✓ Renewable energy source(s) only

# (7.54.1.8) Consumption or production of selected energy carrier in base year (MWh)

253650.0

(7.54.1.9) % share of low-carbon or renewable energy in base year

3.0

## (7.54.1.16) Is this target part of an emissions target?

Yes

## (7.54.1.17) Is this target part of an overarching initiative?

Select all that apply

✓ Science Based Targets initiative

#### (7.54.1.19) Explain target coverage and identify any exclusions

Our target covers our T&D losses of 5.39% during the current year. [Add row]

## (7.54.2) Provide details of any other climate-related targets, including methane reduction targets.

Row 1

## (7.54.2.1) Target reference number

Select from:

🗹 Oth 1

## (7.54.2.2) Date target was set

03/31/2019

## (7.54.2.3) Target coverage

Select from:

✓ Organization-wide

## (7.54.2.4) Target type: absolute or intensity

Select from:

✓ Absolute

(7.54.2.5) Target type: category & Metric (target numerator if reporting an intensity target)

#### (7.54.2.7) End date of base year

03/30/2020

#### (7.54.2.8) Figure or percentage in base year

0

## (7.54.2.9) End date of target

03/30/2030

(7.54.2.10) Figure or percentage at end of date of target

10

## (7.54.2.11) Figure or percentage in reporting year

8.1

(7.54.2.12) % of target achieved relative to base year

81.000000000

## (7.54.2.13) Target status in reporting year

Select from:

✓ Underway

(7.54.2.15) Is this target part of an emissions target?

Yes, this has been in alignment with the emission target strategy. Various initiatives for the reduction of emissions have been taken up. They include Using Solar to Offset Auxiliary consumption from Grid, Monitoring and optimized utilization of Diesel in Diesel Generating (DG) Set, Monitoring Sulphur Hexafluoride (SF6) Gas leakage through the latest technology cameras, Replacement of HP (High Pressure) & Intermittent Pressure (IP) Turbine – Over Hauling (OH) of LP Turbine and Reduction in slip loss of Boiler Feed Pump (BFP). This forms part of broader goal of Net zero by 2050. and The objectives of the Utilities for Net Zero Alliance (UNEZA) align well with the strategic objectives of Adani Energy Solutions Limited (AESL) in several key areas: 1. Renewable Energy Expansion: o UNEZA aims to triple renewable power capacity by 20301. o AESL is committed to achieve 70% renewable power in procurement mix by 2030 for its retail division in Grid Modernization: o UNEZA focuses on modernizing and expanding grid infrastructure to support renewable energy integration. o AESL is Mumbai. 2. actively involved in enhancing transmission and distribution networks across India. 3. Policy and Regulatory Support: o UNEZA works to facilitate supportive policy and regulatory frameworks1. o AESL aims to maintain a significant market share in the private transmission market through both organic and inorganic Sustainability and Decarbonization: o UNEZA commits to achieving net-zero emissions growth, which requires navigating regulatory landscapes effectively. 4. by 20505. o AESL is dedicated to contributing to India's COP21 goals and the wider UNFCC sustainability targets. o AESL is dedicated and committed for achieving net zero emissions by 2050 and the wider UNFCC sustainability targets 5. Innovation and Technology: o UNEZA promotes the adoption of new technologies and innovative solutions6. AESL is focused on integrating newer technologies for sustainable and innovative future operations. 6. Capital Mobilization: o UNEZA aims to mobilize capital for renewable energy projects 1. o AESL is involved in large-scale projects that require significant investment, such as ecosystems of an enabling infrastructure to enhance utilization of renewable energy with an adequate and reliable power evacuation in the grid.

#### (7.54.2.16) Is this target part of an overarching initiative?

Select all that apply

☑ Other, please specify :SBTi , approval in process

## (7.54.2.18) Please explain target coverage and identify any exclusions

Target coverage: AEML T&D, Target is for sourcing and supply of Renewable Energy to the end consumers of electricity supplied in the 100% transmission & distribution business catering to Mumbai region energy supply of the company. No exclusion.

## (7.54.2.19) Target objective

Various initiatives for the reduction of emissions have been taken up. They include Using Solar to Offset Auxiliary consumption from Grid, Monitoring and optimized utilization of Diesel in Diesel Generating (DG) Set, Monitoring Sulphur Hexafluoride (SF6) Gas leakage through the latest technology cameras, Replacement of HP (High Pressure) & Intermittent Pressure (IP) Turbine – Over Hauling (OH) of LP Turbine and Reduction in slip loss of Boiler Feed Pump (BFP).

#### (7.54.2.20) Plan for achieving target, and progress made to the end of the reporting year

Rooftop solar is installed at each side, plan to add further on the solar / other RE sources in a phased manner

Row 2

### (7.54.2.1) Target reference number

Select from:

🗹 Oth 2

#### (7.54.2.2) Date target was set

03/31/2021

## (7.54.2.3) Target coverage

Select from:

✓ Organization-wide

#### (7.54.2.4) Target type: absolute or intensity

Select from:

✓ Absolute

## (7.54.2.5) Target type: category & Metric (target numerator if reporting an intensity target)

Energy consumption or efficiency ✓ MWh

## (7.54.2.7) End date of base year

03/30/2020

## (7.54.2.8) Figure or percentage in base year

3

(7.54.2.9) End date of target

#### 03/30/2030

#### (7.54.2.10) Figure or percentage at end of date of target

70

#### (7.54.2.11) Figure or percentage in reporting year

34.35

#### (7.54.2.12) % of target achieved relative to base year

46.7910447761

#### (7.54.2.13) Target status in reporting year

Select from:

Underway

#### (7.54.2.15) Is this target part of an emissions target?

Yes. This part of broader company's goal of Net zero by 2050. The objectives of the Utilities for Net Zero Alliance (UNEZA) align well with the strategic objectives of Adani Energy Solutions Limited (AESL) in several key areas: 1. Renewable Energy Expansion: o UNEZA aims to triple renewable power capacity by 20301. o AESL is committed to achieve 70% renewable power in procurement mix by 2030 for its retail division in Mumbai. 2. Grid Modernization: o UNEZA focuses on modernizing and expanding grid infrastructure to support renewable energy integration. oAESL is actively involved in enhancing transmission and distribution networks across India. 3. Policy and Regulatory Support: o UNEZA works to facilitate supportive policy and regulatory frameworks1. o AESL aims to maintain a significant market share in the private transmission market through both organic and inorganic growth, which requires navigating regulatory landscapes effectively. 4. Sustainability and Decarbonization: o UNEZA commits to achieving net-zero emissions by 20505. o AESL is dedicated to contributing to India's COP21 goals and the wider UNFCC sustainability targets. o AESL is dedicated and committed for achieving net zero emissions by 2050 and the wider Innovation and Technology: o UNEZA promotes the adoption of new technologies and innovative solutions6. o UNFCC sustainability targets 5. AESL is focused on integrating newer technologies for sustainable and innovative future operations. 6. Capital Mobilization: o UNEZA aims to mobilize capital for renewable energy projects1. o AESL is involved in large-scale projects that require significant investment, such as ecosystems of an enabling infrastructure to enhance utilization of renewable energy with an adequate and reliable power evacuation in the grid. By aligning with UNEZA's objectives, AESL can further its mission of enhancing energy security and sustainability while leveraging global best practices and collaborative efforts to overcome common barriers in the energy transition.

## (7.54.2.16) Is this target part of an overarching initiative?

Select all that apply

✓ Other, please specify :SBTi, approval in process

#### (7.54.2.18) Please explain target coverage and identify any exclusions

Our target covers our T&D losses of 5.39% during the current year.

## (7.54.2.19) Target objective

A significant focus on renewable energy integration has resulted in 34.35% of our energy mix being renewable by FY 2023- 24. This aligns with our broader commitment to achieving net-zero emissions by 2050.

#### (7.54.2.20) Plan for achieving target, and progress made to the end of the reporting year

We have set a target to procure 70% renewable energy by 2030. During the year under review, we achieved 34.35% electricity from renewable sources. Further, our step wise approach dictates that we achieve 60% of power from renewable energy at 2027, before realizing our target in 2030. [Add row]

## (7.54.3) Provide details of your net-zero target(s).

Row 1

#### (7.54.3.1) Target reference number

Select from:

🗹 NZ1

#### (7.54.3.2) Date target was set

07/31/2021

### (7.54.3.3) Target Coverage

Select from:

✓ Organization-wide

# (7.54.3.4) Targets linked to this net zero target

Select all that apply

✓ Abs1

✓ Abs2

## (7.54.3.5) End date of target for achieving net zero

03/30/2050

#### (7.54.3.6) Is this a science-based target?

Select from:

Ves, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

## (7.54.3.8) Scopes

Select all that apply

Scope 1

✓ Scope 2

✓ Scope 3

#### (7.54.3.9) Greenhouse gases covered by target

Select all that apply

- ☑ Carbon dioxide (CO2)
- ✓ Methane (CH4)
- ✓ Nitrous oxide (N2O)
- ✓ Sulphur hexafluoride (SF6)
- ✓ Nitrogen trifluoride (NF3)

## (7.54.3.10) Explain target coverage and identify any exclusions

The target encompasses the entirety of our business with no exclusions. AESL has committed to be Net zero by 2050. We have defined our strategies and goals and have introduced targets to achieve these objectives. We have officially committed to Science Based Targets initiatives and have submitted targets for SBTi validation. As for the reporting year, we have been reinstated in Power Sector of the SBTi and our commitment has been removed from SBTi list, however, we have been actively communicating with SBTi team for target validation

#### (7.54.3.11) Target objective

We are striving to address climate change and nurture the ecosystems in the most effective way. We are committed to becoming Net Zero by 2050 and our strategies and actions are fully aligned with the Net Zero Goals. We are making strides towards harnessing opportunities to create low carbon operations and services as our response to climate change

#### (7.54.3.12) Do you intend to neutralize any residual emissions with permanent carbon removals at the end of the target?

Select from:

✓ Yes

#### (7.54.3.13) Do you plan to mitigate emissions beyond your value chain?

Select from:

 $\blacksquare$  Yes, and we have already acted on this in the reporting year

## (7.54.3.14) Do you intend to purchase and cancel carbon credits for neutralization and/or beyond value chain mitigation?

Select all that apply

☑ No, we do not plan to purchase and cancel carbon credits for neutralization and/or beyond value chain mitigation

## (7.54.3.15) Planned milestones and/or near-term investments for neutralization at the end of the target

AESL is committed to net zero emissions by 2050, aligning with the 1.5-degree scenario. The focus includes all Scope 1, 2, and 3 emissions. Strategic plans involve decarbonizing grid operations, enhancing renewable energy use, and implementing green tariffs to help customers reduce carbon footprints. A significant pledge of growing 100 million trees by 2030 under the Trillion Trees Platform marks a crucial environmental restoration effort. Investment highlights include Rs 155 crore spent last year on eco-friendly technologies and Rs 1,343.34 crore to boost renewable energy, underlying AESL's dedication to sustainability and a greener future.

#### (7.54.3.16) Describe the actions to mitigate emissions beyond your value chain

We are dedicated to building a more sustainable world through ecosystem restoration, biodiversity conservation, and combating soil erosion. Our commitment is underscored by our significant pledge to the World Economic Forum's Trillion Trees Platform, where we aim to plant 100 million trees by 2030. This initiative positions

us as one of the largest contributors to the 1t.org pledge in India and reflects one of the most ambitious corporate environmental commitments worldwide. Within this framework, AESL is responsible for the planting and nurturing of 15% of these trees, demonstrating our active role in this global effort.

#### (7.54.3.17) Target status in reporting year

Select from:

✓ Underway

## (7.54.3.19) Process for reviewing target

The corporate responsibility committee, is responsible for setting up targets and monitoring progress on quaterly basis. The Chief Sustainability Officer, is responsible for day to day monitoring of the targets, aided by the ESG core groups at the site and corporate level, and apprises the committee of the progress at regular intervals. [Add row]

# (7.55.1) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	12	`Numeric input
To be implemented	5	1200000
Implementation commenced	3	1000
Implemented	7	1099.31
Not to be implemented	0	`Numeric input

[Fixed row]

## (7.55.2) Provide details on the initiatives implemented in the reporting year in the table below.

#### (7.55.2.1) Initiative category & Initiative type

#### Low-carbon energy generation

Other, please specify :700 MW Wind Solar Hybrid plant + other RE power procured on short & Medium term basis during the reporting period

# (7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

2656987

## (7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

✓ Scope 2 (market-based)

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

#### (7.55.2.4) Voluntary/Mandatory

Select from:

Voluntary

#### (7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

1936347861

(7.55.2.6) Investment required (unit currency – as specified in C0.4)

12060344839

#### (7.55.2.7) Payback period

Select from:

✓ <1 year</p>

Select from:

☑ 21-30 years

#### (7.55.2.9) Comment

All RE sources used by the company includes teh combination of Solar, Wind, Hydro, Rooftop solar etc, which provided 3,710.88 Million units in the reporting period. this was equivalant to 34.35% of the total electricity purchased and sold to end consumers. [Add row]

## (7.55.3) What methods do you use to drive investment in emissions reduction activities?

#### Row 1

## (7.55.3.1) Method

Select from:

☑ Other :India's Sustainability linked bond issued by the retail division of the company in Jul 2021

#### (7.55.3.2) Comment

Sustainability Linked Bonds (SLBs) In coherence with our commitment to the Environmental, Social and Governance principles, AEML has raised capital through Sustainability Linked Bonds. Through this initiative, our objective is to highlight the pivotal role debt markets can play in offering funding and encouraging companies to advance their sustainability goals. Our decarbonisation strategy aims at enhancing the distribution sector's energy mix and assisting consumers by providing rooftop solar and EV charging facilities. SLB principles delineate the methodology for issuing sustainability linked bonds and ensures that any SLB issued aligns with the fundamental five components: 1. Identification of Key Performance Indicators (KPIs) 2. Calibration of KPIs - selection of KPIs reflective of issuer's sustainability objectives 3. Characteristics and structure of the bond 4. Reporting and verification 5. Disclosure In this direction and conforming to SLB principles, AEML has issued Sustainability Linked Bonds to fulfil its green mobility goals. KPI 1: Increase the share of renewable power mix in the overall power purchase mix Target 1: Attain at least 60% of the renewable power procurement mix by the end of FY 2026-27 and 70% by the end of FY 2029-30 KPI 2: Reduction in GHG Emission Intensity (Scope 1, 2) Target 1: Achieve reduction in GHG emissions (Scope 1 & 2) by 60% by the end of FY 2030-31 compared with the baseline FY 2018-19 Despite the challenging nature of the KPIs, we remain confident of attaining our targets. We reaffirm our commitment to supply sustainable and affordable power to the citizens of Mumbai, while enabling the transition to a low-carbon economy and moving towards our goal of becoming a leader in the transmission and distribution of reliable and clean power.

#### (7.55.3.1) Method

Select from:

Employee engagement

## (7.55.3.2) Comment

KRA of the senior leadership has linkage to incentives, where energy efficiency leads to climate change mitigation. All employees of the company are motivated by senior leadership for ESG initiatives which are fostered through various recognition. CEO variable pay linked to GHG reduction where as line managers and employees in ESG have monetary incentives linked to their KRAs. At the operational level, various Kaizen and quality circle initiatives drive energy efficiency, and savings are centered among the employees. We run pilot programs for our employees to ensure behavioral shift towards climate change. The energy management system also promotes awareness and new initiatives for energy savings initiatives and their advantages.

#### Row 3

#### (7.55.3.1) Method

Select from:

☑ Dedicated budget for energy efficiency

#### (7.55.3.2) Comment

AESL strongly believes there is always an opportunity for improvement when it comes to improving efficiency, so we allocate budget for energy-efficient action plans. We fell under the PAT scheme of Bureau of Energy Efficiency.

#### Row 4

## (7.55.3.1) Method

Select from:

✓ Compliance with regulatory requirements/standards

## (7.55.3.2) Comment

We abide by green energy requirements and ensure 100% compliance to regulatory standards in determining the eligibility of renewable resources. We are mandated to reduce our auxiliary consumption and therefore, we have increased the share of renewable energy in all our operations.

#### Row 5

## (7.55.3.1) Method

Select from:

✓ Internal incentives/recognition programs

## (7.55.3.2) Comment

AESL has an employee award & recognition Policy, which encourages employees to an innovative and scientific approach to technical problems, including energy efficiency and emission reduction projects. Employees are entitled to a monetary reward for successfully implementing such projects/Intonations. We encourage our employees to share their ideas, suggestions, and insights across strategy, operations, technology, and organization directly to the chairman through portals. The ideas are reviewed by the business-level committee. Employees get monetary rewards if the idea is implemented. [Add row]

## (7.74.1) Provide details of your products and/or services that you classify as low-carbon products.

#### Row 1

## (7.74.1.1) Level of aggregation

Select from:

Product or service

#### (7.74.1.2) Taxonomy used to classify product(s) or service(s) as low-carbon

Select from:

✓ Climate Bonds Taxonomy

## (7.74.1.3) Type of product(s) or service(s)

#### Power

☑ Other, please specify :Procurement of RE power from power exchange, short term and mid term power purchase agreements

## (7.74.1.4) Description of product(s) or service(s)

Distribution of green power

#### (7.74.1.5) Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Select from:

✓ Yes

#### (7.74.1.6) Methodology used to calculate avoided emissions

Select from:

☑ Other, please specify :Activity multiplied by CEA grid emission factor.

### (7.74.1.7) Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Select from:

✓ Cradle-to-grave

## (7.74.1.8) Functional unit used

Number of electricity units, purchased and sold to customers

#### (7.74.1.9) Reference product/service or baseline scenario used

Electricity from Indian Grid/ Scope 2 methodology

# (7.74.1.10) Life cycle stage(s) covered for the reference product/service or baseline scenario

Select from:

✓ Cradle-to-grave

# (7.74.1.11) Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

2656987

## (7.74.1.12) Explain your calculation of avoided emissions, including any assumptions

Since in the absence of any renewable power procurement, emissions would have occurred at the grid, we determine the avoided emissions by calculating the number of electricity units transmitted from generation point to end consumption point multiplied by Emission factor of 0.716. In the rporting period AESL transmisted and delivered 3,710.88 Million units of Green power from RE sources such as wind, solar, hydro to its end consumers in Mumbai's Relatil electricity division. this was equivalent to 34.35% of the total procured and delived electricity after transmission & Distribution losses. Thus helping in reducing Scope 3 catgeory 3 emissions - i.e. Scope 2 emission of AESL's customers.

#### (7.74.1.13) Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

19.94

Row 2

### (7.74.1.1) Level of aggregation

Select from:

Product or service

#### (7.74.1.2) Taxonomy used to classify product(s) or service(s) as low-carbon

Select from:

☑ The IEA Energy Technology Perspectives Clean Energy Technology Guide

## (7.74.1.3) Type of product(s) or service(s)

#### Power

✓ Other, please specify :700 MW Wind Solar Hybrid

## (7.74.1.4) Description of product(s) or service(s)

Transmission and Distribution

(7.74.1.5) Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Select from:

🗹 Yes

#### (7.74.1.6) Methodology used to calculate avoided emissions

Select from:

☑ Other, please specify :CEA Activity data multiplied by grid emissions

#### (7.74.1.7) Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Select from:

✓ Cradle-to-gate

#### (7.74.1.8) Functional unit used

Number of electricity units transmitted from generation point to end consumption point

#### (7.74.1.9) Reference product/service or baseline scenario used

Electricity from Indian Grid/ Scope 2 methodology

#### (7.74.1.10) Life cycle stage(s) covered for the reference product/service or baseline scenario

Select from:

✓ Cradle-to-gate

(7.74.1.11) Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

## (7.74.1.12) Explain your calculation of avoided emissions, including any assumptions

Since in the absence of any renewable power procurement, emissions would have occurred at the grid, we determine the avoided emissions by calculating the number of electricity units transmitted from generation point to end consumption point multiplied by Emission factor of 0.716. In the rporting period AESL transmisted and delivered 3,710.88 Million units of Green power from RE sources such as wind, solar, hydro to its end consumers in Mumbai's Relatil electricity division. this was equivalent to 34.35% of the total procured and delived electricity after transmission & Distribution losses. Thus helping in reducing Scope 3 catgeory 3 emissions - i.e. Scope 2 emission of AESL's customers.

## (7.74.1.13) Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

19.94 [Add row]

## **C9. Environmental performance - Water security**

(9.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

Water withdrawals - total volumes

#### (9.2.1) % of sites/facilities/operations

Select from:

✓ 100%

#### (9.2.2) Frequency of measurement

Select from:

✓ Continuously

## (9.2.3) Method of measurement

The data is monitored and measured on a continuous basis through flow meters and this information from the flow meters is recorded by data owners which is further translated into an excel and communicated to the department heads on a timely manner. The same data is used by senior management for taking the business decision. In FY24, we have obtained reasonable assurance on the data disclosed which further indicated the efficacy of the controls available

## (9.2.4) Please explain

In the reporting year, 47,62,27,229 kilolitres was withdrawn for our operational purposes, this is predominately due to the use of water in our Dahanu facility which we intend to carve out in FY25, we ensure that our water withdrawals are within the prescribed limits, whever applicable.

#### Water withdrawals - volumes by source

## (9.2.1) % of sites/facilities/operations

Select from:

✓ 100%

Select from:

✓ Continuously

## (9.2.3) Method of measurement

The data measured continously is recorded as per the source of withdrawal. we have identified the following sources for extraction of water - Ground water, Sea water, Third party water, Rain water.

## (9.2.4) Please explain

We aim to minimise the use of water in our operations. We record meter readings in a log book and consolidate it on a monthly, quarterly and annual basis. This is further sent for review to the senior management and used for reporting purposes.

## Water withdrawals quality

#### (9.2.1) % of sites/facilities/operations

Select from:

✓ 100%

## (9.2.2) Frequency of measurement

Select from:

✓ Continuously

## (9.2.3) Method of measurement

We continuously monitor the quality of water withdrawn at our facilities aligned with local and national regulations. We monitor it 24x7 to ensure the effective quality and wherever the quality is distorted we enhance the quality through pre-treatment activities. we also conduct regular third party tests to ensure the COD and BOD are in threshold as prescribed by SPCB and PCPB.

## (9.2.4) Please explain

The quality of the water is monitored on a continuous basis and the same is also verified by third party

#### Water discharges - total volumes

#### (9.2.1) % of sites/facilities/operations

Select from:

✓ 100%

## (9.2.2) Frequency of measurement

Select from:

✓ Daily

## (9.2.3) Method of measurement

The quantity of water discharge at our facilities who deal withTransmission business and Distribution business (Receiving & Distribution sub-stations, Offices and customer care centers) is not quantified as it is only used for domestic purposes. The current water discharge disclosed is only for our Dhanu plant where the water is sent to Barkish (sea) post ETP process.

## (9.2.4) Please explain

Our Dahanu Thermal Power plant withdraws and discharge sea water it uses for indirect cooling purposes. During the process, sea water has neglible physiochemical changes, including temperature changes which is controlled during the process so as to not exceed the established discharge limits [max 5 deg C above ambient temperature].

## Water discharges - volumes by destination

#### (9.2.1) % of sites/facilities/operations

Select from:

**☑** 100%

#### (9.2.2) Frequency of measurement

Select from:

✓ Continuously

## (9.2.3) Method of measurement

We monitor our water discharge 24x7 of our 500MW coastal thermal powerplant. This water is monitored through our meters and the appropriate BOD and COD are maintained while discharing them in sea

#### (9.2.4) Please explain

Our Dahanu Thermal Power plant withdraws and discharge sea water it uses for indirect cooling purposes. During the process, sea water has neglible physiochemical changes, including temperature changes which is controlled during the process so as to not exceed the established discharge limits [ max 5 deg C above ambient temperature].

#### Water discharges - volumes by treatment method

#### (9.2.1) % of sites/facilities/operations

Select from:

✓ 100%

#### (9.2.2) Frequency of measurement

Select from:

Continuously

#### (9.2.3) Method of measurement

We monitor our water discharge 24x7 of our 500MW coastal thermal powerplant. This water is monitored through our meters and the appropriate BOD and COD are maintained while discharing them in sea

#### (9.2.4) Please explain

We monitor the Dahanu Thermal plant 24x7. The water discharged from cooling system of thermal Power plant has insignificant physicochemical changes, including temperature changes, which is controlled so as not to exceed the established discharge limits[max 5 deg C above ambient temperature]. Currently, water quantity of discharge at Transmission & Distribution sub-stations, Offices & customercare centers is not quantified as it is only domestic sewage effluent routed through designated soak pits or through local authority collection points.

#### Water discharge quality – by standard effluent parameters

#### (9.2.1) % of sites/facilities/operations

Select from:

✓ 100%

#### (9.2.2) Frequency of measurement

Select from:

✓ Continuously

## (9.2.3) Method of measurement

We monitor our water discharge 24x7 of our 500MW coastal thermal powerplant. This water is monitored through our meters and the appropriate BOD and COD are maintained while discharing them in sea

## (9.2.4) Please explain

We monitor the Dahanu Thermal plant 24x7. The water discharged from cooling system of thermal Power plant has insignificant physicochemical changes, including temperature changes, which is controlled so as not to exceed the established discharge limits[max 5 deg C above ambient temperature]. Currently, water quantity of discharge at Transmission & Distribution sub-stations, Offices & customercare centers is not quantified as it is only domestic sewage effluent routed through designated soak pits or through local authority collection points

## Water discharge quality - emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)

#### (9.2.1) % of sites/facilities/operations

Select from:

✓ 100%

## (9.2.2) Frequency of measurement

Select from:

✓ Continuously

(9.2.3) Method of measurement

Our processes are efficient and doesn't include nitrates or pesticides in the water. The quality shall be maintained and any priority substances shall be identified during the process of treatment and will be removed

#### (9.2.4) Please explain

The quality of the water is monitored on a continuous basis and the same is also verified by third party

#### Water discharge quality - temperature

#### (9.2.1) % of sites/facilities/operations

Select from:

✓ 100%

#### (9.2.2) Frequency of measurement

Select from:

✓ Continuously

## (9.2.3) Method of measurement

During the process, sea water has neglible physiochemical changes, including temperature changes which is controlled during the process so as to not exceed the established discharge limits max 5 deg C above ambient temperature

## (9.2.4) Please explain

Our Dahanu Thermal Power plant withdraws and discharge sea water it uses for indirect cooling purposes. During the process, sea water has neglible physiochemical changes, including temperature changes which is controlled during the process so as to not exceed the established

## Water consumption - total volume

#### (9.2.1) % of sites/facilities/operations

Select from:

✓ 100%

Select from:

✓ Daily

## (9.2.3) Method of measurement

We calculate consumption by subtracting total water discharge from total water withdrawal. We monitor the consumption level at the facility level on a daily basis which is further consolidated monthly, quarterly and annually into our central data collection system. The data is further used for reporting purposes.

## (9.2.4) Please explain

We calculate consumption by subtracting total water discharge from total water withdrawal. We monitor the consumption level at the facility level on a daily basis which is further consolidated monthly, quarterly and annually into our central data collection system. The data is further used for reporting purposes. We track water consumption through two key metrics: 1) Water consumption per MWh 2) Water consumption per Million Revenue

## Water recycled/reused

# (9.2.1) % of sites/facilities/operations

Select from:

76-99

#### (9.2.2) Frequency of measurement

Select from:

🗹 Daily

## (9.2.3) Method of measurement

We measure the water recycled or reused only at our Dhanu plant which constitutes of more than 95% of our water withdrawal. The water consumed in our sub stations are mainly for domestic purposes and these are negligible in nature

## (9.2.4) Please explain

We are recycling our sea water and are using in colling tower, post this we discharge the water into sea. However our transmission business will have limited capabilities in substations as most of the water is for domestic purposes and are discharged post threatment through STPs

## The provision of fully-functioning, safely managed WASH services to all workers

#### (9.2.1) % of sites/facilities/operations

Select from:

✓ 100%

#### (9.2.2) Frequency of measurement

Select from:

🗹 Daily

## (9.2.3) Method of measurement

we provide safe and consumable water for all our workers at all times and facilities. In our Transmission business the majority of water consumption is for domestic purposes alone

## (9.2.4) Please explain

At Adani we ensure the accessibility of basic elements such as food, water, inclusive workplace is right of every employee and worker and therefore, we ensure these ardressed at all times in our business activities and are also integral part of the business [Fixed row]

(9.2.2) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, how do they compare to the previous reporting year, and how are they forecasted to change?

Total withdrawals

#### (9.2.2.1) Volume (megaliters/year)

476227.23

## (9.2.2.2) Comparison with previous reporting year

Select from:

Lower

#### (9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

✓ Investment in water-smart technology/process

## (9.2.2.4) Five-year forecast

Select from:

✓ About the same

## (9.2.2.5) Primary reason for forecast

Select from:

✓ Increase/decrease in efficiency

## (9.2.2.6) Please explain

Total water withdrawals in our operations come largely from our Thermal Power Plant at Dahanu. Our water withdrawal for the thermal plant remains almost the same. We depend on sea water for the operations at Adani Dahanu Thermal Power Plant which is discharged back to its original source with negligible losses Change in volume: About same as 476227.229 megalitres were treated to tertiary level in the previous year and 489,946.17 megalitres were treated to tertiary level this year. Therefore, the volume has decreased by 13,718.94 megalitres (equivalent to a decrease of 3%). This decrease is due to the efficiency in water utilisation of the plant.

## **Total discharges**

# (9.2.2.1) Volume (megaliters/year)

474026.46

(9.2.2.2) Comparison with previous reporting year

#### Select from:

✓ Lower

#### (9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

✓ Investment in water-smart technology/process

#### (9.2.2.4) Five-year forecast

Select from:

✓ About the same

#### (9.2.2.5) Primary reason for forecast

Select from:

✓ Increase/decrease in efficiency

## (9.2.2.6) Please explain

We use Seawater for indirect cooling purposes in our Dahanu Thermal Power plant. The water withdrawn for cooling purposes is discharged back to the sea. During the cooling period, the water undergoes neglible physiochemical changes including temperature changes. Our water discharge as compared to last year was about the same. In the previous year our water discharge was 488105.573 megalitres and in the reporting year it is 474026.459 megalitres which is a 3% decrease.

## **Total consumption**

## (9.2.2.1) Volume (megaliters/year)

2197.61

## (9.2.2.2) Comparison with previous reporting year

Select from:

✓ Higher
#### (9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

✓ Increase/decrease in business activity

## (9.2.2.4) Five-year forecast

Select from:

✓ About the same

(9.2.2.5) Primary reason for forecast

Select from:

✓ Increase/decrease in business activity

# (9.2.2.6) Please explain

Please note: Total Consumption Total Withdrawal - Total Discharge In the reporting year, our total water consumption is 2197.611 megalitres and in the previous year it was 1842.970 megalitres. This is an increase of 19% from previous year. This is due to increased dependency on third party water and Ground water in our facilities and we intend to increase the efficiency by using more recycled water in future [Fixed row]

(9.2.4) Indicate whether water is withdrawn from areas with water stress, provide the volume, how it compares with the previous reporting year, and how it is forecasted to change.

## (9.2.4.1) Withdrawals are from areas with water stress

Select from:

🗹 Yes

(9.2.4.2) Volume withdrawn from areas with water stress (megaliters)

## (9.2.4.3) Comparison with previous reporting year

Select from:

✓ Higher

## (9.2.4.4) Primary reason for comparison with previous reporting year

Select from:

✓ Increase/decrease in business activity

#### (9.2.4.5) Five-year forecast

Select from:

About the same

#### (9.2.4.6) Primary reason for forecast

Select from:

✓ Investment in water-smart technology/process

#### (9.2.4.7) % of total withdrawals that are withdrawn from areas with water stress

0.01

## (9.2.4.8) Identification tool

Select all that apply

✓ WRI Aqueduct

#### (9.2.4.9) Please explain

We used the WRI Aqueduct tool 3.0 to conduct water risk assessments across our sites. Furthermore, in FY24-25, we are in the process of conducting water risk assessment as per Aqueduct 4.0. The following Formula was used for calculating % water withdrawn from areas with water stress as per guidance i.e [( Volume withdrawn in stressed areas)/(Total volume for company wide withdrawals) \* 100 ]}. As per analysis, 11 of 31 AESL operations were sourcing water, where baseline

water stress equals or exceeds 40%. Company specific description: Input: Template "example" Coordinate" was downloaded from WRI Aqueduct tool in which location names and address of AESL 31 sites in India were keyed in and template was imported back in the tool. Analysis was carried out on Annual Temporal resolution using default category weightage (69% Water Quantity Risk, 12% Water Quality Risk and 18% Regulatory & Reputational Risk) as our industry specific option was not available. One of the 'Physical risk quantity' indicators is a water stress indicator ('Baseline water stress') and another is a water depletion indicator ('Baseline water depletion'). Output: WRI aqueduct tool identified 11 of 31 AESL sites which actually sources water where baseline water stress equals or exceeds 40%. Where, Baseline water stress measures the ratio of total water withdrawals to available renewable surface and groundwater supplies. Water withdrawals include domestic, industrial, irrigation, and livestock consumptive and non-consumptive uses. Available renewable water supplies include the impact of upstream consumptive water users and large dams on downstream water availability. Higher values indicate more competition among users. How "stressed areas" are defined and identified 'Low - Medium' baseline water stress is when withdrawals are in the range of (10-20%) 'High' baseline water stress is when withdrawals are in the range of 40-80% of total annual available blue water. Extremely high baseline water stress is when withdrawals are 80% of availability of blue water. Baseline water depletion measures the ratio of total water consumption to available renewable water supplies. Total water consumption includes domestic, industrial, irrigation, and livestock consumptive uses. Available renewable water supplies include the impact of upstream consumptive water users and large dams on downstream water availability. Higher values indicate larger impact on the local water supply and decreased water availability for downstream users. Baseline water depletion is similar to baseline water stress; however, instead of looking at total water withdrawal (consumptive plus non- consumptive), baseline water depletion is calculated using consumptive withdrawal only. How "stressed areas" are defined and identified on basis of water depletion: Low (75%) The categories of 'Overall water risk' are based on a weighted selection of various physical, regulatory and reputational indicators. Total 11 of 31 sites are considered for reporting boundary are in water stress zone contributing 0.0055% of total water withdrawn i.e. 32.887 Mega Liter of Total 476227.229 Mega Liter withdrawn in reporting period. [Fixed row]

#### (9.2.7) Provide total water withdrawal data by source.

#### Fresh surface water, including rainwater, water from wetlands, rivers, and lakes

## (9.2.7.1) **Relevance**

Select from:

🗹 Relevant

# (9.2.7.2) Volume (megaliters/year)

2112.01

## (9.2.7.3) Comparison with previous reporting year

Select from:

✓ Higher

## (9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

✓ Increase/decrease in business activity

## (9.2.7.5) Please explain

Our Business operations have increased in current year with regard to transmission activities which has lead to increase in water withdrawal in fresh water

## Brackish surface water/Seawater

(9.2.7.1) Relevance

Select from:

✓ Relevant

(9.2.7.2) Volume (megaliters/year)

474026.45

## (9.2.7.3) Comparison with previous reporting year

Select from:

✓ About the same

## (9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

✓ Increase/decrease in business activity

## (9.2.7.5) Please explain

We only use sea water in our Dhanu power plant for our operations, and rgus accounts more than 95% of our consumption. we have over 3% of decrease in sea water compared to previous Financial year

#### **Groundwater – renewable**

#### (9.2.7.1) **Relevance**

Select from:

✓ Relevant

## (9.2.7.2) Volume (megaliters/year)

76.07

#### (9.2.7.3) Comparison with previous reporting year

Select from:

#### ✓ Much higher

## (9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

✓ Increase/decrease in business activity

#### (9.2.7.5) Please explain

Our Ground water withdrwal has increased significantly, this is due to increase in our business activities and we have deployed systems to ensure effective consumption in future

#### Groundwater - non-renewable

## (9.2.7.1) Relevance

Select from:

✓ Not relevant

(9.2.7.5) Please explain

we don't have any significant operations in water stress areas which qualifies as fossil water during this reporting period as per our initial assessments

#### **Produced/Entrained water**

## (9.2.7.1) **Relevance**

Select from:

✓ Not relevant

## (9.2.7.5) Please explain

Our operations doesn't inlcude any mining activities that generate produced water

## Third party sources

## (9.2.7.1) **Relevance**

Select from:

✓ Relevant

## (9.2.7.2) Volume (megaliters/year)

2.36

# (9.2.7.3) Comparison with previous reporting year

Select from:

✓ Much higher

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

✓ Increase/decrease in business activity

# (9.2.7.5) Please explain

This increase is due to increase in business activities and we intend to reduce the same in future by reducing the dependency on fresh water sources [Fixed row]

#### (9.2.8) Provide total water discharge data by destination.

#### Fresh surface water

## (9.2.8.1) Relevance

Select from:

Not relevant

#### (9.2.8.5) Please explain

We don't discharge any water to fresh water resources, we recycle the water and use it for horticulture purposes

#### Brackish surface water/seawater

# (9.2.8.1) Relevance

Select from:

Relevant

## (9.2.8.2) Volume (megaliters/year)

474026

# (9.2.8.3) Comparison with previous reporting year

Select from:

✓ Much lower

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

✓ Increase/decrease in business activity

#### (9.2.8.5) Please explain

Seawater is used for cooling activity at the costal thermal power plant and post chlorine shock treatment 100% returned to sea with negligible losses or variation in quality including temperature. Reduction in Qty due to change in Output compared to previous year.

#### Groundwater

## (9.2.8.1) Relevance

Select from:

✓ Not relevant

## (9.2.8.5) Please explain

We don't discharge any water to fresh water resources, we recycle the water and use it for horticulture purposes

## Third-party destinations

# (9.2.8.1) Relevance

Select from:

✓ Not relevant

## (9.2.8.5) Please explain

We don't discharge any water to fresh water resources, we recycle the water and use it for horticulture purposes [Fixed row]

## (9.2.9) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

## **Tertiary treatment**

Select from:

✓ Not relevant

## (9.2.9.6) Please explain

Our operations predominately focus on tranmissions which doesn't require teritiary treatment and only the water used in power plant requires the treatment which shall be a secondary treatment

## Secondary treatment

## (9.2.9.1) Relevance of treatment level to discharge

Select from:

Relevant

## (9.2.9.2) Volume (megaliters/year)

474026.45

# (9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

✓ Much lower

## (9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

✓ Increase/decrease in business activity

# (9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

**☑** 100%

#### (9.2.9.6) Please explain

At our Dahanu Thermal power plant we use seawater for indirect cooling, we treat seawater with cholorine shock treatment. Tertiary treatment was applied to 100% of our total sea water discharges in the reporting period. All discharge volumes were subject to strict water quality controls before being released to the nearby waterbodies. The quantities of seawater as compared to last year are about the same as, last reporting year 488,105.57 megalitres were treated to tertiary level and in the reporting period 474026.459 megalitres were treated to secondary level.

#### **Primary treatment only**

# (9.2.9.1) Relevance of treatment level to discharge

Select from:

Not relevant

#### (9.2.9.6) Please explain

Our operations predominately focus on tranmissions which doesn't require teritiary treatment and only the water used in power plant requires the treatment which shall be a secondary treatment

#### Discharge to the natural environment without treatment

#### (9.2.9.1) Relevance of treatment level to discharge

Select from:

✓ Not relevant

#### (9.2.9.6) Please explain

Our operations predominately focus on tranmissions which doesn't require teritiary treatment and only the water used in power plant requires the treatment which shall be a secondary treatment

#### Discharge to a third party without treatment

#### (9.2.9.1) Relevance of treatment level to discharge

#### Select from:

#### ✓ Not relevant

#### (9.2.9.6) Please explain

Our operations predominately focus on tranmissions which doesn't require teritiary treatment and only the water used in power plant requires the treatment which shall be a secondary treatment

#### Other

#### (9.2.9.1) Relevance of treatment level to discharge

Select from:

✓ Not relevant

#### (9.2.9.6) Please explain

Our operations predominately focus on transmissions which doesn't require tertiary treatment and only the water used in power plant requires the treatment which shall be a secondary treatment [Fixed row]

(9.2.10) Provide details of your organization's emissions of nitrates, phosphates, pesticides, and other priority substances to water in the reporting year.

#### (9.2.10.1) Emissions to water in the reporting year (metric tons)

0

### (9.2.10.2) Categories of substances included

Select all that apply

✓ Nitrates

✓ Phosphates

Pesticides

☑ Priority substances listed under the EU Water Framework Directive

#### (9.2.10.3) List the specific substances included

Our operations will generate suspended solids, oil and grease, Zinc, Chrominum, Phosphate, and other corrosion inhibiting materials. All these chemicals are within the limits and the waste water generated is treated through our Effluent Treatment plant (ETP) before discharging in sea). The water discharge is limited to our Dhanu operations which we intend to carve out from our business.

## (9.2.10.4) Please explain

We have zero emissions to water in the reporting period and all the applicable regulatory requirements are in adherence [Fixed row]

# (9.3) In your direct operations and upstream value chain, what is the number of facilities where you have identified substantive water-related dependencies, impacts, risks, and opportunities?

## **Direct operations**

## (9.3.1) Identification of facilities in the value chain stage

Select from:

Z Yes, we have assessed this value chain stage and identified facilities with water-related dependencies, impacts, risks, and opportunities

#### (9.3.2) Total number of facilities identified

1

## (9.3.3) % of facilities in direct operations that this represents

Select from:

✓ 100%

(9.3.4) Please explain

AESL calculated the values for 2022, 2023 & 2024 of facilities in water stressed areas using the water tool WRI Aqueduct 3.0. In this analysis, AESL identified which of their facilities are in water-stressed areas. Based on the classification provided by the WRI "Aqueduct Water Risk Atlas", the water stressed areas are those where the ratio between the total annual withdrawal of surface water or groundwater for different uses (civil, industrial, agricultural and livestock) and the total annual renewable water supply available ("base water stress", understood, therefore, as the level of competition between all users) is high (40-80%) or extremely high (80%). The information obtained allows us to: • compare our water needs with water availability at India and watershed levels; • determine the relevance of water risks in our portfolio in order to prioritize action; and • enable effective communications with our internal and external stakeholders. Although 11 transmission sub-stations operate in water stressed areas, dependency on water is negligible as 99% Water consumption is at 500MW thermal power plant for cooling (sea-water). Dahanu is the costal thermal power plant that uses sea water for cooling purpose which is returned back after negligible losses in Qty & Quality as per MPCB approved parameters. In the reporting period 3248.48 MU's were generated at Dahanu power plant out of total sold electricity of 9,916 MU's during the reporting period, We have identified 1 generating thermal power plant in the Indian West coast river basin that are impacted by water risks as per WRI Aqueduct tool 3.0, which is subject to inherent water risk due to regulatory restrictions in our value chain with the potential to have a substantive impact on our operations. This plant currently contributes to 25% of the power supplied by AESL to Mumbai region.

## Upstream value chain

## (9.3.1) Identification of facilities in the value chain stage

Select from:

No, we have not assessed this value chain stage for facilities with water-related dependencies, impacts, risks, and opportunities, but we are planning to do so in the next 2 years

## (9.3.4) Please explain

In our ongoing efforts to enhance transparency and accountability, we are conducting a value chain assessment to identify our critical supplies. This comprehensive review will enable us to pinpoint areas of significant environmental and social impact within our supply chain, following which we will conduct on-site assessments for our critical suppliers to gather more detailed information and verify our findings. [Fixed row]

(9.3.1) For each facility referenced in 9.3, provide coordinates, water accounting data, and a comparison with the previous reporting year.

Row 1

#### (9.3.1.1) Facility reference number

## (9.3.1.2) Facility name (optional)

We have Adani 500MW Dahanu Thermal Power station [A-DTPS] operating in India West Coast basin in Maharashtra as per WRI Aqueduct tool 3.0.

## (9.3.1.3) Value chain stage

Select from:

✓ Direct operations

#### (9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

- ✓ Dependencies
- ✓ Impacts
- 🗹 Risks
- ✓ Opportunities

# (9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

✓ Yes, withdrawals and discharges

## (9.3.1.7) Country/Area & River basin

#### India

☑ Other, please specify :India West Coast basin in Maharashtra as per WRI Aqueduct tool

# (9.3.1.8) Latitude

#### 19.957409

## (9.3.1.9) Longitude

72.749418

#### (9.3.1.10) Located in area with water stress

Select from:

🗹 No

#### (9.3.1.11) Primary power generation source for your electricity generation at this facility

Select from:

🗹 Coal - hard

#### (9.3.1.13) Total water withdrawals at this facility (megaliters)

474026.46

## (9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

✓ About the same

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

1728.62

(9.3.1.16) Withdrawals from brackish surface water/seawater

474026.46

(9.3.1.17) Withdrawals from groundwater - renewable

0

#### (9.3.1.18) Withdrawals from groundwater - non-renewable

#### 0

#### (9.3.1.19) Withdrawals from produced/entrained water

0

## (9.3.1.20) Withdrawals from third party sources

0

## (9.3.1.21) Total water discharges at this facility (megaliters)

474026.46

# (9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

✓ About the same

## (9.3.1.23) Discharges to fresh surface water

0

#### (9.3.1.24) Discharges to brackish surface water/seawater

474026.46

## (9.3.1.25) Discharges to groundwater

0

## (9.3.1.26) Discharges to third party destinations

0

#### (9.3.1.27) Total water consumption at this facility (megaliters)

#### 1728.62

#### (9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

✓ About the same

#### (9.3.1.29) Please explain

Please note: C W - D Where, C total consumption W total withdrawals D total discharges In the context of AESL operations & working conditions: 1.Any change less than /-10% is termed about the same 2. Change between /10% to /- 25% is termed higher or lower depending on the trend 3. Change above /- 25% is termed a much higher or much lower depending on the trend. Change in Total water withdrawal: FY23-24: 475,755.08 Mega Liter [ML] FY22-23: 489,955.60 Mega Liter [ML] Change: FY23-FY24 14,200.52 ML 14,200.52 / 489,955.60 2.8% decreased i.e. about the same Change in Total water discharge: FY23-24: 474,026.46 Mega Liter [ML] FY22-23: 488,105.57 Mega Liter [ML] Change: FY23-FY24 14,200.52 ML 10,079.11 / 488,105.57 2.9% decreased i.e. about the same The lower consumption volume can be primarily attributed to Increases in water efficiency measures, which have also contributed to the decrease in water consumption. We expect water consumption to continue decreasing or remain the same with the implementation of the remainder of our 2020-2025 sustainability strategy, including water-smart processes, water circularity and optimised water management to continuously improve the water usage ratio.

#### Row 2

#### (9.3.1.1) Facility reference number

Select from:

✓ Facility 2

#### (9.3.1.2) Facility name (optional)

#### (9.3.1.3) Value chain stage

Select from:

✓ Upstream value chain

## (9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☑ Dependencies

## (9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

✓ Yes, withdrawals and discharges

## (9.3.1.7) Country/Area & River basin

#### Afghanistan

☑ Other, please specify :multiple pan India basis

#### (9.3.1.10) Located in area with water stress

Select from:

🗹 No

# (9.3.1.11) Primary power generation source for your electricity generation at this facility

Select from:

✓ Not applicable

## (9.3.1.13) Total water withdrawals at this facility (megaliters)

12345

# (9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

✓ About the same

## (9.3.1.21) Total water discharges at this facility (megaliters)

#### 12345

#### (9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

✓ About the same

#### (9.3.1.27) Total water consumption at this facility (megaliters)

12345

#### (9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

✓ About the same

## (9.3.1.29) Please explain

Please note: C W - D Where, C total consumption W total withdrawals D total discharges In the context of AESL operations & working conditions: 1. Any change less than /-10% is termed about the same 2. Change between /10% to /- 25% is termed higher or lower depending on the trend 3. Change above /- 25% is termed a much higher or much lower depending on the trend. We assessed 86 supplier partners in the reporting period. [Add row]

(9.3.2) For the facilities in your direct operations referenced in 9.3.1, what proportion of water accounting data has been third party verified?

#### Water withdrawals - total volumes

## (9.3.2.1) % verified

Select from: ✓ 76-100

## (9.3.2.2) Verification standard used

Our water withdrawals-by volume are assured by third party - "TUV India Pvt Ltd" on page number 191 of the pdf of the Sustainability Report.

#### Water withdrawals - volume by source

## (9.3.2.1) % verified

Select from:

76-100

#### (9.3.2.2) Verification standard used

Our water withdrawals- volume by source are assured by third party - "TUV India Pvt Ltd" on page number 191 of the pdf of the Sustainability Report.

#### Water withdrawals - quality by standard water quality parameters

#### (9.3.2.1) % verified

Select from:

76-100

#### (9.3.2.2) Verification standard used

Our water withdrawals- volume by source are assured by third party - "TUV India Pvt Ltd" on page number 191 of the pdf of the Sustainability Report.

#### Water discharges - total volumes

## (9.3.2.1) % verified

Select from:

76-100

(9.3.2.2) Verification standard used

Our water discharges-total volumes are assured by third party - "TUV India Pvt Ltd" on page number 372 of the pdf of the Integrated Report.

#### Water discharges – volume by destination

## (9.3.2.1) % verified

Select from:

76-100

#### (9.3.2.2) Verification standard used

Our water discharges-volumes by destination are assured by third party - "TUV India Pvt Ltd" as stated on page number 372 of the pdf of the Integrated Report.

#### Water discharges – volume by final treatment level

#### (9.3.2.1) % verified

Select from:

76-100

#### (9.3.2.2) Verification standard used

Our water discharges-volume by final treatment level are assured by third party - "TUV India Pvt Ltd" as stated on page number 372 of the pdf of the Integrated Report.

#### Water discharges - quality by standard water quality parameters

## (9.3.2.1) % verified

Select from:

76-100

#### (9.3.2.2) Verification standard used

Our water discharges-volume by final treatment level are assured by third party - "TUV India Pvt Ltd" as stated on page number 372 of the pdf of the Integrated Report.

#### Water consumption - total volume

# (9.3.2.1) % verified

Select from:

76-100

# (9.3.2.2) Verification standard used

Our water consumption are assured by third party - "TUV India Pvt Ltd" as stated on page number 372 of the pdf of the Integrated Report and on page number 191 of pdf of the Sustainability Report. [Fixed row]

## (9.5) Provide a figure for your organization's total water withdrawal efficiency.

## (9.5.1) Revenue (currency)

172183100000

(9.5.2) Total water withdrawal efficiency

361556.60

## (9.5.3) Anticipated forward trend

We expect our revenue to grow in the next few years along with water efficiency in our operations. Continuous use of water efficient equipments like Micro-irrigation systems has further helped us in minimising our water consumption. [Fixed row]

# (9.7.1) Provide the following intensity information associated with your electricity generation activities.

#### (9.7.1.1) Water intensity value (m3/denominator)

145.92

#### (9.7.1.2) Numerator: water aspect

Select from:

✓ Other, please specify :Seawater withdrawl

## (9.7.1.3) Denominator

Select from:

✓ Other, please specify :MWh generated

## (9.7.1.4) Comparison with previous reporting year

Select from:

✓ About the same

## (9.7.1.5) Please explain

In the context of AESL operations & working conditions: 1.Any change less than /-10% is termed about the same 2. Change between /10% to /- 25% is termed higher or lower depending on the trend 3. Change above /- 25% is termed a much higher or much lower depending on the trend. The seawater intensity increased from 140 KL/ MWh generated in FY2023 to 145.92 KL/MWh generated in FY2024. change in FY24 compared from FY23: (145-140)/140 4.6% increase i.e. about same as per definition above of the company.

#### Row 2

# (9.7.1.1) Water intensity value (m3/denominator)

0.53

#### (9.7.1.2) Numerator: water aspect

#### Select from:

✓ Freshwater consumption

#### (9.7.1.3) Denominator

Select from:

🗹 MWh

#### (9.7.1.4) Comparison with previous reporting year

Select from:

✓ About the same

## (9.7.1.5) Please explain

The forward trend is expected to remain same or Reduce further with increase in revenue and continuation of water efficient process, along with Continual awareness on the sensitivity of Water, use of water efficient equipment's like Micro-irrigation systems has further help in limiting the water consumption. The Freshwater intensity increased from 0.527 KL/ MWh generated in FY2023 to 0.530 KL/MWh generated in FY2024. change in FY24 compared from FY23: (0.530 -0.527)/0.527 0.55% increase i.e. about same as per definition above of the company.

#### Row 3

# (9.7.1.1) Water intensity value (m3/denominator)

12.27

## (9.7.1.2) Numerator: water aspect

Select from:

✓ Freshwater consumption

## (9.7.1.3) Denominator

Select from:

✓ Other, please specify :kL/ million INR revenue

Select from:

✓ About the same

## (9.7.1.5) Please explain

In the context of AESL operations & working conditions: 1.Any change less than /-10% is termed about the same 2. Change between /10% to /- 25% is termed higher or lower depending on the trend 3. Change above /- 25% is termed a much higher or much lower depending on the trend. Calculations: A) Total Fresh Water in Previous year [FY2023] was 1842970 KL due to self generation of 3499 Million units B)Total Fresh water consumed in Current year [FY2024] is 2112006 KL due to self generation of 3248.5 Million units, i.e. 7.16% Less as compared to previous year. C) Change in Freshwater (B - A) 2112006 - 1842970 269036 KL 269036/1842970 14.66% increase compared to previous year D) Change in Output [ Revenue generated] in FY2024 compared to FY2023 ( ) INR - 250 Million Kwh 7.16% Decrease compared to previous year. E) FY2024 Feshwater Intensity 1842970/138404.6 13.32 KL / Million INR Revenue; with Revenue of 138404.6 Million INR E) FY2023 Feshwater Intensity 2112006/172183.1 12.27 KL/ Million INR Revenue; with Revenue of 172183.1 Million INR F) % change in Fresh water consumption intensity C / E x 100 (12.27-13.32) x 100 / 13.32 7.88% Reduction compared to previous year [Add row]

#### (9.13) Do any of your products contain substances classified as hazardous by a regulatory authority?

#### (9.13.1) Products contain hazardous substances

Select from:

🗹 No

#### (9.13.2) Comment

Due to nature of the business we are in i.e. Generation, Purchase, Transmission & Distribution of Electricity. Our product/service does not have hazardous substance. But we do use products such as oil and grease for our subsation components hence we at AESL segregate and dispose the wastes generated as per the directives of State Pollution Control Board(s) of respective states where we have operations. Also a per our Company policy we don't use any Single use plastic and are peridocally assessed and certified as Single Use plastic free by M/s. Bureau Veritas India Pvt. Ltd for our generation @ Dahanu,& by M/s. The Confederation of Indian Industry (CII) for Transmission & Distribution sites including corporate office. Adani Transmission is also certified for Zero Waste to Landfill YoY by M/s. Intertek India since 2022. [Fixed row]

#### (9.14.1) Products and/or services classified as low water impact

Select from:

🗹 Yes

#### (9.14.2) Definition used to classify low water impact

The current water withdrawal intensity of India's power sector (excluding hydroelectricity) is largely driven by thermal power plants using once-through cooling systems. Withdrawal intensity could be reduced by upgrading plant cooling technology (Council on Energy, Environment and Water, 2017) and by supporting the development less water-intensive generation technologies (European Wind Energy Association, 2014; National RenewableEnergy Laboratory, 2015). For instance, the operational withdrawal intensity of solar PV in India is around0.08 m3/MWh (primarily related to panel cleaning), which is only 0.5% of the thermal average, while for wind, the water withdrawal is zero. The quantitative analysis presented in this brief examines changes in the freshwater intensity of thermal andrenewable power generation for the four scenarios presented earlier. It also estimates the total water withdrawaland consumption for different power generation options across the scenarios, based on trends in cooling technologyand power plant efficiency11. The results, referenced to a 2014 baseline, are listed below (Figure 3).» IRENA» Reference» 2030: water withdrawal intensity would decrease by about 83%, and waterconsumption intensity would decrease by 7%. IRENA REmap 2030: water withdrawal intensity would decrease by about 84%, and water consumptionintensity would decrease by 19%.» CEA Scenario 2 2027: water withdrawal intensity would decrease by about 71%, and water consumptionintensity would decrease by 25%.

## (9.14.4) Please explain

AESL integrates different water issues into the long-term business objectives such as water consumption, water reuse and a specific water requirement (I/kWh). In 2021, AESL announced its decarbonisation plan, bringing forward its Net-Zero target of 2050, which will decrease water withdrawals. This long-term commitment is the basis of the Strategic Plan, elaborated with a 3-year horizon and updated annually. It envisages the evolution towards renewable sources that are not dependent on the availability of water for their operation, an efficient use of water in thermoelectric plants, and the reduction of generation from fossil fuels. [Fixed row]

# (9.15.1) Indicate whether you have targets relating to water pollution, water withdrawals, WASH, or other water-related categories.

	Target set in this category
Water pollution	Select from: ✓ Yes
Water withdrawals	Select from: ✓ Yes
Water, Sanitation, and Hygiene (WASH) services	Select from: ✓ Yes
Other	Select from: ✓ Yes

[Fixed row]

# (9.15.2) Provide details of your water-related targets and the progress made.

## Row 1

# (9.15.2.1) Target reference number

Select from:

✓ Target 1

# (9.15.2.2) Target coverage

Select from:

✓ Organization-wide (direct operations only)

# (9.15.2.3) Category of target & Quantitative metric

#### Water pollution

✓ Other water pollution, please specify :Ensuring Water discharged to the sea is within the approved temperature rise limit of 5deg C above ambient @ AESL's Dahanu's Thermal power station

## (9.15.2.4) Date target was set

03/31/1996

(9.15.2.5) End date of base year

12/30/1996

(9.15.2.6) Base year figure

5

# (9.15.2.7) End date of target year

03/30/2030

## (9.15.2.8) Target year figure

4.9

#### (9.15.2.9) Reporting year figure

3.9

# (9.15.2.10) Target status in reporting year

Select from:

✓ Achieved and maintained

(9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

✓ Sustainable Development Goal 6

☑ Other, please specify :Sustainable Development Goal 12

#### (9.15.2.13) Explain target coverage and identify any exclusions

Our coastal thermal power plant is withdrawing sea water for indirect cooling purpose has insignificant physicochemical changes, including temperature changes, which is controlled so as not to exceed the established discharge limits[ max 5 deg C above ambient temperature]. cooling purpose and discharged back into the sea after chlorine shock treatment. The monitoring is carried out 24 X 7. (500MW coastal thermal powerplant is having ZLD status meaning Zero liquid discharge out-side the fence.) It is important in view of response towards Company's alignment to SDG-6 & SDG-12. Presently Water quantity of discharge at Transmission business and Distribution business (Receiving & Distribution sub-stations, Offices and customer care centers) is not quantified and as it is only domestic sewage effluent. This is a compliance target as per Consent to operate granted by Maharashtra State Pollution Control Board ONLY for AESL's Thermal power plant @ Dahanu w.r.t. Sea water discharge tempera

### (9.15.2.15) Actions which contributed most to achieving or maintaining this target

Effective monitoring and control strategies are in place to mitigate the thermal impact on marine ecosystems & to ensure regulatory compliance on real time basis. We have Implemented a continuous temperature monitoring systems at multiple Thermal Discharge points with sensors that are capable of withstanding harsh marine environments and providing accurate and reliable data provide real-time data on thermal discharge levels into a centralized SCADA platform which facilitates comprehensive analysis and reporting. Advanced analytics and machine learning algorithms predict potential non-compliance events and trigger. A dynamic control system adjusts the discharge rates during different times of the day or under varying ambient temperature conditions and helps in maintaining thermal discharge within compliance limits. Plus, the Designed and engineered thermal mixing zones at the discharge points enhances the dispersion and dilution of thermal plumes along with mixing of ambient water.

#### (9.15.2.16) Further details of target

Conducting regular environmental impact assessments and compliance audits ensures adherence to regulatory limits. Providing detailed reports to regulators and stakeholders demonstrates the power station's commitment to environmental stewardship. Monitoring and controlling the thermal discharge of coastal thermal power stations is essential to minimize environmental impacts and ensure regulatory compliance. By implementing continuous monitoring systems, optimizing cooling processes by means of zig zag water discharge channels, and engaging with stakeholders, power stations operates sustainably while protecting marine ecosystems.

#### Row 2

#### (9.15.2.1) Target reference number

Select from:

✓ Target 2

## (9.15.2.2) Target coverage

Select from:

✓ Organization-wide (direct operations only)

## (9.15.2.3) Category of target & Quantitative metric

#### Water consumption

☑ Other water consumption, please specify :Total water consumption [ML] per Revenue [Million INR]

(9.15.2.4) Date target was set

03/31/2023

(9.15.2.5) End date of base year

03/31/2022

(9.15.2.6) Base year figure

3.94

(9.15.2.7) End date of target year

03/30/2030

(9.15.2.8) Target year figure

3.28

(9.15.2.9) Reporting year figure

2.77

(9.15.2.10) Target status in reporting year

#### ✓ Achieved

#### (9.15.2.11) % of target achieved relative to base year

177

## (9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

✓ Sustainable Development Goal 6

#### (9.15.2.13) Explain target coverage and identify any exclusions

In FY2023, AESL set a target to reduce our total water withdrawals by 16.6% by 2030 w.r.t. FY2022 baseline. Progress is monitored using megaliters/Million INR Revenue as the unit of measurement. This target applies company-wide with no exclusions in our direct operations, and is expected to extend to our Tier 1 (direct) suppliers with a substantive impact on water security as a contractual obligation within the next 2 years. The motivation for the target stemmed from a corporate objective on maximizing future cost savings (reduced water bills, operational costs, and regulatory costs), while the target is also in alignment with our Internal water policy commitment to increase freshwater availability in key river basins.

## (9.15.2.15) Actions which contributed most to achieving or maintaining this target

Effective monitoring, Recycling of Domestic water and using it in process and increase in Revnue helped acheive the target.

#### (9.15.2.16) Further details of target

We anticipate to continue to have this target and ensure to maintatin the same further.

#### Row 3

## (9.15.2.1) Target reference number

Select from:

✓ Target 3

#### (9.15.2.2) Target coverage

Select from:

✓ Organization-wide (direct operations only)

## (9.15.2.3) Category of target & Quantitative metric

#### Water consumption

☑ Other water consumption, please specify :Freshwater consumption [KL] per Revenue [Million INR]

# (9.15.2.4) Date target was set

03/31/2023

(9.15.2.5) End date of base year

03/31/2022

(9.15.2.6) Base year figure

15.16

(9.15.2.7) End date of target year

03/30/2030

#### (9.15.2.8) Target year figure

12.89

# (9.15.2.9) Reporting year figure

12.78

# (9.15.2.10) Target status in reporting year

Select from:

#### Achieved

#### (9.15.2.11) % of target achieved relative to base year

105

#### (9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

✓ Sustainable Development Goal 6

#### (9.15.2.13) Explain target coverage and identify any exclusions

In FY2023, AESL set a intensity target to reduce our Freshwater consumption [KL] per Revenue [Million INR] by 15% by 2030 w.r.t. FY2022 baseline. Progress is monitored using Kiloliters/Million INR as the unit of measurement. This target applies companywide with no exclusions in our direct operations, and is expected to extend to our Tier 1 (direct) suppliers with a substantive impact on water security as a contractual obligation within the next 2 years. The motivation for the target stemmed from a corporate objective on maximizing future cost savings (reduced water bills, operational costs, and regulatory costs), while the target is also in alignment with our water policy commitment to increase freshwater availability in key river basins.

#### (9.15.2.15) Actions which contributed most to achieving or maintaining this target

Water intensity refers to the amount of water used per unit of electricity generated. Managing this intensity is essential for minimizing environmental impact, reducing operational costs, and ensuring regulatory compliance. Recycling and reusing wastewater within the plant decreased overall water demand. closed-loop cooling systems, where water is recirculated rather than discharged, helps in maintaining water intensity. These systems typically employ heat exchangers & condensers to cool & recycle water, minimizing water loss & intake. Recovering and reusing condensate from steam turbines reduces the need for additional water and improves the overall water-use efficiency. Investing in advanced water management technologies, such as real-time water monitoring systems and automated control systems, allows for precise tracking and management of water use. Implementing robust maintenance protocols ensures the integrity of the water systems contributes to maintaining low water intensity

## (9.15.2.16) Further details of target

Training employees on efficient water use practices and raising awareness about the importance of water conservation lead to more mindful water usage. Engaged and informed employees contribute to water-saving initiatives and report any inefficiencies. Maintaining water intensity at thermal power stations is a multifaceted endeavor that involves optimizing cooling systems, recycling wastewater, adopting closed-loop and condensate recovery systems, leveraging advanced technologies, and ensuring regular maintenance. By implementing these strategies, AESL's thermal power plants significantly reduce their water consumption, contributing to environmental sustainability and operational efficiency. Efficient water management not only aligns with regulatory requirements but also supports the long-term viability of thermal power generation.

# (9.15.2.1) Target reference number

Select from:

✓ Target 4

## (9.15.2.2) Target coverage

Select from:

Business activity

## (9.15.2.3) Category of target & Quantitative metric

#### Water withdrawals

☑ Other water withdrawals, please specify :Reduction in seawater withdrawl [KL] per MWh electricity generated @ our Dahanu Thermal power plant

#### (9.15.2.4) Date target was set

03/31/2023

(9.15.2.5) End date of base year

03/31/2022

#### (9.15.2.6) Base year figure

139.45

(9.15.2.7) End date of target year

03/30/2030

(9.15.2.8) Target year figure

## (9.15.2.9) Reporting year figure

145.92

#### (9.15.2.10) Target status in reporting year

Select from:

Underway

#### (9.15.2.11) % of target achieved relative to base year

-54

## (9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

✓ Sustainable Development Goal 6

## (9.15.2.13) Explain target coverage and identify any exclusions

In FY2023, AESL set an Intensity target to reduce our Sea water withdrawals by 1%YoY by 2030 w.r.t. FY2022 as baseline. Progress is monitored using KL/MWh Electricity generated as the unit of measurement. This target applies to only to Generating plant @ Dahanu of the company with no exclusions in our direct operations @ Dahanu, and is NOT expected to extend to our Tier 1 (direct) suppliers as they don't have a substantive impact on SEA water. The motivation for the target stemmed from a corporate objective on maximizing future cost savings (reduced water bills, operational costs, and regulatory costs), while the target is also in alignment with our Internal water policy commitment to increase resilience in key river basins. We have identified initiatives to reduce the same and soon we will be on track to meet this target. For the current year, due to Plant Load Factor (PLF) decrease & reduction in Plant Availability, there is a slight increase in the intensity tracked.

## (9.15.2.14) Plan for achieving target, and progress made to the end of the reporting year

Target was not meet due to increase breakdown of the boiler and reduced offtake as per Stateload dispatch center based on merit order dispatch. Plant availablity was reduced from 95% to 92% this year and load factor was also reduced leading to increased water intensity to mainiating the cooling of the plant. Going ahead we antcipate to improve on the same.

#### (9.15.2.16) Further details of target

#### Row 5

(9.15.2.1) Target reference number

Select from:

✓ Target 5

#### (9.15.2.2) Target coverage

Select from:

✓ Organization-wide (direct operations only)

## (9.15.2.3) Category of target & Quantitative metric

#### Water, Sanitation, and Hygiene (WASH) services

Other WASH, please specify :Maintaining 100% sites monitoring population access to safely managed drinking water and sanitation services around our facilities and operations

# (9.15.2.4) Date target was set

03/31/2023

#### (9.15.2.5) End date of base year

12/30/2023

## (9.15.2.6) Base year figure

100

## (9.15.2.7) End date of target year

03/30/2030
#### (9.15.2.8) Target year figure

100

#### (9.15.2.9) Reporting year figure

100

## (9.15.2.10) Target status in reporting year

Select from:

✓ Achieved and maintained

## (9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

✓ Sustainable Development Goal 6

#### (9.15.2.13) Explain target coverage and identify any exclusions

Climate change is causing more frequent and severe extreme events, such as heatwaves, floods, and droughts, which pose health risks to people and disrupt services. Building resilience to these events requires access to basic services like water, sanitation, and hygiene (WASH). WASH services and behaviors are crucial for preventing disease and ensuring adequate hydration during extreme events. However, climate change also threatens WASH services, damaging infrastructure, contaminating water sources, and affecting wastewater treatment processes. Ensuring WASH services is essential for the Adani Energy Solutions Limited (AESL) in multiple ways, and regular monitoring and tracking are necessary to mitigate these risks.

## (9.15.2.15) Actions which contributed most to achieving or maintaining this target

The changes in climate that have already occurred means there is an increasing frequency, and in some cases increasing severity, of extreme events – heatwaves, floods, droughts, wildfires, windstorms and associated storm surges – that cause illness, death and displacement of people, and disruption to services. Longer-term changes in average temperatures, precipitation and rising sea-levels will amplify threats that are already being felt. Climate change and WASH are related in three broad ways. 1) Access to WASH services and practice of hygiene behaviours are central to building health resilience to climate, and to help societies cope with extreme events and support their recovery in the long-term. They also support the ability to cope with slower-onset events by preventing disease and ensuring adequate hydration with increasing temperatures. 2) WASH services & behaviours are themselves substantially threatened by climate change and must be resilient to support building wider community

## (9.15.2.16) Further details of target

The Water, Sanitation, and Hygiene (WASH) program is a critical initiative that addresses the essential needs of clean water, adequate sanitation, and proper hygiene practices. For an Indian electric utility and its value chain, maintaining a robust WASH program is not only a corporate social responsibility but also a strategic move that aligns with sustainable development goals and enhances overall operational efficiency. Investing in infrastructure that supports clean water access, efficient sanitation systems, and hygiene facilities is paramount. This could include the installation of water purification systems, construction of toilets, and provision of handwashing stations at all company sites and associated supply chain locations. Educating employees and stakeholders about the importance of WASH and promoting best practices in water conservation, sanitation, and hygiene is essential for the program's success. Continuous monitoring and evaluation of the WASH program ensure that objectives are being met and areas for improvement are identified. This includes regular water quality testing, sanitation facility inspections, feedback mechanisms from employees & stakeholders. Access to clean water and proper sanitation reduces the incidence of illnesses, leading to a healthier workforce, increased productivity with reduced absenteeism, improve morale, and enhance overall operational efficiency demonstrates the AESL's commitment to the well-being of its employees, community.

## Row 6

### (9.15.2.1) Target reference number

Select from:

✓ Target 6

## (9.15.2.2) Target coverage

Select from:

✓ Organization-wide (direct operations only)

## (9.15.2.3) Category of target & Quantitative metric

#### Watershed remediation and habitat restoration, ecosystem preservation

✓ Other watershed remediation and habitat restoration, ecosystem preservation please specify :Creating carbon sink with habitat restoration and ecosystem preservation

## (9.15.2.4) Date target was set

#### 02/28/2022

## (9.15.2.5) End date of base year

02/28/2022

(9.15.2.6) Base year figure

2704

# (9.15.2.7) End date of target year

03/30/2030

(9.15.2.8) Target year figure

26250

(9.15.2.9) Reporting year figure

4949

## (9.15.2.10) Target status in reporting year

Select from:

Underway

(9.15.2.11) % of target achieved relative to base year

10

## (9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

✓ Sustainable Development Goal 6

## (9.15.2.13) Explain target coverage and identify any exclusions

Adani Energy Solutions Limited has set a goal to create a carbon sink by 2030 through habitat restoration and ecosystem preservation. The target is measured in tCO2/year, and progress is monitored across the company and its group companies, excluding Tier 1 suppliers. As a responsible business group, We aims to transition to a low-carbon and eventually carbon-neutral and net-zero business. The company recognizes the importance of trees as a carbon sink, enhancing biodiversity, and essential for a healthy planet and people. To achieve this, Adani Transmission has defined a year-on-year roadmap and will conduct regular audits and assurance exercises using technology like remote sensing, drones, high-resolution satellite imagery, and IoT sensors. The company will also provide annual progress updates on tree plantation and growth.

### (9.15.2.14) Plan for achieving target, and progress made to the end of the reporting year

In FY2023, AESL set a target to creating carbon sink with habitat restoration & ecosystem preservation by 2030 w.r.t. FY2022 as starting year. Progress is monitored using tCO2/year as the unit of measurement. This target applies to company-wide & Adani group companies with no exclusions in our direct operations and is NOT expected to extend to our Tier 1 (direct) suppliers. As a responsible business group Adani Transmission Ltd along with other Adani group companies action towards addressing climate change & its ambition to transition to a low-carbon and subsequently carbon neutral & net-zero business. We recognize that trees are an important carbon sink, they enhance biodiversity and are essential for a healthy planet & healthy people. Our pledge motivated and is aligned with India's NDC commitment under Paris Agreement where the country has committed to create additional carbon sink to sequester 2.5-3.0 billion tons of CO2.

## (9.15.2.16) Further details of target

All Adani Group companies have defined YoY roadmap to achieve the same. We will undertake an audit as well as third part assurance for the trees already planted. For the new plantations, which again will consist of mangroves as well as terrestrial trees, we will undertake periodic audit & assurance exercise using technology such as remote sensing/ monitoring by drones and high-resolution satellite imagery, as well as IoT sensors. We plan to undertake the next round of audit and assurance at the end of 2025 or earlier. This will yield important details like survival rates and the number of trees attaining maturity. Based on the results, we will update our pledge. For our monitoring activities from Corporate Agri Sustainability (CAS), we will appoint our internal horticulture audit team for confirmation of plantation and conservation as well as a third-party agency assurance will confirm the targets for the duration of pledge & beyond. We will provide annual progress updates on tree plantation and growth as per requirements of 1t.org pledge. [Add row]

# C10. Environmental performance - Plastics

# (10.1) Do you have plastics-related targets, and if so what type?

Targets in place
Select from: ✓ Yes

[Fixed row]

## C11. Environmental performance - Biodiversity

(11.2) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

## (11.2.1) Actions taken in the reporting period to progress your biodiversity-related commitments

Select from:

✓ Yes, we are taking actions to progress our biodiversity-related commitments

#### (11.2.2) Type of action taken to progress biodiversity- related commitments

Select all that apply

- ✓ Law & policy
- ✓ Species management
- Education & awareness
- ✓ Land/water protection
- ✓ Land/water management
- [Fixed row]

#### ✓ Livelihood, economic & other incentives

## (11.3) Does your organization use biodiversity indicators to monitor performance across its activities?

Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Select from: ✓ Yes, we use indicators	Select all that apply State and benefit indicators

Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
	<ul><li>✓ Pressure indicators</li><li>✓ Response indicators</li></ul>

[Fixed row]

## (11.4) Does your organization have activities located in or near to areas important for biodiversity in the reporting year?

## Legally protected areas

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

🗹 No

## (11.4.2) Comment

None of our sites are located in legally protected areas.

## **UNESCO World Heritage sites**

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

🗹 No

## (11.4.2) Comment

## **UNESCO Man and the Biosphere Reserves**

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

🗹 No

## (11.4.2) Comment

None of our sites are present at UNESCO Man and biosphere reserves

## **Ramsar sites**

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

🗹 No

## (11.4.2) Comment

None of our sites are located at the 85 sites identified by Ramsar convention.

## **Key Biodiversity Areas**

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

✓ Yes

## (11.4.2) Comment

In lieu of our Biodiversity commitment, we have identified areas where business operations intersect with biodiversity elements. This was done through a desk-based research, follwed by site-specific surveys, stakeholder consultations, utilisation of remote sensing and GIS Technology. Further, we utilised WWF's Biodiversity Risk Filter and The ENCORE tool to comprehensively understand biodiversity related impacts and dependencies. At AESL, biodiversity risks are integrated in the multidisciplinary company-wide risk assessment processes. As a result, we focus on avoiding ecologically sensitive zones for transmission line route, minimising biodiversity impact by reducing energy use, and restoring habitats. We do not have any negative impact on any IUCN Red List species and national conservation list species in any operating location. Part of 400 kV DC Solapur - Kolhapur @ Sangli, Transmission line in Maharashtra passess through Jawaharlal Nehru Bustard Sanctuary. The line is an important link to evacuate 2100MW RE Wind power from Sangli wind park. The route was been duly approved by Ministry of Environment Forest & Climate change [MOEFCC] and adequate bird diverters are provided to avoid potential avaian species loss.

## Other areas important for biodiversity

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

🗹 Yes

### (11.4.2) Comment

Adani Dahanu Thermal Power Station (area 848.91 hectares) is located in an eco-sensitive zone, surrounded by creeks in Coastal Dahanu town in Palghar district of Maharashtra. An assessment for biodiversity and ecosystem services was undertaken by Confederation of Indian Industry. Following the risk-based approach, materials were mapped along the relevance as per the cost of business. This enables us to identify the impact created by ADTPS for every ecosystem service provided. The study highlighted impacts in terms of land use, transport, water requirement, noise and dust from truck, vehicular movement. [Fixed row]

(11.4.1) Provide details of your organization's activities in the reporting year located in or near to areas important for biodiversity.

Row 1

## (11.4.1.2) Types of area important for biodiversity

Select all that apply

## (11.4.1.4) Country/area

Select from:

🗹 India

## (11.4.1.5) Name of the area important for biodiversity

Dahanu, Palghar district of Maharashtra

(11.4.1.6) **Proximity** 

Select from:

✓ Adjacent

## (11.4.1.8) Briefly describe your organization's activities in the reporting year located in or near to the selected area

The organization has a coal based thermal power plant at the location.

# (11.4.1.9) Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Select from:

☑ Yes, but mitigation measures have been implemented

## (11.4.1.10) Mitigation measures implemented within the selected area

Select all that apply

- Physical controls
- Operational controls
- ✓ Abatement controls
- Restoration
- ☑ Other, please specify :2 Crore Mangroves are planted and nurtured by the company,

# (11.4.1.11) Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

ADTPS, our coal-based thermal power plant lies in an eco-sensitive zone in Dahanu town, Palghar district of Maharashtra. In FY 2021-22, Confederation of Indian Industry (CII) conducted a biodiversity and ecosystem services assessment, to identify any site-specific biodiversity risks, covering: Core Zone-Township Plant Area Buffer Zone of 10 km radial distance from the project boundary An Ecosystem Service Matrix (ESM) was developed to assess the ecosystems in and around the project region, as well as the ecosystem services utilised by the project. Adopting the risk-based approach, the ecosystem services, materials were mapped along the relevance as per the cost of business. The study highlighted impacts in terms of variables such as land use, transport, water requirement, noise and dust from truck, vehicular movement. The tool not only identified the level of impacts but also assessed the dependency of ADTPS on each ecosystem vis-à-vis the ecosystem services provided by them. Post-assessment, a site-specific Natural Capital Action Plan (NCAP) was developed to improve the biodiversity quotient and mitigate the risks. The Biodiversity Index of the site was calculated using modified City Biodiversity Index (CBI) methodology of the Convention of Biological Diversity (CBD) for the following: 1. Native Biodiversity in the Project 2. Ecosystem Services provided by Biodiversity in the Project 3. Governance and Management of Biodiversity in the Project 4. Value Chain The outcome of the assessment was outlined as: 225 floral species and 144 faunal species were identified 5 bird species out of 95 categorised as Near Threatened were identified at these sites A score of 66/100 was assigned to ADTPS in FY 2021-22. Mitigation measures include: 1. Green belt -To provide various ecosystem services such as pollution control, carbon sequestration and soil enrichment 2. Ash Pond - To prevent release of ash into the atmosphere, aid in water recharge, habitat and nursery and pollution control 3. Creeks- To provide habitat to marine

#### Row 2

## (11.4.1.2) Types of area important for biodiversity

Select all that apply Key Biodiversity Areas

#### (11.4.1.4) Country/area

Select from:

India

## (11.4.1.5) Name of the area important for biodiversity

Jawaharlal Nehru Bustard Sanctuary in Sangli district of Maharashtra state. Rationale for qualifying as KBA: This site qualifies as a Key Biodiversity Area of international significance because it meets one or more previously established criteria and thresholds for identifying sites of biodiversity importance (including Important Bird and Biodiversity Areas, Alliance for Zero Extinction sites, and Key Biodiversity Areas)

## (11.4.1.6) Proximity

Select from:

✓ Overlap

## (11.4.1.7) Area of overlap (hectares)

99

## (11.4.1.8) Briefly describe your organization's activities in the reporting year located in or near to the selected area

AESL has part of 400 KV DC Solapur - Kolhapur @ Sangli, Transmission line in Maharashtra passess through Jawaharlal Nehru Bustard Sanctuary. The line is an important link to evacuate 2100MW RE Wind power from Sangli wind park. The route was been duly approved by Ministry of Environment Forest & Climate change [MOEFCC] and adequate bird diverters are provided to avoid potential avaian species loss.

# (11.4.1.9) Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Select from:

☑ Yes, but mitigation measures have been implemented

## (11.4.1.10) Mitigation measures implemented within the selected area

Select all that apply

- ✓ Site selection
- Project design
- ✓ Physical controls
- Operational controls

# (11.4.1.11) Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

When planning a transmission line through a key biodiversity area like the Jawaharlal Nehru Bustard Sanctuary in Solapur, several critical steps and considerations are involved to minimize environmental impact and ensure the protection of biodiversity. Our Site Selection Process 1. Initial Assessment: • Determine the

boundaries and ecological significance of the area, focusing on species that are vulnerable or irreplaceable. Conducted thorough environmental baseline studies to understand the existing conditions, including flora, fauna, and habitat types. 2. Alternative Route Analysis: • Developed multiple route options for the transmission line, considering factors like distance, cost, and environmental impact. • Evaluate each route based on environmental, engineering, and economic criteria for potential impacts on wildlife, habitats, and local communities. 3. Stakeholder Consultation: • Engaged & Involved local communities, conservationists, and other stakeholders in the decision-making process to gather input and address concerns. • Incorporated feedback from consultations into the final route selection to ensure it aligns with conservation goals and community interests. Project Design 1. Physical Controls: • Minimizing Habitat Disruption: Design the transmission line to avoid critical habitats and minimize land clearance. Made use of existing corridors where possible and provided bird diverters as guided by the Operational Controls: • Established periodic monitoring programs to track the impact on biodiversity and ensure EIA study report and district forest department. 2. compliance with environmental standards jointly with Sangli district forest department. Use adaptive management practices to modify operations based on monitoring results and emerging conservation needs as guided by Sangli district forest officials and NGO onboarded. 3. Mitigation Measures: • We opted to restore any disturbed habitats to their natural state post-construction. We implement biodiversity offset programs to compensate for any unavoidable impacts by enhancing or protecting other areas with help of conservation NGO and District forest officials. Specific Considerations for the Jawaharlal Nehru Bustard Sanctuary Given the sanctuary's importance for the Great Indian Bustard, specific measures to protect this critically endangered species we ensured that essentially avoiding nesting areas and implementing measures such as Bird diverter to reduce collision risks with power lines. • We schedule the construction activities outside of

avoiding nesting areas and implementing measures such as Bird diverter to reduce collision risks with power lines. • We schedule the construction activities outside c critical breeding or migration periods to minimize disturbance to wildlife. By carefully considering these factors, the transmission line project was designed and implemented in a way that balances infrastructure development to evacuate 2100MW RE Wind power generated in the Sangli district, with the conservation of biodiversity in the Jawaharlal Nehru Bustard Sanctuary.

[Add row]

## C13. Further information & sign off

(13.1) Indicate if any environmental information included in your CDP response (not already reported in 7.9.1/2/3, 8.9.1/2/3/4, and 9.3.2) is verified and/or assured by a third party?

Other environmental information included in your CDP response is verified and/or assured by a third party
Select from: ✓ Yes

[Fixed row]

(13.1.1) Which data points within your CDP response are verified and/or assured by a third party, and which standards were used?

Row 1

## (13.1.1.1) Environmental issue for which data has been verified and/or assured

Select all that apply

✓ Climate change

✓ Water

- Plastics
- ✓ Biodiversity

(13.1.1.2) Disclosure module and data verified and/or assured

#### Introduction

✓ All data points in module 1

#### (13.1.1.3) Verification/assurance standard

#### **General standards**

✓ ISAE 3000

☑ ISAE 3410, Assurance Engagements on Greenhouse Gas Statements

#### (13.1.1.4) Further details of the third-party verification/assurance process

During the assurance engagement, a risk-based approach was adopted and the third party focused on verification efforts with respect to disclosed KPI's. The third party verified the KPI's and assessed the robustness of the underlying data management system, information flows, and controls. The detailed assurance/verification process was inclusve of: i. Examining and reviewing the documents, data, and other information made available by AESL for non-financial KPI's (non-financial disclosures) ii. Conducting interviews with key representatives, including data owners and decision- makers from different functions of the AESL during the verification iii. Performing sample-based reviews of the mechanisms for implementing the sustainability- related policies and data management (qualitative and quantitative) iv. Reviewing the level of adherence to principles of GRI standards

#### (13.1.1.5) Attach verification/assurance evidence/report (optional)

ESG Assurance\_AESL\_.pdf [Add row]

(13.2) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

Additional information
AESL's Sustainability report 2024 includes all the details of AESL's performance, targets, initiatives across ESG parameters.

[Fixed row]

(13.3) Provide the following information for the person that has signed off (approved) your CDP response.

# (13.3.1) Job title

Managing Director

(13.3.2) Corresponding job category

Select from: Board/Executive board [Fixed row]