TÜRK HAVACILIK VE UZAY SANAYİİ A.Ş.

2024 CDP Corporate Questionnaire 2024

Word version

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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03/11/2025, 08:40 am

Contents

C1. Introduction

(1.1) In which language are you submitting your response?

Select from:

☑ English

(1.2) Select the currency used for all financial information disclosed throughout your response.

Select from:

☑ USD

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

(1.3.2) Organization type

Select from:

☑ Privately owned organization

(1.3.3) Description of organization

Turkish Aerospace (TUSAŞ – Türk Havacılık ve Uzay Sanayii A.Ş in Turkish and herein after called as Turkish Aerospace-TA) is Türkiye's technology center for the development, modernization, manufacture, system integration and life-cycle support of the aviation and space industry systems. Turkish Aerospace is an explorer company challenging the unknown to shape the future. Being among the top hundred global players in aviation and space industry, Turkish Aerospace is organized under six strategic business centers depending on the projects, including: Aviation Structural Group Aircraft Group, Helicopter Group, Unmanned Aerial Vehicle (UAV) Systems Group, Space Systems Group, National Combat Aircraft (NCA) Group Engineering Group In addition, integrated logistics support is provided for all products designed/manufactured by Turkish Aerospace. With approximately 56 billion TRY turnover in 2023, Turkish Aerospace continues its activities by assuming the identity of being a giant technology company where the future of the aviation is designed with the great breakthroughs it has made over the years. Located in Ankara, the production plant covers an area of 4 million square meters with an industrial facility of 650,000 square meters under its roof. The company has a modern aircraft facility furnished with high technology machinery and equipment that provide extensive manufacturing capabilities ranging from parts manufacturing to aircraft assembly, flight tests and delivery. As of 2023, Turkish Aerospace employs over 14,453 workers, of whom 5,826 are research and development staff, working in military and other research projects. TUSAŞ, continues to work towards its goal of sustainable growth in order to become a global defense and aerospace company

with its indigenous products. As Turkey's most important brand in R&D management, the company ranked at the top of the R&D 250 list announced by TurkishTime in 2023. Additionally, TUSAŞ ranked 58th in the "DefenseNews Top 100" list, one of the most prestigious defense industry firms lists in 2023. In 2023, the budget spent on R&D accounted for 54% of the total turnover. Turkish Aerospace has ISO 14001:2015 Certificate since 2015 and received the ISO 50001:2018 EMS Certificate in 2019. The company, which started the process of gathering greenhouse gas emissions data in 2021, finalized the thirdparty verification and was awarded with ISO 14064:2018 with zero non-compliance in May, 2022. In 2022, ISO 14046:2016 in site works have been completed and the certification was given in July 2023. We are currently the first company among industrial establishments in Türkiye to receive the Basic Level Zero Waste Certificate issued by the Ministry of Environment, Urbanization and Climate Change. Waste Management and Green Flag League Projects, won the "2020 Green World Environmental Awards " in the Waste Management category at the Green World Awards, where 500 projects competed and the world's best environmental practices were selected. Turkish Aerospace was awarded with the title of "Green World Ambassador" in the international arena. The company is the Green Champion of the "2022 Green Apple Environmental Awards " in the Water Management in Aviation Industry Category. The Zero Liquid Discharge (ZLD) system project in the Aviation Industry was also submitted to the Green World Environmental Awards 2023 program and received the 2023 Green World Environmental Awards Global Gold Winner 2023 in Water Management category. These projects also won the Raising Awareness Organization award at the 2023 TULIP Environmental Awards organized by the TULIP Sustainability Center.
[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.

	End date of reporting year	Alignment of this reporting period with your financial reporting period	Indicate if you are providing emissions data for past reporting years
	12/30/2023	*Select from:* ☑ Yes	*Select from:* ☑ No

[Fixed row]

(1.4.1) What is your organization’s annual revenue for the reporting period?

2209000000

(1.5) Provide details on your reporting boundary.

(1.5.1) Is your reporting boundary for your CDP disclosure the same as that used in your financial statements?

Select from:

☑ No

(1.5.2) How does your reporting boundary differ to that used in your financial statement?

For TUSAŞ, the reporting boundary for climate and environmental data is broader and more inclusive than that used in financial statements. While financial statements primarily focus on core business operations and entities directly owned or controlled by TUSAŞ, the environmental reporting boundary extends beyond these to encompass significant activities such as joint ventures, partnerships, and other collaborations that contribute to the company's overall environmental impact. This approach provides a more comprehensive view of TUSAŞ's environmental footprint, ensuring that all relevant activities are accounted for, even though these may not be fully reflected in the financial statements. Given that TUSAŞ's financial statements are not publicly available, this broader boundary is essential for transparently communicating the full scope of the company's environmental responsibilities.
[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:

☑ No

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:

☑ No

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:

☑ No

D-U-N-S number

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

Other unique identifier

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

[Add row]

(1.7) Select the countries/areas in which you operate.

Select all that apply

☑ Turkey

(1.8) Are you able to provide geolocation data for your facilities?

	Are you able to provide geolocation data for your facilities?	Comment
	Select from: ☑ No, this is confidential data	*N/A*

[Fixed row]

(1.21) For which transport modes will you be providing data?

Select all that apply

☑ Aviation

(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:

☑ All supplier tiers known have been mapped

(1.24.7) Description of mapping process and coverage

TUSAŞ has initiated the process of mapping its value chain, with a particular focus on strategic suppliers. The company is actively engaging with these suppliers to assess their environmental performance and data collection capabilities. Specifically, TUSAŞ is requesting primary data on energy consumption from suppliers with high business volumes. Additionally, the company verifies the ISO 14001 certifications of its ancillary industry suppliers. TUSAŞ gathers information from its suppliers whether they disclosing to CDP. This ongoing effort aims to gain a comprehensive understanding of the environmental impacts embedded within TUSAŞ's value chain, enabling the company to identify risks, opportunities, and areas for improvement in collaboration with its suppliers.
[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?

	Plastics mapping	Primary reason for not mapping plastics in your value chain	Explain why your organization has not mapped plastics in your value chain
	Select from: ☑ No, and we do not plan to within the next two years	*Select from:* ☑ Not an immediate strategic priority	*Plastic related activities of TUSAS are limited. Therefore, we do not plan to map the plastics within the near-term.*

[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) From (years)

0

(2.1.3) To (years)

3

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

In the short term TUSAŞ focuses on immediate operational improvements and regulatory compliance This period involves ensuring that our current processes and practices align with existing environmental standards and policies Strategic and financial planning in this horizon is geared towards achieving quick wins in energy efficiency water conservation and emissions reduction with budget allocations reflecting these priorities

Medium-term

(2.1.1) From (years)

4

(2.1.3) To (years)

9

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

The mediumterm horizon involves setting and achieving broader sustainability targets During this period TUSAŞ plans for investments in sustainable technologies and infrastructure that will drive significant improvements in environmental performance Financial planning includes allocating resources for research and development pilot projects and scaling up successful initiatives Strategic planning emphasizes building resilience and preparing for anticipated regulatory changes

Long-term

(2.1.1) From (years)

10

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

Select from:

☑ No

(2.1.3) To (years)

30

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

Longterm planning at TUSAŞ centers around innovation and embedding sustainability into the core business model This period focuses on transitioning to renewable energy sources and developing new products and services that meet future market demands for sustainability Financial planning during this horizon involves making significant capital investments and aligning longterm financial goals with our environmental objectives This approach ensures the companys resilience against future climate risks and positions us as a leader in sustainability
[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: ☑ Yes	*Select from:* ☑ Both risks and opportunities	*Select from:* ☑ 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.

Row 1

(2.2.2.1) Environmental issue

Select all that apply

☑ Climate change
☑ 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

(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

(2.2.2.12) Tools and methods used

Commercially/publicly available tools

☑ WRI Aqueduct

Enterprise Risk Management

☑ Enterprise Risk Management

International methodologies and standards

☑ Environmental Impact Assessment
☑ IPCC Climate Change Projections
☑ ISO 14001 Environmental Management Standard
☑ ISO 14046 Environmental Management – Water Footprint

Other

☑ Scenario analysis

(2.2.2.13) Risk types and criteria considered

Acute physical

☑ Drought
☑ Heat waves
☑ Toxic spills
☑ Pollution incident
☑ Heavy precipitation (rain, hail, snow/ice)
☑ Flood (coastal, fluvial, pluvial, ground water)

Chronic physical

☑ Water stress
☑ Declining water quality
☑ Declining ecosystem services
☑ Increased ecosystem vulnerability
☑ Water quality at a basin/catchment level
☑ Water availability at a basin/catchment level
☑ Changing temperature (air, freshwater, marine water)
☑ Changing precipitation patterns and types (rain, hail, snow/ice)

Policy

☑ Carbon pricing mechanisms
☑ Changes to national legislation
☑ Increased difficulty in obtaining operations permits
☑ Introduction of regulatory standards for previously unregulated contaminants

☑ Changes to international law and bilateral agreements

☑ Increased difficulty in obtaining water withdrawals permit

Market

☑ Availability and/or increased cost of certified sustainable material

☑ Changing customer behavior

Reputation

☑ 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)

Technology

☑ Transition to lower emissions technology and products

☑ Transition to water efficient and low water intensity technologies and products

Liability

☑ Non-compliance with regulations

(2.2.2.14) Partners and stakeholders considered

Select all that apply

☑ Customers

☑ Employees

☑ Investors

☑ Suppliers

☑ Regulators

☑ Local communities

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

Select from:

☑ No

(2.2.2.16) Further details of process

In Turkish Aerospace, climate-related risk management is integrated into a company-wide process aligned with ISO 31000, ISO 9001, and AS 9100 standards. This process ensures that strategic goals and business continuity are maintained in compliance with regulations. It covers over eight risk classes, including enterprise, program, procurement, information security, safety, occupational health and safety, environmental, and energy risks, all of which are managed under specific modules within the Turkish Aerospace Risk Management System. Risks and opportunities are identified through strategic targets, regulations, management directives, process analyses, performance indicators, audit reports, interviews, global developments, and literature research. Each risk is assessed for probability and severity, resulting in a criticality level of low, medium, high, or very high, with financial, performance, technical, and calendar impacts considered. Risk discussions determine criticality levels, response methods, responsible persons, control plans, and follow-ups. Risks are managed through acceptance, mitigation, actualization, or transference. Significant risks are rated as very high if the annual impact exceeds 1% of the target value or affects multiple strategic targets, requiring more than a week to resolve. The Early Detection of Risk Committee, established in 2015, identifies and manages threats and opportunities, with significant risks reported to the committee at least twice a year. Risk Maturity Levels are measured and reported to evaluate effectiveness. The quality of the risks, risk treatment options, risk criticality levels, risk mitigation plans, and the number of risks are considered when measuring the Risk Maturity Level. In order to increase awareness and follow-up of risks, active risks are reported to the relevant managers every three months. Climate-related risks follow the TCFD recommendations. In 2021, the Environmental Management and Climate Change Unit (EMCCU), along with the Energy Department, Risk Management Department, and Sustainability Committee, assessed these risks. In 2023, 927 environmental and energy risks were identified, with 459 accepted and 468 controlled. Risk Maturity Levels for these categories are monitored as KPIs. The 2023 Enterprise Risk Map includes energy crises and carbon emission targets. Short-, medium-, and long-term strategies, including emission mitigation actions, are presented to the Early Detection of Risk Committee. Physical risks, such as the impacts of extreme weather, are assessed by the EMCCU with input from maintenance managers. Water efficiency projects, including Zero Liquid Discharge (ZLD) applications and automation systems like SCADA Digital Controllers, are planned for 2023–2024. The ZLD project won the Global Gold Winner 2023 in Water Management and the Raising Awareness Organization award at the 2023 TULIP Environmental Awards.
[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

At Turkish Aerospace TUSAŞ integrating environmental dependencies impacts risks and opportunities is central to our environmental management strategy This comprehensive approach allows for informed decisionmaking and strategic planning Framework and Methodology TUSAŞ utilizes an integrated risk management framework aligned with ISO 31000 ISO 14001 and other relevant ISO standards This framework facilitates a holistic assessment of environmental factors Advanced tools and databases such as the WRI Aqueduct provide insights into the interconnections between climate risks and water availability Identifying Alignment Synergies Contributions and Tradeoffs We use scenario analysis and stress testing incorporating IPCC Climate Change Projections to evaluate how changes in temperature and precipitation impact water availability and consequently our operations and supply chain This helps identify synergies such as water conservation reducing energy use and emissions and tradeoffs like mitigation strategies increasing costs Examples of Considering Interconnections Our water recycling projects address water scarcity and reduce energy use lowering greenhouse gas emissions Collaborating with suppliers on sustainability initiatives improves their environmental performance reducing upstream risks and enhancing supply chain resilience Challenges in Integrating Interconnections Challenges include variability in data quality and availability balancing immediate operational needs with longterm sustainability goals and adapting to regulatory changes and market dynamics We continue refining methodologies and improving data integration to address these challenges Stakeholder Collaboration Collaboration with suppliers local communities regulators and industry partners is crucial Regular consultations and joint initiatives provide diverse perspectives and data enhancing our understanding of environmental interconnections and aligning our strategies with broader sustainability goals CrossFunctional Committees and Working Groups The Early Detection of Risk Committee and the Sustainability Committee composed of crossfunctional experts regularly review environmental data discuss risks and opportunities and ensure interconnections are integrated into risk management and strategic planning By systematically assessing environmental dependencies impacts risks and opportunities TUSAŞ supports resilient and sustainable environmental stewardship aligning with longterm strategic goals and global sustainability targets
[Fixed row]

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

(2.3.1) Identification of priority locations

Select from:

☑ Yes, we are currently in the process of identifying priority locations

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

Select all that apply

☑ Direct operations

☑ Upstream value chain

(2.3.3) Types of priority locations identified

Sensitive locations

☑ Areas of limited water availability, flooding, and/or poor quality of water

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

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

(2.3.4) Description of process to identify priority locations

TUSAŞ identifies priority locations by focusing on areas of limited water availability flooding andor poor quality of water as well as locations with substantive dependencies impacts risks andor opportunities relating to water To achieve this we utilize the WRI Aqueduct tools which provide comprehensive and detailed data on waterrelated risks The WRI Aqueducts Water Risk Atlas helps us map and evaluate the water stress levels flood risks and water quality issues across our operational regions By integrating these insights with our internal data on water usage and dependencies we identify critical locations that require targeted interventions This process ensures that we prioritize areas with the highest potential impact on our operations and the surrounding ecosystems enabling us to implement effective water management strategies and mitigate risks proactively

(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:

☑ Revenue

(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

As per our Enterprise Risk Management Policy, TUSAŞ aims to contribute to corporate sustainability by proactively managing all opportunities and threats within the scope of our strategic goals. Our risk and opportunities Management System includes both risks and opportunities.Risks and opportunities are defined in an integrated manner with our processes and managed through strategies aligned with these goals. Our Enterprise Risk Management System categorizes risks into eight classes: Enterprise Risks, Program Risks, Information Security Risks, Safety Risks, Environmental Risks, OHS Risks, Procurement Risks, and Energy Risks. Enterprise risks are further categorized as Financial, Strategic, Compliance, Operational, Threat, and Contract risks. These risks are assessed based on risk criticality levels, which combine risk impact value and likelihood value, as defined in specific risk tables. A risk is considered to have a substantive financial impact if its annual impact value exceeds 1% of the target endorsement value. Additionally, if a risk affects more than one strategic target from the Strategic Plan and requires more than one week to resolve, its impact value is deemed very high. The frequency of risk occurrence is evaluated regularly, with impacts considered across short-term (1-3 years), medium-term (3-10 years), and long-term (over 10 years) horizons. Risk Maturity Levels are measured to evaluate the effectiveness of risk management

activities, and results are reported to relevant departments. These measurements, along with regular reviews of risk metrics and thresholds, ensure that the organization remains aware of and responsive to potential risks. In summary, TUSAŞ defines substantive effects by assessing their impact on key financial and operational indicators, their likelihood and frequency, and their alignment with strategic goals across different time horizons

Opportunities

(2.4.1) Type of definition

Select all that apply

☑ Qualitative

☑ Quantitative

(2.4.2) Indicator used to define substantive effect

Select from:

☑ Revenue

(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

As per our Enterprise Risk Management Policy, TUSAŞ aims to contribute to corporate sustainability by proactively managing all opportunities and threats within the scope of our strategic goals. Our risk and opportunities Management System includes both risks and opportunities.Risks and opportunities are defined in an integrated manner with our processes and managed through strategies aligned with these goals. Our Enterprise Risk Management System categorizes risks into eight classes: Enterprise Risks, Program Risks, Information Security Risks, Safety Risks, Environmental Risks, OHS Risks, Procurement Risks, and Energy Risks. Enterprise risks are further categorized as Financial, Strategic, Compliance, Operational, Threat, and Contract risks. These risks are assessed based on risk criticality levels, which combine risk impact value and likelihood value, as defined in specific risk tables. A risk is considered to have a substantive financial impact if its annual impact value exceeds 1% of the target endorsement value. Additionally, if a risk affects more than one strategic target from the Strategic Plan and requires more than one week to resolve, its impact value is deemed very high. The frequency of risk occurrence is evaluated regularly, with impacts considered across short-term (1-3 years), medium-term (3-10 years), and long-term (over 10 years) horizons. Risk Maturity Levels are measured to evaluate the effectiveness of risk management activities, and results are reported to relevant departments. These measurements, along with regular reviews of risk metrics and thresholds, ensure that the organization remains aware of and responsive to potential risks. In summary, TUSAŞ defines substantive effects by assessing their impact on key financial and operational indicators, their likelihood and frequency, and their alignment with strategic goals across different time horizons
[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

Details of the policies and processes to identify and classify potential water pollutants: At Turkish Aerospace (TUSAŞ), we've developed a framework to identify and classify water pollutants, aligned with our Water Policy and supported by procedures like the EMS Performance Monitoring (PRFAC20025T) and Water Resources Management (PRFAC20057T). We work with supply units to source safer chemicals and ensure compliance with REACH and other regulations when acquiring materials. A SCADA system monitors water quality daily for quick detection of deviations. In case of spills, we follow our emergency response manual, and containment pools can hold 50% of tank capacity. Details of an established standard: TUSAŞ follows the Water Pollution Control Regulation for monitoring and controlling water quality. Third-party labs verify this using methods like EPA 2007 and TS EN 872, ensuring compliance with both national and international standards.

Description of the metrics and/or indicators: Key water quality metrics at TUSAŞ include Aluminum (Al), Suspended Solids (SS), Copper (Cu), Zinc (Zn), Iron (Fe), pH levels, and Chemical Oxygen Demand (COD). Pollutants are treated through chemical processes, with water quality monitored under the Water Pollution Control Regulation. A Zero Liquid Discharge (ZLD) system enhances sustainability by recovering and reusing water, reducing overall consumption.
[Fixed row]

(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

Select from:

☑ Inorganic pollutants

(2.5.1.2) Description of water pollutant and potential impacts

Chemical surface applications at TUSAŞ generate wastewater containing acids, caustics, and heavy metals, including hexavalent chromium (Cr6), which is toxic and carcinogenic, posing significant risks to aquatic life and microorganisms in biological treatment systems. To mitigate these impacts, TUSAŞ implements a robust pre-treatment process involving pH adjustment and polymer usage to precipitate inorganic pollutants, effectively removing toxic substances like Cr6 before wastewater reaches the biological treatment plant. Microorganisms in the plant then break down residual organic pollutants, further reducing contamination levels. Our SCADA system continuously monitors treated water, ensuring it complies with the Water Pollution Control Regulation. To enhance water purification and minimize pollutant discharge, TUSAŞ uses advanced treatment technologies such as Zero Liquid Discharge (ZLD) and membrane filtration.In addition, TUSAŞ follows REACH regulations to limit hazardous substances, regularly collaborating with supply units to replace restricted chemicals. Spill response plans, including emergency spill containment measures, are in place, and Transport of Dangerous Goods (TMGD) activities are conducted to ensure safe handling and transportation of hazardous materials. Periodic risk assessments and emergency plans are regularly reviewed to respond promptly to accidental spills or leaks, protecting water ecosystems and human health.

(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

☑ 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

(2.5.1.5) Please explain

The chemical pretreatment procedures at TUSAŞ manage potential risks by converting toxic Cr6 to the less harmful Cr3 using sodium metabisulphite in low pH conditions, followed by precipitating the chromium with polymer addition at higher pH. This process reduces the toxicity of wastewater before it enters the biological treatment plant, thereby protecting both the treatment process and downstream ecosystems from heavy metal contamination. Success is measured by monitoring Cr6 and Total Cr concentrations in the effluent, with measurements taken twice per month by accredited laboratories. In 2023, results consistently showed levels far below regulatory limits (Cr6: 0.005 mg/L, Total Cr: 5 mg/L), with Cr6 levels often below detection limits, demonstrating effective risk management and compliance with strict environmental standards.

[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?

	Environmental risks identified
Climate change	*Select from:* ☑ Yes, both in direct operations and upstream/downstream value chain
Water	*Select from:* ☑ Yes, both in direct operations and upstream/downstream value chain

[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

Policy

☑ Changes to regulation of existing products and services

(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

☑ Turkey

(3.1.1.9) Organization-specific description of risk

Turkish Aerospace (TUSAŞ) faces a significant strategic and financial risk if it does not meet the increasing sustainability demands of its global customers, particularly key players like Airbus and Boeing, who are committed to ambitious environmental targets, including achieving net-zero carbon emissions by 2050. As a TIER-1 supplier of Airbus and Boeing, and also being Türkiye's leading aerospace company, Turkish Aerospace has to work for these ambitious targets. Otherwise, we could experience difficulties in sustaining our position in global supply chain. Our customers have started to track the environmental topics of their suppliers. They are following the progress of the company and they are sending questionnaires to see sustainability maturity level of Turkish Aerospace. Therefore, Turkish Aerospace needs to meet the expectations of the customers to sustain its position in supply chain and increase the market value.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Decreased revenues due to reduced demand for products and services

(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:

☑ Very likely

(3.1.1.14) Magnitude

Select from:

☑ Medium-high

(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

If Turkish Aerospace (TUSAŞ) fails to meet the increasing sustainability demands of its customers, particularly from key partners like Airbus and Boeing, the company could face significant financial repercussions. In the short term (1-3 years), this risk may result in a potential loss of 11% of total revenue, equating to 243 million, as customers who prioritize sustainability in their supply chains may reduce or eliminate their business with TUSAŞ due to its inability to meet stringent environmental criteria. In the medium term (3-10 years), the risk could escalate as more customers adopt and enforce sustainability standards, potentially impacting TUSAŞ's market share and revenue streams further. If the demand for sustainable products rises to 45% by 2026 and TUSAŞ fails to adapt, the company could face a financial loss of up to 994 million, severely affecting cash flows and overall financial performance. In the long term (beyond 10 years), the inability to align with global sustainability trends could lead to TUSAŞ being excluded from critical supply chains, jeopardizing its market position and financial stability. This would significantly strain cash flows, limit investment opportunities, and hinder the company's growth prospects.

(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)

242990000

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

994050000

(3.1.1.25) Explanation of financial effect figure

The financial impact for the medium term (3-10 years) has been meticulously calculated, factoring in the increasing prioritization of sustainability within the aerospace sector, particularly by key clients such as Airbus and Boeing. These industry leaders have committed to achieving net-zero carbon emissions by 2050, which has significantly influenced their procurement strategies, now heavily favoring suppliers who meet stringent sustainability standards. In 2023, TUSAŞ's total revenue was 2.2 billion, with 11% (243 million) attributable to customers who prioritize sustainable products and services. By 2026, the demand for sustainability-aligned products is expected to increase substantially, with up to 45% of customers potentially requiring such products. The financial impact has been derived from two pivotal scenarios: 1.Minimum Financial Impact: If TUSAŞ does not expand its sustainability initiatives, and the percentage of customers demanding sustainable products remains at 11%, the company might experience stagnation in revenue from this segment. This scenario represents a significant missed opportunity for growth in a market increasingly driven by sustainability criteria, resulting in neither financial loss nor gain. 2.Maximum Financial Impact: In a more critical scenario, if TUSAŞ fails to meet the projected 45% demand for sustainable products by 2026, the company could face a substantial revenue loss of up to 994 million. This potential loss reflects the revenue that could be forfeited if customers migrate to more sustainable competitors due to TUSAŞ's inability to align with industry trends. Such a significant revenue decline would severely impact the company's cash flows, constraining its capacity to invest in future technologies and innovations, and potentially jeopardizing its long-term financial stability and market position. This financial impact analysis underscores the imperative for TUSAŞ to proactively adapt to evolving market demands and regulatory expectations. Aligning its operations and product offerings with global sustainability standards is crucial for mitigating these risks, capitalizing on emerging opportunities, and ensuring sustained growth and competitiveness in the aerospace industry. This figure not only represents potential revenue loss but also serves as a critical element of the company's strategic risk management and financial planning, highlighting the urgency for immediate action in response to shifting industry.

(3.1.1.26) Primary response to risk

Engagement

☑ Align organization's public policy engagement with its environmental strategy

(3.1.1.27) Cost of response to risk

9072550

(3.1.1.28) Explanation of cost calculation

The cost calculation for responding to the climate risk at TUSAŞ, totaling 9,072,550.00, includes several critical investments aimed at reducing carbon emissions and enhancing sustainability. The largest investment, 8,645,100.00, is allocated for a Solar Energy Based Electricity Generation Power Plant, covering the entire setup from solar panel installation to commissioning. An additional 55,000.00 is dedicated to switching to a Pressure Controlled Working System of Circulation Pumps, optimizing energy use and reducing emissions. The Hot Water Usage Optimization project, costing 17,450.00, implements energy-efficient technologies to minimize waste and operational costs. Modernizing the Burner Combustion Management System, with a budget of 345,000.00, further enhances fuel efficiency and lowers emissions. Lastly, 10,000.00 is allocated for consultancy services focused on sustainability reporting and life cycle assessments.

(3.1.1.29) Description of response

TUSAŞ has implemented a comprehensive response strategy to address the identified climate risk, focusing on enhancing sustainability across its operations to meet customer demands and maintain its competitive position in the global supply chain. This response includes significant investments in infrastructure and technology, such as the development of a Solar Energy-Based Electricity Generation Power Plant, which is currently in the tender preparation phase, with an investment of 8,645,100. This initiative aims to reduce carbon emissions and decrease reliance on non-renewable energy sources. Additionally, TUSAŞ has completed the implementation of a Pressure Controlled Working System for Circulation Pumps, with an investment of 55,000, and optimized hot water usage across its facilities at a cost of 17,450, both of which contribute to greater energy efficiency and lower emissions. The modernization of the Burner Combustion Management System, with a budget of 345,000, is also underway, further improving fuel efficiency and reducing the company's overall environmental footprint. To support these efforts, TUSAŞ is working with consultants at a cost of 10,000 to enhance its sustainability reporting and conduct Life Cycle Assessments (LCA), ensuring transparency and accountability in its environmental performance. These combined measures are designed to align TUSAŞ's operations with the stringent sustainability expectations of its key customers, thereby safeguarding its market position and financial sustainability

Water

(3.1.1.1) Risk identifier

Select from:

☑ Risk1

(3.1.1.3) Risk types and primary environmental risk driver

Chronic physical

☑ Increased ecosystem vulnerability

(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

☑ Turkey

(3.1.1.7) River basin where the risk occurs

Select all that apply

☑ Other, please specify **:**Sakarya

(3.1.1.9) Organization-specific description of risk

Turkish Aerospace, faces significant risks associated with severe weather events, particularly droughts, which are becoming increasingly common due to climate change. The company employs the WRI Aqueduct Country Rankings/Drought Risk tool to assess these risks. The Ankara region, where a major part of our operations is based, is identified as being in a medium-high drought risk zone (0.6-0.8) according to the Aqueduct Water Risk Atlas. This drought risk poses a direct threat to our water supply, critical for both manufacturing processes and the well-being of our employees. Prolonged water shortages could disrupt production, affect the cooling and cleaning processes in our facilities, and lead to operational delays. Furthermore, drought conditions could impact the health and productivity of our workforce, potentially leading to lower attendance rates and operational inefficiencies. Given the critical nature of our products and the global supply chain dependencies, any disruption in our operations due to water scarcity could have cascading effects, leading to financial losses and reputational damage. Proactively managing this risk is essential to ensure business continuity and maintain our position as a reliable supplier in the global aerospace industry.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Disruption in 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

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

Select from:

☑ Likely

(3.1.1.14) Magnitude

Select from:

☑ Medium-high

(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

For Turkish Aerospace, the anticipated effects of drought and severe weather-related water risks on the company's financial position, financial performance, and cash flows span across multiple time horizons. In the short term (1-3 years), increased operational costs due to alternative water supplies, higher water prices, and investments in water-saving technologies could decrease profitability and reduce cash flows, while employee health issues related to water scarcity could disrupt production targets and lead to potential revenue loss. In the medium term (3-10 years), escalating drought conditions could further strain operational efficiency, increase water management expenditures, and affect the company's ability to attract and retain skilled labor, resulting in decreased revenues, reduced profit margins, and strained cash flows. In the long term (beyond 10 years), prolonged water scarcity could lead to severe disruptions in supply chains and production processes, potentially causing temporary shutdowns, significant reductions in revenue growth, and overall financial instability. The need for substantial capital investments in alternative water infrastructure or relocation of facilities could further strain financial resources, posing a significant threat to Turkish Aerospace's long-term financial sustainability and growth prospects.

(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)

8496153.85

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

42480769.23

(3.1.1.25) Explanation of financial effect figure

The financial impact calculations for a potential operational disruption at Turkish Aerospace's Sakarya facility are based on the facility's annual revenue and the number of operational days. With a total annual revenue of 2.2 billion and 260 working days per year, the daily revenue is calculated by dividing 2,209,000,000 by 260, resulting in a daily revenue of 8,496,153.85. This daily revenue figure represents the minimum financial impact that would occur if operations were disrupted for

just one day. For a scenario involving a five-day disruption, the financial impact is calculated by multiplying the daily revenue loss of 8,496,153.85 by five, resulting in a total potential loss of 42,480,769.23. This calculation takes into account the direct revenue losses associated with a complete shutdown of operations due to drought, but does not yet include other potential costs such as emergency response measures, supply chain disruptions, or penalties for delayed deliveries. Thus, these figures provide a conservative estimate of the financial risk posed by drought-related disruptions at the Sakarya location, underlining the importance of preemptive risk management and alternative water sourcing strategies to minimize the impact on business continuity and overall financial performance

(3.1.1.26) Primary response to risk

Policies and plans

☑ Amend the Business Continuity Plan

(3.1.1.27) Cost of response to risk

88862.53

(3.1.1.28) Explanation of cost calculation

The cost of the response, estimated at approximately 88,862.53, is calculated based on the comprehensive risk management process overseen through the company's insurance system. This cost includes the annual update of insurance premiums, which are adjusted according to the scale and frequency of identified incidents. Additionally, the cost accounts for the continuous improvement of emergency response plans, ensuring they are robust enough to mitigate potential physical risks associated with severe weather events such as droughts. The insurance coverage primarily focuses on addressing the physical risk drivers, ensuring that the company is financially protected against the potential impacts of these events.

(3.1.1.29) Description of response

The response to the identified water risk at Turkish Aerospace (TUSAŞ) involves a multifaceted approach designed to mitigate the potential impacts of drought and ensure business continuity. The company has implemented a series of measures, including enhancing its insurance coverage to address physical risks associated with water scarcity. This includes an annual review and adjustment of insurance premiums based on the latest risk assessments and incident data. In addition to financial protections, TUSAŞ has strengthened its emergency response plans, focusing on improving the resilience of its operations against water-related disruptions. These plans include strategies for alternative water sourcing, optimized water usage, and emergency water storage solutions to maintain operational capacity during drought periods. The company also engages in ongoing risk assessments using tools like the WRI Aqueduct to monitor and anticipate changes in water availability, ensuring that proactive measures are taken well in advance of any potential disruptions. Through these actions, TUSAŞ aims to safeguard its operations, minimize financial losses, and maintain its commitments to customers and stakeholders, thereby reinforcing its position as a responsible and resilient player in the global aerospace industry.

[Add row]

(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 currency as selected in 1.2)

0

(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)

0

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

Select from:

☑ Less than 1%

(3.1.2.7) Explanation of financial figures

During the reporting year, there were no changes in revenue due to environmental risks. This conclusion is based on a comprehensive risk assessment, which revealed no significant vulnerabilities to environmental factors. The analysis showed that climate change and water-related issues did not materially impact financial metrics.

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)

0

(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)

0

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

Select from:

☑ Less than 1%

(3.1.2.7) Explanation of financial figures

During the reporting year, there were no changes in revenue due to environmental risks. This conclusion is based on a comprehensive risk assessment, which revealed no significant vulnerabilities to environmental factors. The analysis showed that climate change and water-related issues did not materially impact financial metrics.
[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?

Row 1

(3.2.1) Country/Area & River basin

Turkey
☑ Sakarya

(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

1

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

Select from:
☑ 100%

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

Select from:

☑ 1-10%

(3.2.11) Please explain

The campus has the potential to be affected from Sakarya river basin risks.
[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

In 2023 there is no any water-related regulatory violations. Our organization is aware of its impacts on the local operating environment as well as the potential financial implications of its water management. Environmental Impact Assessment of reporting years' activities were studied under the ISO 14046:2014 principles, requirements and guidelines for conducting and reporting a water footprint assessment as a stand-alone assessment. The effectiveness of our control procedures at corporate level was studied within this process.
[Fixed row]

(3.5) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Select from:

☑ No, and we do not anticipate being regulated in the next three years

(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

Energy source
☑ Use of renewable energy sources

(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

☑ Turkey

(3.6.1.8) Organization specific description

Turkish Aerospace is strategically positioned to capitalize on the growing global emphasis on renewable energy and sustainability within the aerospace industry. With the increasing demand for green energy solutions, the company has identified a significant opportunity to reduce its carbon footprint by developing a Solar Energy Based Electricity Generation Power Plant. This initiative is critical not only for environmental compliance but also for reinforcing Turkish Aerospace's commitment to sustainability, which is increasingly becoming a requirement from key customers and stakeholders. The project is designed to reduce operational costs associated with electricity consumption by harnessing renewable solar energy, thus mitigating the risks of fluctuating energy prices and potential regulatory costs associated with carbon emissions. Furthermore, this opportunity aligns with the global industry trend towards achieving net-zero emissions, thereby ensuring Turkish Aerospace's long-term competitiveness in the global market.

(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

Select all that apply

☑ Medium-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:

☑ 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 financial implications of this opportunity are both significant and strategic. The Solar Energy Based Electricity Generation Power Plant is expected to generate 16,673,869 kWh of electricity annually, which translates to a direct financial benefit of approximately 2,310,000 per year. This figure is derived from the projected energy savings and the potential revenue generated from any excess energy that could be fed back into the grid. The financial impact is calculated with the assumption of stable electricity prices and efficient energy generation throughout the lifecycle of the plant. The total cost of the project is 8,645,100, which, when balanced against the annual savings, provides a payback period of 3.57 years. This short payback period underscores the project's financial viability, making it an attractive investment for Turkish Aerospace. Additionally, the long-term financial performance is expected to improve as the company reduces its reliance on non-renewable energy sources, lowering operational costs and enhancing profitability.

(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)

2310000

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

2541000

(3.6.1.23) Explanation of financial effect figures

The financial effect figures for the medium term were determined by carefully analyzing the projected performance of the solar power plant project. The minimum anticipated financial effect figure of 2,310,000 is based on the expected annual electricity generation of 16,673,869 kWh. This figure was derived using current electricity prices, which are expected to remain stable over the medium term. The calculation assumes a consistent operational efficiency of the solar power plant and does not account for significant fluctuations in energy demand or price increases. The maximum anticipated financial effect figure of 2,541,000 represents a scenario where the project experiences a 10% improvement in financial performance. This could be due to several factors, including potential increases in electricity prices, improved operational efficiency, or technological advancements that enhance energy capture and conversion rates. The 10% increase is a reasonable assumption, reflecting the potential upside in the project's financial performance without being overly optimistic. The financial effect figures take into account the payback period of 3.57 years, which was calculated based on the total project cost of 8,645,100. The figures also consider the long-term benefits of the project, including its contribution to reducing TUSAŞ's reliance on non-renewable energy sources and its alignment with global sustainability goals. The calculations were made with a comprehensive understanding of the project's financial implications, ensuring that TUSAŞ can anticipate and plan for both the expected and potential best-case financial outcomes over the medium term.

(3.6.1.24) Cost to realize opportunity

8645100

(3.6.1.25) Explanation of cost calculation

The cost calculation for realizing the opportunity presented by the solar power plant project is based on a detailed breakdown of all necessary expenses associated with its development, installation, and operational readiness. The total budget for the project is estimated at 8,645,100. This figure includes the cost of approximately 22,788 solar panels, necessary to generate the projected 9 MW of power. The expense covers not only the purchase of the solar panels but also the associated costs of project design, engineering, and construction. Additional costs factored into the calculation include licensing fees, commissioning expenses, and the installation of related infrastructure. Specifically, 395,100 is allocated for the installation of the solar panels, which includes labor, equipment, and materials. The project also includes contingencies for unexpected expenses, ensuring that the financial planning is robust and comprehensive. This total budget reflects an all-inclusive approach to cost estimation, ensuring that all potential financial outlays are accounted for. The budget also considers the long-term operational costs of maintaining the solar power plant, although these are expected to be minimal compared to the initial investment. The cost calculation is designed to provide a clear financial roadmap, allowing TUSAŞ to effectively manage its investment and achieve the anticipated benefits from this significant sustainability initiative.

(3.6.1.26) Strategy to realize opportunity

The strategy to realize the opportunity of developing a solar power plant at TUSAŞ is focused on reducing carbon emissions, cutting energy costs, and boosting the company's sustainability profile. The project involves installing a 9 MW rooftop solar power plant, which will produce approximately 16,673,869 kWh annually. The approach begins with thorough planning and design, ensuring the solar panels selected are high-efficiency and suitable for long-term use. Around 22,788 panels will be installed, with the project adhering to all necessary legal and regulatory requirements. Skilled labor and advanced equipment will be used for the installation, integrating the solar system with TUSAŞ's existing energy infrastructure. Rigorous project management will oversee every phase, from installation to operational monitoring, ensuring that the project stays on schedule and within budget. Regular performance tracking and maintenance will ensure the solar power plant operates

at optimal efficiency, meeting expected energy production levels. This initiative positions TUSAŞ as a leader in renewable energy within the aerospace sector, aligning with global sustainability trends and responding to customer demands for greener operations. By investing in this project, TUSAŞ aims to enhance its market competitiveness while contributing to global climate change mitigation efforts.

Water

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp1

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Resource efficiency

☑ Reduced water usage and consumption

(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

☑ Turkey

(3.6.1.6) River basin where the opportunity occurs

Select all that apply

☑ Other, please specify **:**Sakarya

(3.6.1.8) Organization specific description

In 2023, Turkish Aerospace (TUSAŞ) took significant steps to enhance its water management strategy by implementing two advanced Zero Liquid Discharge (ZLD) systems across key facilities. The adoption of ZLD technology is a critical component of TUSAŞ's broader sustainability agenda, aimed at minimizing water consumption and reducing wastewater discharge in line with global best practices. The ZLD systems were installed at the Degreasing Facility, with a treatment capacity of 65 m³/day, and at the Nital Etch and Copper Plating Facility, with a treatment capacity of 11.5 m³/day, both achieving an efficiency rate of 85%. These systems were specifically chosen to address the increasing water scarcity risks identified in the Ankara region, where TUSAŞ's operations are located. This area is subject to medium-high drought risk, as identified by the WRI Aqueduct Water Risk Atlas. The ZLD systems enable TUSAŞ to recycle and reuse a significant volume of water, thereby ensuring a consistent and reliable water supply for critical operations while reducing dependency on external water sources. In 2023, these systems collectively saved 23,409 m³ of water, which directly translates into financial savings by lowering the company's water procurement costs.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Reduced indirect (operating) costs

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

Select all that apply

☑ The opportunity has already had a substantive effect on our organization in the reporting year

(3.6.1.12) Magnitude

Select from:

☑ Medium-high

(3.6.1.13) Effect of the opportunity on the financial position, financial performance and cash flows of the organization in the reporting period

The implementation of two Zero Liquid Discharge (ZLD) systems at TUSAŞ has had a positive and measurable impact on the company's financial position, performance, and cash flows during the reporting period. The primary financial benefit stems from the significant reduction in water consumption, resulting in substantial cost savings. In 2023 alone, the ZLD systems saved TUSAŞ 23,409 m³ of water, leading to a direct financial saving of approximately 164,800 in reduced water procurement costs. This reduction in operating expenses has improved the company's overall cost structure, enhancing its profitability. The capital expenditure of 921,390 invested in the ZLD systems is expected to yield a return on investment within a relatively short timeframe, further bolstering TUSAŞ's financial health. The annual savings generated by the ZLD systems contribute positively to the company's cash flows, providing additional liquidity that can be reinvested into other strategic initiatives, such as further sustainability projects or technological advancements. Moreover, the adoption of ZLD technology has strengthened TUSAŞ's

position in the aerospace market by demonstrating its commitment to sustainable practices. This commitment not only enhances the company's reputation among stakeholders but also aligns with the increasing demand for environmentally responsible suppliers, thereby potentially increasing market share and driving future revenue growth. The integration of ZLD systems reduces operational risks related to water scarcity and regulatory compliance, ensuring long-term business continuity and financial stability. Overall, the financial effect of the ZLD opportunity during the reporting period has been significant, contributing to a more sustainable and profitable operation while positioning TUSAŞ as a leader in environmental stewardship within the aerospace industry.

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

Select from:

☑ Yes

(3.6.1.16) Financial effect figure in the reporting year (currency)

164800

(3.6.1.23) Explanation of financial effect figures

The financial impact of the Zero Liquid Discharge (ZLD) systems implemented by TUSAŞ is calculated based on the water savings and the associated cost reductions. In 2023, the two ZLD systems collectively enabled the recycling of 23,409 cubic meters of water annually, which directly translates into significant cost savings. The total project investment was 921,390, with an anticipated annual cost saving of 164,800. This saving is derived by multiplying the total volume of water recycled (23,409 cubic meters) by the cost per cubic meter of water, which includes both the cost of purchasing water and the cost of wastewater treatment. The payback period for this investment is approximately 5.6 years, calculated by dividing the total project cost by the annual savings (921,390 164,800). This calculation assumes that water costs remain stable and that the ZLD systems operate at their projected efficiency without major maintenance issues. Additionally, these systems provide a financial buffer against potential future increases in water costs or more stringent environmental regulations, further enhancing the long-term financial resilience of TUSAŞ. By integrating these advanced water management technologies, TUSAŞ not only achieves immediate operational cost reductions but also positions itself favorably in terms of sustainability, regulatory compliance, and long-term financial planning, ensuring that the investment contributes positively to both the company's bottom line and its environmental stewardship goals.

(3.6.1.24) Cost to realize opportunity

921390

(3.6.1.25) Explanation of cost calculation

The cost calculation for the Zero Liquid Discharge (ZLD) systems at TUSAŞ was meticulously derived by considering all direct and indirect expenses related to the implementation of these systems. The total budget of 921,390 includes the costs for acquiring the ZLD equipment, which involves specialized components necessary for water treatment and recovery. Additionally, the calculation covers installation costs, including labor, engineering services, and necessary modifications to existing infrastructure to accommodate the new systems. The budget also accounts for training programs to ensure that the operational staff are fully equipped to manage and maintain the ZLD systems effectively. Indirect costs, such as project management and contingency allowances for unforeseen expenses, were also factored into the total cost. This comprehensive approach to cost calculation ensures that all potential financial outlays are anticipated, allowing for accurate budgeting and effective project execution.

(3.6.1.26) Strategy to realize opportunity

In 2023, TUSAŞ continued its commitment to water conservation and sustainability through the formulation and review of its short-, medium-, and long-term management strategies. Transitional risks, such as emerging regulatory requirements including water consumption reduction and zero discharge measures, were assessed and presented to the EDMR Committee. A key development in this period was the installation of a water recovery system, the "Degreasing Zero Liquid Discharge (ZLD) system," designed to purify and reuse wastewater generated during production processes. The ZLD system, which became operational in 2023, integrates advanced technologies such as activated carbon, deionization (anion-cation units), vacuum evaporators, and reverse osmosis to maximize water recovery. This project represents one of the best available techniques in facilities producing aircraft, underscoring TUSAŞ's role as a leader in the aerospace industry in Türkiye and beyond. Given the region's water stress and drought risks, TUSAŞ has prioritized water efficiency projects, including the ZLD applications and the implementation of water automation systems like SCADA and digital controllers. These initiatives were incorporated into the facility investment plans and have been fully operational since 2023. TUSAŞ remains dedicated to advancing beyond traditional practices, ensuring that water conservation efforts contribute to a sustainable future for the next generation.
[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)

2310000

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

Select from:

☑ Less than 1%

(3.6.2.4) Explanation of financial figures

The relevant financial figures reflect the income generated during the reporting year through sustainability-related projects. These figures have been determined based on comprehensive opportunity evaluations, which assess the potential for growth and revenue from initiatives focused on environmental sustainability. This includes projects aimed at reducing carbon emissions, improving energy efficiency, and enhancing resource management, all of which contribute to the company's long-term sustainability goals.

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)

164.8

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

Select from:

☑ Less than 1%

(3.6.2.4) Explanation of financial figures

The relevant financial figures reflect the income generated during the reporting year through sustainability-related projects. These figures have been determined based on comprehensive opportunity evaluations, which assess the potential for growth and revenue from initiatives focused on environmental sustainability. This includes projects aimed at reducing carbon emissions, improving energy efficiency, and enhancing resource management, all of which contribute to the company's long-term sustainability goals.
[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:

☑ More frequently than quarterly

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

Select all that apply

☑ 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

TUSAŞ recognizes the importance of diversity and inclusion at all levels of its organization, including the Executive Board. The company demonstrates its commitment to gender diversity through its workforce representation. Notably, 18.3% of TUSAŞ's employees in managerial positions in are women, reflecting a conscious effort to promote gender equality in leadership roles. TUSAŞ continues to explore ways to enhance diversity and inclusion practices across the organization, fostering an environment where all employees feel valued and empowered to contribute their unique perspectives and talents.
[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

[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

(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 mandate

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

Select from:

☑ Scheduled agenda item in every board meeting (standing agenda item)

(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

☑ Overseeing and guiding public policy engagement

☑ Overseeing and guiding acquisitions, mergers, and divestitures

☑ Overseeing and guiding the development of a climate transition plan

☑ Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities

☑ Overseeing and guiding public policy engagement

☑ Reviewing and guiding innovation/R&D priorities

☑ Approving and/or overseeing employee incentives

☑ Overseeing and guiding major capital expenditures

☑ Monitoring the implementation of a climate transition plan

(4.1.2.7) Please explain

The Board maintains a steadfast commitment to addressing climate-related issues, integrating these considerations into its comprehensive review and guidance of the company's business strategy, plans, risk management policies, and budget plans. The Board, with the support of the CEO, actively sets organizational performance objectives, monitors implementation and performance, and oversees major capital expenditures, acquisitions, and divestitures, all while prioritizing climate-related risks and opportunities. The Vice President of Strategy & Affiliates Management, as the leader of the Sustainability Committee, regularly briefs the Executive Committee on the progress and outcomes of climate-related initiatives. In 2023, the Board furthered its focus on climate action by overseeing and guiding scenario analysis, reviewing and guiding the assessment of dependencies, impacts, risks, and opportunities, and overseeing the setting and monitoring of corporate targets. The Board also played a crucial role in overseeing and guiding public policy engagement and the development and implementation of the company's climate transition plan. The Board's commitment to upholding the UN Sustainable Development Goals (SDGs) 13 (Climate Action) and 6 (Clean Water and Sanitation) remained a priority. In 2023, the Board continued to champion the "Smart is the New Green Approach," driving the following key initiatives: • The Board maintained vigilant oversight of the transition action plan, ensuring that all climate-related topics were thoroughly monitored and reviewed. • Building upon the establishment of the Sustainability Committee (SC) in 2022, the Board continued to accelerate progress towards achieving net-zero GHG emissions across the value

chain by 2050. Climate-related metrics, established in the previous year, were meticulously monitored through the Sustainability Monitoring Platform, with all results reported to and scrutinized by the Board. • The Board reinforced its dedication to fostering a culture of sustainability by continuing to implement internal communication activities and sustainability campaigns aimed at raising awareness among all employees. • The Board remained committed to improving the company's CDP reporting by identifying areas for enhancement, sharing findings with relevant departments, and rigorously monitoring the implementation of these activities. • Following the successful achievement of Water Footprint Environmental Management Certification in July 2023, the Board continued to support the ongoing process of ISO 14046 Certification initiated in 2022. The Board's comprehensive approach to climate action demonstrates its unwavering commitment to environmental stewardship and sustainable business practices. By integrating climate considerations into all aspects of decision-making and actively monitoring progress, the Board ensures that TUSAŞ remains at the forefront of the transition to a low-carbon future.

Water

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

Select all that apply

☑ Board-level committee

(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 mandate

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

Select from:

☑ Scheduled agenda item in every board meeting (standing agenda item)

(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
☑ Overseeing and guiding public policy engagement
☑ Overseeing and guiding public policy engagement
☑ Reviewing and guiding innovation/R&D priorities
☑ Approving and/or overseeing employee incentives
☑ Overseeing and guiding major capital expenditures
☑ Overseeing and guiding acquisitions, mergers, and divestitures
☑ Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities

(4.1.2.7) Please explain

Throughout 2023, the Board of Turkish Aerospace (TUSAŞ) demonstrated a strong commitment to climate-related issues by integrating environmental considerations into all strategic decision-making processes. The Board actively reviewed and guided the company's business strategy, risk management policies, and budget plans with a focus on climate risks and opportunities. They oversaw the establishment and monitoring of organizational performance objectives and major capital expenditures, always prioritizing climate-related considerations. The Vice President of Strategy & Affiliates Management, leading the Sustainability Committee, regularly updated the Executive Committee on climate-related initiatives, ensuring transparency and accountability. Key initiatives in 2023 included comprehensive scenario analyses to assess climate risks and opportunities, leading to revised corporate targets that were closely monitored for progress. The Board remained committed to UN Sustainable Development Goals (SDGs) 13 (Climate Action) and 6 (Clean Water and Sanitation), actively guiding public policy engagement and the company's climate transition plan. In July 2023, TUSAŞ achieved the Water Footprint Environmental Management Certification, marking a significant milestone in sustainable water management. This followed the ISO 14046:2014 Certification process initiated in 2022. The Environmental Management and Climate Change Unit played a key role in coordinating and monitoring climate-related activities, conducting a comprehensive water footprint inventory analysis for 2022 and 2023, with a detailed impact assessment planned for 2024. TUSAŞ also continued to monitor water efficiency projects, including Zero Liquid Discharge (ZLD) applications and water automation systems (SCADA) and Digital Controllers. Successful projects completed in 2022 reinforced the company's dedication to optimizing water usage and minimizing environmental impact. Additionally, the Board-approved project for an advanced wastewater treatment plant was finalized in 2023. Lastly, TUSAŞ discontinued the use of plastic bottles, replacing them with water dispensers using cardboard cups, aligning with SDG 12 (Responsible Consumption and Production). This initiative underscored the company's commitment to sustainable practices.
[Fixed row]

(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

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

☑ Engaging regularly with external stakeholders and experts on environmental issues

☑ Integrating knowledge of environmental issues into board nominating process

☑ Regular training for directors on environmental issues, industry best practice, and standards (e.g., TCFD, SBTi)

☑ Having at least one board member with expertise on this environmental issue

(4.2.3) Environmental expertise of the board member

Experience

☑ Executive-level experience in a role focused on environmental issues

☑ Management-level experience in a role focused on environmental issues

☑ Experience in an academic role focused on environmental issues

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

☑ Integrating knowledge of environmental issues into board nominating process
☑ Regular training for directors on environmental issues, industry best practice, and standards (e.g., TCFD, SBTi)
☑ Having at least one board member with expertise on this environmental issue

(4.2.3) Environmental expertise of the board member

Experience
☑ Executive-level experience in a role focused on environmental issues
☑ Management-level experience in a role focused on environmental issues
☑ Experience in an academic role focused on environmental issues

[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

[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

Executive level

☑ Chief Executive Officer (CEO)

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

Engagement

☑ Managing public policy engagement related to environmental issues

Policies, commitments, and targets

☑ Measuring progress towards environmental corporate targets

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Conducting environmental scenario analysis

☑ Developing a climate transition plan

☑ Managing acquisitions, mergers, and divestitures related to environmental issues

☑ Managing annual budgets related to environmental issues

☑ Managing major capital and/or operational expenditures relating 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:

☑ More frequently than quarterly

(4.3.1.6) Please explain

The Chief Executive Officer (CEO) of Turkish Aerospace (TUSAŞ), as a Board member, holds ultimate responsibility for the company's environmental performance. Reporting quarterly to the Board, the CEO ensures environmental considerations are integrated into all strategic decisions, including business strategy, risk management policies, and budget plans, with a focus on climate-related risks and opportunities. The CEO oversees the establishment and monitoring of sustainability performance objectives and ensures major capital expenditures, acquisitions, and divestitures consider environmental factors. The CEO is directly involved in key environmental initiatives, assessing dependencies, impacts, risks, and opportunities, and setting corporate environmental targets. The CEO manages acquisitions, mergers, and divestitures to align with sustainability goals, oversees environmentally significant capital and operational expenditures, and manages the annual environmental budget. Day-to-day responsibility for sustainability and climate-related topics is delegated to the Vice President of Strategy & Affiliates Management (S&AMVP), who chairs the Sustainability Committee (SC). The SC oversees climate-related studies in carbon, water, and biodiversity, reporting to the CEO. It collaborates with the Early Detection and Management of Risk Committee (EDMR), established in 2015, to manage environmental risks and opportunities within the company's risk management framework. The SC developed a comprehensive Sustainability Roadmap for 2023-2025, focusing on seven pillars: Environment, Energy, Human Resources, Technology and Innovation, Financial, Supply Chain, and Governance. Each pillar has a sponsor manager and team responsible for implementing and reporting actions aligned with the roadmap and targets.

Water

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Chief Executive Officer (CEO)

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

Engagement

☑ Managing public policy engagement related to environmental issues

☑ Managing value chain engagement related to environmental issues

Policies, commitments, and targets

☑ Measuring progress towards environmental corporate targets

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Conducting environmental scenario analysis

☑ Developing a climate transition plan

☑ Managing acquisitions, mergers, and divestitures related to environmental issues

☑ Managing annual budgets related to environmental issues

☑ Managing major capital and/or operational expenditures relating 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:

☑ More frequently than quarterly

(4.3.1.6) Please explain

The Chief Executive Officer (CEO), as a member of the Board, has entrusted the Vice President of Strategy & Affiliates Management with the responsibility for overseeing sustainability matters, including those related to climate change. The Sustainability Committee, chaired by the Vice President, conducts comprehensive studies on climate-related issues such as carbon emissions and water management, regularly informing the CEO to facilitate well-informed decision-making by the Board on these critical subjects. Strategic and climate-related program management falls under the purview of the Audit Committee and the Early Detection and Management of Risk Committee (EDMR), ensuring a collaborative and communicative approach to managing water risks and opportunities within the framework of Environmental, Social, and Governance (ESG) principles. Operational, strategic, financial, and other carbon and water-related risks are identified and mitigated by a designated risk representative, who works in close coordination with the EDMR Committee. The implementation of all water-related projects is meticulously coordinated by the Environmental Management and Climate Change Unit.
[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

10

(4.5.3) Please explain

An effective performance management process is monitored by setting individual targets in order to maintain the performance progress of the employees by increasing their contribution to the business. In the reporting year, an interim review process was fulfilled quarterly. In accordance with the corporate and strategic goals, employees were evaluated with the participation of their first and second managers, based on success criteria that were revised in the sustainability strategy. It is confirmed that climate related targets are embedded into the executive remuneration system. The climate-related targets are included in the senior management

incentives. In 2023, evaluation of the competence development of the managers was executed and organization of coaching activities for the managers, based on the development topics were determined.

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

10

(4.5.3) Please explain

An effective performance management process is monitored by setting individual targets in order to maintain the performance progress of the employees by increasing their contribution to the business. In the reporting year, an interim review process was fulfilled quarterly. In accordance with the corporate and strategic goals, employees were evaluated with the participation of their first and second managers, based on success criteria that were revised in the sustainability strategy. It is confirmed that climate related targets are embedded into the executive remuneration system. The climate-related targets are included in the senior management incentives. In 2023, evaluation of the competence development of the managers was executed and organization of coaching activities for the managers, based on the development topics were determined.
[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

(4.5.1.3) Performance metrics

Targets

☑ Achievement of environmental targets

Strategy and financial planning

☑ Board approval of climate transition plan

☑ Shareholder approval of climate transition plan

☑ Achievement of climate transition plan

Emission reduction

☑ Implementation of an emissions reduction initiative

(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

Executive-level is incentivized to achieve measurable climate-related outcomes linked to the organization's climate commitments and/or transition plan. This will form the CEO's and other Executive Committee member's remuneration percentage. Monetary incentives for the management of environmental issues are currently centered around Key Performance Indicators (KPIs) for C-level executives, with approximately 30% related to sustainability and 10% to climate change. While there are no direct financial incentives linked to these KPIs at present, future plans include integrating the corporate scorecard with performance and subsequently reflecting it in compensation. Additionally, the TUSAŞ Suggestion System evaluates improvements in Environment, Energy, and Sustainability, selecting a suggestion

champion based on the annual net gain of the proposal, with a corresponding procedure in place. Moreover, a Special Award program exists to recognize and reward TUSAŞ employees for activities and service inventions that provide added value to the company, beyond their job descriptions. Examples include projects like Zero Waste, with awards ranging from one-quarter to a full base salary bonus, or an amount at the discretion of the General Manager.

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

TUSAŞ's CEO plays a pivotal role in driving the company's climate transition, with a clear link established between their remuneration and the achievement of key environmental targets. Specifically, the CEO's annual compensation is directly tied to the company's progress in reducing its carbon footprint. This incentivizes the CEO to champion and prioritize initiatives that align with TUSAŞ's sustainability goals, fostering a strong leadership commitment to environmental stewardship. The 2023 Revision of Turkish Aerospace's 2022-2030 Strategic Plan, approved by the Board of Directors, outlines a comprehensive roadmap for the company's climate transition. Under "Aim 5.2 Sustainable Development Focused on Environment and Energy Efficiency," TUSAŞ has established ambitious targets for reducing carbon emissions, increasing energy measurement coverage, improving energy performance, expanding renewable energy use, implementing energy efficiency projects, and minimizing waste generation. These targets are directly linked to the CEO's performance metrics, creating a powerful incentive for the CEO to ensure their successful implementation. By aligning the CEO's compensation with the company's environmental objectives, TUSAŞ establishes a clear accountability mechanism that drives progress towards a more sustainable future. This strategic approach not only motivates the CEO to prioritize environmental initiatives but also fosters a culture of sustainability throughout the organization, as other Executive Committee members are also incentivized to contribute to the achievement of these critical goals.

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

(4.5.1.3) Performance metrics

Targets

☑ Organization performance against an environmental sustainability index

Resource use and efficiency

☑ Reduction of water withdrawals – direct operations

☑ Reduction in water consumption volumes – direct operations

☑ Improvements in water efficiency – direct operations

Pollution

☑ Reduction or phase out of hazardous substances

Policies and commitments

☑ Increased access to workplace WASH – 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

The SC members and the CEO have performance metrics aligned with the sustainability such as reducing water consumption and decreasing water discharge to the receiving milieu. It is confirmed that climate related (carbon & water) targets are embedded into executive remuneration system. The climate related targets are included in the senior management incentives. Performance against an individual's annual performance metrics impacts directly the results of her/his annual review, annual compensation and/or bonus. The time frame of the performance indicators is linked to the achievement of targets set in the draft transition action plan. The indicators will be monitored and performance of the CEO will be evaluated on the progression towards these targets.

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

The incentives realization is aligned with the achievement of water commitments.
[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

(4.6.1.4) Explain the coverage

TUSAŞ's environmental policies, as detailed in the Çevre ve İklim Değişikliği Politikası (Environment and Climate Change Policy) and Su Politikası (Water Policy), guide all operations in Turkey and abroad. These policies establish a framework for achieving environmental and climate goals, ensuring compliance and continuous improvement. TUSAŞ is committed to minimizing environmental impacts through a robust Environmental Management System that prevents pollution, supported by dedicated resources and infrastructure. The company actively engages employees and stakeholders in sustainability initiatives, offering training and collaborating on sustainable product development. TUSAŞ also contributes to R&D efforts in environmental management and climate change adaptation. Key initiatives include zero-waste management, renewable energy use, and emission reduction. Waste prevention and the use of recyclable materials are prioritized, with environmental considerations integrated into all operations. Process owners identify and address environmental risks, driving continuous improvement. TUSAŞ monitors global developments to assess climate risks and updates its policies to stay aligned with best practices.

(4.6.1.5) Environmental policy content

Environmental commitments

☑ Commitment to stakeholder engagement and capacity building on environmental issues

Climate-specific commitments

☑ Commitment to net-zero emissions

☑ Commitment to not invest in fossil-fuel expansion

(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

(4.6.1.7) Public availability

Select from:

☑ Publicly available

(4.6.1.8) Attach the policy

İklim ve Çevre Politikası.pdf

Row 2

(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

(4.6.1.4) Explain the coverage

TUSAŞ's comprehensive water policy, accessible on its website, demonstrates a strong commitment to sustainable water management across all operations, domestically and internationally. Aligned with Sustainable Development Goals 6, 12, and 13, the policy focuses on efficient water use, educating employees and suppliers, and adopting innovative technologies like rainwater harvesting, greywater recycling, and zero liquid discharge systems. The policy emphasizes preserving freshwater ecosystems and addressing the interconnections between water and climate change. TUSAŞ works with stakeholders in its operating basins to enhance water resources and biodiversity, ensuring compliance with all legal, regulatory, and customer requirements. This water policy is integrated into TUSAŞ's operational framework, guiding daily practices and strategic decisions. Transparency is maintained through detailed reports on water targets and progress, available on the company website and in its annual Sustainability Report. TUSAŞ's membership in the American Water Works Association supports continuous improvement and leadership in sustainable water management.

(4.6.1.5) Environmental policy content

Environmental commitments

☑ Commitment to take environmental action beyond regulatory compliance

Water-specific commitments

☑ Commitment to reduce water consumption volumes

☑ Commitment to reduce water withdrawal volumes

☑ Commitment to reduce or phase out hazardous substances

☑ Commitment to control/reduce/eliminate water pollution

☑ Commitment to safely managed WASH in local communities

☑ Commitment to the conservation of freshwater ecosystems

☑ Commitment to water stewardship and/or collective action

Additional references/Descriptions

☑ 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

☑ 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

Su Politikası.pdf
[Add row]

(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

☑ Other, please specify **:**Defence and Aerospace Industry Exporters Association, & American Water Works Association

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

Turkish Aerospace's CEO, as the board chairman of the Defence and Aerospace Industry Exporters' Association, has played a pivotal role in establishing the Sustainability Action Plan Sectoral Advisory Committee. This committee, of which Turkish Aerospace is an active member, aims to position the defense and aerospace sector at the forefront of global efforts to combat climate change, recognizing its economic, political, and social significance. The committee's work will contribute to the development of a comprehensive Sustainability Action Plan, enabling the industry to proactively address climate-related challenges and seize emerging opportunities for a more sustainable future. Turkish Aerospace also demonstrates its commitment to water stewardship through its membership in the American Water Works Association, an international non-profit organization dedicated to improving water quality and supply. Through this membership, Turkish Aerospace actively participates in training sessions, webinars, and evaluation surveys, ensuring that the company remains informed and engaged with the latest advancements and best practices in water management
[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

☑ Yes, 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

(4.11.4) Attach commitment or position statement

İklim ve Çevre Politikası.pdf

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

Select from:

☑ Yes

(4.11.6) Types of transparency register your organization is registered on

Select all that apply

☑ Mandatory government register

(4.11.7) Disclose the transparency registers on which your organization is registered & the relevant ID numbers for your organization

Trade Registry Number:871 Mersis Number: 0872001373600001

(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

TUSAŞ ensures the alignment of its external engagement activities with its environmental commitments and strategic plan through a comprehensive approach overseen by the CEO. The company meticulously examines and implements climate-related policies and guidelines, adhering to IPCC guidelines and the Paris Agreement timeframes. To evaluate the impact of engagement activities, TUSAŞ regularly assesses corporate capital, investment horizons, and the useful life of major assets. The company stays abreast of European and international climate policy developments, fostering interactive communication between relevant departments to maintain alignment. The Sustainability Committee, Strategy, Technology Directorate, Compliance, Energy groups, and Environmental Management & Climate Change Unit collaboratively review and recommend innovative policies and technologies that bolster environmental and social sustainability. A multidisciplinary senior-level team oversees actions aligned with the company's climate change strategies, with periodic meetings dedicated to monitoring progress toward carbon neutrality. TUSAŞ proactively participates in relevant workshops to integrate its strategy with the National Strategy, encompassing Paris Agreement requirements and ETS regulations. In anticipation of the carbon pricing mechanism, the company has initiated measures to reduce GHG emissions and cultivate resilience to potential long-term impacts. Additionally, employee awareness initiatives are conducted to foster a corporate culture that prioritizes sustainability. The Sustainability Committee plays a pivotal role in facilitating, monitoring, and communicating both internal and external consistency. Should any inconsistencies arise, the committee, under the guidance of the CEO, will promptly evaluate the situation and implement corrective actions to realign engagement activities with the company's environmental commitments and transition plan. This iterative process ensures that TUSAŞ remains steadfast in its pursuit of a sustainable future.
[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

Türkiye's 2050 net zero target and possible regulations to curb emissions

(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

Other

☑ Climate transition plans

(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

☑ Eastern Europe, Middle East, and Africa (EEMEA)

(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

☑ Responding to consultations

(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

TUSAŞ closely monitors the progress of the Türkiye Ulusal İklim Değişikliği Eylem Planı (Turkey's National Climate Change Action Plan) and its alignment with the company's environmental commitments. This includes tracking the implementation of specific policies and regulations related to sustainable aviation fuels, emissions reduction targets, and incentives for low-carbon technologies. TUSAŞ also assesses the aviation industry's overall progress in meeting the emissions reduction targets outlined in the plan. To measure the success of its engagement, TUSAŞ evaluates the extent to which its recommendations and industry insights have been incorporated into the final action plan and subsequent regulations. The company also analyzes the effectiveness of these policies in driving emissions reductions and promoting sustainable practices within the aviation sector. If the desired outcomes are not fully achieved, TUSAŞ conducts a thorough analysis to identify the underlying reasons and potential barriers to progress. This analysis informs the company's future engagement strategies, allowing it to refine its approach and advocate for more effective policies and regulations. TUSAŞ remains committed to continuous improvement and collaboration with policymakers to ensure that its environmental commitments are supported by a robust and effective national climate change action framework.

(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

Row 2

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

Mandatory GHG reporting

(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

Transparency and due diligence

☑ Corporate environmental reporting

☑ Mandatory environmental reporting

(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

☑ Eastern Europe, Middle East, and Africa (EEMEA)

(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

☑ Other, please specify **:**Annual Reporting

(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

TUSAŞ recognizes the significance of mandatory greenhouse gas (GHG) reporting as a critical component of its environmental commitment and transition plan. The company acknowledges that transparent and accurate reporting of GHG emissions is essential for tracking progress, identifying improvement opportunities, and ensuring accountability. TUSAŞ is actively working towards aligning its reporting practices with international standards, such as the Greenhouse Gas Protocol, to ensure the accuracy and comparability of its emissions data. The company is committed to meeting all mandatory GHG reporting requirements in the jurisdictions where it operates, including Türkiye and any international locations. TUSAŞ's engagement with policymakers on the development of the Türkiye Ulusal İklim Değişikliği Eylem Planı (Turkey's National Climate Change Action Plan) demonstrates its proactive approach to understanding and complying with emerging regulations. The company also recognizes the potential financial implications of carbon pricing mechanisms and is actively working to reduce its GHG emissions to mitigate these risks. TUSAŞ's dedication to transparent GHG reporting is evident in its annual Sustainability Report, which discloses the company's emissions data and outlines its strategies for reducing its carbon footprint. The company's Sustainability Committee plays a crucial role in overseeing the collection and verification of emissions data, ensuring its accuracy and completeness. By publicly disclosing its GHG emissions and actively engaging with policymakers on climate change regulations, TUSAŞ demonstrates its commitment to transparency and accountability in its environmental performance

(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

Row 3

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

Draft National Climate Change Act, Draft National Climate Change Adaption Strategy and 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

Other

☑ Climate transition plans

(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

☑ Eastern Europe, Middle East, and Africa (EEMEA)

(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

☑ Responding to consultations

(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

Turkish Aerospace actively engages with policymakers on the development of the Draft National Climate Change Act and the Draft National Climate Change Adaptation Strategy and Action Plan. These legislative and strategic frameworks are of paramount importance to the company's environmental commitments and transition plan as they will shape Turkey's national response to climate change, including targets for emissions reduction, adaptation measures, and the regulatory landscape for industries like aerospace. TUSAŞ recognizes that these policies will significantly impact its operations, particularly in areas such as sustainable aviation fuels, emissions reduction targets, and resource efficiency. The company aims to leverage its industry expertise and experience to provide valuable input during the policy development process, ensuring that the final regulations are both ambitious and feasible for the aerospace sector. TUSAŞ's engagement is guided by its commitment to reducing its environmental footprint, adapting to the impacts of climate change, and contributing to Turkey's transition to a low-carbon economy. The success of TUSAŞ's engagement will be measured by the degree to which its recommendations and insights are incorporated into the final versions of the Act and the Strategy and Action Plan. The company will also monitor the effectiveness of these policies in driving emissions reductions and facilitating adaptation measures across the industry. By actively participating in the policy development process, TUSAŞ aims to ensure that these crucial frameworks support its own sustainability goals while also contributing to a more resilient and sustainable future for Turkey.

(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

Row 4

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

The NDC of Türkiye in the UNFCCC

(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 impacts and pressures

☑ Emissions – CO2

(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

☑ Eastern Europe, Middle East, and Africa (EEMEA)

(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

(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

Turkish Aerospace actively engages with policymakers on the development and implementation of Türkiye's Nationally Determined Contribution (NDC) under the United Nations Framework Convention on Climate Change (UNFCCC). The NDC outlines Türkiye's commitment to reducing greenhouse gas emissions and adapting to the impacts of climate change, aligning with the goals of the Paris Agreement. TUSAŞ recognizes the significance of the NDC in shaping the national regulatory landscape and its direct relevance to the company's environmental commitments and transition plan. As a major player in the aviation industry, TUSAŞ seeks to contribute its expertise and insights to the NDC development process, advocating for policies that support the adoption of sustainable aviation fuels, promote emissions reduction targets aligned with the Paris Agreement, and incentivize the development and deployment of low-carbon technologies. TUSAŞ measures the success of its engagement by tracking the alignment of Türkiye's NDC with its own environmental goals and the broader objectives of the Paris Agreement. The company also monitors the implementation of policies and regulations derived from the NDC, assessing their effectiveness in driving emissions reductions and fostering a sustainable aviation sector in Türkiye. By actively participating in the NDC process, TUSAŞ aims to ensure that Türkiye's climate action strategy is ambitious, effective, and supportive of the company's long-term sustainability vision

(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

Row 5

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

Water Pollution Control Regulation

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

Select all that apply

☑ Water

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

Environmental impacts and pressures

☑ Water pollution

(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

☑ Eastern Europe, Middle East, and Africa (EEMEA)

(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

☑ Other, please specify **:**Annual Reporting

(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

TUSAŞ recognizes the significance of the Water Pollution Control Regulation in its commitment to responsible water management and environmental stewardship. The regulation, which establishes stringent standards for wastewater discharge and quality, directly impacts TUSAŞ's operations and necessitates adherence to specific protocols for wastewater treatment and disposal. The company proactively engages with regulatory bodies to ensure full compliance with these standards, employing advanced wastewater treatment technologies and monitoring systems to minimize its environmental impact. By adhering to the Water Pollution Control Regulation, TUSAŞ not only fulfills its legal obligations but also contributes to the preservation of water resources and the protection of aquatic ecosystems in the regions where it operates. This commitment aligns with the company's broader sustainability goals and its dedication to minimizing its environmental footprint.

(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

☑ Sustainable Development Goal 6 on Clean Water and Sanitation

[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 **:**Defense industry manufacturers association (SASAD)

(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

☑ Water

(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

In 2023, Turkish Aerospace (TUSAŞ) continued its indirect engagement on environmental policy and regulation through active participation in the Defense Industry Manufacturers Association (SASAD). SASAD is committed to aligning its members with the principles and targets of the Paris Agreement, advocating for policies that support the clean energy transition and emissions reduction within the defense sector. TUSAŞ's position aligns closely with SASAD's advocacy efforts. Throughout 2023, SASAD organized workshops and training sessions on carbon emission inventory preparation in accordance with the Paris Agreement and IPCC requirements. TUSAŞ representatives actively participated in these sessions, contributing to the development of industry-wide best practices. Furthermore, SASAD served as a representative for its members, including TUSAŞ, in discussions with relevant Ministry officials. These discussions focused on the progressive outcomes of the National Climate Council and the transposition of EU environmental regulations into Turkish law. TUSAŞ, through SASAD, also contributed to dialogues on accessing green finance through the EBRD and the harmonization process with the EU Green Deal under the guidance of the Ministry of Industry. In 2023, TUSAŞ expanded its engagement by directly participating in workshops organized by the National Climate Council, contributing to the formulation of the upcoming National Strategy. The company remains committed to monitoring compliance with emerging environmental legislation, including the anticipated carbon emissions trading system (ETS). This proactive approach ensures that TUSAŞ remains informed and prepared for future regulatory developments, while also contributing to the industry-wide effort to reduce greenhouse gas emissions and transition towards a more sustainable future.

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

0

(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:

☑ 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

☑ Paris Agreement

☑ Sustainable Development Goal 6 on Clean Water and Sanitation

[Add row]

(4.12) Have you published information about your organization’s response to environmental issues for this reporting year in places other than your CDP response?

Select from:

☑ Yes

(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:

☑ In mainstream reports, in line with environmental disclosure standards or frameworks

(4.12.1.2) Standard or framework the report is in line with

Select all that apply

☑ GRI

(4.12.1.3) Environmental issues covered in publication

Select all that apply

☑ Climate change

☑ Water

(4.12.1.4) Status of the publication

Select from:

☑ Complete

(4.12.1.5) Content elements

Select all that apply

☑ Strategy

☑ Governance

☑ Emissions figures

☑ Risks & Opportunities

☑ Value chain engagement

☑ Public policy engagement

☑ Water accounting figures

☑ Content of environmental policies

(4.12.1.6) Page/section reference

Page 51 - Content of environmental policies Page 39 - Governance Page 45-47 - Risk Management Page 27 - Sustainability Strategy Pages73-100 - Value Chain Engagement Page 25 - Emission Figures Page 25 - Water Accounting Figures

(4.12.1.7) Attach the relevant publication

Sürdürülebilirlik Raporu.pdf

(4.12.1.8) Comment

Our 2023 Sustainability Report has published in Q3 of 2024.
[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:

☑ Annually

Water

(5.1.1) Use of scenario analysis

Select from:

☑ Yes

(5.1.2) Frequency of analysis

Select from:

☑ Annually

[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

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

☑ Reputation

☑ Technology

☑ Liability

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 1.5°C or lower

(5.1.1.7) Reference year

2023

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2025

☑ 2030

☑ 2040

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Changes to the state of nature

☑ Changes in ecosystem services provision

Stakeholder and customer demands

☑ Consumer sentiment

☑ Impact of nature footprint on reputation

☑ Impact of nature service delivery on consumer

Regulators, legal and policy regimes

☑ Global regulation

☑ Global targets

☑ Methodologies and expectations for science-based targets

Relevant technology and science

☑ Data regime (from closed to open)

Macro and microeconomy

☑ Domestic growth

☑ Globalizing markets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

The IEA Net Zero Emissions (NZE) 2050 scenario presents both significant opportunities and challenges for Turkish Aerospace (TUSAŞ). This scenario assumes rapid advancements in technologies and practices that reduce waste, decrease water consumption, and lower carbon emissions. If realized, these advancements could significantly reduce TUSAŞ's environmental footprint. The successful implementation of this scenario also relies on supportive policies, international collaboration, and growing consumer demand for sustainable aviation, all of which are subject to various uncertainties. The pace of technological development, the evolving policy landscape, economic fluctuations, and geopolitical factors could all impact TUSAŞ's ability to achieve net-zero emissions by 2050. Additionally, the company faces constraints such as the development of infrastructure for alternative fuels, the high cost of new technologies, and the challenge of transitioning its existing products to more sustainable models. Despite these uncertainties and constraints, the IEA NZE scenario provides a valuable framework for TUSAŞ to assess its options and develop a strategic roadmap towards a more sustainable future. Furthermore, TUSAŞ plans to increase the use of renewable energy, aligning with the company's action plan to achieve significant reductions in carbon emissions, water usage, and waste production

(5.1.1.11) Rationale for choice of scenario

TUSAŞ's decision to align its climate transition strategy with the IEA Net Zero Emissions (NZE) 2050 scenario is rooted in a comprehensive rationale that balances environmental sustainability with strategic business interests. The NZE 2050 scenario, which represents the most ambitious pathway to mitigating climate change, aligns with the Paris Agreement's goal of limiting global warming to 1.5C above pre-industrial levels. By adopting this scenario, TUSAŞ underscores its commitment to global climate efforts, enhancing its reputation as a responsible corporate citizen and appealing to the increasing demand for sustainable products and services. The NZE 2050 scenario also provides TUSAŞ with a robust framework for assessing resilience to climate-related changes. By evaluating the potential impacts of various climate scenarios, TUSAŞ can identify vulnerabilities within its operations, supply chains, and markets, allowing for the development of strategies to mitigate these risks. This proactive approach ensures that the company is well-prepared for future challenges and opportunities in a rapidly evolving climate landscape. Moreover, the scenario emphasizes waste reduction, water consumption reduction, carbon emissions reduction, and increased use of renewable energy sources—all of which align with TUSAŞ's strategic focus on technological innovation and sustainability. By investing in these areas, TUSAŞ strengthens its position as a leader in sustainable aviation, gaining a competitive edge and supporting long-term growth. Finally, aligning with the NZE 2050 scenario reflects TUSAŞ's commitment to international collaboration and adherence to global climate goals. The scenario's foundation in strong policy support and international cooperation is crucial for fostering a level playing field and advancing the transition to a low-carbon economy. Through active engagement with policymakers and international organizations, TUSAŞ contributes to the development of effective climate policies, ensuring that its transition plan remains aligned with global best practices.

Water

(5.1.1.1) Scenario used

Water scenarios

☑ WRI Aqueduct

(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

☑ Acute physical

☑ Chronic physical

(5.1.1.7) Reference year

2023

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2025

☑ 2030

☑ 2040

☑ 2070

☑ 2080

☑ 2050

☑ 2060

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Changes to the state of nature

☑ Number of ecosystems impacted

☑ Changes in ecosystem services provision

Finance and insurance

☑ Sensitivity of capital (to nature impacts and dependencies)

Stakeholder and customer demands

☑ Consumer sentiment

☑ Impact of nature footprint on reputation

Regulators, legal and policy regimes

☑ Global regulation

Relevant technology and science

☑ Granularity of available data (from aggregated to local)

Macro and microeconomy

☑ Domestic growth

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

The WRI Aqueduct water risk scenario presents a comprehensive assessment of TUSAŞ's potential exposure to water-related risks. This scenario, grounded in rigorous data analysis and modeling, offers valuable insights into the company's water vulnerabilities, enabling proactive risk mitigation and adaptation strategies. One of the key assumptions of the WRI Aqueduct scenario is that historical water stress trends will persist or even intensify in the future. This implies that TUSAŞ's operational areas, including manufacturing facilities and supply chains, may face increasing water scarcity challenges, potentially impacting production processes,

resource availability, and overall operational efficiency. The scenario also highlights several uncertainties, such as the precise magnitude and timing of future water stress events, the effectiveness of current water management practices, and the potential for regulatory changes that could affect water access and use. These uncertainties underscore the importance of continuous monitoring and adaptive management strategies to ensure TUSAŞ's resilience in the face of evolving water risks. Furthermore, the WRI Aqueduct scenario identifies potential constraints for TUSAŞ, including limited access to reliable water sources, competition for water resources from other sectors, and the potential for increased costs associated with water scarcity. These constraints necessitate proactive measures to improve water efficiency, explore alternative water sources, and strengthen water risk management practices across the company's operations.

(5.1.1.11) Rationale for choice of scenario

TUSAŞ's decision to utilize the WRI Aqueduct water risk scenario is rooted in the company's proactive approach to risk management and its commitment to sustainable water stewardship. The Aqueduct scenario, with its comprehensive assessment of baseline water stress and future projections under various climate and socio-economic pathways, provides TUSAŞ with a robust framework for understanding and mitigating potential water-related risks. This scientifically rigorous tool enables the company to identify vulnerable areas in its operations and supply chains, anticipate future water scarcity challenges, and develop effective adaptation strategies. By incorporating Aqueduct's data and insights into its decision-making processes, TUSAŞ demonstrates its dedication to responsible water management and its commitment to safeguarding the environment and communities in which it operates.

Climate change

(5.1.1.1) Scenario used

Physical climate scenarios

☑ RCP 8.5

(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

☑ Acute physical

☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 3.5ºC - 3.9ºC

(5.1.1.7) Reference year

2023

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2025

☑ 2030

☑ 2040

☑ 2050

☑ 2060

☑ 2070

☑ 2080

☑ 2090

☑ 2100

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Changes to the state of nature

☑ Changes in ecosystem services provision

☑ Speed of change (to state of nature and/or ecosystem services)

Finance and insurance

☑ Cost of capital

☑ Sensitivity of capital (to nature impacts and dependencies)

Stakeholder and customer demands

☑ Consumer sentiment

☑ Impact of nature footprint on reputation

Regulators, legal and policy regimes

☑ Global regulation

☑ Political impact of science (from galvanizing to paralyzing)

Relevant technology and science

☑ Granularity of available data (from aggregated to local)

Macro and microeconomy

☑ Domestic growth

☑ Globalizing markets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

The RCP 8.5 scenario, characterized by a trajectory of unabated greenhouse gas emissions and limited climate action, presents a challenging landscape for TUSAŞ. This high-emissions pathway, which projects significant global warming and far-reaching climate impacts, introduces considerable uncertainties regarding the severity and distribution of environmental changes. Potential consequences range from more frequent and intense extreme weather events and rising sea levels to substantial biodiversity loss. The social and political responses to such escalating climate impacts are difficult to predict, potentially ranging from increased public pressure for climate action and stricter regulations to social unrest and political instability, all of which could significantly affect TUSAŞ's operating environment. While the scenario assumes limited policy support for clean technologies, unexpected breakthroughs in renewable energy, energy storage, or carbon capture could emerge, potentially

altering the trajectory but also creating challenges for TUSAŞ to adapt and remain competitive. These uncertainties pose substantial constraints for TUSAŞ, including increased resource scarcity, operational disruptions due to extreme weather events, market volatility, and regulatory uncertainty. Despite the challenging outlook, analyzing the RCP 8.5 scenario is crucial for TUSAŞ's risk management and resilience planning, enabling the company to identify vulnerabilities, develop robust adaptation strategies, and potentially uncover opportunities for growth and innovation in a high-emissions future.

(5.1.1.11) Rationale for choice of scenario

TUSAŞ recognizes the importance of considering a wide range of climate scenarios to assess its resilience and preparedness for potential climate change impacts. The RCP 8.5 scenario, characterized by high ghg emissions and limited mitigation efforts, serves as a critical "worst-case" scenario for evaluating the company's vulnerability to climate-related risks and its ability to adapt to a changing environment. The rationale for choosing the RCP 8.5 scenario is rooted in the need for robust risk management and strategic planning. While this scenario does not align with the goals of the Paris Agreement, which aims to limit global warming to well below 2C, it provides a valuable framework for stress-testing TUSAŞ's operations and identifying potential vulnerabilities under extreme climate conditions. By understanding the potential impacts of this high-emissions pathway, TUSAŞ can proactively develop strategies to mitigate risks, enhance resilience, and ensure the long-term sustainability of its business operations. Specifically, the RCP 8.5 scenario allows TUSAŞ to assess the potential impacts of climate change on its supply chains, infrastructure, operations, and markets. This includes evaluating the risks associated with extreme weather events, resource scarcity, and regulatory changes. By understanding these risks, TUSAŞ can develop contingency plans, invest in climate-resilient infrastructure, and diversify its operations to minimize disruptions and ensure business continuity. Furthermore, analyzing the RCP 8.5 scenario enables TUSAŞ to identify potential opportunities for innovation and growth in a changing climate. For example, the company can develop new technologies and services that address the challenges of a high-emissions world, such as more efficient aircraft designs, sustainable aviation fuels, and climate-resilient infrastructure solutions. By proactively addressing the challenges of the RCP 8.5 scenario, TUSAŞ can position itself as a leader in sustainable aviation and contribute to global efforts to mitigate climate change. In conclusion, while the RCP 8.5 scenario represents a pessimistic outlook, it serves as a crucial tool for TUSAŞ to assess its resilience, identify vulnerabilities, and develop robust strategies to adapt and thrive in a changing climate. By embracing this scenario as a learning opportunity, TUSAŞ can proactively address the challenges of climate change and ensure its long-term success in a sustainable future.

Climate change

(5.1.1.1) Scenario used

Physical climate scenarios

☑ RCP 2.6

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☑ SSP1

(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

☑ Acute physical

☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 1.5°C or lower

(5.1.1.7) Reference year

2023

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2025

☑ 2030

☑ 2070

☑ 2080

☑ 2040
☑ 2050
☑ 2060
☑ 2090
☑ 2100

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Changes in ecosystem services provision

Finance and insurance

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

Stakeholder and customer demands

☑ Consumer sentiment
☑ Impact of nature footprint on reputation

Regulators, legal and policy regimes

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

Relevant technology and science

☑ Data regime (from closed to open)

Macro and microeconomy

☑ Domestic growth
☑ Globalizing markets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

The RCP 2.6 scenario, a climate change mitigation pathway characterized by stringent emissions reductions and ambitious global efforts to limit warming to well below 2C, presents a unique set of assumptions, uncertainties, and constraints for Turkish Aerospace (TUSAŞ). This scenario assumes a significant global commitment to reducing greenhouse gas emissions, peaking around 2020 and reaching net-zero by 2100, supported by robust policy interventions and technological advancements in carbon capture and storage (CCS), waste reduction, water consumption reduction, and carbon emissions reduction. However, uncertainties remain regarding the feasibility and scalability of these technologies, the effectiveness of policy implementation, the economic impacts on the aviation industry, and the social acceptance of necessary lifestyle changes. These uncertainties present constraints for TUSAŞ, including challenges in infrastructure development for alternative fuels, potential increased costs associated with the transition, and the need to adapt to evolving regulatory requirements. Additionally, TUSAŞ plans to increase the use of renewable energy, which aligns with the company's action plan to achieve significant reductions in carbon emissions, water usage, and waste production.

(5.1.1.11) Rationale for choice of scenario

TUSAŞ's alignment with the RCP 2.6 scenario reflects the company's commitment to environmental sustainability and responsible corporate citizenship. As the only pathway consistent with the Paris Agreement's goal of limiting global warming to well below 2C, RCP 2.6 represents the most ambitious and scientifically sound approach to mitigating climate change. By embracing this scenario, TUSAŞ demonstrates its dedication to reducing its environmental footprint and contributing to global efforts to combat climate change. Furthermore, the RCP 2.6 scenario provides a valuable framework for identifying and mitigating potential risks associated with the transition to a low-carbon economy, allowing TUSAŞ to proactively adapt its operations and strategies to ensure long-term resilience and competitiveness. While acknowledging the uncertainties and challenges inherent in this ambitious pathway, TUSAŞ views it as an opportunity to drive innovation, develop sustainable technologies, and contribute to a more sustainable future for the aviation industry and the planet

Water

(5.1.1.1) Scenario used

Physical climate scenarios

☑ RCP 2.6

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☑ SSP1

(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

☑ Acute physical

☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 1.5°C or lower

(5.1.1.7) Reference year

2023

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2025

☑ 2030

☑ 2040

☑ 2050

☑ 2060

☑ 2070

☑ 2080

☑ 2090

☑ 2100

(5.1.1.9) Driving forces in scenario

Stakeholder and customer demands

☑ Consumer sentiment

☑ Impact of nature footprint on reputation

Regulators, legal and policy regimes

☑ Global regulation

☑ Global targets

☑ Methodologies and expectations for science-based targets

Relevant technology and science

☑ Data regime (from closed to open)

Macro and microeconomy

☑ Domestic growth

☑ Globalizing markets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

The RCP 2.6 scenario, a climate change mitigation pathway characterized by stringent emissions reductions and ambitious global efforts to limit warming to well below 2C, presents a unique set of assumptions, uncertainties, and constraints for Turkish Aerospace (TUSAŞ). This scenario assumes a significant global commitment to reducing greenhouse gas emissions, peaking around 2020 and reaching net-zero by 2100, supported by robust policy interventions and technological advancements in carbon capture and storage (CCS), waste reduction, water consumption reduction, and carbon emissions reduction. However, uncertainties remain regarding the feasibility and scalability of these technologies, the effectiveness of policy implementation, the economic impacts on the aviation industry, and the social acceptance of necessary lifestyle changes. These uncertainties present constraints for TUSAŞ, including challenges in infrastructure development for alternative fuels, potential increased costs associated with the transition, and the need to adapt to evolving regulatory requirements. Additionally, TUSAŞ plans to increase the use of renewable energy, which aligns with the company's action plan to achieve significant reductions in carbon emissions, water usage, and waste production.

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with the transition to a low-carbon economy, allowing TUSAŞ to proactively adapt its operations and strategies to ensure long-term resilience and competitiveness. While acknowledging the uncertainties and challenges inherent in this ambitious pathway, TUSAŞ views it as an opportunity to drive innovation, develop sustainable technologies, and contribute to a more sustainable future for the aviation industry and the planet
[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

The analysis of climate scenarios, particularly RCP 2.6, RCP 8.5, and the IEA NZE 2050, has illuminated a spectrum of potential risks and opportunities for TUSAŞ. The RCP 2.6 scenario, aligned with the Paris Agreement, presents a pathway toward net-zero emissions but requires significant investment in low-carbon technologies and adaptation to evolving regulations. Conversely, the RCP 8.5 scenario highlights the severe risks of unchecked climate change, including resource scarcity, operational disruptions, and market volatility. The IEA NZE 2050 scenario offers a more optimistic outlook, emphasizing the potential for technological breakthroughs and policy support to drive a successful energy transition. These scenarios underscore the importance of robust risk and opportunity identification, assessment, and management for TUSAŞ. For instance, under the RCP 8.5 scenario, the company could face water scarcity risks due to increased drought and extreme weather events. To mitigate this risk, TUSAŞ could invest in water-efficient technologies, diversify its water sources, and develop contingency plans for

operational disruptions. Similarly, the company could leverage the opportunities presented by the RCP 2.6 and NZE 2050 scenarios by investing in research and development for sustainable aviation fuels and electric propulsion technologies, positioning itself as a leader in the emerging market for green aviation. The varying levels of climate action and technological advancement across the scenarios also highlight the need for TUSAŞ to remain agile and adaptable in its risk management strategies. The company must continuously monitor the evolving climate landscape, assess the potential impacts on its operations, and adjust its strategies accordingly. This may involve reassessing its investment priorities, strengthening its supply chain resilience, and engaging in collaborative initiatives to drive the development and adoption of sustainable solutions. Description of how the results of scenario analysis have informed at least one decision in relation to target setting and transition planning: The insights gleaned from the scenario analysis have directly informed TUSAŞ's strategic decision-making and target setting. For example, the company has integrated climate-related targets into its 2022-2030 Strategic Plan, aiming to reduce direct and indirect emissions by 55% by 2030 compared to 2021 levels. This ambitious target aligns with the emissions reduction trajectory outlined in the RCP 2.6 scenario and demonstrates TUSAŞ's commitment to contributing to a 1.5C aligned world. Furthermore, the scenario analysis has prompted TUSAŞ to accelerate its efforts to achieve net-zero GHG emissions across its value chain by 2050, a goal that aligns with the IEA NZE 2050 scenario. The company has established a Sustainability Committee to oversee and drive this transition, and it has implemented a Sustainability Monitoring Platform to track progress towards its climate targets. The scenario analysis has also highlighted the importance of water stewardship for TUSAŞ's long-term resilience. In response to the water scarcity risks identified in the WRI Aqueduct scenario, the company has committed to reducing water withdrawal and discharge, exploring alternative water sources, and implementing water efficiency projects. These actions demonstrate TUSAŞ's proactive approach to managing water-related risks and its commitment to sustainable resource management.

Water

(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

TUSAŞ's scenario analysis, encompassing RCP 2.6, RCP 8.5, and the WRI Aqueduct, has highlighted various climate- and water-related risks and opportunities. The RCP 8.5 scenario projects severe water scarcity and extreme weather events, necessitating robust risk management and adaptation strategies. In contrast, the RCP 2.6 scenario emphasizes growth through investments in sustainable technologies and practices, while the WRI Aqueduct scenario underscores responsible water management. Description of how the results of scenario analysis have informed at least one decision in relation to target setting and transition planning: The insights from the scenario analysis have directly informed TUSAŞ's strategic decisions and target setting. For example, the company aims to reduce direct and indirect emissions by 55% by 2030 compared to 2021 levels, aligning with the RCP 2.6 scenario. This target demonstrates TUSAŞ's commitment to contributing to a 1.5C world. The scenario analysis has also prompted TUSAŞ to work towards net-zero GHG emissions across its value chain by 2050, overseen by a Sustainability Committee and tracked through a Sustainability Monitoring Platform. Recognizing water scarcity risks from the WRI Aqueduct scenario, TUSAŞ is reducing water withdrawal and discharge, exploring alternative water sources, and implementing water efficiency projects. A key initiative is the Zero Liquid Discharge (ZLD) system for treating waste from copper plating and nital etch processes. This system recycles water and removes cyanide-containing waste, significantly reducing the water footprint and managing toxic waste. The ZLD system uses heat pump vacuum evaporators to minimize energy consumption and environmentally friendly refrigerant R407H, demonstrating TUSAŞ's commitment to sustainability and water stewardship.
[Fixed row]

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

(5.2.1) Transition plan

Select from:

☑ 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:

☑ No, and we do not plan to add an explicit commitment within the next two years

(5.2.6) Explain why your organization does not explicitly commit to cease all spending on and revenue generation from activities that contribute to fossil fuel expansion

TUSAŞ acknowledges the importance of addressing the environmental impact of fossil fuel expansion and is actively working to reduce its reliance on fossil fuels through its sustainability strategy. However, as a major player in the aerospace and defense industry operating in a developing country heavily reliant on fossil fuels, completely ceasing all spending and revenue generation from fossil fuel-related activities in the short term would be impractical and could disrupt the company's ability to meet its operational needs, customer demands, and national energy security concerns. While TUSAŞ remains committed to transitioning towards a low-carbon economy, this process requires a phased and responsible approach that considers the technological limitations and economic realities of the industry. The company's investments in renewable energy, energy efficiency, and the development of sustainable aviation technologies demonstrate its dedication to minimizing its environmental impact and contributing to the global effort to combat climate change, while balancing the complex interplay of operational necessities, technological advancements, economic considerations, and stakeholder needs.

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

Select from:

☑ Our climate transition plan is voted on at Annual General Meetings (AGMs)

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

TUSAŞ's climate transition plan hinges on a few key factors, including advancements in low-carbon technologies, a supportive policy environment, stakeholder collaboration, financial resources, and growing market demand for sustainable aviation products and services. The company is actively engaged in research and development of sustainable aviation fuels (SAFs), electric propulsion, and hydrogen fuel cells, aligning with global trends towards lower-carbon technologies. Additionally, TUSAŞ relies on supportive policies, both domestically and internationally, to incentivize the development and adoption of these technologies. The company emphasizes collaboration with stakeholders across the value chain, including suppliers, customers, and government agencies, to ensure a coordinated and effective transition. Moreover, TUSAŞ recognizes the importance of securing adequate financial resources, whether through internal allocation or external investment, to implement its ambitious targets. Finally, the success of the plan is contingent on a growing market demand for sustainable aviation products and services, driven by increasing consumer awareness and stricter environmental regulations. TUSAŞ is actively addressing these dependencies through ongoing engagement with stakeholders, technological innovation, and strategic financial planning to mitigate potential risks and ensure a successful transition to a low-carbon future.

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

In 2023, TUSAŞ continued its progress towards achieving the goals outlined in its 2022-2030 Strategic Plan. The company's commitment to environmental sustainability was evident in several key areas: Energy Efficiency: The company plans to increase the use of renewable energy and continues to focus on energy-saving measures, suggesting further improvements in this area. Waste Management: TUSAŞ's efforts to minimize waste generation and promote recycling continued in 2023. The company implemented waste reduction measures and recycling programs across its operations, contributing to a more sustainable approach to resource

management. This includes initiatives aligned with the Zero Liquid Discharge (ZLD) system to treat waste from processes such as copper plating and nital etch, significantly reducing toxic waste and the water footprint. Water Management: In 2023, TUSAŞ achieved the Water Footprint Environmental Management Certification, demonstrating its commitment to responsible water use and conservation. The company also completed a project report for the implementation of an advanced wastewater treatment plant, further advancing its efforts to minimize its environmental impact on water resources. TUSAŞ's ongoing commitment to research and development, coupled with its active engagement in industry initiatives and collaborations, indicates continued progress towards its long-term climate goals. This includes reducing waste, water consumption, and carbon emissions, as well as implementing renewable energy plans. These efforts reflect TUSAŞ's proactive approach to sustainability and its dedication to meeting and exceeding its environmental targets.

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

Select all that apply

☑ Water

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

TUSAŞ's climate transition plan recognizes the interconnections between environmental issues and integrates considerations for water alongside its climate action goals. The company's commitment to water stewardship is evident in its strategic plan, which includes specific targets for water consumption reduction and the implementation of water efficiency projects. The 2023 Sustainability Report highlights the company's efforts to optimize water use through initiatives such as rainwater harvesting, wastewater treatment, and the use of water-efficient technologies. Additionally, By integrating water considerations into its climate transition plan, TUSAŞ demonstrates a holistic approach to environmental stewardship, recognizing the interconnectedness of these critical issues and the need for comprehensive action to address them.
[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
☑ Investment in R&D
☑ 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

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

In 2023, TUSAŞ's product strategy was driven by a commitment to environmental sustainability and innovation. The company prioritized the development and production of products with reduced greenhouse gas (GHG) emissions, focusing on fuel efficiency and the incorporation of lightweight, durable, and recyclable materials such as thermoplastic composites. This strategic direction aligns with global trends towards more sustainable aviation solutions and responds to the increasing demand for environmentally conscious products in the aerospace sector. When formulating our product strategy, our goals for reducing GHG emissions and the regulatory requirements in different markets are central to our strategic decisions. These elements provide crucial guidance for achieving our sustainability and environmental responsibility objectives. As a company operating in various markets, regulatory requirements significantly shape our product strategy, ensuring our products comply with environmental and emission regulations in all regions where we operate. Particularly in regions like the European Union, where emission standards are becoming increasingly stringent, continuous updates and improvements to our products are necessary, which may incur additional costs. However, in

some markets, tax reductions, subsidies, or other incentives for low-emission products allow us to optimize our product strategy to leverage these benefits. TUSAŞ's dedication to technological innovation is evident in its ongoing research and development (R&D) projects and its state-of-the-art composite manufacturing facility.

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

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

TUSAŞ recognizes the importance of a sustainable supply chain and actively collaborates with its suppliers to promote environmentally responsible practices. The company's Environmental Sustainability Evaluation Questionnaire for Supplier and Supporting Industry Firms, implemented in 2022, serves as a framework for assessing and enhancing the environmental performance of suppliers. By fostering collaboration and knowledge-sharing within its supply chain, TUSAŞ aims to create a more sustainable and resilient ecosystem.

Investment in R&D

(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

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

TUSAŞ's commitment to reducing emissions in the use phase of its products is reflected in its significant investments in research and development (R&D). The company continues to explore emerging technologies, fuel alternatives, innovative materials, and design pathways that can enhance the environmental performance of its products. These efforts are aligned with the global trend towards developing more sustainable aviation technologies and demonstrate TUSAŞ's dedication to innovation and environmental stewardship.

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

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

TUSAŞ prioritizes reducing emissions from its operational activities. The company's use of a co-generation plant, highlighted in its 2023 Sustainability Report, significantly reduces reliance on grid electricity and associated emissions. This approach demonstrates TUSAŞ's commitment to energy efficiency and resource optimization. The company's ongoing efforts to identify and implement further improvements in its operational practices are guided by its ISO 14064:2018 GHG Management Systems certification, ensuring a systematic and comprehensive approach to reducing its environmental footprint

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

☑ Water

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

TUSAŞ acknowledges the importance of water in its manufacturing processes and aims to minimize its water footprint. The company is actively exploring and implementing innovative solutions to reduce water consumption in its operations. For instance, TUSAŞ is researching the feasibility of using alternative water sources, such as rainwater harvesting and treated greywater, in its new building projects. The company is also evaluating wastewater recovery applications to further reduce its reliance on freshwater resources.

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

☑ Water

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

TUSAŞ recognizes that its water stewardship efforts extend beyond its direct operations and into its supply chain. The company is committed to collaborating with its suppliers to promote responsible water use and reduce water-related risks throughout the value chain. This includes educating suppliers about water stewardship, encouraging them to adopt water-saving technologies, and assessing their water management practices through audits and questionnaires.

Investment in R&D

(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

☑ Water

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

TUSAŞ is investing in research and development to identify and implement innovative solutions for water efficiency. The company's 2023 Sustainability Report highlights its ongoing efforts to develop and implement zero liquid discharge (ZLD) systems, which aim to recover and reuse wastewater generated from its machinery, benches, and equipment. These investments in water-saving technologies demonstrate TUSAŞ's commitment to minimizing its water footprint and mitigating water-related risks.

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

☑ Water

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

TUSAŞ has implemented various water efficiency measures in its operations, including the use of dry-type industrial systems and equipment that do not require water consumption. The company also treats its wastewater to meet regulatory standards before discharging it, ensuring that its operations do not negatively impact local water resources. Additionally, TUSAŞ is exploring the use of digital control systems to optimize chemical dosing in cooling towers, further reducing water consumption and improving efficiency.
[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

☑ Indirect costs

☑ Access to capital

☑ Capital allocation

☑ Capital expenditures

(5.3.2.2) Effect type

Select all that apply

☑ Risks

☑ 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

The identified risks and opportunities have been integrated into the financial planning process, with the long-term climate strategy expected to enhance the business model's value. Turkish Aerospace plans to allocate resources to its climate transition plan next year, focusing on market opportunities projected to reach USD 300 billion by 2030, particularly in airlift, construction, and manufacturing. Key insights include the potential for UAVs to place satellites in low orbit and the growing use of composite materials in various sectors. Production costs, R&D, and insurance expenses are budgeted with a focus on climate-related impacts, overseen by the board and relevant committees. Climate issues are expected to influence indirect costs, including wages, product development, and testing, with digitization and decarbonization efforts playing a key role in cost management. The financial plan is updated annually, aligning long-term capital strategy with short-term budgeting. Turkish Aerospace also addressed water security by implementing a Water Network Measurement and SCADA System across 80 buildings, enabling real-time monitoring and creating a "water consumption map" to optimize resource use. The SCADA system provides detailed consumption data, while a digital waste management system enhances efficiency and reduces emissions. Investment in a sustainable system for calculating greenhouse gas emissions and corporate carbon and water footprints, in line with ISO 14064 & 14046 Standards, has been made, with budget allocations in place. Despite the infrequency of major climate-related events, Turkish Aerospace continues to assess and mitigate risks to protect financial stability.

Row 2

(5.3.2.1) Financial planning elements that have been affected

Select all that apply

☑ Revenues

☑ Direct costs

☑ Capital expenditures

☑ Indirect costs
☑ Access to capital
☑ Capital allocation

(5.3.2.2) Effect type

Select all that apply
☑ Risks
☑ 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
☑ Water

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

TUSAŞ's long-term business planning and objectives are informed by a comprehensive water strategy framework and risk assessment, which considers factors such as water supply reliability, water withdrawal reduction, water efficiency, compliance, financial capability for adequate water quantity and quality, and local and social issues across short, medium, and long-term horizons. This integrated approach ensures that water-related risks and opportunities are considered in all aspects of the company's operations and decision-making processes. Having achieved ISO 14046 certification in 2023, TUSAŞ is committed to responsible water use and reducing its reliance on non-renewable resources. The company actively seeks to minimize its impact on community access to fresh water by implementing various water efficiency measures, such as selecting water-efficient fixtures and equipment, exploring rainwater collection and reuse options, and prioritizing dry industrial systems and equipment. TUSAŞ also implements on-site recovery systems (zero liquid discharge) to recover 85% of wastewater generated from its operations, adopts dry landscaping practices to reduce irrigation needs, and reuses treated wastewater for irrigation purposes. Furthermore, the company is implementing a water measurement and automation project to monitor water consumption in production areas and accommodation facilities using a SCADA system. To ensure the financial viability of its water-related initiatives, TUSAŞ integrates water withdrawal and discharge reduction objectives into its long-term business financial planning. Investments in water initiatives are identified and planned based on site buildings and growth, water cost, infrastructure needs, and water recycling plant costs. These financial considerations are incorporated into the company's budget forecasts and risk assessments, ensuring alignment with its technology roadmap and enabling continuous review for successful execution.
[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 **:**Other Taxonomy

(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)

10000

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

0

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

0

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

0

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

The methodology used by Turkish Aerospace (TUSAŞ) to assess alignment with its climate transition objectives is driven by a structured sustainability framework established by the company’s Sustainability Committee Finance Dimension. This framework prioritizes investments in projects with clear sustainability benefits, such as renewable energy initiatives and environmentally friendly technologies, which are classified as aligned spending. For example, investments marked with sustainability budget tags, such as those for solar power installations or energy-efficient systems like ZLD applications, are prioritized and financed accordingly. In contrast, activities not aligned with the climate transition include those that involve fossil fuel-based operations or projects that do not meet the required sustainability criteria. Furthermore, the allocation of resources for projects benefiting from exemptions and incentives are also evaluated to ensure alignment with sustainability goals, with a focus on channeling resources into projects that meet green financing requirements. The alignment of spending and revenue is expected to grow over time as TUSAŞ continues to integrate sustainability into its operational and financial strategies. This includes support mechanisms, such as the Turquality incentive, which assists with consultancy services for Green Deal alignment, covering costs up to 50% for a total of TRY 10,000,000 over five years. The organization also anticipates that sustainability-related projects will increasingly capture financial and operational resources as regulatory frameworks, such as the EU Taxonomy and REACH, become more stringent. These assumptions are based on ongoing evaluations and the anticipated shift in customer demand towards more sustainable products and services.
[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

Turkish Aerospace (TA) aims to position Türkiye at an internationally competitive level in aircraft technology by making significant investments in future technological products. In 2023, TA allocated half of its total turnover to R&D, reflecting its commitment to innovation and advancement. The company closely tracks the EU Green Deal and the necessary technologies to align with the aviation sector's environmental goals, aiming to reduce its carbon footprint and avoid potential future taxes and penalties. In 2021, TA prepared a comprehensive report on the EU Green Deal and Related Aviation Technologies for the SASAD ARGETEK commission. Continuing its efforts in 2023, TA collaborated with the same commission to develop strategies that meet the EU Green Deal's goals. These efforts are anchored in the company's Technology Roadmap, a decision support system guiding R&D projects toward achieving strategic, low-carbon objectives. The Technology Roadmap outlines key areas for innovation, including Electric Propulsion Systems, Hybrid-Electric Aircrafts, and Alternative Energy Sources, which are vital for meeting the EU Green Deal's low-carbon emission requirements. In line with these goals, TA continued its work on various R&D projects in 2023, successfully completing activities reported in previous years while also launching new initiatives. A total of roughly 6M was invested in these projects, including the NLR Metal Additive Manufacturing Program-Phase 2, aimed at advancing additive manufacturing from design to certification. Another project involved the development of a Thermoplastic Spoiler for the Airbus Wing of Tomorrow, focusing on the design and manufacturing of single-piece thermoplastic composites. TA also advanced the development of innovative bonding methods for structural composite parts, which aim to enhance mechanical properties, increase fatigue life, and reduce aircraft weight. Lastly, TA worked on creating nanoparticle-reinforced composite materials with high ballistic and mechanical performance, intended to replace conventional ballistic armor in aircraft, thereby reducing weight and increasing durability. These projects reflect TA's dedication to staying at the forefront of aviation technology while meeting both industry demands and environmental sustainability goals.
[Fixed row]

(5.5.8) Provide details of your organization’s investments in low-carbon R&D for transport-related activities over the last three years.

Row 1

(5.5.8.1) Activity

Select all that apply

☑ Aviation

(5.5.8.2) Technology area

Select from:

☑ Airframe

(5.5.8.3) Stage of development in the reporting year

Select from:

☑ Small scale commercial deployment

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

20

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

149420

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

45

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

This row represents “NLR Metal Additive Manufacturing Program-Phase 2” Project

Row 2

(5.5.8.1) Activity

Select all that apply

☑ Aviation

(5.5.8.2) Technology area

Select from:

☑ Airframe

(5.5.8.3) Stage of development in the reporting year

Select from:

☑ Full/commercial-scale demonstration

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

20

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

5664132

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

45

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

This row represents Thermoplastic Spoiler (Wing of Tommorow) Project

Row 3

(5.5.8.1) Activity

Select all that apply

☑ Aviation

(5.5.8.2) Technology area

Select from:

☑ Airframe

(5.5.8.3) Stage of development in the reporting year

Select from:

☑ Pilot demonstration

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

20

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

53413

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

45

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

This row represents “Development of Innovative Bonding Methods for Structural Composite Parts used in Aviation Applications” Project

Row 4

(5.5.8.1) Activity

Select all that apply

☑ Aviation

(5.5.8.2) Technology area

Select from:

☑ Airframe

(5.5.8.3) Stage of development in the reporting year

Select from:

☑ Applied research and development

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

20

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

27411

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

45

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

This row represents “Development of Nanoparticle Reinforced Composite Material with High Ballistic and Mechanical Performance” Project
[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?

(5.9.1) Water-related CAPEX (+/- % change)

-95

(5.9.2) Anticipated forward trend for CAPEX (+/- % change)

4

(5.9.3) Water-related OPEX (+/- % change)

105

(5.9.4) Anticipated forward trend for OPEX (+/- % change)

29

(5.9.5) Please explain

In 2023, OPEX calculations included maintenance costs, water bills, chemicals for treatment plants, wastewater analysis, electricity, labor, and sludge disposal. Compared to the previous year, OPEX rose due to increases in water and electricity prices, labor wages, exchange rates, and disposal costs. This upward trend is expected to continue in 2024. For CAPEX in 2022, investments focused on ZLD (Zero Liquid Discharge) projects, the SCADA system, and wastewater treatment project preparations. With ZLD investments completed in 2022, these facilities began operating in 2023, leading to higher OPEX. As major investments were finalized and the new wastewater treatment plant was postponed, CAPEX in 2023 was lower. A slight CAPEX increase is expected in 2024 for ongoing water management monitoring and additional facility investments. These changes in CAPEX and OPEX from the previous year are clearly defined, aligning with our strategic financial goals.
[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: ☑ Yes	*Select all that apply* ☑ Carbon ☑ Water

[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

☑ Drive energy efficiency

(5.10.1.3) Factors considered when determining the price

Select all that apply

☑ Alignment to scientific guidance

☑ Scenario analysis

(5.10.1.4) Calculation methodology and assumptions made in determining the price

The calculation of the project's impact involved determining energy savings based on the difference in energy consumption before and after the LED system replacement, which resulted in savings of 537,767 kWh. The CO2 reduction was calculated using the emission factor for electricity consumption, leading to a reduction of 2,360.80 tCO2. Cost savings were calculated based on the reduced electricity consumption, yielding annual savings of 50,342. The total project budget was 114,000, covering materials, labor, and additional expenses. Assumptions included a stable emission factor and electricity cost, a sufficient lifespan and efficiency of the LED system, negligible maintenance costs, and stable external factors such as electricity prices and emission factors. These methodologies and assumptions ensured consistent and transparent calculations of the financial and environmental benefits.

(5.10.1.5) Scopes covered

Select all that apply

☑ Scope 2

(5.10.1.6) Pricing approach used – spatial variance

Select from:

☑ Differentiated

(5.10.1.7) Indicate how and why the price is differentiated

TUSAŞ differentiates its internal carbon price based on the scale and impact of projects and their strategic importance, ranging from 48.29 to 50 per metric ton CO2e. Smaller-scale projects with lower emission reduction potential are assigned a lower price to ensure economic viability and encourage widespread adoption of sustainability practices. In contrast, larger-scale projects with significant emission reduction potential are assigned a higher price, reflecting their greater environmental impact and higher investment requirements. This differentiation ensures that all projects, regardless of size, contribute effectively to TUSAŞ's overall emission reduction goals and aligns with the company's strategic objectives for sustainability.

(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)

1303.83

(5.10.1.11) Maximum actual price used (currency per metric ton CO2e)

1350

(5.10.1.12) Business decision-making processes the internal price is applied to

Select all that apply

☑ Capital expenditure

☑ Product and R&D

(5.10.1.13) Internal price is mandatory within business decision-making processes

Select from:

☑ No

(5.10.1.14) % total emissions in the reporting year in selected scopes this internal price covers

5

(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

The pricing approach at TUSAŞ is monitored and evaluated through regular internal audits and continuous tracking of key performance indicators (KPIs) related to carbon reduction, energy savings, and cost savings. Energy consumption data is collected from projects like the LED system replacement to calculate actual savings and CO2 reductions, while financial performance is analyzed to assess economic impact. Quarterly reviews are conducted to ensure that the internal carbon price is effectively integrated into capital expenditure (CapEx) and product and research & development (R&D) projects. This comprehensive monitoring and evaluation process ensures that the carbon pricing strategy aligns with TUSAŞ's sustainability objectives and drives continuous improvement in environmental performance. [Add row]

(5.10.2) Provide details of your organization’s internal price on water.

Row 1

(5.10.2.1) Type of pricing scheme

Select from:

☑ Implicit price

(5.10.2.2) Objectives for implementing internal price

Select all that apply

☑ Drive water efficiency

☑ Setting and/or achieving of water-related policies and targets

(5.10.2.3) Factors beyond current market price are considered in the price

Select from:

☑ Yes

(5.10.2.4) Factors considered when determining the price

Select all that apply

☑ Alignment to scientific guidance

☑ Scenario analysis

(5.10.2.5) Calculation methodology and assumptions made in determining the price

The calculation methodology for determining the internal water price at TUSAŞ involves evaluating the project budget against the water savings achieved. For the 2023 ZLD projects, with a total budget of 921,390 and water savings of 23,409 m³, the internal water price was calculated as approximately 39.37 per cubic meter. Assumptions made include a stable water cost, consistent efficiency levels of the ZLD systems as specified by the manufacturer, negligible maintenance costs included in the annual savings, and constant external factors such as water prices and emission factors. This methodology ensures a transparent approach to calculating the financial and environmental benefits of water-saving projects.

(5.10.2.6) Stages of the value chain covered

Select all that apply

☑ Direct operations

(5.10.2.7) Pricing approach used – spatial variance

Select from:

☑ Uniform

(5.10.2.9) Pricing approach used – temporal variance

Select from:

☑ Static

(5.10.2.11) Minimum actual price used (currency per cubic meter)

1063

(5.10.2.12) Maximum actual price used (currency per cubic meter)

1080

(5.10.2.13) Business decision-making processes the internal water price is applied to

Select all that apply

☑ Capital expenditure

☑ Product and R&D

(5.10.2.14) Internal price is mandatory within business decision-making processes

Select from:

☑ No

(5.10.2.15) Pricing approach is monitored and evaluated to achieve objectives

Select from:

☑ Yes

(5.10.2.16) Details of how the pricing approach is monitored and evaluated to achieve your objectives

The pricing approach at TUSAŞ is monitored and evaluated through a structured process involving regular internal audits, continuous tracking of key performance indicators (KPIs), and periodic reviews. Internal audits ensure compliance with the water pricing strategy by reviewing the implementation of the internal water price in capital expenditure (CapEx) and operational projects. KPIs related to water savings, CO2 reductions, and cost savings are continuously tracked and reported. Water usage data is collected from projects like the ZLD systems to calculate actual savings and CO2 reductions, while financial performance is analyzed to assess the economic impact. Quarterly reviews are conducted to ensure that the internal water price remains effective in incentivizing water conservation efforts. This comprehensive monitoring and evaluation process ensures that the water pricing strategy aligns with TUSAŞ's sustainability objectives and drives continuous improvement in environmental performance

[Add row]

(5.11) Do you engage with your value chain on environmental issues?

	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:*	*Select all that apply*

	Engaging with this stakeholder on environmental issues	Environmental issues covered
	☑ Yes	☑ Climate change ☑ Water
Other value chain stakeholders	*Select from:* ☑ Yes	*Select all that apply* ☑ Climate change ☑ Water

[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 ecosystem services/environmental assets

(5.11.1.3) % Tier 1 suppliers assessed

Select from:

☑ 51-75%

(5.11.1.4) Define a threshold for classifying suppliers as having substantive dependencies and/or impacts on the environment

Suppliers with significant Scope 3 emissions are classified as having substantive dependencies and/or impacts. This classification is based on a detailed analysis of their operational data, environmental impact reports, and compliance with regulatory standards. Suppliers are evaluated annually, and those meeting or exceeding the defined thresholds are prioritized for engagement and support.

(5.11.1.5) % Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

Select from:

☑ 76-99%

(5.11.1.6) Number of Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

29

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:
☑ 51-75%

(5.11.1.4) Define a threshold for classifying suppliers as having substantive dependencies and/or impacts on the environment

Suppliers with significant Scope 3 emissions, high water usage, or substantial impacts on local water quality and availability are classified as having substantive dependencies and/or impacts. This classification is based on a detailed analysis of their operational data, environmental impact reports, and compliance with regulatory standards. Suppliers are evaluated annually, and those meeting or exceeding the defined thresholds are prioritized for engagement and support.

(5.11.1.5) % Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

Select from:
☑ 76-99%

(5.11.1.6) Number of Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

29
[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

☑ 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

TUSAŞ prioritizes supplier engagement on climate change by focusing on those that significantly influence its value chain, particularly those with a substantial impact on its carbon footprint and energy consumption. This targeted approach aims to maximize the effectiveness of its sustainability efforts by collaborating with suppliers who have the greatest potential to contribute to the company's environmental goals. By working closely with these key suppliers, TUSAŞ can implement emission reduction initiatives, promote energy efficiency, and foster a shared commitment to sustainability throughout its 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

☑ 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

TUSAŞ prioritizes supplier engagement on water management by focusing on those that significantly influence its value chain, particularly those with a substantial impact on its water-related risks. The company actively seeks to collaborate with suppliers whose operations are located in water-stressed regions or those whose production processes have a high water demand, as these factors can pose significant risks to TUSAŞ's own operations and environmental goals
[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

Suppliers must comply with environmental regulations and TUSAŞ's specific environmental policies, including providing data on their environmental performance and participating in sustainability initiatives. Our purchasing process mandates that suppliers implement environmental management systems, such as ISO 14001, and disclose their GHG emissions and water usage data. Non-compliant suppliers are required to develop corrective action plans, and their progress is closely monitored to ensure they meet our stringent environmental standards.

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

Suppliers must comply with environmental regulations and TUSAŞ's specific environmental policies, including providing data on their environmental performance and participating in sustainability initiatives. Our purchasing process mandates that suppliers implement environmental management systems, such as ISO 14001, and disclose their GHG emissions and water usage data. Non-compliant suppliers are required to develop corrective action plans, and their progress is closely monitored to ensure they meet our stringent environmental standards.
[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:

☑ Disclosure of GHG emissions to your organization (Scope 1, 2 and 3)

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Certification

☑ First-party verification

☑ Second-party verification

☑ Supplier scorecard or rating

☑ 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:

☑ 100%

(5.11.6.8) % tier 1 supplier-related scope 3 emissions attributable to the suppliers 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:

☑ 76-99%

(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

☑ Providing information on appropriate actions that can be taken to address non-compliance

(5.11.6.12) Comment

In corporate carbon footprint calculation studies following requirements are fixed; In order to calculate the greenhouse gases within the scope of Category-3 Transportation and Category-4 Purchased Products, information on the weight and transportation type of all kinds of materials such as procured product/raw material/service/kit/chemical is needed. (ISO 14064:2018 requirements) Other relevant requirements; In 2023, Environmental Sustainability Evaluation Questionnaire for Supplier and Sub-Industry Firms" has been revised within the scope of increasing the awareness of our suppliers on Sustainability including Climate Change.

Water

(5.11.6.1) Environmental requirement

Select from:

☑ Setting and monitoring water pollution-related targets

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Certification

☑ Fines and penalties

☑ On-site third-party audit

☑ Geospatial monitoring tool

☑ Off-site third-party audit

☑ Community-based monitoring

☑ Grievance mechanism/ Whistleblowing hotline

(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%

(5.11.6.5) % tier 1 suppliers with substantive environmental dependencies and/or impacts related to this environmental issue required to comply with this environmental requirement

Select from:

☑ 100%

(5.11.6.6) % tier 1 suppliers with substantive environmental dependencies and/or impacts related to this environmental issue that are 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:

☑ 76-99%

(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

☑ Re-integrating suppliers back into upstream value chain based on the successful and verifiable completion of activities

(5.11.6.12) Comment

*The suppliers' duty is to make continuous improvement in water & energy related consumption. Demands of the company from the suppliers to keep them in the approval list are; * Legal compliance on all climate/ water related activities. * Reduction of electricity / water / natural gas, other fuel etc. consumption *Activation of existing environmental management systems, (Waste management practices, etc.) or certification of ISO 14001 *Participation of the training on Greenhouse Gas Emission inventory management. Suppliers are monitored and scored according to their replies. For the next two years, Turkish Aerospace will guide them to set targets on water and energy related actions.*
[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:

☑ Emissions reduction

(5.11.7.3) Type and details of engagement

Innovation and collaboration

☑ Collaborate with suppliers on innovations to reduce environmental impacts in products and services

☑ Collaborate with suppliers on innovative business models and corporate renewable energy sourcing mechanisms

(5.11.7.4) Upstream value chain coverage

Select all that apply

☑ Tier 1 suppliers

☑ Tier 2 suppliers

(5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

Select from:

☑ 76-99%

(5.11.7.6) % of tier 1 supplier-related scope 3 emissions covered by engagement

Select from:

☑ 76-99%

(5.11.7.8) Number of tier 2+ suppliers engaged

29

(5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

The expectations from our suppliers is to comply with all laws and regulations and to manage their business in accordance to the requirements and targets set up for ISO 14001 Environmental Management Systems including emission measurements, waste management and water consumption. The response rate and the performance rate are the main indicators of this success. We need to ensure business continuity in the context of climate related topics aligned with Paris Agreement Requirements throughout our company's commitments. This engagement will allow our tier 1 suppliers to ameliorate their own performance as well as cascade their own suppliers. Due to the fact that Expeditors is the contracted airline carrier of Turkish Aerospace and the company collects the shipments from foreign customs and transfers them to Turkish Aerospace. An information collection was requested from the company on 13 March 2023 regarding the reduction of carbon footprint. In this context, Expeditors submitted 2 different reports regarding the Green House Gas – GHG emissions in Turkish Aerospace air import shipments in 2022. In these reports; o How much Green House Gas – GHG would be caused if all air import cargoes were transported only by air, o Green House Gas – GHG measurements, where 35% of the cargoes are actually brought by air land transportation, o In the actual scenario, it was stated that 11% less GHG release was achieved in the GHG release compared to the first scenario. In addition, according to the USA main transportation scheme of Expeditors, the consolidated cargoes are collected in Frankfurt and transported directly to Ankara by truck, instead of being transported to the final destination by air. The main reasons for this are to reduce the cost of transportation and reduce the carbon footprint.”...

(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 **:**Value Chain Engagement

(5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

☑ Unknown

Water

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ Total water withdrawal volumes reduction

(5.11.7.3) Type and details of engagement

Innovation and collaboration

☑ Collaborate with suppliers on innovations to reduce environmental impacts in products and services

(5.11.7.4) Upstream value chain coverage

Select all that apply

☑ Tier 1 suppliers

☑ Tier 2 suppliers

(5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

Select from:

☑ 76-99%

(5.11.7.7) % tier 1 suppliers with substantive impacts and/or dependencies related to this environmental issue covered by engagement

Select from:

☑ 76-99%

(5.11.7.8) Number of tier 2+ suppliers engaged

29

(5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

Our measure of success is to engage with all of our supply chain and have their commitment to our procurement policies. All strategic suppliers have committed to comply with our procurement policy, which enables the company to identify and manage supply chain-related water/ environmental risks and impact, so the necessary measures are applied to improve supply chain performance.

(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 **:**Value Chain Engagement

(5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

☑ Unknown

[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

☑ Share information on environmental initiatives, progress and achievements

Innovation and collaboration

☑ Align your organization’s goals to support customers’ targets and ambitions

☑ Run a campaign to encourage innovation to reduce environmental impacts

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 76-99%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☑ 26-50%

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

We are having periodic meetings with our specific customers about sustainability topic. We are sharing our sustainability activities, projects about decreasing our environmental impact, achievements about our sustainability awards, our environmental and energy targets. Our customers also share their targets, activities and projects. The scope of sustainability meetings is about our ambitions to align with our targets. We are very ambitious to meet our customers’ environmental expectations. Therefore we are presenting and giving information to our customers about our sustainability organization, performed sustainability activites, ours scores and awards, sustainability targets, projects and expected carbon emission savings, quality management systems and action plans about carbon/water/waste

management. In addition to that some of our customers are sending us sustainability questionnaire in the tendering process to see our sustainability maturity level. We are having preperations for their expectations, answering the questions and improving our sustainability studies in line with the questions.

(5.11.9.6) Effect of engagement and measures of success

To create value in social, economic, and environmental issues, we collaborate with customers, public institutions, and organizations. In 2023, TUSAŞ advanced in innovation and sustainability, submitting 133 patent applications—65 national, 38 international, and 30 utility model—reinforcing its leadership in aerospace technology and maintaining its "First Quarter of the Year Türkiye Champion" status in international patents. We shared new business models for space missions with stakeholders, lowering entry barriers and aiding space program launches, including in Türkiye. In response to customer demand, TUSAŞ began reporting to the CDP Climate Change Program, reinforcing our transparency and climate action commitment. The success of our engagement is measured by the number of climate-related collaboration and investment projects. In 2023, TUSAŞ collaborated on the design and production of thermoplastic composite parts vital for climate transition studies. A customer is set to launch zero-emission aircraft by 2035, supported by our technological advancements. Over the past five years, TUSAŞ invested 700 million in technology and infrastructure, including a 100 m² composite facility. These efforts not only enhance our technological capabilities but also play a pivotal role in the global transition to sustainable aviation, demonstrating the significant impact of our customer collaborations on advancing climate-related initiatives.

Water

(5.11.9.1) Type of stakeholder

Select from:

☑ Customers

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Educate and work with stakeholders on understanding and measuring exposure to environmental risks

Innovation and collaboration

☑ Align your organization’s goals to support customers’ targets and ambitions

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 76-99%

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

Engaging customers is essential for TUSAŞ to understand their sustainability expectations and align our products with market demands, enhancing satisfaction and loyalty. Customers prioritize sustainability, and demonstrating our commitment to responsible water stewardship positions TUSAŞ competitively. We collaborate with customers to develop environmentally friendly products, gather feedback through surveys, and conduct educational workshops to raise awareness of sustainability practices. Joint projects aim at reducing water usage and improving water efficiency, while transparent reporting builds trust and demonstrates accountability. This comprehensive engagement not only improves our environmental performance but also strengthens customer relationships and supports the industry's transition to sustainability. Responsible water stewardship is material for TUSAŞ, covering all partners in the value chain. TUSAŞ is a member of the American Water Works Association, an international non-profit, scientific, and educational association founded to improve water quality and supply. In this context, the company participates in training sessions, webinars, and evaluation surveys, contributing opinions and expertise. Raising employee awareness about water usage and engaging with local communities where operations take place is a crucial aspect of TUSAŞ's commitment to treating water as a human right. By engaging with customers through these comprehensive initiatives, TUSAŞ not only enhances its environmental performance but also ensures alignment with future technological advancements and market trends, supporting long-term sustainability and innovation.

(5.11.9.6) Effect of engagement and measures of success

In 2023, TUSAŞ enhanced its water stewardship efforts and transparency to effectively engage customers. The Environment Department created videos on climate and water-related issues for campus visitors, raising awareness and promoting best practices. As part of the CDP Water Program, TUSAŞ transparently reported on company-wide water management. Under ISO 14001, the company evaluated and updated the expectations of each stakeholder in its value chain, ensuring effective engagement. Measures of Success: TUSAŞ's engagement success is measured by awards won, supplier assessment results, and value chain feedback. The company shared environmental activities, especially water-related data, through its website, Sustainability and Annual Reports, Supplier Sustainability Rating Reporting, and Water Security reports. In 2023, TUSAŞ passed the IS/IT Industrial Supplier Assessment by Airbus without any non-conformities, demonstrating high standards. The company also received the “Success Partner" award from Spirit Aerosystems and won the "Green Champion 2022" award at the Green Apple Environmental Awards for its Water Efficiency in Aviation Industry project. The Zero Liquid Discharge (ZLD) system project was submitted to the Green World Environmental Awards 2023 and was among the winners. These achievements underscore the effectiveness of TUSAŞ's water management engagement strategy, reinforcing its commitment to sustainability and enhancing its reputation among customers and stakeholder

Climate change

(5.11.9.1) Type of stakeholder

Select from:

☑ Investors and shareholders

(5.11.9.2) Type and details of engagement

Innovation and collaboration

☑ Collaborate with stakeholders on innovations to reduce environmental impacts in products and services

☑ Run a campaign to encourage innovation to reduce environmental impacts

(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

Engaging stakeholders and investors is essential for TUSAŞ to understand their sustainability expectations and align our products with market demands, enhancing satisfaction and loyalty. Stakeholders and investors prioritize sustainability, and demonstrating our commitment to reducing climate impacts positions TUSAŞ competitively. We collaborate with stakeholders and investors to develop environmentally friendly products, gather feedback through surveys, and conduct educational workshops to raise awareness of sustainability practices. Joint projects aim at reducing emissions and improving energy efficiency, while transparent reporting builds trust and demonstrates accountability. This comprehensive engagement not only improves our environmental performance but also strengthens relationships and supports the industry's transition to sustainability. In addition to these efforts, TUSAŞ actively participates in industry initiatives to shape the future of defense technologies. For example, the "Geleceğin Harekât Ortamını Şekillendirecek Teknolojiler (GHOST)" scenario competition and workshop were organized by the Presidency of Defense Industries, in collaboration with leading sector institutions and organizations, to identify and develop new technologies and concepts for future operations. TUSAŞ played a key role in the management and execution boards throughout this process, contributing to the development of processes that integrate futuristic thinking and foresight analysis methods. On January 9, 2024, TUSAŞ hosted and conducted a workshop using these methods as part of the final stage of the scenario competition. These efforts are aimed at supporting the Presidency's Focus Technology Network (OTAĞ) initiatives, identifying technologies expected to be used in the operational environment of the 2050s, and contributing to the creation of a roadmap. By engaging with stakeholders and investors through these comprehensive initiatives, TUSAŞ not only enhances its environmental performance but also ensures alignment with future technological advancements and market trends, supporting long-term sustainability and innovation.

(5.11.9.6) Effect of engagement and measures of success

In 2023, TUSAŞ strengthened innovation and sustainability through strategic engagements with shareholders and investors. Regular meetings were held within the Innovation Management Working Group, including defense companies like Aselsan, Havelsan, and other industry associations. These meetings facilitated experience sharing on entrepreneurship and innovation management. TUSAŞ, chairing the Entrepreneurship and Innovation Management Working Group under SASAD's R&D and Technology Committee, continued to drive innovation activities with defense industry stakeholders. Measures of Success: Success is measured by participation rates and collaborative projects. In 2023, participation in the Innovation Management Working Group increased by 20%, with five new collaborative projects initiated. The HANGAR Intrapreneurship Program, launched in 2023, involved officials from the Aviation and Space Future Center who mentored intrapreneurs. These engagements resulted in the launch of five new initiatives, aligning with our annual targets and demonstrating our commitment to innovation and sustainability. These efforts have significantly enhanced TUSAŞ's innovation capabilities, keeping the company at the forefront of aerospace and defense technology while supporting long-term sustainability goals.

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

☑ Educate and work with stakeholders on understanding and measuring exposure to environmental risks

Innovation and collaboration

☑ Align your organization’s goals to support customers’ targets and ambitions

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 76-99%

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

Engaging investors and shareholders in water stewardship is critical for TUSAŞ to secure support for its long-term sustainability goals and demonstrate its commitment to responsible resource management. The rationale for this engagement lies in the growing recognition among investors and shareholders of the material risks and opportunities associated with water management. By proactively addressing water-related issues, TUSAŞ enhances its risk management capabilities, improves operational efficiency, and strengthens its reputation as a responsible corporate entity. The scope of engagement includes regular communication on water management strategies, performance, and initiatives, detailed reports on water usage and conservation efforts, regular meetings and briefings to update progress and address concerns, and involving investors and shareholders in collaborative initiatives and decision-making processes related to water management. This comprehensive engagement ensures transparency, fosters trust, and aligns TUSAŞ's water stewardship efforts with investor and shareholder expectations, supporting long-term sustainability and innovation.

(5.11.9.6) Effect of engagement and measures of success

In 2023, TUSAŞ strengthened its water stewardship and transparent reporting to engage effectively with investors. The Environment Department created videos on climate and water issues for visitors, promoting best practices. As part of the CDP Water Program, TUSAŞ reported transparently on company-wide water management. Under ISO 14001, we updated stakeholder expectations in our value chain to ensure effective engagement. Measures of Success: Success is measured by awards won, supplier assessments, and value chain feedback. TUSAŞ shared environmental activities through its website, Sustainability and Annual Reports, and Water Security reports. In 2023, TUSAŞ passed the IS/IT Industrial Supplier Assessment by Airbus without non-conformities and received the "Success Partner" award from Spirit Aerosystems. The company also won the "Green Champion 2022" award for its Water Efficiency project and submitted the ZLD system project to the Green World Environmental Awards 2023, where it was among the winners. These achievements highlight the effectiveness of TUSAŞ's water management strategy, reinforcing its commitment to sustainability and enhancing its reputation among investors and stakeholders.

Climate change

(5.11.9.1) Type of stakeholder

Select from:

☑ Other value chain stakeholder, please specify **:**employees

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Educate and work with stakeholders on understanding and measuring exposure to environmental risks

☑ Share information about your products and relevant certification schemes

☑ Share information on environmental initiatives, progress and achievements

Innovation and collaboration

☑ Run a campaign to encourage innovation to reduce environmental impacts

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 76-99%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☑ 1-25%

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

We provide a total of 6 online training sessions to all our employees, covering topics such as environmental awareness, the ISO 14001 Environmental Management System, carbon footprint, and the ISO 14064 standard. The aim of the training is to provide information on the concepts of greenhouse gas emissions and carbon footprint, climate change initiatives, the calculation of greenhouse gas emissions, carbon tax mechanisms and their potential impacts, the ISO 14064:2018 standard, and the carbon footprint calculation process. In our carbon footprint calculation and verification efforts, we request data from all units operating within the emissions categories and involve them in the calculation process. Similarly, all teams providing data also participate in the verification process. The verification results and areas for improvement are shared with the entire team. We hold meetings with our Environmental Working Group members every three months, where we share our carbon footprint data. The purpose of these meetings is to present our progress and communicate the areas that need improvement. The obtained verification documents are shared with all employees through the portal.

(5.11.9.6) Effect of engagement and measures of success

To enhance environmental awareness within the company, we have implemented our Green Flag initiative. Through this initiative, we send an environmental awareness survey to all employees, and we measure their awareness levels based on participation and the responses provided.

Water

(5.11.9.1) Type of stakeholder

Select from:

☑ Other value chain stakeholder, please specify **:**employees

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Educate and work with stakeholders on understanding and measuring exposure to environmental risks

☑ Share information about your products and relevant certification schemes

☑ Share information on environmental initiatives, progress and achievements

Innovation and collaboration

☑ Run a campaign to encourage innovation to reduce environmental impacts

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 76-99%

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

We provide a total of 6 online training sessions to all our employees, covering topics such as the ISO 14046 Water Footprint Standard. The aim of the training is to provide information on the concepts of water footprint, calculation process. In our water footprint calculation and verification efforts, we request data from all units operating within the emissions categories and involve them in the calculation process. Similarly, all teams providing data also participate in the verification process. The verification results and areas for improvement are shared with the entire team. We hold meetings with our Environmental Working Group members every three months, where we share our water footprint data. The purpose of these meetings is to present our progress and communicate the areas that need improvement. The obtained verification documents are shared with all employees through the portal.

(5.11.9.6) Effect of engagement and measures of success

To enhance environmental awareness within the company, we have implemented our Green Flag initiative. Through this initiative, we send an environmental awareness survey to all employees, and we measure their awareness levels based on participation and the responses provided.
[Add row]

(5.12) Indicate any mutually beneficial environmental initiatives you could collaborate on with specific CDP Supply Chain members.

Row 1

(5.12.1) Requesting member

Select from:

(5.12.2) Environmental issues the initiative relates to

Select all that apply

☑ Climate change

☑ Water

(5.12.4) Initiative category and type

Relationship sustainability assessment

☑ Align goals to feed into customers targets and ambitions

(5.12.5) Details of initiative

In the upcoming sustainability meeting between Turkish Aerospace (TUSAŞ) and Airbus, both companies aim to align their sustainability goals through the High 5 approach, focusing on five key areas: Saving Energy, Reducing CO2 Emissions, Reducing Waste, Reducing VOC and Air Emissions, and Saving Water. By collaborating on these initiatives, TUSAŞ and Airbus plan to integrate their efforts into meeting customer sustainability targets and global environmental ambitions. This partnership seeks to reduce the environmental impact of aerospace manufacturing while advancing innovation in eco-friendly technologies, helping customers achieve their own sustainability commitments. This initiative emphasizes the joint responsibility of both companies to foster a greener supply chain and contribute to global environmental objectives.

(5.12.6) Expected benefits

Select all that apply

☑ Improved water stewardship
☑ Improved resource use and efficiency
☑ Reduction of own operational emissions (own scope 1 & 2)
☑ Increased transparency of upstream/downstream value chain
☑ Reduction of downstream value chain emissions (own scope 3)
☑ Reduction of own operational water withdrawals and/or consumption

(5.12.7) Estimated timeframe for realization of benefits

Select from:
☑ 0-1 year

(5.12.8) Are you able to estimate the lifetime CO2e and/or water savings of this initiative?

Select from:
☑ No

(5.12.11) Please explain

The sustainability partnership between Turkish Aerospace (TUSAŞ) and Airbus, centered on the High 5 approach, aims to create a unified strategy for reducing environmental impact across aerospace operations. Each of the five pillars of the approach—Saving Energy, Reducing CO2 Emissions, Reducing Waste, Reducing VOC (Volatile Organic Compounds) and Air Emissions, and Saving Water—addresses key areas where improvements can lead to substantial sustainability gains. By working together, TUSAŞ and Airbus ensure that their sustainability strategies align with broader industry trends and customer expectations. Customers, especially airlines and government agencies, increasingly demand products that reflect their environmental goals. Through this initiative, TUSAŞ and Airbus can offer innovative solutions that not only meet but exceed customer expectations in terms of sustainability, providing a competitive advantage and contributing to long-term environmental goals in the aviation sector.
[Add row]

(5.13) Has your organization already implemented any mutually beneficial environmental initiatives due to CDP Supply Chain member engagement?

	Environmental initiatives implemented due to CDP Supply Chain member engagement
	Select from: ☑ Yes

[Fixed row]

(5.13.1) Specify the CDP Supply Chain members that have prompted your implementation of mutually beneficial environmental initiatives and provide information on the initiatives.

Row 1

(5.13.1.1) Requesting member

Select from:

(5.13.1.2) Environmental issues the initiative relates to

Select all that apply

☑ Climate change

☑ Water

(5.13.1.4) Initiative ID

Select from:

☑ Ini1

(5.13.1.5) Initiative category and type

Communications

☑ Other communications, please specify **:**3-monthly overall sustainability meetings

(5.13.1.6) Details of initiative

In the meetings we hold with Airbus every three months, we discuss various topics related to sustainability, including our overall sustainability strategy and activities, the sustainable benefits of ongoing projects, and our sustainability targets. We also focus on reducing the environmental footprint of our operations and ensuring environmental responsibility throughout the entire lifecycle. Other key areas of discussion include the methodology for calculating our carbon baseline using Life Cycle Assessment (LCA), the concept of a Sustainable Gemba Walk, and exploring new sustainability opportunities based on the High 5 approach. Additionally, the initiation of CDP reporting and the commencement of ISO 14064:2018 calculations and verifications were actions taken at the request of Airbus.

(5.13.1.7) Benefits achieved

Select all that apply

☑ Improved water stewardship

☑ Improved resource use and efficiency

☑ Reduction of own operational emissions (own scope 1 & 2)

☑ Increased transparency of upstream/downstream value chain

☑ Reduction of downstream value chain emissions (own scope 3)

☑ Reduction of own operational water withdrawals and/or consumption

(5.13.1.8) Are you able to provide figures for emissions savings or water savings in the reporting year?

Select from:

☑ No

(5.13.1.11) Please explain how success for this initiative is measured

Airbus evalute the success of our initiative by rating our sustainability performance with different aspects. Engagement, Ecovadis, CDP and CDX ratings are evaluated by Airbus and feedback is provided.

(5.13.1.12) Would you be happy for CDP Supply Chain members to highlight this work in their external communication?

Select from:

☑ Yes

[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

The rationale for choosing the operational control approach for both climate change and water-related environmental issues is rooted in the fact that TUSAŞ exercises direct authority and decision-making power over its operations. This approach aligns with the company's overarching strategy to ensure that all operational activities, including emissions and water usage, are directly monitored, managed, and reported within the boundaries of TUSAŞ's control. By employing the operational control approach, TUSAŞ can more effectively implement its environmental policies, ensure compliance with regulations, and drive improvements in environmental performance across its operations. This method also facilitates more accurate and comprehensive data collection, allowing TUSAŞ to set and achieve specific environmental targets, thereby enhancing the company's overall sustainability efforts.

Water

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

The rationale for choosing the operational control approach for both climate change and water-related environmental issues is rooted in the fact that TUSAŞ exercises direct authority and decision-making power over its operations. This approach aligns with the company's overarching strategy to ensure that all operational activities, including emissions and water usage, are directly monitored, managed, and reported within the boundaries of TUSAŞ's control. By employing the

operational control approach, TUSAŞ can more effectively implement its environmental policies, ensure compliance with regulations, and drive improvements in environmental performance across its operations. This method also facilitates more accurate and comprehensive data collection, allowing TUSAŞ to set and achieve specific environmental targets, thereby enhancing the company's overall sustainability efforts.
[Fixed row]

C7. Environmental performance - Climate Change

(7.1) Is this your first year of reporting emissions data to CDP?

Select from:

☑ No

(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 methodology

(7.1.2.2) Details of methodology, boundary, and/or reporting year definition change(s)

Since our base year, we have been collecting the data used in our calculations with higher quality each year. Due to the increase in our data quality, there may be changes in our materiality and uncertainty analyses. This year, we conducted a prioritization analysis focused on both logistics and product source emissions, particularly related to procurement. This study addressed the processes of filtering,sorting, and optimizing the main data. In the end, we appropriately expressed our workflow on how we obtained quality data suitable for calculation. We conducted a flexible process to adapt to changes in the team, data, calculation methodology, and even reporting boundaries in the following year. Our process is becoming standardized and serves as a strong indicator of our sustainability goals. On the other hand, our borders and reporting year have not changed.
[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:
☑ Yes

(7.1.3.2) Scope(s) recalculated

Select all that apply
☑ Scope 3

(7.1.3.3) Base year emissions recalculation policy, including significance threshold

As mentioned in 7.1.2, the increase in our data quality and the improvements we make to the processing of these data each year have made it easier to identify errors from the past. After completing our current calculations, we conducted a study observing annual comparisons and emission changes. In this study, we identified the root causes of emission changes as 'Activity Data Increase-Decrease,' 'Data Quality,' 'Error Finding,' etc. Following this root cause analysis, we had the opportunity to review and correct data from previous years. By obtaining higher-quality activity data related to procurement and sales for Scope 3 emissions, we also revised our past calculations. Although there were no major errors, our updates in activity data have made our annual comparisons more accurate.

(7.1.3.4) Past years' recalculation

Select from:

☑ Yes

[Fixed row]

(7.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

Select all that apply

☑ IPCC Guidelines for National Greenhouse Gas Inventories, 2006

☑ ISO 14064-1

☑ The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

☑ Other, please specify **:**Defra Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance, 2021 TURKISH ELECTRICITY TRANSMISSION CORPORATION/ Electricity Production-Transmission Statistics for year 2018, 2019, 2020

(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

TA consumes electricity purchased from the grid. Electricity generated using natural gas in the Co generation system is also consumed within the facility. [Fixed row]

(7.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

Select from:

☑ Yes

(7.4.1) Provide details of the sources of Scope 1, Scope 2, or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure.

Row 1

(7.4.1.1) Source of excluded emissions

As stated in 7.1.2, this year we focused heavily on prioritization and root cause analyses. Within our Scope 3 emissions, we identified that 3.47% of purchased goods, 8% of purchased capital assets, and 0.0022% of transportation of purchased capital assets could not be calculated. Additionally, we were unable to calculate uncertain activity data related to visitors and end-of-life product activities, and we identified these exclusions. These specified exclusions constitute 0.0765% of our total Scope 3 emissions. We also performed an "Estimated Emissions" calculation on the non-calculable and unavailable activity data, with approximate values and relevant scenarios included in our "Materiality Criteria" table.

(7.4.1.2) Scope(s) or Scope 3 category(ies)

Select all that apply

☑ Scope 3: Purchased goods and services

☑ Scope 3: Downstream transportation and distribution

☑ Scope 3: End-of-life treatment of sold products

☑ Scope 3: Other (downstream)

(7.4.1.6) Relevance of Scope 3 emissions from this source

Select from:

☑ Emissions are not relevant

(7.4.1.9) Estimated percentage of total Scope 3 emissions this excluded source represents

0.8

(7.4.1.10) Explain why this source is excluded

As stated in 7.1.2, this year we focused heavily on prioritization and root cause analyses. Within our Scope 3 emissions, we identified that 3.47% of purchased goods, 8% of purchased capital assets, and 0.0022% of transportation of purchased capital assets could not be calculated. Additionally, we were unable to calculate uncertain activity data related to visitors and end-of-life product activities, and we identified these exclusions. These specified exclusions constitute 0.0765% of our total Scope 3 emissions. We also performed an "Estimated Emissions" calculation on the non-calculable and unavailable activity data, with approximate values and relevant scenarios included in our "Materiality Criteria" table.

(7.4.1.11) Explain how you estimated the percentage of emissions this excluded source represents

In our "Materiality Criteria" table we have estimated the emissions by using the average data. Whenever absence of data exists, the average of the existing data is considered. For instance, in scope 3 "capital goods" some of our data were missing the weight information, in this case our average weight of 100kg was accepted as the weight of each good that have missing weight info.
[Add row]

(7.5) Provide your base year and base year emissions.

Scope 1

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

94052.22

(7.5.3) Methodological details

Based on the data verified through MRV reporting, the Scope 1 calculation was completed in its entirety by including other greenhouse gas emissions and sections like mobile combustion and refrigerant leakages. Activity data was identified from original invoices and transferred to the relevant calculation table. The calculation was then completed using emission factors and GWP values from IPCC and national inventory sources. The fuel usage of on-road and off-road vehicles, Avgas and JP8 fuel usage, as well as the company's consumption of natural gas, coal, and stationary combustion activities were thoroughly examined and verified. As a result of the calculations, a total emission of 94,052.22 TCO2 was calculated. Briefly, in our methodology, the calculation was completed by using sources such as IPCC, national inventories (intensity values, emission factors, net calorific values, etc.) to determine the categories in scope1 of verified activity data.

Scope 2 (location-based)

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

41849.86

(7.5.3) Methodological details

To calculate Scope 2 emissions, electricity consumption data obtained from meters and bills were used and validated. Our total electricity consumption was recorded as 95,329,979.10 kWh. Using the emission factor of 0.439 tCO2e/MWh specified in the Turkish National Inventory, the Scope 2 emission calculation was carried out. All data and methodologies used in this process are based on the latest publications of the Ministry of Energy and supported by verifiable sources.

Scope 2 (market-based)

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

41849.86

(7.5.3) Methodological details

To calculate Scope 2 emissions, electricity consumption data obtained from meters and bills were used and validated. Our total electricity consumption was recorded as 95,329,979.10 kWh. Using the emission factor of 0.439 tCO2e/MWh specified in the Turkish National Inventory, the Scope 2 emission calculation was carried out. All data and methodologies used in this process are based on the latest publications of the Ministry of Energy and supported by verifiable sources.

Scope 3 category 1: Purchased goods and services

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

163942.57

(7.5.3) Methodological details

In our calculations for the subcontractors and suppliers we receive services from, we proportionally calculated the Scope 1 and Scope 2 fuel, and energy consumption amounts we received from these suppliers with the production amount they did "for us." As a result of this calculation, we proportionally calculated the percentage productions with emissions using a weighting methodology. Our calculation has been verified and will be continued in the same way every year.

Scope 3 category 2: Capital goods

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

3192.53

(7.5.3) Methodological details

We filtered the data defined under the code "Fixed Assets-Capital Goods" within our purchasing items in the ERP system for the year 2023. After ensuring the controls, we listed the relevant products for use in our calculations. The list was processed with product names, activity data units (Dollars or KG), and quantities. The calculation was then completed using emission factor sources such as EPA and DEFRA.

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

24510.39

(7.5.3) Methodological details

We obtained the activity data of the fuels we used and completed our calculation by multiplying these verified activity data by the appropriate WTT coefficients.

Scope 3 category 4: Upstream transportation and distribution

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

35369.79

(7.5.3) Methodological details

We reviewed the purchasing data received from our supply chain department. From the relevant data, we identified the transportation items between January 1, 2023, and December 31, 2023, and prepared them for calculation according to the "Distance-based method, which involves determining the mass, distance, and mode of each shipment, then applying the appropriate mass-distance emission factor for the vehicle used." We listed the location, load, and distance information for these items. Since the data also included control and payment statuses, we separately calculated these as upstream and downstream emissions.

Scope 3 category 5: Waste generated in operations

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

357.27

(7.5.3) Methodological details

We regularly report our waste to the ministry. Using the waste code, name, and quantity information from our officially approved documents, we selected the appropriate emission factor for each waste type and completed our calculation.

Scope 3 category 6: Business travel

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

4270.41

(7.5.3) Methodological details

We obtained the raw travel data processed in the ERP system from the relevant department. We then calculated the data using our KM calculation file created as Business Travel Distance Calculator & References and obtained our activity data. Subsequently, we completed the calculations by applying appropriate emission factors based on the vehicle and transportation type for each activity data. The document is a calculation tool that we can use each year, showing the distance between two points with minimal margin of error.

Scope 3 category 7: Employee commuting

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

2245.37

(7.5.3) Methodological details

Data on the routes used by employees for commuting to and from our facility, as well as the KM information of the relevant vehicles, is regularly recorded. This data, along with the activity data and number of people, has been included in our calculations.

Scope 3 category 8: Upstream leased assets

(7.5.1) Base year end

12/30/2023

(7.5.3) Methodological details

We do not have any activity in the relevant category.

Scope 3 category 9: Downstream transportation and distribution

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

15947.15

(7.5.3) Methodological details

We reviewed the purchasing data received from our supply chain department. From the relevant data, we identified the transportation items between January 1, 2023, and December 31, 2023, and prepared them for calculation according to the "Distance-based method, which involves determining the mass, distance, and mode of each shipment, then applying the appropriate mass-distance emission factor for the vehicle used." We listed the location, load, and distance information for these items. Since the data also included control and payment statuses, we separately calculated these as upstream and downstream emissions.

Scope 3 category 10: Processing of sold products

(7.5.1) Base year end

12/30/2023

(7.5.3) Methodological details

Our sold products mostly consits of end products which cannot be processed further. The minor products that can be proccessed are not easy to keep track since the complexity of the products, it cannot be estimated what kind of process these products will experience. Therefore, due to the minor number and the complexity of the data tracking, these emissions could not be calculated.

Scope 3 category 11: Use of sold products

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

3574849.49

(7.5.3) Methodological details

As TUSAŞ, we have completed the calculations for the post-product life of the products we sell. In this section, the activity data for the relevant category was processed by taking the absolute average of fuel consumption for aircraft used after the product's life, based on test flights. We know the sales quantities and the amount of Avgas and JP8 fuel consumed by the relevant aircraft. Considering these fuel amounts, we calculated the emissions resulting from the product usage phase.

Scope 3 category 12: End of life treatment of sold products

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

1.98

(7.5.3) Methodological details

The arrival times, composition materials, and weights of the products in their "Scrap" phase are known. The relevant data has been verified and used in the calculations

Scope 3 category 13: Downstream leased assets

(7.5.1) Base year end

12/30/2023

(7.5.3) Methodological details

We do not have an activity belonging to the relevant category in our organization.

Scope 3 category 14: Franchises

(7.5.1) Base year end

12/30/2023

(7.5.3) Methodological details

We do not have an activity belonging to the relevant category in our organization.

Scope 3 category 15: Investments

(7.5.1) Base year end

12/30/2023

(7.5.3) Methodological details

We do not have an activity belonging to the relevant category in our organization.

Scope 3: Other (upstream)

(7.5.1) Base year end

12/30/2023

(7.5.3) Methodological details

We do not have an activity belonging to the relevant category in our organization.

Scope 3: Other (downstream)

(7.5.1) Base year end

12/30/2023

(7.5.3) Methodological details

We do not have an activity belonging to the relevant category in our organization.
[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)

94052.22

(7.6.3) Methodological details

Based on the data verified through MRV reporting, the Scope 1 calculation was completed in its entirety by including other greenhouse gas emissions and sections like mobile combustion and refrigerant leakages. Activity data was identified from original invoices and transferred to the relevant calculation table. The calculation was then completed using emission factors and GWP values from IPCC and national inventory sources. The fuel usage of on-road and off-road vehicles, Avgas and JP8 fuel usage, as well as the company's consumption of natural gas, coal, and stationary combustion activities were thoroughly examined and verified. As a result of the calculations, a total emission of 94,052.22 TCO2 was calculated. Briefly, in our methodology, the calculation was completed by using sources such as IPCC, national inventories (intensity values, emission factors, net calorific values, etc.) to determine the categories in scope1 of verified activity data.
[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)

41849.86

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

41849.86

(7.7.4) Methodological details

To calculate Scope 2 emissions, electricity consumption data obtained from meters and bills were used and validated. Our total electricity consumption was recorded as 95,329,979.10 kWh. Using the emission factor of 0.439 tCO2e/MWh specified in the Turkish National Inventory, the Scope 2 emission calculation was carried out. All data and methodologies used in this process are based on the latest publications of the Ministry of Energy and supported by verifiable sources.
[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)

163942.57

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Hybrid method

☑ Average data method

☑ Spend-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

(7.8.5) Please explain

In our calculations for the subcontractors and suppliers we receive services from, we proportionally calculated the Scope 1 and Scope 2 fuel, and energy consumption amounts we received from these suppliers with the production amount they did "for us." As a result of this calculation, we proportionally calculated the percentage productions with emissions using a weighting methodology. Our calculation has been verified and will be continued in the same way every year.

Capital goods

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

3192.5

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Hybrid method

☑ Average data method

☑ Spend-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

(7.8.5) Please explain

We filtered the data defined under the code "Fixed Assets-Capital Goods" within our purchasing items in the ERP system for the year 2023. After ensuring the controls, we listed the relevant products for use in our calculations. The list was processed with product names, activity data units (Dollars or KG), and quantities. The calculation was then completed using emission factor sources such as EPA and DEFRA.

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)

24510.39

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Hybrid method

☑ Average data method

☑ 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

We obtained the activity data of the fuels we used and completed our calculation by multiplying these verified activity data by the appropriate WTT coefficients.

Upstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

35369.79

(7.8.3) Emissions calculation methodology

Select all that apply

☑ 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

We reviewed the purchasing data received from our supply chain department. From the relevant data, we identified the transportation items between January 1, 2023, and December 31, 2023, and prepared them for calculation according to the "Distance-based method, which involves determining the mass, distance, and mode of each shipment, then applying the appropriate mass-distance emission factor for the vehicle used." We listed the location, load, and distance information for these items. Since the data also included control and payment statuses, we separately calculated these as upstream and downstream emissions.

Waste generated in operations

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

357.27

(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

0

(7.8.5) Please explain

We regularly report our waste to the ministry. Using the waste code, name, and quantity information from our officially approved documents, we selected the appropriate emission factor for each waste type and completed our calculation.

Business travel

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

4270.4

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Distance-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

We obtained the raw travel data processed in the ERP system from the relevant department. We then calculated the data using our KM calculation file created as Business Travel Distance Calculator & References and obtained our activity data. Subsequently, we completed the calculations by applying appropriate emission factors based on the vehicle and transportation type for each activity data. The document is a calculation tool that we can use each year, showing the distance between two points with minimal margin of error.

Employee commuting

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

2245.37

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Hybrid method

☑ Distance-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

Data on the routes used by employees for commuting to and from our facility, as well as the KM information of the relevant vehicles, is regularly recorded. This data, along with the activity data and number of people, has been included in our calculations.

Upstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

We do not have any activity in the relevant category.

Downstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

15947.1

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Distance-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

We reviewed the purchasing data received from our supply chain department. From the relevant data, we identified the transportation items between January 1, 2023, and December 31, 2023, and prepared them for calculation according to the "Distance-based method, which involves determining the mass, distance, and mode of each shipment, then applying the appropriate mass-distance emission factor for the vehicle used." We listed the location, load, and distance information for these items. Since the data also included control and payment statuses, we separately calculated these as upstream and downstream emissions.

Processing of sold products

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Our sold products mostly consist of end products which cannot be processed further. The minor products that can be processed are not easy to keep track since the complexity of the products, it cannot be estimated what kind of process these products will experience. Therefore, due to the minor number and the complexity of the data tracking, these emissions could not be calculated.

Use of sold products

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

3574849.49

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

☑ Fuel-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

As TUSAŞ, we have completed the calculations for the post-product life of the products we sell. In this section, the activity data for the relevant category was processed by taking the absolute average of fuel consumption for aircraft used after the product's life, based on test flights. We know the sales quantities and the amount of Avgas and JP8 fuel consumed by the relevant aircraft. Considering these fuel amounts, we calculated the emissions resulting from the product usage phase.

End of life treatment of sold products

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

1.98

(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

0

(7.8.5) Please explain

The arrival times, composition materials, and weights of the products in their "Scrap" phase are known. The relevant data has been verified and used in the calculations

Downstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

We do not have an activity belonging to the relevant category in our organization.

Franchises

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

We do not have an activity belonging to the relevant category in our organization.

Investments

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

We do not have an activity belonging to the relevant category in our organization.

Other (upstream)

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

We do not have an activity belonging to the relevant category in our organization.

Other (downstream)

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

We do not have an activity belonging to the relevant category in our organization.
[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

(7.9.1.4) Attach the statement

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(7.9.1.5) Page/section reference

The Verification document has been uploaded.

(7.9.1.6) Relevant standard

Select from:

☑ ISO14064-3

(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

(7.9.2.5) Attach the statement

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(7.9.2.6) Page/ section reference

The Verification document has been uploaded.

(7.9.2.7) Relevant standard

Select from:

☑ ISO14064-3

(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: Capital goods

☑ Scope 3: Business travel

☑ Scope 3: Employee commuting

☑ Scope 3: Use of sold products

☑ Scope 3: Purchased goods and services

☑ 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

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(7.9.3.6) Page/section reference

The Verification document has been uploaded.

(7.9.3.7) Relevant standard

Select from:

☑ ISO14064-3

(7.9.3.8) Proportion of reported emissions verified (%)

100
[Add row]

(7.10) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Select from:

☑ Increased

(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)

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

No renewable enrgy usage.

Other emissions reduction activities

(7.10.1.1) Change in emissions (metric tons CO2e)

2360.79

(7.10.1.2) Direction of change in emissions

Select from:

☑ Decreased

(7.10.1.3) Emissions value (percentage)

2.09

(7.10.1.4) Please explain calculation

210 LEDs were replaced in the B210 building. As a result of this change, 537,767 kWh of electricity was saved. As a result, we improved our emissions and as a result of this improvement, we carried out 2350.79 Tco2 reduction activities.

Change in output

(7.10.1.1) Change in emissions (metric tons CO2e)

19050.84

(7.10.1.2) Direction of change in emissions

Select from:

☑ Increased

(7.10.1.3) Emissions value (percentage)

16.95

(7.10.1.4) Please explain calculation

Increase in our production resulted an increase in consumption. As a result, our emissions increased with respect to previous year. The calculation was the same.

Change in methodology

(7.10.1.1) Change in emissions (metric tons CO2e)

4459.71

(7.10.1.2) Direction of change in emissions

Select from:

☑ Increased

(7.10.1.3) Emissions value (percentage)

3.97

(7.10.1.4) Please explain calculation

Change in data quality, improvement in the data tracking systems, and change in emission factors are the cause of this change.

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

NaN
[Fixed row]

(7.10.2) Are your emissions performance calculations in 7.10 and 7.10.1 based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Select from:
☑ Location-based

(7.12) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

Select from:
☑ No

(7.15) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Select from:
☑ Yes

(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)

87043.34

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Sixth Assessment Report (AR6 - 20 year)

Row 2

(7.15.1.1) Greenhouse gas

Select from:

☑ CH4

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

4.3

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Sixth Assessment Report (AR6 - 20 year)

Row 3

(7.15.1.1) Greenhouse gas

Select from:

☑ N2O

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

1.19

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Sixth Assessment Report (AR6 - 20 year)

Row 5

(7.15.1.1) Greenhouse gas

Select from:

☑ HFCs

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

6561.26

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Sixth Assessment Report (AR6 - 20 year)

[Add row]

(7.16) Break down your total gross global Scope 1 and 2 emissions by country/area.

	Scope 1 emissions (metric tons CO2e)	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Turkey	*94052.22*	*41849.86*	*41849.86*

[Fixed row]

(7.17) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

Select all that apply

☑ By facility

☑ By activity

(7.17.2) Break down your total gross global Scope 1 emissions by business facility.

Row 1

(7.17.2.1) Facility

Kahramankazan

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

94052.22

(7.17.2.3) Latitude

40.081491

(7.17.2.4) Longitude

32.588543
[Add row]

(7.17.3) Break down your total gross global Scope 1 emissions by business activity.

Row 1

(7.17.3.1) Activity

Stationary Combustion - Natural Gas

(7.17.3.2) Scope 1 emissions (metric tons CO2e)

51395.61

Row 2

(7.17.3.1) Activity

Stationary Combustion - Coal

(7.17.3.2) Scope 1 emissions (metric tons CO2e)

18806.16

Row 3

(7.17.3.1) Activity

Stationary Combustion - Diesel

(7.17.3.2) Scope 1 emissions (metric tons CO2e)

113.9

Row 4

(7.17.3.1) Activity

Stationary Combustion - Other

(7.17.3.2) Scope 1 emissions (metric tons CO2e)

1.57

Row 5

(7.17.3.1) Activity

Mobile Combustion (On Road) - Deisel

(7.17.3.2) Scope 1 emissions (metric tons CO2e)

2926.21

Row 6

(7.17.3.1) Activity

Mobile Combustion (On Road) - Gasoline

(7.17.3.2) Scope 1 emissions (metric tons CO2e)

1209.79

Row 8

(7.17.3.1) Activity

Mobile Combustion (On Road) - JP8

(7.17.3.2) Scope 1 emissions (metric tons CO2e)

12173.08

Row 9

(7.17.3.1) Activity

Mobile Combustion (On Road) - Aviation Gasoline

(7.17.3.2) Scope 1 emissions (metric tons CO2e)

311.65

Row 10

(7.17.3.1) Activity

Mobile Combustion (Off Road) - Gasoline

(7.17.3.2) Scope 1 emissions (metric tons CO2e)

15.67

Row 11

(7.17.3.1) Activity

Mobile Combustion (Off Road) - Diesel

(7.17.3.2) Scope 1 emissions (metric tons CO2e)

537.32

Row 12

(7.17.3.1) Activity

Fugitive Emissions

(7.17.3.2) Scope 1 emissions (metric tons CO2e)

6555.14

Row 13

(7.17.3.1) Activity

Process Emissions

(7.17.3.2) Scope 1 emissions (metric tons CO2e)

6.12
[Add row]

(7.19) Break down your organization’s total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

Transport OEM activities

(7.19.1) Gross Scope 1 emissions, metric tons CO2e

94052.22

(7.19.3) Comment

This coverage includes stationary combustion, mobile combustion, fugitives and process emissions. Stationary combustion consists of the consumption of natural gas, coal, diesel, CO2, propane, acetylene and nitrous oxide fuels. Within the scope of mobile combustion, emissions from diesel, gasoline and aviation fuels consumed in road and aircraft were calculated. Fugitive emissions from refrigerant gas and fire extinguishing systems and wastewater were calculated.
[Fixed row]

(7.20) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

Select all that apply

☑ By facility

(7.20.2) Break down your total gross global Scope 2 emissions by business facility.

	Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Row 1	*Kahramankazan*	*41849.86*	*41849.86*

[Add row]

(7.21) Break down your organization’s total gross global Scope 2 emissions by sector production activity in metric tons CO2e.

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Transport OEM activities	*41849.86*	*41849.86*	*TUSAS only involves in Transport OEM activities.*

[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)

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

TUSAS has no sub-organization that is consolidated in the 2023 inventory.

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

TUSAS has no sub-organization that is consolidated in the 2023 inventory.
[Fixed row]

(7.23) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

Select from:

☑ Not relevant as we do not have any subsidiaries

(7.28) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

(7.28.1) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

Select from:

☑ Yes

(7.28.2) Describe how you plan to develop your capabilities

At TUSAS, we are committed to enhancing transparency and providing our customers with the necessary insights into the emissions associated with the goods and services we provide. We understand the importance of offering a detailed understanding of emissions and energy intensity to our customers. We are currently exploring the development of these capabilities, particularly for customers who have specifically requested this information. Our goal is to work closely with these customers to ensure that we can provide accurate and meaningful emissions data tailored to their needs. While we are in the initial stages of this process, we are committed to advancing our capabilities in this area and will continue to update our stakeholders as we make progress. We recognize the value this adds to our customers and are actively working towards implementing these solutions in the future.
[Fixed row]

(7.29) What percentage of your total operational spend in the reporting year was on energy?

Select from:

☑ More than 0% but less than or equal to 5%

(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

414304.36

(7.30.1.4) Total (renewable and non-renewable) MWh

414304.36

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

95329.98

(7.30.1.4) Total (renewable and non-renewable) MWh

95329.98

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

0

(7.30.1.4) Total (renewable and non-renewable) MWh

0

Total energy consumption

(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

509634.34

(7.30.1.4) Total (renewable and non-renewable) MWh

509634.34
[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:* ☑ Yes
Consumption of fuel for the generation of cooling	*Select from:* ☑ No
Consumption of fuel for co-generation or tri-generation	*Select from:* ☑ Yes

[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

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

No consumption.

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

0

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

No consumption.

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

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

No consumption.

Coal

(7.30.7.1) Heating value

Select from:

☑ Unable to confirm heating value

(7.30.7.2) Total fuel MWh consumed by the organization

66229.02

(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

31284.18

(7.30.7.5) MWh fuel consumed for self-generation of steam

34944.84

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

Generation of heat and steam

Oil

(7.30.7.1) Heating value

Select from:

☑ Unable to confirm heating value

(7.30.7.2) Total fuel MWh consumed by the organization

65843.7

(7.30.7.3) MWh fuel consumed for self-generation of electricity

331.84

(7.30.7.4) MWh fuel consumed for self-generation of heat

65511.86

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

Usage of Electric Generator and Vehicles.

Gas

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

282225.14

(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

83886.91

(7.30.7.5) MWh fuel consumed for self-generation of steam

20521.55

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

177816.69

(7.30.7.8) Comment

Facility, heat and steam and cogeneration usage.

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

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

6.49

(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

6.49

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

Other

Total fuel

(7.30.7.1) Heating value

Select from:

☑ Unable to confirm heating value

(7.30.7.2) Total fuel MWh consumed by the organization

414304.35

(7.30.7.3) MWh fuel consumed for self-generation of electricity

331.84

(7.30.7.4) MWh fuel consumed for self-generation of heat

180689.43

(7.30.7.5) MWh fuel consumed for self-generation of steam

55466.39

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

177816.69

(7.30.7.8) Comment

Total
[Fixed row]

(7.30.9) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

Electricity

(7.30.9.1) Total Gross generation (MWh)

64796.49

(7.30.9.2) Generation that is consumed by the organization (MWh)

64796.49

(7.30.9.3) Gross generation from renewable sources (MWh)

0

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

0

Heat

(7.30.9.1) Total Gross generation (MWh)

135784.22

(7.30.9.2) Generation that is consumed by the organization (MWh)

135784.22

(7.30.9.3) Gross generation from renewable sources (MWh)

0

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

0

Steam

(7.30.9.1) Total Gross generation (MWh)

40754.55

(7.30.9.2) Generation that is consumed by the organization (MWh)

40754.55

(7.30.9.3) Gross generation from renewable sources (MWh)

0

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

0

Cooling

(7.30.9.1) Total Gross generation (MWh)

0

(7.30.9.2) Generation that is consumed by the organization (MWh)

0

(7.30.9.3) Gross generation from renewable sources (MWh)

0

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

0
[Fixed row]

(7.30.14) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in 7.7.

Row 1

(7.30.14.1) Country/area

Select from:

☑ Turkey

(7.30.14.2) Sourcing method

Select from:

☑ None (no active purchases of low-carbon electricity, heat, steam or cooling)

(7.30.14.10) Comment

No low-carbon energy purchase has been made.
[Add row]

(7.30.16) Provide a breakdown by country/area of your electricity/heat/steam/cooling consumption in the reporting year.

Turkey

(7.30.16.1) Consumption of purchased electricity (MWh)

95329.98

(7.30.16.2) Consumption of self-generated electricity (MWh)

64796.49

(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)

143204.9

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

303331.37
[Fixed row]

(7.35) Provide any efficiency metrics that are appropriate for your organization’s transport products and/or services.

Row 1

(7.35.1) Activity

Select from:
☑ Aviation

(7.35.2) Metric figure

77714.12

(7.35.3) Metric numerator

Select from:
☑ tCO2e

(7.35.4) Metric denominator

Select from:

☑ Use phase, please specify **:**number of aircraft

(7.35.5) Metric numerator: Unit total

3574849.49

(7.35.6) Metric denominator: Unit total

46

(7.35.7) % change from previous year

0

(7.35.8) Please explain

This metric helps TUSAS to understand the average tCO2e resultant in the use phase of an aircraft.
[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

0.00006152

(7.45.2) Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

135902.08

(7.45.3) Metric denominator

Select from:

☑ unit total revenue

(7.45.4) Metric denominator: Unit total

2209000000

(7.45.5) Scope 2 figure used

Select from:

☑ Location-based

(7.45.6) % change from previous year

0.52

(7.45.7) Direction of change

Select from:

☑ Increased

(7.45.8) Reasons for change

Select all that apply

☑ Change in output

☑ Change in revenue

(7.45.9) Please explain

The intensity figure in 2022 was 0.0000612. The Scope 1 and Scope 2 emissions increased in the reporting year due to the increase in production.
[Add row]

(7.50) Provide primary intensity metrics that are appropriate to your indirect emissions in Scope 3 Category 11: Use of sold products from transport.

Row 1

(7.50.1) Activity

Select from:
☑ Aviation

(7.50.2) Emissions intensity figure

0.000305

(7.50.3) Metric numerator (Scope 3 emissions: use of sold products) in Metric tons CO2e

3574849.49

(7.50.4) Metric denominator

Select from:
☑ p.km

(7.50.5) Metric denominator: Unit total

11300400000

(7.50.6) % change from previous year

199.98

(7.50.7) Vehicle unit sales in reporting year

20

(7.50.8) Vehicle lifetime in years

30

(7.50.9) Annual distance in km or miles (unit specified by column 4)

1708200000

(7.50.10) Load factor

2 passengers on average in Atak 2 passengers on average in Hürkuş 12 passengers on average in T70 6.615384615 on total average

(7.50.11) Please explain the changes, and relevant standards/methodologies used

Vehicles with no passenger are excluded from this calculation. To find the total distance average speed and average lifetime of the vehicle have been utilized.
[Add row]

(7.52) Provide any additional climate-related metrics relevant to your business.

Row 1

(7.52.1) Description

Select from:
☑ Waste

(7.52.2) Metric value

667.21

(7.52.3) Metric numerator

kg

(7.52.4) Metric denominator (intensity metric only)

FTE

(7.52.5) % change from previous year

16

(7.52.6) Direction of change

Select from:

☑ Increased

(7.52.7) Please explain

Increase in production and number of employees resulted an increment.

Row 2

(7.52.1) Description

Select from:

☑ Other, please specify **:**Waste Water

(7.52.2) Metric value

19.43

(7.52.3) Metric numerator

cubic meters

(7.52.4) Metric denominator (intensity metric only)

FTE

(7.52.5) % change from previous year

30

(7.52.6) Direction of change

Select from:
☑ Decreased

(7.52.7) Please explain

Increase in FTE resulted a decrease.

Row 3

(7.52.1) Description

Select from:
☑ Other, please specify **:**Water Usage

(7.52.2) Metric value

91.66

(7.52.3) Metric numerator

cubic meters

(7.52.4) Metric denominator (intensity metric only)

FTE

(7.52.5) % change from previous year

21

(7.52.6) Direction of change

Select from:
☑ Increased

(7.52.7) Please explain

Increase in data availability resulted an increase in water usage. Thus, an increment occured.
[Add row]

(7.53) Did you have an emissions target that was active in the reporting year?

Select all that apply
☑ Absolute target

(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:

☑ No, but we are reporting another target that is science-based

(7.53.1.5) Date target was set

12/30/2021

(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)

(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

12/30/2021

(7.53.1.12) Base year Scope 1 emissions covered by target (metric tons CO2e)

71370.5

(7.53.1.13) Base year Scope 2 emissions covered by target (metric tons CO2e)

23194.82

(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)

94565.320

(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

12/30/2030

(7.53.1.55) Targeted reduction from base year (%)

55

(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

42554.394

(7.53.1.57) Scope 1 emissions in reporting year covered by target (metric tons CO2e)

94052.22

(7.53.1.58) Scope 2 emissions in reporting year covered by target (metric tons CO2e)

41849.86

(7.53.1.77) Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

135902.080

(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

-79.48

(7.53.1.80) Target status in reporting year

Select from:

☑ Revised

(7.53.1.81) Explain the reasons for the revision, replacement, or retirement of the target

The initial target was set to cover only scope 2 emissions, the revision took place to include the scope 1 emissions and to align the target with the net-zero goals.

(7.53.1.82) Explain target coverage and identify any exclusions

The abs 1 revision took place for the year 2022 While only the S2 target was chosen in 2021 with the same base year, in the reporting year S1 was added to this target in order to be aligned with company's net zero target. The revised target covers total scope 1&2 emissions with no exclusion. The Solar Power Plants (SPP) will start to operate in 2024 with approximately 5,000 kWh (hourly average) capacity. As of 2021, Turkish Aerospace's average hourly electricity demand was about 10,861 kWh. In addition, considering new investment and buildings, the electricity demand forecast is considered to increase about 21,447 kWh for 2030. By 2030, it is aimed to meet the electricity demand from SPPs (%55) and green electricity (%45) and 100% by 2050 Even if 55% is not provided by SPP, all the needs will be met from green energy.

(7.53.1.83) Target objective

Reducing the scope 1 & 2 emissions by 55% until the end of the 2030.

(7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year

The plan for achieving S1S2 target Due to limited natural gas supply because of Russia-Ukraine War; the S1 & S2 emissions increased in the reporting year because of coal usage increase in the stationary combustion. The area and FTE figures were increased in 2022. The renewable energy usage for S2 emissions will start in 2024 The S1 emissions reduction is planned by following activities: 1-Awareness activities on energy use practices 2- Transition from conventional vehicles to EVs in mobile combustion 3-Energy Efficient Design Criteria Setting in new buildings 4-Building insulation works 5-Solar Power Plant installations in the open areas of the company 7-Maintenance, repair, and revision works on heating & cooling, ventilation, pressure air, vacuum, aspirators, steam humidifiers, process coolers, treatment devices, transformers, UPS and generators etc. 8- Renovation on control systems 9-Substitution of cooling gases and extinguishers 10- Operation, maintenance, and repair of facilities' technology infrastructure The S2 reduction is planned by the following activities LED-equipped fixtures, local lighting techniques will continue. The SPPs will start to be operate with 5,000 kWh hourly capacity in 2024 and this capacity will be increased gradually every year. The projected SPP operating capacity and electricity consumption is given below. The predicted hourly electricity consumption for 2030 is 21,477 kWh. According to the projections for 2030, %55 of the electricity demand will be met by SPPs and the remaining %45 part will be supplied as Green Electricity. Even if 55% is not provided by SPP, all the needs will be met from green energy 2024: 5,000 kWh (%31,68 of demand) 2025: 7,000 kWh (%40,92 of demand) 2026: 9,408 kWh (%55 of demand) 2027: 9,896 kWh (%55 of demand) 2028: 10,578 kWh (%55 of demand) 2029: 11,219 kWh (%55 of demand) 2030: 11,812 kWh (%55 of demand) Turkish Aerospace is planning to offset the residual emissions through the voluntary carbon offset markets or renewable energy certifications.

(7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

☑ No

Row 2

(7.53.1.1) Target reference number

Select from:

☑ Abs 2

(7.53.1.2) Is this a science-based target?

Select from:

☑ No, but we are reporting another target that is science-based

(7.53.1.5) Date target was set

12/30/2021

(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)

(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

12/30/2021

(7.53.1.12) Base year Scope 1 emissions covered by target (metric tons CO2e)

71370.5

(7.53.1.13) Base year Scope 2 emissions covered by target (metric tons CO2e)

23194.82

(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)

94565.320

(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

12/30/2050

(7.53.1.55) Targeted reduction from base year (%)

100

(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

0.000

(7.53.1.57) Scope 1 emissions in reporting year covered by target (metric tons CO2e)

94052.22

(7.53.1.58) Scope 2 emissions in reporting year covered by target (metric tons CO2e)

41849.86

(7.53.1.77) Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

135902.080

(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

-43.71

(7.53.1.80) Target status in reporting year

Select from:

☑ Underway

(7.53.1.82) Explain target coverage and identify any exclusions

The target covers total scope 1&2 emissions with no exclusion. By 2050, it is aimed to reduce the emissions by 100% and replace the emission sources with the sustainable alternatives.

(7.53.1.83) Target objective

Reducing the scope 1 & 2 emissions by 100% until the end of 2050

(7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year

The plan for achieving S1S2 target Due to limited natural gas supply because of Russia-Ukraine War; the S1 & S2 emissions increased in the reporting year because of coal usage increase in the stationary combustion. The area and FTE figures were increased in 2022. The renewable energy usage for S2 emissions will start in 2024 The S1 emissions reduction is planned by following activities: 1-Awareness activities on energy use practices 2- Transition from conventional vehicles to EVs in mobile combustion 3-Energy Efficient Design Criteria Setting in new buildings 4-Building insulation works 5-Solar Power Plant installations in the open areas of the company 7-Maintenance, repair, and revision works on heating & cooling, ventilation, pressure air, vacuum, aspirators, steam humidifiers, process coolers, treatment devices, transformers, UPS and generators etc. 8- Renovation on control systems 9-Substitution of cooling gases and extinguishers 10- Operation, maintenance, and repair of facilities' technology infrastructure The S2 reduction is planned by the following activities LED-equipped fixtures, local lighting techniques will continue. The SPPs will start to be operate with 5,000 kWh hourly capacity in 2024 and this capacity will be increased gradually every year. The projected SPP operating capacity and electricity consumption is given below. The predicted hourly electricity consumption for 2030 is 21,477 kWh. According to the projections for 2030, %55 of the electricity demand will be met by SPPs and the remaining %45 part will be supplied as Green Electricity. Even if 55% is not provided by SPP, all the needs will be met from green energy 2024: 5,000 kWh (%31,68 of demand) 2025: 7,000 kWh (%40,92 of demand) 2026: 9,408 kWh (%55 of demand) 2027: 9,896 kWh (%55 of

demand) 2028: 10,578 kWh (%55 of demand) 2029: 11,219 kWh (%55 of demand) 2030: 11,812 kWh (%55 of demand) Turkish Aerospace is planning to offset the residual emissions through the voluntary carbon offset markets or renewable energy certifications.

(7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

☑ Yes

[Add row]

(7.54) Did you have any other climate-related targets that were active in the reporting year?

Select all that apply

☑ Net-zero targets

(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

12/30/2021

(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

(7.54.3.5) End date of target for achieving net zero

12/30/2050

(7.54.3.6) Is this a science-based target?

Select from:

☑ No, but we are reporting another target that is science-based

(7.54.3.8) Scopes

Select all that apply

☑ Scope 1

☑ Scope 2

(7.54.3.9) Greenhouse gases covered by target

Select all that apply

☑ Carbon dioxide (CO2)

☑ Methane (CH4)

☑ Nitrous oxide (N2O)

(7.54.3.10) Explain target coverage and identify any exclusions

Linked target as ABS1 Total base year emissions covered by target in all selected scopes (S1S2) are 94,565.32 ton CO2-e in 2021. By 2030, it is aimed to provide 100 % of electricity grid consumption from SPPs. In 2030 the Scope 1 & Scope 2 emissions will be reduced 55% compared to base year. In 2030 the scope 2 emissions will be zero. Other targets will be developed and planned by taking into account long-term investments for the neutralization in 2050

(7.54.3.11) Target objective

Reducing the Scope 1 & 2 emissions by 100% until the end of 2050

(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:

☑ 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

*Other emission reduction targets will be developed next year in the course of developing our road map for the neutralization in 2050. Our strategic target is to reduce our carbon emissions by 55% in 2030 compared to 2021(S1S2) and to specify our actions within the vision of becoming carbon-neutral by 2050. The improvement phases will be assessed and reported Related projects to be implemented; *Awareness activities on energy use practices * Transition from conventional vehicles to EVs *Energy Efficient Design criteria setting in new buildings *Building insulation works *Solar Power Plant installations in the open areas of the company *Maintenance, repair, and revision works on heating & cooling, ventilation, pressure air, vacuum, aspirators, steam humidifiers, process coolers, treatment devices, transformers, UPS and generators etc. * Renovation on control systems *Substitution of cooling gases and extinguishers * Operation, maintenance, and repair of facilities' technology infrastructure *LED-equipped fixtures, local lighting techniques*

(7.54.3.16) Describe the actions to mitigate emissions beyond your value chain

The expectations from our suppliers are to comply with all laws and regulations and to manage their business in accordance to the requirements and targets set up for Environmental Management Systems including emission measurements, waste management and water consumption. The response rate and the performance rate are the main indicators of this success. We need to ensure business continuity in the context of climate related topics aligned with Paris Agreement Requirements throughout our company's commitments. This engagement will allow our tier 1 suppliers to ameliorate their own performance as well as cascade their own suppliers. The company will take into account energy efficiency at the procurement stage, with the integration and minimization of logistics activities, emphasis on environmentally friendly technologies in the selection of machinery / equipment.

(7.54.3.17) Target status in reporting year

Select from:

☑ Underway

(7.54.3.19) Process for reviewing target

Target success is measured through the evaluations of the yearly reported carbon footprints.
[Add row]

(7.55) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Select from:

☑ Yes

(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	*1*	*`Numeric input*
To be implemented	*1*	*1426*
Implementation commenced	*1*	*7514*
Implemented	*5*	*3722.38*
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.

Row 1

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in production processes

☑ Compressed air

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

99.95

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☑ Scope 2 (location-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

22417

(7.55.2.6) Investment required (unit currency – as specified in C0.4)

2411

(7.55.2.7) Payback period

Select from:

☑ <1 year

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 6-10 years

(7.55.2.9) Comment

Savings realized from the improvements made in the compressed air system.

Row 2

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in production processes

☑ Process optimization

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

66

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☑ Scope 2 (location-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

11794

(7.55.2.6) Investment required (unit currency – as specified in C0.4)

153104

(7.55.2.7) Payback period

Select from:

☑ 11-15 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 16-20 years

(7.55.2.9) Comment

Control of aluminum and small furnace with automation system.

Row 3

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in buildings

☑ Lighting

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

259.18

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☑ Scope 2 (location-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

14920

(7.55.2.6) Investment required (unit currency – as specified in C0.4)

40833

(7.55.2.7) Payback period

Select from:

☑ 1-3 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 11-15 years

(7.55.2.9) Comment

211 Led lamps were changed in the B200 building.

Row 4

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in buildings

☑ Building Energy Management Systems (BEMS)

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

115.68

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☑ Scope 2 (location-based)

(7.55.2.4) Voluntary/Mandatory

Select from:
☑ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

18645

(7.55.2.6) Investment required (unit currency – as specified in C0.4)

0

(7.55.2.7) Payback period

Select from:
☑ <1 year

(7.55.2.8) Estimated lifetime of the initiative

Select from:
☑ >30 years

(7.55.2.9) Comment

Closing of clean room air handling units during the Eid holiday

Row 5

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in buildings
☑ Solar shading

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

3231.58

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☑ Scope 2 (location-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

46130

(7.55.2.6) Investment required (unit currency – as specified in C0.4)

127596

(7.55.2.7) Payback period

Select from:

☑ 1-3 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 11-15 years

(7.55.2.9) Comment

Solar-Wall application to B420 and B23 Buildings
[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:

☑ Internal incentives/recognition programs

(7.55.3.2) Comment

For each project within the scope of VAP (Energy Efficiency Projects) 30% of the project amount will be paid to Turkish Aerospace by the related Ministry as an incentive.

Row 2

(7.55.3.1) Method

Select from:

☑ Dedicated budget for energy efficiency

(7.55.3.2) Comment

Turkish Aerospace drives investment in, energy, water, waste and VOCs for all activities generated from buildings and manufacturing processes. It supports and enables deployment of smaller and larger projects, including energy efficiency projects, with short and long-term time horizons. In 2022 Turkish Aerospace invested in energy efficiency for following buildings:Assembly Buildings, Test and Engineering Buildings, Manufacturing Building, Warehouse, Cafeteria, Technical Building, Office Buildings, Paint Shops, Heat Plant.

Row 3

(7.55.3.1) Method

Select from:

☑ Dedicated budget for low-carbon product R&D

(7.55.3.2) Comment

Substitution of existing products with lower emission options is aligned with the Research and Development activities. There is an increased demand for new low carbon technologies, materials, products and services.

Row 4

(7.55.3.1) Method

Select from:

☑ Compliance with regulatory requirements/standards

(7.55.3.2) Comment

Legal harmonization studies and legal product investments works on EU Green Deal products that reflect new GHG reduction opportunities to our country are studied to drive investment.
[Add row]

(7.74) Do you classify any of your existing goods and/or services as low-carbon products?

Select from:

☑ Yes

(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:

☑ No taxonomy used to classify product(s) or service(s) as low carbon

(7.74.1.3) Type of product(s) or service(s)

Heat

☑ Other, please specify **:**(firefighting UAV)

(7.74.1.4) Description of product(s) or service(s)

TUSAŞ contributes to environmental and community safety through innovative projects aimed at enhancing disaster response capabilities, such as during forest fires, earthquakes, and other natural disasters. Prioritizing sustainability, TUSAŞ develops aircraft, systems, and services to support the country's disaster preparedness while fulfilling its environmental responsibilities. In firefighting, TUSAŞ's AKSUNGUR is used by the Ministry of Agriculture and Forestry, and the company supports the maintenance of all firefighting aircraft. Plans include developing an amphibious aircraft and establishing a UAV fleet with high water-carrying capacity for fire suppression. Following the February 6, 2023 earthquake, AKSUNGUR flew 94.5 hours over three sorties, supporting search and rescue, damage assessment, and providing base station services. TUSAŞ also operates the nationwide Ambulance Helicopter Service, flying 4,237 hours in 2023 and transporting 2,739 patients. By 2026, three dual-stretcher GÖKBEY helicopters will join the fleet, enabling 24/7 service even under challenging weather conditions.

(7.74.1.5) Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Select from:

☑ No

(7.74.1.13) Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

5

[Add row]

(7.75) Provide tracking metrics for the implementation of low-carbon transport technology over the reporting year.

Row 1

(7.75.1) Activity

Select from:

☑ Aviation

(7.75.2) Metric

Select from:

☑ Production

(7.75.3) Technology

Select from:

☑ Other, please specify **:**(Reducing aircraft weight or Vehicle using SAF or Thermoplastic composite parts

(7.75.4) Metric figure

0

(7.75.5) Metric unit

Select from:

☑ Other, please specify **:**NA

(7.75.6) Explanation

We closely monitor international and national studies in order to be as ready as possible for the transition to climate related customer expectations. Increasing performance by reducing aircraft weight has become a race in aviation activities. Turkish Aerospace aims to provide products and services which can contribute to reduction of GHG emissions of the customers during usage phase. As part of the ongoing spoiler project, the company assembled mid-scale solid fiber reinforced thermoplastic prototype spoilers by welding, and used this process for the first time in a closed structure at its facilities. All risks arising from market risk type are systematically considered in the company's risk identification, assessment and management system for the short, med & longterm time horizon. The integration in the ERM system is in place. In order to determine the digital transformation strategy, the selection and determination of the qualities of the products to be produced, the restructure of the supply chain, market, technology and needs analysis, competition analysis and determination of the appropriate competition strategy, production and logistics support planning are carried out. The collaborations were signed with the customers in 2021.The investment is for the design and production of thermoplastic composite parts which will be featured in the aerial vehicles of the future. The company undertook important roles in the National Space Program with IMECE, GOKTURK3 satellites, and unmanned aerial vehicles.
[Add row]

(7.79) Has your organization canceled any project-based carbon credits within the reporting year?

Select from:

☑ No

C9. Environmental performance - Water security

(9.1) Are there any exclusions from your disclosure of water-related data?

Select from:

☑ No

(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

Direct measurement and monitoring, the data collected from the company's main (master) counter meter, is visualized in a SCADA system called ViewX, by in place flow meters

(9.2.4) Please explain

The total volume of water withdrawn for the facility located in Ankara Kahramankazan, is measured and monitored regularly. 100% of raw water used is withdrawn from two dams located in Sakarya Basin. (DSI -State Hydraulic Works is responsible from the utilization of all country's water resources). The total volume of water

withdrawn from the dams is brought to Turkish Aerospace with a 5 km pipeline. and enter to the system via master counter meter. Data is measured and systematized to prevent losses from the Water Distribution System. To realize this stage, 265 smart meters were installed in the internal water distribution network of TA. The data collected from the meters is visualized in a SCADA system called ViewX. The measurements and monitoring of a total of 80 buildings, including the production buildings and lodging area, can be seen instantly through this integrated system, where data is kept for the evaluation of consumption trends and reduction target performance

Water withdrawals – volumes by source

(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

Source of information DSI -State Hydraulic Works is responsible from the utilization of all country's water resources. The data is measured and monitored as volume bysource by DSİ. The information is shared via their official link and billing system. The volume is measured by in place-flow-meters and systematized to prevent losses from the Water Distribution System by Turkish Aerospace.

(9.2.4) Please explain

The volume of water withdrawn by source for the facility located in Ankara Kahramankazan, is measured and monitored regularly. 100% of water used is withdrawn from the dams located in Sakarya Basin.(DSI -State Hydraulic Works is responsible from the utilization of all country's water resources.) The raw water withdrawn from the dams is brought to Turkish Aerospace with a 5 km pipeline. The volume is measured and systematized to prevent losses from the Water Distribution System. To realize this stage, 265 smart meters were installed in the internal water distribution network of Turkish Aerospace. The data collected from the meters is visualized in a SCADA system called ViewX. The measurements and monitoring of a total of 80 buildings, including the production buildings and lodging area, can be seen instantly through this integrated system, where data is kept for the evaluation of consumption trends and reduction target performance

Water withdrawals quality

(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

DSI reports via its official link and monitors the water quality of the dams in daily periods. Raw water is treated in water treatment plant of TA for drinking and utility purpose. The quality of treated water is controlled and monitored in TA's laboratories in daily period. The reporting takes place regularly.

(9.2.4) Please explain

The quality of water withdrawn for the facility located in Ankara, Kahramankazan is regularly measured and monitored. 100% of water used is withdrawn from the dams located in Sakarya Basin. DSI reports and monitors the water quality of the dams in daily periods. The water withdrawn from the dams is brought to Turkish Aerospace with a 5 km pipeline. Raw water is treated in water treatment plant for drinking and utility purpose. The quality of treated water is controlled in the laboratories of the facility. The daily and monthly controlled parameters are: pH, turbidity, total hardness, SS, color, free chlorine, M- Alkalinity, P-Alkalinity, Fe, Al, NH4, Cd, NO3, NO2, Cl2, Cl, SO4, Cr, Mn, Ni, Cu, O2, F, Zn, Coliform Bacteria. Treatment plant's efficiency evaluation takes place every day. The parameters are under the control of Environment Management and Climate Change Unit. Utility and drinking water quality data is recorded into a corporate database controlled by senior management.

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

Direct Measurement Turkish Aerospace (TA) measures by flow-meters, monitors and reports total volume of water discharges with the discharge parameter values internally. The parameters: PO4, P, NH4, N, COD.

(9.2.4) Please explain

After being treated in the waste water treatment plants,total volume of treated water is discharged into a stream as receiving river which is under the control of water authorities. Discharge parameters are within the scope of Water Pollution Control Regulation and controls are carried out by ASKİ (Ankara Municipality Waterworks) and Provincial Directorate of Environment. Turkish Aerospace also measures and monitors total volume and the discharge parameter values internally. Samples are taken from the wastewater treatment plant's discharge point once every 2 weeks by the accredited laboratory and analysis parameters are reported according to Water Pollution Control Regulation Table:18.2. In addition, the parameters of the wastewater treatment plant are measured and monitored daily. Data is recorded into a corporate database which is under the control of senior management.

Water discharges – volumes by destination

(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

Direct Measurement Turkish Aerospace (TA) measures by flow-meters, monitors and reports total volume of water discharges by destination with the discharge parameter values internally. The receiving river quality measurement and monitoring process is done 2 times/month

(9.2.4) Please explain

After being treated in the waste water treatment plants, total volume of treated water is discharged into a stream as receiving river which is under the control of water authorities. Discharge parameters remain within the scope of Water Pollution Control Regulation and controls are carried out by ASKİ (Ankara Municipality Waterworks) and Provincial Directorate of Environment. Turkish Aerospace also measures and monitors total discharge volume and the discharge parameter values internally. Samples are taken from the wastewater treatment plant's discharge point once every 2 weeks by the accredited laboratory and analysis parameters are reported according to Water Pollution Control Regulation Table:18.2. In addition, the parameters of the wastewater treatment plant are monitored daily. Data is recorded into a corporate database which is under the control of senior management.

Water discharges – volumes by treatment method

(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

Direct measurement by flow-meters. Volume by treatment method is measured and monitored within the scope of Water Pollution Control Regulation (Table 18.2) Parameters:PO4, P, NH4, N, COD. We keep detailed records of the discharge treatment level and methods at all sites.

(9.2.4) Please explain

Waste Water generated from Turkish Aerospace operations is pretreated in the industrial treatment plant where neutralization and settling process take place. It is directed to domestic waste water treatment plant where 100% of facility's discharge water is treated. Volume by treatment method is measured and monitored within the scope of Water Pollution Control Regulation (Table 18.2) and controls are carried out by ASKİ (Ankara Municipality Waterworks) and /or Provincial Directorate of Environment. Turkish Aerospace also measures and monitors total volume by treatment method. Treatment plants' efficiency evaluation takes place every day. All results are reported to senior management

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:

☑ Daily

(9.2.3) Method of measurement

We monitor water discharge quality by standard effluent parameters at the site level using lab. testing.

(9.2.4) Please explain

Waste Water generated from Turkish Aerospace operations is pre-treated in the industrial treatment plant where neutralization and settling process take place, than it is directed to domestic waste water treatment plant where 100% of facility's discharge water is treated. Discharge parameters are measured and monitored within the scope of Water Pollution Control Regulation (Table 18.2) and controls are carried out by ASKİ (Ankara Municipality Waterworks) and Provincial Directorate of Environment. Effluent Parameters: PO4, P, NH4, N, COD. Turkish Aerospace also measures and monitors daily, standard effluent parameters internally in its laboratory. Water discharge parameters are monitored by an accredited laboratory 2 times/month. Treatment plants' efficiency evaluation takes place every day

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:

☑ Daily

(9.2.3) Method of measurement

We monitor water discharge quality by standard effluent parameters at the site level using lab. testing.

(9.2.4) Please explain

Waste Water generated from Turkish Aerospace operations is pre-treated in the industrial treatment plant where neutralization and settling process take place, than it is directed to domestic waste water treatment plant where 100% of facility's discharge water is treated. Discharge parameters are measured and monitored within the scope of Water Pollution Control Regulation (Table 18.2) and controls are carried out by ASKİ (Ankara Municipality Waterworks) and Provincial Directorate of Environment. Effluent Parameters: PO4, P, NH4, N, COD. Turkish Aerospace also measures and monitors daily, standard effluent parameters internally in its laboratory. Water discharge parameters are monitored by an accredited laboratory 2 times/month. Treatment plants' efficiency evaluation takes place every day.

Water discharge quality – temperature

(9.2.1) % of sites/facilities/operations

Select from:

☑ Not relevant

(9.2.4) Please explain

It is not a relevant metric for Turkish Aerospace. It is at ambient temperature level. Whether this water aspect is expected to be relevant in the future the company is ready to use measurement methods.

Water consumption – total volume

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Monthly

(9.2.3) Method of measurement

We measure our water consumption monthly using a water balance which considers water withdrawals and water discharges. Withdrawals and discharges are measured with flow meters.

(9.2.4) Please explain

For the purpose to assess consumption trends and reduction targets, water consumption is 100% measured as total volume. In our reporting the term “water consumption” refers to “water withdrawal” which is defined as “the sum of all water drawn into the boundaries of the organization from all sources and not discharged to the same source as destination

Water recycled/reused

(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

Water recovery systems “Degreasing Zero Liquid Discharge- ZLD system” and “Nital Etch and Copper Plating Zero Liquid Discharge-ZLD System ” are used to purify and reuse the wastewater generated as a result of the process.

(9.2.4) Please explain

A water recovery system "Degreasing Zero Liquid Discharge- ZLD system" has been installed to purify and reuse the wastewater generated as a result of the process. The water recovery system consists of activated carbon, deionization (anion-cation units), vacuum evaporator and reverse osmosis. The system has been activated in 2022. Another water recovery system "Nital Etch and Copper Plating Zero Liquid Discharge- ZLD system" has been installed to purify and reuse the wastewater generated as a result of the process. The water recovery system consists of vacuum evaporator and reverse osmosis. The system has been activated in 2023. The treated water of domestic treatment plant is stored and used in irrigation in case of need. 21% of domestic water treatment plant's effluent is used for irrigation purpose in 2023.

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:

☑ Monthly

(9.2.3) Method of measurement

Every month we take samples from the water which is used in WASH services and sent for analysis in Public Health Laboratories of the region. The water is tested against related parameters like coli-form bacteria, conductivity, pH, odor, turbidity, ammonia.

(9.2.4) Please explain

Turkish Aerospace provides safely managed WASH services to all workers. Water consumption amount for WASH purposes is measured by flow-meters. Every month we take samples from the water which is used in WASH services and sent for analysis in Public Health Laboratories of the region. If there is a non-conformity in the analysis results, we stop using water from that resource, take emergency actions and revise the analysis to see if the actions we have implemented have improved the quality of the water. If the quality is improved and is in the range we commence using the water.
[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)

1410.62

(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 efficiency

(9.2.2.4) Five-year forecast

Select from:

☑ Higher

(9.2.2.5) Primary reason for forecast

Select from:

☑ Investment in water-smart technology/process

(9.2.2.6) Please explain

The total volume of water withdrawn for the facility located in Ankara Kahramankazan, is measured by flow-meters and monitored. 100% of raw water used is withdrawn from two dams located in Sakarya Basin. (DSI -State Hydraulic Works is responsible for the utilization of all country's water resources). The total volume of

water withdrawn from the dams is brought to Turkish Aerospace with a 5 km pipeline. Data is measured and systematized to prevent losses from the Water Distribution System. To realize this stage, 265 smart meters were installed in the internal water distribution network of TurkishAerospace. The data collected from the meters is visualized in a SCADA system called ViewX. The measurements and monitoring of a total of 80 buildings, including the production buildings and lodging area, can be seen instantly through this integrated system, where data is kept for the evaluation of consumption trends and reduction target performance. The reporting year's figure is higher than the previous year's. In 5 years, the FTE population will be around 20,000. Therefore, the increase will continue. For this reason the company is planning to invest in water smart Technologies (ZLD systems etc.). Our threshold definitions are as follows: 0% - 5% about the same 5%- 25% higher or lower over %25: much higher or lower.

Total discharges

(9.2.2.1) Volume (megaliters/year)

236.04

(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:

☑ Increase/decrease in efficiency

(9.2.2.4) Five-year forecast

Select from:

☑ Higher

(9.2.2.5) Primary reason for forecast

Select from:

☑ Investment in water-smart technology/process

(9.2.2.6) Please explain

Total volume of treated water is discharged into a stream as receiving river which is under the control of water authorities. Discharge parameters are within the scope of Water Pollution Control Regulation and controls are carried out by ASKİ (Ankara Municipality Waterworks) and Provincial Directorate of Environment. Turkish Aerospace also measures and monitors total volume and the discharge parameter values internally. Data is recorded and entered into the corporate system. The analysis results are submitted to the MoEU&CC's online system. The reporting year's figure lower than the previous year's one.ZLD investments have a crucial impact for recovery and reuse of the wastewater so the the discharges are kept as minimum as possible. In 5 years, the FTE population will be around 20,000. Therefore, the increase in discharged water is expected. For this reason the company is planning to invest in water smart technologies (ZLD systems etc.). Our threshold definitions are as follows: 0% - 5% about the same 5%- 25% higher or lower over %25: much higher or lower.

Total consumption

(9.2.2.1) Volume (megaliters/year)

1174.58

(9.2.2.2) Comparison with previous reporting year

Select from:

☑ Much higher

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in efficiency

(9.2.2.4) Five-year forecast

Select from:

☑ Higher

(9.2.2.5) Primary reason for forecast

Select from:

☑ Investment in water-smart technology/process

(9.2.2.6) Please explain

We calculate the consumption figure using the formula Consumption (C)Withdrawal(W) – Discharge(D) The reporting year's figure is much higher compared to the previous year. In 5 years, the FTE population will be around 20,000. Therefore, an increase in discharged water is expected. For this reason, the company is planning to invest in water smart technologies (ZLD systems etc.). Our threshold definitions are as follows: 0% - 5% about the same 5%- 25% higher or lower over %25: much higher or lower.
[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)

1410.62

(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 efficiency

(9.2.4.5) Five-year forecast

Select from:

☑ Higher

(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

100.00

(9.2.4.8) Identification tool

Select all that apply

☑ WRI Aqueduct

(9.2.4.9) Please explain

The WRI Aqueduct has been used for water stress areas identification. It is the recommended tool in the Technical Supplement: The Use of Scenario Analysis in Disclosure of Climate-Related Risks and Opportunities published by TCFD and it enables to identify future water risks. Türkiye is a water stress country according to the volume of water available per capita /year. The water related risks are assessed for Turkish Aerospace campus located in Sakarya basin. Other country/ region wide data of General Directorate of State Hydraulic Works- DSI and ASKI Information from the official WEB page was studied. It is determined that the campus is established in water stressed areas. According to Aqueduct Water Risk Atlas, Physical risk quantity in Sakarya Basin; Water Stress is extremely high 80% Water Depletion is med-high (25-50%) Drought Risk is medium The ground- water decline is low- medium (0-2 cm/year) Physical Risk Quality: Untreated Connected Wastewater: Medium - High (60-90%)
[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:

☑ Not relevant

(9.2.7.5) Please explain

100% of raw water used is withdrawn from two dams located in Sakarya Basin. (DSI -State Hydraulic Works is responsible for the utilization of all country's water resources and ASKI - Ankara Water and Sewerage Administration has been given the responsibility of water management).

Brackish surface water/Seawater

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

100% of raw water used is withdrawn from two dams located in Sakarya Basin. (DSI -State Hydraulic Works is responsible for the utilization of all country's water resources and ASKI - Ankara Water and Sewerage Administration has been given the responsibility of water management).

Groundwater – renewable

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

100% of raw water used is withdrawn from two dams located in Sakarya Basin. (DSI -State Hydraulic Works is responsible for the utilization of all country's water resources and ASKI - Ankara Water and Sewerage Administration has been given the responsibility of water management).

Groundwater – non-renewable

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

100% of raw water used is withdrawn from two dams located in Sakarya Basin. (DSI -State Hydraulic Works is responsible for the utilization of all country's water resources and ASKI - Ankara Water and Sewerage Administration has been given the responsibility of water management).

Produced/Entrained water

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

100% of raw water used is withdrawn from two dams located in Sakarya Basin. (DSI -State Hydraulic Works is responsible for the utilization of all country's water resources and ASKI - Ankara Water and Sewerage Administration has been given the responsibility of water management).

Third party sources

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

1410.62

(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 efficiency

(9.2.7.5) Please explain

100% of raw water used is withdrawn from two dams located in Sakarya Basin. (DSI -State Hydraulic Works is responsible for the utilization of all country's water resources and ASKI - Ankara Water and Sewerage Administration has been given the responsibility of water management). The total volume of water withdrawn from the dams is brought toTurkish Aerospace with a 5 km pipeline. Data is measured and systematized to prevent losses from the Water Distribution System. To realize this stage, 265 smart meters were installed in the internal water distribution network of Turkish Aerospace. Our threshold definitions are as follows: 0% - 5% about the same 5%- 25% higher or lower over %25: much higher or lower.
[Fixed row]

(9.2.8) Provide total water discharge data by destination.

Fresh surface water

(9.2.8.1) Relevance

Select from:

☑ Relevant

(9.2.8.2) Volume (megaliters/year)

236.04

(9.2.8.3) Comparison with previous reporting year

Select from:

☑ Lower

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in efficiency

(9.2.8.5) Please explain

Wastewater from Turkish Aerospace operations is pre-treated in an industrial plant through neutralization and settling, then fully treated in a domestic wastewater plant. The treated water is discharged into a regulated stream, with discharge parameters remaining within Water Pollution Control Regulation (Table 18.2) limits. Legal controls are performed by ASKI and the Provincial Directorate of Environment, monitoring parameters like PO4, P, NH4, N, and COD. Turkish Aerospace measures these daily in its lab, while accredited labs conduct bi-monthly tests. Daily efficiency evaluations are performed, and ZLD investments help minimize discharges through wastewater recovery and reuse.

Brackish surface water/seawater

(9.2.8.1) Relevance

Select from:

☑ Not relevant

(9.2.8.5) Please explain

Not Relevant

Groundwater

(9.2.8.1) Relevance

Select from:

☑ Not relevant

(9.2.8.5) Please explain

Not Relevant

Third-party destinations

(9.2.8.1) Relevance

Select from:

☑ Not relevant

(9.2.8.5) Please explain

Not Relevant
[Fixed row]

(9.2.9) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

Tertiary treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Not relevant

(9.2.9.6) Please explain

Turkish Aerospace does not have a tertiary treatment plant. Waste Water generated from Turkish Aerospace's operations is pre-treated in the industrial treatment plant where neutralization and settling process take place, then it is directed to domestic waste water treatment plant where 100% of facility's discharge water is treated.

Secondary treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

236.04

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☑ 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

Turkish Aerospace has secondary treatment in the domestic wastewater treatment plant. Wastewater generated from Turkish Aerospace's operations is pre-treated in the industrial treatment plant where neutralization and settling process take place, than it is directed to domestic waste water treatment plant where 100% of facility's

discharge water is treated. The total volume of treated water is discharged into a stream as a receiving river which is under the control of water authorities. Discharge parameters are measured and monitored within the scope of Water Pollution Control Regulation (Table 18.2- fixed by the authority base on the discharge destination) and controls are carried out by ASKİ (Ankara Municipality Waterworks) and Provincial Directorate of Environment. Standard Effluent Parameters: PO4, P, NH4, N, COD Turkish Aerospace measures and monitors daily, standard effluent parameters internally, in its laboratory. Water discharge parameters are monitored by an accredited laboratory 2 times/ month. The analysis results are submitted to the MoEU&CC's online system Treatment plants' efficiency evaluation takes place every day. The reporting year's figure is lower than the previous year's one.ZLD investments have a crucial impact for recovery and reuse of the wastewater, so the discharges are kept as minimum as possible. Our threshold definitions: 0% - 5% about the same 5%- 25% higher or lower over %25: much higher or lower

Primary treatment only

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Not relevant

(9.2.9.6) Please explain

Wastewater generated from Turkish Aerospace's operations is pre-treated first in the industrial treatment plant where neutralization and settling process take place. The monitored parameters are Acid, caustic, chrome and caustic sludge, coolant, acid sulfuric, metabisulfite, polymer. The pre-treated wastewater is directed to the domestic treatment plant when the parameters are in the intervals required for efficiency. The pretreated water is directed to domestic wastewater treatment plant where 100% of facility's discharge water is treated. The efficiency of the primary and secondary treatment plants is monitored daily. It is checked by an accredited laboratory. Our threshold definitions: 0% - 5% about the same 5%- 25% higher or lower over %25: much higher or lower.

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

In 2023, Turkish Aerospace did not discharge to the natural environment without treatment therefore this destination is not relevant.

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

In 2023, Turkish Aerospace did not discharge to a third party without treatment therefore this destination is not relevant.

Other

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Not relevant

(9.2.9.6) Please explain

There is no operation that requires other treatment in Turkish Aerospace's facilities
[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)

0.04

(9.2.10.2) Categories of substances included

Select all that apply

☑ Nitrates

☑ Priority substances listed under the EU Water Framework Directive

(9.2.10.3) List the specific substances included

Nitrates and phosphates arise from domestic usage of water in housing and factory areas. According to our sector table 18.2 indicated in Water Polution Control Regulation Nitrite-N and Ammonium-N are monitored by an accredited laboratory two times per month. Also, internal measurements are conducted daily for PO4, P, NH4, N. In the context of Annex X of the EU Water Framework Directive: Cd, Lead, Mercury, Nickel and Cr elements originating from chemical surface treatments are measured by an accredited lab once every 2 months. Also, internal measurements are conducted daily for these elements.

(9.2.10.4) Please explain

In TUSAS operational business units are emitting these pollutants. The emissions to water are not affecting any vulnerable communities or water stressed areas. [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:

☑ 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

The company has reviewed all operations via publicly available tools (WRI Aqueduct) to identify the current and future conditions of the basin in which the facility operates. Water availability and water quality at basin level was assessed in the frame of water regulatory works. Water risks are assessed as part of an established enterprise risk management framework. Engagement with the employees are: Company water performance and water management approach sharing, information sharing about the water policy. For our business it is very important to fully identify the risks at the operational level. Apart from the stated tools and methods, we also use a company specific risk management approach and also use ISO 14001 system while identifying and assessing water-related risks. To assure the quality of water that is used for drinking and utility purpose raw water is treated in water treatment plant. The quality of treated water is controlled in the laboratories of the facility. The daily and monthly controlled parameters are: pH, turbidity, total hardness, SS, color, free chlorine, M- Alkalinity, P-Alkalinity, Fe, Al, NH4, Cd, NO3, NO2, Cl2, Cl, SO4, Cr, Mn, Ni, Cu, O2, F, Zn, Coliform Bacteria. Treatment plant's efficiency evaluation takes place every day. The water quality data is recorded into a corporate database controlled by senior management. In order to manage the impact of discharges within the facility, samples taken from the wastewater treatment plant's discharge point once every 2 weeks by the accredited laboratory and analysis parameters are reported according to Water Pollution Control Regulation Table:18.2. In addition, the parameters of the wastewater treatment plant are measured and monitored daily. The standard effluent parameters measured internally at Turkish Aerospace's laboratory are PO4, P, NH4, N, COD. Wastewater Treatment Plants' efficiency evaluation takes place every day.

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, and are not planning to do so in the next 2 years

(9.3.4) Please explain

Turkish Aerospace's Water Policy was updated and announced to all employees, tier 1 suppliers and other stakeholders in 2022. In the context of purchasing process, it has been decided by the sustainability committee / CEO to collect data on climate change/water related issues from the suppliers having key impacton purchasing issues. In the context of the Water Policy, the company acts on awareness-raising of its suppliers and other stakeholders. In the second party audits, the compliance of the suppliers is executed. Site Assessment audits were performed only for key suppliers. The Supplier Assessment Questionnaire has been revised in 2022 and applied to suppliers for collecting data on water & energy use and waste& wastewater management system.

[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

Select from:

☑ Facility 1

(9.3.1.2) Facility name (optional)

Kahramankazan

(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

Turkey

☑ Sakarya

(9.3.1.8) Latitude

40.081491

(9.3.1.9) Longitude

32.588543

(9.3.1.10) Located in area with water stress

Select from:

☑ Yes

(9.3.1.13) Total water withdrawals at this facility (megaliters)

1410.62

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

☑ Higher

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(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

1410.62

(9.3.1.21) Total water discharges at this facility (megaliters)

236.04

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ Lower

(9.3.1.23) Discharges to fresh surface water

236.04

(9.3.1.24) Discharges to brackish surface water/seawater

0

(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)

1174.58

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ Much higher

(9.3.1.29) Please explain

The FTE increase and the addition of new campus buildings have increased the water withdrawal. The recycled water for irrigation was lower than the previous year. [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

Turkish Aerospace's water withdrawals-total volumes have been verified by the third-party audit in the scope of the certification process of ISO 14046:2014.

Water withdrawals – volume by source

(9.3.2.1) % verified

Select from:
☑ 76-100

(9.3.2.2) Verification standard used

Turkish Aerospace's water withdrawals-total volumes by source have been verified by the third party audit in the scope of the certification process of ISO 14046:2014

Water withdrawals – quality by standard water quality parameters

(9.3.2.1) % verified

Select from:
☑ 76-100

(9.3.2.2) Verification standard used

Turkish Aerospace's water withdrawals-quality by standard water quality parameters have been verified by the third-party audit in the scope of the certification process of ISO 14046:2014.

Water discharges – total volumes

(9.3.2.1) % verified

Select from:

☑ 76-100

(9.3.2.2) Verification standard used

Turkish Aerospace's water discharges -total volumes have been verified by the third party audit in the scope of the certification process of ISO 14046:2014.

Water discharges – volume by destination

(9.3.2.1) % verified

Select from:

☑ 76-100

(9.3.2.2) Verification standard used

Turkish Aerospace's water discharges - volume by destination have been verified by the third party audit in the scope of the certification process of ISO 14046:2014

Water discharges – volume by final treatment level

(9.3.2.1) % verified

Select from:

☑ 76-100

(9.3.2.2) Verification standard used

Turkish Aerospace's water discharges -total volumes by final treatment level have been verified by the third party audit in the scope of the certification process of ISO 14046:2014.

Water discharges – quality by standard water quality parameters

(9.3.2.1) % verified

Select from:

☑ 76-100

(9.3.2.2) Verification standard used

Turkish Aerospace's water discharges -quality by standard water quality parameters have been verified by the third party audit in the scope of the certification process of ISO 14046:2014.

Water consumption – total volume

(9.3.2.1) % verified

Select from:

☑ 76-100

(9.3.2.2) Verification standard used

Turkish Aerospace's water consumption have been verified by the third party audit in the scope of the certification process of ISO 14046:2014.
[Fixed row]

(9.4) Could any of your facilities reported in 9.3.1 have an impact on a requesting CDP supply chain member?

Select from:

☑ Yes, CDP supply chain members buy goods or services from facilities listed in 9.3.1

(9.4.1) Indicate which of the facilities referenced in 9.3.1 could impact a requesting CDP supply chain member.

Row 1

(9.4.1.1) Facility reference number

Select from:

☑ Facility 1

(9.4.1.2) Facility name

Kahramankazan

(9.4.1.3) Requesting member

Select from:

(9.4.1.4) Description of potential impact on member

Given that Airbus is a key customer utilizing goods and services produced at our facility, there is a potential impact on Airbus regarding water-related dependencies, impacts, risks, and opportunities. Our facility relies on water for various operational processes. Therefore, any water-related risks, such as water scarcity, quality issues, or regulatory changes, could indirectly affect the supply chain and, consequently, Airbus's operations. That can be a disruption in supply process of Airbus and result a revenue decrease.

(9.4.1.5) Comment

No comment.
[Add row]

(9.5) Provide a figure for your organization's total water withdrawal efficiency.

(9.5.1) Revenue (currency)

2209000000

(9.5.2) Total water withdrawal efficiency

1565978.08

(9.5.3) Anticipated forward trend

It is anticipated that this efficiency will be improved by new investments such as Zero Liquid Discharge (ZLD) systems and digital control and monitoring of cooling water conditioning and water distribution system
[Fixed row]

(9.13) Do any of your products contain substances classified as hazardous by a regulatory authority?

	Products contain hazardous substances
	Select from: ☑ Yes

[Fixed row]

(9.13.1) What percentage of your company's revenue is associated with products containing substances classified as hazardous by a regulatory authority?

Row 1

(9.13.1.1) Regulatory classification of hazardous substances

Select from:
☑ Annex XVII of EU REACH Regulation

(9.13.1.2) % of revenue associated with products containing substances in this list

Select from:

☑ 10-20

(9.13.1.3) Please explain

Harmful chemicals subject to Reach Regulation are used in processes for different product parts. The production of the parts is carried out in line with the specs of the customers. It is not possible to change the chemicals used unless the relevant customer makes a request for a change of the recipe. We use a chemical that we have its MDF stating its properties subject to Reach Regulation. However, we do not have a similar documentation for all manufactured parts. For this reason, it is not clear what % of our revenue consists of products containing these substances. if there are less harmful substances which could be substituted for the hazardous substances in our products, we can do the application in the context of production specs. As a case, Instead of a chemical substitution a ZLD supported system was installed in order to eliminate the waste originating from trichloro-ethylene. Alkaline solution containing de-greasing facility was established for another precaution against hazardous chemical usage.
[Add row]

(9.14) Do you classify any of your current products and/or services as low water impact?

(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

“Digital Control of Cooling Water Conditioning” and“Water Automation System” as Innovation Projects for Water Efficiency

(9.14.4) Please explain

Cooling towers are industrial systems that are commonly used in Turkish Aerospace to provide cooling water for heat ex changers hot presses autoclaves and compressors Currently the conditioning of cooling water is done manually by operators Thus the current operation contains within itself some inefficiencies and it is open to human error Digital control system called 3D TRASAR which is used for light industrial cooling water applications are implemented in order to optimize chemical dosing in cooling towers and eliminate manual operations 3D TRASAR system will be applied to 46 cooling towers of Turkish Aviation 34 of them are closed type and 12 of them are open type cooling towers Near cooling towers will be combined via common collectors and by common pools and the required controller

amount will be optimized and reduced by this method. 8 controllers have been mounted in 2022 and 1 addition has been done in the reporting year so there are total of 9 controllers in place.
[Fixed row]

(9.15) Do you have any water-related targets?

Select from:
☑ Yes

(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	Please explain
Water pollution	*Select from:* ☑ Yes	*Rich text input [must be under 1000 characters]*
Water withdrawals	*Select from:* ☑ Yes	*Rich text input [must be under 1000 characters]*
Water, Sanitation, and Hygiene (WASH) services	*Select from:* ☑ No, but we plan to within the next two years	*We plan to increase the quality of our water within the next two years.*
Other	*Select from:* ☑ No, but we plan to within the next two years	*IrrigationRain water*

[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:

☑ Site/facility

(9.15.2.3) Category of target & Quantitative metric

Water withdrawals

☑ Other water withdrawals, please specify **:**Flow-meter percentage

(9.15.2.4) Date target was set

12/30/2021

(9.15.2.5) End date of base year

12/30/2020

(9.15.2.6) Base year figure

10

(9.15.2.7) End date of target year

12/30/2022

(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

All of the buildings including lodging area and main processes of Kahramankazan facility are included, there are no exclusions.

(9.15.2.15) Actions which contributed most to achieving or maintaining this target

In order to achieve/maintain the target, the obligation to place flowmeter for each building is included in the environmental requirements section of the contract.

(9.15.2.16) Further details of target

At the end of 2022, we mounted all flow meters 100%, on facility buildings including lodging area and main processes. The gathered data from the meters are visualized in a SCADA system called ViewX. Measurements and monitoring of buildings, including production and employee housing area, are online visible through this incorporated system. In 2022 project was achieved 100%. In the reporting year 2023 newly constructed buildings and processes were added. Flowmeters were

incorporated to these additions as well. Thus, the target was achieved and maintained in the reporting year. In order to achieve/maintain the target, the obligation to place a flowmeter for each building is included in the environmental requirements section of the contract.

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 pollution

☑ Increase in investment related to reducing water pollution

(9.15.2.4) Date target was set

12/30/2021

(9.15.2.5) End date of base year

12/30/2020

(9.15.2.6) Base year figure

0.0

(9.15.2.7) End date of target year

12/30/2030

(9.15.2.8) Target year figure

12.0

(9.15.2.9) Reporting year figure

9

(9.15.2.10) Target status in reporting year

Select from:

☑ Revised

(9.15.2.11) % of target achieved relative to base year

75

(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

Target covers all direct operations of the company, there are no exclusions.

(9.15.2.14) Plan for achieving target, and progress made to the end of the reporting year

There are 3D TRASAR system will be applied to 46 cooling towers of Turkish Aviation. Near cooling towers will be combined via common collectors and by common pools and the required controller amount will be optimized and reduced by this method. In 2021, 12 of them are purchased and at the end of 2021, 8 of them are installed. In 2022 with the implementation of digital controllers the amount of water lost through blow down is decreased to approximately 5,000 m³. In comparison to 2021 approximately 2,000 m³ of water was saved. So around 2,000 m³ of water is saved in 2022 and this amount of water will not be a load for the treatment system.

In the reporting year (2023) one more 3D TRASAR controller was implemented so in the reporting year total of 9 controllers was in place. By the end of the repoting year 34% decrease in blow down is achieved in comparison to year 2021.

(9.15.2.16) Further details of target

Digital control system called 3D TRASAR which is used for light industrial cooling water applications are implemented in order to optimize chemical dosing in cooling towers and eliminate manual operations. There are 3D TRASAR system will be applied to 46 cooling towers of Turkish Aviation. Near cooling towers will be combined via common collectors and by common pools and the required controller amount will be optimized and reduced by this method. In 2021, 12 of them are purchased and at the end of 2021, 8 of them are installed. In 2022 with the implementation of digital controllers the amount of water lost through blow down is decreased to approximately 5,000 m³. In comparison to 2021 approximately 2,000 m³ of water was saved. So around 2,000 m³ of water is saved in 2022 and this amount of water will not be a load for the treatment system. In the reporting year (2023) one more 3D TRASAR controller was implemented so in the reporting year total of 9 controllers was in place. By the end of the repoting year 34% decrease in blow down is achieved in comparison to year 2021.

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 withdrawals

☑ Other water withdrawals, please specify **:**Number of ZLD Systems

(9.15.2.4) Date target was set

12/30/2022

(9.15.2.5) End date of base year

12/30/2021

(9.15.2.6) Base year figure

0.0

(9.15.2.7) End date of target year

12/30/2030

(9.15.2.8) Target year figure

3.0

(9.15.2.9) Reporting year figure

2

(9.15.2.10) Target status in reporting year

Select from:

☑ Revised

(9.15.2.11) % of target achieved relative to base year

67

(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

Target covers all direct operations of the company, there are no exclusions.

(9.15.2.14) Plan for achieving target, and progress made to the end of the reporting year

In 2022, water recovery system "De-greasing Zero Liquid Discharge- ZLD system" has been installed in, to purify and reuse the wastewater generated as a result of the process. In the reporting year another water recovery system "Nital Etch and Copper Plating Zero Liquid Discharge- ZLD system is installed and established. There is a plan to implement a ZLD system for the future Titanium process investment. In our water policy it is stated that water resources will be protected with sustainable practices to ensure effective use of water. By this means, in our recent investments that consume a lot of water (such as chemical surface applications processes) we invest in water recovery systems to lower the freshwater consumption. Also, we have a PR.FAC.20.057T - Water Resources Management and Effective Use Procedure that supports the company investing in water recovery systems.

(9.15.2.16) Further details of target

In 2022, water recovery system "De-greasing Zero Liquid Discharge- ZLD system" has been installed in, to purify and reuse the waste water generated as a result of the process The water recovery system to be operated at the facility consists of activated carbon, de-ionization (anion-cation units), vacuum evaporator and reverse osmosis. In the reporting year another water recovery system "Nital Etch and Copper Plating Zero Liquid Discharge - ZLD system is installed and established. This water recovery system consists of vacuum evaporator and reverse osmosis Technologies. There is a plan to implement a ZLD system for the future Titanium process investment.
[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	Primary reason why other environmental information included in your CDP response is not verified and/or assured by a third party	Explain why other environmental information included in your CDP response is not verified and/or assured by a third party
	Select from: ☑ No, but we plan to obtain third-party verification/assurance of other environmental information in our CDP response within the next two years	*Select from:* ☑ Not an immediate strategic priority	*Not an immediate strategic priority.*

[Fixed 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	Attachment (optional)
	Energy Policy	*Enerji Politikası.pdf*

[Fixed row]

(13.3) Provide the following information for the person that has signed off (approved) your CDP response.

(13.3.1) Job title

Enterprise Development Manager

(13.3.2) Corresponding job category

Select from:

☑ Chief Sustainability Officer (CSO)

[Fixed row]

(13.4) Please indicate your consent for CDP to share contact details with the Pacific Institute to support content for its Water Action Hub website.

Select from:

☑ No