



SASA POLYESTER SANAYİ 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](#)

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:

EUR

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

(1.3.2) Organization type

Select from:

Publicly traded organization

(1.3.3) Description of organization

Headquartered in Adana, SASA Polyester Sanayi A.Ş. (SASA) is a pioneer and global leader in the polyester industry with its wide range of products including polyester, fiber, filament yarn, polyester-based polymers, specialty polymers and intermediates. Since its establishment in 1966, SASA has been committed to innovation, technical expertise and sustainability in the sector with its state-of-the-art production facilities and innovative perspective. SASA's journey over the years has been accompanied by strategic partnerships and significant organizational transformation. In 2000, the company was transformed into DupontSA as a result of its business partnership with Dupont, the chemical giants, but later continued operations under the trade name ADVANSA following the acquisition of Dupont shares by Sabancı Holding in 2004. In 2011, Sabancı Holding acquired all shares of ADVANSA BV and changed the corporate brand name to SASA. In 2015, there was a major change in the shareholding structure following the acquisition of a majority stake by Erdemoğlu Holding A.Ş. Following this change in the shareholding structure and management of SASA, its position in the market has become even stronger. As of 2023, Erdemoğlu Holding holds 55.28% of SASA shares. Following the foregoing change, the Company established its wholly owned subsidiaries SASA Dış Ticaret A.Ş. and SASA Uluslararası Finansal Yatırım A.Ş. in 2015 and 2022 respectively in order to increase its export and funding operations. In addition, SASA Trading BV, wholly owned by SASA Uluslararası Finansal Yatırım A.Ş., is based in the Netherlands and provides support in global credit and capital markets. In 2023, various changes occurred in the shareholding structure of SASA. Erdemoğlu Holding A.Ş. sold 1.26%, 1.1% and 2.5% of SASA shares to qualified institutional investors on June 13, September 14 and December 12 respectively and later repurchased shares on September 25, November 1, December 19 and December 25 of the same year. Erdemoğlu Holding's shareholding in SASA thus decreased from 62.04% to 55.28%. Merinos Halı Sanayi ve Ticaret A.Ş. took over Dinarsu İmalat ve Ticaret A.Ş. through a merger on December 15, increasing its stake in

SASA from 13.19% to 20.71%. With more than 5,000 employees, SASA has integrated production facilities in Adana on an outdoor area of 2,181,000 m² and a 55,625-m² raw material storage facility in İskenderun as well as liaison offices in Istanbul and Ankara. SASA houses major technologies such as Dynamit Nobel, ICI, Dupont, Udhe Inventa-Fischer (UIF), Oerlikon Barmag, AC Automation and INVISTA and offers innovative products and solutions thanks to the R&D Center established in 2002, thus delivering high-quality production at international standards. In addition to its leading role in the Turkish market, SASA also holds a key position in export activities to European and Middle Eastern countries, particularly to Germany. SASA is Germany's first choice for the supply of polyethylene terephthalate (PET) chips and is also a supplier to North American and Asian countries. Ranked 22nd in "Türkiye's Top 500 Industrial Enterprises 2022" list prepared by the Istanbul Chamber of Industry (İSO), SASA enjoys a competitive position in both national and global markets. Furthermore, SASA rose from 83rd place to 32nd in export rankings under the same list.

[Fixed row]

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

(1.4.1) End date of reporting year

12/30/2023

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

Select from:

Yes

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

Select from:

Yes

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

Select from:

4 years

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

Select from:

4 years

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

Select from:

3 years

[Fixed row]

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

1451761100

(1.5) Provide details on your reporting boundary.

	<p>Is your reporting boundary for your CDP disclosure the same as that used in your financial statements?</p>
	<p>Select from: <input checked="" type="checkbox"/> Yes</p>

[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:

Yes

(1.6.2) Provide your unique identifier

TRASASAW91E4

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:

Yes

(1.6.2) Provide your unique identifier

533-116-558

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

(1.14) In which part of the chemicals value chain does your organization operate?

Bulk inorganic chemicals

Titanium dioxide

Bulk organic chemicals

Aromatics

Ethylene oxide & Ethylene glycol

Methanol

Polymers

Other chemicals

Other, please specify :SASA produce special polyester products, polymer, polymer chips, textile chips, bottle chips, and pet chips, fiber and filament yarn. The main chemicals used are paraxylene, methanol, monoethyleneglycol (MEG).

(1.24) Has your organization mapped its value chain?

(1.24.1) Value chain mapped

Select from:

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

(1.24.2) Value chain stages covered in mapping

Select all that apply

Upstream value chain

Downstream value chain

(1.24.3) Highest supplier tier mapped

Select from:

Tier 1 suppliers

(1.24.4) Highest supplier tier known but not mapped

Select from:

Tier 2 suppliers

(1.24.7) Description of mapping process and coverage

SASA's Responsible Sourcing Practices covers value chain mapping processes. SASA's supply chain is international, multistakeholder, complex and integrated. The process starting from the entry of the raw material into the system until it is delivered to the end user is monitored. This monitoring covers both upstream and

downstream information and material flows. The supply network, consisting of pre-process, process and post-process main chains, involves different approaches at each step. 5 procedures were developed to improve the effectiveness of supply chain management. These procedures reinforce the responsible supply chain approach by supporting close collaboration with suppliers, continuous communication and an effective feedback system. Operating on a global scale, SASA purchases from 35 different countries around the world for the continuity of its operations and increases the number and diversity of its suppliers day by day. With the technological infrastructure in place, container movements related to international purchases are continuously monitored through the online system. As of 2023, according to the global breakdown of total purchases, the highest number of purchases were made from the People's Republic of China, followed by South Korea, the United States of America and Germany. The inter-operational supply network within the Company is effectively managed by SASA's in-house Design, R&D, Marketing, Sales and Operations Departments. The principles regarding the receipt of customer requests and orders, the planning and realization of the production and shipment program, and the execution of sales and post-shipment services are defined in the Customer Marketing Relations Procedure. Through the Customer Service, Grievances and Compensation Procedure, fast and effective feedback is provided to customer grievances, root causes are investigated, and corrective and preventive actions are quickly implemented.

[Fixed row]

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

(1.24.1.1) Plastics mapping

Select from:

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

(1.24.1.2) Value chain stages covered in mapping

Select all that apply

- Upstream value chain
- Downstream value chain
- End-of-life management

(1.24.1.4) End-of-life management pathways mapped

Select all that apply

- Preparation for reuse
- Recycling
- Landfill

[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

Risks that may arise during the reporting year and have an impact on short-term financial results. This time period is defined as one 3 years or less. Climate-related risks were introduced to the system within the scope of the Management System within SASA. According to our studies, these risks may arise during the current reporting year and have an impact on short-term financial results. This time period is defined as one 3 years or less. These risks are market, flood, fire, forest fire, extreme weather events.

Medium-term

(2.1.1) From (years)

3

(2.1.3) To (years)

10

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

These are the risks that can arise within a timeframe of 3 to 10 years. Risks that have a substantial impact on the company's strategy and financial results. SASA has defined policy, legal, technology, market, flood, fire, forest fire, extreme weather events, over temperature, decreasing groundwater level, destruction of biodiversity as medium-term risks.

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)

100

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

Risks that could have a significant impact on the organization's long-term strategy and the feasibility of the SASA facilities, including those that could be more than 10 years. SASA has defined policy, legal, technology, reputation, fire, forest fire, extreme weather events, overtemperature, decreasing groundwater level, rising sea level, destruction of biodiversity, drought, change in precipitation regime as long term risks.

[Fixed row]

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

(2.2.1) Process in place

Select from:

Yes

(2.2.2) Dependencies and/or impacts evaluated in this process

Select from:

Impacts only

(2.2.4) Primary reason for not evaluating dependencies and/or impacts

Select from:

No standardized procedure

(2.2.5) Explain why you do not evaluate dependencies and/or impacts and describe any plans to do so in the future

SASA has Biodiversity Management Plan covering the analysis of the flora and fauna in the site and KPI's. Even though there are impacts analyzed in the document, there is no specific information on opportunities analysis and management of the dependencies. Because, the relevant standards are published newly and there is not enough expertise to implement these standards properly. SASA starting to carry out studies on climate change mitigation and adaptation and water management in the previous period, evaluated its commitments to climate change impacts on parameters such as fossil fuel consumption, resource consumption, water consumption and measured their impacts through GHG calculation and LCA analysis on their products. Even though there are procedures on impact calculations followed, there are no procedures for evaluation of dependencies.

[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: <input checked="" type="checkbox"/> Yes	Select from: <input checked="" type="checkbox"/> Both risks and opportunities	Select from: <input checked="" type="checkbox"/> 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

(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

- 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:

- A specific environmental risk management process

(2.2.2.11) Location-specificity used

Select all that apply

- Site-specific

(2.2.2.12) Tools and methods used

International methodologies and standards

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

Other

- Scenario analysis
- Other, please specify :ISO 14064, GHG Protocol

(2.2.2.13) Risk types and criteria considered

Acute physical

- Drought
- Flood (coastal, fluvial, pluvial, ground water)
- Heat waves
- Heavy precipitation (rain, hail, snow/ice)
- Storm (including blizzards, dust, and sandstorms)

Chronic physical

- Changing precipitation patterns and types (rain, hail, snow/ice)
- Temperature variability

Policy

- Carbon pricing mechanisms
- Changes to national legislation

Market

- Availability and/or increased cost of raw materials

Reputation

- Increased partner and stakeholder concern and partner and stakeholder negative feedback

Technology

- Transition to lower emissions technology and products
- Unsuccessful investment in new technologies

Liability

- Non-compliance with regulations

(2.2.2.14) Partners and stakeholders considered

Select all that apply

- Customers
- Employees
- Investors
- Regulators
- Suppliers

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

Select from:

- No

(2.2.2.16) Further details of process

Within SASA, climate risks are included in internal risk management procedures. In this context, risks are defined in 3 different timing periods (short, medium, and long). Risk assessments are made on an annual basis. The following steps are considered when addressing risks. Risk levels range from 1 to 4 from low to very high. When we look at the financial situation: - 10 million and above - very high risk - 10 to 6 million - high risk - 6 to 2 million - moderate risk - 2 to 500 thousand Turkish liras - low risk is expressed as. According to the SASA Corporate Risk Management Policy, risk definitions were made on the basis of business lines and processes. These are risk definitions such as risk, opportunity, Risk Control, Financial Risk, Operational Risk, Strategic Risk, Climate Risk, and External Environment Risk. The approaches to the defined risks are categorized as follows. At the same time, approaches were determined with flow charts in the OHS Risk/ Environmental Aspect Assessment Procedure; 1. Avoiding Risk: It is the decision to end the activities or process that caused the risk to arise. While taking this decision, the return of the activity or process and the size of the risk are compared and a decision is made in accordance with the risk appetite of the company. 2. Reducing the Probability of Risk: It is the decision to eliminate the frequency of occurrence of possibilities with appropriate controls. 3. Reducing the Effects of Risk: These are the decisions and controls aimed at reducing the damages that may occur before and after the incident. Emergency plans are included in these approaches so that the damages do not grow further after the incidents occur. 4. Transfer/ Sharing of Risk: All or part of the risk is assumed by an external party. Solutions such as insurance applications, forming business partner agreements, partnerships are included in this approach. There is usually a cost in the risk-forming approach. For this reason, the cost-effect balance is given importance when making a decision. 5. Acceptance of Risk: Acceptance of residual risks. These risks should remain below the risk appetite. How the risks are evaluated numerically is detailed in the OHS Risk/ Environmental Aspect Evaluation Procedure. The probability of occurrence of the risk and the degree of impact are calculated by scoring from 1 to 5. It is evaluated using the 5x5 matrix. 1 point is in the minor risk, 2-6 low risk, 8-15 medium risk, 16-25 high risk categories.

Row 2

(2.2.2.1) Environmental issue

Select all that apply

- Water

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

Select all that apply

- Impacts
- Risks
- Opportunities

(2.2.2.3) Value chain stages covered

Select all that apply

- Direct operations

(2.2.2.4) Coverage

Select from:

- Full

(2.2.2.7) Type of assessment

Select from:

- Qualitative and quantitative

(2.2.2.8) Frequency of assessment

Select from:

- Annually

(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:

- A specific environmental 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

- EcoVadis
- WRI Aqueduct
- WWF Water Risk Filter

Enterprise Risk Management

- ISO 31000 Risk Management Standard

International methodologies and standards

- Environmental Impact Assessment
- ISO 14001 Environmental Management Standard
- ISO 14046 Environmental Management – Water Footprint
- Life Cycle Assessment

(2.2.2.13) Risk types and criteria considered

Chronic physical

- Sea level rise
- Water availability at a basin/catchment level
- Other chronic physical driver, please specify :Status of ecosystems and habitats

Policy

- Changes to national legislation

Market

- Inadequate access to water, sanitation, and hygiene services (WASH)

Reputation

- Impact on human health

(2.2.2.14) Partners and stakeholders considered

Select all that apply

- Customers
- Employees
- Investors
- Regulators
- Local communities
- Water utilities at a local level

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

Select from:

- No

(2.2.2.16) Further details of process

SASA assesses its Water Related risks according to international standards and using various tools which are accessible in the market. SASA defines the risks according to aforementioned tools and assesses its probabilities and its potential frequencies in the TCFD report which is publicly available on the Company's website. SASA also states the risks related to water in the Environmental Impact Assessment Risk Analysis Form. The form has been prepared as stated in the OHS Risk/ Environmental Aspect Evaluation Procedure. In all of the analyses, the departments and activities of the risks related to water, the environmental dimension, the effect on the receiving environment, the measures taken, the probability of occurrence, the degree of impact, the environmental importance and the actions to be taken are evaluated. Actions taken in water-related risks are monitored with the help of a form that is prepared continuously. Risks are analyzed according to the 5x5 matrix method. Within SASA, water risks have been addressed in the following processes: - Water conditioning, - Human use, - Resource use, - Energy use, - Chemical transfer/transport.

[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:

No

(2.2.7.3) Primary reason for not assessing interconnections between environmental dependencies, impacts, risks and/or opportunities

Select from:

No standardized procedure

(2.2.7.4) Explain why you do not assess the interconnections between environmental dependencies, impacts, risks and/or opportunities

SASA's primary goal is to identify environmental impacts, risks and/or opportunities separately. These studies have already been conducted and will be developed further. After completing these evaluations, SASA will assess the links between environmental dependencies and impacts, risks and opportunities in the upcoming period.

[Fixed row]

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

(2.3.1) Identification of priority locations

Select from:

Yes, we have identified priority locations

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

Select all that apply

Downstream value chain

(2.3.3) Types of priority locations identified

Sensitive locations

Other sensitive location, please specify :The growth of the packaging market, one of SASA's sales markets, is constrained by increased regulations on the use of plastic packaging.

(2.3.4) Description of process to identify priority locations

Production of packaging is growing worldwide, however in recent years, consumers have become more critical of certain items because of environmental concerns. Recently, a few countries and organizations have begun to outright forbid some goods, including plastic bags. Some have increased the levy on items made of single-use plastic. Because of the increasing regulation and the acceleration of customer desire for alternative packaged items, the packaging industry will find it difficult to grow in several product areas. Thus, there will be a need to developing sustainable packaging options.

(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:

- Production capacity

(2.4.3) Change to indicator

Select from:

- % decrease

(2.4.4) % change to indicator

Select from:

- 21-30

(2.4.6) Metrics considered in definition

Select all that apply

- Time horizon over which the effect occurs

(2.4.7) Application of definition

SASA conducts risk and opportunity assessments using the PESTEL (political, economic, social, technological, environmental and legal) model. In this context, it takes into account its earnings, which are directly linked to its production capacity. SASA considers risk categories as strategic, financial and operational, and evaluates risk impacts with a 1 (low risk) - 4 (very high risk) rating system. It calculates the risk value by determining the risk impact and probability and determines the risk class according to the determined risk value. According to the determined risk impact and risk class, a final decision is taken by the risk review team together with the senior management processes. In this context, if production capacity falls below 20%, this constitutes a substantive risk for SASA.

Opportunities

(2.4.1) Type of definition

Select all that apply

- Qualitative
- Quantitative

(2.4.2) Indicator used to define substantive effect

Select from:

- Capital expenditures

(2.4.3) Change to indicator

Select from:

% increase

(2.4.4) % change to indicator

Select from:

31-40

(2.4.6) Metrics considered in definition

Select all that apply

Time horizon over which the effect occurs

(2.4.7) Application of definition

SASA conducts risk and opportunity assessments using the PESTEL (political, economic, social, technological, environmental and legal) model. In this context, it takes into account its capital expenditures increase, which are directly linked to new investments, decrease in the logistic expenses, production of its own raw material. In this context, if capital expenditures due to the new investments increases more than 30% SASA considers it as substantive opportunities.

[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

Safety data sheets which are available for all chemicals on the production site and Wastewater Management Procedure are used. Before using a new chemical, a safety data sheet is obtained from the supplier and stored at the factory. All chemical inventory records are forwarded to the Ministry of Environment, Urbanization, and Climate Change's data system. Employees get training on all chemicals used within the framework of the ISO 45001 and ISO 14001 management standards.

First aid, personal protective equipment, toxicological information, ecological information, and so on are all included in the relevant section of the safety data sheets. Employees are trained at least once every year. Emergency response kits are constantly kept in the factory in areas where chemicals are kept and should not be mixed with the receiving environment (water, soil, etc.). The company has a procedure regarding this, and necessary information is given to the employees. Safety data sheets are also available for all of the company's goods. The products are classified as non-hazardous. Our company also has an Oekotex Certificate, which proves that our products are free of dangerous compounds and that we are meeting our commitments under the REACH Regulation. SASA also adheres to the Manufacturing Restricted Substances List of the ZDHC (Zero Discharge of Hazardous Chemicals) Program - MRS� for Textiles and Polymers in order to prevent the discharge of chemicals into the receiving environment.

[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:

- Other nutrients and oxygen demanding pollutants

(2.5.1.2) Description of water pollutant and potential impacts

Chemical Oxygen Demand (COD): One of the most important parameters used in determining the degree of pollution of domestic and industrial wastewater (especially industrial) is the chemical oxygen demand. COD, which is found in high amounts in wastewater, is one of the most important pollution measures. Measurement of oxygen demand is important in measuring waste loads of treatment plants and evaluating treatment efficiency.

(2.5.1.3) Value chain stage

Select all that apply

- Direct operations
- Upstream value chain

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

- Beyond compliance with regulatory requirements

- Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements
- Other, please specify :IFC standarts/EHS Guidelines (EHS Guidelines for Large volume Petroleum-based Organic Chemicals Manufacturing, EHS Guidelines for Petroleum-based Polymers-Manufacturing; EHS Guidelines for Textile Manufacturing) compliance

(2.5.1.5) Please explain

The local legislation for wastewater discharge in Turkey sets the limit of COD at 240 mg/L. SASA uses the necessary specific treatment methods which are in compliance with the local and international standards to go beyond the local limit and to achieve the limit determined by the IFC standards of 150 mg/L. The limit of 150 mg/L value which is determined by IFC standards are complied with since most effective methods are applied for our treated wastewater. The procedures are selected from the local and international standards and from necessary literature reviews on wastewater treatment and the effectiveness and success of the procedures are measured and watched with necessary sensors daily.

Row 2

(2.5.1.1) Water pollutant category

Select from:

- Other physical pollutants

(2.5.1.2) Description of water pollutant and potential impacts

Total Suspended Solids: Suspended solids in drinking water and wastewater have effects on both environmental and human health. TSS lowers the dissolved oxygen level in water and raises its temperature. It can disrupt the photosynthesis mechanism in the aquatic environment by creating turbidity in the water.

(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

- Beyond compliance with regulatory requirements
- Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

Other, please specify :IFC standarts/EHS Guidelines (EHS Guidelines for Large volume Petroleum-based Organic Chemicals Manufacturing, EHS Guidelines for Petroleum-based Polymers-Manufacturing; EHS Guidelines for Textile Manufacturing) compliance

(2.5.1.5) Please explain

SASA uses the necessary specific treatment methods which are in compliance with the local and international standards to achieve the limit determined by the local legal standards and IFC standards of 30 mg/L. The limit of 30 mg/L value which is determined by IFC and local standards are complied with since most effective methods are applied for our treated wastewater. The procedures are selected from the local and international standards and from necessary literature reviews on wastewater treatment and the effectiveness and success of the procedures are measured and watched with necessary sensors daily.

Row 3

(2.5.1.1) Water pollutant category

Select from:

Inorganic pollutants

(2.5.1.2) Description of water pollutant and potential impacts

Sulfide, Sulfate and Sulfur Compounds: Sulfide compounds are mostly found in groundwater and hot spring waters. Sulfur compounds are mixed with wastewater, decomposition of organic materials or industrial wastes. Sulfur compounds are formed in water as a result of bacterial reduction of sulfate compounds. Hydrogen sulfide escaping into the air from wastewater containing sulfur causes odor problems in the environment. The limit odor concentration of hydrogen sulfide (H₂S) in clean water is between 0.025 µg/L and 0.25 µg/L. Hydrogen Sulfide (H₂S) is a very toxic gas and is very harmful to sewer workers. Sulfur compounds in water cause serious corrosion by affecting metal materials directly and indirectly on concrete channels.

(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

Beyond compliance with regulatory requirements

Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

(2.5.1.5) Please explain

SASA uses the necessary specific treatment methods which are in compliance with the local and international standards to achieve the limits determined by the local legal standards and IFC standards of 1 mg/L and 0.1mg/L. The limits of 1 mg/L and 0.1mg/L value which is determined by IFC and local standards are complied with since most effective methods are applied for our treated wastewater. The procedures are selected from the local and international standards and from necessary literature reviews on wastewater treatment and the effectiveness and success of the procedures are measured and watched with necessary sensors daily.

Row 5

(2.5.1.1) Water pollutant category

Select from:

- Inorganic pollutants

(2.5.1.2) Description of water pollutant and potential impacts

Free Chlorine: The effects of chlorine on the environment are directly related to the exposure time and dose. Chlorine accumulates in living things and is transported in the food chain. Chlorine also leaves a taste and odor in the water.

(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

- Beyond compliance with regulatory requirements
- Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

(2.5.1.5) Please explain

SASA uses the necessary specific treatment methods which are in compliance with the local and international standards to achieve the local legal limit of 0.3 mg/L. The limit of 0.3 mg/L value which is determined by local standards are complied with since most effective methods are applied for our treated wastewater. The procedures are selected from the local and international standards and from necessary literature reviews on wastewater treatment and the effectiveness and success of the procedures are measured and watched with necessary sensors daily.

Row 6

(2.5.1.1) Water pollutant category

Select from:

- Inorganic pollutants

(2.5.1.2) Description of water pollutant and potential impacts

Ammonium Nitrogen: Ammonium nitrogen is one of the forms of nitrogen found in the receiving medium. Unlike other forms of nitrogen, ammoniac nitrogen is directly toxic to aquatic life. It causes accumulation in the biomass of living creatures in the aquatic environment. This accumulation creates toxicity in the blood. Environmental factors such as pH and temperature can affect ammonium toxicity for aquatic animals.

(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

- Beyond compliance with regulatory requirements
- Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

(2.5.1.5) Please explain

SASA uses the necessary specific treatment methods which are in compliance with the local and international standards to achieve the local legal limit of 5 mg/L. The limit of 5 mg/L value which is determined by local standards are complied with since most effective methods are applied for our treated wastewater. The procedures are selected from the local and international standards and from necessary literature reviews on wastewater treatment and the effectiveness and success of the procedures are measured and watched with necessary sensors daily.

Row 7

(2.5.1.1) Water pollutant category

Select from:

- Inorganic pollutants

(2.5.1.2) Description of water pollutant and potential impacts

Heavy metal (Cr): The presence of heavy metals, which are released into the environment uncontrollably, in wastewater is increasing. For this reason, wastewater containing heavy metals is seen as an important source of danger for all living things. In addition to causing serious environmental problems, heavy metal accumulation is one of the factors that pose a significant threat to food safety, human health and ecosystem. Heavy metals taken into the body through water and nutrients have the potential to accumulate in living things and damage all life activities. Heavy metals are not biodegradable. Since they are toxic and/or carcinogenic, their presence in concentrations above the permissible limit values causes critical health problems for the ecosystem. The toxic effects of these pollutants vary according to both the properties of the metal, the dose taken and the form of exposure.

(2.5.1.3) Value chain stage

Select all that apply

- Direct operations
- Upstream value chain
- Downstream value chain

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

- Beyond compliance with regulatory requirements
- Provision of best practice instructions on product use
- Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements
- Other, please specify :IFC standarts/EHS Guidelines (EHS Guidelines for Large volume Petroleum-based Organic Chemicals Manufacturing, EHS Guidelines for Petroleum-based Polymers-Manufacturing; EHS Guidelines for Textile Manufacturing) compliance

(2.5.1.5) Please explain

SASA uses the necessary specific treatment methods which are in compliance with the local and international standards to achieve the limit determined by the IFC standards of 0.5 mg/L. The limit of 0.5 mg/L value which is determined by IFC standards are complied with since most effective methods are applied for our treated wastewater. The procedures are selected from the local and international standards and from necessary literature reviews on wastewater treatment and the effectiveness and success of the procedures are measured and watched with necessary sensors daily.

Row 8

(2.5.1.1) Water pollutant category

Select from:

- Oil

(2.5.1.2) Description of water pollutant and potential impacts

Oil and Grease: Oil and grease are substances that pose serious problems to aquatic life. The oil and grease-receiving environment accumulated on the water surface reduces the dissolved oxygen level. By covering the water surface, it prevents oxygen transfer and reduces biological activity. As the oxygen level in the water decreases, the oxidation of organic materials decreases.

(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

- Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience
- Beyond compliance with regulatory requirements
- Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements
- Other, please specify :IFC standarts/EHS Guidelines (EHS Guidelines for Large volume Petroleum-based Organic Chemicals Manufacturing, EHS Guidelines for Petroleum-based Polymers-Manufacturing; EHS Guidelines for Textile Manufacturing) compliance

(2.5.1.5) Please explain

SASA uses the necessary specific treatment methods which are in compliance with the local and international standards to achieve the limit determined by the IFC standards of 10 mg/L. The limit of 10 mg/L value which is determined by IFC standards are complied with since most effective methods are applied for our treated wastewater. The procedures are selected from the local and international standards and from necessary literature reviews on wastewater treatment and the effectiveness and success of the procedures are measured and watched with necessary sensors daily.

[Add row]

C3. Disclosure of risks and opportunities

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

Climate change

(3.1.1) Environmental risks identified

Select from:

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

Water

(3.1.1) Environmental risks identified

Select from:

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

Plastics

(3.1.1) Environmental risks identified

Select from:

No

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

Select from:

Insufficient data

(3.1.3) Please explain

*Due to insufficient data, we have not yet assessed plastic-related risks, but we plan to conduct this assessment within the next two years.
[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

Carbon pricing mechanisms

(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

After 2026, EU CBAM will be in charge in Turkey but SASA won't be in the prioritized sector according to current situation. - When it is considered EU CBAM Regulation development is an ongoing process now, SASA may be affected because of chemical sector's possible inclusion to the CBAM. - If CBAM sector scope is enlarged to chemicals and polymers, SASA's products exportation will be affected directly.

(3.1.1.11) Primary financial effect of the risk

Select from:

- Increased compliance costs

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

Select all that apply

- Medium-term

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

Select from:

- Likely

(3.1.1.14) Magnitude

Select from:

- 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

Carbon Border Adjustment Mechanism (CBAM) is expected to have a significant impact on the organization's financial position, financial performance, and cash flows in future time horizons. As CBAM comes into effect, the increased carbon costs associated with export operations are likely to reduce revenue margins, which could put downward pressure on overall profitability. The need to comply with CBAM regulations may also result in increased operating costs and capital expenditures as the organization invests in emissions-reduction strategies and technologies. This could strain cash flows and require careful financial planning to manage the additional costs while maintaining competitiveness in international markets.

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

Select from:

Yes

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

0

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

13854816.59

(3.1.1.25) Explanation of financial effect figure

Cradle-to-gate Life Cycle Assessment (LCA) studies have been conducted for the main product groups, and product carbon footprint calculations have been made in line with the CBAM emission scopes. SASA's product groups do not fall among the priority sectors based on current regulations. Official sources do not provide product benchmark values for the polymer groups produced by SASA. In this context, when conducting the analysis, it is assumed that the carbon footprint difference between the product benchmark values and SASA's products might be 0-20%. The evaluated product groups are PET Chips and Polyester Yarn. The sales volumes of these products to Europe have been taken into account. The calculation of CBAM cost is based on the carbon price of 83.47 EUR/t-CO₂e, which is the average value for 2023 in the EU ETS.

(3.1.1.26) Primary response to risk

Infrastructure, technology and spending

Increase environment-related capital expenditure

(3.1.1.27) Cost of response to risk

256019868

(3.1.1.28) Explanation of cost calculation

Implementing renewable energy / Energy efficiency / Low-carbon fuel investments Breakdown of carbon reduction projects' cost: - 36,964,000 EUR - Low-carbon fuel investments (Considered to be commissioned in 2026 - Estimated investment cost is 40,000,000 USD. 2023 average USD/EUR parity is evaluated as 0,924) - 10,488,535 EUR - Renewable energy generation investment (Solar Rooftop) (Realized in 2023) (Declared investment cost is 11,400,000 USD. 2023 average USD/EUR parity is evaluated as 0,924) - 175,579,000 EUR - Renewable energy generation investment (Planned as Land Solar) (To be commissioned by 2027 - Estimated total investment costs is 180,000,000 USD. 2023 average USD/EUR parity is evaluated as 0,924) - 32.988.333 EUR - Wastewater Treatment System (Ongoing implementation process of PTA facility project)

(3.1.1.29) Description of response

SASA plans to minimize the financial effects of risks by means of renewable energy, energy efficiency and fuel conversion investments in 2023 and beyond. The investments planned to be established are transition technologies from coal to biomass, steam saving, lighting efficiency for the facility, waste heat recovery, high energy efficiency class in newly installed equipment in offices and production facilities, and increasing the amount of energy to be produced from biogas with the installation of an integrated waste water treatment system.

Water

(3.1.1.1) Risk identifier

Select from:

Risk1

(3.1.1.3) Risk types and primary environmental risk driver

Acute physical

Flooding (coastal, fluvial, pluvial, groundwater)

(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 :Seyhan River

(3.1.1.9) Organization-specific description of risk

The risk of flooding as a result of sudden changes in precipitation regimes or excessive precipitation. Flood risk is assessed using hazard (inundation caused by river overflow), exposure (population in flood zone), and vulnerability. The existing level of flood protection is also incorporated into the risk calculation. It is important to note that this indicator represents flood risk not in terms of maximum possible impact but rather as average annual impact. The impacts from infrequent, extreme flood years are averaged with more common, less newsworthy flood years to produce the “expected annual affected population.” Higher values indicate that a greater proportion of the population is expected to be impacted by Riverine floods on average.

(3.1.1.11) Primary financial effect of the risk

Select from:

- Closure of operations

(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:

- Likely

(3.1.1.14) Magnitude

Select from:

- 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

Risk of flooding is expected to have a more pronounced impact on the organization’s financial position, performance, and cash flows. As climate patterns shift and the likelihood of extreme weather events increases, the risk of flooding could lead to significant operational disruptions, potentially resulting in the closure of facilities, loss of production capacity, and increased costs related to repairs and asset protection. These impacts could strain the organization’s cash flows and reduce profitability. Additionally, there may be an increase in capital expenditures to enhance flood defenses and infrastructure resilience, which could further affect financial performance in the medium term. Overall, the organization anticipates that this risk will require ongoing attention and investment to mitigate potential future financial impacts.

(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)

300000

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

575000

(3.1.1.25) Explanation of financial effect figure

Financial losses as a result of damage to the equipment and products of the plant as a result of floods Stopping of operations

(3.1.1.26) Primary response to risk

Policies and plans

Increase insurance coverage

(3.1.1.27) Cost of response to risk

38812200

(3.1.1.28) Explanation of cost calculation

Annual cost of having a block insurance.

(3.1.1.29) Description of response

SASA has block insurance to compensate for damages in case of flooding or any natural/climate-related disaster, during transportation of raw materials or products, and at production facilities

Climate change

(3.1.1.1) Risk identifier

Select from:

Risk2

(3.1.1.3) Risk types and primary environmental risk driver

Policy

Carbon pricing mechanisms

(3.1.1.4) Value chain stage where the risk occurs

Select from:

Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

Turkey

(3.1.1.9) Organization-specific description of risk

Local Emission Trading System will be valid in Turkey after year 2024. Since the capacity of SASA is higher than 20 MW, SASA will be a participant in the system. Therefore, Turkish ETS requirements will be followed.

(3.1.1.11) Primary financial effect of the risk

Select from:

Increased indirect [operating] costs

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

Select all that apply

Short-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:

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

The implementation of the Local Emission Trading System in Turkey after 2024, where SASA will be a mandatory participant due to its capacity exceeding 20 MW, is expected to have a significant impact on the organization's financial position, performance, and cash flows. The need to purchase emission allowances or invest in emission reduction technologies will likely increase operational costs, leading to reduced profit margins. Compliance with the Turkish ETS requirements will also necessitate increased capital expenditures and monitoring costs, further affecting cash flow. As a result, the financial performance in the reporting year could experience downward pressure, with potential impacts on profitability and liquidity.

(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)

0

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

28536910.57

(3.1.1.25) Explanation of financial effect figure

Since carbon prices and CAP values are not determined in the Local ETS system, a net carbon cost could not be calculated. However, it is assumed that SASA will receive 100% free allowance for the calculation of minimum potential financial impact. For the calculation of the maximum potential financial impact, it is assumed that

stationary combustion fuel emissions will pay for 100% (free allowance 0%). SASA's stationary combustion-related emissions amount to 341,882.24 t-CO₂e. The calculation of the maximum potential cost is based on the carbon price of 83.47 EUR/t-CO₂e, which is the average value for 2023 in the EU ETS.

(3.1.1.26) Primary response to risk

Compliance, monitoring and targets

- Establish organization-wide targets

(3.1.1.27) Cost of response to risk

36964000

(3.1.1.28) Explanation of cost calculation

It is reflected as the costs of switching to biomass instead of using coal for energy generation at SASA facilities. The investment cost (CAPEX) for the biomass power plant has been calculated as 36,964,000 EUR. The transition to biomass is targeted to be completed by the year 2026.

(3.1.1.29) Description of response

SASA plans to minimize the financial effects of risks by means of energy efficiency and fuel conversion investments in 2023 and beyond. The investments planned to be established are transition technologies from coal to biomass, steam saving, waste heat recovery, increasing the amount of energy to be produced from biogas with the installation of an integrated wastewater treatment system.

Climate change

(3.1.1.1) Risk identifier

Select from:

- Risk3

(3.1.1.3) Risk types and primary environmental risk driver

Market

- Increased costs and/or uncertainties related to the cost of virgin plastics

(3.1.1.4) Value chain stage where the risk occurs

Select from:

- Upstream value chain

(3.1.1.6) Country/area where the risk occurs

Select all that apply

- Turkey

(3.1.1.9) Organization-specific description of risk

SASA has market risks associated with climate change. These risks can be listed as changes in customer expectations and behaviors, uncertainties in the markets, and finally, the increase in raw material product costs because of their enlarged production costs.

(3.1.1.11) Primary financial effect of the risk

Select from:

- Increased direct costs

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

Select all that apply

- Medium-term

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

Select from:

- More likely than not

(3.1.1.14) Magnitude

Select from:

- Medium

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

SASA anticipates that the market risks associated with climate change will have a more pronounced effect on its financial position, performance, and cash flows. As customer expectations and behaviors continue to evolve in response to climate-related concerns, SASA may face increased pressure to adapt its product offerings, which could lead to higher costs and potentially lower revenues if market preferences shift away from its core products. Additionally, the uncertainty in markets may exacerbate volatility in demand, further complicating revenue forecasting and financial planning. The expected increase in raw material costs, driven by higher production expenses due to climate-related factors, is likely to reduce profit margins and strain cash flows. Over time, these factors could weaken SASA's financial performance and necessitate strategic adjustments to maintain competitiveness and financial stability in an increasingly climate-conscious market environment.

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

Select from:

Yes

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

0

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

985600000

(3.1.1.25) Explanation of financial effect figure

Financial impact will occur in case of disruption of raw material supply within the scope of climate risks. Breakdown of potential financial impact arising from raw material: - Purified Terephthalic Acid (PTA) (process chemical) (701.6 million EUR/year) - Monoethylene Glycol (MEG) (process chemical) (184.7 million EUR/year) - Paraxylene (process chemical) (56.8 million EUR/year) - Butanediol (process chemical) (21,5 million EUR/year) - MEOH, 2-Ethylhexanol (process solvent) (17,6 million EUR/year) - Acetic acid, cobalt acetate, caustic soda, IPA (main catalysts) (3,4 million EUR/year)

(3.1.1.26) Primary response to risk

Diversification

Develop new products, services and/or markets

(3.1.1.27) Cost of response to risk

498479770.4

(3.1.1.28) Explanation of cost calculation

Yearly contracts with suppliers and tracking raw material stocks in the factory. To mitigate market risks associated with one of our crucial raw materials, PTA (Purified Terephthalic Acid), we are currently establishing a PTA production facility. Through this ongoing installation of the PTA plant, we aim to minimize the potential risks we might encounter in raw material procurement. The investment cost of our PTA facility represents the cost of response to risk that we incur to mitigate raw material market risks. Average EUR-USD parity is evaluated as 0.924 for 2023.

(3.1.1.29) Description of response

In SASA, to handle the financial impact of raw materials price increase, annual contracts are signed with suppliers. Raw material prices are set according to the formulations based on the data of the reporter companies in which internationally accepted base prices are published. On the other hand, the stock level of raw materials are kept as corresponds to 1 month consumption and ensured that it does not fall below this level.

Climate change

(3.1.1.1) Risk identifier

Select from:

Risk4

(3.1.1.3) Risk types and primary environmental risk driver

Acute physical

Other acute physical risk, please specify :Heavy precipitation, flood, tornado, fire

(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

(3.1.1.9) Organization-specific description of risk

Disasters that may occur due to physical climate risks, such as heavy precipitation, floods, tornadoes, and fires, present significant threats to our organization. These events can lead to direct damage to critical infrastructure, including manufacturing facilities, supply chains, and storage units, resulting in operational disruptions. The increasing frequency and intensity of such climate-related events exacerbate the risk of asset impairment, early retirement of equipment, and increased maintenance costs.

(3.1.1.11) Primary financial effect of the risk

Select from:

Decreased asset value or asset useful life leading to write-offs, asset impairment or early retirement of existing assets

(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:

More likely than not

(3.1.1.14) Magnitude

Select from:

Medium-low

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

The increasing likelihood of acute physical risks, including heavy precipitation, floods, tornadoes, and fires, could have a significant impact on the organization's financial position, performance, and cash flows in the coming years. Although such events did not occur in the reporting year, the potential for future incidents is recognized. If these risks materialize, increased costs for infrastructure repair, asset impairment, and operational disruptions could be incurred, placing pressure on

financial resources and potentially reducing profitability. To address these concerns, efforts are being made to enhance risk management strategies and improve resilience to mitigate the possible financial impacts of these climate-related risks.

(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)

0

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

728462771

(3.1.1.25) Explanation of financial effect figure

SASA's financial tangible fixed assets may be affected by physical risks related to climate change. Therefore, all tangible fixed assets except from land asset are included to potential financial impact figure value for 2023: Buildings Machinery, plant and equipment Vehicles Furniture and fixtures Construction in progress The calculations made in 2021 for assets containing acute risks remain valid in the year 2023 as well.

(3.1.1.26) Primary response to risk

Infrastructure, technology and spending

Increase environment-related capital expenditure

(3.1.1.27) Cost of response to risk

38812200

(3.1.1.28) Explanation of cost calculation

Annual cost of having a block insurance.

(3.1.1.29) Description of response

SASA has block insurance to compensate the damage to be encountered in the raw material or product during the transportation, and production facilities in case of fire or any other natural/climate related disaster.

Water

(3.1.1.1) Risk identifier

Select from:

Risk2

(3.1.1.3) Risk types and primary environmental risk driver

Chronic physical

Water stress

(3.1.1.4) Value chain stage where the risk occurs

Select from:

Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

Turkey

(3.1.1.7) River basin where the risk occurs

Select all that apply

Other, please specify :Seyhan River

(3.1.1.9) Organization-specific description of risk

According to the WRI water risk map, Adana is a region experiencing extreme water stress. The water scarcity that may occur in the region may cause shut off operations.

(3.1.1.11) Primary financial effect of the risk

Select from:

- Closure of operations

(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:

- Unlikely

(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

The risk of extreme water stress in Adana is anticipated to have a significant impact on the organization's financial position, performance, and cash flows in the medium to long term. Should water scarcity intensify, there is a high likelihood that operations may be shut off, leading to a loss of production capacity and decreased revenues. The costs associated with securing alternative water sources or implementing water-saving technologies could increase capital expenditures, further straining cash flows. Additionally, the potential disruption to operations could reduce overall profitability and necessitate more robust risk management strategies. The organization is preparing for these scenarios by investing in infrastructure and technologies to enhance water efficiency and by developing contingency plans to ensure business continuity in the face of worsening water scarcity.

(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)

115000

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

300000

(3.1.1.25) Explanation of financial effect figure

The stoppage of production due to water shortage/stress will result in loss of revenue for SASA.

(3.1.1.26) Primary response to risk

Infrastructure, technology and spending

Adopt water efficiency, water reuse, recycling and conservation practices

(3.1.1.27) Cost of response to risk

32988333.21

(3.1.1.28) Explanation of cost calculation

In 2021, the construction of the wastewater treatment and water reuse facility was started and the construction phase continues. The total CAPEX cost of the new wastewater treatment and water reuse facilities, which will be implemented closely in the coming years, has been taken into account.

(3.1.1.29) Description of response

SASA aims to reduce the risks of water scarcity with the water reuse unit to be established in 2024.

Water

(3.1.1.1) Risk identifier

Select from:

Risk3

(3.1.1.3) Risk types and primary environmental risk driver

Policy

Statutory water withdrawal limits/changes to water allocation

(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 :Seyhan River

(3.1.1.9) Organization-specific description of risk

Any limiting of water withdrawals for our company when we are growing will put a constraint on our growth rate. We are currently expanding our operations and this potential limiting will damage our strategic plans to grow.

(3.1.1.11) Primary financial effect of the risk

Select from:

Constraint to growth

(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:

Unlikely

(3.1.1.14) Magnitude

Select from:

Medium

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

Water withdrawal limit will have a significant impact on SASA's financial position, performance, and cash flows, especially as the company continues its expansion. Should such limitations be imposed, they could directly constrain our growth rate, delaying or reducing the scale of planned expansions. This could result in reduced revenue growth, increased operational costs related to securing alternative water sources, and potential delays in achieving strategic objectives. Additionally, the need to invest in water-saving technologies or infrastructure to comply with new regulations could increase capital expenditures, further impacting cash flows. The organization is actively developing contingency plans and exploring options to mitigate the potential financial impacts of this risk, ensuring that growth objectives can be achieved even in the face of regulatory changes.

(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)

115000

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

300000

(3.1.1.25) Explanation of financial effect figure

Opportunity cost of losing potential revenues. This will be the main cost that this risk will bring.

(3.1.1.26) Primary response to risk

Infrastructure, technology and spending

Adopt water efficiency, water reuse, recycling and conservation practices

(3.1.1.27) Cost of response to risk

32988333.21

(3.1.1.28) Explanation of cost calculation

In 2021, the construction of the wastewater treatment and water reuse facility was started and the construction phase continues. The total CAPEX cost of the new wastewater treatment and water reuse facilities, which will be implemented closely in the coming years, has been taken into account.

(3.1.1.29) Description of response

We are currently implementing a water reuse unit which will be in service in next two years. This will help us to comply with any potential limits. It will increase our water reuse rates and will help us keep our water withdrawals within limits.

[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:

CAPEX

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

498479770

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

Select from:

61-70%

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

38812200

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

Select from:

1-10%

(3.1.2.6) Amount of CAPEX in the reporting year deployed towards risks related to this environmental issue

540479770.4

(3.1.2.7) Explanation of financial figures

CAPEX of the PTA plant, which is under construction, and the budget amount of insurance policies were taken into consideration.

Water

(3.1.2.1) Financial metric

Select from:

CAPEX

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

32988333.21

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

Select from:

1-10%

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

32988333.21

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

Select from:

1-10%

(3.1.2.6) Amount of CAPEX in the reporting year deployed towards risks related to this environmental issue

32988333.21

(3.1.2.7) Explanation of financial figures

Wastewater Treatment System (Ongoing implementation process of PTA plant project)
[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

Other, please specify :Seyhan River

(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:

- Less than 1%

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

Select from:

- Less than 1%

(3.2.11) Please explain

SASA meets all of the water from the groundwater that means we don't supply the water from the river. The decrease in the groundwater level as a result of potential droughts may lead to the interruption of the production processes and financial losses during the operation of existing facility and construction phase of the new facilities. However, according to the current Hydrogeological Report of State Hydraulic Works (DSI) for our company, depending on the feeding-discharge of the aquifer at the end of 15 years, the groundwater level was found at 25 meters from the ground. As stated in the Hydrogeological Report, considering the results of the groundwater flow model, after 15 years of use, the groundwater level will be 25m which is higher than the limit. So no risk is foreseen for the groundwater level. All discharges are the responsibility of 3rd parties(DSI Directorate General for State Hydraulic Works- Governmental Organization). Wastewater is discharged into TD-07 DSI drainage channel to the Seyhan river.

[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?

	Water-related regulatory violations	Comment
	Select from: <input checked="" type="checkbox"/> No	SASA was not subject to any fines, enforcement orders or any penalties due to regulatory violations.

[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, but we anticipate being regulated in the next three years

(3.5.4) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

SASA carries out its climate-related strategies on the basis of sustainability. Within the scope of the 2022 SASA Corporate Sustainability Principles Compliance Report, it constantly monitors and takes action on the Emission Trading System, Carbon Pricing and Carbon Tax. The aforementioned systems are not implemented in Turkey. Projects to be done to reduce emissions are determined Transition from coal to biomass is planned Energy efficiency improvement projects are being developed Roof solar investment plan is finalized in 2023 Renewable energy investments feasibility studies are carried out such as land solar power plant (2x100 MWp)

(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: <input checked="" type="checkbox"/> Yes, we have identified opportunities, and some/all are being realized

	Environmental opportunities identified
Water	<i>Select from:</i> <input checked="" type="checkbox"/> 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

Products and services

Development of new products or services through R&D and innovation

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

Downstream value chain

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

- Turkey

(3.6.1.8) Organization specific description

The chemical industry is considered as a critical sector in terms of decarbonization due to its use of raw materials. Therefore, by decarbonizing its production processes and producing low-carbon intensity products, SASA is expected to strengthen its position in the market.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

- Increased revenues resulting from increased demand for products and services

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

Select all that apply

- Medium-term

(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 opportunity to strengthen SASA's market position through the decarbonization of its production processes is expected to have a substantial positive impact on the organization's financial position, performance, and cash flows. As the global market continues to prioritize sustainability and low-carbon solutions, demand for SASA's products is anticipated to grow further. This increased demand is likely to result in sustained revenue growth, higher profit margins, and enhanced cash flows over the medium to long term. Additionally, SASA's approach to decarbonization may open up new markets and customer segments, further bolstering the company's financial performance. The ongoing investments in sustainable production practices are expected to yield long-term financial benefits, solidifying SASA's competitive advantage in the industry.

(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)

0

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

334194252

(3.6.1.23) Explanation of financial effect figures

In 2023, the proportion of our low-carbon products was 7.2%, and we anticipate increasing it to 10% by 2026. Due to the expected preference for low-carbon products in the market with CBAM implementation in 2026, we are increasing our investments in sustainable product groups. By the year 2026, we expect our sustainable product revenue to reach 10%.

(3.6.1.24) Cost to realize opportunity

256019868

(3.6.1.25) Explanation of cost calculation

Breakdown of carbon reduction projects' cost: Implementing renewable energy / Energy efficiency / Low-carbon fuel investments Breakdown of carbon reduction projects' cost: - 36,964,000 EUR - Low-carbon fuel investments (Considered to be commissioned in 2026 - Estimated investment cost is 40,000,000 USD. 2023 average USD/EUR parity is evaluated as 0,924) - 10,488,535 EUR - Renewable energy generation investment (Solar Rooftop) (Realized in 2023) (Declared investment cost is 11,400,000 USD. 2023 average USD/EUR parity is evaluated as 0,924) - 175,579,000 EUR - Renewable energy generation investment (Planned as Land Solar) (To be commissioned by 2027 - Estimated total investment costs is 180,000,000 USD. 2023 average USD/EUR parity is evaluated as 0,924) - 32.988.333 EUR - Wastewater Treatment System (Ongoing implementation process of PTA facility project)

(3.6.1.26) Strategy to realize opportunity

SASA plans to minimize the financial effects of risks by means of renewable energy, energy efficiency and fuel conversion investments in 2024 and beyond. The investments planned to be established are transition technologies from coal to biomass, steam saving, lighting efficiency for the facility, waste heat recovery, high

energy efficiency class in newly installed equipment in offices and production facilities, and increasing the amount of energy to be produced from biogas with the installation of an integrated waste water treatment system.

Water

(3.6.1.1) Opportunity identifier

Select from:

Opp1

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Products and services

Increased sales of existing products and services

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

Downstream value chain

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

Turkey

(3.6.1.6) River basin where the opportunity occurs

Select all that apply

Other, please specify :Seyhan River

(3.6.1.8) Organization specific description

The agricultural sector is the most likely area to be affected in the possible water crisis as a result of global climate change. It is foreseen that the cotton production, which has decreased as a result of water scarcity, will be replaced by polyester fiber in the market. The increase in fiber demand is expected to increase SASA's revenues by increasing its fiber product group sales.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

- Increased revenues resulting from increased demand for products and services

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

Select all that apply

- Medium-term

(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 ongoing water crisis is expected to further reduce cotton production, solidifying polyester fiber as a preferred alternative in the market. This trend presents a substantial opportunity for SASA to continue expanding its fiber product sales. The anticipated increase in fiber demand is likely to drive revenue growth, contributing to improved profitability and stable cash flows in the future. Over the medium to long term, SASA's ability to meet the rising demand for polyester fiber is expected to strengthen its market position and support sustained financial success, ensuring the company remains resilient in a changing global environment.

(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)

178500000

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

262500000

(3.6.1.23) Explanation of financial effect figures

Assuming that petroleum and derivative raw materials will progress as in current level in 2025-2030, the anticipated impact of the decrease in cotton supply on, SASA polyester turnover will increase 17-25 %. Although polyester fiber unit prices will follow an upward trend in the long run, there is a partial decline in the potential impact figure in the reporting period compared to the previous year due to the decrease in global fiber demand, the decrease in oil-derivative prices and the decrease in raw material costs in polyester fiber unit prices.

(3.6.1.24) Cost to realize opportunity

380400000

(3.6.1.25) Explanation of cost calculation

SASA invest in new polyester fiber manufacturing facilities to increase the capacity double. Cost to realize opportunity is represent our polyester fiber facility's capacity increase investment cost.

(3.6.1.26) Strategy to realize opportunity

The decrease in cotton supply will push prices up in the long run as demand remains high. Therefore, unit prices of polyester fiber, which is the alternative product, will respond to this increase and will follow an upward trend.

Climate change

(3.6.1.1) Opportunity identifier

Select from:

Opp2

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Markets

- Other markets opportunity, please specify :Extending market share of polyester fiber due to the cotton production shortage and price increase

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

- Downstream value chain

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

- Turkey

(3.6.1.8) Organization specific description

The agricultural sector is the most likely area to be affected in the possible water crisis as a result of global climate change. It is foreseen that the cotton production, which has decreased as a result of water scarcity, will be replaced by fiber in the market. The increase in fiber demand is expected to increase SASA's revenues by increasing its fiber product group sales.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

- Increased revenues resulting from increased demand for products and services

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

Select all that apply

- Medium-term

(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

In the coming years, the anticipated ongoing challenges in cotton production due to water scarcity are likely to further increase the demand for polyester fiber. This presents a significant opportunity for SASA to continue expanding its market share in the fiber segment. As the shift from cotton to fiber accelerates, SASA is well-positioned to capture a larger share of the market, leading to sustained revenue growth. The expected increase in fiber sales is likely to support a strong financial performance, with improved profitability and robust cash flows. Over the medium to long term, this opportunity could solidify SASA's position in the market, providing a stable foundation for continued financial success.

(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)

178500000

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

262500000

(3.6.1.23) Explanation of financial effect figures

Assuming that petroleum and derivative raw materials will progress as in current level in 2025-2030, the anticipated impact of the decrease in cotton supply on, SASA polyester turnover will increase 17-25%. Although polyester fiber unit prices will follow an upward trend in the long run, there is a partial decline in the potential impact figure in the reporting period compared to the previous year due to the decrease in global fiber demand, the decrease in oil-derivative prices and the decrease in raw material costs in polyester fiber unit prices.

(3.6.1.24) Cost to realize opportunity

380400000

(3.6.1.25) Explanation of cost calculation

SASA invest in new polyester fiber manufacturing facilities to increase the capacity double. Cost to realize opportunity is represent our polyester fiber facility's capacity increase investment cost.

(3.6.1.26) Strategy to realize opportunity

The decrease in cotton supply will push prices up in the long run as demand remains high. Therefore, unit prices of polyester fiber, which is the alternative product, will respond to this increase and will follow an upward trend.

Water

(3.6.1.1) Opportunity identifier

Select from:

Opp2

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Resource efficiency

Water recovery from sewage treatment

(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 :Seyhan River

(3.6.1.8) Organization specific description

We are currently undertaking a water reuse plant in our facility to increase our water reuse percentage. With this plant we aim to increase our water recovery rate to 55% - 60%. It will help us to increase our water efficiency greatly and will help us to achieve our strategic goal to reduce water intensity.

(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

- Short-term

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

Select from:

- Virtually certain (99–100%)

(3.6.1.12) Magnitude

Select from:

- Low

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

Once operational, the water reuse plant is anticipated to have a significant positive impact on SASA's financial position, performance, and cash flows in future periods. The expected increase in the water recovery rate to 55% - 60% will lead to substantial water savings and a reduction in water-related costs, improving overall operational efficiency. This will enhance profitability by lowering operational expenses and contributing to stronger cash flows. Additionally, the achievement of SASA's strategic goal to reduce water intensity will position the company favorably in terms of environmental sustainability, potentially attracting more customers and opening up new business opportunities, thereby supporting long-term financial success.

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

Select from:

No

(3.6.1.24) Cost to realize opportunity

32988333.21

(3.6.1.25) Explanation of cost calculation

In 2021, the construction of the wastewater treatment and water reuse plant has started and the construction phase is ongoing. The total CAPEX cost of the new wastewater treatment and water reuse facilities, which will be implemented closely in the coming years, has been taken into consideration.

(3.6.1.26) Strategy to realize opportunity

We will reduce our withdrawal volume per ton produced product. And we aim to save a lot of water through this project. We currently estimate the cost saving will be less than 1% of our revenue. We estimate it will help us in the long run.

[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:

CAPEX

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

636419868

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

Select from:

81-90%

(3.6.2.4) Explanation of financial figures

Polyester fiber facility's capacity increase and carbon reduction projects' cost are taken into account

Water

(3.6.2.1) Financial metric

Select from:

CAPEX

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

413388333.21

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

Select from:

51-60%

(3.6.2.4) Explanation of financial figures

Polyester fiber facility's capacity increase and PTA facility wastewater treatment plant are taken into account

[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

Non-executive directors or equivalent

Independent non-executive directors or equivalent

(4.1.4) Board diversity and inclusion policy

Select from:

Yes, and it is publicly available

(4.1.5) Briefly describe what the policy covers

The main purpose of the Board Diversity and Inclusion Policy is to demonstrate the diversity of the organization's decision-makers, gain the trust of shareholders and all stakeholders, improve decision-making processes and promote inclusiveness within an effective corporate governance framework. SASA aims to increase the ratio of female Board members to 25% by 2025.

(4.1.6) Attach the policy (optional)

[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: <input checked="" type="checkbox"/> Yes
Water	Select from: <input checked="" type="checkbox"/> Yes
Biodiversity	Select from: <input checked="" type="checkbox"/> 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

- Board chair
- Director on board
- Other C-Suite Officer
- Board-level committee
- Chief Risk Officer (CRO)
- Chief Executive Officer (CEO)
- Chief Sustainability Officer (CSO)

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

Select from:

- Yes

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

Select all that apply

- Board Terms of Reference
- Other policy applicable to the board, please specify :Sustainability Policy, Environmental Policy

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

Select from:

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

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

Select all that apply

- Reviewing and guiding annual budgets
- Overseeing and guiding scenario analysis
- Overseeing the setting of corporate targets
- Monitoring progress towards corporate targets
- Approving corporate policies and/or commitments
- Overseeing reporting, audit, and verification processes
- Monitoring the implementation of a climate transition plan
- Overseeing and guiding the development of a business strategy
- Overseeing and guiding acquisitions, mergers, and divestitures
- Monitoring supplier compliance with organizational requirements
- Monitoring compliance with corporate policies and/or commitments
- Overseeing and guiding the development of a climate transition plan
- Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities
- Overseeing and guiding public policy engagement
- Overseeing and guiding public policy engagement
- Reviewing and guiding innovation/R&D priorities
- Overseeing and guiding major capital expenditures
- Monitoring the implementation of the business strategy

(4.1.2.7) Please explain

SASA places great importance on effective communication between senior management and all stakeholders, thus enabling the transfer of accurate information to stakeholders. SASA's management body consists of the Board Chairperson, General Manager, Deputy General Managers, Group Managers and Group Heads. Most of the members of the Board of Directors are non-executive members as defined in the Corporate Governance Principles. Four of the Board members are independent members. The General Assembly elects board members by the Corporate Governance Principles. The Company's Board members continue to work within a governance approach to actively and effectively uphold the Company's values. SASA's Board of Directors determines corporate strategies by considering the company's operations and performance as well as the interests of all stakeholders. Committees reporting to the Board of Directors at SASA carry out oversight and audit activities for the entire Company. The structure, functioning and performance of these committees are regularly evaluated, and necessary actions are taken to systematically monitor and record the processes. Committees reporting to the Board of Directors are namely the Corporate Governance Committee, Audit Committee, Early Detection of Risk Committee, and Sustainability Committee. As of 2023, the Nomination Committee and the Remuneration Committee are not separately defined in the current structure, and these duties are undertaken by the Corporate Governance Committee. Various working groups are operating under the Early Detection of Risk Committee and Sustainability Committee. The Climate Change Working Group reports to the Early Detection of Risk Committee, while the Environmental Sustainability, Sustainable Products and Chemicals, Social Sustainability and Corporate Governance Working Groups report to the Sustainability Committee. The Climate Change Working Group was launched in 2021 under the Early Detection of Risk Committee and meets semimonthly. The main focus areas for this group include supporting the transition to a low-carbon economy, reducing carbon emissions and examining the risks and opportunities brought about by climate change in detail. Furthermore, climate-related risks and opportunities, coupled with their potential financial impacts, are regularly reported to the Early Detection of Risk Committee. The Committee aims to extend infrastructure support to ensure the integration of climate change risks into the Company's overall risk management framework. The Sustainability Committee reviews the activities carried out by the working groups at periodic meetings and provides feedback based on the evaluation results for these groups. During the General Assembly Meetings, sustainability goals and the planned strategies to achieve them are scrutinized by the relevant committees reporting to the Board as well as the working groups under these committees.

Water

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

Select all that apply

- | | |
|--|--|
| <input checked="" type="checkbox"/> Board chair | <input checked="" type="checkbox"/> Chief Executive Officer (CEO) |
| <input checked="" type="checkbox"/> Director on board | <input checked="" type="checkbox"/> Chief Sustainability Officer (CSO) |
| <input checked="" type="checkbox"/> Other C-Suite Officer | |
| <input checked="" type="checkbox"/> Board-level committee | |
| <input checked="" type="checkbox"/> Chief Risk Officer (CRO) | |

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

Select from:

- Yes

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

Select all that apply

- Board Terms of Reference
- Other policy applicable to the board, please specify :Sustainability Policy, Water Policy

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

Select from:

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

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

Select all that apply

- Reviewing and guiding annual budgets
- Overseeing and guiding scenario analysis
- Overseeing the setting of corporate targets
- Monitoring progress towards corporate targets
- Approving corporate policies and/or commitments
- Overseeing reporting, audit, and verification processes
- Monitoring the implementation of a climate transition plan
- Overseeing and guiding the development of a business strategy
- Overseeing and guiding acquisitions, mergers, and divestitures
- Monitoring supplier compliance with organizational requirements
- Monitoring compliance with corporate policies and/or commitments
- Overseeing and guiding the development of a climate transition plan
- Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities
- Overseeing and guiding public policy engagement
- Overseeing and guiding public policy engagement
- Reviewing and guiding innovation/R&D priorities
- Overseeing and guiding major capital expenditures
- Monitoring the implementation of the business strategy

(4.1.2.7) Please explain

SASA places great importance on effective communication between senior management and all stakeholders, thus enabling the transfer of accurate information to stakeholders. SASA's management body consists of the Board Chairperson, General Manager, Deputy General Managers, Group Managers and Group Heads. Most of the members of the Board of Directors are non-executive members as defined in the Corporate Governance Principles. Four of the Board members are independent members. The General Assembly elects board members by the Corporate Governance Principles. The Company's Board members continue to work within a governance approach serving the goal of actively and effectively upholding the Company's values. SASA's Board of Directors determines corporate strategies by considering the company's operations and performance as well as the interests of all stakeholders. Committees reporting to the Board of Directors at SASA carry out oversight and audit activities for the entire Company. The structure, functioning and performance of these committees are regularly evaluated, and necessary actions are taken to systematically monitor and record the processes. Committees reporting to the Board of Directors are namely the Corporate Governance Committee, Audit Committee, Early Detection of Risk Committee, and Sustainability Committee. As of 2023, the Nomination Committee and the Remuneration Committee are not separately defined in the current structure, and these duties are undertaken by the Corporate Governance Committee. Various working groups are operating under the Early Detection of Risk Committee and Sustainability Committee. The Climate Change Working Group reports to the Early Detection of Risk Committee, while the Environmental Sustainability, Sustainable Products and Chemicals, Social Sustainability and Corporate Governance Working Groups report to the Sustainability Committee. In 2023, the Environmental Sustainability Working Group convened 9 times and completed the following work. The Group submitted its working reports to the Sustainability Committee. SASA focuses on water and wastewater management to improve water efficiency, alongside executing projects aimed at waste reduction. In line with biodiversity conservation, the company conducts environmental impact studies and formulates strategies to meet climate-related goals.

Biodiversity

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

Select all that apply

- | | |
|--|--|
| <input checked="" type="checkbox"/> Board chair | <input checked="" type="checkbox"/> Chief Executive Officer (CEO) |
| <input checked="" type="checkbox"/> Director on board | <input checked="" type="checkbox"/> Chief Sustainability Officer (CSO) |
| <input checked="" type="checkbox"/> Other C-Suite Officer | |
| <input checked="" type="checkbox"/> Board-level committee | |
| <input checked="" type="checkbox"/> Chief Risk Officer (CRO) | |

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

Select from:

- Yes

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

Select all that apply

- Board Terms of Reference
- Other policy applicable to the board, please specify :Sustainability Policy

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

Select from:

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

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

Select all that apply

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

(4.1.2.7) Please explain

SASA places great importance on effective communication between senior management and all stakeholders, thus enabling the transfer of accurate information to stakeholders. SASA's management body consists of the Board Chairperson, General Manager, Deputy General Managers, Group Managers and Group Heads. Most of the members of the Board of Directors are non-executive members as defined in the Corporate Governance Principles. Four of the Board members are independent members. The General Assembly elects board members by the Corporate Governance Principles. The Company's Board members continue to work within a governance approach serving the goal of actively and effectively upholding the Company's values. SASA's Board of Directors determines corporate strategies by considering the company's operations and performance as well as the interests of all stakeholders. Committees reporting to the Board of Directors at SASA carry out oversight and audit activities for the entire Company. The structure, functioning and performance of these committees are regularly evaluated, and necessary actions are taken to systematically monitor and record the processes. Committees reporting to the Board of Directors are namely the Corporate Governance Committee, Audit Committee, Early Detection of Risk Committee, and Sustainability Committee. As of 2023, the Nomination Committee and the Remuneration Committee are not separately defined in the current structure, and these duties are undertaken by the Corporate Governance Committee. Various working groups are operating under the Early Detection of Risk Committee and Sustainability Committee. The Climate Change Working Group reports to the Early Detection of Risk Committee, while the Environmental Sustainability, Sustainable Products and Chemicals, Social Sustainability and Corporate Governance Working Groups report to the Sustainability Committee. In 2023, the Environmental Sustainability Working Group convened 9 times and completed the following work. The Group submitted its working reports to the Sustainability Committee. SASA focuses on water and wastewater management to improve water efficiency, alongside executing projects aimed at waste reduction. In line with biodiversity conservation, the company conducts environmental impact studies and formulates strategies to meet climate-related goals.

[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
- Active member of an environmental committee or organization

Water

(4.2.1) Board-level competency on this environmental issue

Select from:

Yes

(4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

- Consulting regularly with an internal, permanent, subject-expert working group
- Engaging regularly with external stakeholders and experts on environmental issues
- 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
- Active member of an environmental committee or organization

[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: <input checked="" type="checkbox"/> Yes
Water	Select from: <input checked="" type="checkbox"/> Yes

	Management-level responsibility for this environmental issue
Biodiversity	Select from: <input checked="" type="checkbox"/> Yes

[Fixed row]

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

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Committee

- Sustainability committee

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

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

Engagement

- Managing public policy engagement related to environmental issues
- Managing supplier compliance with environmental requirements
- Managing value chain engagement related to environmental issues

Policies, commitments, and targets

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

Strategy and financial planning

- Developing a climate transition plan
- Implementing a climate transition plan
- Conducting environmental scenario analysis
- Managing annual budgets related to environmental issues
- Implementing the business strategy related to environmental issues
- Developing a business strategy which considers environmental issues
- Managing environmental reporting, audit, and verification processes
- Managing acquisitions, mergers, and divestitures related to environmental issues
- Managing major capital and/or operational expenditures relating to environmental issues
- Managing priorities related to innovation/low-environmental impact products or services (including R&D)

(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:

- Half-yearly

(4.3.1.6) Please explain

The Sustainability Committee, was established on 13.12.2021. In the first committee meeting, the committee members elect the chairman, vice chairman, working group coordinator, committee coordinator and a rapporteur. The Committee coordinator ensures the coordination of the Committee. Sustainability targets, strategies and policies, etc. determined in line with the decisions taken in the Committee are accepted as data for the Company's sustainability activities. The Committee works on a meeting basis. The Committee meets at least twice a year, when necessary. Committee meetings are held with the participation of at least half of the members. The participation of at least one of the Committee chairman, vice chairman or General Manager is essential, and the meeting is postponed in cases where at least one of these persons cannot attend. Committee decisions are taken by a simple majority. The Rapporteur keeps a written report containing the decisions taken in the committee meetings, including the place, time and member information of the meeting, and ensures that the participants sign it. The Board of Directors provides all resources and support required for the Committee to fulfill its duties. The Committee is responsible for reporting the decisions taken to the Board of Directors through the Committee Chair/Deputy Committee Chair. The Committee's Duties and Responsibilities include following national and international developments on climate change, water management and biodiversity; proactively managing risks in environmental and corporate governance; supporting the development of projects to reduce carbon emissions in business processes within the scope of combating climate change and ensuring their implementation; Detailed information can be accessed from the links: <https://www.sasa.com.tr/content/files/SASA%20Corporate%20Governance%20Approach.pdf>
<https://www.sasa.com.tr/Themes/sasa/assets/pdf-en/Sustainability-Committee.pdf>

Water

(4.3.1.1) Position of individual or committee with responsibility

Committee

- Sustainability committee

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

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

Engagement

- Managing public policy engagement related to environmental issues
- Managing supplier compliance with environmental requirements
- Managing value chain engagement related to environmental issues

Policies, commitments, and targets

- Monitoring compliance with corporate environmental policies and/or commitments

- Measuring progress towards environmental corporate targets
- Measuring progress towards environmental science-based targets
- Setting corporate environmental policies and/or commitments
- Setting corporate environmental targets

Strategy and financial planning

- Developing a climate transition plan
- Implementing a climate transition plan
- Conducting environmental scenario analysis
- Managing annual budgets related to environmental issues
- Implementing the business strategy related to environmental issues
- Developing a business strategy which considers environmental issues
- Managing environmental reporting, audit, and verification processes
- Managing acquisitions, mergers, and divestitures related to environmental issues
- Managing major capital and/or operational expenditures relating to environmental issues
- Managing priorities related to innovation/low-environmental impact products or services (including R&D)

(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:

- Half-yearly

(4.3.1.6) Please explain

The Sustainability Committee, was established on 13.12.2021. In the first committee meeting, the committee members elect the chairman, vice chairman, working group coordinator, committee coordinator and a rapporteur. The Committee coordinator ensures the coordination of the Committee. Sustainability targets, strategies and policies, etc. determined in line with the decisions taken in the Committee are accepted as data for the Company's sustainability activities. The Committee works on a meeting basis. The Committee meets at least twice a year, when necessary. Committee meetings are held with the participation of at least half of the members.

*The participation of at least one of the Committee chairman, vice chairman or General Manager is essential, and the meeting is postponed in cases where at least one of these persons cannot attend. Committee decisions are taken by a simple majority. The Rapporteur keeps a written report containing the decisions taken in the committee meetings, including the place, time and member information of the meeting, and ensures that the participants sign it. The Board of Directors provides all resources and support required for the Committee to fulfill its duties. The Committee is responsible for reporting the decisions taken to the Board of Directors through the Committee Chair/Deputy Committee Chair. The Committee's Duties and Responsibilities include following national and international developments on climate change, water management and biodiversity; proactively managing risks in environmental and corporate governance; supporting the development of projects to reduce carbon emissions in business processes within the scope of combating climate change and ensuring their implementation; Detailed information can be accessed from the links: <https://www.sasa.com.tr/content/files/SASA%20Corporate%20Governance%20Approach.pdf>
<https://www.sasa.com.tr/Themes/sasa/assets/pdf-en/Sustainability-Committee.pdf>*

Biodiversity

(4.3.1.1) Position of individual or committee with responsibility

Committee

- Sustainability committee

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

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

Engagement

- Managing public policy engagement related to environmental issues
- Managing supplier compliance with environmental requirements
- Managing value chain engagement related to environmental issues

Policies, commitments, and targets

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

- Setting corporate environmental targets

Strategy and financial planning

- Developing a climate transition plan
- Implementing a climate transition plan
- Conducting environmental scenario analysis
- Managing annual budgets related to environmental issues
- Implementing the business strategy related to environmental issues
- Developing a business strategy which considers environmental issues
- Managing environmental reporting, audit, and verification processes
- Managing acquisitions, mergers, and divestitures related to environmental issues
- Managing major capital and/or operational expenditures relating to environmental issues
- Managing priorities related to innovation/low-environmental impact products or services (including R&D)

(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:

- Half-yearly

(4.3.1.6) Please explain

The Sustainability Committee, was established on 13.12.2021. In the first committee meeting, the committee members elect the chairman, vice chairman, working group coordinator, committee coordinator and a rapporteur. The Committee coordinator ensures the coordination of the Committee. Sustainability targets, strategies and policies, etc. determined in line with the decisions taken in the Committee are accepted as data for the Company's sustainability activities. The Committee works on a meeting basis. The Committee meets at least twice a year, when necessary. Committee meetings are held with the participation of at least half of the members. The participation of at least one of the Committee chairman, vice chairman or General Manager is essential, and the meeting is postponed in cases where at least one of these persons cannot attend. Committee decisions are taken by a simple majority. The Rapporteur keeps a written report containing the decisions taken in the committee meetings, including the place, time and member information of the meeting, and ensures that the participants sign it. The Board of Directors provides all

resources and support required for the Committee to fulfill its duties. The Committee is responsible for reporting the decisions taken to the Board of Directors through the Committee Chair/Deputy Committee Chair. The Committee's Duties and Responsibilities include following national and international developments on climate change, water management and biodiversity; proactively managing risks in environmental and corporate governance; supporting the development of projects to reduce carbon emissions in business processes within the scope of combating climate change and ensuring their implementation; Detailed information can be accessed from the links: <https://www.sasa.com.tr/content/files/SASA%20Corporate%20Governance%20Approach.pdf>

<https://www.sasa.com.tr/Themes/sasa/assets/pdf-en/Sustainability-Committee.pdf>

[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:

No, but we plan to introduce them in the next two years

(4.5.3) Please explain

There are sustainability-related targets in individual performance evaluations. Studies have been initiated to design the incentive system in 2024, but the studies are ongoing. according to SASA's Human Resources Policy, an effective performance evaluation system is carried out in a way that supports corporate and individual development goals in which managers regularly monitor the performance of employees in an open communication environment and undertake development responsibilities.

Water

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

Select from:

No, but we plan to introduce them in the next two years

(4.5.3) Please explain

There are sustainability-related targets in individual performance evaluations. Studies have been initiated to design the incentive system in 2024, but the studies are ongoing. according to SASA's Human Resources Policy, an effective performance evaluation system is carried out in a way that supports corporate and individual

development goals in which managers regularly monitor the performance of employees in an open communication environment and undertake development responsibilities.

[Fixed row]

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

	Does your organization have any environmental policies?
	Select from: <input checked="" type="checkbox"/> 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
- Water
- Biodiversity

(4.6.1.2) Level of coverage

Select from:

- Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

- Direct operations

(4.6.1.4) Explain the coverage

SASA aims to be a leader in the environment on a national and international scale and to continuously improve and maximize its environmental performance, based on sustainable development strategies in the sector, which operates as an integrated polyester and specialty chemicals manufacturer in line with the United Nations sustainable development goals and circular economy principles. SASA's Environmental Policy covers, - All production facilities, auxiliary and new investments of SASA, - All employees of SASA, - Stakeholders of SASA, including personnel involved in contracts with suppliers, contractors, subcontractors and other organizations.

(4.6.1.5) Environmental policy content

Environmental commitments

- Commitment to a circular economy strategy
- Commitment to stakeholder engagement and capacity building on environmental issues
- Commitment to respect legally designated protected areas
- Commitment to comply with regulations and mandatory standards
- Commitment to take environmental action beyond regulatory compliance
- Commitment to avoidance of negative impacts on threatened and protected species

Water-specific commitments

- Commitment to reduce or phase out hazardous substances
- Commitment to control/reduce/eliminate water pollution
- Commitment to reduce water consumption volumes
- Commitment to reduce water withdrawal volumes
- Commitment to the conservation of freshwater ecosystems

(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

Environmental Policy.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

Global Reporting Initiative (GRI) Community Member

Task Force on Climate-related Financial Disclosures (TCFD)

UN Global Compact

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

SASA discloses its sustainability activities contributing to the United Nations Global Compact (UNGC), as a signatory. On an annual basis, the Company issues its sustainability report to share with its stakeholders its sensitivity towards environmental conservation and the protection of natural resources as well as social issues. In addition, SASA issues dedicated Biodiversity and TCFD (Task Force on Climate-related Financial Disclosures) reports covering all facilities of SASA and publicly shares them on its corporate website.

[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

No, we have assessed our activities, and none could directly or indirectly influence policy, law, or regulation that may impact the environment

(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:

No, and we do not plan to have one in the next two years

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

Select from:

No

(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

SASA ensures that its external engagement activities align with its environmental commitments through a structured, multi-faceted approach: *Integration of Environmental Policies: SASA incorporates its sustainability goals into all external engagements by aligning with global environmental standards, such as reducing carbon emissions and improving energy efficiency. These goals are embedded in the company's collaborations with suppliers, customers, and regulatory bodies to ensure consistency across all operations. Transparent Reporting: SASA publishes detailed sustainability reports outlining its environmental impact, including carbon footprint reduction, waste management, and water conservation initiatives. This transparency in communication ensures that external stakeholders are fully aware of the company's environmental goals and progress, fostering trust and accountability. Stakeholder Collaboration: SASA actively engages with a variety of stakeholders, including local communities, NGOs, and international organizations, to drive initiatives related to climate change, renewable energy, and sustainable production methods. This ensures that its external engagement is in line with both corporate environmental policies and the broader sustainability objectives of these partners. Sustainability-driven Projects: In its external partnerships, SASA promotes projects that focus on eco-friendly innovations, circular economy strategies, and renewable energy. By partnering with stakeholders who share similar environmental goals, SASA guarantees that its external engagements remain consistent with its internal environmental objectives.*

(4.11.9) Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the environment

Select from:

Contractual hindrances

(4.11.10) Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the environment

SASA does not engage in activities that directly influence policy, law, or regulation related to the environment due to contractual limitations tied to its operations. These restrictions likely stem from the company's contractual obligations with various stakeholders, such as international investors, government bodies, or private partners, which may prohibit direct lobbying or advocacy activities. Such limitations are often in place to maintain neutrality, avoid conflicts of interest, and ensure that the company complies with regulations and ethical guidelines across different jurisdictions. Additionally, as a company with a significant presence in international markets, SASA must align its activities with multinational regulatory frameworks and abide by local laws that may restrict corporate influence on environmental policy-making. These constraints could also be influenced by agreements with financial backers or investors, particularly those who expect the company to focus on sustainable business practices rather than direct policy advocacy, ensuring alignment with corporate governance standards. In this context, SASA's focus remains on adhering to and advancing within existing environmental laws and regulations, rather than attempting to shape them, to avoid legal repercussions or violations of contractual terms that could jeopardize its business interests.

[Fixed 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
- Biodiversity

(4.12.1.4) Status of the publication

Select from:

- Complete

(4.12.1.5) Content elements

Select all that apply

- | | |
|---|--|
| <input checked="" type="checkbox"/> Strategy | <input checked="" type="checkbox"/> Value chain engagement |
| <input checked="" type="checkbox"/> Governance | <input checked="" type="checkbox"/> Dependencies & Impacts |
| <input checked="" type="checkbox"/> Emission targets | <input checked="" type="checkbox"/> Biodiversity indicators |
| <input checked="" type="checkbox"/> Emissions figures | <input checked="" type="checkbox"/> Public policy engagement |
| <input checked="" type="checkbox"/> Risks & Opportunities | <input checked="" type="checkbox"/> Water accounting figures |
| <input checked="" type="checkbox"/> Water pollution indicators | |
| <input checked="" type="checkbox"/> Content of environmental policies | |

(4.12.1.6) Page/section reference

1.ABOUT SASA (p.15-26), 2.CORPORATE GOVERNANCE (p.28-40), 3.SUSTAINABILITY APPROACH (p.41-57), 4.ENVIRONMENTAL SUSTAINABILITY (p.60-76), 5.SOCIAL SUSTAINABILITY (p.82-89), 6.RESPONSIBLE SOURCING AND SUSTAINABLE PRODUCT DEVELOPMENT (p.95-111), 7.DIGITALIZATION AND INFORMATION SECURITY (p.114-116), 8.STAKEHOLDER INTERACTION (p.117-119), Environmental Performance Indicators p.126, Social Performance Indicators p.133, Economic Performance Indicators p.146 APPENDICES: GRI Content Index, UNGC Content

(4.12.1.7) Attach the relevant publication

(4.12.1.8) Comment

This report was prepared according to the Global Reporting Initiative Standards (GRI Standards) and presents the governance, environmental and social activities to SASA's stakeholders. The report was prepared within the framework of SASA's reevaluated sustainability priorities and includes its activities for 2023 as well as goals and progress towards priorities. The environmental, social and economic information presented in the report covers SASA's production facilities for the 12-month operating period between January 1, 2023 and December 31, 2023. To provide measurable and comparable information, the report presents in the relevant sections publicly accessible data from the last 3 years. This report also discloses SASA's activities contributing to the United Nations Global Compact (UNGC) and Sustainable Development Goals (SDGs).

Row 2

(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

- TCFD

(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
- Emission targets
- Emissions figures
- Risks & Opportunities
- Dependencies & Impacts
- Water accounting figures
- Water pollution indicators

(4.12.1.6) Page/section reference

-Strategy for Combating Climate Change, Strategic Carbon Roadmap, Climate-related Risk Definitions, RCP 8.5 & 4.5 Climate Change Scenarios (p.15-23) -Risk Management Structure, Risk Evaluation Qualification and Level of Risks Arising from Financial Instruments, Regional Physical Risks Arising from Meteorological and Climate Change Meteorological Incidents, Transition Risks, Physical Risks, Water Risk Management (p.25-43) -Metrics & Targets (p.45-46)

(4.12.1.7) Attach the relevant publication

SASA-TCFD-Report-(Entire-Facilities).pdf

(4.12.1.8) Comment

SASA's TCFD report demonstrates its commitment to addressing climate risks and enhancing transparency in line with international standards. The report identifies both physical and transitional risks associated with climate change, such as extreme weather events and policy changes related to decarbonization. By focusing on energy efficiency and reducing carbon emissions, SASA aligns its operations with both regulatory requirements and investor expectations. The report highlights SASA's investments in innovative, energy-efficient technologies and high-value-added products, showing that the company is not only mitigating risks but also leveraging climate-related opportunities for growth.

Row 3

(4.12.1.1) Publication

Select from:

- In other regulatory filings

(4.12.1.3) Environmental issues covered in publication

Select all that apply

- Climate change

- Water
- Biodiversity

(4.12.1.4) Status of the publication

Select from:

- Complete

(4.12.1.5) Content elements

Select all that apply

- | | |
|---|--|
| <input checked="" type="checkbox"/> Strategy | <input checked="" type="checkbox"/> Value chain engagement |
| <input checked="" type="checkbox"/> Governance | <input checked="" type="checkbox"/> Dependencies & Impacts |
| <input checked="" type="checkbox"/> Emission targets | <input checked="" type="checkbox"/> Biodiversity indicators |
| <input checked="" type="checkbox"/> Emissions figures | <input checked="" type="checkbox"/> Public policy engagement |
| <input checked="" type="checkbox"/> Risks & Opportunities | <input checked="" type="checkbox"/> Water accounting figures |
| <input checked="" type="checkbox"/> Water pollution indicators | |
| <input checked="" type="checkbox"/> Content of environmental policies | |

(4.12.1.6) Page/section reference

Sustainability Compliance Report 2023 - Annual Notification (p2-12)

(4.12.1.7) Attach the relevant publication

Sustainability Compliance Report 2023.pdf

(4.12.1.8) Comment

SASA's sustainability compliance report, submitted via Turkey's Public Disclosure Platform (KAP), reflects the company's commitment to aligning its operations with sustainability goals and transparency in environmental, social, and governance (ESG) issues. SASA demonstrates a strong focus on environmental responsibility, particularly through its efforts in emissions reduction, energy efficiency, and water management. The compliance report provides comprehensive details about their sustainability performance and targets, including progress on waste reduction, resource management, and circular economy initiatives. The report highlights governance structures in place to oversee sustainability efforts, such as the roles of the board and senior management. The inclusion of independent auditing for key sustainability metrics further enhances credibility, ensuring that SASA's claims are verified and trustworthy.

[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:

First time carrying out analysis

Water

(5.1.1) Use of scenario analysis

Select from:

Yes

(5.1.2) Frequency of analysis

Select from:

First time carrying out analysis

[Fixed row]

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

Climate change

(5.1.1.1) Scenario used

Physical climate scenarios

RCP 4.5

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

No SSP used

(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:

Unknown

(5.1.1.7) Reference year

2022

(5.1.1.8) Timeframes covered

Select all that apply

- | | |
|--|--|
| <input checked="" type="checkbox"/> 2025 | <input checked="" type="checkbox"/> 2070 |
| <input checked="" type="checkbox"/> 2030 | <input checked="" type="checkbox"/> 2080 |
| <input checked="" type="checkbox"/> 2040 | <input checked="" type="checkbox"/> 2090 |
| <input checked="" type="checkbox"/> 2050 | <input checked="" type="checkbox"/> 2100 |
| <input checked="" type="checkbox"/> 2060 | |

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

- Changes to the state of nature
- Speed of change (to state of nature and/or ecosystem services)
- Climate change (one of five drivers of nature change)

Finance and insurance

- Sensitivity of capital (to nature impacts and dependencies)

Stakeholder and customer demands

- Impact of nature footprint on reputation

Regulators, legal and policy regimes

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

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

The following criteria have been taken into account in the RCP 4,5 and 8.5 assumptions within SASA. RCP scenarios were created on the World Bank Climate Change Knowledge Portal.- Max temperature - Min temperature - Number of hot days - mean temperature - Number of frost days - Precipitation - Cold spell duration index - Annual SPEI drought index Evaluations Adana region criteria were examined in detail.

(5.1.1.11) Rationale for choice of scenario

RCP4.5 scenario assumes that GHG emissions will peak in the mid-21st century and then decline with certain policies and measures. It represents a more sustainable economic and environmental future scenario. RCP8.5 scenario depicts a world in which the use of fossil fuels continues to grow and emissions increase rapidly. This scenario is considered the worst-case scenario and is used to assess the most severe impacts of climate change. So by analyzing these scenarios we will be able to designate risks and opportunities in the most realistically forecasted future.

Water

(5.1.1.1) Scenario used

Physical climate scenarios

RCP 4.5

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

No SSP used

(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:

- Unknown

(5.1.1.7) Reference year

2022

(5.1.1.8) Timeframes covered

Select all that apply

- | | |
|--|--|
| <input checked="" type="checkbox"/> 2025 | <input checked="" type="checkbox"/> 2070 |
| <input checked="" type="checkbox"/> 2030 | <input checked="" type="checkbox"/> 2080 |
| <input checked="" type="checkbox"/> 2040 | <input checked="" type="checkbox"/> 2090 |
| <input checked="" type="checkbox"/> 2050 | <input checked="" type="checkbox"/> 2100 |
| <input checked="" type="checkbox"/> 2060 | |

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

- Changes to the state of nature
- Speed of change (to state of nature and/or ecosystem services)
- Climate change (one of five drivers of nature change)

Finance and insurance

- Sensitivity of capital (to nature impacts and dependencies)

Stakeholder and customer demands

- Impact of nature footprint on reputation

Regulators, legal and policy regimes

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

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

World Bank Climate Change Knowledge Portal Multimodel Ensemble RCP 4.5 CP 8.5

(5.1.1.11) Rationale for choice of scenario

RCP4.5 scenario assumes that GHG emissions will peak in the mid-21st century and then decline with certain policies and measures. It represents a more sustainable economic and environmental future scenario. RCP8.5 scenario depicts a world in which the use of fossil fuels continues to grow and emissions increase rapidly. This scenario is considered the worst-case scenario and is used to assess the most severe impacts of climate change. So by analyzing these scenarios we will be able to designate risks and opportunities in the most realistically forecasted future.

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:

No SSP used

(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:

- Unknown

(5.1.1.7) Reference year

2022

(5.1.1.8) Timeframes covered

Select all that apply

- | | |
|--|--|
| <input checked="" type="checkbox"/> 2025 | <input checked="" type="checkbox"/> 2070 |
| <input checked="" type="checkbox"/> 2030 | <input checked="" type="checkbox"/> 2080 |
| <input checked="" type="checkbox"/> 2040 | <input checked="" type="checkbox"/> 2090 |
| <input checked="" type="checkbox"/> 2050 | <input checked="" type="checkbox"/> 2100 |
| <input checked="" type="checkbox"/> 2060 | |

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

- Changes to the state of nature
- Speed of change (to state of nature and/or ecosystem services)
- Climate change (one of five drivers of nature change)

Finance and insurance

- Sensitivity of capital (to nature impacts and dependencies)

Stakeholder and customer demands

- Impact of nature footprint on reputation

Regulators, legal and policy regimes

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

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

The following criteria have been taken into account in the RCP 4,5 and 8.5 assumptions within SASA. RCP scenarios were created on the World Bank Climate Change Knowledge Portal. - Max temperature - Min temperature - Number of hot days - mean temperature - Number of frost days - Precipitation - Cold spell duration index - Annual SPEI drought index Evaluations Adana region criteria were examined in detail.

(5.1.1.11) Rationale for choice of scenario

RCP4.5 scenario assumes that GHG emissions will peak in the mid-21st century and then decline with certain policies and measures. It represents a more sustainable economic and environmental future scenario. RCP8.5 scenario depicts a world in which the use of fossil fuels continues to grow and emissions increase rapidly. This scenario is considered the worst-case scenario and is used to assess the most severe impacts of climate change. So by analyzing these scenarios we will be able to designate risks and opportunities in the most realistically forecasted future.

Climate change

(5.1.1.1) Scenario used

Climate transition scenarios

- Customized publicly available climate transition scenario, please specify

(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:

- 2.0°C - 2.4°C

(5.1.1.7) Reference year

2022

(5.1.1.8) Timeframes covered

Select all that apply

- | | |
|--|--|
| <input checked="" type="checkbox"/> 2025 | <input checked="" type="checkbox"/> 2070 |
| <input checked="" type="checkbox"/> 2030 | <input checked="" type="checkbox"/> 2080 |
| <input checked="" type="checkbox"/> 2040 | <input checked="" type="checkbox"/> 2090 |
| <input checked="" type="checkbox"/> 2050 | <input checked="" type="checkbox"/> 2100 |
| <input checked="" type="checkbox"/> 2060 | |

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

- Changes to the state of nature
- Speed of change (to state of nature and/or ecosystem services)
- Climate change (one of five drivers of nature change)

Finance and insurance

- Sensitivity of capital (to nature impacts and dependencies)

Stakeholder and customer demands

- Impact of nature footprint on reputation

Regulators, legal and policy regimes

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

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Transition risks that SASA will face, - Policy and Legal Risk - Technology Risk - Market Risk - Reputation Risk In the next stage, analytical method will be developed to determine the impact of these Transition Risks on SASA.

(5.1.1.11) Rationale for choice of scenario

RCP4.5 scenario assumes that GHG emissions will peak in the mid-21st century and then decline with certain policies and measures. It represents a more sustainable economic and environmental future scenario. RCP8.5 scenario depicts a world in which the use of fossil fuels continues to grow and emissions increase rapidly. This scenario is considered the worst-case scenario and is used to assess the most severe impacts of climate change. So by analyzing these scenarios we will be able to designate risks and opportunities in the most realistically forecasted future.

Water

(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:

- No SSP used

(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:

- Unknown

(5.1.1.7) Reference year

2022

(5.1.1.8) Timeframes covered

Select all that apply

- | | |
|--|--|
| <input checked="" type="checkbox"/> 2025 | <input checked="" type="checkbox"/> 2070 |
| <input checked="" type="checkbox"/> 2030 | <input checked="" type="checkbox"/> 2080 |
| <input checked="" type="checkbox"/> 2040 | <input checked="" type="checkbox"/> 2090 |
| <input checked="" type="checkbox"/> 2050 | <input checked="" type="checkbox"/> 2100 |
| <input checked="" type="checkbox"/> 2060 | |

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

- Changes to the state of nature
- Speed of change (to state of nature and/or ecosystem services)
- Climate change (one of five drivers of nature change)

Finance and insurance

- Sensitivity of capital (to nature impacts and dependencies)

Stakeholder and customer demands

- Impact of nature footprint on reputation

Regulators, legal and policy regimes

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

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

World Bank Climate Change Knowledge Portal Multimodel Ensemble RCP 4.5 CP 8.5

(5.1.1.11) Rationale for choice of scenario

RCP4.5 scenario assumes that GHG emissions will peak in the mid-21st century and then decline with certain policies and measures. It represents a more sustainable economic and environmental future scenario. RCP8.5 scenario depicts a world in which the use of fossil fuels continues to grow and emissions increase rapidly. This scenario is considered the worst-case scenario and is used to assess the most severe impacts of climate change. So by analyzing these scenarios we will be able to designate risks and opportunities in the most realistically forecasted future.

[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

For transitional risks our focal questions are mainly based on how to manage penalties, and carbon pricing regarding changes in policies and legal regulations; need of qualified personnel in altered technologies; possible fines and financial losses that affect reputation; increasing energy consumptions and supplying difficulties in line with new market prices. For physical risks our focal questions are mainly based on how to manage risks that are related to flood, fire, forest fire, overtemperature, extreme weather events that may affect also groundwater level, sea level, biodiversity, precipitation regime, droughts. For efficient use of sources and management of energy and waste, our organization monitors its emissions, and emission reduction targets are determined accordingly. Also we invest on solar power plant, water recycle, chemical recovery technologies based on BAT (Best Available Technologies). We are prepared to extreme weather events by our Climate Change Working Group under the control of Early Risk Detection Committee. Additionally, our emergency response plans, engineering design, hydrogeologic reports, ESIA reports, special safety systems are utilized during these processes.

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

For transitional risks our focal questions are mainly based on how to manage penalties, and carbon pricing regarding changes in policies and legal regulations; need of qualified personnel in altered technologies; possible fines and financial losses that affect reputation; increasing energy consumptions and supplying difficulties in line with new market prices. For physical risks our focal questions are mainly based on how to manage risks that are related to flood, fire, forest fire, overtemperature, extreme weather events that may affect also groundwater level, sea level, biodiversity, precipitation regime, droughts. For efficient use of sources and management of energy and waste, our organization monitors its emissions, and emission reduction targets are determined accordingly. Also we invest on solar power plant, water recycle, chemical recovery technologies based on BAT (Best Available Technologies). We are prepared to extreme weather events by our Climate Change Working Group under the control of Early Risk Detection Committee. Additionally, our emergency response plans, engineering design, hydrogeologic reports, ESIA reports, special safety systems are utilized during these processes.

[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:

- No

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

Select from:

Yes

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

1. *Renewable Energy: By 2025, the objective is to secure 97,655 MWh of I-REC certificates and to invest in 200 MWp of ground-mounted solar projects and a 4.5 MWp biomass facility by 2027. Such investments serve to diminish reliance on fossil fuels, reduce the carbon footprint, and provide long-term cost savings through a reduction in energy expenditure.* 2. *Transition to Alternative Energy Systems: By 2025, the intention is to transition to cogeneration and trigeneration systems, which will result in the phasing out of coal-fired boilers and a reduction in energy consumption from lighting. This transition has the dual benefit of reducing operational costs and supporting the achievement of sustainability goals.* 3. *Sustainable Product Development: The development of sustainable products is undertaken with the utilisation of recycled materials, with the objective of ensuring durability and recyclability. This approach serves to minimise the environmental impact throughout the product lifecycle. The alignment of market demand for environmentally friendly products with revenue growth opportunities represents a promising avenue for business expansion.* 4. *Life Cycle Assessment (LCA) Works: We conduct Life Cycle Assessments (LCAs) to gain insight into the environmental impact of our products, from the initial extraction of raw materials to their eventual disposal at the end of their useful life. This enables the identification of areas for improvement and the formulation of data-driven decisions to enhance sustainability.* 5. *Green Chemistry Principles: Our production processes adhere to the tenets of green chemistry, which entails the reduction of hazardous substances, the prioritisation of renewable feedstocks, and the enhancement of energy efficiency. The implementation of these principles has the dual benefit of reducing the costs associated with the disposal of hazardous waste and ensuring compliance with relevant regulations.* 6. *Sustainable Sourcing: We ensure that the materials we utilise meet the requisite environmental and social standards, working with suppliers who adhere to ethical practices and use renewable resources. This strengthens the resilience of the supply chain and aligns expenditures with sustainability commitments.*

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

Select from:

We have a different feedback mechanism in place

(5.2.8) Description of feedback mechanism

We have both internal and external grievance mechanism to evaluate suggestions and grievances from all of the stakeholders. We received the feedbacks from the stakeholders with the questionnaires and performed materiality analysis in the scope of sustainability which also include prior issues related to climate change risks.

(5.2.9) Frequency of feedback collection

Select from:

Annually

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

Various climate scenario analyses have been conducted regarding the company's operations. These scenarios have been analyzed based on the following assumptions: - The estimated annual greenhouse gas emissions of the PTA facility, in which the investment was made, have been assumed to be a certain calculated amount. - The outputs of the climate scenarios analyzed were based on projected data rather than predictions or expectations. - "Extreme" weather events that may arise in the scenarios were excluded as outliers. - Since the projections are categorized as regional and global, uncertainty ranges are subject to error margins in various risks.

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

Energy Consumption: In the year 2023, there was a reduction in energy consumption of 8.40% in comparison to the previous year, 2022. This resulted in a total energy consumption of 7,021,738 GJ, in contrast to the 7,665,249 GJ consumed in 2022. This considerable reduction in emissions results in significant cost savings and an enhancement of our financial performance. Emission: Total emissions were reduced by 7,646 tCO₂e in comparison to the 2019 baseline, and 25 Verified Carbon Unit (VCU) carbon offset certificates were obtained in 2023. This aligns with regulatory requirements and potential carbon pricing mechanisms, which serve to mitigate financial risks and enhance our market position.

(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

*Water Usage: The ongoing wastewater treatment and recycling plant aims to recover 55-60% of water.
[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

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

Collateral problems in the supply of raw materials as a result of climate change caused SASA to evaluate purchasing raw materials from different geographies. Alternative raw material suppliers are being researched with a sustainable supply chain perspective. SASA's product and sector specification is not among the priority sectors and will have experience in the actual implementation of the system to be established. SASA manages its management strategies against legal and international regulations as investors, stakeholders, etc., and is constantly updated in line with its demands.

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

Potential climate effects within the supply chain are evaluated as market risk. - Raw material supply may be interrupted as a result of the effects of climate change. Another potential climate impact in the supply chain has been addressed at reputation risk. - Income and financial losses in line with the negativities that may occur in the production and supply chain

Investment in R&D

(5.3.1.1) Effect type

Select all that apply

Risks

(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

SASA has been adapting to changing technology processes with its R&D team since 2002. Strict requirements are complied with in university collaborations, technology investments and national standards such as IFC and ISO. Within the scope of sustainable innovation studies, R&D projects are developed for the use of recyclable and bio-based materials. Life cycle assessments are carried out to analyze the environmental impacts of products.

Operations

(5.3.1.1) Effect type

Select all that apply

Risks

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

Select all that apply

- Climate change
- Water

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

Water cooling is required continuously for the production processes at SASA facilities. In order to meet the water needs of the facilities, 13 additional wells are being drilled in the production area. An underground water modeling study, precipitation data, regional geology, and model findings were evaluated in the hydrogeological report for the New PTA Production Plant. If the ambient temperature is too high, the cooling efficiency will decrease. At the same time, extreme temperatures can increase the evaporation rate of the water used in the system for cooling.

[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

- Direct costs
- Indirect costs
- Capital expenditures
- Assets

(5.3.2.2) Effect type

Select all that apply

- Risks

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

Select all that apply

- Climate change
- Water

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

Technology investments, policy and legal risks (carbon pricing), raw material costs, transportation costs are expected to have an impact on direct and indirect costs. Flood, fire, extreme weather events and higher temperatures are expected to have an impact on our assets.

[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: <input checked="" type="checkbox"/> Yes	Select all that apply <input checked="" type="checkbox"/> 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 :As SASA, our climate transition plan aims to limit the global temperature increase to 1.5°C by 2030, in line with the Paris Agreement. Our strategy includes reducing our consumption through energy efficiency projects and renewable energy investments,

(5.4.1.5) Financial metric

Select from:

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

693075

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

1.6

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

4.4

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

100

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

Primarily, the climate transition strategy incorporates comprehensive evaluations of energy consumption, expenditure, and the financial commitments necessary for the transition to renewable energy sources. By the year 2030, the objective is to reduce the carbon intensity of Scope 1 and Scope 2 emissions by 69% from the 2019 baseline. This ambitious target is supported by a series of strategic investments and initiatives, the progress of which is monitored and reported in meticulous detail. The principal stages of the climate transition plan are as follows: 1- Renewable Energy Investments: By 2023, 16.4 MWp of rooftop solar capacity had been installed and a 670 MWh LED investment had been completed. By 2025, the objective is to secure 97,655 MWh of I-REC certificates and to invest in 200 MWp of ground-mounted solar projects and a 4.5 MWp biomass facility by 2027. Such investments serve to diminish reliance on fossil fuels, reduce the carbon footprint, and provide long-term cost savings through a reduction in energy expenditure. 2- Energy Consumption Reduction: In the year 2023, there was a reduction in energy consumption of 8.40% in comparison to the previous year, 2022. This resulted in a total energy consumption of 7,021,738 GJ, in contrast to the 7,665,249 GJ consumed in 2022. This considerable reduction in emissions results in significant cost savings and an enhancement of our financial performance. 3- Emission Reductions: Total emissions were reduced by 7,646 tCO₂e in comparison to the 2019 baseline, and 25 Verified Carbon Unit (VCU) carbon offset certificates were obtained in 2023. This aligns with regulatory requirements and potential carbon pricing mechanisms, which serve to mitigate financial risks and enhance our market position. 4- Transition to Alternative Energy Systems: There is an intention for transition to cogeneration and trigeneration systems, which will result in the phasing out of coal-fired boilers and a reduction in energy consumption from lighting. This transition has the dual benefit of reducing operational costs and supporting the achievement of sustainability goals. 5- Sustainable Product Development: The development of sustainable products is undertaken with the utilisation of recycled materials, with the objective of ensuring durability and recyclability. This approach serves to minimise the environmental impact throughout the product lifecycle. The alignment of market demand for environmentally friendly products with revenue growth opportunities represents a promising avenue for business expansion. For the 2025 and 2030 alignment calculations, investments planned to be realised by 2025 are included in the 2025 calculation, and investments planned to be realised by 2030 are included in the 2030 calculation, as the year in which future low carbon investments will be completed is uncertain both in terms of Turkey's financial

situation and planning. For the total CAPEX in 2025, only the land purchase of the Yumurtalık investment is included in the calculation, as the technical details of the COTC investments planned as part of the Yumurtalık investment are not fully certain, and the 2030 calculation does not include the Yumurtalık (the reason for 100%) and the relevant data is expected to be added in two years when the plans are finalised. CARBIOS and SASA have started negotiations for the licence of a 100,000 tonnes/year PET bioconversion plant in Turkey and the related investment is also included in the 2030 calculation.

[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

SASA is committed to investing in R&D activities with the objective of advancing low-carbon products and services within our sector. The R&D strategy is founded upon a commitment to innovation, sustainability, green chemistry, the circular economy and LCA. In 2023, financial resources were allocated for the development of low-carbon emissions, sustainable, and environmentally friendly products in accordance with local and international regulatory frameworks. The commercialization of products in the special polymers class remained a key objective. The budget of the SASA R&D Centre is subject to regular increases. In 2023, a budget of 27,014,000 TL was allocated for R&D and P&D activities, representing a 160% increase from the previous year. Approximately 7.2% of total sales are comprised of innovative products. The production of biodegradable PET fibres represents a pivotal research and development area for SASA, in alignment with the company's low-carbon targets. Furthermore, efforts are being made to develop recycled polyester, which has a lower carbon footprint than conventional materials. The investment in a state-of-the-art PTA production facility is illustrative of the commitment to low-carbon innovations. Its purpose is twofold: firstly, to reduce reliance on imports and, secondly, to lower transportation-related carbon emissions. The facility employs cutting-edge technologies to optimize energy efficiency, minimize waste generation and mitigate environmental impact. A comprehensive LCA is conducted to evaluate the environmental impacts of all our products. The findings of this assessment guide our research and development projects to ensure that they are sustainable. Furthermore, we are committed to enhancing energy efficiency in manufacturing through the optimization of production methods and the implementation of technologies that minimize waste and emissions. The principles of green chemistry are an integral part of our R&D activities. The strategy places an emphasis on the utilization of renewable feedstocks, the development of durable and recyclable products, the promotion of a circular economy and the reduction of carbon emissions. Our collaborations with academic institutions, industry partners, and research organizations facilitate the utilization of pioneering research for the advancement of sustainable products and technologies.

[Fixed row]

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

Row 1

(5.5.3.1) Technology area

Select from:

Product redesign

(5.5.3.2) Stage of development in the reporting year

Select from:

Applied research and development

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

66.96

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

706520

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

56

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

In the process of redesigning our products, we are dedicated to minimizing their environmental impact and ensuring alignment with the objectives set out in our climate transition plan. Such demands are becoming increasingly prevalent in line with the evolving expectations of our customer base and the advent of a low-carbon economy. Approximately 7.2% of total sales are comprised of innovative products. In addition to the existing patents, a further patent application was submitted in 2023, with four further patents currently in the application stage. The products resulting from the studies conducted at our R&D center and technological laboratories are made available to our customers. Furthermore, we monitor new developments through our periodical publications and online subscriptions. We utilize a range of production methods and inputs to design and develop new products. In 2023, 13 sustainable product projects were implemented. Within these projects, 5 sustainable

products contributed to sales. These products were redesigned with PTA instead of DMT, are more environmentally friendly and generate less emissions and waste during production. In addition to these studies, we started R&D studies in 2023 to prevent microplastics and produce biodegradable products. Pilot-scale trials have been carried out and plans are in place for full-scale trials. Synthetic polymers can take centuries to degrade in nature. With our project, we aim to make polyester fibres biodegradable in nature - carbon dioxide and water - in much less time. We want to add biodegradable properties to polyester fibre produced for disposable wet wipes and nappies. Another project we started in 2023 is the pilot study for the recycling plant. Together with companies that provide chemical recycling technology, we initiated a project to evaluate the pros and cons of the technologies, the investment and conversion costs, and the polymerisation performance of the recycled product (R-DMT / R-PTA / oligomer) obtained with the technology. Negotiations have started with CARBIOS for a licence for a PET bioconversion plant with a capacity of 100,000 tonnes/year in Turkey.

[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)

213.21

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

-62.2

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

-25.83

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

-17.5

(5.9.5) Please explain

CAPEX overview: In the previous reporting year, capital expenditure on water-related issues totalled EUR 16084174, whereas this year we increased our expenditure to EUR 50378566. - Investments in cooling tower and pumps for CP 11-12-13 - Investments in water wells and cooling tower for PTA - Investment in new WWTP and recycling plant. Looking ahead to next year, we expect our CAPEX to decrease as our investment in the WWTP will be completed. OPEX overview: In the previous

reporting year, the OPEX expenditure for water related issues was EUR 12817382, whereas this year our expenditure decreased and amounted to EUR 9505584. Detailed Expenditure Items: - DMT Tower, - Tower 1-3, - Tower 7,8,9, - DYT CP10 Tower, - Waste Water Treatment Plant expenses, - Water purification costs. When we look at next year, we anticipate that our expenditures will decrease within the scope of austerity measures.
 [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: <input checked="" type="checkbox"/> Yes	Select all that apply <input checked="" type="checkbox"/> Carbon

[Fixed row]

(5.10.1) Provide details of your organization’s internal price on carbon.

Row 1

(5.10.1.1) Type of pricing scheme

Select from:

- Shadow price

(5.10.1.2) Objectives for implementing internal price

Select all that apply

- Drive energy efficiency
- Drive low-carbon investment
- Identify and seize low-carbon opportunities

(5.10.1.3) Factors considered when determining the price

Select all that apply

- Alignment to international standards
- Alignment with the price of a carbon tax

(5.10.1.5) Scopes covered

Select all that apply

- Scope 1
- Scope 2

(5.10.1.6) Pricing approach used – spatial variance

Select from:

- Uniform

(5.10.1.8) Pricing approach used – temporal variance

Select from:

- Evolutionary

(5.10.1.9) Indicate how you expect the price to change over time

As part of our climate action plan, various investments are planned over the years. These investments include biomass power plants, on-site solar power plants, and others. Therefore, changes in our investment costs over time may also affect our internal carbon pricing.

(5.10.1.10) Minimum actual price used (currency per metric ton CO₂e)

14.58

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

14.58

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

Select all that apply

Capital expenditure

Operations

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

Select from:

Yes, for some decision-making processes, please specify

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

100

(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

Internal carbon pricing is used as a parameter in decision-making processes for emission reduction investments and our climate transition plan. The same internal carbon price is used in all facilities of SASA, our internal carbon price is uniform.

[Add row]

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

Suppliers

(5.11.1) Engaging with this stakeholder on environmental issues

Select from:

Yes

(5.11.2) Environmental issues covered

Select all that apply

Climate change

Water

Customers

(5.11.1) Engaging with this stakeholder on environmental issues

Select from:

Yes

(5.11.2) Environmental issues covered

Select all that apply

Climate change

Water

Investors and shareholders

(5.11.1) Engaging with this stakeholder on environmental issues

Select from:

No, but we plan to within the next two years

(5.11.3) Primary reason for not engaging with this stakeholder on environmental issues

Select from:

No standardized procedure

(5.11.4) Explain why you do not engage with this stakeholder on environmental issues

Inventors and shareholders are informed regarding the improvements of SASA. Environmental policies are publicly available. However, currently there is no direct interactions with them regarding the environmental issues.

Other value chain stakeholders

(5.11.1) Engaging with this stakeholder on environmental issues

Select from:

Yes

(5.11.2) Environmental issues covered

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

(5.11.1.3) % Tier 1 suppliers assessed

Select from:

100%

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

SASA question the Category 1 and 2 suppliers on environmental and social criteria through supplier evaluation forms. SASA evaluates the environmental management approaches and sustainability performances of suppliers through on-site audits and Supplier Audit Evaluation Forms and classify the supplier according to the results of the evaluations. The suppliers that get 90 or more do not require an action. The suppliers that get 49 or less points are excluded from the Approved Supplier List.

(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

38

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

Basin/landscape condition

Dependence on water

Impact on water availability

Other, please specify :Impacts on water quality

(5.11.1.3) % Tier 1 suppliers assessed

Select from:

100%

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

When assessing the impact of suppliers, firstly SASA checks the locations of the suppliers for water stress, drought risk and overall water scarcity etc. from necessary tools like the WRI Aqueduct and WWF Water Risk Filter. Starting with the most important suppliers, SASA checks their Ecovadis processes. All suppliers are asked about their water specific works and calculations, such as water targets, footprint calculations, etc. SASA requires to comply with necessary regulations for discharges.

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

Select from:

1-25%

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

6

[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

Procurement spend

(5.11.2.4) Please explain

SASA categorized its suppliers according to the purchased products and purchase ratio. Main suppliers are the raw material suppliers and 80% of purchase cost of SASA consists of these suppliers. The main suppliers are Category 1 suppliers. SASA questions EcoVadis ratings of Category 1 suppliers, especially in accordance their importance in terms of greenhouse gas emissions. Additionally, SASA question the Category 1 and 2 suppliers on environmental and social criteria (e.g. ISO

certificates, carbon and waste reduction targets, environmental accidents, LCA studies, ecological impacts, environmental and social policies, sustainability reports) through supplier evaluation forms. SASA has included criteria regarding the environmental and social issues in the main supplier contracts. SASA evaluates the environmental management approaches of suppliers through on-site audits and Supplier Audit Evaluation Forms and classify the supplier according to the results. ISO 14001 and ISO 45001 certifications are of critical importance in supplier selection. The scores and the action matches are: Class A (score: 90-100) - do not require an action; Class B (score 70-89) - It is SASA's choice to go for an audit and its suggestions to improve the supplier are being explored; Class C (score 50-69) - audits are mandatory and studies should be initiated to eliminate the nonconformities identified in the audit; Class D (score 0-49) - The supplier is removed from the Approved Supplier List.

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

Procurement spend

(5.11.2.4) Please explain

SASA categorized its suppliers according to the purchased products and purchase ratio. Main suppliers are the raw material suppliers and 80% of purchase cost of SASA consists of these suppliers. The main suppliers are Category 1 suppliers. SASA questions EcoVadis ratings of Category 1 suppliers, especially in accordance their importance in terms of greenhouse gas emissions. Additionally, SASA question the Category 1 and 2 suppliers on environmental and social criteria (e.g. ISO certificates, carbon and waste reduction targets, environmental accidents, LCA studies, ecological impacts, environmental and social policies, sustainability reports) through supplier evaluation forms. SASA has included criteria regarding the environmental and social issues in the main supplier contracts. SASA evaluates the environmental management approaches of suppliers through on-site audits and Supplier Audit Evaluation Forms and classify the supplier according to the results. ISO 14001 and ISO 45001 certifications are of critical importance in supplier selection. The scores and the action matches are: Class A (score: 90-100) - do not require an action; Class B (score 70-89) - It is SASA's choice to go for an audit and its suggestions to improve the supplier are being explored; Class C (score 50-69) - audits are mandatory and studies should be initiated to eliminate the nonconformities identified in the audit; Class D (score 0-49) - The supplier is removed from the Approved Supplier List.

[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

SASA has Supplier Code of Conduct Policy and related procedures. SASA has the following procedures: - Supplier Audit Procedure - Supplier Non-compliance Management Procedure - Procurement Procedure - Approved Supplier Selection Procedure - Supplier Performance Evaluation Procedure SASA evaluates the environmental management approaches and sustainability performances of suppliers through on-site audits and Supplier Audit Evaluation Forms and classify the supplier according to the results of the evaluations. The suppliers that have a score between 90-100 do not require an action. The suppliers that gets 49 or less point are excluded from the Approved Supplier List of SASA.

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

SASA has Supplier Code of Conduct Policy and related procedures. SASA has the following procedures: - Supplier Audit Procedure - Supplier Non-compliance Management Procedure - Procurement Procedure - Approved Supplier Selection Procedure - Supplier Performance Evaluation Procedure SASA evaluates the environmental management approaches and sustainability performances of suppliers through on-site audits and Supplier Audit Evaluation Forms and classify the supplier according to the results of the evaluations. The suppliers that have a score between 90-100 do not require an action. The suppliers that gets 49 or less point are excluded from the Approved Supplier List of SASA.
[Fixed row]

(5.11.6) Provide details of the environmental requirements that suppliers have to meet as part of your organization’s purchasing process, and the compliance measures in place.

Climate change

(5.11.6.1) Environmental requirement

Select from:

- Environmental disclosure through a non-public platform

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

- Grievance mechanism/ Whistleblowing hotline
- On-site third-party audit
- Supplier scorecard or rating

(5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

Select from:

- 76-99%

(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:

Suspend and engage

(5.11.6.10) % of non-compliant suppliers engaged

Select from:

1-25%

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

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

(5.11.6.12) Comment

SASA evaluates all of its main suppliers through the Supplier Audit Evaluation Form. SASA measures climate change performances with the questions included in the supplier procedures. There are below questions in our Supplier Assessment Forms: -Is there a procedure or risk management system in place? -Do they perform carbon footprint tracking? -Do they have a carbon emission target and monitoring system? -Do they have measurements for the carbon emission reduction? SASA evaluates the environmental management approaches and sustainability performances of suppliers through on-site audits and Supplier Audit Evaluation Forms and classify the supplier according to the results of the evaluations. The scores and the action matches are: Class A (score: 90-100) - do not require an action; Class B

(score 70-89) - It is SASA's choice to go for an audit and its suggestions to improve the supplier are being explored; Class C (score 50-69) - audits are mandatory and studies should be initiated to eliminate the nonconformities identified in the audit; Class D (score 0-49) - The supplier is removed from the "Approved Supplier List".

Water

(5.11.6.1) Environmental requirement

Select from:

- Regular environmental risk assessments (at least once annually)

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

- Fines and penalties
- On-site third-party audit
- Supplier scorecard or rating

(5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

Select from:

- 76-99%

(5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:

- 51-75%

(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:

51-75%

(5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:

Exclude

(5.11.6.12) Comment

SASA evaluates all of its main suppliers through the Supplier Audit Evaluation Form. SASA measures water related performances with the questions included in the supplier procedures. There are below questions in our Supplier Assessment Forms: -Do you have a water management system, policies or analysis studies specific to water risks arising from your activities? Is the water footprint calculated? SASA asks its suppliers to submit a water related risk assessment on their own. All suppliers have to comply with this rule. If they do not comply on time, auditing may take place and if this goes repeatedly, they may be excluded from the approved supplier lists. SASA evaluates the environmental management approaches and sustainability performances of suppliers through on-site audits and Supplier Audit Evaluation Forms and classify the supplier according to the results of the evaluations. The scores and the action matches are: Class A (score: 90-100) - do not require an action; Class B (score 70-89) - It is SASA's choice to go for an audit and its suggestions to improve the supplier are being explored; Class C (score 50-69) - audits are mandatory and studies should be initiated to eliminate the nonconformities identified in the audit; Class D (score 0-49) - The supplier is removed from the "Approved Supplier List".

[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:

Adaptation to climate change

(5.11.7.3) Type and details of engagement

Information collection

- Collect climate transition plan information at least annually from suppliers
- Collect environmental risk and opportunity information at least annually from suppliers
- Collect GHG emissions data at least annually from suppliers
- Collect targets information at least annually from suppliers

(5.11.7.4) Upstream value chain coverage

Select all that apply

- Tier 1 suppliers

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

Select from:

- 76-99%

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

Select from:

- Unknown

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

SASA evaluates the environmental management approaches and sustainability performances of suppliers through on-site audits and Supplier Audit Evaluation Forms and classify the supplier according to the results of the evaluations. In the Supplier Audit Evaluation Form, issues related to environmental management are given priority and the relations with suppliers who work on these issues are prioritized. The purpose is to improve both environmental and social supplier standards in the upcoming period to reinforce the responsible supplier chain. It is assumed that emissions from the raw materials suppliers will make up the majority of the gross total scope 3 emissions. Therefore, SASA creates the necessary data information to calculate the relevant emissions, thanks to the information received from the suppliers. SASA conducts this information collection activity to understand the supply chain effects to SASA's climate-related activities. Thanks to the supplier evaluation approach, SASA encourages its supply chain to take actions under the heading of environmental impacts. Using the Supplier Classification and Action Table, suppliers are classified and necessary actions are taken based on the scores resulting from supplier performance evaluations. Supplier Classification and Action Table; 90-100 Score A Class No action will be taken 70-89 Score B Class An audit may be conducted, and improvement suggestions are researched. 50-69 Score C Class An audit is always conducted, and efforts are initiated to eliminate any detected non-conformities. 0-49 Score D Class They are removed from the "Approved Supplier List"

(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 :SASA measures climate change performances with the questions included in the supplier procedures.

(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

Information collection

- Collect water quantity information at least annually from suppliers (e.g., withdrawal and discharge volumes)

(5.11.7.4) Upstream value chain coverage

Select all that apply

- Tier 1 suppliers

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

Select from:

- 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:

100%

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

SASA has suppliers from about 20 countries and some of them have a high-water stress and water scarcity. SASA conducts this information collection activity to understand the supply chain effects to water stresses and help them with a target to set for them accordingly. SASA aims to reduce water withdrawals of its upstream value chain by gathering this information and setting clear and achievable goals for them to further help those regions and reduce water stress globally. SASA requires from its suppliers to give information about their water-related targets, water footprint calculations and etc. SASA has found that SASA can set more realistic targets for its water-related issues through this engagement activity. If the data is deemed unacceptable or critical, SASA may conduct audits and find ways to help them rectify the situation and improve their operations. SASA also learns and improves its own activities and set its own targets for water.

(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 :It is seen improvements and further visibility along in the value chain for water quantities, which reduced water related risks. It is seen that the suppliers are also trying to achieve their targets and adhering to SASA's water policy as well.

(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:

Other value chain stakeholder, please specify :Employee, university, contractor, sectoral/market engagement

(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

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

(5.11.9.3) % of stakeholder type engaged

Select from:

- 76-99%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

- Unknown

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

Employee Engagement: One of the most important components of the SASA value chain is its employees. SASA continuously provides training for its stakeholders, including employees. The scope of these trainings covers environmental, chemical safety, water risks, and climate risks. Especially, ISO 31000 Corporate Risk Management Training has been provided to employees to understand SASA's risk management approach and effectively address risks within the organization. Additionally, training sessions such as OHS supervisor trainings, Security Management System, and ADME are conducted for sustainability topics related to chemical and emergency management. Climate change is a subject that SASA prioritizes and aims to raise awareness among its employees. University Engagement: SASA collaborates with universities and technology institutes for process improvement, new product development, research on alternative catalyst systems, and academic consulting. Contractor Engagement: As part of the Contractor Security and Performance Management Program, training is provided on climate and water security in accordance with EBRD, IFC, and legal regulations. Sectoral, Market Engagement: The SASA Sustainability Department participates in sector events to facilitate knowledge sharing and transfer in the industry.

(5.11.9.6) Effect of engagement and measures of success

Due to the engagement with employees, universities, contractors, etc., SASA improves its sustainability studies. The awareness of employees increases. The number of projects related to climate change increases so that climate change measurements increase.

Water

(5.11.9.1) Type of stakeholder

Select from:

- Other value chain stakeholder, please specify :Employee, university, contractor, sectoral/market engagement

(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
- Run an engagement campaign to educate stakeholders about the environmental impacts about your products, goods and/or services

(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

Employee Engagement: One of the most critical components of the SASA value chain is its employees. SASA continuously provides training for its stakeholders, which include employees. The scope of these training programs covers topics such as the environment, chemical safety, water risks, and climate risks. Specifically, the ISO 31000 Corporate Risk Management Training has been provided to employees to ensure a proper understanding of SASA's risk management approach and the effective handling of risks within the organization. Additionally, training programs on chemical and emergency management for sustainability, Security Management System, and ADME are offered. Water is another crucial topic, as it significantly impacts SASA and its surroundings. The purpose of these training programs is to transfer SASA's management approach to employees and raise awareness about water-related issues. University Engagement: SASA collaborates with universities and technology institutes for process improvement, new product development, research on alternative catalyst systems, and academic consulting. Contractor Engagement: Under the Contractor Security and Performance Management Program, training is provided on climate and water safety in line with the guidelines of EBRD, IFC, and legal regulations. Sectoral, Market Engagement: The SASA Sustainability Department participates in sector events to facilitate knowledge sharing and transfer within the industry.

(5.11.9.6) Effect of engagement and measures of success

The trainings are conducted by SASA to ensure the understanding of SASA management systems and sensitive management. These mentioned trainings are mandatory for relevant stakeholders, and the participation rate is 100%. Improvements have been seen in employee behavior and new ideas are shared with SASA's sustainability team to improve the water efficiency.

Climate change

(5.11.9.1) Type of stakeholder

Select from:

Customers

(5.11.9.2) Type and details of engagement

Innovation and collaboration

Collaborate with stakeholders in creation and review of your climate transition plan

(5.11.9.3) % of stakeholder type engaged

Select from:

1-25%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

Unknown

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

SASA engages with some of its customers as one of the suppliers of them. For example, there is a collaboration with Coca Cola. SASA is one of the suppliers of Coca Cola and there is a Supplier Leadership on Climate Transition Program. During the target setting process for SBTi, cooperation was initiated within the scope of the supplier information program. The program includes industry updates, climate action tools & resources, forest, land, and agriculture guidance, seminars, etc. In the program, scope 1,2,3 emissions, green investments, LCA, recycled products are evaluated and audits are performed.

(5.11.9.6) Effect of engagement and measures of success

This engagement increases and improves the studies of SASA related to sustainability and climate change. SASA tends to increase the greener production due to the engagement with the customers. The success can be measured with the increase in sales and continuity of the sales. Demands from the customers can also be considered as measure. For example, SASA developed an antimony free product (environmentally friendly) according to customer demand. Customer engagement improves SASA in sustainability.

[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

Since the operational control approach will give the most precise results, the consolidation approach was chosen. 2 offices and 2 plants were included in calculations.

Water

(6.1.1) Consolidation approach used

Select from:

Operational control

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

All operations at the Adana plant have been determined as the system boundaries. Since our institution has 100% control over the operations conducted within the organization, the operational control approach has been used in the calculations. As the water consumption of the facilities within our operational boundaries is taken into account in this study, a gate-to-gate approach has been applied. In this scope, all operational units and processes have been included within the study boundaries.

Plastics

(6.1.1) Consolidation approach used

Select from:

Other, please specify :-

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

No report has been prepared.

Biodiversity

(6.1.1) Consolidation approach used

Select from:

Operational control

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

All regions affected by SASA's activities, including new facilities and constructions where investments have been made, are included in biodiversity related report. The effect of construction and operations has been monitored to minimize biodiversity-related risks.

[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 <input checked="" type="checkbox"/> No

[Fixed row]

(7.1.2) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

(7.1.2.1) Change(s) in methodology, boundary, and/or reporting year definition?

Select all that apply

Yes, a change in boundary

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

In SASA's 2022 carbon footprint calculation, emissions from primary raw materials within the scope of "Emissions from Purchased and Consumed Raw Materials and Materials" under Category 4 and emissions from fuel production and fuel transportation/distribution specified in Category 3 are not included in the calculation. These

emissions are included in the calculation in 2023. In 2023, 99.6% of the main raw materials (PTA, Methanol, Xylene, Ethylene Glycol) and 99.6% of the auxiliary materials with low rates were not calculated separately. Furthermore, the emissions from fuel production and fuel transportation/distribution specified in Category 3 is calculated for natural gas, coal, diesel, LPG and gasoline.

[Fixed row]

(7.1.3) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in 7.1.1 and/or 7.1.2?

(7.1.3.1) Base year recalculation

Select from:

No, because we do not have the data yet and plan to recalculate next year

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

SASA has not recalculated the base year emissions because it does not have sufficient data to accurately calculate the emissions for certain categories that were not included in the 2022 carbon footprint calculation. Specifically, emissions from primary raw materials within the scope of emissions from purchased and consumed raw materials under Category 4, and emissions from fuel production and fuel transportation/distribution under Category 3, were not originally included in the 2022 calculations. SASA will consider recalculating the base year emissions once reliable data is available.

(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

Defra Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance, 2019

ISO 14064-1

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

- The Greenhouse Gas Protocol: Scope 2 Guidance
- The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Standard

(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

SASA’s approach to reporting Scope 2 emissions focuses on ensuring accuracy and transparency. There are carbon reduction instruments (IREC, YEK-G) available in the market in our country, which can be utilized for market-based Scope 2 emissions reporting. Even though, the IREC certificate has not been obtained for the reporting year, SASA aims to obtain 97,655 MWh IREC certificate by 2025. SASA will continue to evaluate the use of such instruments in the future to enhance our reporting practices.

[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:

- No

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

Scope 1

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

300024

(7.5.3) Methodological details

For SASA, Scope 1 emissions include those generated from both mobile and stationary combustion activities. Specifically, this covers the combustion of natural gas, coal, diesel, gasoline, and LPG. Additionally, Scope 1 emissions also account for emissions arising from industrial processes, which include the use of chemicals such as methanol, paraxylene, and dimethyl terephthalate (DMT). Furthermore, any emissions resulting from leakage during these industrial processes, cooling activities, and fire extinguisher are also included within the Scope 1 category. These emissions represent the direct impact of SASA's operations on the environment.

Scope 2 (location-based)

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

124862

(7.5.3) Methodological details

Scope 2 emissions for SASA result from the indirect greenhouse gas emissions associated with the consumption of purchased electricity. The company follows a location-based approach for calculating Scope 2 emissions, which reflects the average emissions intensity of the grids from which SASA sources its electricity.

Scope 2 (market-based)

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

(7.5.3) Methodological details

SASA is exploring market-based instruments, such as IREC and YEK-G, to potentially reduce these emissions in future reporting periods.

Scope 3 category 1: Purchased goods and services

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO₂e)

0

(7.5.3) Methodological details

Scope 3 emissions were not calculated in 2019.

Scope 3 category 2: Capital goods

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO₂e)

0

(7.5.3) Methodological details

Scope 3 emissions were not calculated in 2019.

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

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

Scope 3 emissions were not calculated in 2019.

Scope 3 category 4: Upstream transportation and distribution

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

Scope 3 emissions were not calculated in 2019.

Scope 3 category 5: Waste generated in operations

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

Scope 3 emissions were not calculated in 2019.

Scope 3 category 6: Business travel

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO₂e)

0

(7.5.3) Methodological details

Scope 3 emissions were not calculated in 2019.

Scope 3 category 7: Employee commuting

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO₂e)

0

(7.5.3) Methodological details

Scope 3 emissions were not calculated in 2019.

Scope 3 category 8: Upstream leased assets

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

Scope 3 emissions were not calculated in 2019.

Scope 3 category 9: Downstream transportation and distribution

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

Scope 3 emissions were not calculated in 2019.

Scope 3 category 10: Processing of sold products

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

Scope 3 emissions were not calculated in 2019.

Scope 3 category 11: Use of sold products

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

Scope 3 emissions were not calculated in 2019.

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

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

Scope 3 emissions were not calculated in 2019.

Scope 3 category 13: Downstream leased assets

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

Scope 3 emissions were not calculated in 2019.

Scope 3 category 14: Franchises

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO₂e)

0

(7.5.3) Methodological details

Scope 3 emissions were not calculated in 2019.

Scope 3 category 15: Investments

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO₂e)

0

(7.5.3) Methodological details

Scope 3 emissions were not calculated in 2019.

Scope 3: Other (upstream)

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

Scope 3 emissions were not calculated in 2019.

Scope 3: Other (downstream)

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

Scope 3 emissions were not calculated in 2019.

[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)

377058.25

(7.6.3) Methodological details

For SASA, Scope 1 emissions include those generated from both mobile and stationary combustion activities. Specifically, this covers the combustion of natural gas, coal, diesel, gasoline, and LPG. Additionally, Scope 1 emissions also account for emissions arising from industrial processes, which include the use of chemicals such as methanol, paraxylene, and dimethyl terephthalate (DMT). Furthermore, any emissions resulting from leakage during these industrial processes, cooling activities, and fire extinguisher are also included within the Scope 1 category. These emissions represent the direct impact of SASA's operations on the environment. SASA's Scope 1 greenhouse gas emissions for 2023 decreased by 24% compared to 2022. The reduction in Scope 1 and 2 greenhouse gas emissions is due to clean production practices within the facility and the decrease in production rate as 10.97%.

Past year 1

(7.6.1) Gross global Scope 1 emissions (metric tons CO₂e)

494823.4

(7.6.2) End date

12/30/2022

(7.6.3) Methodological details

It seems that our Scope 1 emissions in 2022 has increased compared to 2021, the reason is our increasing production volume, and total energy consumption accordingly. Following emission sources are considered for Scope 1 emission calculations: -Stationary Combustion Based Direct Emission (Natural Gas, Sub-bituminous, Other-bituminous and Lignite Coal, Diesel, LPG, Acetylene) (CO₂, CH₄, N₂O) -Mobile Combustion Based Direct Emission (Company vehicles (on-road, off-road) - Diesel, Gasoline, LPG) (CO₂, CH₄, N₂O) -Process Emission (Input: Methanol and Paraxylene; Output: DMT) (CO₂) -Direct Emission-Leakage (fire extinguishers (CO₂), refrigerants (HFC's)

Past year 2

(7.6.1) Gross global Scope 1 emissions (metric tons CO₂e)

488358.45

(7.6.2) End date

12/30/2021

(7.6.3) Methodological details

Our Scope 1 emissions in 2021 has increased compared to 2020, the reason is our increasing production volume, and total energy consumption accordingly. Following emission sources are considered for Scope 1 emission calculations: -Stationary Combustion Based Direct Emission (Natural Gas, Sub-bituminous, Other-bituminous and Lignite Coal, Diesel, LPG, Acetylene) (CO₂, CH₄, N₂O) -Mobile Combustion Based Direct Emission (Company vehicles (on-road, off-road) - Diesel, Gasoline, LPG) (CO₂, CH₄, N₂O) -Process Emission (Input: Methanol and Paraxylene; Output: DMT) (CO₂) -Direct Emission-Leakage (fire extinguishers (CO₂), refrigerants (HFC's)

Past year 3

(7.6.1) Gross global Scope 1 emissions (metric tons CO₂e)

391641

(7.6.2) End date

12/30/2020

(7.6.3) Methodological details

Our Scope 1 emissions in 2020 has increased compared to 2019, the reason is our increasing production volume, and total energy consumption accordingly.

Past year 4

(7.6.1) Gross global Scope 1 emissions (metric tons CO₂e)

300024

(7.6.2) End date

12/30/2019

(7.6.3) Methodological details

2019 is the base year of our greenhouse gas emission calculation and both stationary, mobile combustion, emission from industrial processes and leakage are included.

[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)

202032.05

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

0

(7.7.4) Methodological details

Energy indirect emission (electricity) for CO2, CH4, and N2O are considered to calculate Scope 2 emissions. Our Scope 2 emission has decreased compared to 2022 due to decrease in production volume and energy consumption, and to enhance cleaner production activities.

Past year 1

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

275153.53

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

0

(7.7.3) End date

12/30/2022

(7.7.4) Methodological details

Energy indirect emission (electricity) for CO2, CH4, and N2O are considered to calculate Scope 2 emissions. Our Scope 2 emission has decreased compared to 2021 due to enhancement of the cleaner production activities.

Past year 2

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

286273.15

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

0

(7.7.3) End date

12/30/2021

(7.7.4) Methodological details

Energy indirect emission (electricity) for CO2, CH4, and N2O are considered to calculate Scope 2 emissions. Our Scope 2 emission has increased compared to 2020 due to increase in production volume.

Past year 3

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

215606

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

0

(7.7.3) End date

12/30/2020

(7.7.4) Methodological details

Energy indirect emission (electricity) for CO2, CH4, and N2O are considered to calculate Scope 2 emissions. Our Scope 2 emission has increased compared to 2019 due to increase in production volume.

Past year 4

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

124862

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

0

(7.7.3) End date

12/30/2019

(7.7.4) Methodological details

*Energy indirect emission (electricity) for CO2, CH4, and N2O are considered to calculate Scope 2 emissions and this is the base year.
[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)

2740383.5

(7.8.3) Emissions calculation methodology

Select all that apply

- Supplier-specific 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

Emission calculations include raw material consumption (e.g., PTA, methanol, xylene, ethylene glycol) and are based on data collected from procurement records, ERP reports, invoices, delivery notes, and shipping documents. Tier 1 DEFRA and GHG Protocol emission factors were applied in the calculations. Emission factor: Ecoinvent LCI v3.9.1

Capital goods

(7.8.1) Evaluation status

Select from:

- Relevant, not yet calculated

(7.8.5) Please explain

The calculation of emissions from capital goods was not completed due to the complexity of tracking and collecting accurate data related to long-term assets, such as machinery and infrastructure. The required data spans multiple sources and involves significant effort to consolidate, making it challenging to finalize calculations within the reporting period. Plans are in place to improve data collection processes for future reporting periods.

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)

(7.8.3) Emissions calculation methodology

Select all that apply

- Spend-based 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

Emissions from fuel and energy-related activities (not included in Scope 1 or 2) have been calculated based on upstream emissions related to fuel production and transportation. Data for natural gas, coal, diesel, gasoline, and LPG were collected, and emissions were calculated using Tier 1 DEFRA WTT (Well-to-Tank) emission factors.

Upstream transportation and distribution**(7.8.1) Evaluation status**

Select from:

- Relevant, calculated

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

284716.26

(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

(7.8.5) Please explain

This includes emissions from the transportation of raw materials and products. For emission factors, tier 1 DEFRA and GHG Protocol are applied as these are the most achievable and appropriate data. Activity data have been collected from ERP reports, sampled invoices, bill of conveyances and shipping bills, contracts, reports.

Waste generated in operations**(7.8.1) Evaluation status**

Select from:

Relevant, calculated

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

2327.77

(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

100

(7.8.5) Please explain

Emissions from waste management, including transportation and disposal, were calculated. Waste transportation data has been obtained from the supplier. Emissions related to waste disposal have been calculated according to Tier 1 Defra Emission Factor.

Business travel**(7.8.1) Evaluation status**

Select from:

Relevant, calculated

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

1135.03

(7.8.3) Emissions calculation methodology

Select all that apply

Spend-based method

Distance-based method

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

100

(7.8.5) Please explain

Emissions related to employee travel, including flights and accommodations, were accounted for. All data has been obtained from our travel agency reports.

Employee commuting

(7.8.1) Evaluation status

Select from:

Relevant, calculated

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

9256.92

(7.8.3) Emissions calculation methodology

Select all that apply

Average data method

- Distance-based method

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

100

(7.8.5) Please explain

Emissions from employees' daily commuting were calculated. All data has been obtained from our travel agency reports.

Upstream leased assets

(7.8.1) Evaluation status

Select from:

- Not relevant, explanation provided

(7.8.5) Please explain

Emissions from the use of leased properties and products, like commercial vehicles, are included in the scope 1 inventory since they are considered part of SASA's operations.

Downstream transportation and distribution

(7.8.1) Evaluation status

Select from:

- Relevant, calculated

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

86062.01

(7.8.3) Emissions calculation methodology

Select all that apply

- Spend-based method
- Distance-based method

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

100

(7.8.5) Please explain

For emission factors, tier 1 DEFRA and GHG Protocol are applied as these are the most achievable and appropriate data. Activity data have been collected from ERP reports, sampled invoices, bill of conveyances and shipping bills, contracts, reports.

Processing of sold products

(7.8.1) Evaluation status

Select from:

- Relevant, not yet calculated

(7.8.5) Please explain

Because of the complexity of our products being used as an intermediate product in other versatile industries, the data collection for processing of sold products is not possible.

Use of sold products

(7.8.1) Evaluation status

Select from:

- Not relevant, explanation provided

End of life treatment of sold products

(7.8.1) Evaluation status

Select from:

Not relevant, explanation provided

Downstream leased assets

(7.8.1) Evaluation status

Select from:

Not relevant, explanation provided

Franchises

(7.8.1) Evaluation status

Select from:

Not relevant, explanation provided

Investments

(7.8.1) Evaluation status

Select from:

Not evaluated

Other (upstream)

(7.8.1) Evaluation status

Select from:

Not evaluated

Other (downstream)

(7.8.1) Evaluation status

Select from:

Not evaluated
[Fixed row]

(7.8.1) Disclose or restate your Scope 3 emissions data for previous years.

Past year 1

(7.8.1.1) End date

12/30/2022

(7.8.1.2) Scope 3: Purchased goods and services (metric tons CO2e)

0

(7.8.1.3) Scope 3: Capital goods (metric tons CO2e)

0

(7.8.1.4) Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

0

(7.8.1.5) Scope 3: Upstream transportation and distribution (metric tons CO2e)

279390.1

(7.8.1.6) Scope 3: Waste generated in operations (metric tons CO2e)

2290.31

(7.8.1.7) Scope 3: Business travel (metric tons CO2e)

649.2

(7.8.1.8) Scope 3: Employee commuting (metric tons CO2e)

9020.25

(7.8.1.9) Scope 3: Upstream leased assets (metric tons CO2e)

279390.1

(7.8.1.10) Scope 3: Downstream transportation and distribution (metric tons CO2e)

91756.73

(7.8.1.11) Scope 3: Processing of sold products (metric tons CO2e)

0

(7.8.1.12) Scope 3: Use of sold products (metric tons CO2e)

0

(7.8.1.13) Scope 3: End of life treatment of sold products (metric tons CO2e)

0

(7.8.1.14) Scope 3: Downstream leased assets (metric tons CO2e)

0

(7.8.1.15) Scope 3: Franchises (metric tons CO2e)

0

(7.8.1.16) Scope 3: Investments (metric tons CO2e)

0

(7.8.1.17) Scope 3: Other (upstream) (metric tons CO2e)

0

(7.8.1.18) Scope 3: Other (downstream) (metric tons CO2e)

0

(7.8.1.19) Comment

The explanation of the above question stands the same for this question. Only visitors accommodation, seaway RORO transportation is not included in the scope and fuel production and distribution wasn't calculated due to the lack of data.

Past year 2

(7.8.1.1) End date

12/30/2021

(7.8.1.2) Scope 3: Purchased goods and services (metric tons CO2e)

0

(7.8.1.3) Scope 3: Capital goods (metric tons CO2e)

0

(7.8.1.4) Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

0

(7.8.1.5) Scope 3: Upstream transportation and distribution (metric tons CO2e)

216393.83

(7.8.1.6) Scope 3: Waste generated in operations (metric tons CO2e)

1460.16

(7.8.1.7) Scope 3: Business travel (metric tons CO2e)

78.98

(7.8.1.8) Scope 3: Employee commuting (metric tons CO2e)

23.1

(7.8.1.9) Scope 3: Upstream leased assets (metric tons CO2e)

216393.83

(7.8.1.10) Scope 3: Downstream transportation and distribution (metric tons CO2e)

87819.74

(7.8.1.11) Scope 3: Processing of sold products (metric tons CO2e)

0

(7.8.1.12) Scope 3: Use of sold products (metric tons CO2e)

0

(7.8.1.13) Scope 3: End of life treatment of sold products (metric tons CO2e)

0

(7.8.1.14) Scope 3: Downstream leased assets (metric tons CO2e)

0

(7.8.1.15) Scope 3: Franchises (metric tons CO2e)

0

(7.8.1.16) Scope 3: Investments (metric tons CO2e)

0

(7.8.1.17) Scope 3: Other (upstream) (metric tons CO2e)

0

(7.8.1.18) Scope 3: Other (downstream) (metric tons CO2e)

0

(7.8.1.19) Comment

The explanation of the above question stands the same for this question. Only visitors accommodation and transportation, seaway RORO transportation and highway transportation of raw materials, fuel production and distribution were not included in the scope due to the lack of data.

Past year 3

(7.8.1.1) End date

12/30/2020

(7.8.1.2) Scope 3: Purchased goods and services (metric tons CO2e)

0

(7.8.1.3) Scope 3: Capital goods (metric tons CO2e)

0

(7.8.1.4) Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

0

(7.8.1.5) Scope 3: Upstream transportation and distribution (metric tons CO2e)

0

(7.8.1.6) Scope 3: Waste generated in operations (metric tons CO2e)

0

(7.8.1.7) Scope 3: Business travel (metric tons CO2e)

0

(7.8.1.8) Scope 3: Employee commuting (metric tons CO2e)

0

(7.8.1.9) Scope 3: Upstream leased assets (metric tons CO2e)

0

(7.8.1.10) Scope 3: Downstream transportation and distribution (metric tons CO2e)

0

(7.8.1.11) Scope 3: Processing of sold products (metric tons CO2e)

0

(7.8.1.12) Scope 3: Use of sold products (metric tons CO2e)

0

(7.8.1.13) Scope 3: End of life treatment of sold products (metric tons CO2e)

0

(7.8.1.14) Scope 3: Downstream leased assets (metric tons CO2e)

0

(7.8.1.15) Scope 3: Franchises (metric tons CO2e)

0

(7.8.1.16) Scope 3: Investments (metric tons CO2e)

0

(7.8.1.17) Scope 3: Other (upstream) (metric tons CO2e)

0

(7.8.1.18) Scope 3: Other (downstream) (metric tons CO2e)

0

(7.8.1.19) Comment

Scope 3 was not calculated in this year due to lack of data.
[Fixed row]

(7.9) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Select from: <input checked="" type="checkbox"/> Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Select from: <input checked="" type="checkbox"/> Third-party verification or assurance process in place
Scope 3	Select from: <input checked="" type="checkbox"/> 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

SASA 2023 BVGH-SUS-F12 ISO 14064-1 Doğrulama Raporu.pdf

(7.9.1.5) Page/section reference

Page 29-Section 5.1. The verification team concluded that the organization's 2023 GHG inventory report meets the verification criteria within the defined materiality framework.

(7.9.1.6) Relevant standard

Select from:

ISO14064-1

(7.9.1.7) Proportion of reported emissions verified (%)

(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

SASA 2023 BVGH-SUS-F12 ISO 14064-1 Doğrulama Raporu.pdf

(7.9.2.6) Page/ section reference

(7.9.2.7) Relevant standard

Select from:

- ISO14064-1

(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: Business travel
- Scope 3: Employee commuting
- Scope 3: Purchased goods and services
- Scope 3: Waste generated in operations
- 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

SASA 2023 BVGH-SUS-F12 ISO 14064-1 Doğrulama Raporu.pdf

(7.9.3.6) Page/section reference

Page 29-Section 5.1. The verification team concluded that the organization's 2023 GHG inventory report meets the verification criteria within the defined materiality framework.

(7.9.3.7) Relevant standard

Select from:

ISO14064-1

(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:

Decreased

(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)

3131.48

(7.10.1.2) Direction of change in emissions

Select from:

Decreased

(7.10.1.3) Emissions value (percentage)

0.41

(7.10.1.4) Please explain calculation

*In 2023, 6470 MWH energy was obtained from rooftop solar panel and this results in the emission reduction in Scope 1 and 2 when compared to the 2022's data by using national electricity emission factor. Emission value has been calculated as $(3131.48/769975.95)*100$ 0.41 %.*

Other emissions reduction activities

(7.10.1.1) Change in emissions (metric tons CO2e)

28389.14

(7.10.1.2) Direction of change in emissions

Select from:

Decreased

(7.10.1.3) Emissions value (percentage)

3.69

(7.10.1.4) Please explain calculation

In 2023, there were many environmentally friendly projects which reduced the electricity, natural gas, and steam consumption as: - Savings of electricity was 6392417 kWh/year, - Savings of natural gas was 2469450 m3/year - Savings of steam was 69447 tonnes/year.

Divestment

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

The status of the enterprise did not change in the reporting period.

Acquisitions

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

The status of the enterprise did not change in the reporting period.

Mergers

(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

The status of the enterprise did not change in the reporting period.

Change in output

(7.10.1.1) Change in emissions (metric tons CO2e)

162458.96

(7.10.1.2) Direction of change in emissions

Select from:

Decreased

(7.10.1.3) Emissions value (percentage)

(7.10.1.4) Please explain calculation

Since there was decrease in production as 6.9% in total output, there was a decrease in emissions. These emissions corresponds to the 21.10%. Due to this decrease, there was also decrease in emission intensity of the Scope 1 and 2 as 24.41%. The decrease in emission intensity might be caused by the emission reduction activity due to the environmental friendly projects resulting the electricity, natural gas, and steam savings.

Change in methodology**(7.10.1.1) Change in emissions (metric tons CO2e)**

0

(7.10.1.2) Direction of change in emissions*Select from:* No change**(7.10.1.3) Emissions value (percentage)**

0

(7.10.1.4) Please explain calculation

There is no change in methodology.

Change in boundary**(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

There is no change in boundaries.

Change in physical operating conditions

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

The category is irrelevant in the annual comparison.

Unidentified

(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

The category is irrelevant in the annual comparison.

[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)

373369.33

(7.15.1.3) GWP Reference

Select from:

IPCC Sixth Assessment Report (AR6 - 100 year)

Row 2

(7.15.1.1) Greenhouse gas

Select from:

CH4

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

630.28

(7.15.1.3) GWP Reference

Select from:

IPCC Sixth Assessment Report (AR6 - 100 year)

Row 3

(7.15.1.1) Greenhouse gas

Select from:

N2O

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

1080.14

(7.15.1.3) GWP Reference

Select from:

IPCC Sixth Assessment Report (AR6 - 100 year)

Row 4

(7.15.1.1) Greenhouse gas

Select from:

HFCs

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

1969.5

(7.15.1.3) GWP Reference

Select from:

IPCC Sixth Assessment Report (AR6 - 100 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	377058.25	202032.05	202032.05

[Fixed row]

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

Select all that apply

By activity

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

	Activity	Scope 1 emissions (metric tons CO2e)
Row 1	<i>Total Stationary Combustion Based Direct Greenhouse Gas Emission of all Facilities</i>	341882.24
Row 3	<i>Total Mobile Combustion Based Direct Greenhouse Gas Emission of all Facilities</i>	2537.8
Row 4	<i>Total Process Emissions Based Direct Greenhouse Gas Emission of all Facilities</i>	30668.71
Row 5	<i>Other (Refrigerant and Fire Extinguisher)</i>	1969.5

[Add row]

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

Chemicals production activities

(7.19.1) Gross Scope 1 emissions, metric tons CO₂e

377058.25

(7.19.3) Comment

SASA's only production activity is the chemical production and all Scope 1 emissions arise from the chemical production. Gross Scope 1 emissions also include process emissions from DMT (Dimethyl Terephthalate) production. Process emissions account for 8,13% of Gross Scope 1 emissions.

[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 CO ₂ e)	Scope 2, market-based (metric tons CO ₂ e)
Row 1	SASA POLYESTER SAN. A.Ş. İstanbul Facility	15.89	15.89
Row 3	SASA POLYESTER SAN. A.Ş. Adana Facility	201917.3	201917.3
Row 4	SASA POLYESTER SAN. A.Ş. İskenderun Facility	97.94	97.94
Row 5	SASA POLYESTER SAN. A.Ş. Ankara Facility	0.93	0.93

[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
Chemicals production activities	201917.3	201917.3	Chemicals production activities are held at SASA Manufacturing Facility in Adana.

[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)

377058.25

(7.22.2) Scope 2, location-based emissions (metric tons CO2e)

202032.05

(7.22.3) Scope 2, market-based emissions (metric tons CO2e)

202032.05

(7.22.4) Please explain

The emissions are fully included in SASA's emission report and there is no any other entities.

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

There is no any other entities.

[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

(7.25) Disclose the percentage of your organization's Scope 3, Category 1 emissions by purchased chemical feedstock.

Row 1

(7.25.1) Purchased feedstock

Select from:

Methanol

(7.25.2) Percentage of Scope 3, Category 1 tCO2e from purchased feedstock

0.34

(7.25.3) Explain calculation methodology

Emission calculation including methanol is based on data collected from procurement records, ERP reports, invoices, delivery notes, and shipping documents. Tier 1 DEFRA, GHG Protocol and Ecoinvent LCI v3.9.1 emission factors were applied in the calculations. The percentage of this question is found by the emission caused by the methanol over total emission caused by SASA.

Row 2

(7.25.1) Purchased feedstock

Select from:

Other (please specify) :Purified Trephtalic Acid (PTA)

(7.25.2) Percentage of Scope 3, Category 1 tCO2e from purchased feedstock

50.84

(7.25.3) Explain calculation methodology

Emission calculation including PTA is based on data collected from procurement records, ERP reports, invoices, delivery notes, and shipping documents. Tier 1 DEFRA, GHG Protocol and Ecoinvent LCI v3.9.1 emission factors were applied in the calculations. The percentage of this question is found by the emission caused by the PTA over total emission caused by SASA.

Row 3

(7.25.1) Purchased feedstock

Select from:

Other (please specify) :Xylene (Px)

(7.25.2) Percentage of Scope 3, Category 1 tCO2e from purchased feedstock

1.33

(7.25.3) Explain calculation methodology

Emission calculation including xylene is based on data collected from procurement records, ERP reports, invoices, delivery notes, and shipping documents. Tier 1 DEFRA, GHG Protocol and Ecoinvent LCI v3.9.1 emission factors were applied in the calculations. The percentage of this question is found by the emission caused by the xylene over total emission caused by SASA.

Row 4

(7.25.1) Purchased feedstock

Select from:

Other (please specify) :Etilen Glikol (MEG)

(7.25.2) Percentage of Scope 3, Category 1 tCO2e from purchased feedstock

20.12

(7.25.3) Explain calculation methodology

Emission calculation including etilen glikol is based on data collected from procurement records, ERP reports, invoices, delivery notes, and shipping documents. Tier 1 DEFRA, GHG Protocol and Ecoinvent LCI v3.9.1 emission factors were applied in the calculations. The percentage of this question is found by the emission caused by the etilen glikol over total emission caused by SASA.

[Add row]

(7.25.1) Disclose sales of products that are greenhouse gases.

Carbon dioxide (CO2)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

SASA does not have/sell any product that is greenhouse gas.

Methane (CH4)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

SASA does not have/sell any product that is greenhouse gas.

Nitrous oxide (N₂O)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

SASA does not have/sell any product that is greenhouse gas.

Hydrofluorocarbons (HFC)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

SASA does not have/sell any product that is greenhouse gas.

Perfluorocarbons (PFC)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

SASA does not have/sell any product that is greenhouse gas.

Sulphur hexafluoride (SF₆)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

SASA does not have/sell any product that is greenhouse gas.

Nitrogen trifluoride (NF3)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

SASA does not have/sell any product that is greenhouse gas.

[Fixed row]

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

Select from:

More than 5% but less than or equal to 10%

(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: <input checked="" type="checkbox"/> Yes

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of purchased or acquired electricity	Select from: <input checked="" type="checkbox"/> Yes
Consumption of purchased or acquired heat	Select from: <input checked="" type="checkbox"/> No
Consumption of purchased or acquired steam	Select from: <input checked="" type="checkbox"/> No
Consumption of purchased or acquired cooling	Select from: <input checked="" type="checkbox"/> No
Generation of electricity, heat, steam, or cooling	Select from: <input checked="" type="checkbox"/> 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

1379588

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

1379588

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

564250762

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

564250762

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

6470

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

6470

Total energy consumption

(7.30.1.1) Heating value

Select from:

Unable to confirm heating value

(7.30.1.2) MWh from renewable sources

6470

(7.30.1.3) MWh from non-renewable sources

565630350

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

565636820

[Fixed row]

(7.30.3) Report your organization's energy consumption totals (excluding feedstocks) for chemical production activities in MWh.

Consumption of fuel (excluding feedstocks)

(7.30.3.1) Heating value

Select from:

LHV (lower heating value)

(7.30.3.2) MWh consumed from renewable sources inside chemical sector boundary

0

(7.30.3.3) MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)

1351797

(7.30.3.4) MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary

27791

(7.30.3.5) Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

1379588

Consumption of purchased or acquired electricity

(7.30.3.1) Heating value

Select from:

Unable to confirm heating value

(7.30.3.2) MWh consumed from renewable sources inside chemical sector boundary

0

(7.30.3.3) MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)

564250762

(7.30.3.4) MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary

0

(7.30.3.5) Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

564257232

Consumption of self-generated non-fuel renewable energy

(7.30.3.1) Heating value

Select from:

Unable to confirm heating value

(7.30.3.2) MWh consumed from renewable sources inside chemical sector boundary

6470

(7.30.3.5) Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

0

Total energy consumption

(7.30.3.1) Heating value

Select from:

Unable to confirm heating value

(7.30.3.2) MWh consumed from renewable sources inside chemical sector boundary

6470

(7.30.3.3) MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)

565602559

(7.30.3.4) MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary

27791

(7.30.3.5) Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

565630350

[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: <input checked="" type="checkbox"/> Yes
Consumption of fuel for the generation of heat	Select from: <input checked="" type="checkbox"/> Yes
Consumption of fuel for the generation of steam	Select from: <input checked="" type="checkbox"/> Yes
Consumption of fuel for the generation of cooling	Select from: <input checked="" type="checkbox"/> No
Consumption of fuel for co-generation or tri-generation	Select from: <input checked="" type="checkbox"/> No

[Fixed row]

(7.30.7) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

(7.30.7.1) Heating value

Select from:

LHV

(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

(7.30.7.8) Comment

There is no sustainable biomass usage.

Other biomass

(7.30.7.1) Heating value

Select from:

LHV

(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

(7.30.7.8) Comment

Normally, anaerobic wastewater treatment produces biogas which is used for steam production. However, no production was realized this year due to the commissioning of the new WWTP and the gradual closure of the old one.

Other renewable fuels (e.g. renewable hydrogen)

(7.30.7.1) Heating value

Select from:

LHV

(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

(7.30.7.8) Comment

There is no other renewable fuel usage.

Coal

(7.30.7.1) Heating value

Select from:

LHV

(7.30.7.2) Total fuel MWh consumed by the organization

592711

(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

592711

(7.30.7.8) Comment

Coal is used for steam generation.

Oil

(7.30.7.1) Heating value

Select from:

LHV

(7.30.7.2) Total fuel MWh consumed by the organization

7839

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

189

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

7650

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

0

(7.30.7.8) Comment

Diesel is used in generators for electricity generation, off-road and on-road vehicles, and also as a start-up for coal boiler, where it is converted into heat.

Gas

(7.30.7.1) Heating value

Select from:

LHV

(7.30.7.2) Total fuel MWh consumed by the organization

750020

(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

668639

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

81381

(7.30.7.8) Comment

Natural gas is used for heat and steam generation.

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

29018

(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

29018

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

0

(7.30.7.8) Comment

The heat generated from incineration of waste and the LPG consumption used for machinery are taken into consideration.

Total fuel

(7.30.7.1) Heating value

Select from:

LHV

(7.30.7.2) Total fuel MWh consumed by the organization

1379588

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

189

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

705307

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

674108

(7.30.7.8) Comment

Total fuel covers consumption of coal, diesel, LPG, natural gas and waste.

[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)

564250762

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

564250762

(7.30.9.3) Gross generation from renewable sources (MWh)

6470

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

6470

Heat

(7.30.9.1) Total Gross generation (MWh)

705307

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

705307

(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)

674108

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

674108

(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]

(7.30.11) Provide details on electricity, heat, steam, and cooling your organization has generated and consumed for chemical production activities.

Electricity

(7.30.11.1) Total gross generation inside chemicals sector boundary (MWh)

564250762

(7.30.11.2) Generation that is consumed inside chemicals sector boundary (MWh)

564250762

(7.30.11.3) Generation from renewable sources inside chemical sector boundary (MWh)

6470

(7.30.11.4) Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)

6470

Heat

(7.30.11.1) Total gross generation inside chemicals sector boundary (MWh)

705307

(7.30.11.2) Generation that is consumed inside chemicals sector boundary (MWh)

705307

(7.30.11.3) Generation from renewable sources inside chemical sector boundary (MWh)

0

(7.30.11.4) Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)

0

Steam

(7.30.11.1) Total gross generation inside chemicals sector boundary (MWh)

674108

(7.30.11.2) Generation that is consumed inside chemicals sector boundary (MWh)

674108

(7.30.11.3) Generation from renewable sources inside chemical sector boundary (MWh)

0

(7.30.11.4) Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)

0

Cooling

(7.30.11.1) Total gross generation inside chemicals sector boundary (MWh)

0

(7.30.11.2) Generation that is consumed inside chemicals sector boundary (MWh)

0

(7.30.11.3) Generation from renewable sources inside chemical sector boundary (MWh)

0

(7.30.11.4) Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (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

SASA did not supply any low-carbon electricity, heat, steam or cooling for the reporting year.

[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)

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

6470

(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)

1379588

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

565636820.00

[Fixed row]

(7.31) Does your organization consume fuels as feedstocks for chemical production activities?

Select from:

No

(7.39) Provide details on your organization's chemical products.

Row 1

(7.39.1) Output product

Select from:

Other, please specify :polyester chips

(7.39.2) Production (metric tons)

449466

(7.39.3) Capacity (metric tons)

1197000

(7.39.4) Direct emissions intensity (metric tons CO2e per metric ton of product)

0.2

(7.39.5) Electricity intensity (MWh per metric ton of product)

0.14

(7.39.6) Steam intensity (MWh per metric ton of product)

0.222

(7.39.7) Steam/ heat recovered (MWh per metric ton of product)

0

(7.39.8) Comment

In the calculations carried out for each product group, heat and steam usage for direct emissions are included. The amount of electricity and steam used was calculated for each product group and intensity per tonne was calculated. Last year, vapour calculations could not be performed because the relevant data could not be accessed, but this year, calculations were added with the improved data tracking system.

Row 2

(7.39.1) Output product

Select from:

Other, please specify :polyester fiber

(7.39.2) Production (metric tons)

375653

(7.39.3) Capacity (metric tons)

446628

(7.39.4) Direct emissions intensity (metric tons CO2e per metric ton of product)

0.34

(7.39.5) Electricity intensity (MWh per metric ton of product)

0.206

(7.39.6) Steam intensity (MWh per metric ton of product)

0.496

(7.39.7) Steam/ heat recovered (MWh per metric ton of product)

0

(7.39.8) Comment

In the calculations carried out for each product group, heat and steam usage for direct emissions are included. The amount of electricity and steam used was calculated for each product group and intensity per tonne was calculated. Last year, vapour calculations could not be performed because the relevant data could not be accessed, but this year, calculations were added with the improved data tracking system.

Row 3

(7.39.1) Output product

Select from:

Other, please specify :POY

(7.39.2) Production (metric tons)

324094

(7.39.3) Capacity (metric tons)

367500

(7.39.4) Direct emissions intensity (metric tons CO2e per metric ton of product)

0.139

(7.39.5) Electricity intensity (MWh per metric ton of product)

0.293

(7.39.6) Steam intensity (MWh per metric ton of product)

0.102

(7.39.7) Steam/ heat recovered (MWh per metric ton of product)

0

(7.39.8) Comment

In the calculations carried out for each product group, heat and steam usage for direct emissions are included. The amount of electricity and steam used was calculated for each product group and intensity per tonne was calculated. Last year, vapour calculations could not be performed because the relevant data could not be accessed, but this year, calculations were added with the improved data tracking system.

Row 4

(7.39.1) Output product

Select from:

Other, please specify :DMT

(7.39.2) Production (metric tons)

111407

(7.39.3) Capacity (metric tons)

280000

(7.39.4) Direct emissions intensity (metric tons CO2e per metric ton of product)

1.075

(7.39.5) Electricity intensity (MWh per metric ton of product)

0.546

(7.39.6) Steam intensity (MWh per metric ton of product)

1.536

(7.39.7) Steam/ heat recovered (MWh per metric ton of product)

0

(7.39.8) Comment

In the calculations carried out for each product group, heat and steam usage for direct emissions are included. The amount of electricity and steam used was calculated for each product group and intensity per tonne was calculated. Last year, vapour calculations could not be performed because the relevant data could not be accessed, but this year, calculations were added with the improved data tracking system.

Row 5

(7.39.1) Output product

Select from:

Other, please specify :Polyester Yarn

(7.39.2) Production (metric tons)

164200

(7.39.3) Capacity (metric tons)

218750

(7.39.4) Direct emissions intensity (metric tons CO2e per metric ton of product)

0

(7.39.5) Electricity intensity (MWh per metric ton of product)

1.598

(7.39.6) Steam intensity (MWh per metric ton of product)

0.0011

(7.39.7) Steam/ heat recovered (MWh per metric ton of product)

0

(7.39.8) Comment

In the calculations carried out for each product group, heat and steam usage for direct emissions are included. The amount of electricity and steam used was calculated for each product group and intensity per tonne was calculated. Last year, vapour calculations could not be performed because the relevant data could not be accessed, but this year, calculations were added with the improved data tracking system.

[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

0.000325

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

579090.3

(7.45.3) Metric denominator

Select from:

unit total revenue

(7.45.4) Metric denominator: Unit total

1781411269.23

(7.45.5) Scope 2 figure used

Select from:

Location-based

(7.45.6) % change from previous year

24.41

(7.45.7) Direction of change

Select from:

Decreased

(7.45.8) Reasons for change

Select all that apply

Change in renewable energy consumption

Other emissions reduction activities

(7.45.9) Please explain

SASA's Scope 1 and Scope 2 greenhouse gas emissions for 2023 decreased by 24% and 27%, respectively, compared to 2022. The reduction in Scope 1 and 2 greenhouse gas emissions is due to clean production practices within the facility. Moreover, SASA carries out various studies on energy efficiency to manage energy consumption effectively and sustainably as part of its sustainability strategy. This saves both cost and energy. To this end, total energy consumption decreased which resulted decrease in emissions.

Row 2

(7.45.1) Intensity figure

0.41

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

579090.3

(7.45.3) Metric denominator

Select from:

metric ton of product

(7.45.4) Metric denominator: Unit total

1424820

(7.45.5) Scope 2 figure used

Select from:

Location-based

(7.45.6) % change from previous year

16.32

(7.45.7) Direction of change

Select from:

Decreased

(7.45.8) Reasons for change

Select all that apply

- Change in renewable energy consumption
- Other emissions reduction activities

(7.45.9) Please explain

SASA's Scope 1 and Scope 2 greenhouse gas emissions for 2023 decreased by 24% and 27%, respectively, compared to 2022. The reduction in Scope 1 and 2 greenhouse gas emissions is due to clean production practices within the facility. Moreover, SASA carries out various studies on energy efficiency to manage energy consumption effectively and sustainably as part of its sustainability strategy. This saves both cost and energy. To this end, total energy consumption decreased which resulted decrease in emissions.

[Add row]

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

Row 1

(7.52.1) Description

Select from:

- Energy usage

(7.52.2) Metric value

4.93

(7.52.3) Metric numerator

Gigajoule (GJ)

(7.52.4) Metric denominator (intensity metric only)

tons production

(7.52.5) % change from previous year

1.65

(7.52.6) Direction of change

Select from:

Increased

(7.52.7) Please explain

The reason for the increase in energy intensity, which was 4.85 GJ/ton in 2022, is both the realization of more production in 2022 and the increase in the number of starts and shutdowns for a certain period of time due to the earthquake in 2023.

[Add row]

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

Select all that apply

Intensity target

(7.53.2) Provide details of your emissions intensity targets and progress made against those targets.

Row 1

(7.53.2.1) Target reference number

Select from:

Int 1

(7.53.2.2) Is this a science-based target?

Select from:

No, but we anticipate setting one in the next two years

(7.53.2.5) Date target was set

12/31/2018

(7.53.2.6) Target coverage

Select from:

Organization-wide

(7.53.2.7) Greenhouse gases covered by target

Select all that apply

Carbon dioxide (CO2)

(7.53.2.8) Scopes

Select all that apply

Scope 1

Scope 2

(7.53.2.9) Scope 2 accounting method

Select from:

Location-based

(7.53.2.11) Intensity metric

Select from:

Metric tons CO2e per unit of production

(7.53.2.12) End date of base year

12/31/2019

(7.53.2.13) Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity)

0.473

(7.53.2.14) Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity)

0.197

(7.53.2.33) Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)

0.6700000000

(7.53.2.34) % of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

100

(7.53.2.35) % of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

100

(7.53.2.54) % of total base year emissions in all selected Scopes covered by this intensity figure

100

(7.53.2.55) End date of target

12/30/2030

(7.53.2.56) Targeted reduction from base year (%)

69

(7.53.2.57) Intensity figure at end date of target for all selected Scopes (metric tons CO2e per unit of activity)

0.2077000000

(7.53.2.58) % change anticipated in absolute Scope 1+2 emissions

-50

(7.53.2.60) Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)

0.264

(7.53.2.61) Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)

0.141

(7.53.2.80) Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)

0.4050000000

(7.53.2.81) Land-related emissions covered by target

Select from:

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.2.82) % of target achieved relative to base year

57.32

(7.53.2.83) Target status in reporting year

Select from:

Underway

(7.53.2.85) Explain target coverage and identify any exclusions

2030 target includes Scope 1 and Scope 2 emissions for all SASA facilities.

(7.53.2.86) Target objective

Climate change poses significant environmental, social, and economic challenges for SASA Production Plants, as it does globally. SASA must navigate the ongoing energy crisis while striving to reduce emissions in line with its climate and energy strategy. With the upcoming implementation of the Turkish Emissions Trading System (ETS) and the expected introduction of the Carbon Border Adjustment Mechanism (CBAM) in the plastics sector, SASA needs to proactively adapt to these regulatory changes.

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

SASA has a Strategic Carbon Roadmap and aims to reduce its carbon intensity by 69% in 2030 compared to the base year 2019. To achieve this goal, the following practices are planned: • Realizing 16.4 MWp of rooftop solar investments and 670 MWh of LED investments by 2023, • Obtaining 97,655 MWh I-REC certificate in 2025, • Realizing a total of 200 MWp of landtype SPP investments as of 2026 and 2027, and 4.5 MWp of biomass investments starting from 2026.

(7.53.2.88) 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

Targets to increase or maintain low-carbon energy consumption or production

(7.54.1) Provide details of your targets to increase or maintain low-carbon energy consumption or production.

Row 1

(7.54.1.1) Target reference number

Select from:

Low 1

(7.54.1.2) Date target was set

12/31/2020

(7.54.1.3) Target coverage

Select from:

Organization-wide

(7.54.1.4) Target type: energy carrier

Select from:

Electricity

(7.54.1.5) Target type: activity

Select from:

Consumption

(7.54.1.6) Target type: energy source

Select from:

Renewable energy source(s) only

(7.54.1.7) End date of base year

12/31/2021

(7.54.1.8) Consumption or production of selected energy carrier in base year (MWh)

612401.9

(7.54.1.9) % share of low-carbon or renewable energy in base year

0

(7.54.1.10) End date of target

12/31/2023

(7.54.1.11) % share of low-carbon or renewable energy at end date of target

2.5

(7.54.1.12) % share of low-carbon or renewable energy in reporting year

(7.54.1.13) % of target achieved relative to base year

44.00

(7.54.1.14) Target status in reporting year

Select from:

 Expired**(7.54.1.16) Is this target part of an emissions target?**

Yes, it is aimed to reduce the carbon intensity to 0.21 tCO₂e/tons production in 2030, which means 69% reduction compared to 2019. This can be possible renewable energy use.

(7.54.1.17) Is this target part of an overarching initiative?

Select all that apply

 No, it's not part of an overarching initiative**(7.54.1.19) Explain target coverage and identify any exclusions**

Target covers electricity consumption from renewable energy of all organization. Since rooftop SPP trials were postponed due to the earthquake, the 2023 target of 2.5% could only be realized as 1.1%.

(7.54.1.20) Target objective

Increasing the renewable energy share in total electricity use compared to the base year 2021 (2,204,647 GJ) to reduce emissions from electricity consumption: • 2.5% by 2023, • 4% by 2024, • 50% by 2030. SASA aims to increase rooftop and offroad solar energy investments and use biomass energy as an alternative fuel. Since rooftop SPP trials were postponed due to the earthquake, the 2023 target of 2.5% could only be realized as 1.1%.

Row 5**(7.54.1.1) Target reference number**

Select from:

Low 2

(7.54.1.2) Date target was set

12/31/2020

(7.54.1.3) Target coverage

Select from:

Organization-wide

(7.54.1.4) Target type: energy carrier

Select from:

Electricity

(7.54.1.5) Target type: activity

Select from:

Consumption

(7.54.1.6) Target type: energy source

Select from:

Renewable energy source(s) only

(7.54.1.7) End date of base year

12/31/2021

(7.54.1.8) Consumption or production of selected energy carrier in base year (MWh)

612401.9

(7.54.1.9) % share of low-carbon or renewable energy in base year

0

(7.54.1.10) End date of target

12/31/2024

(7.54.1.11) % share of low-carbon or renewable energy at end date of target

4

(7.54.1.12) % share of low-carbon or renewable energy in reporting year

1.1

(7.54.1.13) % of target achieved relative to base year

27.50

(7.54.1.14) Target status in reporting year

Select from:

Underway

(7.54.1.16) Is this target part of an emissions target?

Yes, it is aimed to reduce the carbon intensity to 0.21 tCO₂e/tons production in 2030, which means 69% reduction compared to 2019. This can be possible renewable energy use.

(7.54.1.17) Is this target part of an overarching initiative?

Select all that apply

No, it's not part of an overarching initiative

(7.54.1.19) Explain target coverage and identify any exclusions

Target covers electricity consumption from renewable energy of all organization.

(7.54.1.20) Target objective

Increasing the renewable energy share in total electricity use compared to the base year 2021 (2,204,647 GJ) to reduce emissions from electricity consumption: • 2.5% by 2023, • 4% by 2024, • 50% by 2030. SASA aims to increase rooftop and offroad solar energy investments and use biomass energy as an alternative fuel.

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

The 16.4 MWp of rooftop solar investment, which had been expected to be fully operational in 2023 but was delayed by the earthquake, will be fully operational by 2024.

Row 6

(7.54.1.1) Target reference number

Select from:

Low 3

(7.54.1.2) Date target was set

12/31/2020

(7.54.1.3) Target coverage

Select from:

Organization-wide

(7.54.1.4) Target type: energy carrier

Select from:

Electricity

(7.54.1.5) Target type: activity

Select from:

Consumption

(7.54.1.6) Target type: energy source

Select from:

Renewable energy source(s) only

(7.54.1.7) End date of base year

12/31/2021

(7.54.1.8) Consumption or production of selected energy carrier in base year (MWh)

612401.9

(7.54.1.9) % share of low-carbon or renewable energy in base year

0

(7.54.1.10) End date of target

12/31/2030

(7.54.1.11) % share of low-carbon or renewable energy at end date of target

50

(7.54.1.12) % share of low-carbon or renewable energy in reporting year

1.1

(7.54.1.13) % of target achieved relative to base year

2.20

(7.54.1.14) Target status in reporting year

Select from:

Underway

(7.54.1.16) Is this target part of an emissions target?

Yes, it is aimed to reduce the carbon intensity to 0.21 tCO₂e/tons production in 2030, which means 69% reduction compared to 2019. This can be possible renewable energy use.

(7.54.1.17) Is this target part of an overarching initiative?

Select all that apply

No, it's not part of an overarching initiative

(7.54.1.19) Explain target coverage and identify any exclusions

Target covers electricity consumption from renewable energy of all organization.

(7.54.1.20) Target objective

Increasing the renewable energy share in total electricity use compared to the base year 2021 (2,204,647 GJ) to reduce emissions from electricity consumption: • 2.5% by 2023, • 4% by 2024, • 50% by 2030. SASA aims to increase rooftop and offroad solar energy investments and use biomass energy as an alternative fuel.

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

Realizing 16.4 MWp of rooftop solar investments by 2023 and realizing a total of 200 MWp of landtype SPP investments as of 2026 and 2027, and 4.5 MWp of biomass investments starting from 2026.

Row 7

(7.54.1.1) Target reference number

Select from:

Low 4

(7.54.1.2) Date target was set

12/31/2020

(7.54.1.3) Target coverage

Select from:

Organization-wide

(7.54.1.4) Target type: energy carrier

Select from:

Electricity

(7.54.1.5) Target type: activity

Select from:

Consumption

(7.54.1.6) Target type: energy source

Select from:

Low-carbon energy source(s)

(7.54.1.7) End date of base year

12/31/2021

(7.54.1.8) Consumption or production of selected energy carrier in base year (MWh)

612401.9

(7.54.1.9) % share of low-carbon or renewable energy in base year

0.25

(7.54.1.10) End date of target

12/31/2025

(7.54.1.11) % share of low-carbon or renewable energy at end date of target

15

(7.54.1.12) % share of low-carbon or renewable energy in reporting year

3.74

(7.54.1.13) % of target achieved relative to base year

23.66

(7.54.1.14) Target status in reporting year

Select from:

Underway

(7.54.1.16) Is this target part of an emissions target?

Yes, it is aimed to reduce the carbon intensity to 0.21 tCO₂e/tons production in 2030, which means 69% reduction compared to 2019. This can be possible with energy savings.

(7.54.1.17) Is this target part of an overarching initiative?

Select all that apply

No, it's not part of an overarching initiative

(7.54.1.19) Explain target coverage and identify any exclusions

Target covers electricity saving for all organization. With 2021 as the base year, we have a cumulative reduction target of 91100 MWh, which represents a saving of 15%. Therefore, the content of 2023 is a cumulative information including the increase in 2021 and 2022 (2021: 1488.6 MWh, 2022: 13071.7 MWh, 2023: 8359.2). The energy efficiency studies are discussed.

(7.54.1.20) Target objective

Securing the savings in energy resource consumption by 2025: • 91,100,000 kWh/year for electricity.

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

Until 2025 there are plans to save 466,560 kWh of electricity and increase lighting fixture life by 85% by improving energy efficiency to reduce the energy consumed for lighting purposes. The PTA Plant will use off-gas to generate the electricity it needs. The wastewater treatment plant will be supplied with electricity from the PTA Plant and is expected to save 1,200-2,200 MWh of electricity annually by 2025.

Row 8

(7.54.1.1) Target reference number

Select from:

Low 5

(7.54.1.2) Date target was set

12/31/2020

(7.54.1.3) Target coverage

Select from:

Organization-wide

(7.54.1.4) Target type: energy carrier

Select from:

Steam

(7.54.1.5) Target type: activity

Select from:

Production

(7.54.1.6) Target type: energy source

Select from:

Renewable energy source(s) only

(7.54.1.7) End date of base year

12/31/2021

(7.54.1.8) Consumption or production of selected energy carrier in base year (MWh)

3919.67

(7.54.1.9) % share of low-carbon or renewable energy in base year

8.12

(7.54.1.10) End date of target

12/31/2025

(7.54.1.11) % share of low-carbon or renewable energy at end date of target

100

(7.54.1.12) % share of low-carbon or renewable energy in reporting year

0

(7.54.1.13) % of target achieved relative to base year

-8.84

(7.54.1.14) Target status in reporting year

Select from:

Underway

(7.54.1.16) Is this target part of an emissions target?

Yes, it is aimed to reduce the carbon intensity to 0.21 tCO₂e/tons production in 2030, which means 69% reduction compared to 2019. This can be possible renewable energy use.

(7.54.1.17) Is this target part of an overarching initiative?

Select all that apply

No, it's not part of an overarching initiative

(7.54.1.19) Explain target coverage and identify any exclusions

Target covers steam production from biogas in WWTP for all organization.

(7.54.1.20) Target objective

In 2025, the amount of steam produced from biogas will be 70,000 tonnes/year (48,258.89 MWh/year).

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

Partial commissioning of the advanced biological wastewater treatment plant, the construction of which started with the PTA plant, has started. For this reason, biogas production at the old wastewater treatment plant was stopped in 2023. With the closure of the DMT plant, it is aimed to produce 70,000 tonnes/year of steam from the biogas produced in the new wastewater treatment plant for 2025. The biogas production expected to be produced in the Anaerobic Wastewater Treatment section is estimated to be approximately 28,900 Nm³/day.

[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	0	`Numeric input
To be implemented	5	482901.88
Implementation commenced	1	11950
Implemented	20	28531.41
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 buildings

Lighting

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

10.62

(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)

2351

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

288

(7.55.2.7) Payback period

Select from:

1-3 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

21-30 years

(7.55.2.9) Comment

Energy Efficiency Project for Lighting Groups

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)

1760.37

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

Select all that apply

Scope 1

(7.55.2.4) Voluntary/Mandatory

Select from:

Voluntary

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

212166

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

1923

(7.55.2.7) Payback period

Select from:

<1 year

(7.55.2.8) Estimated lifetime of the initiative

Select from:

16-20 years

(7.55.2.9) Comment

Cp7 Fiber Furnace Operation Design Change

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)

27.21

(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)

9621

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

800

(7.55.2.7) Payback period

Select from:

<1 year

(7.55.2.8) Estimated lifetime of the initiative

Select from:

21-30 years

(7.55.2.9) Comment

Cp8 Fiber Plant Lighting Project

Row 4

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in buildings

Motors and drives

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

1294.23

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

Select all that apply

Scope 1

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)

2936

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

3398

(7.55.2.7) Payback period

Select from:

11-15 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

21-30 years

(7.55.2.9) Comment

Cp 8 Furnace Fans Energy Savings

Row 5

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in buildings

Heating, Ventilation and Air Conditioning (HVAC)

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

283.38

(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)

67557

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

192

(7.55.2.7) Payback period

Select from:

<1 year

(7.55.2.8) Estimated lifetime of the initiative

Select from:

21-30 years

(7.55.2.9) Comment

Reduction of Energy Consumption from Cooling in Electrical Rooms

Row 6

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in buildings

Motors and drives

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

100.36

(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)

23926

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

14038

(7.55.2.7) Payback period

Select from:

4-10 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

11-15 years

(7.55.2.9) Comment

Reduction of Energy Consumption of Filament 3 Furnace Fan Motors

Row 7

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in buildings

Heating, Ventilation and Air Conditioning (HVAC)

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

120.72

(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)

28781

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

692

(7.55.2.7) Payback period

Select from:

<1 year

(7.55.2.8) Estimated lifetime of the initiative

Select from:

21-30 years

(7.55.2.9) Comment

HVAC Chiller and Air Conditioning System Energy Optimization

Row 8

(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)

214.64

(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)

75902

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

0

(7.55.2.7) Payback period

Select from:

- No payback

(7.55.2.8) Estimated lifetime of the initiative

Select from:

Ongoing

(7.55.2.9) Comment

Closure of Excess Package Furnaces

Row 9

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in buildings

Motors and drives

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

110.27

(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)

26289

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

1265

(7.55.2.7) Payback period

Select from:

<1 year

(7.55.2.8) Estimated lifetime of the initiative

Select from:

11-15 years

(7.55.2.9) Comment

Reducing the Energy Consumption of the Spray EG Pump (PE) System

Row 10

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in buildings

Motors and drives

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

232.59

(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)

55449

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

2508

(7.55.2.7) Payback period

Select from:

<1 year

(7.55.2.8) Estimated lifetime of the initiative

Select from:

11-15 years

(7.55.2.9) Comment

Reducing Energy Consumption of the Stripper Offgas Blower System

Row 11

(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)

59.1

(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)

20900

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

0

(7.55.2.7) Payback period

Select from:

No payback

(7.55.2.8) Estimated lifetime of the initiative

Select from:

Ongoing

(7.55.2.9) Comment

Shutting Down of Production Hood Fans

Row 12

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in production processes

Reuse of steam

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

632.57

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

Select all that apply

Scope 1

(7.55.2.4) Voluntary/Mandatory

Select from:

Voluntary

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

49059

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

19231

(7.55.2.7) Payback period

Select from:

4-10 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

16-20 years

(7.55.2.9) Comment

Row 13

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in production processes

- Reuse of steam

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

1378.23

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

Select all that apply

- Scope 1

(7.55.2.4) Voluntary/Mandatory

Select from:

- Voluntary

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

106888

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

5769

(7.55.2.7) Payback period

Select from:

- <1 year

(7.55.2.8) Estimated lifetime of the initiative

Select from:

16-20 years

(7.55.2.9) Comment

Reducing CP1-2 Steam Consumption by 10% per Ton (Ton Steam)

Row 14

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in production processes

Reuse of steam

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

9999.69

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

Select all that apply

Scope 1

(7.55.2.4) Voluntary/Mandatory

Select from:

Voluntary

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

775519

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

(7.55.2.7) Payback period

Select from:

1-3 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

16-20 years

(7.55.2.9) Comment

Reducing Steam Consumption of Filament 3 Plant from 1.4 Ton/Ton to 1 Ton/Ton

Row 15**(7.55.2.1) Initiative category & Initiative type**

Energy efficiency in production processes

Reuse of steam

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

4604.01

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

Select all that apply

Scope 1

(7.55.2.4) Voluntary/Mandatory

Select from:

Voluntary

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

357061

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

57692

(7.55.2.7) Payback period

Select from:

1-3 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

16-20 years

(7.55.2.9) Comment

Reducing CP8 Mono Steam Consumption to 0.65 Ton/Ton

Row 16

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in production processes

Reuse of steam

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

875.19

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

Select all that apply

Scope 1

(7.55.2.4) Voluntary/Mandatory

Select from:

Voluntary

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

50042

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

0

(7.55.2.7) Payback period

Select from:

No payback

(7.55.2.8) Estimated lifetime of the initiative

Select from:

Ongoing

(7.55.2.9) Comment

Reducing CP7 Polymer Steam Consumption

Row 17

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in buildings

Lighting

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

105.8

(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)

29359

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

769

(7.55.2.7) Payback period

Select from:

<1 year

(7.55.2.8) Estimated lifetime of the initiative

Select from:

21-30 years

(7.55.2.9) Comment

Reducing In-Plant Lighting Costs

Row 18

(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)

4906.21

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

Select all that apply

Scope 1

(7.55.2.4) Voluntary/Mandatory

Select from:

Voluntary

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

1144067

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

17023

(7.55.2.7) Payback period

Select from:

<1 year

(7.55.2.8) Estimated lifetime of the initiative

Select from:

11-15 years

(7.55.2.9) Comment

Reducing Natural Gas Usage through Engineering Design Changes

Row 19

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in production processes

Motors and drives

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

181.24

(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)

26573

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

35900

(7.55.2.7) Payback period

Select from:

16-20 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

6-10 years

(7.55.2.9) Comment

Replacing Boiler Feed Water Pumps with More Efficient Pumps

Row 20

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in buildings

Heating, Ventilation and Air Conditioning (HVAC)

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

1639.7

(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)

254085

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

369750

(7.55.2.7) Payback period

Select from:

16-20 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

6-10 years

(7.55.2.9) Comment

Replacing Cooling Tower Blades with Next-Generation Blades (in Cooling Towers 9, 10, and DTY)
[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:

- Compliance with regulatory requirements/standards

(7.55.3.2) Comment

The ETS will be in place in Turkey after 2024. As SASA's capacity is more than 20 MW, it will have to comply with the ETS requirements. In addition, SASA has already started initiatives to reduce carbon emissions as it expects the Border Carbon Regulation Mechanism to be on Turkey's agenda after 2026.

Row 3

(7.55.3.1) Method

Select from:

- Dedicated budget for energy efficiency

(7.55.3.2) Comment

Energy efficiency is a hot topic at SASA. Energy efficiency projects are continuously monitored and new projects are developed both by working groups and as part of the ISO 50001 energy management system. In 2023, 11 projects have been developed and an increasing budget is allocated each year for the development of these projects. In addition to energy efficiency, SASA allocates a significant budget to projects such as Solar Rooftop Project, Coal to Biomass Switch, Economiser application and LED investments to increase the share of renewable energy in the future.

Row 4

(7.55.3.1) Method

Select from:

- Financial optimization calculations

(7.55.3.2) Comment

The financial outlay required for energy will be reduced as a consequence of the avoidance of emissions and the implementation of optimal decision-making processes in relation to the selection of energy sources for specific projects. This will have an impact on the financial results and is a driver in investment projects.

Row 5

(7.55.3.1) Method

Select from:

- Dedicated budget for low-carbon product R&D

(7.55.3.2) Comment

SASA has demonstrated a consistent commitment to increasing the budget allocated to the R&D centre on an annual basis. The R&D centre is engaged in research activities pertaining to the development of sustainable product production methodologies, with notable advancements being made in the reduction of emissions associated with these products.

[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)

Hydrogen

- Other, please specify :Low carbon production

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

In 2023, 13 sustainable product projects were implemented. Within these projects, 5 sustainable products contributed to sales. These products were redesigned using PTA instead of DMT, are more environmentally friendly and generate less emissions and waste during production. SASA was allocated for the development of new "friendly" products that are especially sustainable and sensitive to the environment and people in line with new local and international regulations, and efforts were continued to commercialise and offer many special products in the special polymers class to SASA's customers during the year.

(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

7.2

[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

Real time instantaneous in-place flowmeters are used for the measurement.

(9.2.4) Please explain

All of the water used in SASA facilities comes from groundwater wells. The wells are approved by the Turkish State Hydraulic Works (DSI). Water withdrawals are measured via real-time monitoring. Since 2019, SASA has been working to reduce the consumption of water resources by recording the total amount of water withdrawn from underground. The total water withdrawal is one of the environmental performance indicators reported in SASA's sustainability report. SASA also published the Water Footprint Inventory Report for 2023 in compliance with ISO 14046.

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

Real time instantaneous in-place flowmeters are used for the measurement.

(9.2.4) Please explain

All of the water used in SASA facilities comes from groundwater wells. The wells are approved by the Turkish State Hydraulic Works (DSI). Water withdrawals are measured via real-time monitoring. Since 2019, SASA has been working to reduce the consumption of water resources by recording the total amount of water withdrawn from underground. The total water withdrawal is one of the environmental performance indicators reported in SASA's sustainability report. SASA also published the Water Footprint Inventory Report for 2023 in compliance with ISO 14046.

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

To monitor the water withdrawals quality, daily samples are taken and these samples are tested weekly.

(9.2.4) Please explain

Water is utilized for a variety of functions in SASA, including raw water, permutit water, demineralized water, cooling water, drinking water, etc. Water samples are taken daily and water quality analyses are performed on a weekly basis, as mentioned in the method part. The water drawn from the well primarily is subjected to the following analysis; pH, total hardness, m-alkalinity, calcium hardness, conductivity, organic matter, chloride, and total iron.

Water discharges – 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

Real time instantaneous in-place flowmeters are used for the measurement.

(9.2.4) Please explain

The total volume of the discharged water is constantly monitored and measured. Monitoring and measurement of the discharged water volume are essential to assess the improvement of SASA on the environmental performance. In 2023, total amount of the water discharge of SASA has decreased by 20,7% according to the amount of water discharge in 2022.

Water discharges – volumes by destination

(9.2.1) % of sites/facilities/operations

Select from:

100%

(9.2.2) Frequency of measurement

Select from:

Continuously

(9.2.3) Method of measurement

Real time instantaneous in-place flowmeters are used for the measurement. The treated water (%100) is discharged to the drainage channel, which meets surface water, according to the discharge permit given by the authorities.

(9.2.4) Please explain

All industrial wastewater from SASA's manufacturing facilities and all domestic wastewater from on-site staff usage are collected in a shared sewage system and delivered to an industrial wastewater treatment plant (operated by SASA) within the SASA's boundaries. The treated wastewater is discharged to a neighboring water stream known as the TD-07 DSI drainage channel of the State Hydraulic Works, which eventually meets the Seyhan River about 35 kilometers from the discharge destination. This drainage pipe also gathers the treated effluent from the nearby industry. The government tests the discharged water and provides all discharge permits.

Water discharges – volumes by treatment method

(9.2.1) % of sites/facilities/operations

Select from:

100%

(9.2.2) Frequency of measurement

Select from:

Continuously

(9.2.3) Method of measurement

Real time instantaneous in-place flowmeters are used for the measurement. In SASA, all generated wastewaters are collected and treated together. All the wastewater is subjected to same treatment methods. In addition to the inspections conducted by the Republic of Türkiye Ministry of Environment, Urbanization and Climate Change, sample analyses are carried out daily in the environmental laboratory of the plant, thus monitoring the plant performance continuously.

(9.2.4) Please explain

Industrial wastewater, process wash water and domestic wastewater resulting from SASA's production processes are treated at the in-house Wastewater Treatment Plant. Physical, biological (anaerobic and aerobic), chemical and advanced treatment processes are applied in this plant. SASA is constantly working to ensure that its treatment methods meet national and international discharge restrictions. These are the standards (Water Pollution Control Regulation, IFC standards/EHS Guidelines (EHS Guidelines for Large Volume Petroleum-based Organic Chemicals Manufacturing, EHS Guidelines for Petroleum-based Polymers Manufacturing, EHS Guidelines for Textile Manufacturing). In SASA, wastewater is generated by operations such as human sanitary usage, reverse osmosis operations, and cooling towers, among other things. Because DMT wastewater contains a significant level of pollutants, it requires anaerobic treatment. Other wastewaters are collected from various processes and treated aerobically.

Water discharge quality – by standard effluent parameters

(9.2.1) % of sites/facilities/operations

Select from:

100%

(9.2.2) Frequency of measurement

Select from:

Continuously

(9.2.3) Method of measurement

Key parameters are monitored and measured continuously. Some tests are carried out quarterly. The wastewater is treated and discharged in accordance with the discharge limits under the Water Pollution Control Regulation and IFC Environmental Performance Standards. Certain parameters of the discharged effluent (suspended solids, conductivity, dissolved oxygen, pH and chemical oxygen demand) are monitored online by the Ministry of Environment through the Continuous Wastewater Monitoring System.

(9.2.4) Please explain

SASA maintains constant control over its wastewater. The following metrics are tracked and submitted to the online program of the Ministry: TSS, COD, DO, Conductivity, pH, and Temperature. Furthermore, accredited institutions conduct the following analyses quarterly: COD, Ammonium Nitrogen, Free Chlorine, Total Chromium, Sulfur, Sulfite, Oil grease, ZDF, pH, Color, Hydrocarbons, DO, TSS, Temperature, Conductivity are all tested in accordance with Tables 10.1 and 14.12 of the Water Pollution Control Regulation. SASA adheres to the criteria of the IFC standards/EHS Guidelines (EHS Guidelines for Large Volume Petroleum-based Organic Chemicals Manufacturing, EHS Guidelines for Petroleum-based Polymers Manufacturing, and EHS Guidelines for Textile Manufacturing). Wastewater from RO and cooling towers are analyzed by accredited laboratories according to WPC (Table 20.1-7).

Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)

(9.2.1) % of sites/facilities/operations

Select from:

100%

(9.2.2) Frequency of measurement

Select from:

Continuously

(9.2.3) Method of measurement

Effluent characteristics are continuously measured. In addition, SASA works with accredited institutions (laboratories) for further analysis for quarterly measurements.

(9.2.4) Please explain

SASA is committed to not exceeding local and international discharge requirements. The pollution load parameters of SASA's wastewater treatment plant effluent are COD, ammonium as nitrogen (NH₄-N), phosphate (PO₄-P), sulfur, sulfite, total chromium.

Water discharge quality – temperature

(9.2.1) % of sites/facilities/operations

Select from:

100%

(9.2.2) Frequency of measurement

Select from:

Continuously

(9.2.3) Method of measurement

In place temperature sensors (thermometers) are used for the measurement.

(9.2.4) Please explain

Sensors are used to measure the wastewater plant effluent temperature parameter. All wastewater temperature is measured instantaneously and submitted to the online program of the Ministry.

Water consumption – total volume

(9.2.1) % of sites/facilities/operations

Select from:

100%

(9.2.2) Frequency of measurement

Select from:

Continuously

(9.2.3) Method of measurement

The water withdrawals and discharges are monitored through in place flowmeters continuously. Therefore, water consumption can be measured closely through balance and reported.

(9.2.4) Please explain

At all SASA facilities, water consumption is continuously monitored by volume from water withdrawals volumes minus water discharges. Consumed water is used for human use, garden irrigation, evaporated from cooling towers, cleaning purposes and etc. Since 2019, SASA has been working to reduce the consumption of water. The total water consumption is one of the environmental performance indicators reported in SASA's sustainability report. SASA also published the Water Footprint Inventory Report for 2023 in compliance with ISO 14046.

Water recycled/reused

(9.2.1) % of sites/facilities/operations

Select from:

Not relevant

(9.2.4) Please explain

Currently, water recycle/reuse is not applicable in SASA. However, the new constructed wastewater plant will start operating in 2024. The wastewater generated from PTA production will be treated anaerobically in that plant with a biobed expanded granular sludge bed and then subjected to biological treatment in the new wastewater treatment plants using all the best and advanced treatment technologies together with all wastewater from existing and upcoming polyester plants as part of new investments. In the wastewater recovery unit, where wastewater treated in accordance with local regulatory limits and IFC standards will be re-treated using advanced treatment technologies, 55-60% of the treated wastewater will be recovered and reused in cooling towers. Furthermore, by using Koch (INVISTA) licensed P8 technology as the production technology in the PTA Production Plant, the Company expects to generate 75% less wastewater compared to conventional PTA production technologies.

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:

Quarterly

(9.2.3) Method of measurement

Tests are carried out for checking the water quality and ensuring hygiene.

(9.2.4) Please explain

The quality of water used for humanitarian purposes at SASA facilities is constantly monitored. Monitoring is carried out in accordance with Legionnaires' Disease Control Procedure Regulation and Water Intended for Human Consumption Regulation. Samples for Legionella bacteria are tested at the facility with samples taken twice a year in showers, cooling towers, cooling waters, raw water, eye and body showers, chiller waters. For drinking and using water yearly analysis are carried out by accredited laboratories for Coliform, E.coli, Entrococcal (microbiological analysis) bacteria. In chemical analyzes of drinking and utility water; nitrite, iron, aluminum, ammonium, conductivity parameters and physical odor, color, turbidity parameters are followed. Chlorination is done within limits for the purpose of disinfection for potable and using 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)

4332.2

(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:

Other, please specify :Reduction in production capacities of old and inefficient processes & studies conducted for efficiency increase

(9.2.2.4) Five-year forecast

Select from:

Much higher

(9.2.2.5) Primary reason for forecast

Select from:

Facility expansion

(9.2.2.6) Please explain

The use of water has a critical place in the petrochemical industry. In addition, SASA is currently working on the construction of a new production facility. PTA production will be performed in the new facility and due to the nature of the process, the water consumption will increase. Therefore, water withdrawal volume will also increase according to the previous years. SASA expects an increase in the forecasted withdrawal volumes. However, water related projects will continue to manage this increase. As mentioned before, new constructed wastewater treatment plant will start operation in the following year and treatment efficiency will increase. 55-60% of the treated water will be used in the cooling towers to decrease the water withdrawal and consumption. Also, water efficiency studies will continue for the further improvement. When the water withdrawal for the PTA facility is excluded from the total, the water withdrawal for the remaining production activities is expected to be lower. However, the whole SASA facility is considered in system boundary. Therefore, in overall, the water withdrawal is forecasted to be much higher. In this reporting year, there is a decrease in the withdrawal volumes due to reduction in production capacities of old and inefficient processes and studies conducted for

efficiency increase. Finally, SASA will produce one of its own raw material with the PTA process, this will decrease the dependencies on the suppliers and SASA will control its own water efficiency more easily. The definition for change: Much higher: 20%, Higher: 10%, About the same: -10%, Much lower: -20%

Total discharges

(9.2.2.1) Volume (megaliters/year)

2549.9

(9.2.2.2) Comparison with previous reporting year

Select from:

Much 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:

Much higher

(9.2.2.5) Primary reason for forecast

Select from:

Facility expansion

(9.2.2.6) Please explain

The use of water has a critical place in the petrochemical industry. In addition, SASA is currently working on the construction of a new production facility. PTA production will be performed in the new facility and due to the nature of the process, the water consumption will increase. Therefore, water discharge volume will also increase according to the previous years. SASA expects an increase in the forecasted discharge volumes. However, water related projects will continue to manage this increase. As mentioned before, new constructed wastewater treatment plant will start operation in the following year and treatment efficiency will increase. 55-60% of the treated water will be used in the cooling towers to decrease the water withdrawal and consumption. Also, water efficiency studies will continue for the

further improvement. The whole SASA facility is considered in system boundary. Therefore, in overall, the water discharge is forecasted to be much higher. In this reporting year, there is a decrease in the discharge volumes due to increase in efficiency. The definition for change: Much higher: 20%, Higher: 10%, About the same: -10%, Much lower: -20%

Total consumption

(9.2.2.1) Volume (megaliters/year)

1782.3

(9.2.2.2) Comparison with previous reporting year

Select from:

About the same

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

Other, please specify :Although, the water consumption is about the same comparing to the previous year. The water intensity in 2023 was reduced.

(9.2.2.4) Five-year forecast

Select from:

Much higher

(9.2.2.5) Primary reason for forecast

Select from:

Facility expansion

(9.2.2.6) Please explain

The use of water has a critical place in the petrochemical industry. In addition, SASA is currently working on the construction of a new production facility. PTA production will be performed in the new facility and due to the nature of the process, the water consumption will increase. SASA expects an increase in the forecasted water consumption volumes. However, water related projects will continue to manage this increase. As mentioned before, new constructed wastewater treatment plant will start operation in the following year and treatment efficiency will increase. 55-60% of the treated water will be used in the cooling towers to decrease the

water withdrawal and consumption. Also, water efficiency studies will continue for the further improvement. When the water consumption of PTA facility is excluded from the total, the water consumption for the remaining production activities is expected to be lower. However, the whole SASA facility is considered in system boundary. Therefore, in overall, the water consumption is forecasted to be much higher. Finally, SASA will produce one of its own raw material with the PTA process, this will decrease the dependencies on the suppliers and SASA will control its own water efficiency more easily. The definition for change: Much higher: 20%, Higher: 10%, About the same: -10%, Much lower: -20%
[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)

4332.2

(9.2.4.3) Comparison with previous reporting year

Select from:

Lower

(9.2.4.4) Primary reason for comparison with previous reporting year

Select from:

Other, please specify :Reduction in production capacities of old and inefficient processes & studies conducted for efficiency increase

(9.2.4.5) Five-year forecast

Select from:

Much higher

(9.2.4.6) Primary reason for forecast

Select from:

- Facility expansion

(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
- WWF Water Risk Filter

(9.2.4.9) Please explain

WRI Aqueduct “Global Water Risk Mapping Atlas” was used to define the baseline water stress and baseline water depletion of the region. WWF Water Risk filter was used to determine Baseline water stress and water scarcity data. Adana region is considered as in extreme water stress. According to Hydrogeological Report, water use permits were given by the local authorities. The amount of water allowed for daily use is 30,000 cubic meters. The limitation values are not exceeded by SASA. It is stated in the documents of Ministry of Agriculture and Forestry of Turkiye, water stress begins when the annual per capita amount of water falls below 1,700 cubic meters, and water poverty occurs when this amount falls below 1,000 cubic meters. Turkiye is not a water-rich country and it is one of the countries experiencing water stress with an annual amount of 1,323 cubic meters of water per capita. SASA is already located in a water scarce region in Turkiye and in order to reduce the percentages, SASA would have to supply water from outside the region. However, it is not feasible for SASA’s operations. SASA measures the water levels and monitors each well every month. Also, SASA report these water levels. Wells of SASA are renewable in nature. The use of water has a critical place in the petrochemical industry. In addition, SASA is currently working on the construction of a new production facility. PTA production will be performed in the new facility and due to the nature of the process, the water consumption will increase. Therefore, water withdrawal volume will also increase according to the previous years. However, water related projects will continue to manage this increase. As mentioned before, new constructed wastewater treatment plant will start operation in the following year and treatment efficiency will increase. 55-60% of the treated water will be used in the cooling towers to decrease the water withdrawal and consumption. Also, water efficiency studies will continue for the further improvement. SASA has prepared a Hydrogeological Assessment Report for the new PTA facility and water withdrawal conditions. In the modeling in the report, the groundwater level is determined 25 meters below the surface at the end of 15 years depending on the recharge-discharge relationship of the aquifers. The definition for change: Much higher: 20%, Higher: 10%, About the same: -10%, Much lower: -20%

[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

SASA's water withdrawal is from groundwater totally. In the operations and facilities, SASA does not use fresh surface water, including rainwater, water from wetlands, rivers and lakes.

Brackish surface water/Seawater

(9.2.7.1) Relevance

Select from:

Not relevant

(9.2.7.5) Please explain

SASA's water withdrawal is from groundwater totally. In the operations and facilities, SASA does not use brackish surface water/sea water.

Groundwater – renewable

(9.2.7.1) Relevance

Select from:

Relevant

(9.2.7.2) Volume (megaliters/year)

4332.2

(9.2.7.3) Comparison with previous reporting year

Select from:

Lower

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

Other, please specify :Reduction in production capacities of old and inefficient processes & studies conducted for efficiency increase

(9.2.7.5) Please explain

All water supply is provided from the groundwater (renewable). There are different water wells in the facility surrounding area and they are operated continuously. Real time instantaneous in-place flowmeters are used for the measurement of the water withdrawal. Our definition for change: Much higher: 20%, Higher: 10%, About the same: -10%, Much lower: -20%

Groundwater – non-renewable

(9.2.7.1) Relevance

Select from:

Not relevant

(9.2.7.5) Please explain

SASA's water withdrawal is from groundwater (renewable) totally. In the operations and facilities, SASA does not use non-renewable groundwater.

Produced/Entrained water

(9.2.7.1) Relevance

Select from:

Not relevant

(9.2.7.5) Please explain

SASA's water withdrawal is from groundwater totally. In the operations and facilities, SASA does not use produced/entrained water.

Third party sources

(9.2.7.1) Relevance

Select from:

Not relevant

(9.2.7.5) Please explain

*SASA's water withdrawal is from groundwater totally. In the operations and facilities, SASA does not use third part sourced water.
[Fixed row]*

(9.2.8) Provide total water discharge data by destination.

Fresh surface water

(9.2.8.1) Relevance

Select from:

Not relevant

(9.2.8.5) Please explain

The treated water (treated in the wastewater treatment plant of SASA) is discharged to the drainage channel, which meets surface water eventually, according to the discharge permit given by the authorities. However, there is no direct discharge to the fresh surface water.

Brackish surface water/seawater

(9.2.8.1) Relevance

Select from:

Not relevant

(9.2.8.5) Please explain

There is no discharge to the brackish surface water/seawater. It is not foreseen a change in discharge location in the future.

Groundwater

(9.2.8.1) Relevance

Select from:

Not relevant

(9.2.8.5) Please explain

There is no discharge to the groundwater. It is not foreseen a change in discharge location in the future.

Third-party destinations

(9.2.8.1) Relevance

Select from:

Relevant

(9.2.8.2) Volume (megaliters/year)

2549.9

(9.2.8.3) Comparison with previous reporting year

Select from:

Much lower

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

Increase/decrease in efficiency

(9.2.8.5) Please explain

All of the industrial water from SASA's production sites and all domestic water from personnel use on-site are collected in a common sewerage system and are sent to an industrial wastewater treatment plant within the boundaries of SASA facility. Treated wastewater is discharged to the very nearby water stream named as TD-07 DSI drainage channel of the State Hydraulic Works which finally meets Seyhan river approximately 35 kilometers from our discharge point. This drainage channel also collects the treated wastewater of the industries in this vicinity. Discharge permits have been issued by Ministry of Environment, Urbanization and Climate Change. The discharged water volume in 2023 has been decreased by 20,6% according to the discharged water volume in the previous year. Our definition for change: Much higher: 20%, Higher: 10%, About the same: -10%, Much lower: -20%
[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

Tertiary treatment is not applied in current SASA wastewater treatment plants but the new constructed wastewater treatment plant will include advanced biological treatment methods such as Biobed EGSB (Extended Granular Sludge Bed) and the MBBR (Moving Bed Biofilm Reactor) process. The wastewater generated from PTA production will be treated anaerobically in the new wastewater treatment plants with a biobed expanded granular sludge bed (EGSB) and then subjected to biological treatment in the new wastewater treatment plants using all the best and advanced treatment technologies together with all wastewater from existing and upcoming polyester plants as part of new investments. In the wastewater recovery unit, where wastewater treated in accordance with local regulatory limits and IFC standards will be re-treated using advanced treatment technologies, 55-60% of the treated wastewater will be recovered and reused in cooling towers. The plant will produce 1,206 Nm³/hour of biogas through anaerobic treatment. SASA aims to save 1,200-2,200 MWh of electricity annually by automating the air blowers in the biological treatment unit using Hubgrade Technology with Industry 4.0 features. Furthermore, by using Koch (INVISTA) licensed P8 technology as the production technology in the PTA Production Plant, the Company expects to generate 75% less wastewater compared to conventional PTA production technologies.

Secondary treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

Relevant

(9.2.9.2) Volume (megaliters/year)

2549.9

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

Much lower

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

Increase/decrease in efficiency

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

100%

(9.2.9.6) Please explain

SASA manages wastewater with the responsible consumption approach. There is a wastewater treatment plant to treat industrial wastewater arising from production processes, process washing water, and domestic wastewater. The wastewater treatment plant was built in 1998. With the newly added facilities in 2011 and 2019, the capacity was increased. The plant has the "Wastewater Treatment Plant Identity Document" and uses physical (primary), biological, (secondary) chemical (secondary), and advanced biological treatment processes (MBR system). Additionally, both anaerobic and aerobic treatment methods are used in the biological treatment system. The treatment plant operates in three shifts and the entire process can be monitored from the control room. In addition to the audits of the Ministry, and online monitoring system (SAIS) of the Ministry, the environmental laboratory within SASA performs daily sample analysis and the performance is constantly monitored for the key parameters like COD, temperature, DO, TSS, etc. (as previously explained). The discharged water volume in 2023 has been decreased by 20,6% according to the discharged water volume in the previous year. Our definition for change: Much higher: 20%, Higher: 10%, About the same: -10%, Much lower: -20%

Primary treatment only

(9.2.9.1) Relevance of treatment level to discharge

Select from:

Relevant

(9.2.9.2) Volume (megaliters/year)

0

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

About the same

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

Other, please specify :There is no discharge after the primary treatment. The waste water coming from the primary treatment is sent to the secondary treatment. Therefore, the volume is indicated as 0 and it is the same with the previous year as the same procedure is used.

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

100%

(9.2.9.6) Please explain

All wastewater is applied primary, secondary biological treatment. Primary treatment consists of physical treatments. All wastewater that passes through primary treatment goes to the secondary and advanced biological treatment stage. There is no discharge directly from the primary treatment. There will be similar situation in the future.

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 SASA, there is no discharging wastewater without treatment.

Discharge to a third party without treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

Not relevant

(9.2.9.6) Please explain

In SASA, there is no discharging wastewater without treatment. All the wastewater generated by all activities of SASA is treated within the in-situ wastewater treatment plant by SASA.

Other

(9.2.9.1) Relevance of treatment level to discharge

Select from:

Not relevant

(9.2.9.6) Please explain

There are no other treatment methods used.

[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)

2.77

(9.2.10.2) Categories of substances included

Select all that apply

Phosphates

(9.2.10.4) Please explain

SASA is committed to not exceeding local and international discharge requirements. SASA does not produce products that can generate the nitrates, phosphates, pesticides, etc. However, the pollution load of the effluent water of wastewater treatment plant is calculated regularly. The pollution load parameters of SASA's wastewater treatment plant effluent are COD, ammonium as nitrogen (NH₄-N), phosphate (PO₄-P), sulfur, sulfite, total chromium. Nitrogen is measured in term of ammonia-N. The pollution load of the effluent water from the wastewater treatment plant in 2023 (yearly) for NH₄-N is 0.89 metric tons. SASA meets the all discharge limits regulated by the government.

[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

According to the WRI water risk map, Adana is in a region experiencing extreme water stress. The water scarcity that may occur in the region may cause shut off in SASA's operations. With the awareness of this fact, SASA identified its whole production site's water-related dependencies, impacts, risks, and opportunities. The facility included here refers whole SASA Polyester Production Facility located in the Adana region. Therefore, the ratio was chosen as 100%.

Upstream value chain

(9.3.1) Identification of facilities in the value chain stage

Select from:

No, we have assessed this value chain stage but did not identify any facilities with water-related dependencies, impacts, risks, and opportunities

(9.3.4) Please explain

In the value chain assessment procedure, SASA evaluates the main suppliers according to their environmental impacts and requires Ecovadis score. However, upstream value chain (suppliers) is not identified facility by facility with the water-related dependencies, impacts, risks, and opportunities. Considering the complexity of SASA's production and operations, the inclusion of water-related issues in all value chain processes requires more detailed study. Actions to be taken will be evaluated. SASA will firstly consider the water stress, water scarcity and drought risks from its upstream value chain. SASA will also consider regulatory risks for its main suppliers. SASA is currently considering the risks and is planning to evaluate, assess and identify its upstream value chain within the following years. Necessary researches have been started and steps are taken.

[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)

SASA Polyester Sanayi A.Ş

(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

- Other, please specify :Seyhan River

(9.3.1.8) Latitude

37

(9.3.1.9) Longitude

35.17

(9.3.1.10) Located in area with water stress

Select from:

Yes

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

4332.2

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

Lower

(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

4332.2

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

0

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

2549.9

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

Much lower

(9.3.1.23) Discharges to fresh surface water

0

(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

2549.9

(9.3.1.27) Total water consumption at this facility (megaliters)

1782.3

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

About the same

(9.3.1.29) Please explain

Water withdrawal and water discharge volumes are measured continuously with real time instantaneous in-place flowmeters. Water consumption volume is also monitored and can be measured by the balance of water withdrawal and discharge volumes. All water supply of SASA is provided from the groundwater (renewable). There are different water wells (approved by the authorities) in the facility surrounding area and they are operated continuously. All of the industrial water from

SASA's production sites and all domestic water from personnel use on-site are collected in a common sewerage system and are sent to an industrial wastewater treatment plant within the boundaries of SASA facility. Treated wastewater is discharged to the very nearby water stream named as TD-07 DSI drainage channel of the State Hydraulic Works which finally meets Seyhan river approximately 35 kilometers from our discharge point. This drainage channel also collects the treated wastewater of the industries in this vicinity. Discharge permits have been issued by Ministry of Environment, Urbanization and Climate Change. The discharged water volume in 2023 has been decreased by 20,6% according to the discharged water volume in the previous year. SASA sets water intensity targets every year and track the progress. Historical water related data are shared in the 2023 Sustainability Report. Although, the water consumption in 2023 is about the same comparing to the previous year. The water intensity in 2023 was reduced
[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

ISO 14046 Standard and third-party verification (attached to 2023 Sustainability Report with Independent Limited Assurance Report)

Water withdrawals – volume by source

(9.3.2.1) % verified

Select from:

76-100

(9.3.2.2) Verification standard used

ISO 14046 Standard and third-party verification (attached to 2023 Sustainability Report with Independent Limited Assurance Report)

Water withdrawals – quality by standard water quality parameters

(9.3.2.1) % verified

Select from:

Not verified

(9.3.2.3) Please explain

No verification was planned for the projects or studies related to water withdrawals' quality. However, SASA is expanding and developing the projects related to sustainability. Therefore, it is planned to get verification for more water-related data in the following years.

Water discharges – total volumes

(9.3.2.1) % verified

Select from:

76-100

(9.3.2.2) Verification standard used

ISO 14046 Standard and third-party verification (attached to 2023 Sustainability Report with Independent Limited Assurance Report)

Water discharges – volume by destination

(9.3.2.1) % verified

Select from:

76-100

(9.3.2.2) Verification standard used

ISO 14046 Standard and third-party verification (attached to 2023 Sustainability Report with Independent Limited Assurance Report)

Water discharges – volume by final treatment level

(9.3.2.1) % verified

Select from:

Not verified

(9.3.2.3) Please explain

No verification was planned for the projects or studies related to water withdrawals' quality. However, SASA is expanding and developing the projects related to sustainability. Therefore, it is planned to get verification for more water-related data in the following years.

Water discharges – quality by standard water quality parameters

(9.3.2.1) % verified

Select from:

76-100

(9.3.2.2) Verification standard used

- ISO 14046 Standard and third-party verification (attached to 2023 Sustainability Report with Independent Limited Assurance Report) - Turkish Accreditation Agency approved laboratories verified and approved our water discharges qualities by the regulations

Water consumption – total volume

(9.3.2.1) % verified

Select from:

76-100

(9.3.2.2) Verification standard used

*ISO 14046 Standard and third-party verification (attached to 2023 Sustainability Report with Independent Limited Assurance Report)
[Fixed row]*

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

(9.5.1) Revenue (currency)

1451761100

(9.5.2) Total water withdrawal efficiency

335109.44

(9.5.3) Anticipated forward trend

SASA expects an increase in revenue with the new investment for PTA production and possible capacity revisions. There will be an increase in the water withdrawal due to the manufacturing activities. However, SASA also expects an increase in the total water withdrawal efficiency over time because SASA aims to minimize environmental impact through the implementation water savings projects and improve water-related targets like the new constructed wastewater treatment plant and water reuse projects.

[Fixed row]

(9.6) Do you calculate water intensity for your activities in the chemical sector?

Select from:

Yes

(9.6.1) For your top five products by production weight/volume, provide the following water intensity information associated with your activities in the chemical sector.

Row 1

(9.6.1.1) Product type

Bulk organic chemicals

Polymers

(9.6.1.2) Product name

Production Based (Polyester Fiber, Polyester Chips, DMT, POY, Polyester Yarn)

(9.6.1.3) Water intensity value (m3/denominator)

3.04

(9.6.1.4) Numerator: water aspect

Select from:

Total water withdrawals

(9.6.1.5) Denominator

Select from:

Ton

(9.6.1.6) Comparison with previous reporting year

Select from:

Lower

(9.6.1.7) Please explain

Metrics description: SASA makes a single water intensity calculation for its 5 main products in total. While calculating the water intensity of the products, m3 raw water withdrawn/tons production unit is used. Reason for change: SASA calculates and verifies its water footprint in accordance with ISO 14046 requirements as well as national and international legal regulations to ensure water security, develop sustainable water management and achieve the water consumption targets. The blue water footprint of polyester fiber and SPC enterprises decreased by 8% and 4% respectively in 2023 comparing 2022. In addition, SASA's gray water footprint decreased by 39% in 2023 comparing in 2022. In general, the decrease in water footprints is due to increase in operational efficiency. The capacities of the DMT plant, former SPC plants and former fiber plants has been reduced and production has mostly shifted to new technology plants in 2023. Water withdrawal volume has been also decreased in 2023. The water intensity in 2022 was 3.14 m3 water withdrawn/ton product while the water intensity in 2023 is 3.04 m3 water withdrawn/ton product. 42% reduction in water intensity was achieved compared to base year 2019. Anticipation for future trend: SASA aim to even further increase the production and at the same time increase the water efficiency. SASA constantly sets lower intensity targets each year and expects this trend to continue in the next years. To reduce water consumption, SASA has developed projects such as "automation and optimization of tower blowers" and "monitoring of condensate return water" while monitoring the consumption patterns monthly, ensuring controls and interventions for water leakage. SASA has a project to start operation of water reuse and this will increase the water efficiency as well. SASA also started water mapping in each production unit, which was done before for all facilities as a whole. Mapping each water consuming unit enables to define parts where improvements may be done.

[Add row]

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

(9.13.1) Products contain hazardous substances

Select from:

No

(9.13.2) Comment

SASA not only creates added value but also manufactures products that consume low energy and water, emit minimal carbon emissions, comply with the European Union's REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) regulation, successfully undergo allergy tests and have food-safe production certificates, all proof of the Company's keen sensitivity to the environment and human health both during and after production.

[Fixed 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:

No, but we plan to address this within the next two years

(9.14.3) Primary reason for not classifying any of your current products and/or services as low water impact

Select from:

Lack of internal resources

(9.14.4) Please explain

SASA is basically a raw material producer for textile products. The supply of raw materials for the production of textile products is based on chemical products. The entire supply chain needs to be reviewed for low water impact product production.

[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
Water pollution	Select from: <input checked="" type="checkbox"/> Yes
Water withdrawals	Select from: <input checked="" type="checkbox"/> Yes
Water, Sanitation, and Hygiene (WASH) services	Select from: <input checked="" type="checkbox"/> Yes
Other	Select from: <input checked="" type="checkbox"/> Yes

[Fixed row]

(9.15.2) Provide details of your water-related targets and the progress made.

Row 1

(9.15.2.1) Target reference number

Select from:

Target 1

(9.15.2.2) Target coverage

Select from:

Organization-wide (direct operations only)

(9.15.2.3) Category of target & Quantitative metric

Product water intensity

Increase in water use met through recycling/reuse

(9.15.2.4) Date target was set

12/31/2020

(9.15.2.5) End date of base year

12/30/2021

(9.15.2.6) Base year figure

0

(9.15.2.7) End date of target year

12/31/2024

(9.15.2.8) Target year figure

55

(9.15.2.9) Reporting year figure

0

(9.15.2.10) Target status in reporting year

Select from:

Revised

(9.15.2.11) % of target achieved relative to base year

0

(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

The target is to ensure 55% to 60% recovery of wastewater by 2025 with the wastewater treatment plant and recycling plant under construction. The figures given in the targets are the percentage of water that will be reused. The aim and the purpose of implementing this target was to reduce water withdrawals and increase the water reuse percentage. The target covers all operations of SASA in Adana region.

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

The new advanced biological wastewater treatment plant has been phased in, and 55% to 60% water recovery will be achieved after full commissioning.

(9.15.2.16) Further details of target

In the wastewater recovery unit, where wastewater treated in accordance with local regulatory limits and IFC standards will be re-treated using advanced treatment technologies, 55-60% of the treated wastewater will be recovered and reused in cooling towers. The plant will produce 1,206 Nm³/hour of biogas through anaerobic treatment. SASA aims to save 1,200-2,200 MWh of electricity annually by automating the air blowers in the biological treatment unit using Hubgrade Technology with Industry 4.0 features.

Row 2

(9.15.2.1) Target reference number

Select from:

Target 5

(9.15.2.2) Target coverage

Select from:

Organization-wide (direct operations only)

(9.15.2.3) Category of target & Quantitative metric

Water pollution

Reduction in concentration of pollutants

(9.15.2.4) Date target was set

12/31/2019

(9.15.2.5) End date of base year

12/30/2020

(9.15.2.6) Base year figure

240

(9.15.2.7) End date of target year

12/31/2024

(9.15.2.8) Target year figure

150

(9.15.2.9) Reporting year figure

78.63

(9.15.2.10) Target status in reporting year

Select from:

Achieved

(9.15.2.11) % of target achieved relative to base year

179

(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

The target covers all operations of SASA in Adana region. The target is to ensure that the effluent COD parameter, which is currently below the local legislation threshold (240 mg/L), is below 150 mg/L by 2025 in accordance with international standards. SASA set this target to be well below the local legislation limit of 240 mg/L to 150 mg/L. Aim of the target is to minimize the pollution discharged to the receiving body from the wastewater treatment plant of SASA and to protect the environment. The figures indicated in the previous part are in mg/L for COD parameter.

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

The target is achieved and exceeded. The average COD effluent value was measures as 78.63 mg/L, which is below the limit. The efficiency of the wastewater treatment plant has been increased and Partial commissioning of the new constructed wastewater treatment plant started in the last quarter of 2023. The new wastewater treatment plant has advanced treatment units.

(9.15.2.16) Further details of target

With the new wastewater treatment plant, further targets have been set. These targets are as follows: - Using Hubgrade artificial intelligence technology for optimization of oxygen and nutrient amounts required by the wastewater treatment plant. - Savings of 20% to 40% in N and P nutrients compared to the amount that would normally be consumed. - Saving 1,255 to 2,330 mWh/year in electricity consumption for oxygen supply.

Row 3

(9.15.2.1) Target reference number

Select from:

Target 6

(9.15.2.2) Target coverage

Select from:

Organization-wide (direct operations only)

(9.15.2.3) Category of target & Quantitative metric

Product water intensity

Reduction per unit of production

(9.15.2.4) Date target was set

12/31/2018

(9.15.2.5) End date of base year

12/30/2019

(9.15.2.6) Base year figure

5.01

(9.15.2.7) End date of target year

12/30/2023

(9.15.2.8) Target year figure

3.19

(9.15.2.9) Reporting year figure

3.04

(9.15.2.10) Target status in reporting year

Select from:

Achieved

(9.15.2.11) % of target achieved relative to base year

108

(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

From the base year of 2019, a target was set to reduce water intensity of production to 3.19 m3 raw water withdrawn/ton production. In the reporting year it was well achieved and was under the target number. The target covers all operations of SASA in Adana region.

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

In general, water intensity was decreased because the capacities of the DMT plant, former SPC plants and former fiber plants has been reduced and production has mostly shifted to new technology plants in 2023.

(9.15.2.16) Further details of target

Since 2019, SASA sets a new target for the water intensity reduction. Water intensity in 2019 was 5.01 raw water withdrawn/ton production. Ever since, each target has been achieved and further target has been set for the following year. Likewise, in 2023, the water intensity reduction target has been achieved with the measurements taken by SASA.

Row 4

(9.15.2.1) Target reference number

Select from:

Target 7

(9.15.2.2) Target coverage

Select from:

Organization-wide (direct operations only)

(9.15.2.3) Category of target & Quantitative metric

Water, Sanitation, and Hygiene (WASH) services

Increase in the proportion of employees using safely managed sanitation services, including a hand-washing facility with soap and water

(9.15.2.4) Date target was set

11/07/1966

(9.15.2.5) End date of base year

12/31/1966

(9.15.2.6) Base year figure

0

(9.15.2.7) End date of target year

12/30/2023

(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

SASA aims to provide high standard sanitary services for all employees. In line with the Regulation on Waters Intended for Human Consumption of Republic of Turkiye, SASA provides safe and clean water for human use in the whole facility. The level stays at 100% all the time, because SASA makes sure that every building has WASH services for employees. Sanitation and WASH services are well managed.

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

Test are being conducted related to WASH services. The quality of water used for humanitarian purposes at SASA facilities is constantly monitored. Monitoring is carried out in accordance with Legionnaires' Disease Control Procedure Regulation and Water Intended for Human Consumption Regulation. Samples for Legionella bacteria are tested at the facility with samples taken twice a year in showers, cooling towers, cooling waters, raw water, eye and body showers, chiller waters. For drinking and using water yearly analysis are carried out by accredited laboratories for Coliform, E.coli, Entrococcal bacteria. In chemical analyzes of drinking and utility water; nitrite, iron, aluminum, ammonium, conductivity parameters and physical odor, color, turbidity parameters are followed. Chlorination is done within limits for the purpose of disinfection for potable and using water.

(9.15.2.16) Further details of target

SASA pays attention to provide sufficient and safe drinking water that is easily accessible to employees. Separate, adequate, and well-maintained sanitary facilities are available for both male and female employees. Adequate washing facilities with clean water, soap, and towels are provided for personal hygiene. Changing facilities are kept clean, well-ventilated, and offer privacy, with separate spaces for men and women.

[Add row]

C10. Environmental performance - Plastics

(10.1) Do you have plastics-related targets, and if so what type?

(10.1.1) Targets in place

Select from:

No, but we plan to within the next two years

(10.1.3) Please explain

SASA has demonstrated a strong commitment to environmental sustainability, including efforts around waste reduction and recycling, which will encompass plastic management strategies.

[Fixed row]

(10.2) Indicate whether your organization engages in the following activities.

Production/commercialization of plastic polymers (including plastic converters)

(10.2.1) Activity applies

Select from:

Yes

(10.2.2) Comment

SASA Polyester is a major player in the production and commercialization of plastic polymers, focusing primarily on polyester-based products. Leveraging advanced manufacturing technologies, SASA produces a wide range of polymers for applications in packaging, textiles, and industrial uses. SASA's approach includes optimizing production efficiency, reducing carbon emissions, and exploring sustainable raw materials like recycled plastics. Additionally, the company is strategically positioned to innovate through the development of eco-friendly polymer alternatives and enhanced recycling initiatives. By adhering to global environmental standards and responding to consumer demand for sustainable solutions, SASA aims to reinforce its market position while contributing to the circular economy and reducing plastic waste.

Production/commercialization of durable plastic goods and/or components (including mixed materials)

(10.2.1) Activity applies

Select from:

No

(10.2.2) Comment

SASA Polyester does not engage in the production of durable plastic goods, focusing instead on the manufacturing of plastic polymers primarily used in applications like packaging, textiles, and other short-term industrial products. By steering clear of durable goods, SASA concentrates on materials that are often designed for recyclability or shorter life cycles. This approach aligns with the company's strategy to minimize the long-term environmental impact associated with durable plastics, which tend to accumulate as waste over time. Instead, SASA emphasizes the production of polyester-based polymers that can be integrated into a circular economy model, promoting the reuse and recycling of materials. This strategic focus reflects SASA's commitment to sustainability by avoiding products that contribute to long-lasting plastic pollution.

Usage of durable plastics goods and/or components (including mixed materials)

(10.2.1) Activity applies

Select from:

No

(10.2.2) Comment

SASA Polyester does not utilize durable plastic goods in its production processes, aligning with its focus on sustainability and environmental responsibility. By avoiding the use of long-lasting, non-degradable plastic materials, the company aims to reduce its environmental footprint and minimize the accumulation of persistent plastic waste. Instead, SASA prioritizes the use of polyester-based polymers, which can be recycled and reintegrated into new production cycles. This allows SASA to contribute to the development of a more sustainable and circular economy, reducing reliance on durable plastics that can remain in ecosystems for decades without breaking down.

Production/commercialization of plastic packaging

(10.2.1) Activity applies

Select from:

No

(10.2.2) Comment

SASA Polyester does not produce plastic packaging as part of its product portfolio, instead focusing on the production of polyester-based polymers for various industrial applications. By not engaging in the manufacture of plastic packaging, SASA reduces its contribution to the global issue of single-use plastic waste, which is a significant environmental concern. This allows the company to concentrate on materials that can be more sustainably managed, such as polymers designed for textiles and other industries with a focus on recyclability and longer product life cycles.

Production/commercialization of goods/products packaged in plastics

(10.2.1) Activity applies

Select from:

No

(10.2.2) Comment

SASA Polyester does not produce goods or products packaged in plastics, aligning its operations with a commitment to reducing plastic waste. Rather than manufacturing consumer goods or packaging, SASA focuses on the production of polyester-based polymers for industrial applications like textiles and technical materials.

Provision/commercialization of services that use plastic packaging (e.g., food services)

(10.2.1) Activity applies

Select from:

No

(10.2.2) Comment

SASA Polyester does not provide services that involve the use of plastic packaging. By steering clear of any operations or services that contribute to the proliferation of plastic packaging, SASA actively avoids contributing to the growing global plastic waste crisis. Instead, the company focuses on producing polyester-based polymers for industrial and technical applications, which are designed with sustainability in mind.

Provision of waste management and/or water management services

(10.2.1) Activity applies

Select from:

Yes

(10.2.2) Comment

SASA Polyester integrates waste management and water management services as key components of its operational strategy, reflecting a commitment to sustainability and environmental stewardship. In its production processes, SASA emphasizes the importance of reducing waste, particularly in terms of minimizing industrial polymer by-products and promoting recycling initiatives to create a more circular economy. Additionally, water management is a critical focus, with efforts aimed at optimizing water use, reducing consumption, and implementing wastewater treatment systems to prevent environmental contamination.

Provision of financial products and/or services for plastics-related activities

(10.2.1) Activity applies

Select from:

No

(10.2.2) Comment

SASA Polyester does not provide financial products since it is not a financial institution.

Other activities not specified

(10.2.1) Activity applies

Select from:

No

(10.2.2) Comment

*There are no other activities to be reported.
[Fixed row]*

(10.3) Provide the total weight of plastic polymers sold and indicate the raw material content.

(10.3.1) Total weight of plastic polymers sold during the reporting year (Metric tons)

1424820

(10.3.2) Raw material content percentages available to report

Select all that apply

% virgin fossil-based content

% virgin renewable content

(10.3.3) % virgin fossil-based content

95.02

(10.3.4) % virgin renewable content

4.98

(10.3.7) Please explain

With an annual capacity of 446,628 tons of fiber, 367,500 tons of POY, 218,750 tons of yarn, 1,197,000 tons of polyester chips and 132,300 tons of SSP chips, SASA aims to make Türkiye one of the three largest polyester producers in the world. For reporting year 2023, total production quantity in tons 1.424.820.

[Fixed row]

(10.6) Provide the total weight of waste generated by the plastic you produce, commercialize, use and/or process and indicate the end-of-life management pathways.

Production of plastic

(10.6.1) Total weight of waste generated during the reporting year (Metric tons)

(10.6.2) End-of-life management pathways available to report*Select all that apply* Recycling**(10.6.4) % recycling**

100

(10.6.12) Please explain

With an annual capacity of 446,628 tons of fiber, 367,500 tons of POY, 218,750 tons of yarn, 1,197,000 tons of polyester chips and 132,300 tons of SSP chips, SASA aims to make Türkiye one of the three largest polyester producers in the world. For reporting year 2023, total production quantity in tons 1.424.820.

Commercialization of plastic**(10.6.1) Total weight of waste generated during the reporting year (Metric tons)**

0

(10.6.2) End-of-life management pathways available to report*Select all that apply* Preparation for reuse**(10.6.3) % prepared for reuse**

100

(10.6.12) Please explain

SASA Polyester is actively engaged in the commercialization of plastic, primarily focusing on polyester-based polymers used in a variety of applications, including textiles, packaging, and industrial products.

Processing of plastic waste

(10.6.1) Total weight of waste generated during the reporting year (Metric tons)

4268612

(10.6.2) End-of-life management pathways available to report

Select all that apply

Preparation for reuse

(10.6.3) % prepared for reuse

100

(10.6.12) Please explain

Recyclable plastic raw material usage data in 2023.

[Fixed row]

C11. Environmental performance - Biodiversity

(11.2) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

(11.2.1) Actions taken in the reporting period to progress your biodiversity-related commitments

Select from:

- Yes, we are taking actions to progress our biodiversity-related commitments

(11.2.2) Type of action taken to progress biodiversity-related commitments

Select all that apply

- Species management
- Education & awareness

[Fixed row]

(11.3) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
	<p>Select from:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes, we use indicators 	<p>Select all that apply</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> State and benefit indicators <input checked="" type="checkbox"/> Pressure indicators <input checked="" type="checkbox"/> Response indicators

[Fixed row]

(11.4) Does your organization have activities located in or near to areas important for biodiversity in the reporting year?

Legally protected areas

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

No

(11.4.2) Comment

There is no protected area within the site boundaries or adjacent to the site boundaries with any protected status, with international recognition in question.

UNESCO World Heritage sites

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

No

(11.4.2) Comment

There is no protected area within the site boundaries or adjacent to the site boundaries with any protected status, with international recognition in question.

UNESCO Man and the Biosphere Reserves

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

No

(11.4.2) Comment

There is no protected area within the site boundaries or adjacent to the site boundaries with any protected status, with international recognition in question.

Ramsar sites

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

No

(11.4.2) Comment

There is no protected area within the site boundaries or adjacent to the site boundaries with any protected status, with international recognition in question.

Key Biodiversity Areas

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

No

(11.4.2) Comment

There is no protected area within the site boundaries or adjacent to the site boundaries with any protected status, with international recognition in question.

Other areas important for biodiversity

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

No

(11.4.2) Comment

There is no protected area within the site boundaries or adjacent to the site boundaries with any protected status, with international recognition in question.
[Fixed 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?

(13.1.1) Other environmental information included in your CDP response is 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

(13.1.2) Primary reason why other environmental information included in your CDP response is not verified and/or assured by a third party

Select from:

No standardized procedure

(13.1.3) Explain why other environmental information included in your CDP response is not verified and/or assured by a third party

The main reason is linked to contractual or operational priorities that focus more on compliance with existing regulations than on voluntary third-party certifications. For companies like SASA, especially those with extensive international operations, meeting baseline regulatory requirements might take precedence over voluntary verification, unless mandated by investors or other stakeholders. However, while the CDP response may lack third-party assurance, SASA's sustainability report itself includes an independent assurance report. This report assures specific sustainability metrics or disclosures. An independent assurance statement often enhances the credibility of the sustainability report by providing external validation of key environmental data, although it focuses on selective metrics like carbon emissions or water usage rather than the entire report.

[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)
	Detailed information about SASA can be reached from its website. https://www.sasa.com.tr/sustainability	2024 Stakeholder Engagement Plan.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

Sustainability and HSE Manager

(13.3.2) Corresponding job category

Select from:

Other C-Suite Officer

[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:

Yes, CDP may share our Disclosure Submission Lead contact details with the Pacific Institute

