

## **Welcome to your CDP Water Security Questionnaire 2022**

## **W0.** Introduction

## W<sub>0.1</sub>

#### (W0.1) Give a general description of and introduction to your organization.

#### About the organization

SASA is one of the world's leading manufacturers of polyester fiber, filament yarn, polyester-based polymers, specialty polymers and intermediates. SASA successfully manages the entire process from design to manufacturing and distribution by combining its leadership responsibility in its sector, its strong technical heritage and innovation culture with its high production capacity.

Having started its production in the polyester industry in 1966, **SASA** has always maintained its rapid growth process with its uninterrupted investments since its establishment. **SASA** established a joint-venture partnership with world chemistry giant **Dupont** in 2000 to maintain its leadership in the polyester industry and to further strengthen this position, and consecutively acquired the name "**DupontSA**".

The name **DupontSA** was changed to **ADVANSA** with the acquisition of Dupont shares in 2004 by Sabancı Holding. The name of the group's organization in Turkey was also changed to **ADVANSA SASA Polyester Sanayi A.Ş.** in 2005. In 2011, Sabancı Holding acquired all the shares of **ADVANSA BV** and changed its name from ADVANSA SASA to **SASA** in September 2011.

On April the 30th, 2015, Sabanci Holding shares were acquired by ERDEMOĞLU Holding, which led to a new shareholding structure in which 51% of the total shares were held by **ERDEMOĞLU Holding**, and the remaining quantity being publicly held.

ERDEMOĞLU Holding A.Ş. became the owner of 84.80% of the shares of SASA Polyester Sanayi A.Ş. SASA with Nobel, ICI, and DuPont technologies under its use has a strong technical infrastructure with its almost 5000 competent employees, high capacity manufacturing plants, and Research and Development Center built in 2002. 120,350,000 lots which represent 14.50% of the total capital of Sasa Polyester Sanayi A.Ş. of the



shares of 51% which were not publicly traded in the stock market of Sasa Polyester Sanayi A.Ş (SASA) with a nominal capital of 830,000,000 TL, of which Erdemoğlu Holding A.Ş. had 84.80% of the shares were sold on 30/09/2019 to Merinos Hali San. Ve Tic. A.Ş. which is a subsidiary company of Erdemoğlu Holding A.Ş. Additionally 62,250,000 lots which represent 7.50% of the total capital were sold on 30/09/2019 to Dinarsu İmalat ve Ticaret T.A.Ş. which is a subsidiary company of Erdemoğlu Holding A.Ş. at a price of 7.20 to per lot. With the acquisitions in July 2021 following the above, the company achieved its current partnership structure. SASA has integrated production facilities and head office located on an area of 2,181,000 m² in Adana, its own raw material storage facility on an area of 55,625 m² in Iskenderun, and liaison offices in Istanbul and Ankara.

SASA's ESG Risk Rating score is 23.1 (Medium Risk) in Sustainalytics. Our ranking is 35 out of 460 chemical companies by February, 2022. Our total GHG emissions intensity (Scope1+Scope2) is 0,498 (tonCO2e/ton production) in 2021.

## W-CH0.1a

#### (W-CH0.1a) Which activities in the chemical sector does your organization engage in?

Bulk organic chemicals

Other, please specify

SASA produces special polyester products, polymer, polymer chips, textile chips, bottle chips, and PET chips, fiber and filament yarn. The main chemicals which are used are paraxylene, methanol, monoethyleneglycol (MEG).

## W<sub>0.2</sub>

## (W0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date
Reporting year	January 1, 2021	December 31, 2021



## W<sub>0.3</sub>

(W0.3) Select the countries/areas in which you operate.

Turkey

## W<sub>0.4</sub>

(W0.4) Select the currency used for all financial information disclosed throughout your response.

**EUR** 

## W<sub>0.5</sub>

(W0.5) Select the option that best describes the reporting boundary for companies, entities, or groups for which water impacts on your business are being reported.

Companies, entities or groups over which financial control is exercised

## **W0.6**

(W0.6) Within this boundary, are there any geographies, facilities, water aspects, or other exclusions from your disclosure?

## W0.7

(W0.7) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization.	Provide your unique identifier
Yes, an ISIN code	TRASASAW91E4



## W1. Current state

## W1.1

## (W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Important	Important	Our company carefully plans water and wastewater management in line with our Environmental Policy and prior sustainability goals. SASA takes into consideration water supply, water consumption both in production processes, and wastewater treatment processes for human health. Also, SASA sets water reuse goals using efficient treatment technologies. Treatment of the water drawn from the well in SASA is important for the safety of the processes.  In the scope of short-term goals set for 2022, we intend to reduce our water intensity to the following targets:  - (m3raw water withdrawn/tons production) 3.22  - (m3 treated wastewater/tons production) 0.95  - (m3 raw water withdrawn/total income TL) 0.166  Adopting a responsible and sustainable water management approach, SASA uses groundwater from 11 wells. As a result of additional water needs with the capacity increase in the plants, we have planned to drill 13 new water wells in Seyhan, Adana. A total of 16,398,720 tons/year of water will be drawn from these 13 new wells for the next 15 years. According to the Hydrogeological Report of the State Hydraulic Works (DSI), 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 forseen for the groundwater level.
Sufficient amounts of recycled, brackish and/or produced water available for use	Have not evaluated	Have not evaluated	SASA did not use any recyled or brackish water in 2021. In 2023, SASA aims at wastewater treatment and water reuse with advanced treatment technologies. It is aimed to have a water WRU (water reuse) rate of 55-60% in all facilities. The consruction phase for the treatment plants (aerobic and anaerobic) as well as water reuse plant has started in reporting year (2021).

## W1.2

## (W1.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

	% of sites/facilities/operations	Please explain
Water withdrawals – total volumes	100%	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.
Water withdrawals – volumes by source	100%	Water withdrawal volumes by source are monitored at 100% of our operations. We continuously measure 11 different water wells it operates with instantaneous flow meter equipment.
Water withdrawals quality	100%	In SASA, water is used for various purposes such as raw water, permutit water, demineralized water, cooling water, drinking water, and etc. As stated in the SASA's procedure, water quality analyzes are performed on a weekly basis. The water drawn form the well primarly is subjected to the following analysis; - pH, total hardness, m-alkalinity, calcium hardness, conductivity, organic matter, chloride, and total iron.
Water discharges – total volumes	100%	The total water volume given to the sewer system is constantly monitored.



Water discharges – volumes by destination	100%	All of the industrial water from our 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 our 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. All discharge permits are available from government.
Water discharges – volumes by treatment method	100%	SASA continuously works to ensure that its treatment processes comply with the discharge limits of national and international standards. These standarts are (Water Pollution Control Regulation, IFC standarts/EHS Guidelines (EHS Guidelines for Large volume Petroleum-based Organical Chemicals Manufacturing, EHS Guidelines for Petroleum-based Polymers-Manufacturing; EHS Guidelines for Textile Manufacturing).  In our facility wastewater comes from operations, human use for sanitary purposes, reverse osmosis operations and cooling towers etc. DMT wastewater contains high pollution so it requires anaerobic treatment. The other wastewaters come from various operations and are treated with aerobic techniques.  Wastewater treatment basically consists of 3 main stages;  Physical treatment Biological treatment (aerobic, anaerobic)  MBR (Aerobics) Sludge Treatment
Water discharge quality – by standard effluent parameters	100%	SASA continuously controls its wastewater. In line with the National Regulation on WPC, the Ministry of Environment, has an online system (SAİS). The following parameters are monitored and reported online to the SAIS software.  - TSS, COD, DO, Conductivity, pH, Temp. In addition, the following analyzes are carried out quarterly by accredited institutions. Analyzes are made according to the Table 10.1 and 14.12 of the Water Pollution Control Regulation,  - COD, Ammonium Nitrogen, Free Chlorine, Total Chromium, Sulfur, Sulphite, Oil grease, ZDF,



		pH, Colour, Hydrocarbons, DO, TSS, Temperature, Conductivity.  As international standart we follow the requirements IFC standarts/EHS Guidelines (EHS Guidelines for Large volume Petroleum-based Organical Chemicals Manufacturing, EHS Guidelines for Petroleum-based Polymers-Manufacturing; EHS Guidelines for Textile Manufacturing standarts. Wastewater from RO and cooling towers are analysed by accredited laboratories according to WPC (Table 20.1-7)
Water discharge quality – temperature	100%	Sensors are used to measure the waste water plant effluent temperature parameter. Thanks to the online system, all wastewater is measured instantly and reported to the Ministry system.
Water consumption – total volume	100%	At all SASA facilities, water consumption is continuously monitored by volume. Consumed water is used for human use, garden irrigation, evaporated from cooling towers, cleaning purposes and etc.
Water recycled/reused	Not relevant	There is no water recycled/reused. However, with new investments, which under construction currently, water reuse will be possible in 2023. The rate of water reuse will be 55-60 %. in our new wastewater treatment and water reuse plant facility.
The provision of fully- functioning, safely managed WASH services to all workers	100%	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.



## W1.2b

# (W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, and how do these volumes compare to the previous reporting year?

	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total withdrawals	5,223.02	This is our first year of measurement	The use of water in the petrochemical industry has a very important place. When we look at the economic indicators of SASA, compared to 2020, sales amount increased by 71%, turnover by 29% and Ebitda profit increased by 233% in 2021. Considering the increase in production capacity, there is an 18 percent increase in water withdrawals between 2020 and 2021. Although water withdrawals is on a constant upward trend, water intensity is on a continuous decline in terms of raw water and wastewater intensity per ton, as stated in the 2021 Sustainability Report. For example, the intensity of raw water withdrawn decreased from 4.4 to 3.36 (m3 raw water withdrawal / tons production) between 2020-2021.
Total discharges	3,409.46	This is our first year of measurement	The use of water in the petrochemical industry has a very important place. When we look at the economic indicators of SASA, compared to 2020, sales amount increased by 71%, turnover by 29% and Ebitda profit increased by 233% in 2021. Considering the increase in production capacity, there is an 18 percent increase in total discharges between 2020 and 2021. Although water consumption is on a constant upward trend, water intensity is on a continuous decline in terms of raw water and wastewater intensity per ton, as stated in the 2021 Sustainability Report. For example, the intensity of raw water discharged decreased from 1.36 to 0.97 (m3 treated wastewater / tons production) between 2020-2021.
Total consumption	1,813.55	This is our first year of measurement	The use of water in the petrochemical industry has a very important place. When we look at the economic indicators of SASA, compared to 2020, sales amount increased by 71%, turnover by 29% and Ebitda profit increased by 233% in 2021. Considering the increase in production capacity, there is an 18 percent increase in water total consumption between 2020 and 2021.



## W1.2d

## (W1.2d) Indicate whether water is withdrawn from areas with water stress and provide the proportion.

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Identification tool	Please explain
Row 1	Yes	100%	This is our first year of measurement	WRI Aqueduct	WRI Aqueduct "Global Water Risk Mapping Atlas" was used to define the water stress of the region. 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 m3. The limitation values will not exceed.  It is stated in the documents of Ministry of Agriculture and Foresty, 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. Our country is not a water-rich country as it is thought. On the contrary, it is one of the countries experiencing water stress with an annual amount of 1,323 cubic meters of water per capita.

## W1.2h

## (W1.2h) Provide total water withdrawal data by source.

	Relevance	(megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water	Not relevant			In the operations and facilities SASA do not use fresh surface water, including rainwater, water from wetlands, rivers and lakes.



from wetlands, rivers, and lakes				
Brackish surface water/Seawater	Not relevant			In the operations and facilities SASA do not use brackish surface water/seawater.
Groundwater – renewable	Relevant	5,223.02	This is our first year of measurement	All water supply is provided from the groundwater. 11 different water wells in the facility surrounding area are operated continuously. It is foreseen that the use of water will increase with the expanding production and continuous investments. Therefore, the use of renewable groundwater will increase, but SASA plans to manage this increase by investing on water reuse systems in 2023.
Groundwater – non- renewable	Not relevant			In the operations and facilities SASA do not use non-renewable groundwater.
Produced/Entrained water	Not relevant			In the operations and facilities SASA do not use produced/entrained water.
Third party sources	Not relevant			In the operations and facilities SASA do not use non-renewable groundwater.

## W1.2i

## (W1.2i) Provide total water discharge data by destination.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water	Not relevant			There is no discharge to fresh surface water.
Brackish surface water/seawater	Not relevant			There is no discharge to the brackish surface water/seawater.



Groundwater	Not relevant			There is no discharge to the groundwater resources.
Third-party destinations	Relevant	3,409.46	This is our first year of measurement	All of the industrial water from our 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 our 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.

## W1.2j

## (W1.2j) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Not relevant				Tertiary treatment is not applied in SAS wastewater treatment plants.
Secondary treatment	Relevant	3,409.46	This is our first year of measurement	100%	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,



Discharge to a third party	Not relevant				Discharge to a third party without treatment methods is not used in SASA.
Discharge to the natural environment without treatment	Not relevant				Discharge to the natural environment without treatment is not applied in SASA.
Primary treatment only	Relevant	0	This is our first year of measurement	100%	All wastewater is applied primary, secondary and advanced biological treatment. Primary treatment consist of physical treament. All wastewater that passes through primary treatment goes to the secondary and advanced biological treatment stage.
					the capacity was increased. Our 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 our biological treatment system. Our 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 in our plant performs daily sample analysis and the performance is constantly monitored.



without			
treatment			
Other	Not relevant		

## W1.3

(W1.3) Provide a figure for your organization's total water withdrawal efficiency.

	Revenue	Total water withdrawal volume (megaliters)	Total water withdrawal efficiency	Anticipated forward trend
Ro	w 1,514,472	5,223.02	289.9609804289	As stated in the SASA 2021 Sustainability Report, water consumptions are expected to
1				increase in the coming years. The increase in water consumption will not affect the
				withdrawal efficiency because the rate of increase in revenues will be much higher.

## W-CH1.3

(W-CH1.3) Do you calculate water intensity for your activities in the chemical sector?
Yes

## W-CH1.3a

(W-CH1.3a) For your top five products by production weight/volume, provide the following water intensity information associated with your activities in the chemical sector.

## **Product type**

Bulk organic chemicals

**Product name** 



Production Based (Polyester Fiber, Polyester Chips, DMT, POY, Polyester Yarn)

## Water intensity value (m3)

3.36

#### **Numerator: water aspect**

Total water withdrawals

#### **Denominator**

Other, please specify tons production

## Comparison with previous reporting year

This is our first year of measurement

## Please explain

SASA makes a single water intensity calculation for its 5 main products in total. While calculating the water instensity of the products (m3 raw water withdrawn/tonsproduction) unit was used.

## W1.4

## (W1.4) Do you engage with your value chain on water-related issues?

No, not currently but we intend to within two years

## W1.4d

## (W1.4d) Why do you not engage with any stages of your value chain on water-related issues and what are your plans?

	Primary reason	Please explain
Row	We are planning to do	We define our value chain in 3 categories: upstream (input providers), operation (Design -Marketing and Sales -R&D and other
1	so within the next two	Operations) and downstream (distribution and post-marketing services for customers and consumers). To meet our
	years	environmental responsibilities within the framework of the needs and expectations of all our employees and stakeholders, we



work on for the following items;

- To regularly prepare and transparently share our environmental reports,
- To monitor and continuously improve our environmental performance,
- To raise awareness about the environment,
- To provide all kinds of communication and cooperation with the relevant parties in order to raise the level of awareness, providing necessary information, training, etc committed to its activities.

In our Environmental Policy, we commit that reducing our water intensity during our activities by adopting sustainable, efficient and economical use. We will ensure that the wastewater is reused as much as possible using the best available techniques. We plan to carry out studies to extend the same approach to our value chain.

## **W2. Business impacts**

## W2.1

(W2.1) Has your organization experienced any detrimental water-related impacts?

No

## W2.2

(W2.2) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

No



## **W3. Procedures**

## W-CH3.1

(W-CH3.1) How does your organization identify and classify potential water pollutants associated with its activities in the chemical sector that could have a detrimental impact on water ecosystems or human health?

All chemicals used in the factory site have safety data sheets .Before the use of a new chemical, a safety data sheet is requested from the suppliers and kept at the factory site. Inventory records of all chemicals used are sent to the data system of the Ministry of Environment, Urbanization and Climate Change. Training of all chemicals used within the scope of ISO 45001 and ISO 14001 management systems is given to employees. First aid, personal protective equipment, toxicological information, ecological information, etc. written in the relevant article of the safety data sheets. Employees receive training at least once a 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 for all the company's products are also available. The products are in the non-hazardous class. Our company has also Oekotex Certificate demonstrate that our products don't include harmful substances and also fulfills the responsibilities in the scope of REACH Regulation. Also, in order to prevent the discharge of chemicals into the water receiving environment, SASA follows Manufacturing Restricted Substances List of ZDHC (Zero Discharge of Hazardous Chemicals) Program - MRSL for Textiles and Polymers undertakes not to discharge its products. These chemicals:

- Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers
- Anti- Microbials & Biocides
- Chlorinated Parafins
- Chlorobenzenes and Chlorotoluenes
- Chlorophenols
- Dyes Azo (Forming Restricted Amines)
- Dyes Carcinogenic or Equivalent Concern
- Dyes Disperse (Sensitising)



- Dyes Navy Blue Colourant
- Flame Retardants
- Glycols / Glycol Ethers
- Halogenated Solvents
- Organotin Compounds
- Other/ Miscellaneous Chemicals
- Perfluorinated and Polyfluorinated Chemicals (PFCs)
- Phthalates including all other esters of ortho-phthalic acid
- Polycyclic Aromatic Hydrocarbons (PAHs)
- Total Heavy Metals
- UV absorbers
- Volatile Organic Compounds (VOC)
- (Free) Aniline
- ADCA
- Cyclic Siloxanes
- Dimethylfumarate
- Formaldehyde
- Phenol
- Solvents

We have also research development studies for antimonfree products. Antimony-free products are produced by using alternative catalysts in continuous polymer enterprises. (ADV14009, ADV14038, ADV14030). An antimony-free PTA-based chips and fiber production trial was also carried out recently.

## W-CH3.1a

(W-CH3.1a) Describe how your organization minimizes adverse impacts of potential water pollutants on water ecosystems or human health. Report up to ten potential pollutants associated with your activities in the chemical sector.



Potential water pollutant	Value chain stage	Description of water pollutant and potential impacts	Management procedures	Please explain
COD	Direct operations Supply chain	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.	Compliance with effluent quality standards Management procedure under development Other, please specify IFC standarts/EHS Guidelines (EHS Guidelines for Large volume Petroleum- based Organical Chemicals Manufacturing, EHS Guidelines for Petroleum-based Polymers- Manufacturing; EHS Guidelines for Textile Manufacturing) compliance	The 150 mg/l limit value determined by IFC standards and local standards are complied with since the most stricted values are applied for our treated wastewater.
Total Heavy	Direct	The presence of heavy metals, which are released	Compliance with effluent quality standards	The 0.5 mg/l limit value
Metals (Cr)	operations Supply	into the environment uncontrollably, in wastewater is increasing. For this reason, wastewater containing	Management procedure under development	determined by IFC standards and local standards are
	chain	heavy metals is seen as an important source of	Other, please specify	complied with since the most
	Product use	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	IFC standarts/EHS Guidelines (EHS Guidelines for Large volume Petroleumbased Organical Chemicals Manufacturing, EHS Guidelines for Petroleum-based Polymers-Manufacturing; EHS Guidelines for Textile Manufacturing) compliance	stricted values are applied for our treated wastewater.



		of these pollutants vary according to both the properties of the metal, the dose taken and the form of exposure.		
Oil and Grease	Direct operations	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.	Compliance with effluent quality standards Measures to prevent spillage, leaching, and leakages Management procedure under development Other, please specify IFC standarts/EHS Guidelines (EHS Guidelines for Large volume Petroleum- based Organical Chemicals Manufacturing, EHS Guidelines for Petroleum-based Polymers- Manufacturing; EHS Guidelines for Textile Manufacturing) compliance.	The 10 mg/l limit value determined by IFC and local standards are complied with.
Ammonium Nitrogen	Direct operations	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.	Compliance with effluent quality standards Management procedure under development	The 5 mg/l limit value determined by local standard is complied with.
Free Chlorine	Direct operations	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.	Compliance with effluent quality standards Management procedure under development	The 0.3 mg/l limit value determined by local standard is complied with.



TSS	Direct operations	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.	Compliance with effluent quality standards Management procedure under development Other, please specify IFC standarts/EHS Guidelines (EHS Guidelines for Large volume Petroleum- based Organical Chemicals Manufacturing, EHS Guidelines for Petroleum-based Polymers- Manufacturing; EHS Guidelines for Textile Manufacturing) compliance.	The 30 mg/l limit value determined by IFC and local standards are complied with.
Sulfide and Sulphide	Direct operations	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.	Textile Manufacturing) compliance.	The 1 mg/l limit value for Sufide determined by IFC and 0,1 mg/l for sulphide by local standards are complied with.

## W3.3

## (W3.3) Does your organization undertake a water-related risk assessment?

Yes, water-related risks are assessed



## W3.3a

(W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.

## Value chain stage

**Direct operations** 

## Coverage

Full

#### Risk assessment procedure

Water risks are assessed in an environmental risk assessment

#### Frequency of assessment

Annually

#### How far into the future are risks considered?

1 to 3 years

## Type of tools and methods used

International methodologies and standards

#### Tools and methods used

Environmental Impact Assessment Life Cycle Assessment ISO 14001 Environmental Management Standard

#### Contextual issues considered

Water regulatory frameworks
Status of ecosystems and habitats



Access to fully-functioning, safely managed WASH services for all employees

#### Stakeholders considered

**Employees** 

Investors

Local communities

Regulators

Water utilities at a local level

#### Comment

SASA states the risks related to water in the Environmental Aspect Assessment Risk Analysis form. The form has been prepared as stated in the OHS Risk / Environmental Aspect Evaluation Procedure. In the analysis, 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

## W3.3b

(W3.3b) Describe your organization's process for identifying, assessing, and responding to water-related risks within your direct operations and other stages of your value chain.

SASA states the risks related to water in the Environmental Aspect Assessment Risk Analysis form. The form has been prepared as stated in the OHS Risk / Environmental Aspect Evaluation Procedure. In the analysis, 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

## W4. Risks and opportunities

## W4.1

(W4.1) Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes, only within our direct operations

## W4.1a

#### (W4.1a) How does your organization define substantive financial or strategic impact on your business?

Risk management is one of the most important workflows within SASA. With our corporate business management perspective, we plan the behaviors or actions that may affect the operation thus make them manageable. In our company, we carry out Corporate Risk Management in accordance with the requirements of ISO 31000/Risk Management—Principles and Guidelines Standard and the Corporate Risk Management Policy we have prepared in line with our knowledge and experience. In this policy, we ensure the establishment and effective implementation of Corporate Risk Management systems and the assurance of the execution of corporate risk management activities. The Early Detection of Risk Committee (EDRC), which reports to the Board of Directors, and manages the process of risk identification, assessment, and mitigation, is the main risk management body in our company and ensures the continuity of the risk management cycle. The purpose of the committee is the early detection of all kinds of strategic, operational, and financial risks that may jeopardize the existence, development, and continuation of our company, the implementation of necessary measures and



solutions for these risks, and the management of the risk. This committee provides updates and reporting on risk development and trends, as well as the execution of risk reduction strategies every year.

#### Risk Assessment

We identify, analyze, and prioritize our risks in line with our risk assessment instructions. Our company evaluates the possible risks under four main risk categories: financial, operational, strategic, and environmental. Environmental, social and governance risks, including climate crisis risks, are managed in an integrated manner under these categories. The ESG risk categories addressed by our company are as follows:

- Environmental Safety and Climate Crisis
- Technological Innovations
- Occupational Health and Safety
- Corruption
- Business Interruption
- Employee Satisfaction
- International Impact
- Ethics

Within SASA, 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 situations:

- 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.

We define the impact and probability ranges of the risks and include the relevant business units responsible for taking actions that can minimize these risks using the risk impact assessment table we have created in accordance with the categories. With our corporate business management perspective, we plan the behaviors or actions that may affect the operation of our company and our strategies in advance and thus make them manageable.

According to the SASA Enterprise Risk Management Procedure, 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, External Environment Risk.



The approaches to the risks that have been defined are categorized as follows, and approaches are also determined with flow charts in the OHS (Occupational Health and Safety) Risk / Environmental Dimension Evaluation 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 risks, 2-6 low risks, 8-15 medium risks, 16-25 high risks.

## W4.1b

(W4.1b) What is the total number of facilities exposed to water risks with the potential to have a substantive financial or strategic impact on your business, and what proportion of your company-wide facilities does this represent?

	Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
Row 1	1		Within the scope of the CDP report, the SASA Polyester Production Facility located in the Adana region represents 100%.

## W4.1c

(W4.1c) By river basin, what is the number and proportion of facilities exposed to water risks that could have a substantive financial or strategic impact on your business, and what is the potential business impact associated with those facilities?



#### Country/Area & River basin

Turkey
Other, please specify
Seyhan River

#### Number of facilities exposed to water risk

1

#### % company-wide facilities this represents

100%

## % company's total global revenue that could be affected

Unknown

#### Comment

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 falicities. 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.



## W4.2

(W4.2) Provide details of identified risks in your direct operations with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

#### Country/Area & River basin

Turkey
Other, please specify
Seyhan Ceyhan River

## Type of risk & Primary risk driver

Acute physical Flood (coastal, fluvial, pluvial, groundwater)

## **Primary potential impact**

Closure of operations

#### **Company-specific description**

The risk of flooding as a result of sudden changes in precipitation regimes or excessive precipitation

#### **Timeframe**

1-3 years

## Magnitude of potential impact

Low

#### Likelihood

Unlikely

Are you able to provide a potential financial impact figure?



No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

#### **Explanation of financial impact**

- Financial losses as a result of damage to the equipment and products of the plant as a result of floods
- Shut off operations

## Primary response to risk

Adopt regenerative agriculture policies

#### **Description of response**

Considering the Adana Meteorology Stations Long-Year Extreme incidents state that the probability of flooding is quite high. There are emergency procedures for flooding that may occur at the facility.

**Cost of response** 

**Explanation of cost of response** 

## Country/Area & River basin

Turkey
Other, please specify



Seyhan Ceyhan River

## Type of risk & Primary risk driver

Chronic physical Water stress

## **Primary potential impact**

Closure of operations

## **Company-specific description**

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.

#### **Timeframe**

1-3 years

## Magnitude of potential impact

Medium-high

#### Likelihood

Unlikely

## Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)



## **Explanation of financial impact**

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

#### Primary response to risk

Adopt water efficiency, water reuse, recycling and conservation practices

#### **Description of response**

SASA aims to reduce the risks of water scarcity with the water reuse unit to be established in 2023.

#### Cost of response

32,000,000

#### **Explanation of cost of response**

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 in 2023, has been taken into account.

## W4.2c

# (W4.2c) Why does your organization not consider itself exposed to water risks in its value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact?

	Primary reason	Please explain
Row	Risks exist, but no substantive	Considering the complexity of SASA's production and operations, the inclusion of water-related issues in all value
1	impact anticipated	chain processes requires more detailed study. Actions to be taken will be evaluated.

## W4.3

# (W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes, we have identified opportunities, and some/all are being realized



## W4.3a

(W4.3a) Provide details of opportunities currently being realized that could have a substantive financial or strategic impact on your business.

## Type of opportunity

Products and services

#### **Primary water-related opportunity**

Increased sales of existing products/services

### Company-specific description & strategy to realize opportunity

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.

#### Estimated timeframe for realization

4 to 6 years

## Magnitude of potential financial impact

High

#### Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

## Potential financial impact figure – minimum (currency)

191,760,000



## Potential financial impact figure – maximum (currency)

282,000,000

## **Explanation of financial impact**

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 by 17-25 %.

## W5. Facility-level water accounting

## W5.1

(W5.1) For each facility referenced in W4.1c, provide coordinates, water accounting data, and a comparison with the previous reporting year.

## Facility reference number

Facility 1

## Facility name (optional)

SASA Polyester Sanayi A.Ş

## Country/Area & River basin

Turkey
Other, please specify
Seyhan River

#### Latitude

37

## Longitude



35.17

#### Located in area with water stress

Yes

#### Total water withdrawals at this facility (megaliters/year)

5.223.02

## Comparison of total withdrawals with previous reporting year

This is our first year of measurement

## Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

### Withdrawals from brackish surface water/seawater

0

## Withdrawals from groundwater - renewable

5,223.02

## Withdrawals from groundwater - non-renewable

0

#### Withdrawals from produced/entrained water

U

#### Withdrawals from third party sources

0

## Total water discharges at this facility (megaliters/year)

3,409.46

### Comparison of total discharges with previous reporting year



This is our first year of measurement

#### Discharges to fresh surface water

0

#### Discharges to brackish surface water/seawater

0

#### Discharges to groundwater

0

#### **Discharges to third party destinations**

3.409.46

## Total water consumption at this facility (megaliters/year)

1,813.55

#### Comparison of total consumption with previous reporting year

This is our first year of measurement

## Please explain

Water amounts which are withdrawn, discharged and consumed are monitored annually. We set water intensity targets yearly and track our progress. Historical water amounts are shared in the 2020 and 2021 Sustainability Reports.

## W5.1a

## (W5.1a) For the facilities referenced in W5.1, what proportion of water accounting data has been third party verified?

#### Water withdrawals - total volumes

#### % verified

Not verified



## Please explain

There is no verification process.

## Water withdrawals - volume by source

#### % verified

Not verified

## Please explain

There is no verification process.

## Water withdrawals - quality by standard water quality parameters

#### % verified

Not verified

## Please explain

There is no verification process.

## Water discharges – total volumes

#### % verified

Not verified

## Please explain

There is no verification process.

## Water discharges – volume by destination

#### % verified

Not verified

## Please explain



There is no verification process.

## Water discharges – volume by final treatment level

#### % verified

Not verified

## Please explain

There is no verification process.

## Water discharges – quality by standard water quality parameters

#### % verified

76-100

#### Verification standard used

Turkish Accreditation Agency approved laboratories.

## Water consumption - total volume

#### % verified

Not verified

## Please explain

There is no verification process.



# **W6.** Governance

# W6.1

## (W6.1) Does your organization have a water policy?

Yes, we have a documented water policy that is publicly available

# W6.1a

# (W6.1a) Select the options that best describe the scope and content of your water policy.

	Scope	Content	Please explain
Row 1	Company-wide	Description of business impact on water  Description of water-related standards for procurement  Reference to international standards and widely-recognized water initiatives  Company water targets and goals  Commitment to align with public policy initiatives, such as the SDGs  Commitments beyond regulatory compliance  Commitment to water-related innovation  Commitment to stakeholder awareness and education	Policies related to water are shared publicly on SASA's website. It is mentioned in the titles of Sustainability Policy, Environmental Policy and Green Procurement Policy. The aim of forming policies is to cope with global problems such as climate change, poverty, hunger, inequalities, water scarcity and loss of biodiversity. Water related approaches and concernings UN Sustainable Development Goals are mentioned in the Sustainability Policy and Sustainability Reports.



Commitment to safely managed	
Water, Sanitation and Hygiene	
(WASH) in the workplace	
Acknowledgement of the human	
right to water and sanitation	
Recognition of environmental	
linkages, for example, due to	
climate change	
linkages, for example, due to	

<sup>1</sup>2021-Sustainability-Report.pdf

**0** <sup>2</sup>Environmental-Policy.pdf

**∅** <sup>4</sup>Green-Procurement-Policy.pdf

# W6.2

(W6.2) Is there board level oversight of water-related issues within your organization?

Yes

# W6.2a

(W6.2a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for water-related issues.

Position of individual	Please explain
Board-level committee	Early Detection of Risk Committee has 3 management members. According to the 2021 management structure, the chairman of the committee is a member of the board of directors.



There is a Climate Change Working Group established under the Early Detection of Risk Committee.

Duties and responsibilities of Early Detection of Risk Committee are;

- •Committee works to identify risks that may endanger the existence, development and continuity of operations of the company, to establish management systems, to identify risks, and to take necessary precautions.
- •It reviews the risk management system at least once a year, works to implement the committee's decisions.
- •Invites executives to a meeting when deemed necessary
- •Independent expert opinions can be used if needed
- •The Committee fulfills other duties and responsibilities given/to be assigned pursuant to the Turkish Commercial Code and the Capital Markets Legislation.
- •Committee advises the board of directors in identifying and managing climate-related risks and taking necessary actions within the company

The Committee provides information, regarding its activities and outputs, to the Board of Directors, at least once a year. SASA ensures that all stakeholders be informed, in line with the risk policy and objectives determined by the Committee. It conducts activities for the internalization of these policies by the employees. Working groups consists of the persons who work at related units of the company, to realize the projects relating to objectives set in matters which shall support sustainability work on the committee side.

# Board-level committee

Early Detection of Risk Committee has 3 management members. Early Detection of Risk Committee has 3 management members. When we look at the management structure of 2021, the chairman of the committee is a member of the board of directors. Duties and Responsibilities;

- The Committee works to identify risks that may endanger the existence, development, and continuation of the Company, to establish crisis prevention models, management systems, early diagnosis and detection, to implement necessary precautions regarding risks, and to manage risk.
- The Committee reviews the risk management systems at least once a year and monitors the implementation of risk management practices in accordance with the Committee Decisions.
- The Committee may invite any manager it deems necessary to its meetings and take their opinions.
- The Committee benefits from the opinions of independent experts on the issues it needs regarding its activities. The cost of consultancy services required by the Committee is covered by the Company.
- The Committee decisions are advisory to the Board of Directors, and the Board of Directors is the final decision maker on related matters. The Committee submits its evaluations and recommendations on the above issues to the Board of Directors in writing.



	- The Committee fulfills other duties and responsibilities assigned/to be assigned pursuant to the Turkish Commercial Code and the Capital Markets Legislation.
Board-level committee	Sustainability committee consists of chairman, vice chairman, rapporteur, committee and working group coordinators and 11 members. The Committee shall, within the scope of its duties and responsibilities  - conduct work activities and develop projects for the purpose of integrating sustainability into the Company's structure,  - follow national and international developments regarding sustainability  - compose the sustainability strategy, goals, road maps and policies  - manage, in pro-active manner, the risks regarding social, environmental and corporate governance issues, and direct the Company's sustainability strategy and policy  - support development of projects intended to decrease carbon emissions in business processes within the scope of combating against climate change, and ensure implementation of such projects  - follow the Company's road may regarding sustainability and developments in relation to implementation thereof; set objectives; accordingly, determine the performance criteria; supervise performance in accordance with the objectives and ensure participation of all related units of the Company, in the process actively  -authorise and coordinate the Working Group composed by it within the Company's organisation within the scope of relevant work activities  - revise regularly the sustainability policies, objectives, practices, working principles, management systems, and rearrange, implement, monitor and monitor them; in necessary cases, present them for approval of the Board of Directors  - ensure that all employees of the Company be informed in line with the Company's sustainability policy and objectives, and conduct work activities intended for internalisation of these policies by the employees  - ensure realisation of stakeholder participation for all stakeholders regarding the Company's sustainability strategy, policy and practices  - ensure that outputs of works, correspond to the Company's sustainability policies and the Company's expectations

# W6.2b

# (W6.2b) Provide further details on the board's oversight of water-related issues.

Frequency that water-	Governance mechanisms into	Please explain
related issues are a	which water-related issues are	
scheduled agenda item	integrated	



Row	Scheduled - some meetings	Monitoring implementation and	The Climate Change Working Group carries out studies on water and climate-related
1		performance	issues within SASA. The Group organizes meeting at least 2 (two) times a year and
		Reviewing and guiding business	presents a report evaluating the climate-related risks and opportunities for the
		plans	Company.
		Reviewing and guiding risk	
		management policies	
		Reviewing and guiding strategy	
		Reviewing and guiding corporate	
		responsibility strategy	
		Reviewing innovation/R&D	
		priorities	
		Setting performance objectives	

# W6.2d

# (W6.2d) Does your organization have at least one board member with competence on water-related issues?

	Board member(s) have competence on water-related issues	Criteria used to assess competence of board member(s) on water-related issues
Row 1	Yes	The Climate Change Working Group undertakes the main responsibility for water-related issues. The Climate Change Working Group works under the Early Detection of Risk Committee, which is one of the highest level governance units. The EDRC consists of a chairman and 2 members. Committee chairman and committee member have a say in the Board of Directors. The Climate Change Working Group reports the results of its work to the senior management twice a year.



# W6.3

(W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).

#### Name of the position(s) and/or committee(s)

Other, please specify
Early Detection of Risk Committee Chairman

## Responsibility

Assessing water-related risks and opportunities Managing water-related risks and opportunities

## Frequency of reporting to the board on water-related issues

Half-yearly

## Please explain

Early Detection of Risk Committee Chairman Duties

- Chairs the Early Detection of Risk Committee and manages the meetings.
- Sets the meeting agenda.
- Provides information flow and coordination between the Board of Directors and the Committee.
- During the discussion of certain issues, he/she may invite the relevant expert or experts to the meeting when necessary.
- Takes the necessary measures for the Committee to fulfill its duties and responsibilities effectively.

# **W6.4**

(W6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?



		Provide incentives for management of water-	Comment
	related issues		
F	Row	No, not currently but we plan to introduce them	In the coming reporting years, it is planned to establish a senior management incentive mechanism
1	I	in the next two years	not only for water but also for other climate issues.

# W6.5

# (W6.5) Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?

Yes, direct engagement with policy makers

# W6.5a

(W6.5a) What processes do you have in place to ensure that all of your direct and indirect activities seeking to influence policy are consistent with your water policy/water commitments?

## **Ministry Colloborations:**

## **Ministry of Agriculture and Forestry**

With the industry based efficiency project carried out by the Ministry of Agriculture and Forestry, SASA was determined as a pilot facility to determine the best available techniques. SASA is engaged with this project to the ministry. At the end of the project, Ministry will issue guidance documents specific for the industries.

### Ministry of Environment Urbanization and Climate Change

- Joint work of the ministry and SASA for the applicability of the Chemical Industry Integrated Pollution Prevention and Control Directive SASA Polyester production facility in Adana was used as a pilot facility to measure the applicability of the Integrated Pollution Prevention and Control Directive in the chemical industry. SASA gives its opinions regarding legal regulations on both greenhouse gas emissions and water pollution issues.



# **W6.6**

(W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report?

No, but we plan to do so in the next two years

# W7. Business strategy

# W7.1

# (W7.1) Are water-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

	Are water- related issues integrated?	Long-term time horizon (years)	Please explain
business	Yes, water- related issues are integrated	> 30	As stated in SASA's 2021 Sustainability Principles Action Report, sustainability targets on a corporate basis were examined under the headings of Strategy, Policy, Objectives, Environmental, Human and Employee Rights, Coorporate Governance Principles. Under the title of environmental principles, water issues are examined in detail. Topics covered on water are as follows:  - Water and wastewater management  - Review and reporting of water use and procedures within the institution  - Includes targets for calculating water footprint.  Please see our Sustainability Principles Compliance Framework and Compliance Status at SASA web site: https://www.sasa.com.tr/en/investor-relations/investor-relations/reports/sustainability-principles-compliance-report



Strategy for	Yes, water-	5-10	SASA summarized its Strategy, Policy and Objectives studies in its 2021 Sustainability Principles Action
achieving long-	related issues are		Report.
term objectives integrated			
			The Board of Directors determines ESG material issues, risks and opportunities and establishes
			appropriate ESG policies. In terms of the effective implementation of the policies that are discussed;
			Intra-partner directives, business procedures, etc. can be prepared. The Board of directors takes the decision for these policies and announces them to the public.
			decision for these policies and announces them to the public.
			Our Board of Directors has identified ESG material issues, risks and opportunities Policies have been
			established with the decision of the Board of Directors in accordance with these, and procedures and
			guidelines have been prepared to implement these policies. All our policies are posted on our website.
			Determines the Partnership Strategy in line with ESG policies, risks, and opportunities. It sets and
			publicizes its short and long-term objectives in line with the partnership strategy and ESG policies.
			Sustainability Strategy has been determined in line with the UN's Priority Development Goals. SASA
			continues to work on UN Sustainable Development Goals article 6 Clean Water and Sanitation.
			Solution of the state of the st
			Please see our Sustainability Principles Compliance Framework and Compliance Status at SASA web
			site: https://www.sasa.com.tr/en/investor-relations/investor-relations/reports/sustainability-principles-
			compliance-report
Financial	Yes, water-	5-10	Our aim is efficient use of resources, respect for the environment and cost savings. 32 million Euro
planning	related issues are		investment is planned for the new wastewater treatment plant and water reuse unit, which is planned to
	integrated		be established in 2023.



## W7.2

(W7.2) 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?

#### Row 1

Water-related CAPEX (+/- % change)

0

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

616

Water-related OPEX (+/- % change)

46

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

22

## Please explain

Water and CAPEX expenses for the following items in 2021 and 2022

- New wastewater treatment and reuse facility expenses
- Existing wastewater treatment plant
- CoolingTower facilities for new investments
- Water Wells for new investments

OPEX expenses related to water consist of the following expenses in 2021 and 2022

- Existing wastewater treatment plant expenses
- Raw water treatment expenses
- Pemutite water generation facilities



#### - Cooling tower facilities

When we look at 2022, it is expected that CAPEX and OPEX expenses will be considerably higher than in 2021 due to the newly established wastewater treatment plant and water reuse units.

# W7.3

# (W7.3) Does your organization use scenario analysis to inform its business strategy?

	Use of scenario analysis	Comment
Row 1	Yes	TCFD report studies were started during the reporting year. Climate-related risks are evaluated within SASA. It was created using the Multi Model Essemble portal offered World Bank Climate Change Knowledge. The aim here is to examine the effects of climate change on the company. Subjects such as minimum maximum temperature averages, precipitation, drought index were investigated. Currently, the work has been completed. TCFD studies will be completed covering all SASA facilities.

# W7.3a

# (W7.3a) Provide details of the scenario analysis, what water-related outcomes were identified, and how they have influenced your organization's business strategy.

	Type of scenario analysis used	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
Row	Water-related	World Bank Climate Change	- Reducing water use	Max-Temperature
1	Climate-	Knowledge Portal	- Drought	
	related	Multimodel Essemble RCP	- Negative impact of	The annual maximum temperature tends to increase rapidly, especially in the
		4.5 CP 8.5	agricultural activities in	RCP 8.5 scenario. This pessimistic scenario also jeopardizes water use as it



	the region	causes drought. Because of the reduction in water resources, both agriculture
	- Increase in cooling	and economy in Adana region are affected negatively, as well as the operations
	costs due to hot	of the plant and employee health.
	weather	
	- Irregularity in	Min-Temperature °C
	precipitation regimes	Although the annual minimum temperature remains much more optimistic
	as a result of climate	compared to the maximum temperature scenario, when the RCP 8.5 scenario is
	change	considered, it predicts an increase of about 6°C in 100 years. This creates a
	- Technology	risk for the plant in the use of natural resources. with the increase in the usual
	investments to keep	temperature.
	water consumption to a	
	minimum	Number of Hot Days (Tmax >35° C)
		Since fires can be expected to increase with hot days, there might be fires in the
		plant and many disruptions in equipment.
		practically allocaphone in equipment
		Precipitations (mm)
		The decrease in annual precipitation amounts may cause problems in the water
		use capacity of the plant. Since the water resources to be used by the plant are
		well water, rainfall amounts are very important. Considering the precipitation
		projections in the scenarios, with the new investments SASA targets 55-60%
		water recycling.
		Appual SPEL Draught Indov
		Annual SPEI Drought Index
		Drought, which brings with it water scarcity and many natural disasters, is one
		of the dangers that should be considered, as it can cause a decrease in
		vegetation, a decrease in water quality, negative effects on nutrition and even
		stop production.
•		



# W7.4

## (W7.4) Does your company use an internal price on water?

#### Row 1

### Does your company use an internal price on water?

No, but we are currently exploring water valuation practices

#### Please explain

As stated in the 2021 Sustainability Report within SASA, water management is among the high priority issues. For this reason, SASA carries out serious studies on water issues in parallel with its presence in the water stress area. Since 2019, SASA has consistently aimed to reduce water intensity. On the other hand, it works to reduce the waste water discharge limits below the legal limits. The wastewater treatment plant and water reuse systems, which are planned to be commissioned in 2023, are the biggest proof of serious studies on the sustainable use of water. It aims to carry out internal water price studies in the following years with the same strategic responsible production approach.

# W7.5

# (W7.5) Do you classify any of your current products and/or services as low water impact?

	Products and/or services classified as low water impact	Primary reason for not classifying any of your current products and/or services as low water impact	Please explain
1	No, but we plan to address this within the next two years		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.



# **W8. Targets**

# W8.1

## (W8.1) Describe your approach to setting and monitoring water-related targets and/or goals.

	Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row 1	Company-wide targets and goals	Targets are monitored at the corporate level Goals are monitored at the corporate level	In accordance with the Management Systems, the targets set within the company are regularly monitored at the Management Review meetings once a year. Management Review meetings are at the senior management level. On the other hand, necessary actions are taken by the Early Detection of Risk Committee, Sustainability Committee and sub-working groups of these committees, which are among the groups that make up the targets.  In addition, the targets are followed every year during the Sustainability Reporting process and at the Sustainability Committee meetings.

# W8.1a

(W8.1a) Provide details of your water targets that are monitored at the corporate level, and the progress made.

# Target reference number

Target 1

## **Category of target**

Water recycling/reuse

Level



Company-wide

# **Primary motivation**

Reduced environmental impact

## **Description of target**

Recovery and reuse of water used in the business

#### **Quantitative metric**

% increase in water use met through recycling/reuse

## Baseline year

2021

#### Start year

2021

# Target year

2023

## % of target achieved

0

# Please explain

SASA will establish a water reuse unit in 2023. The water reuse unit will cylcled 55-60% of the treated water used in the entire facility.

## Target reference number

Target 2

# **Category of target**

Product water intensity



#### Level

Company-wide

## **Primary motivation**

Climate change adaptation and mitigation strategiess

## **Description of target**

Targets for water intensity are given on an annual basis. The reason for this is that SASA productions vary on a yearly basis.

#### **Quantitative metric**

Other, please specify m3 withdraw water / ton production

## Baseline year

2019

## Start year

2019

# Target year

2020

## % of target achieved

100

# Please explain

Targets for water intensity are given on an annual basis. The reason for this is that SASA productions vary on a yearly basis. The water intesity, which was 5.01 in 2019, decreased to 4.4 in 2020.

# Target reference number

Target 3



# **Category of target**

Product water intensity

#### Level

Company-wide

## **Primary motivation**

Climate change adaptation and mitigation strategiess

## **Description of target**

Targets for water intensity are given on an annual basis because SASA productions vary over the years.

#### **Quantitative metric**

Other, please specify m3 withdraw water / ton production

## Baseline year

2020

# Start year

2020

# **Target year**

2021

# % of target achieved

100

# Please explain

In 2020, a 29 percent reduction in water intesity is targeted for 2021. It fell below the target of 3.47 in 2021 and decreased to 3.36.



# W8.1b

(W8.1b) Provide details of your water goal(s) that are monitored at the corporate level and the progress made.

#### Goal

Improve wastewater quality beyond compliance requirements

#### Level

Company-wide

#### **Motivation**

Reduced environmental impact

### **Description of goal**

The wastewater COD output value in the existing facility is below the local legislation limit (240 mg/L). As a result of its environmentally friendly approach, SASA has determined the limits as 150 mg/l.

## Baseline year

2021

## Start year

2021

# **End year**

2025

## **Progress**

Falling below current legal limits is one of the best examples of responsible sourcing. SASA has achieved this target, including 2021.



#### Goal

Engaging with customers to help them minimize product impacts

#### Level

Company-wide

#### **Motivation**

Reduced environmental impact

## **Description of goal**

Reducing the amount of discharged wastewater and pollution load

# Baseline year

2017

#### Start year

2018

# **End year**

2023

# **Progress**

In recent Sustainability Report stated that the targeted 0.97 wastewater intensity in 2021 was achieved.

### Goal

Other, please specify

Enhancing circular economy in terms of water use

#### Level

Company-wide



#### **Motivation**

Increase freshwater availability for users/natural environment within the basin

## **Description of goal**

Using the water obtained from the recycling units in the cooling towers in the facility as of 2023

## Baseline year

2021

#### Start year

2022

## **End year**

2025

## **Progress**

The construction of water reuse units started in 2021. The new wastewater treatment plant and water reuse unit is scheduled to be established in 2023.

# **W9. Verification**

# **W9.1**

(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?

Yes

 $\emptyset$  2021-Sustainability-Report.pdf



# W9.1a

# (W9.1a) Which data points within your CDP disclosure have been verified, and which standards were used?

Disclosure module	Data verified	Verification standard	Please explain
W1 Current state	1- W1.1 Water intensity targets 2- W1.2b All water amounts 3- W6.1a Water Policy	RevR6 Procedure for assurance of sustainability report	SASA 2021 Sustainability Report  1- please see page 56. 2- please see page 146.
W6 Governance	1- W6.1a Water Policy	RevR6 Procedure for assurance of sustainability report	SASA 2021 Sustainability Report  1- please see pages 53-56
W1 Current state	1- W1.2b Water discharge quality – by standard effluent parameters 2- W1.2b The provision of fully-functioning, safely managed WASH services to all workers	Other, please specify Turkish Accreditation Agency- Accreditation	The parameters in the provision of fully-functioning, safely managed WASH services to all workers are approved by accredited institutions.  The effulent parameters are controlled by accredited institutions.



# W10. Sign off

# W-FI

(W-FI) 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.

# W10.1

(W10.1) Provide details for the person that has signed off (approved) your CDP water response.

		Job title	Corresponding job category
Ro	ow 1	Environment and Wastewater Treatment Plant Executive- Sustainability Coordinator	Other C-Suite Officer

# W10.2

(W10.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate's Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].

Nο

# **Submit your response**

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP



	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

# Please confirm below

I have read and accept the applicable Terms