

# Welcome to your CDP Water Security Questionnaire 2023

# **W0. Introduction**

# W0.1

# (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 Sabanci Holding. The name of the group's organization in Turkey was also changed to **ADVANSA SASA Polyester Sanayi A.Ş.** in 2005. In 2011, Sabanci 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 Halı 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 m<sup>2</sup> in Adana, its own raw material storage facility on an area of 55,625 m<sup>2</sup> in Iskenderun, and liaison offices in Istanbul and Ankara.

SASA's ESG Risk Rating score decreased from 23.1 (Medium Risk) to 15.4 (Low risk) in Sustainalytics in 18th June, 2023. Our ranking is 6 out of 562 chemical companies in June, 2023. Also, in the Sustainalytics, SASA is ranked 1st in its own sub-industry.

Our total GHG emissions intensity (Scope1+Scope2) is 0,487 (tonCO2e/ton production) in 2022. Our total water intensity is 3,14 (m3 withdrawn / ton production) in 2022 which is also verified by 3rd party according to the ISO 14046 standard.

# 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).

# W0.2

# (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, 2022	December 31, 2022



# W0.3

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

Turkey

# **W0.4**

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

# W0.5

(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? No

# 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	Direct use importance: As SASA, we are one of the leading polymer producers in the world. As a chemical company we need to use water in our direct operation such as in our processes, cooling towers and general equipment cleaning and providing safely managed water for our employees. Indirect use importance: Also, for our value chain and for our raw material suppliers it is essential to have good quality freshwater. Since they also use water in their operations. 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.
			<ul> <li>(m3 raw water withdrawn/tons production) 3.19</li> <li>Adopting a responsible and sustainable water management approach, SASA uses</li> </ul>



			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 foreseen for the groundwater level.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Important	It is important for us to use recycled water since it is embedded in our business plan to start operating a water treatment plant. We aim to increase our recycled water usage and therefore reduce our freshwater importance. We also aim to raise awareness in our supply chain to increase their recycled water usage to further reduce the need for freshwater that is drawn from water stressed areas. 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 construction phase for the treatment plants (aerobic and anaerobic) as well as water reuse plant has started in the previous 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		Method of measurement	Please explain
Water withdrawals – total volumes	100%	Continuously		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%	Continuously	Real time instantaneous in- place flowmeters	Water withdrawal volumes by source are monitored at 100% of our operations. We continuously measure our all water wells it operates with instantaneous flow meter equipment.
Water withdrawals quality	100%	Daily	Daily sample taking and weekly testing of the samples	Water is utilized for a variety of functions in SASA, including raw water, permutit water, demineralized water, cooling water, drinking water, and so on. Water samples are taken daily and water quality analyses are performed on a weekly basis, as mentioned in the SASA method. 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	100%	Continuously	Real time instantaneous in- place flowmeters	The total water volume given to the sewer system is constantly monitored.
Water discharges – volumes by destination	100%	Continuously	Real time instantaneous in- place flowmeters	All industrial water from our manufacturing facilities and all domestic water from on-site staff usage are collected in a shared sewage system and delivered to an industrial wastewater treatment plant within our facility's boundaries. Treated wastewater is discharged to a neighbouring water stream known as the TD-07 DSI drainage channel of the State Hydraulic Works, which eventually meets the Seyhan river about 35 kilometres from our disposal location. 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	100%	Continuously	Real time instantaneous in- place flowmeters	In SASA, all generated wastewaters are collected and treated together. All the wastewater is subjected to same treatment methods. Therefore, we can easily monitor the volumes by their treatment methods. 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 our plant, 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	100%	Continuously	Some of the parameters are watched and monitored continuously and some tests are carried out quarterly. All	SASA maintains constant control over its wastewater. The Ministry of Environment has an online system (SAIS) in accordance with the National Regulation on WPC. The following metrics



			will be explained in the next column.	are tracked and submitted to the SAIS program online. - 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. We adhere to the criteria of the IFC standards/EHS Guidelines (EHS Guidelines for Large Volume Petroleum-based Organical Chemicals Manufacturing, EHS Guidelines for Petroleum-based Polymers Manufacturing, and EHS Guidelines for Textile Manufacturing). Wastewater from RO and cooling towers are analized by accredited laboratories according to WPC (Table 20.1-7)
Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)	Not relevant			We do not produce products that can generate the aforementioned pollutants.
Water discharge quality – temperature	100%	Continuously	In place temperature sensors	Sensors are used to measure the wastewater plant effluent temperature parameter. All wastewater temperature is measured instantaneously and submitted to the Ministry system thanks to the online system.



Water consumption – total volume	100%	Continuously	The withdrawals and discharges are monitored through in place flowmeters and consumption can be watched closely thanks to this.	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%	Quarterly	Tests are carried out for checking the water quality and ensuring hygiene	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, Enterococcal (microbiological analysis) bacteria. In chemical analyzes of drinking and utility water; nitrite, iron, aluminium, ammonium, conductivity parameters are followed. Chlorination is done within limits for the purpose of disinfection for





# W1.2b

(W1.2b) 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?

	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Please explain
Total withdrawals	4,967.01	Lower	Increase/decrease in efficiency	Much higher	Facility expansion	The use of water has a critical place in the petrochemical industry. We are planning to open a PTA facility in the coming years; therefore, we expect an increase in the forecasted withdrawal volumes according to our thresholds, we aim to manage this increase with our plan to install and operate a Water Reuse plant. Considering the increase in production and facility expansions that are planned, water withdrawal volume will be much higher. However, our working groups are studying on water saving projects to compensate this forecasted increase. For example, as stated in our 2022 Sustainability Report, we started with a project that will save 200.000 m3 per year and proceeding with further projects. This reporting year we saw a decrease in the withdrawal volumes due to increase in our efficiency in our operations.



						Our definition for change: Much higher: >+10%, Higher: >+3%, About the same: <+/-3%, Lower: >- 3%, Much lower: >-10%.
Total discharges	3,214.99	Lower	Increase/decrease in efficiency	Much higher	Facility expansion	The use of water has a critical place in the petrochemical industry. We are planning to open a PTA facility in the coming years; therefore, we expect an increase in the forecasted discharge volumes according to our thresholds, we aim to manage this increase with our plan to install and operate a Water Reuse plant. Considering the increase in production and facility expansions that are planned, water discharge volume will be much higher. This reporting year we saw a decrease in the withdrawal volumes due to increase in our efficiency in our operations. Our definition for change: Much higher: >+10%, Higher: >+3%, About the same: <+/-3%, Lower: >- 3%, Much lower: >-10%.
Total consumption	1,752.01	Lower	Increase/decrease in efficiency	Much higher	Facility expansion	The use of water has a critical place in the petrochemical industry. We are planning to open a PTA facility in the coming years; therefore, we expect an increase in the forecasted consumption volumes according to our thresholds, we aim to manage this increase with our plan to install and operate a Water Reuse plant. Considering the increase in production and facility expansions that are planned, water consumption



	volume will be much higher.
	This reporting year we saw a decrease in the
	withdrawal volumes due to increase in our efficiency
	in our operations.
	Our definition for change: Much higher: >+10%,
	Higher: >+3%, About the same: <+/-3%, Lower: >-
	3%, Much lower: >-10%.

# W1.2d

(W1.2d) Indicate whether water is withdrawn from areas with water stress, provide the proportion, how it compares with the previous reporting year, and how it is forecasted to change.

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year			Primary reason for forecast	Identification tool	Please explain
Row 1	Yes	100%	About the same	Maximum potential volume reduction already achieved	About the same	Maximum potential volume reduction already achieved	WRI Aqueduct WWF Water Risk Filter	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 can be 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 be exceeded.	
	It is stated in the documents of Minis Agriculture and Forestry, water stress begins when the annual per capita amount of water falls below 1,700 cu meters, and water poverty occurs wh this amount falls below 1,000 cubic meters. Our country is not a water-ri country as it is thought. On the contr is one of the countries experiencing	ubic hen ich rary, it
	stress with an annual amount of 1,32 cubic meters of water per capita. We are already located in a water so region in Turkey. And in order to red	carce
	the percentages, we would have to s water from outside the region and it feasible for our operations. We achieved to reduce our absolute	isn't
	withdrawals in volume from water so areas. And with the project to increa reused water usage in our direct operations, we expect to increase ou water reuse volume by 55-60% with	ase ur
	year 2023. Our definition for change: Much high >+10%, Higher: >+3%, About the sa	



				<+/-3%, Lower: >-3%, Much lower: >-
				10%.

# W1.2h

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes					In the operations and facilities SASA do not use fresh surface water, including rainwater, water 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	4,967.01	Lower	Increase/decrease in efficiency	All water supply is provided from the groundwater. There are different water wells in the facility surrounding area and they are operated continuously. It is foreseen that the use of water will slightly 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. However, we achieved to reduce our withdrawal volumes this year due to increasing efficiency in our operations.



			Our definition for change: Much higher: >+10%, Higher: >+3%, About the same: <+/-3%, Lower: >-3%, Much lower: >-10%.
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 third party sourced water.

# W1.2i

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for 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	3,214.99	Lower	Increase/decrease in efficiency	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 kilometres 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.
We achieved to reduce our discharge volumes this year due
to increasing efficiency in our operations.
Our definition for change: Much higher: >+10%, Higher:
>+3%, About the same: <+/-3%, Lower: >-3%, Much lower:
>-10%.

# 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)	treated volume	Primary reason for comparison 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 current SASA wastewater treatment plants but our new integrated wastewater treatment plant which is under construction



					now, will include advanced biological treatment methods such as Biobed EGSB (Extended Granular Sludge Bed) and the MBBR (Moving Bed Biofilm Reactor) process.
Secondary treatment	Relevant	3,214.99	Lower	Increase/decrease in efficiency	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. 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



Primary treatment only	Not relevant			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. Our definition for change: Much higher: >+10%, Higher: >+3%, About the same: <+/-3%, Lower: >- 3%, Much lower: >-10%. All wastewater is applied primary, secondary and advanced biological treatment. Primary treatment consists of physical treatment. All wastewater that passes through primary treatment goes to the secondary and
				advanced biological treatment stage. Our definition for change: Much higher: >+10%, Higher: >+3%, About the same: <+/-3%, Lower: >- 3%, Much lower: >-10%.
Discharge to the natural environment	Not relevant			In SASA, there is no discharging wastewater without treatment.



without treatment				
Discharge to a third party without treatment	Not relevant			In SASA, there is no discharging wastewater 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
Rov 1	v 1,785,529,476.01	4,967.01	359,477.729259655	We expect the water consumptions increase with our increased capacity but it will not affect our efficiency negatively. We expect our revenue growth to be higher than water withdrawal increases. We used the average exchange EUR/TRY rate of 17.3955 to give our EUR revenue.

# 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/denominator)

3.14

## Numerator: water aspect

Total water withdrawals

# Denominator

Ton

# Comparison with previous reporting year

Lower

# **Please explain**

Reason for change: The water intensity of our products was lower than previous reporting year mainly due to increase in our operational efficiency. Our withdrawal volumes were also lower than previous year and our production numbers have also increased.

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 was used.

Anticipation for future trend: We aim to even further increase our production and at the same time increase our water efficiency. We constantly set lower intensity targets each year and we expect this trend to continue in the next years.

Future strategic plans for water intensity: To reduce water consumption, we have developed the projects such as "automation and optimization of tower blowers" and "monitoring of condensate return water" while monitoring our consumption patterns monthly, ensuring controls and



interventions for water leakage. We also have a project to start operation of a water reuse plan to increase our water reuse rate and this will increase our water efficiency as well. We are also closely tracking and reviewing our progress each year according to ISO 14046 standard, starting with this reporting year. We also started water mapping in our each production units, which was done before in our facilities as a total, but from this year we are mapping each units and each water consuming units. Which enables us to define where we can improve our operations.

# W1.4

# (W1.4) Do any of your products contain substances classified as hazardous by a regulatory authority?

	Products contain hazardous substances	Comment
Row 1	No	

# W1.5

# (W1.5) Do you engage with your value chain on water-related issues?

	Engagement
Suppliers	Yes
Other value chain partners (e.g., customers)	Yes

# W1.5a

(W1.5a) Do you assess your suppliers according to their impact on water security?

# Row 1

# Assessment of supplier impact

Yes, we assess the impact of our suppliers



#### **Considered in assessment**

Basin status (e.g., water stress or access to WASH services) Supplier dependence on water Supplier impacts on water availability

Supplier impacts on water quality

# Number of suppliers identified as having a substantive impact

6

## % of total suppliers identified as having a substantive impact

1-25

#### **Please explain**

When assessing the impact of our suppliers, firstly we check 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 our most important suppliers, we started to check which of them started on their Ecovadis process. Because, Ecovadis makes evaluations on all value chain in both climate and water-related issues. Also, all of our suppliers are asked to inform us with their water specific works and calculations, such as water targets, footprint calculations and their sustainability reports to learn about their risks and impacts. We also restructured our Procurement Department as Supply Chain Management Department and with this restructuring we are closely monitoring our suppliers and conducting audits if necessary.

We also check and ask them to comply with necessary regulations for discharges and if they have received any fines or penalties, we count them as impactful.

# W1.5b

#### (W1.5b) Do your suppliers have to meet water-related requirements as part of your organization's purchasing process?

		Suppliers have to meet specific water-related requirements	
Ro	ow 1	Yes, suppliers have to meet water-related requirements, but they are not included in our supplier contracts	



# W1.5c

(W1.5c) Provide details of the water-related requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance measures in place.

## Water-related requirement

Conducting water-related risk assessments on a regular basis (at least once annually)

- % of suppliers with a substantive impact required to comply with this water-related requirement 100%
- % of suppliers with a substantive impact in compliance with this water-related requirement 51-75

# Mechanisms for monitoring compliance with this water-related requirement

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

# Response to supplier non-compliance with this water-related requirement

Exclude

# Comment

We ask our suppliers to submit a water related risk assessments on their own. All of our 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 our supplier lists.

#### Water-related requirement

Providing fully-functioning, safely managed WASH services to all workers



# % of suppliers with a substantive impact required to comply with this water-related requirement 100%

# % of suppliers with a substantive impact in compliance with this water-related requirement 51-75

# Mechanisms for monitoring compliance with this water-related requirement

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

# Response to supplier non-compliance with this water-related requirement

Exclude

# Comment

All of our suppliers have to commit to our water policy which is publicly available. In our policy the suppliers can see that they need to ensure that they are providing fully-functioning and safely managed WASH services to all workers in their respective sites. We conduct audits if deemed necessary and potential penalties such as exclusion from our supplier lists are applicable.

# Water-related requirement

Complying with going beyond water-related regulatory requirements

- % of suppliers with a substantive impact required to comply with this water-related requirement 100%
- % of suppliers with a substantive impact in compliance with this water-related requirement 76-99
- Mechanisms for monitoring compliance with this water-related requirement

Certification



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

# Response to supplier non-compliance with this water-related requirement

Exclude

# Comment

All of our suppliers should comply with water related regulations that are applicable with their respective regions. If any breaches or any fines or penalties occur, we firstly engage with them to take corrective measures and if still not improving we cut ties with them.

# W1.5d

# (W1.5d) Provide details of any other water-related supplier engagement activity.

# Type of engagement

Information collection

# **Details of engagement**

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

# % of suppliers by number

100%

# % of suppliers with a substantive impact

100%

# Rationale for your engagement

We have suppliers from about 20 countries and some of them have a high-water stress and water scarcity. We conduct this information collection activity to understand our supply chain effects to water stresses and help them with a target to set for them accordingly. We aim to



reduce water withdrawals of our upstream value chain by gathering these information and setting clear and achievable goals for them to further help those regions and reduce water stress globally.

We have water reduction and intensity reduction targets in our Sustainability Report and to achieve these targets, during our supplier visits we inform them with these targets and we are asking them, through our supplier evaluation forms and verbally, to give us information about their water-related targets, water footprint calculations and etc.

#### Impact of the engagement and measures of success

We have found that through this engagement activity we can set more realistic targets for our water-related issues and also to inform our operations from this gathered data. If the data is deemed unacceptable or critical, we may conduct audits and find ways to help them rectify the situation and improve their operations.

We continuously update and inform our targets and check successes, by constantly checking our suppliers and measure the targets and real values.

We also learn and improve our own activities and set our own targets for water.

As an outcome for this engagement, we have seen improvements and further visibility along our value chain for water quantities. We saw that our suppliers are also trying to achieve their targets and adhering to our water policy as well. This also helped us reduce our water related risks. We measure the success of this activity by which are sharing info as requested and by the percentages. We also check the goals and achieved targets and make comparisons accordingly.

#### Comment

# W1.5e

(W1.5e) Provide details of any water-related engagement activity with customers or other value chain partners.

# Type of stakeholder

Other, please specify Employee, Stakeholders (Universities)



# Type of engagement

Education / information sharing

# **Details of engagement**

Educate and work with stakeholders on understanding and measuring exposure to water-related risks Run an engagement campaign to educate stakeholders about your water-related performance and strategy

# Rationale for your 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, such as Sustainability Talks 22, to facilitate knowledge sharing and transfer within the industry.

# Impact of the 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%. We have seen improvements in employee behavior and new ideas are shared with our Sustainability team to improve our water efficiency.

# **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?

	Water-related regulatory violations	Comment
Row 1	No	SASA was not subject to any fines, enforcement orders or any penalties due to regulatory violations.

# **W3. Procedures**

# W3.1

(W3.1) 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?



	Identification and classification of potential water pollutants	How potential water pollutants are identified and classified
Row 1	Yes, we identify and classify our potential water pollutants	Safety data sheets are available for all chemicals used on the production site. 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 - MRSL for Textiles and Polymers in order to prevent the discharge of chemicals into the receiving environment.

# W3.1a

(W3.1a) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities.

# Water pollutant category

Other nutrients and oxygen demanding pollutants

# Description of water pollutant and potential impacts

Chemical Oxygen Demand.

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.

## Value chain stage

Direct operations Supply chain

# Actions and procedures to minimize adverse impacts

Beyond compliance with regulatory requirements

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

Other, please specify

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) compliance

# **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.

# Water pollutant category

Inorganic pollutants

# 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.

## Value chain stage

Direct operations Supply chain Product use phase

## Actions and procedures to minimize adverse impacts

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 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) compliance

# **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.

# Water pollutant category

Oil

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.

## Value chain stage

**Direct operations** 

# Actions and procedures to minimize adverse impacts

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 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) compliance

# **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.

# Water pollutant category

Inorganic pollutants

# 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.

# Value chain stage

**Direct operations** 

# Actions and procedures to minimize adverse impacts

Beyond compliance with regulatory requirements

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

# 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.

# Water pollutant category

Inorganic pollutants

# 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.

# Value chain stage

Direct operations

# Actions and procedures to minimize adverse impacts

Beyond compliance with regulatory requirements



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

## **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.

# Water pollutant category

Other physical pollutants

## 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.

#### Value chain stage

**Direct operations** 

#### Actions and procedures to minimize adverse impacts

Beyond compliance with regulatory requirements

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

Other, please specify

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) compliance

# **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.

#### Water pollutant category

Inorganic pollutants

#### 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.

#### Value chain stage

**Direct operations** 

#### Actions and procedures to minimize adverse impacts

Beyond compliance with regulatory requirements

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

#### **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.

# 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?

3 to 6 years

# Type of tools and methods used

Tools on the market International methodologies and standards



#### Tools and methods used

WRI Aqueduct WWF Water Risk Filter Environmental Impact Assessment Life Cycle Assessment ISO 14001 Environmental Management Standard ISO 14046 Environmental Management - Water Footprint

#### **Contextual issues considered**

Water availability at a basin/catchment level Impact on human health Water regulatory frameworks Status of ecosystems and habitats Access to fully-functioning, safely managed WASH services for all employees

#### Stakeholders considered

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

#### Comment

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

### 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.

	Rationale for approach to risk assessment	Explanation of contextual issues considered	Explanation of stakeholders considered	Decision-making process for risk response
Row	In SASA, we assess our own direct	We as SASA, consider Water	SASA considers its direct	Our Early Detection of Risk Committee's
1	operational risks and we did not	Regulatory Frameworks, mainly	stakeholders such as	working groups gather the necessary
	include other stages of our value	because of the transitional	investors, employees and	information for all the considered issues and
	chain mostly because we ask our	regulation risks may arise and we	customers that will be	all the stakeholders that could be involved by
	suppliers to submit their own risk	always aim to comply with the	affected by the risks that	the risks and then classifies all the risks in a
	assessments to us for reviewing.	regulations and also go beyond the	may arise. They are	severity-probability(frequency) matrix. Risk is
		regulations.	considered because we	then calculated as severity x probability
	We assessed full coverage of our		believe that they will be	(frequency). Then the acceptable and not
	operations mainly due to our location	We care about the ecosystems	directly influenced.	acceptable risks are determined. Then our
	is accessible and in a single country	and habitats that we may affect, as		Committee oversees the risks and advises
	and a single region. So, it is	this can cause many different risks	We also consider local	corrective actions.
	accessible for us to assess our risks.	as well. Also, this can drive	communities and water	The risks are then calculated for the residual



	reputational risks for our company	utilities at a local level	risks and if it moved into acceptable zone or
For the tools, we employ many viable	as well.	since we are located in a	not is checked thoroughly.
	as well.		<b>-</b> ,
tools for assessing our risks. WRI		single region and we care	The final decisions are taken by the
Aqueduct, WWF Water Risk Filter	We always commit to provide fully	about the risks that could	Committee after gathering all the information
maps to check drought risk, baseline	functioning, safely managed	affect them and our	and risk calculation. The actions are
water stress risks and water scarcity	WASH services to all our	company as well.	determined and they are prioritized
in our region. ISO 14046 to review our	employees. We always consider		according to company strategy and their
water footprints and see in which	the risks from this issue, since we	We consider regulators	timeframes.
organizational boundaries use and	aim to be and are one of the	mainly because the	
consume water the most. ISO 14001	largest polyester producers. We	regulation risks and how it	
to employ and see effectiveness of	have a huge number of employees	may affect us and also how	
our environmental management and	and their well-being is a top priority	it may affect the regulators	
assess the risks that can arise. LCA	for our company.	with our actions to mitigate	
and Environmental Impact		the risks.	
Assessments to see our products	Impact on human health is also		
effects and to see and assess the	considered in our risk		
risks on climate and water from our	assessments. This is mainly		
operations.	because we are genuinely		
	considerate of our operations to		
After seeing and assessing our risks,	not to have an impact on human		
we classify them based on their	health. This contextual issue may		
severity and probability. Then we put	arise many risks for our company		
them in a matrix and see which risks	and cause some severe financial		
are need to be addressed right away	damage due to risks that are		
and which risks are negligible. Also,	overlooked.		
we classify our risks by their time			
frames. We consider them as short	Water availability is considered		
	-		
term, medium term and long term.	mainly due to importance of water		
	in the petrochemical industry. The		



The timeframes are 0 to 3 years, 3-10	availability risk is essential for our	
years and 10+ years respectively.	assessments and we consider the	
	water stress, groundwater levels,	
	drought risks and water scarcity	
	when we are doing our	
	assessments for water-related	
	issues.	

# 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

Less than 1%

#### 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 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.

### 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 and Ceyhan Rivers

#### 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

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.

#### Timeframe

More than 6 years

#### Magnitude of potential impact

High

#### Likelihood

Likely

#### 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)

300,000

#### Potential financial impact figure - maximum (currency)

575,000

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

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

- Stopping of operations

#### Primary response to risk

Increase insurance coverage

#### **Description of response**

We increased our insurance coverage to include flooding risks and to protect our assets and operations from this potential risk.

#### Cost of response

135,000

#### Explanation of cost of response

We increased our premiums for the insurance to fully include the flood risk.

#### Country/Area & River basin

Turkey Other, please specify Seyhan and Ceyhan Rivers



#### 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?

Yes, an estimated range

Potential financial impact figure (currency)

# Potential financial impact figure - minimum (currency) 115,000

# Potential financial impact figure - maximum (currency) 300,000

**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 closely in the coming years, has been taken into account.

#### Country/Area & River basin

Turkey Other, please specify Seyhan and Ceyhan Rivers

#### Type of risk & Primary risk driver

Regulatory Statutory water withdrawal limits/changes to water allocation

#### **Primary potential impact**

Constraint to growth

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

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.



#### Timeframe

More than 6 years

#### Magnitude of potential impact

Medium

#### Likelihood

Unlikely

#### 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) 115,000

# Potential financial impact figure - maximum (currency)

300,000

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

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

#### Primary response to risk

Adopt water efficiency, water reuse, recycling and conservation practices

#### **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.

#### 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 closely in the coming years, 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
Rov 1	Evaluation in progress	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.
		We will firstly consider the water stress, water scarcity and drought risks from our upstream value chain. We will also consider regulatory risks for our suppliers since any penalties will damage them and will also disrupt our supply chain as well.
		We are currently considering all the aforementioned risks and will be finishing our evaluations within 2 years.

### 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 %.

#### Type of opportunity

Efficiency

#### Primary water-related opportunity

Water recovery from sewage management

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

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.

#### Estimated timeframe for realization

Current - up to 1 year

#### Magnitude of potential financial impact

Low

#### 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**

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.

# 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)** 4,967.01

Comparison of total withdrawals with previous reporting year Lower

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

Withdrawals from brackish surface water/seawater 0

Withdrawals from groundwater - renewable 4,967.01

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water 0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year) 3,214.99

Comparison of total discharges with previous reporting year Lower

Discharges to fresh surface water



0

Discharges to brackish surface water/seawater
0
Discharges to groundwater
0
Discharges to third party destinations
3,214.99
Total water consumption at this facility (megaliters/year)
1,752.01
Comparison of total consumption with previous reporting year
Lower
Please explain

Water amounts which are withdrawn, discharged and consumed are monitored continuously. We set water intensity targets yearly and track our progress. Historical water amounts are shared in the 2022 Sustainability Report. We saw lower consumptions, discharges and withdrawal volumes mainly due to increase in our operational efficiency.

### 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

76-100

Verification standard used



#### ISO 14046 standard and third-party verification

#### Water withdrawals – volume by source

#### % verified

76-100

#### Verification standard used

ISO 14046 standard and third-party verification

#### Water withdrawals - quality by standard water quality parameters

#### % verified

Not verified

#### **Please explain**

No verification was planned for our projects and studies related to water withdrawals' quality. However, we are expanding and developing the projects we carry out within the scope of sustainability. Therefore, we plan to have our water-related data verified in the next 2 years.

#### Water discharges – total volumes

% verified

76-100

#### Verification standard used

ISO 14046 standard and third-party verification

#### Water discharges – volume by destination

% verified 76-100 SASA POLYESTER SANAYİ A.Ş. CDP Water Security Questionnaire 2023 27 July 2023



#### Verification standard used

ISO 14046 standard and third-party verification

#### Water discharges – volume by final treatment level

#### % verified

Not verified

#### **Please explain**

No verification was planned for our projects and studies related to discharges by treatment levels. However, we are expanding and developing the projects we carry out within the scope of sustainability. Therefore, we plan to have our water-related data verified in the next 2 years.

#### Water discharges - quality by standard water quality parameters

#### % verified

76-100

#### Verification standard used

-ISO 14046

-Turkish Accreditation Agency approved laboratories verified and approved our water discharges qualities by the regulations.

#### Water consumption – total volume

% verified 76-100 SASA POLYESTER SANAYİ A.Ş. CDP Water Security Questionnaire 2023 27 July 2023



#### Verification standard used

ISO 14046 standard and third-party verification

# 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
v Company- wide	Description of business dependency on water Description of business impact on water Commitment to align with international frameworks, standards, and widely- recognized water initiatives	SASA has a water policy that is publicly available. And the company also has water related policies which are also publicly available. 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 concerns UN Sustainable Development Goals are mentioned in the Sustainability Policy and Sustainability Reports.
	Commitment to prevent, minimize, and control pollution Commitment to reduce water withdrawal and/or consumption volumes in direct operations	The policies that are related with water issues define the dependencies of the business and business impact on water. And give commitment to apply these policy measures on their procurement contracts as well. The policies give commitment to reduce water usage and also to comply with international regulations as well. The policies states that SASA is also committing to contribute to CDP Water Security reporting every year.



	Commitment to reduce water	0 1, 2, 3, 4, 5
	withdrawal and/or consumption	
	volumes in supply chain	
	Commitment to safely managed	
	Water, Sanitation and Hygiene	
	(WASH) in the workplace	
	Commitments beyond regulatory	
	compliance	
	Reference to company water-related	
	targets	
	Acknowledgement of the human right	
	to water and sanitation	
	Recognition of environmental	
	linkages, for example, due to climate	
	change	
G		

<sup>●</sup> <sup>1</sup>Environmental-Policy.pdf

0 ₂Sustainability-Policy.pdf

U 3Water-Management-Policy.pdf

0 ₄Green-Purchasing-Policy.pdf

0 ₅2022-Sustainability-Report.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 or committee	Responsibilities for water-related issues
Board-level committee	Under the TCFD framework, the decisions and actions related to the topic of climate change are taken by the Early Detection of Risk Committee. The Committee has been established by the Board of Directors for the early detection and management of all kinds of risks and climate related risks that may endanger the existence, development, and continuation of SASA. Committee also takes necessary and appropriate measures accordingly. The members of the committee are determined by the Company's Board of Directors and disclosed to the public. The term of the committee members' duty is parallel to the board directors. The Committee is re- formed following the election of the Members of the Board of Directors. Three members are part of the Early Detection of Risk Committee: the chairman, the rapporteur, and one other member. Risks are determined at the highest level, and the chairman and members constitute independent members of the board of directors. The committee chairman sets the committee's agenda, discusses subjects, and schedules meetings. The committee meets at least 6 times a year to review the agenda topics. The relevant executives may be invited to Committee meetings as considered necessary by the Committee, and those decisions are documented in writing. The Early Detection of Risk Committee manages corporate risks according to the following criteria. Risks are identified. Crisis prevention models are developed. Management systems are created. Risks are recognized and detected early. Risks are constantly reviewed. Risks are managed by taking appropriate precautions. Legal requirements are completed.



	Within SASA, committees-affiliated working groups have been established. Here, the objective is to support the Committees in their work, work in accordance with SASA's sustainability goals and strategies, and provide suggestions.
Board-level committee	The Climate Change Working Group organizes meeting at least 2 times a year and presents a report evaluating the climate and water related risks and opportunities for the company. The tasks of the group are: Leading the identification, assessment and management of climate-related risks and opportunities. Reporting to the EDRC the climate-related risks and opportunities identified by the management, along with their corresponding potential financial impacts on the Company. Establishing a process for integrating climate-related risks into the enterprise risk database. To monitor the management of climate and water related risks. The Climate Change Working Group determines its actions for the reporting year and uses action tables to monitor its progress as it specifically climate risks and opportunities. TOR documents provide explanations of meeting norms and frequency. The TOR document contains references to the action tables' ongoing updating. SASA Climate Change Working Group Actions on Water Management: -Keeping water usage and wastewater data on a regular basis -Determining water density and setting water use reduction targets -Annual corporate carbon and water footprint measurement and verification in accordance with ISO standards -Investigating the impact of possible water pollutants on the aquatic ecosystem -Conducting special investigations into water-related risks under the guidance of the Early Detection of Risk Committee -Total water withdrawal, determination of discharged water quality and approval of the process by third parties in SASA's water usage and measurement stages -Establishing an independent water policy for a company -Minimizing steam loss leaks through water-efficiency studies
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
-authorize and coordinate the Working Group composed by it within the Company's organization 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 internalization of these policies by the employees
- ensure realization 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- related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - all meetings	Monitoring implementation and performance Monitoring progress towards corporate targets	In the Governance structure of SASA, there is an Early Detection of Risk Committee to address all the risks which also includes climate change and water related risks. The Committee also has Climate Change working group which is working specially on climate related and water related risks.



# W6.2d

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

	Board member(s) have	Criteria used to assess competence of board member(s) on water-related issues
	competence on water-related	
	issues	
Row	Yes	The board members that oversee water and climate related issues are selected from independent directors. This is to
1		ensure that the company acts on the best interest of the environment and to show support that the company brings



	the best experts to oversee the climate and water related issues.
	The people that are selected on the committee which oversees water related issues have extensive management
	experiences to understand and to implement new strategies for water and climate issues.
	Management and financial experiences are sought since the EDRC is multidisciplinary and recent trends and risks
	arising in the climate related issues.
	Adaptability is an important criteria as well. Trends tend to change and the Committee is to foresee the change and
	adapt itself and advise the company accordingly.

### 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

#### Water-related responsibilities of this position

Managing water-related risks and opportunities

- Setting water-related corporate targets
- Monitoring progress against water-related corporate targets
- Managing public policy engagement that may impact water security
- Managing value chain engagement on water-related issues

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

Half-yearly

#### **Please explain**



Early Detection of Risk Committee Chairman General 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.

Water Related Duties:

- Setting water-related targets
- Managing-water related risks and opportunities, and managing the assessment process as well
- Monitoring targets and progresses
- Managing public policy engagements for water related issues
- Management of value chain engagements for water related issues

### **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- related issues	Comment
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	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 Collaborations:

#### **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
Long-term business objectives	Yes, water- related issues are integrated	> 30	According to SASA's 2022 Sustainability Principles Action Report, business sustainability goals were assessed under the categories of Strategy, Policy, Objectives, Environmental, Human and Employee Rights, and business Governance Principles. Water issues are thoroughly studied within the heading of environmental principles. Water-related topics include the following: - Management of water and wastewater - Examine and report on the institution's water use and practices. - Contains objectives for calculating one's 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 achieving long- term objectives	Yes, water- related issues are integrated	11-15	In its 2022 Sustainability Principles Action Report, SASA detailed their studies on Strategy, Policy, and Objectives. The Board of Directors identifies ESG material concerns, risks, and opportunities and develops ESG policies. In order to effectively implement the policies that have been agreed, intra-partner instructions, business procedures, and so on can be prepared. The Board of Directors makes the policy decisions and announces them to the public. Our Board of Directors has identified environmental, social, and governance (ESG) material challenges, risks, and opportunities. Policies have been developed with the Board of Directors' resolution, and procedures and guidelines have been prepared to implement these policies. All of our policies are available on our website. SASA, establishes the Partnership Strategy based on ESG policies, risks, and opportunities. It establishes and communicates its short and long-term goals in accordance with the partnership strategy



			and ESG principles. The Sustainability Strategy was developed in accordance with the United Nations' Priority Development Goals. SASA is still working on UN Sustainable Development Goal 6: Clean Water and Sanitation. 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 planning	Yes, water- related issues are integrated	11-15	Our aim is efficient use of resources, respect for the environment and cost savings. 32 million Euro investment is planned for the new wastewater treatment plant and water reuse unit, which is planned to 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)

100

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

0

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



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

41.1

#### **Please explain**

Explanations for CAPEX:

We did not make any CAPEX for water related issues in the previous reporting year. That is why the percentage change is 100%. We are expecting to finish our water reuse plant in coming years and we are anticipating same CAPEX for the next reporting year.

CAPEX Items are listed below:

-Water reuse plant

-Existing wastewater treatment plant expansions

-Cooling towers for new facilities

-Water well drilling for new investments

Explanations for OPEX:

We constantly have been seeing inflationary economy in Turkey in the reporting year. That and also disruptions in the supply chain led to expense increases in our OPEX. We are also anticipating an increase in the following years due to new reuse facility operation and inflation. OPEX items are listed below:

- Existing wastewater treatment plant expenses

- Raw water treatment expenses

- Permutite water generation facilities

- Cooling tower facilities

### W7.3

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

Use of	Comment
scenario	
analysis	



Row	Yes	TCFD report studies were prepared during the reporting year. Climate-related risks are evaluated within SASA. It was created using			
1		the Multi Model Ensemble 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 are 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 1	Water-related Climate- related	World Bank Climate Change Knowledge Portal Multimodel Ensemble RCP 4.5 CP 8.5	<ul> <li>Reducing water use</li> <li>Drought</li> <li>Negative impact of agricultural activities in the region</li> <li>Increase in cooling costs due to hot weather</li> <li>Irregularity in precipitation regimes as a result of climate change</li> <li>Technology investments to keep</li> </ul>	Max-Temperature The annual maximum temperature tends to increase rapidly, especially in the RCP 8.5 scenario. This pessimistic scenario also jeopardizes water use as it causes drought. Because of the reduction in water resources, both agriculture and economy in Adana region are affected negatively, as well as the operations of the plant and employee health. Min-Temperature °C Although the annual minimum temperature remains much more optimistic compared to the maximum temperature scenario, when the RCP 8.5 scenario is considered, it predicts an increase of about 6°C in 100 years. This creates a risk for the plant in the use of natural resources. with the increase in the usual temperature. Number of Hot Days (Tmax >35° C)



	Wa	ater consumption to a	
	mi	ninimum	Since fires can be expected to increase with hot days, there might be fires in
			the plant and many disruptions 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.
			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

Water management is listed as a high priority issue according to SASA's 2022 Sustainability Report. As a result, SASA conducts substantial studies on water concerns in tandem with its presence in the water stress area. SASA has continually sought to lower water intensity since 2019. It, on the other hand, works to keep waste water discharge limitations below the permissible limits. The wastewater treatment plant and



water reuse systems, which are scheduled to be completed in 2023, are the most visible evidence of substantial research into the sustainable use of water. In the coming years, it intends to conduct internal water price analyses using the same strategic responsible production strategy.

## 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
Rov 1	<ul> <li>No, but we plan to address this within the next two years</li> </ul>		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) Do you have any water-related targets?

Yes

### W8.1a

(W8.1a) Indicate whether you have targets relating to water pollution, water withdrawals, WASH, or other water-related categories.

	Target set in this category
Water pollution	Yes
Water withdrawals	Yes



Water, Sanitation, and Hygiene (WASH) services	
Other	Yes

### W8.1b

(W8.1b) Provide details of your water-related targets and the progress made.

Target reference number

Target 1

Category of target

Water recycling/reuse

#### Target coverage

Company-wide (direct operations only)

#### **Quantitative metric**

Increase in water use met through recycling/reuse

#### Year target was set

2021

#### Base year

2021

#### Base year figure

0

#### Target year

2023



**Target year figure** 55

Reporting year figure

% of target achieved relative to base year 0

Target status in reporting year

Underway

#### **Please explain**

SASA will establish a water reuse unit in 2023. The water reuse unit will allow SASA to use 55-60% of the treated water used in the entire facility. The figures given in the targets are the percentage of water that will be reused.

The target and the purpose of implementing this target was to reduce water withdrawals and increase the water reuse percentage. Mainly to save cost and to help the community and the environment by becoming more sustainable in the water use of the company.

Target reference number

Target 2

#### **Category of target**

Product water intensity

#### **Target coverage**

Company-wide (direct operations only)

#### **Quantitative metric**

Other, please specify m3 / ton production



#### Year target was set

2019

#### Base year

2019

#### Base year figure

5.01

#### Target year

2020

# Target year figure

...

# Reporting year figure 4.4

#### % of target achieved relative to base year

100

#### Target status in reporting year

Achieved

#### 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 intensity, which was 5.01 in 2019, decreased to 4.4 in 2020.

#### Target reference number

Target 3



#### Category of target

Product water intensity

#### Target coverage

Company-wide (direct operations only)

#### Quantitative metric

Other, please specify m3 / ton production

#### Year target was set

2020

#### Base year

2020

#### Base year figure

4.4

#### Target year

2021

#### Target year figure

3.47

#### **Reporting year figure**

3.36

### % of target achieved relative to base year

111.8279569892

#### Target status in reporting year

Achieved



#### Please explain

In 2020, a reduction in water intensity was targeted for 2021. The target was achieved and the final product water intensity fell below the target of 3.47 in 2021 and decreased to 3.36.

#### Target reference number

Target 4

#### **Category of target**

Product water intensity

#### Target coverage

Company-wide (direct operations only)

#### **Quantitative metric**

Other, please specify m3 / ton production

#### Year target was set

2021

#### Base year

2021

# Base year figure

3.36

#### Target year

2022

## Target year figure

3.22



#### **Reporting year figure**

3.14

#### % of target achieved relative to base year 157.1428571429

157.1426571429

#### Target status in reporting year

Achieved

#### Please explain

The target of reducing the water intensity of products was established in the previous reporting year was achieved and it fell again well below the anticipated amount.

#### Target reference number

Target 5

#### Category of target

Water pollution

#### Target coverage

Company-wide (direct operations only)

#### **Quantitative metric**

Reduction in concentration of pollutants

#### Year target was set

2020

#### Base year

2020



# Base year figure 240

#### Target year 2025

\_\_\_\_

Target year figure 150

# Reporting year figure

% of target achieved relative to base year 100

Target status in reporting year Achieved

#### Please explain

The reported numbers above are the mg/L values of Chemical Oxygen Demand in the wastewater that is discharged from the company. The base figure was the local legislation limit of COD in wastewater. SASA set this target to be well below the local legislation limit of 240 mg/L to 150 mg/L. And this target was achieved within the first year. And is still continuing to be at the low level of 150 mg/L.

Target reference number

Target 6

#### Category of target

Product water intensity

#### Target coverage

Company-wide (direct operations only)



#### **Quantitative metric**

Other, please specify m3 / ton production

#### Year target was set

2019

#### Base year

2019

#### Base year figure

5.01

#### Target year

2023

#### Target year figure

3.19

#### **Reporting year figure**

3.14

#### % of target achieved relative to base year

102.7472527473

#### Target status in reporting year

Underway

#### Please explain

From the base year of 2019, a target was set to reduce water intensity of production to 3.19 m3 / ton production. In the reporting year it was well achieved and was under the target number. However, we do not revise the target number due to an expansion in our facilities and increase in production.



# **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

## 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	<ol> <li>W1.1 Water intensity targets</li> <li>W1.2b All water amounts</li> </ol>	RevR6 Procedure for assurance of sustainability report	SASA 2022 Sustainability Report 1- please see page 69.	
W6 Governance	1- W6.1a Water Policy	RevR6 Procedure for assurance of sustainability report	SASA 2022 Sustainability Report 1- please see pages 69-71 And please see our Water Policy that is publicly available on our website.	
W1 Current state	<ol> <li>W1.2b Water discharge quality – by standard effluent parameters</li> <li>W1.2b the provision of fully-functioning,</li> </ol>	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.	

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



safely managed WASH services to all	
workers	The effluent parameters are controlled by accredited
	institutions.

# W10. Plastics

# W10.1

(W10.1) Have you mapped where in your value chain plastics are used and/or produced?

Plastics mapping		Please explain
Row 1	Not mapped – but we plan to within the next two years	We are planning to do the plastics mapping within 2 years.

## W10.2

(W10.2) Across your value chain, have you assessed the potential environmental and human health impacts of your use and/or production of plastics?

Impact assessment		Please explain
Row 1	Not assessed – but we plan to within the next two years	We are planning to address this assessment within 2 years.

# W10.3

(W10.3) Across your value chain, are you exposed to plastics-related risks with the potential to have a substantive financial or strategic impact on your business? If so, provide details.

		Risk exposure	Please explain
R	OW	Not assessed – but we plan to within the next two	We did not assess plastic related risks but we are planning to address this assessment within 2
1		years	years.



# W10.4

#### (W10.4) Do you have plastics-related targets, and if so what type?

Targets in place		Please explain
Row	No – but we plan to within the next two	We are currently planning to implement plastics related targets and we are aiming to do it within 2
1	years	years.

## W10.5

(W10.5) Indicate whether your organization engages in the following activities.

	Activity applies	Comment
Production of plastic polymers		
Production of durable plastic components	No	
Production / commercialization of durable plastic goods (including mixed materials)	No	
Production / commercialization of plastic packaging	No	
Production of goods packaged in plastics	No	
Provision / commercialization of services or goods that use plastic packaging (e.g., retail and food services)	No	

# W11. 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.

We have added the water related policies for disclosure.



Environmental-Policy.pdf

USustainability-Policy.pdf

Water-Management-Policy.pdf

Green-Purchasing-Policy.pdf

2022-Sustainability-Report.pdf

# W11.1

(W11.1) Provide details for the person that has signed off (approved) your CDP water response.

	Job title	Corresponding job category
Row 1	Sustainability & HSE Manager	Other C-Suite Officer

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

No



#### Please confirm below

I have read and accept the applicable Terms