

Welcome to your CDP Water Security Questionnaire 2022

W0. Introduction

W0.1

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

ASELSAN is the face of technology in Türkiye for decades and an inspiration for the manufacture of electrical /electronic equipment since its establishment in 1975.

ASELSAN's vision is being a national technology company that maintains its sustainable growth by creating value in the global market; preferred due to its competitiveness, trusted as a strategic partner, and caring for the environment and people.

Today ASELSAN is a world class brand in expanding systematically into the local and global markets, with over 2.2 Bio USD in revenue and almost 9460 employees. ASELSAN has become a high technology, multi-product defense electronics company by introducing state-of-the-art equipment and systems solutions for both military and professional applications in 3 continents over 78 countries.

ASELSAN is a technology provider not only for the military but for the life and the environment. Beside defense technologies, ASELSAN has a wide range of scope in the technology areas such as public safety, transportation, health, energy and automation systems, communication and high-end agricultural technologies. In addition to contributions to the national technological needs in line with the mission, ASELSAN also creates value for its customers and partners with its exports.

ASELSAN operates under five business sectors:

- Communications and Information Technologies Business Sector (HBT): Tactical Radios, Tactical Area Communication Systems, Avionic, Satellite and Naval Communication Systems, Public Safety Communication Systems
- Radar, Electronic Warfare Business Sector (REHIS): Radar Systems, Electronic Warfare Self Protection Systems, Electronic Warfare Intelligence and Attack Programs
- Defense Systems Technologies Business Sector (SST): Weapon Systems, Command Control (C4ISR) Systems, Naval Combat Systems, Air and Missile Defense
- Microelectronics, Guidance & Electro-Optics Business Sector (MGEO): Electro-Optic Systems, Guidance & Unmanned Systems, Avionic Systems, Microelectronics
- Transportation, Security, Energy, Automation & Healthcare Systems Business Sector: Transportation Systems, Security Systems, Traffic and Automation Systems, Energy Systems, Homeland Security Systems, Healthcare Systems (UGES).

ASELSAN maintains engineering operations in Ankara, production and engineering operations in Macunköy, Akyurt and Gölbaşı. Headquarters are located in Ankara Macunköy. Some management offices are located in Istanbul Teknopark.

The Macunköy Facility was established over a total area of 186,848 m2. ASELSAN's headquarters are located in Macunköy Facility as well as Communications and Information Technologies Business Sector and Defense System Technologies Business Sector and Transportation, Security Energy Automation and Healthcare Business Sector.

The Akyurt Facility was established on a total area of 635,309 m2. The Microelectronics Guidance and Electro-Optic Business Sector is located in the ASELSAN Akyurt Facility.

The Gölbaşı Facility was established in the Gölbaşı district of Ankara, and houses production plants for radar and electronic warfare systems for land, air, sea, space and unmanned platforms. This Facility was established on a total area of 665,802 m2.

Teknokent (ODTU- Titanium) offices and Akyurt 2 facility were included in the boundaries in 2020.

Decreasing carbon emission is the most important strategic goal for ASELSAN. Carbon emission is monitored since 2009. In 2021, ASELSAN got an A- score in Climate Change Supply Chain Management, achieving a new success in its climate change management, it has decreased carbon emission significantly through its efforts, and continues its operations by increasing momentum in the fields of increasing energy efficiency in production, giving priority to production technologies that decrease carbon emission, switching to use of energy that does not cause carbon emission. Macunköy, Akyurt and Gölbaşı Facilities obtained the ISO 50001:2018 Energy Management System Certificate in April 2021 for all energy resources, and without any major or minor findings.

The GHG reporting boundaries mapping was achieved in 2021 and in April 2022 ISO 14064:2018 GHG Management Systems transition was carried out successfully.

As a result of corporate governance rating activities carried out by an independent rating agency, SAHA in 2021, ASELSAN increased its score from 9.29 out of 10 on 11.12.2020 to 9.35 on 10.12.2021. ASELSAN became the leader of Türkiye's most valuable brands by increasing its brand value by 65.7%. In the brand rating, the Company increased its score from AA in 2020 to AA+ in 2021.

According to Turkish Time's "R&D 250 - Companies with Highest R&D Spending in Türkiye" Survey conducted on the basis of data for 2020, ASELSAN was the company with the highest R&D spending with its investments of TRY 5 billion 615 million in 2021.

ASELSAN won the "Special Award" in "Big Stars" category that lists technology companies with revenues of EUR 50 million and above.

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, 2021	December 31, 2021

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.

TRY

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 operational 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	TREASLS00018
Yes, a Ticker symbol	ASELS

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	Access to sufficient volumes and good quality water is required in direct or indirect operations, the operations are not water intensive. The direct use of water in our facilities' offices, laboratories, printed circuit board manufacturing area, cafeteria services and green areas covers operational and maintenance activities for cooling, heating,

			<p>laboratory tests and cleaning/ hygiene purposes. In the short term, reducing water usage during these services is in our business plans. For current conditions, the efficient use of water has importance for indirect activities performed by our suppliers. Due to our risk assessments, in 4-5 years the water efficiency will be in their concern base on water management principles. So, there is a need to understand the relevant water aspects and volumetric data for indirect uses. The water related data collection process from our supply chain is in place, and it is in the improvement phase.</p> <p>Reducing water usage by monitoring water quantity and quality is always in our concern during our activities. In the short term ISO 14046 certification process will be included in our business plan .</p>
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Neutral	<p>For our facilities reducing water stress risk and ensuring adequate water for all needs are important. For current conditions, there is no any urgent need for recycled or produced water both for direct and indirect use. In the med- term; quality and quantity of water may be affected by pollution or salinity, which may increase the need for recycled water.</p> <p>For this reason, we prefer to use water efficiently in our activities. In the med- term, the recovery of wastewater through water management will be in our activity plan. For this purpose, the feasibility work for the recycle/reuse of the waste water has a great importance in the domestic treatment plants. The efficiency monitoring of the treatment plants is always in place.</p>

W1.2

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

	% of sites/facilities/operations	Please explain
Water withdrawals – total volumes	100%	100% of the organization’s facilities are regularly (at least annually) measured for each of the defined aspects; 8% of it represents various offices located in İstanbul and in Ankara

		<p>Campuses that fall outside of our control boundary. The main 3 facilities: Macunköy, Akyurt(I&II) and Gölbaşı are into our control boundaries.</p> <p>In all facilities & offices 100% of water used is withdrawn from municipal supply system; ASKI (Ankara Municipality Waterworks) & ISKI (Istanbul Municipality Waterworks).</p> <p>The water taken by tanker as 3 rd party, is used for irrigation purposes, in case of any requirement.</p> <p>Total Volumes are cross-checked by bills.</p> <p>The data is entered monthly into a corporate database, to evaluate consumption trends and reduction target.</p>
Water withdrawals – volumes by source	100%	<p>100% of the organization’s facilities are regularly (at least annually) measured for each of the defined aspects; 8% of it represents various offices located in İstanbul and in Ankara</p> <p>Campuses that fall outside of our control boundary. The main 3 facilities: Macunköy, Akyurt(I&II) and Gölbaşı are into our control boundaries.</p> <p>Water is important for our activities and we measure water withdrawals by their sources. In all facilities and offices nearly 100% of water used is withdrawn from municipal supply system; ASKI & ISKI.</p> <p>The data is entered monthly into a corporate database, to evaluate consumption trends and reduction target.</p>
Water withdrawals quality	100%	<p>100% of the organization’s facilities are regularly (at least annually) measured and monitored for each of the defined aspects; 8% of it represents various offices located in İstanbul and in Ankara</p> <p>Campuses that fall outside of our control boundary. The main 3 facilities: Macunköy,Akyurt(I&II) and Gölbaşı are into our control boundaries. Ankara Municipal Waterworks Directorate reports and monitors the water quality in daily periods. The quality of water could be regularly accessed through their official website. We can monitor the quality of water from their system. In our activities, the municipal water is used for all facilities and offices. As a cross</p>

		check of quality, the clean water is sampled and monitored periodically in our facilities, in the context of WASH services. The data is entered monthly into a corporate database, to evaluate consumption trends and reduction target.
Water discharges – total volumes	76-99	100% of the organization’s facilities are regularly (at least annually) monitored for each of the defined aspects; 8% of it represents various offices located in İstanbul and in Ankara Campuses that fall outside of our control boundary. The main 3 facilities: Macunköy, Akyurt(I&I) and Gölbaşı are into our control boundaries where total volumes of water discharges are monitored. The data is entered monthly into a corporate database, to evaluate consumption trends and reduction targets.
Water discharges – volumes by destination	76-99	100% of the organization’s facilities are regularly (at least annually) monitored for each of the defined aspects; 8% of it represents various offices located in İstanbul and in Ankara Campuses that fall outside of our control boundary. . In Gölbaşı Facility the domestic waste water is first treated in the biologic treatment plant then discharged into the dry creek bed by monitoring with flow-meter. In Macunköy Facility the industrial waste water is first treated in the chemical treatment plant then discharged to sewer system. The discharge volume by destination is monitored by legal authority. The data is entered monthly into a corporate database, to evaluate consumption trends and reduction targets.
Water discharges – volumes by treatment method	76-99	100% of the organization’s facilities are regularly (at least annually) measured and monitored for each of the defined aspects; 8% of it represents various offices located in İstanbul and in Ankara Campuses that fall outside of our control boundary. The main 3 facilities: Macunköy, Akyurt(I&I) and Gölbaşı are into our control boundaries where discharged water volumes by treatment method and quality parameters are monitored internally by ASELSAN and externally by the legal authority.

		<p>In Gölbaşı Facility, the domestic waste water is first treated in the biologic treatment plant then discharged into the dry creek bed.</p> <p>In Macunköy Facility, the domestic waste water is discharged to sewer system.</p> <p>The data is entered monthly into a corporate database, to evaluate consumption trends and reduction targets. The efficiency monitoring of the treatment plants is always in place.</p>
Water discharge quality – by standard effluent parameters	76-99	<p>100% of the organization’s facilities are regularly (at least annually) measured and monitored for each of the defined aspects; 8% of it represents various offices located in İstanbul and in Ankara Campuses that fall outside of our control boundary. The main 3 facilities: Macunköy, Akyurt(I&II) and Gölbaşı are into our control boundaries where standard effluent parameters are internally and externally monitored:</p> <p>The parameters: COD,SS, pH,Oil & Grease, Fe, Pb, Ni, Cr, Cu, Zn, Al for Macunköy chemical treatment plant COD, BOD, SS, pH for Gölbaşı biological treatment plant.</p> <p>The Akyurt’s water is discharged directly into the sewer system where ASKI, the local authority takes regular samples to control the discharge. Plant effluents are always monitored and verified by an accredited external company and the results are always reported to the Legal Authority (ASKI).The efficiency monitoring of the treatment plants is always in place.</p>
Water discharge quality – temperature	Not relevant	It is at ambient temperature level; this is not a relevant metric for ASELSAN.
Water consumption – total volume	100%	<p>In all facilities and offices, water consumption 100% measured as total volume to assess consumption trends and reduction targets.</p> <p>In our reporting the term “water consumption” refers to “water withdrawal” which is defined as “the sum of all water drawn into the boundaries of the organization from all sources and not discharged to the same source as destination</p>

Water recycled/reused	Less than 1%	ASELSAN has office and R&D base activities. The cafeteria base activities could bring some future burdens in case of any scarcity in urban/municipal water supply. In case of the occurrence of this risk, ASELSAN is able to collect rainwater and the wastewater of the cooling towers in the facilities for irrigation purpose. For the time being the amount of recycled water is less than 1%.
The provision of fully-functioning, safely managed WASH services to all workers	100%	The Corporate Responsibility requirements are fully clear to provide a fully-functioning, safely managed WASH services to all workers at 100% of our facilities. At existing facilities WASH services are measured and monitored 100% to ensure the fully-functioning.

W1.2b

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

	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total withdrawals	432.96	Lower	<p>The data is entered monthly into a corporate database, to evaluate consumption trends and reduction targets for the purpose to understand the overall scale of our impact to environment. Water management process and water withdrawal values are publicly available in our Sustainability Report (In the Report water withdrawal is referred to as water consumption). 14 % improvement is identified, thanks to awareness raising on energy and water consumption and other infrastructure maintenance activities. The water withdrawals decreased from 502.71 (2020) to 432.96 megaliters in 2021.</p> <p>Thresholds for comparison: Year-to-year changes of less than 5% were considered as "about the same". Year-to-year changes between 5% and 15 % were considered as "higher"/"lower". Year-to-year changes over</p>

			15% were considered as "much higher"/"much lower
Total discharges	432.96	Lower	<p>The data is entered monthly into a corporate database, to evaluate consumption trends and reduction targets for the purpose to understand the overall scale of our impact to environment. Water management process and water withdrawal values are publicly available in our Sustainability Report (In the Report water withdrawal is referred to as water consumption) 14 % improvement is identified, thanks to awareness raising on energy and water consumption and other infrastructure maintenance activities. The water discharges decreased from 502.71 (2020) to 432.96 mega-liters in 2021.</p> <p>Thresholds for comparison: Year-to-year changes of less than 5% were considered as "about the same". Year-to-year changes between 5% and 15 % were considered as "higher"/"lower". Year-to-year changes over 15% were considered as "much higher"/"much lower</p>
Total consumption	432.96	Lower	<p>Here the term "water consumption" refers to "water withdrawal" which is defined as "the sum of all water drawn into the boundaries of the organization from all sources and not discharged to the same source as destination. The data is entered monthly into a corporate database, to evaluate consumption trends and reduction targets for the purpose to understand the overall scale of our impact to environment. Water management process and water withdrawal values are publicly available in our Sustainability Report (In the Report water withdrawal is referred to as water consumption) 14 % improvement is identified, thanks to awareness raising on energy and water consumption and other infrastructure maintenance activities. The water consumption decreased from 502.71 (2020) to 432.96 mega-liters in 2021.</p> <p>Thresholds for comparison: Year-to-year changes of less than 5% were considered as "about the same". Year-to-year changes</p>

			between 5% and 15 % were considered as "higher"/"lower". Year-to-year changes over 15% were considered as "much higher"/"much lower"
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W1.2d

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

	Withdrawals are from areas with water stress	Please explain
Row 1	Yes	<p>WRI Aqueduct "Global Water Risk Mapping Atlas" enables to map future water risks. It is a recommended tool by TCFD. In addition to this tool, by using the results and country wide knowledge such as; General Directorate of State Hydraulic Works- DSI and ASKI Information from their official WEB page we can conclude that all of our facilities are located in water stressed areas.</p> <p>Türkiye is water stress country according to annual volume of water available per capita. Standards and water risks are being studied also for all 3 main facilities located in Kızılırmak basin. which is a water stress basin area.</p>

W1.2h

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	10.66	This is our first year of measurement	ASELSAN do not use fresh surface water in operational activities. In 2021 rain water was collected and then used for irrigation purpose. Municipal water is withdrawn from the water supply network
Brackish surface water/Seawater	Not relevant			ASELSAN do not use Brackish surface water/Seawater in the activities. Municipal water is withdrawn from

				the water supply network
Groundwater – renewable	Relevant	0.44	Higher	ASELSAN prefers to use as low quantity as possible Groundwater – renewable in its activities. In Macunköy and Akyurt facilities this type of water source was used in 2021.
Groundwater – non-renewable	Not relevant			ASELSAN do not use Groundwater –non-renewable in the activities. Municipal water is withdrawn from the water supply network
Produced/Entrained water	Not relevant			ASELSAN do not use produced water in the activities. Municipal water is withdrawn from the water supply network
Third party sources	Relevant	432.96	Lower	Previous year's third party sources' quantity was 502.716, the reporting year's is 432.96 mega liters.

W1.2i

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water	Relevant	115.2	Much higher	In Gölbaşı Facility the domestic waste water is first treated in the biologic treatment plant then discharged into the dry creek bed. FTE figure increased in the reporting year. The discharge

				volume by destination is measured and monitored by legal authority Year-to-year changes over 15% were considered as "much higher"/"much lower"
Brackish surface water/seawater	Not relevant			There is no discharge into brackish surface/sea water
Groundwater	Not relevant			There is no discharge into ground water
Third-party destinations	Relevant	328.43	Much lower	It is discharged into municipal sewer system Year-to-year changes over 15% were considered as "much higher"/"much lower"

W1.2j

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

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Not relevant				There is no any tertiary treatment in ASELSAN
Secondary treatment	Relevant	320.25	About the same	71-80	This is the sum of Macunköy and Gölbaşı waste water discharge after secondary treatment. In Macunköy there is chemical treatment plant where treated

					<p>water is discharged into municipal sewage system. In Gölbaşı after domestic treatment the water is discharged into the dry creek bed under the control and permits of ASKI. It is controlled internally by ASELSAN ,in daily periods, and monthly by ASKI</p> <p>In all facilities and offices, the chemical or other contaminated liquids generated from laboratories are collected in special storage tanks and disposed as hazardous waste in line with regulation. The efficiency measurement of the treatment plants is always fulfilled. Year-to-year changes of less than 5% were</p>
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					considered as "about the same".
Primary treatment only	Not relevant				There is no primary treatment
Discharge to the natural environment without treatment	Not relevant				There is no discharge to the natural environment without treatment
Discharge to a third party without treatment	Relevant	112.76	Lower	1-10	The Akyurt's waste water is discharged directly into the sewer system where ASKI, the local authority takes regular samples to control the discharge. Plant effluents are regularly monitored and verified by an accredited external company and the results are always reported to the Legal Authority (ASKI). In all facilities and offices the chemical or other contaminated liquids generated from laboratories are collected in

					special storage tanks and disposed as hazardous waste in line with regulation. Year-to-year changes between 5% and 15 % were considered as "higher"/"lower"
Other	Not relevant				There is no any other water discharged

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
Row 1	20,138,952,878	432.96	46,514,580.7418699	We prefer to use water efficiently in our activities. Awareness raising and infrastructure renovation with flow-meter installations will continue. In the med- term, the recovery of wastewater through water management will be in our activity plan. For this purpose, the feasibility work for the recycle/reuse of the waste water has a great importance in the domestic treatment plants. The efficiency monitoring of the treatment plants is always in place.

W1.4

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

Yes, our suppliers

Yes, our customers or other value chain partners

W1.4a

(W1.4a) What proportion of suppliers do you request to report on their water use, risks and/or management information and what proportion of your procurement spend does this represent?

Row 1

% of suppliers by number

51-75

Rationale for this coverage

Within the scope of the purchasing processes, data collection on climate and water related issues has been continuing, from the suppliers who have a direct impact on ASELSAN.

ASELSAN's Water Policy was announced to all suppliers in 2020.

Through Water Policy, ASELSAN takes on responsibilities on awareness-raising of its suppliers and other stakeholders as well as its operations. First of all, we monitor the compliance of our suppliers with the quality and operational standards through comprehensive audits. We contribute to the process or activity development of our suppliers with audits and field visits. Site Assessment audits were performed only for above stated proportion on our suppliers. The Supplier Identification and Evaluation Questionnaire continued to be participated with suppliers for collecting data on water use and wastewater management system.

Comment

Some examples from Environment and Climate Change Questionnaire:

Environmental Management

- Do you have any studies / management system related to Environmental Management and policies and targets within this scope? - Do you have any products / activities that you think pose a risk for the environment? If yes, please provide information about the products and activities and the works you carry out in this context
- Do you have any work to reduce consumption on wastes, energy, water?

W1.4b

(W1.4b) Provide details of any other water-related supplier engagement activity.

Type of engagement

Incentivizing for improved water management and stewardship

Details of engagement

Demonstrable progress against water-related targets is incentivized in your supplier relationship management

Water management and stewardship action is integrated into your supplier evaluation

Water management and stewardship is featured in supplier awards scheme

Offer financial incentives to suppliers reducing your operational water impacts through the products they supply to you

Offer financial incentives to suppliers improving water management and stewardship across their own operations and supply chain

% of suppliers by number

51-75

% of total procurement spend

51-75

Rationale for the coverage of your engagement

Within the scope of the purchasing processes, data collection on climate and water related issues has been continuing, from the suppliers who have a direct impact on ASELSAN .

ASELSAN's Water Policy was announced to all suppliers in 2020.

In 2021, we continued to share the latest environmental and climate related information with our suppliers. In the reporting year, we continued to inform and train our suppliers about climate change and its impacts. Side visits have been completed for main subsidiary suppliers. The importance of data gathering about water use and energy consumption was shared with them. We encourage them to implement these initiatives in their own activities and to share the responsibility of environmental impact further down the supply chain.

Impact of the engagement and measures of success

Supplier risk assessment studies have started as of August 2020, and the companies have been subject to risk assessments. Within the scope of supplier risks, the targets are:

* High Risk Critical Supplier Ratio: 0% *High Risk Supplier Ratio <1%

Our suppliers need to improve their water related consumption figures every year in order to continue to keep their approval. Water& climate related questions are added into environmental management questionnaire and our suppliers are monitored and scored according to their replies.

In 2021 second party side visits continued. Main subsidiary suppliers have been visited.

In order to appreciate the efforts of the suppliers, who have made extraordinary contributions to current activities, business continuity and success, we started to evaluate the suppliers within the scope of their excellence in 3 different categories, in the context of Supplier Award Program in 2021.

1) SUPPLIER EXCELLENCE AWARD

It covers suppliers who contribute greatly to ASELSAN's activities and success by providing organizational excellence in all managerial, operational, social and environmental practices.

2) SUPPLIER NATIONALIZATION AWARD

It covers suppliers who provide backlog support to ASELSAN's nationalization efforts.

3) SUPPLIER SUSTAINABILITY AWARD

ASELSAN includes suppliers who have achieved backlog success in environmental and social sustainability practices, which are highly valued. With the reward system, it is

aimed to encourage suppliers to improve their processes and reduce sustainability risks. ASELSAN, also provides financial support to its suppliers. Sub-industry companies that have been approved within the scope of this application and whose cooperation has been continuing for a certain period of time, can only get an additional guarantee, guarantor, etc., by contacting the banks within the scope of the relevant system with the orders.

They can have the opportunity to use credit and receive a letter of guarantee without citing a source.

The Company signed contracts with 3 additional banks in 2021, raising the number of partner banks to 15. So far, 111 firms have used the system, and loans worth USD 173 million were extended, USD 42 million of which was provided in 2021. The system has contributed to the financial sustainability of the firms within ASELSAN's ecosystem.

Comment

Some examples from Environment and Climate Change Related Questionnaire:
Environmental Management

- Do you have any studies / management system related to Environmental Management and policies and targets within this scope? - Do you have any products / activities that you think pose a risk for the environment? If yes, please provide information about the products and activities and the works you carry out in this context
- Do you have any work to reduce consumption on wastes, energy, water?

W1.4c

(W1.4c) What is your organization's rationale and strategy for prioritizing engagements with customers or other partners in its value chain?

ASELSAN received an award in the field of "Most Valuable Corporate Behavior" from Stevie Awards. ASELSAN, which has been working seriously since the first day of the Covid-19 pandemic process, won the Silver Award at the Stevie International Business Awards with its practices that add value to its employees and stakeholders.

ASELSAN prioritizes engagement with its employees and the communities where its activities are performed. Many employee volunteers are also engaged in our community-based efforts to conserve water and promote responsible water stewardship. By engaging with employees, we engage company's water conservation goal and strategy within each employee's daily works. We prove our commitment to the human right, to water and the provision of WASH services to all by engaging with local communities near the main facilities.

In the reporting year videos on climate/ water related issues to all delegations and employees of the value chain was prepared and after the approval of the management it was started to be used before site visits. ISO 50001 Energy Management Systems and Climate/Water related impacts on-line training continued for all employees.

Water's Future Project competition final was launched with the main theme of mobilizing technology for an habitable world. Total 125 teams participated in the competition and uploaded their projects to the system through the talent gate. The competition was organized with the cooperation of ASELSAN under the leadership of the Presidential

Human Resources. In 2021, water baskets to be attached to helicopters were sent to the fire zones to combat forest fires throughout the country.

"Aim to reach "Consultant Country" status in the Antarctic Treaty came out. Within the scope of the Antarctic Agreement, the scientific team conducting research in the fields of climate related topics carbon, water and biodiversity in Antarctica, was supported with ASELSAN's communication and energy technologies.

W2. Business impacts

W2.1

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

No

W2.2

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

No

W3. Procedures

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 as part of an established enterprise risk management framework

Frequency of assessment

More than once a year

How far into the future are risks considered?

More than 6 years

Type of tools and methods used

Tools on the market
Enterprise risk management
International methodologies and standards
Databases

Tools and methods used

WRI Aqueduct
Enterprise Risk Management
ISO 31000 Risk Management Standard
Environmental Impact Assessment
Life Cycle Assessment
IPCC Climate Change Projections
ISO 14001 Environmental Management Standard

Contextual issues considered

Water availability at a basin/catchment level
Water quality at a basin/catchment level
Stakeholder conflicts concerning water resources at a basin/catchment level
Implications of water on your key commodities/raw materials
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
NGOs
Regulators
Suppliers
Water utilities at a local level
Other water users at the basin/catchment level

Comment

We develop projects in order to reduce and recycle the amount of water we use as part of water management.
Water related risk assessments are embedded in HSE documentation system which is revised as the part of enterprise risk management framework

Value chain stage

Supply chain

Coverage

Full

Risk assessment procedure

Water risks are assessed as part of an established enterprise risk management framework

Frequency of assessment

Annually

How far into the future are risks considered?

More than 6 years

Type of tools and methods used

Tools on the market
Enterprise risk management
International methodologies and standards
Databases

Tools and methods used

WRI Aqueduct
ISO 31000 Risk Management Standard
IPCC Climate Change Projections
ISO 14001 Environmental Management Standard
Regional government databases

Contextual issues considered

Water availability at a basin/catchment level
Water quality at a basin/catchment level
Stakeholder conflicts concerning water resources at a basin/catchment level
Implications of water on your key commodities/raw materials
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
NGOs
Regulators
Suppliers
Water utilities at a local level
Other water users at the basin/catchment level

Comment

The critical suppliers were asked to report water management through the questionnaire. These suppliers are selected based on the water intensive activities.

Critical suppliers undergo environmental audits. Necessary tools and methods are always used to evaluate the related risks

Value chain stage

Other stages of the value chain

Coverage

Partial

Risk assessment procedure

Water risks are assessed as part of an established enterprise risk management framework

Frequency of assessment

Annually

How far into the future are risks considered?

More than 6 years

Type of tools and methods used

Tools on the market
Enterprise risk management
International methodologies and standards
Databases

Tools and methods used

WRI Aqueduct
ISO 31000 Risk Management Standard
IPCC Climate Change Projections

Contextual issues considered

Water availability at a basin/catchment level
Water regulatory frameworks
Access to fully-functioning, safely managed WASH services for all employees

Stakeholders considered

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

Comment

It will be fully in the concern of the company in the next 10 years. We engage with our customers in various ways including information sharing about our water policy, water

performance and water management approach. Identifying and knowing the global and local risks related with water will be very effective in explaining the functions and efficiency of the products that we will produce in the med-term. For this purpose, it is very important for our business to fully identify the risks at the customer scale. We share with them the knowledge that our products will solve their water-related problems in the near future.

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.

ASELSAN's Enterprise Risk Management Policy aims to ensure that appropriate actions are taken against all uncertainties that threaten the corporate existence of the Company. At ASELSAN, the information produced within the scope of risk management activities is integrated into decision mechanisms. "Top-down" and "bottom-up" approaches are applied together in Enterprise Risk Management studies, risks that may affect ASELSAN's achievement of its goals are identified, evaluated, monitored and reported together with the risk reactions and the measures to be taken. At ASELSAN, The Enterprise Risk Management process is regularly reviewed and improved.

At both company and asset levels, water related risks include, changes in weather conditions, water related laws and regulations, global competitiveness, changing customer needs and suppliers' profile, potential threats of national security and employee related issues. The water related risks at the company level are assessed by the Sustainability Committee. Risks associated with water are often coupled with water consumption and water quality activity and are subject to our Risk & Opportunity Evaluation Process. The Sustainability Committee is responsible of setting targets to reduce the impact of identified risks and making performance reviews to assess whether the targets are met. Sustainability Committee and the Early Detection and Management of Risk Committee review and finalize all water related risk analysis and present the critical risks that are assessed to be of "Very High" importance to the Board of Directors according to the scoring methodology defined below. They also present a report to Board of Directors about the financial and operational measures that need to be taken by ASELSAN to prevent the occurrence of the identified risks. The Board of Directors decides which measures shall be applied and the evaluations are then reported to the Early Detection and Management of Risk Committee (EDMR) to be monitored and brought into action. Additionally, when the relative significance of water related risks is determined by the strategic decision makers after a comparable structured review, they are itemized as implementation plan within the scope of ISO 14001:2015 for a detailed assessment and planning.).

The risks are first analysed at the facility and activity level as compliance risks, project risks, operational risks, management and adaptation risks. These are assessed according to the methodology given as process(es) for managing water related risks. The identified risks are then classified to be; very low, low, medium, high and very high (critical). The results of the evaluation are reported to the EC, which in turn makes decisions. ASELSAN's overall risk management objective is to reduce controllable risk impacts and minimize the impact of the ones that cannot be controlled. We analyse short, med and long-term R&Os having the potential of substantive strategic and financial impact on the organization.

Environmental risks that have a significant financial or strategic impact (i.e rated “very high” and have an EBITDA impact of over TL 1,400 million) are reported to the Early Detection and Management of Risk Committee every two months, which is then sent to the ASELSAN Board of Directors. . The major water related risks at the asset level are the events that may have a major impact as compliance and health risks.

The process is described as follows: First, the probability of occurrence of the identified risk is scored from Very Low to Very High occurrence Then, the impact of the identified risk event is determined from Not Important to Critical. According to final score the risks are prioritized from Very Low to Critical. If the assessment result is Critical, the company establishes a response plan and implements the response and regular monitoring.

The responsible who identifies first the risk, tracks the actions. Communication with the risk manager is always setup within a defined official time frame. Climate Change Management Unit carries out the coordination, reporting and monitoring processes of all climate/water engagement activities across business divisions and external official institutions and organizations.

Loss of productive labor force as a consequence of health/hygiene problems caused by environment and climate related problems ending by facility shut-off, is an example of water related risk assessment realized by ASELSAN's IMS department. In order to reduce the impact of the epidemic, measures covering all internal and external stakeholders were evaluated at ASELSAN. In addition, all possible effects of the epidemic on ASELSAN's strategic goals, operations, financial situation, and all applicable laws and regulations were evaluated through scenario-based analyzes. The tools used comply well to the relevant water issues of the value chain, including their global coverage, range of water risk types covered, and ability to monetize risk.

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, both in direct operations and the rest of our value chain

W4.1a

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

Substantive financial and strategic impact represents a circumstance when significant effects disrupt the way we do business. We detected that our facilities are located in water stress areas. Water availability and quality would pose some risks in the med-term, in the region where we operate. We are committing to take water responsibly in our internal operations and engage with related communities of our value chain.

In deciding which facilities and which basins are in the concern of ASELSAN, we used physical risk analysis using WRI Aqueduct as well as internal knowledge of our facilities and local watersheds. The high-risk facilities are detected and specified.

The Company defines substantive financial impact on the business if the resulting deviation from planned earnings exceeds 1,400 million TRY when identifying or assessing climate and water related risks. Production/activity shut-off, deviation from planned revenue, labor force interruption, severe weather events, etc. or other emerging regulatory water related issues are the main evaluation items. All improvement actions with emergency drills are in place and in a developing phase especially after 2019 weather events. The operating facilities listed as “substantive” have a high stress or risk and have production or support production that would exceed the 1,400 million TRY threshold. For this reason, in coming years we will share our practices in water use reduction activities of our main and support suppliers. For the purpose to reduce our common environmental footprint, we started to help them to set targets. In our Supplier risk assessment questionnaire, there are environment related questions guiding them to make improvements in water and energy related actions. We will introduce an easy methodology to determine their water/climate related risks by themselves, the supplier risk assessment of ASELSAN will be improved with specified measurements of success by this way.

For suppliers which have water intensive operations in water stressed areas we will recommend them to participate in CDP Supply Chain Water Program.

With the data supplied from these surveys the actions will be started and the strategic impacts on the company will be detected in a perceptible way.

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	3	76-99	The % represents 3 main facilities under the control boundary. The remaining part represents offices in İstanbul and in various universities of Ankara.

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
Kizilirmak

Number of facilities exposed to water risk

3

% company-wide facilities this represents

76-99

% company's total global revenue that could be affected

91-99

Comment

The 3 main facilities have the potential to be affected from Kızılırmak river basin risks.

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
Kızılırmak

Type of risk & Primary risk driver

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

Primary potential impact

Disruption to workforce management and planning

Company-specific description

According to WEF 's The Global Risks Report 2021; Climate change is still the greatest threat facing the world in the decades to come. The related risks dominate the top ten major risks list in both impact and likelihood. Extreme weather events, climate action failure and human-led environmental damage are the environmental risks stated in the report.

According to our analysis on WRI, Water Risk Atlas Tool (annual temporal resolution /physical risk quantity and country rankings), Kızılırmak river basin, like all of other river basins in Türkiye, appear to be exposed high risk of severe weather events such as flooding. ASELSAN's facilities may be affected by this risk.

Flooding damage could interrupt the business continuity in our facilities, it also may pose a threat to the health of our employees. Major or minor damages could result with impacts on company assets.

Timeframe

1-3 years

Magnitude of potential impact

Medium-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)

87,181,614

Potential financial impact figure - maximum (currency)

435,908,070

Explanation of financial impact

The financial impact of this risk depends on the magnitude and frequency of the events. Financial impact provided here is determined min1 day/ max 5 days business interruption risk assumption. The financial impact figure is calculated based on sales or delivery figure of the impacted day. The financial implication of a daily shut-off due to supplier activity disruption would not exceed 86,805,831 TRY.

Calculation for 1 day: (Revenues) 20,138,952,878 / 231 (working days in 2021) = 87.181,614 (TRY)

Calculation for 5 days: 435,908,070 (TRY)

Primary response to risk

Improve maintenance of infrastructure

Description of response

ASELSAN's Business Continuity Management Plan covers all of the following items in case of natural disaster or significant hazard: 1-Ensuring continuity in the activities 2-Fulfilling legal obligations, 3-Minimizing financial losses, 4-Providing employee security 5- Safeguarding of information assets.

Cost of response

2,000,000

Explanation of cost of response

Those risks are managed through our insurance process. The business interruption insurance is in place, it is updated annually according to the size of the incidents. Also, we develop flood emergency plans in all of our facilities. The cost is related with insurance premium value, covering only physical risk driver.

Country/Area & River basin

Turkey

Kizilirmak

Type of risk & Primary risk driver

Regulatory
Higher water prices

Primary potential impact

Increased operating costs

Company-specific description

ASELSAN's water withdrawal depends 100% on Municipal Supply System. According to our analysis on WRI, Water Risk Atlas Tool (annual temporal resolution /physical risk quantity and quality), referring the water stress in the river basin of Kızılırmak and also by taking into account high operational costs of water quality management in the Municipal Supply System, our operational expenditure could be adversely affected as a result of higher water consumption. In the long term this risk may pose some burdens for Printed Circuit Board Manufacturing Area where is the most water intensive unit of Macunköy Facility. In this unit there are pools where water is treated for specific purposes.

With the system implemented to reduce water use, 22 tons of water per day was saved from being wastewater, and resources were used more efficiently.

Timeframe

4-6 years

Magnitude of potential impact

Medium

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)

3,161,426

Potential financial impact figure - maximum (currency)

35,256,282

Explanation of financial impact

Currently the water price is 14.148 TL/m³, in case of 10% increase for both when we consider tariff and water consumption, the calculation of the cost for 10 years later is:
 $236 \text{ (m}^3\text{)} * 36.70 \text{ (TRY)} * 365 \text{ (days)} = 3,161,426 \text{ TRY}$.

The worst case where there is an increase of 40% in the water tariff is: $236 \text{ (m}^3\text{)} * 409 \text{ (TRY)} * 365 \text{ (days)} = 35,256,282 \text{ TRY}$

In the scale of the worst case the potential financial impact will be high.

Primary response to risk

Increase investment in new technology

Description of response

ASELSAN'S goal is to reduce water consumption, by taking into account the worst case, a reverse osmosis system was planned for this unit. The printed circuit works 24 hours a day, 7 days a week. In other words, it is worked 365 days a year (excluding holidays and public holidays). It produces 22 tons of water per day: $22 \times 365 = 8030$ m³ of water per year.

Daily water used in the old system: 52.56 tons/day

Pure water available in the old system: 21.6 tons/day

Daily water used in the new system: 69.3 tons/day

Pure water obtainable in the new system: 37.44 tons/day

Water required to produce 37.44 tons/day of pure water per day with the old system: 91.1 tons/day

Water savings: $91.1 - 69.3 = 21.8$ tons/day of water saved

Pure water production efficiency in the old system: 41.1%

Pure water efficiency in the new system: 54%

Waste ratio in the old system: 1

Waste rate in the new system: 0.6

Waste water efficiency increased by 40%.

This means a savings of 3.6% in Macunköy as a whole.

Cost of response

62,608

Explanation of cost of response

ASELSAN'S goal is to reduce water consumption, by taking into account the worst case, an investment was planned for this unit. With the reverse osmosis system implemented in the reporting year; 22 tons of water per day was saved from being wastewater, and resources were used more efficiently. Cost of response: 4816\$ Average currency : 1\$=13 TRY

Country/Area & River basin

Turkey

Kizilirmak

Type of risk & Primary risk driver

Acute physical

Drought

Primary potential impact

Disruption to workforce management and planning

Company-specific description

According to WEF's The Global Risks Report 2021; Climate change is still the greatest threat facing the world in the decades to come. The related risks dominate the top ten major risks list in both impact and likelihood. Extreme weather events, climate action failure and human-led environmental damage, drought are the environmental risks

stated in the report. We use the WRI Aqueduct Country Rankings/Drought Risk tool to detect risks related to severe weather events/ drought affecting the region. Water is an important indicator of the impact of climate change. In many regions contaminated water sources cause water availability problem. In some regions, drought is intensifying water stress by negatively impacting people's health and productivity. Employees health conditions could be affected from drought. The damage could interrupt the business continuity in our operations. Examples of drought impacts on society include anxiety or depression about economic losses, conflicts when there is not enough water, reduced incomes, fewer recreational activities, higher incidents of heat stroke, and even loss of human life. According to Aqueduct Water Risk Atlas; Ankara Region is located in an area which is exposed to the drought-risk (medium-high 0.6-0.8). There is always a potential impact of the drought on the employee attendance to the company in case of the occurrence of the problem. A different situation arises where the water crisis results in problems with attendance.

Timeframe

1-3 years

Magnitude of potential impact

Medium-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)

87,181,614

Potential financial impact figure - maximum (currency)

435,908,070

Explanation of financial impact

1 to 5 days shut down was assessed in this risk driver

Calculation for 1 day: (Revenues)20,138,952,878 / 231 (working days in 2021) =
87.181.614 (TRY)

Calculation for 5 days: 435,908,070 (TRY)

Primary response to risk

Amend the Business Continuity Plan

Description of response

With regard to a employee attendance, there are various measures companies can take. Some practical examples include engaging with employees to establish what plans

each employee has made to ensure that he/she has adequate water in the household, providing employees with water at the workplace, adjusting working hours, implementing new rules on how to communicate in certain situations, etc.

Cost of response

2,000,000

Explanation of cost of response

ASELSAN's Business Continuity Management Plan covers all of the following items in case of natural disaster or significant hazard: 1-Ensuring continuity in the activities 2- Fulfilling legal obligations, 3-Minimizing financial losses, 4-Providing employee security 5- Safeguarding of information assets.

Those risks are managed through our insurance process. The business interruption insurance is in place, it is updated annually according to the size of the incidents. The cost is related with insurance premium value, covering only physical risk driver.

W4.2a

(W4.2a) Provide details of risks identified within your value chain (beyond 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
Kizilirmak

Stage of value chain

Supply chain

Type of risk & Primary risk driver

Acute physical
Drought

Primary potential impact

Supply chain disruption

Company-specific description

According to WEF 's The Global Risks Report 2021; Climate change is still the greatest threat facing the world in the decades to come. The related risks dominate the top ten major risks list in both impact and likelihood. Extreme weather events, climate action failure and human-led environmental damage are the environmental risks stated in the report.

We use the WRI Aqueduct Country Rankings/Drought Risk tool to detect risks related to severe weather events/ drought affecting the supply chain. Our suppliers are located in water stress areas in Türkiye. The procurement risks appear as business interruption in case of any severe drought. The damage could interrupt the business continuity in our

supply chain, In order to avoid the problems on supply chain disruption, Supply Chain Department's tasks were strengthened by the Board in 2020.

Timeframe

1-3 years

Magnitude of potential impact

High

Likelihood

Likely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact

The magnitude of financial impact is under evaluation.

Primary response to risk

Supplier engagement

Promote investment in infrastructure and technologies for water saving, re-use and recycling among suppliers

Description of response

After August 2020, we conducted direct risk assessments on sustainability issues our local companies and tried to support the improvement of their processes.

Hereafter these risk assessments will be fulfilled by integrating them in company-wide assessments, with the oversight of Supply Chain Management Vice President . It is planned that the risk assessment of 100% of the companies will be completed in 2023.

Cost of response

0

Explanation of cost of response

There is no any direct cost of response for this action.

ASELSAN, also provides financial support to its suppliers. Sub-industry companies that have been approved within the scope of this application and whose cooperation has been continuing for a certain period of time, can only get an additional guarantee, guarantor, etc, by contacting the banks within the scope of the relevant system with the orders.

They can have the opportunity to use credit and receive a letter of guarantee without

citing a source.

111 companies within ASELSAN benefited from the Supplier Financing System, and a total of USD 173 million, was used.

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

Sales of new products/services

Company-specific description & strategy to realize opportunity

ASELSAN's Technology Road Map and Investment Plan is created in line with ASELSAN's Strategic Plan having detailed plans on each technology area (including climate and environment friendly and health technologies) that will be researched and developed in the next 5 years along with the required investments." The progress of this plan is monitored every year and used as a measure in corporate performance.

ASELSAN is agile to produce and to align new technologies related with environment & public health with low carbon products/services. ASELSAN aims to use its technological knowledge in the field of these systems. A new project on water management system includes the development of systems for efficient monitoring and control of the process from the source to the delivery of the water to the end user.

The main purpose of the developed solutions is to ensure energy and water efficiency. It aims to save up to 25% of energy in the management of water in our cities and to reduce the loss and leakage rates that currently exceed 50%. Main enabling technology for the purpose is Supervisory Control and Data Acquisition (SCADA).

Healthy functioning of the system is measured in terms of pressure, flow of water in the network, level of water in tanks, energy consumption in pumps and other electrical equipment. Historical trend analysis is performed on a time of day, day and season of year. Through the use of intelligent algorithms, efficiency figures above are monitored and necessary actions are taken. There is an approved document showing that the suggestions made in the Van project will increase the energy efficiency. This improvement includes the water pump motors that our software recommends replacing. In the analyzes made, it has been revealed that one of the motors works with 47% efficiency and the other with 51% efficiency. This is not the optimal operating range of

the pumps and is not healthy for the motors.

Discovering this result, our SCADA software offers suggestions for replacing motors.

And with this change, the energy savings will be 32.559 kWh/month. This value shows that the investment to be made for the replacement of the engines will be amortized in about 6 months. Emission avoidance= 170 ton CO₂-e/year.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

High

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

Financial implications of these projects are evaluated. They have the potential to increase our revenue in the med-term. The financial figures are sensitive data.

A product partnership agreement was signed with Envest, which develops SCADA units related to the subject.

ASELSAN continued to add new products to its product range previous year and receives new orders within this framework. As of the end of 2021, new contracts/orders amounting to USD 2 billion have been signed, and ASELSAN's backlog for the coming years is at the level of USD 8.5 billion.

The Product Life Cycle System, expressed as PLM (Product Lifecycle Management), which can be considered one of the milestones for ASELSAN, is the most important part of ASELSAN's digital transformation included in the ASELSAN Strategic Plan for this purpose. PLM will prepare ASELSAN for the future by providing the infrastructure for the simultaneous engineering method that enables interactive and efficient work from design to production, from program management to integrated logistics support. Within the scope of the preparations initiated in this regard, ASELSAN PLM needs were analyzed and requirements were determined.

The requirements for ASELSAN's transition to the PLM System have been determined with the participation of all sector presidencies and general management units.

Considering water network, potential financial impact is expected to be in terms of the unit cost of water supplied. By operating energy consuming equipment at a more efficient operating points and operating the water network at more suitable flow and pressure points, not only loss of water at the network will be minimized but also the

energy used per liter of water to the user will be decreased. Considering the millions of liters of water supplied to cities, system will justify itself.

Type of opportunity

Products and services

Primary water-related opportunity

New R&D opportunities

Company-specific description & strategy to realize opportunity

Opportunity related with water management systems stems from climatic changes and scarcity of water resources. High costs associated with bringing water to users, especially due to energy costs is another source of opportunity. Possibilities of minimizing both energy used and water losses forms the primary sources of opportunities makes savings possible.

Each city's water network proposes its own possibilities. By careful examination of the water utilities for each city and utilization of SCADA and data science technologies forms the principal points of opportunity realization.

Integration of water related facilities like sanitation, purification, water distribution network proposes the other ways of possibilities.

By following up on all kind of technological developments pertaining to land, air, naval and aerospace platform product/system technologies, the Company not only applies technology but also designs, develops and produces product/system technologies in order to share or sell with/to national and international collaborations.

Projects are striving at maximum level in order to benefit from the technological opportunities existing in the country aiming to increase the national contribution share. For this purpose, cooperation is made with universities and various R&D organizations and importance is given to the use of local suppliers and subcontractors.

As for the projects carried out within the Group, the Research and Development incentive in compliance with the provisions of the Law on Corporate Tax numbered 5520 and Research and Development center application pursuant to the Law regarding the support of Research and Development activities numbered 5746 are being implemented together. As for non-public R&D projects, the approval of TEYDEB (Technology and Innovation Support Programs Directorate) and ARDEB (Research Support Programs Presidency) are received and supported by the institutions. Türkiye's 10th Development Plan includes multi programs on different incentives including R&D projects such as Enhancing Energy, Water Efficiency etc.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

27,291,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

The incentive obtained consists of the incentives that are accrued in accordance with TÜBİTAK's R&D recognition letter prepared with respect to the Group's ongoing projects Current government total grants and incentives 2021 Annual Report; 27,291,000 TL. This figure represents the total grants covering also climate/environment related ones.

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)

Macunköy Facility (Ankara)

Country/Area & River basin

Turkey
Kizilirmak

Latitude

39.96763

Longitude

32.76631

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

205.05

Comparison of total withdrawals with previous reporting year

Lower

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

0.23

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

205.05

Total water discharges at this facility (megaliters/year)

205.05

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

205.05

Total water consumption at this facility (megaliters/year)

205.05

Comparison of total consumption with previous reporting year

Lower

Please explain

Water consumption diminished 6% in this facility.

The reason of this decrease: People oriented consumption base awareness projects have been intensified, car wash processes have been evaluated and some reduction improvements were realized, Printed Circuit Department chiller system improvement has been realizing.

In all facilities and offices, water consumption 100% measured as total volume to assess consumption trends and reduction targets.

In our reporting the term "water consumption" refers to "water withdrawal" which is defined as "the sum of all water drawn into the boundaries of the organization from all sources and not discharged to the same source as destination

Thresholds for comparison: Year-to-year changes of less than 5% were considered as "about the same". Year-to-year changes between 5% and 15 % were considered as "higher"/"lower". Year-to-year changes over 15% were considered as "much higher"/"much lower

Facility reference number

Facility 2

Facility name (optional)

Akyurt (1&2) located in ANKARA

Country/Area & River basin

Turkey
Kizilirmak

Latitude

40.08628

Longitude

33.02409

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

112.76

Comparison of total withdrawals with previous reporting year

Much lower

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

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0.21

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

112.76

Total water discharges at this facility (megaliters/year)

112.76

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

112.76

Total water consumption at this facility (megaliters/year)

112.76

Comparison of total consumption with previous reporting year

Lower

Please explain

Water consumption diminished %13 in this facility.

The reason of this decrease: People oriented consumption base awareness projects have been intensified, irrigation activity was evaluated and some reduction improvements were realized

Previous years' figure was: 129.729 mega liters.

In all facilities and offices, water consumption 100% measured as total volume to assess consumption trends and reduction targets.

In our reporting the term "water consumption" refers to "water withdrawal" which is defined as "the sum of all water drawn into the boundaries of the organization from all sources and not discharged to the same source as destination

Thresholds for comparison: Year-to-year changes of less than 5% were considered as "about the same". Year-to-year changes between 5% and 15 % were considered as "higher"/"lower". Year-to-year changes over 15% were considered as "much higher"/"much lower

Facility reference number

Facility 3

Facility name (optional)

Gölbaşı

Country/Area & River basin

Turkey
Kizilirmak

Latitude

39.71837

Longitude

32.81612

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

104.54

Comparison of total withdrawals with previous reporting year

Higher

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

10.66

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

104.54

Total water discharges at this facility (megaliters/year)

115.2

Comparison of total discharges with previous reporting year

Higher

Discharges to fresh surface water

115.2

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

115.2

Comparison of total consumption with previous reporting year

Higher

Please explain

Water consumption increased 10% in this facility.

The reason of this increase: Intensive construction / renovation process in the reporting year.

In all facilities and offices, water consumption 100% measured as total volume to assess consumption trends and reduction targets. In Gölbaşı after domestic treatment the water is discharged into the river under the control and permits of ASKI.

It is controlled internally by ASELSAN in daily periods, and by ASKI in monthly periods.

In all facilities and offices the chemical or other contaminated liquids generated from laboratories are collected in special storage tanks and disposed as hazardous waste in line with regulation.

In our reporting the term "water consumption" refers to "water withdrawal" which is defined as "the sum of all water drawn into the boundaries of the organization from all sources and not discharged to the same source as destination

Thresholds for comparison: Year-to-year changes of less than 5% were considered as "about the same". Year-to-year changes between 5% and 15 % were considered as "higher"/"lower". Year-to-year changes over 15% were considered as "much higher"/"much lower

Facility reference number

Facility 4

Facility name (optional)

Other campus offices located in İstanbul and Ankara

This offices water management are out of the control boundaries of ASELSAN.

The water is withdrawn from municipal supply system and discharged into municipal sewer system

Country/Area & River basin

Turkey

Other, please specify

Marmara and Kızılırmak

Latitude

Longitude

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

10.62

Comparison of total withdrawals with previous reporting year

Much lower

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

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

10.62

Total water discharges at this facility (megaliters/year)

10.62

Comparison of total discharges with previous reporting year

Much lower

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

10.62

Total water consumption at this facility (megaliters/year)

10.62

Comparison of total consumption with previous reporting year

Much lower

Please explain

100% of the organization's facilities are regularly (at least annually) measured for each of the defined aspects; 8% of it as area base, represents various offices located in İstanbul and in Ankara Campuses that fall outside of our control boundary.

The main 3 facilities: Macunköy, Akyurt(I&I) and Gölbaşı are into our control boundaries.

People oriented consumption base awareness projects have been intensified as on line training.

In all facilities & offices 100% of water used is withdrawn from municipal supply system; ASKI (Ankara Municipality Waterworks) & ISKI (İstanbul Municipality Waterworks). Total Volumes are measured.

The data is entered monthly into a corporate database, to evaluate consumption trends and reduction target.

Thresholds for comparison: Year-to-year changes of less than 5% were considered as "about the same". Year-to-year changes between 5% and 15 % were considered as "higher"/"lower". Year-to-year changes over 15% were considered as "much higher"/"much lower"

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

In the GHG verification process, water use quantity and water discharge quantity was verified in the context of scope 3 emissions accounting of ISO 14064 Standard. For all facilities and offices of ASELSAN ,100% of water uses and water discharge quantities are verified by the third party in 2021, the data was crosschecked by water bills. ISO 14046 certification process will be included in our business plan.

Water withdrawals – volume by source

% verified

76-100

Verification standard used

The total volume is always verified by third party. In 2021 the data was crosschecked by water bills, as volume by source.

Water withdrawals – quality by standard water quality parameters

% verified

76-100

Verification standard used

Ankara Municipal Waterworks Directorate reports and monitors the water quality in daily periods. The quality of water could be regularly accessed through their official website. We can monitor the quality of water from their system. In our activities, the municipal water is used for all facilities and offices. As a cross check of quality, the clean water is sampled and monitored periodically in our facilities, in the context of WASH services. ISO 14046 certification process will be included in our business plan.

Water discharges – total volumes

% verified

76-100

Verification standard used

In the GHG verification process, water use quantity and water discharge quantity was verified in the context of scope 3 emissions accounting of ISO 14064 Standard. For all facilities and offices of ASELSAN ,100% of water uses and water discharge quantities are verified by the third party in 2021, the data was crosschecked by water bills

Water discharges – volume by destination

% verified

76-100

Verification standard used

The total water volume discharged to 3rd party destination or to the surface water is under control. The total quantity was verified in the context of scope 3 emissions accounting of ISO 14064 Standard. For all facilities and offices of ASELSAN; 100% of water uses and water discharge quantities are verified by the third party in 2021, the data was crosschecked by water bills.

ISO 14046 certification process will be included in our business plan.

Water discharges – volume by final treatment level

% verified

76-100

Verification standard used

Water discharges volume by final treatment is periodically monitored by internal Scada system.

The volume by final treatment level is verified by the third party verification system of ASKI.

ISO 14046 certification process will be included in our business plan.

Water discharges – quality by standard water quality parameters

% verified

76-100

Verification standard used

The third party accredited laboratory verification is periodically realized .
EPA 200.7, TS EN 872, SN 5220 B, SN 5220 D, TS EN ISO 17294-1-2, TS EN ISO 15587-1, TS EN ISO 15587-2, SM 3030 C, SM 3030 D, SM 3030 E, SM 3030 F, SM 3120 B, TS EN ISO 11885, SM 4500-P B, SM 4500-P E, SM 3500 Cr B, methods are used for different parameter such as:
Al, SS, Cu,Zn, Fe, KOI, Pb, Ni, pH, T-Cr, Oil &Grease, Hg, Total P, TKN, Cd,Cr
ISO 14046 certification process will be included in our business plan.

Water consumption – total volume

% verified

76-100

Verification standard used

In the GHG verification process, water use quantity and water discharge quantity was verified in the context of scope 3 emissions accounting of ISO 14064 Standard. For all facilities and offices of ASELSAN ,100% of water uses and water discharge quantities are verified by the third party in 2021, the data was crosschecked by water bills.

In our reporting the term “water consumption” refers to “water withdrawal” which is defined as “the sum of all water drawn into the boundaries of the organization from all sources and not discharged to the same source as destination.

ISO 14046 certification process will be included in our business plan.

W6. Governance

W6.1


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

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

W6.1a

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

	Scope	Content	Please explain
Row 1	Company-wide	<p>Description of business dependency on water</p> <p>Description of business impact on water</p> <p>Description of water-related performance standards for direct operations</p> <p>Description of water-related standards for procurement</p> <p>Reference to international standards and widely-recognized water initiatives</p> <p>Company water targets and goals</p> <p>Commitment to align with public policy initiatives, such as the SDGs</p> <p>Commitments beyond regulatory compliance</p> <p>Commitment to water-related innovation</p> <p>Commitment to stakeholder awareness and education</p> <p>Commitment to water stewardship and/or collective action</p>	<p>ASELSAN's environmental management vision focuses on continuous management of environmental impacts by evaluating energy and water efficiency in all direct and indirect operations. In this process international standards and water initiatives are our guiding tools.</p> <p>Water management is a company-wide issue and we have a policy which is available company wide and publicly. ASELSAN, with its sector base activities is not a water dependent company. Its business' impact on water is not significant but the company's commitment is beyond regulatory compliance. ASELSAN makes efforts to set up water targets and goals to improve water management. Achieving water targets by reducing use of freshwater through water efficiency initiatives, water reuse, recycling and rainwater use is important for the policy. High water risk facilities are identified by the World Resources Institute Aqueduct Water Risk Atlas.</p> <p>ASELSAN committed to align with public policy initiative such as SDGs.</p> <p>The municipal discharge parameters are measured and monitored internally in daily periods and the data is entered monthly into a corporate database to evaluate consumption trends and reduction targets. In our treatment plants, stricter company limits are setup to monitor the discharge quality and treatment efficiency. The results are monitored every day.</p> <p>The company is aware of the impacts of climate change on water access and water quality.</p> <p>Within the scope of water monitoring, it was started to increase the number of the flow meters between 2021-2026.</p> <p>Our stakeholders' climate and water related awareness raising activities are performed every year with the leadership of Integrated Management Systems .</p> <p>As a technology company ASELSAN started to develop innovative water related products/services .</p> <p>For the purpose to catch technology-based project solutions, a water competition was initiated jointly with the Presidency of Republic of Türkiye.</p> <p>To become a leading sustainable technology company</p>

		Recognition of environmental linkages, for example, due to climate change	ASELSAN focuses on its climate change and water-related impacts very seriously and continuously updates its policies. ISO 14046 certification process will be included in our business plan. Water Policy is attached.  1
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 1 ASELSAN Water Policy.pdf

W6.2

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

Yes

W6.2a

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

Position of individual	Please explain
Board Chair	<p>The Board Chair who has been assigned as CEO as of April 27, 2018; has a direct responsibility for climate and water related issues on behalf of the Board and EC. The CEO also has an execution responsibility in the field of social responsibility and environment.</p> <p>The board consider climate and water related issues when reviewing and guiding the business strategy aligned with the economic performance of the company. Following the Strategic Plan, the Board carry out oversight power on Sustainability Committee's Program integrated with climate and water related issues impacting economic, social and environmental performance of the company. In order to conduct its responsibilities ASELSAN's Board of Directors formed three committees: Audit Committee, Corporate Governance Committee, Early Detection and Management of Risk Committee. The 3rd one is comprised of three Board Members who ensure the determination of the operational, strategic, financial and other climate and water related R&Os.</p> <p>ASELSAN CDP Execution Group is working under the presidency of Corporate Management Vice President (CMVP) who is a member of Executive Board. In this group there is one representative from each sector chair, including financial affairs and strategy department. Energy and water reduction projects that will serve as a basis for setting targets are also reported to the same group. In the reporting year, the CMVP assisted the Board of Directors in fulfilling oversight of CDP related issues with the collaboration of ERM within the organization. The Climate Change Management Unit works with all facilities' leaders to drive an integrated, enterprise-wide management on climate and environment related issues including water management. ASELSAN who set up 2050 Climate Change Net Zero Target, started to take an active</p>

	role in the workshops that will draw up Türkiye's road map on climate change related strategy.
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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 Overseeing acquisitions and divestiture Overseeing major capital expenditures Providing employee incentives Reviewing and guiding annual budgets Reviewing and guiding business plans Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy Reviewing and guiding corporate responsibility strategy Reviewing innovation/R&D priorities Setting performance objectives	<p>The Board reviews and guides climate and water related risk management policies as scheduled. The Corporate Management Vice President who leads the Sustainability Committee, briefs the executive committee (EC) of ASELSAN about climate and water related developments and practices by bringing the attention of the EC to social, legal and environmental R&O's that may have an impact on the Risk Management Policy of the Company. The CEO and the Board of Directors oversee policy by considering global climate and water related issues, government relations and corporate responsibility including reviewing and providing oversight of the Company's Environmental Sustainability Program. The board consider also climate and water related issues when reviewing and guiding the whole business strategy, plans, risk management policies, budget plans as well as, setting organizational performance objectives, monitoring implementation and performance, and overseeing major capital expenditures, acquisitions and divestitures. In 2021 the following decisions were carried out for addressing climate and water related risks and opportunities.</p> <p>1-Consistent decisions were made regarding the transition plan to be prepared ensuring to facilitate emission reduction target by 2050. Emission and water use reduction actions which will take part in the Climate Transition Plan were discussed in the first Sustainability Workshop organized with the presidency of the CEO. Board-chair/ CEO and ASELSAN's Sustainability Ambassadors attended the workshops under the main topics of ESG.</p> <p>2. The coordination of energy/water reduction</p>

			<p>activities among the teams was ensured for the planning and implementation of mandatory activities for certification, including Internal Audit, External Audit, and Management Review. It was decided to perform surveys and organize contests to raise awareness within the company about the Energy, Water Management System, to conduct interactive communication with employees, and to carry out projects for sharing good practices. A renovation base planned budget has been allocated for the replacement of inefficient electric motors and installment of new flow- meters.</p> <p>3. Monitoring and approval process of videos prepared to all delegations and employees of the value chain on climate& water related issues was completed by the Board.</p> <p>4. ASELSAN undertook the duty of jury in the project competition themed "The Future of Water" organized under the leadership of the Presidential Human Resources Office.</p> <p>5. ASELSAN has included 9 of its subsidiaries in the climate change related management system, conducted awareness-raising training on water & carbon management and included them in the inventory system.</p> <p>6. Within the scope of the Antarctic Agreement, the scientific team conducting research in the fields of climate, water and biodiversity in Antarctica, was supported with ASELSAN's communication and energy technologies.</p>
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W6.2d

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

	Board member(s) have competence on water-related issues	Criteria used to assess competence of board member(s) on water-related issues
Row 1	Yes	In ASELSAN; the members of the board are competent in different fields. The criteria used to assess competence of board members is: academic background or business proficiency on climate/ energy/ environment related projects & tasks. These capabilities will ensure the company's commitment to understand and respond to risks, opportunities, and

	<p>impacts within its highest decision-making body.</p> <p>The Board-Chair of ASELSAN has a competence on climate-related issues, he can fulfill any plans to address board-level competence as a whole.</p> <p>The board-chair has served as the chairman of Control and Automation Engineering Department in Yıldız Technical University, between the years 2009-2013. During his chairmanship, he has been the founder of many postgraduate programs. He served as the Türkiye Delegate of European Union 7th Framework Program Energy Field in between the years 2007-2010. He carried his duties as a Board Member of Yıldız Technical University Techno-park, BAP Coordinate, Science Application and Research Center, served as the Editor of YTU Sigma Engineering and Science Journal between 2010-2013. He also carried his duties as Yıldız Technical University Deputy Manager of the Institute of Science and Vice Rector. He has numerous national and international articles / reports, editorial editions and projects. He was elected as the Rector of the Year in 2015, 2016, 2017 and 2018 in organizations organized by different institutions due to his pioneering contributions to university-industry cooperation during his rectorate. As an electrical engineer he was actively involved in energy efficiency and energy saving methods.</p> <p>Some International Articles of the Board Chair/CEO</p> <p>1-A Nonlinear Observer Design for Fuel Cell Hydrogen Estimation</p> <p>2-An algorithm for estimation of membrane water content in PEM fuel cells (2005)</p> <p>2-A Voltage-Based Observer Design for Membrane Water Content in PEM Fuel Cells</p>
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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)

Chief Executive Officer (CEO)

Responsibility

Assessing future trends in water demand
Managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

More frequently than quarterly

Please explain

The direct responsibility for climate change related issues such as carbon, water, biodiversity lies with Executive Committee headed by the CEO representing also the

Board Chair. The CEO informs the board of directors who oversight the company performance on climate/water related issues. The Board assign strategic and program management responsibility to applicable board committees. ASELSAN's Board of Directors formed following committees to ensure the communication based integrated management of R&Os.

EDMR ensures the determination of the operational, strategic, financial and other climate /water related risks which are managed in compliance with company's enterprise risk-taking profile. Audit Committee and Enterprise Risk Management Coordination Committee are responsible to assign a risk representative who has the duties to prepare risk detection and management documents and to make the coordination of related activities which are reported to EDMR Committee.

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 1	Yes	In ASELSAN there are incentives for certain behaviors and performances for responsible production and consumption

W6.4a

(W6.4a) What incentives are provided to C-suite employees or board members for the management of water-related issues (do not include the names of individuals)?

	Role(s) entitled to incentive	Performance indicator	Please explain
Monetary reward	Corporate executive team Chief Executive Officer (CEO)	Reduction of water withdrawals Reduction in consumption volumes Improvements in efficiency - direct operations Improvements in efficiency - supply chain Improvements in efficiency - product-use	Our company committed to reduce water withdrawals and impact on water resources by increasing water-use efficiency and improving sustainable & innovative water management practices across all facilities. This is included in our water strategy and incorporated into all employee incentives as monetary reward. The team undertook the duty of jury in the project competition themed "The Future of Water" organized under the leadership of the Presidential Human Resources Office. The team has various environmental objectives /goals to perform during the year. Performance rating is influenced with these plans.

		<p>Improvements in waste water quality - direct operations</p> <p>Improvements in waste water quality - product-use</p> <p>Implementation of employee awareness campaign or training program</p> <p>Supply chain engagement</p> <p>Increased access to workplace WASH</p> <p>Implementation of water-related community project</p>	
Non-monetary reward	<p>Corporate executive team</p> <p>Other, please specify</p> <p>Climate Change Unit Manager</p>	<p>Reduction of water withdrawals</p> <p>Reduction in consumption volumes</p> <p>Improvements in efficiency - direct operations</p> <p>Improvements in efficiency - supply chain</p> <p>Improvements in waste water quality - direct operations</p> <p>Improvements in waste water quality - product-use</p> <p>Implementation of employee awareness campaign or training program</p> <p>Supply chain engagement</p>	<p>In 2020 Climate Change Unit was established and its manager is responsible from the management of climate related issues such as energy, emissions and water.</p> <p>The manager has various environmental objectives /goals to perform during the year. Reductions, improvements, and other efficiency projects are reported to the Corporate Executive Team and to the Board. The performance is assessed as monetary and non - monetary reward. Certificate of appreciation for ASELSAN was given as non-monetary award.</p>

		Increased access to workplace WASH Implementation of water-related community project	
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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?

According to our new corporate communication strategy, all communication activities have to be approved by the Corporate Governance Vice President. Our CEO/ Board Chairman is fully aware of our general corporate strategies and our overall water and climate change strategy. The Sustainability Committee & Climate Change Management Unit carries out the coordination, reporting and monitoring processes of all climate/ water engagement activities across business divisions and external official institutions and organizations.

Engagements with regulatory water related authorities are realized and thus, consistency with the water policy and water commitments is assured.

Based on the connection of water with the climate, the requirements of the Paris Agreement, WRI Aqueduct are followed in these studies. To maintain alignment between our water policy efforts in company-wide activities, quarterly scheduled meetings are organized with the waterworks directorate to review public policy developments that may affect our facilities. These meetings enable us to identify and avoid inconsistencies and ensure alignment by calibrating these external developments and discussions with the authorities.

If there is an inconsistency between our policy and activities, depending on its nature it is remediated in unscheduled meetings. ASELSAN has developed a pioneering and innovative platform to strengthen the bond with its suppliers-value chain representing the society.

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	11-15	<p>Water related issues including water availability and quality with direct water use costs, flood & drought events, future water stress, are integrated in our long-term business objectives.</p> <p>Water management goals, plans, programs and investments contribute to the long-term success of these objectives.</p> <p>10–15 year time frame was selected because of infrastructure investments, transition to advanced flow meters followed with water use reduction improvement efforts and water resupply processes.</p> <p>WRI Aqueduct Risk Atlas Tool is used to help to set our 50% efficiency targets in 5 years.</p> <p>This tool will leverage our long-term business objectives. For 10-15 year plan, it is planned for the wastewater of the treatment plant to meet the process water specification with advanced filtration processes and resupply it to the production line as recycled water.</p>
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	11-15	<p>Toward our facilities' budget objectives, we implement new projects and investments to reduce annual water and energy costs.</p> <p>We support smart building standards in new buildings of our facilities including water management criteria. We work on location base water scarcity and water efficiency information.</p> <p>5-Year Plan:</p> <ul style="list-style-type: none"> • While the capacity is increased with the transition to production systems, such as mSap/horizontal in-hole coating line, to enable the production of new technological cards in Printed Circuit Board production, water consumption is expected to remain constant. It is aimed to achieve approximately 50% efficiency. • The transition to mechanical meters with pulse output

			<p>is planned in 2022.</p> <p>10-15-Year Plan:</p> <ul style="list-style-type: none"> It is planned for the wastewater of the treatment plant to meet the process water specification with appropriate filtration processes and resupply it to the production line.
Financial planning	Yes, water-related issues are integrated	11-15	<p>Operational water related projects are part of our annual opex on energy and water sustainability projects. In all facilities water is part of the allocated annual budget with capital expenditure.</p> <p>The high-risk facilities are assessed by using WRI Aqueduct tool maps, regarding on quantity and quality of water with regulatory, financial, legal and capital risks for 15 years beyond.</p> <p>Then the budget allocation is fulfilled by taking into account substantial water cost risks. We have chosen 15 year time horizon to inform facilities' financial planning in the context of water-related issues. We invest in projects with an estimated 3-year payback threshold. In this way, water projects are evaluated and planned for financially alongside other facilities' investment needs and ROIs. Sustainable Water Resupply Management Plan" is in progress. Water management, water reuse, rainwater harvesting phases are started to be implemented. The expenditure and other infrastructure base financial planning have been completed.</p>

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)

2

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

6

Water-related OPEX (+/- % change)

1

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

4

Please explain

- *Within the scope of our water system improvement, our integration into the water monitoring system automation will continue.
- *In order to reduce personal water use, our sensor faucet conversion process will proceed as planned.
- *Gray water infrastructure installation is planned at Gölbaşı Campus. Our treatment plant improvement activities will continue.
- *A garden automatic irrigation system will be installed in Akyurt Campus.
- *The construction of a rainwater collection system for the newly constructed building in Gölbaşı Campus will continue.
- New buildings' capital expenditure will increase in the next reporting year for Gölbaşı. Due to FTE increase the OPEX will increase in the same facility.

W7.3

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

	Use of scenario analysis	Comment
Row 1	Yes	<p>We use the WRI Aqueduct Tool to assess water risk for facilities within our operational control. Water risks include risks such as water stress, flood and drought risk. The climate risk assessment approach was informed by the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), and the Guidance for Applying Enterprise Risk Management to ESG related Risks.</p> <p>Climate-related risks are incorporated into company's Enterprise Risk Management annual process.</p> <p>For the next three years, we will help our suppliers to set targets by guiding them to make improvements in water and energy related actions by using the related tools. We will introduce an easy methodology to determine their water/climate related risks by themselves with public scenarios.</p> <p>The supplier risk assessment of ASELSAN will be improved with specified measurements of success by this way. We will have an opportunity to engage with our suppliers and plan diversification.</p>

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
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<p>Row 1</p>	<p>Water-related Climate-related Socioeconomic</p>	<p>The company identified key areas for assessment, including water related physical risk. The key areas were assessed for impact and preparedness across two time horizons 2030 and 2050. ASELSAN already conducts a water security risk assessment each year for its global operations using the WRI Aqueduct tool. Climate-related risks are incorporated into Enterprise Risk Management annual process.</p> <p>When assessing physical risks, specific risks have been included and their severity (temperature, precipitation, flooding, water availability/ drought were studied for all assets of the company. The last years's climate events have been assessed.</p> <p>The investment phase has been studied based on the severity of the detected risks.</p> <p>Efficiency gains/clean energy pathways incorporated into scenarios and business planning.</p> <p>In transitional risk assessments various key supply and demand-side technologies (solar PV/CSP, energy storage, bio-fuels, green hydrogen, electric vehicles, and other efficiency technologies in other key sectors including industrial and infrastructure</p>	<p>According to the IPCC RCP 2.6 scenario analysis, the pH value of the oceans will gradually decrease and the iron content will increase. It is stated that this is almost certain. In order to prevent this case, as ASELSAN, we control our facilities water discharge on a daily, weekly and monthly basis. If the effluent parameters results are over the limits, it is redirected into the treatment plant not to the discharge channel. In this way, the treatment is ensured and the discharge is controlled.</p> <p>ASELSAN Macunköy campus is located close to residential areas. Therefore, the discharge of the residences and the campus is directed to the same municipal channel. In periods when it rains heavily, it may cause in the discharge channel the overflow problem.</p>	<p>This project is in progress phase. After the heavy flood events occurred between 2019-2022 in Ankara, ASKI stated that there is a need to revise infrastructure plans of certain areas. ASELSAN participates in relevant meetings and shares its views. In two years the investment will be completed and ASELSAN will provide necessary support to build the channel.</p>
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		were assessed. GDP rate, employment rate, and other socioeconomic variables are taken into consideration during the assessments.		
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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

In the next two years we will work on the cost of water with its various dimensions.

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	Please explain
Row 1	Yes	There is an analysis document showing that the suggestions made in the Van project-a pilot Project for a Water Management System in a small area-will increase the energy efficiency. This improvement includes the water pump motors that our software recommends replacing. In the analyzes made, it has been revealed that one of the motors works with 47% efficiency and the other with 51% efficiency. This is not the optimal operating range of the pumps and is not healthy for the motors. Discovering this result, our SCADA software offers suggestions for replacing motors. And with this change, the energy savings will be 32.559 kWh/month. This value shows that the investment to be made for the replacement of the engines will be amortized in about 6 months. Emission avoidance=170 ton CO2e /year.

W8. Targets

W8.1

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

	Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row 1	Company-wide targets and goals	<p>Targets are monitored at the corporate level</p> <p>Goals are monitored at the corporate level</p>	<p>ASELSAN's Water Policy, is updated with the action of the Integrated Management Systems. After the approval of the CEO, it was announced to all suppliers.</p> <p>With the strategy we have focused on reducing our water impacts by setting reduction targets as part of our alignment with SDGs; In the board level it is decided to establish a target of a reduction in water use in 2030. The strategy and target were established by the sustainability committee, including Climate Change Management Unit. The Unit team surveys the global developments and examines regulations on water and climate related issues, such as water stress and many other aspects of the current and future emerging issues setting and monitoring water-related targets and/or goals.</p> <p>Progress to targets is reviewed at regular meetings with senior management to ensure progress and accountability.</p> <p>In the supply chain side, for the next three years, we plan to set targets by guiding them to make improvements in water and energy related actions. We will introduce an easy methodology to determine their water/climate related risks by themselves with public scenarios. The supplier risk assessment of ASELSAN will be improved with specified measurements of success by this way.</p>

W8.1a

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

Target reference number

Target 1

Category of target

Monitoring of water use

Level

Other, please specify

Division base strategic monitoring of water use

Primary motivation

Climate change adaptation and mitigation strategies

Description of target

Company wide monitoring is in place, it is targeted to departmentalize it by branching for all of the production units (70% in overall buildings) where water use will be monitored by continuous flow-meters. Our Primary motivation with this target is to set climate adaptation and mitigation strategies. It is significant for reducing other water-related risks.

As of action, the consumption will be determined and then targets will be set-up by division, and related financial allocation will be structured for related division. At the end of the year the best performer division will receive a non-monetary award depending on improvements in water consumption. Other performers will be guided to explore the best performers' behavioral change to reach a good performance. Monitoring will begin as flow meters are installed in the divisions.

The transition to mechanical meters with pulse output is planned for 2022.

Quantitative metric

% sites monitoring water consumption total volumes

Baseline year

2020

Start year

2020

Target year

2025

% of target achieved

69

Please explain

2020 was the start year of the target . Target revision is realized for the next year.

With the strategy we have focused in reducing our water impacts by setting reduction targets as part of our alignment with Sustainable Development Goals SDG: 6.3. In the Executive Committee Meeting it was decided to establish a target of a reduction in water use by 2030. The strategy and target were established by the Sustainability Committee, including Climate Change Management Unit. With this target which supports the SDG 6.3 ;

By 2030, our company will be a contributor to the improvement of the reduction of water quantity and indirect remediation of water quality, substantially increasing recycling and safe reuse.

Installation of energy meters in the devices that consume water was completed. In July 2021, an energy analyzer was installed in various lines. Thanks to the existing and new

water meters in the coating lines, water consumption tracking is performed on a daily basis.

Target reference number

Target 2

Category of target

Water, Sanitation and Hygiene (WASH) services in the workplace

Level

Company-wide

Primary motivation

Risk mitigation

Description of target

Hygiene and sanitation practices in public life areas are important for public health, and constitute the first building block in preventive healthcare.

After the pandemic the Executive Committee decided to be certified in 2023 with ISO 13811 standard which ensures;

*Delivery of products and services that are compatible with legal requirements,

*Increased hygiene and sanitation performance,

*Increased market share and competitive power in the related sector by means of improved product and service reliability,

*Managing and controlling the risks associated with operations,

*Taking active role in establishing community health.

Quantitative metric

Other, please specify

ISO 13811 hygiene and sanitation management system establishment goal

Baseline year

2020

Start year

2020

Target year

2023

% of target achieved

50

Please explain

By spreading to every area of life, Hygiene; starting from the individual dimension, comes out as an important factor affecting the health of the community. The new type of corona-virus (COVID-2019) epidemic, which has been reported to have started in China at the end of 19, has been declared as a "pandemic" by the World Health Organization.

In this context in the reporting year, ASELSAN became the first defense industry company to qualify for COVID-19 Safe Production / Safe Service Certification by fulfilling all the standards set by TSE. ISO 13811 Standard will ensure the company to be in continuous hygienic conditions, by focusing on optimum water use. Transition applications to the standard started in 2020.

In the reporting year the training part of the project has ended.

Target reference number

Target 3

Category of target

Water recycling/reuse

Level

Site/facility

Primary motivation

Climate change adaptation and mitigation strategies

Description of target

According to its strategic plan and "2050 year net zero emission target", ASELSAN plans its actions to minimize its environmental impact. Improving water monitoring systems and being efficient in water use is one of the important aspects. Therefore, ASELSAN targets to build grey water system for three new buildings within the facility of Gölbaşı and use gray water for gardening purposes of its new office building in Gölbaşı Facility. This target will ensure the decrease in water withdrawal.

Quantitative metric

Other, please specify

Absolute reduction in total water withdrawals

Baseline year

2021

Start year

2021

Target year

2025

% of target achieved

0

Please explain

ASELSAN builds three new buildings in Gölbaşı Facility. One building is designed for cafeteria where food will be cooked for 30.000 people. The second building is build for a new Nursery and Kindergarden where 250 students will be educated. The third building will be a big sports complex with gym, basketball court, spinning center etc. All

employees of ASELSAN, working at all facilities, can benefit from these buildings. Gray water system will be used in these three buildings and awareness raising will be fulfilled within employees using these complexes. In addition, gray water will be used for irrigation purposes in the new office building in Gölbaşı Facility. At the beginning of 2023, all buildings will be in use.

W8.1b

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

Goal

Engagement with suppliers to reduce the water-related impact of supplied products

Level

Business activity

Motivation

Climate change adaptation and mitigation strategies

Description of goal

Progress to targets is reviewed at regular meetings with senior management to ensure progress and accountability.

In the supply chain side, for the next three years, we plan to set targets by guiding them to make improvements in water and energy related actions. We will introduce an easy methodology to determine their water/climate related risks by themselves with public scenarios (IPCC AR 5, RCP 4.5 and/or 2.6 by using easy tools) and online training will be given for critic suppliers. The supplier risk assessment of ASELSAN will be improved with specified measurements of success by this way.

Baseline year

2020

Start year

2020

End year

2030

Progress

Climate Change Management Unit surveys the global developments and examines regulations on water and climate related issues, such as water stress and many other aspects of the current and future emerging issues setting and monitoring water-related targets and/or goals. ASELSAN Water Policy, was updated with the action of the Integrated Management Systems. After the approval of the CEO, it was announced to all suppliers.

In 2020, during the supplier meetings, we shared the latest environmental and climate

related information with them. In the reporting year, we have informed and trained our suppliers about climate change and its impacts. The importance of data gathering about water use and energy consumption was shared with them. We encourage them to implement these initiatives in their own activities and to share the responsibility of environmental impact further down the supply chain.

Goal

Improve wastewater quality beyond compliance requirements

Level

Site/facility

Motivation

Increase freshwater availability for users/natural environment within the basin

Description of goal

While the capacity is increased with the transition to production systems, such as mSap/horizontal in-hole coating line, to enable the production of new technological cards in Printed Circuit Board production, water consumption is expected to remain constant. It is aimed to achieve approximately 50% efficiency in five years. In ten-years, it is planned for the wastewater of the treatment plant of Macunköy to meet the process water specification with appropriate filtration processes and resupply it to the production line.

Baseline year

2021

Start year

2022

End year

2032

Progress

Next year the systems to be monitored will be evaluated.

A consultancy service on water and waste water management will be received

Water consumption and water treatment quality requirements with energy efficiency will be detailed.

Water treatment efficiency of the treatment plant will be monitored in detail.

W9. Verification

W9.1

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

No, but we are actively considering verifying within the next two years

W10. Sign off

W-FI

(W-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

2021 ASELSAN Sustainability Report

 2021 ASELSAN Sustainability Report.pdf

W10.1

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

	Job title	Corresponding job category
Row 1	Corporate Management Vice President	Board/Executive board

W10.2

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

No

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

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

Please confirm below

I have read and accept the applicable Terms