

Welcome to your CDP Water Security Questionnaire 2022

W0. Introduction

W0.1

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

The Hamitabat Power Plant (HPP) is Turkey's first natural gas combined cycle power plant operating since 1986 with a total operational capacity of 1,156 MW was privatized by the Privatization Administration in May 2013 and the transfer agreement with Limak Natural Gas Electricity Generation Inc. (hereinafter called LIMAK) was mutually signed on August 1, 2013. LIMAK has transformed HPP into the most efficient power plant of Turkey and the electricity generation will be carried out by Hamitabat Electricity Generation and Trade Inc. (hereinafter called HEAŞ), which is the affiliating company of LIMAK.

HEAŞ and his French associate called Inframed, has ensured availability at full capacity as of September 2017 with 2 SIEMENS H class combined cycle blocks replacing the plant with old technology by the rehabilitation project that has been initiated in March 2015 with a budget of 520 million Euros. It increased its efficiency level to 61 percent with the investment made, thereby causing a significant improvement in natural resource consumption as well as a reduction in energy import bills as a country. HEAŞ has taken its place among the limited power plants of both Turkey and Europe with respect to construction period, efficiency and alignment with environmental standards. HEAŞ, with its 1,156 MW installed power, contributed to the energy supply after the completion of the renovation project in 2017. Serving as an assurance for power supply in the Marmara Region with its strategic location and high reliability and availability, HEAŞ increased its installed power to 1220 MW in 2018. Existing old and aged technology has been demolished in the operation. The production amount in 2021 was 7,349 billion kWh.

The project designing of the new power plant has been concluded to fulfill the requirements of the local legislation and international standards. The main goal of HEAŞ is to sustain its existence within Turkey's energy market with high efficiency and environmental awareness in the upcoming years. EIA and ESIA reports have been prepared for HEAS renovation project. The gas turbines at the facility are air cooled; therefore, no water consumption is of concern. The plant has been furnished by dry Heller type cooling towers for cooling of water-steam cycle. Also two generators are cooled by hydrogen to save water consumption for cooling process. Special environmental management procedures specific to HEAŞ have been established for the purpose of creating minimum environmental impact in the site works and defining and following control measures in satisfactory standards. Procedures have been

established by taking the IFC (International Finance Company) and Equator Principles as references to comply with the good environmental standards and practices regulated for the fulfillment of the located legal requirements. Prior to initiation of operations in the renovation project area, an ecological field study has been conducted with flora, fauna and aquatic life experts, the existence of endemic species within the project impact area has been investigated and the ecological characteristics of the project have been identified. Although no endemic species have been identified accordingly.

The following indicators are monitored and followed within the scope of the sustainability activities and environmental performance such as energy consumption and production, waste generation amounts based on waste types, waste water and water management issues, greenhouse gas emission monitoring, reporting and third party verification.

Energy Management Acting with the awareness of the importance of utilization of energy efficiently as a power plant generating power, the foundations of energy efficiency transformation of HEAŞ was said in 2015 via renovation project.

HEAŞ established the Zero Waste Management System within the scope of the “Zero Waste Project” verified by the Ministry of Environment, Urbanization and Climate Change of the Turkish Republic. HEAŞ, which continues its production activities with minimum impact by considering today’s resources and tomorrow’s needs, has ISO 27001: 2013 Information Security Management System Standard in 2016, ISO 27019: 2017 Information Security in Electricity Production Distribution Systems and Corporate Information Assets Standard and ISO 9001:2015 Quality Management System, ISO 14001:2015 Environmental Management System and ISO 45001:2018 Occupational Health and Safety Management System certification. Being the first natural gas combined cycle power plant of Turkey, HEAŞ continues to operate as a symbol of Kırklareli since 1986 and will continue to operate in the energy market of Turkey with high efficiency and environmental awareness in line with the United Nations Sustainable Development Goals in the coming years.

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.

EUR

W0.5

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

Companies, entities or groups over which 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.

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	Vital	Neutral	<p>For direct use; Hamitabat Natural Gas Combined Cycle Power Plant has good quality well-water and is used as a water source after treatment at plant area. HEAS uses water directly for electrical energy production on steam turbine. Water is vital importance for full capacity power generation availability on steam production, closed loop cooling process and other auxiliary systems. Therefore, the need for water will always be necessary and vital for energy production now and in the future.</p> <p>For indirect use; water is used for WASH purposes by site team but compared with power plant direct consumptions the amount is less than the direct usages.</p>

Sufficient amounts of recycled, brackish and/or produced water available for use	Vital	Not very important	<p>For direct use; Hamitabat Natural Gas Combined Cycle Power Plant has good quality well-water and is used as a water source after treatment at plant area. HEAS uses water directly for electrical energy production on steam turbine. Water is vital importance for full capacity power generation availability on steam production, closed loop cooling process and other auxiliary systems. Therefore, the need for water will always be necessary and vital for energy production now and in the future.</p> <p>For indirect use; water is used for WASH purposes by site team but compared with power plant direct consumptions the amount is less than the direct usages.</p>
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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%	HEAS has four water wells at site and 100% of all water withdrawals from the source and the total volume of the water used in the process are monitored online and reported within the power plant on a daily basis.
Water withdrawals – volumes by source	100%	We have four water wells at site and 100% of all water withdrawals are regularly measured and monitored by separate measurement equipment is located on the sources and the consumers basis. The water drawn from the wells is used for different purposes in the facility. These are domestic water usage (cooking, WC,), cooling water, process water and other needs (like landscaping).
Water withdrawals quality	100%	The water drawn from the wells passes through the ultrafiltration treatment plant and is serviced as domestic water. According to Regulation on the Protection of Groundwater against Pollution and Deterioration, the quality of the well water quality is monitored by accredited laboratories

		<p>monthly basis.</p> <p>Groundwater quality monitoring parameters are as follows; ammonium, copper, BOD, mercury, zinc, dissolved oxygen, conductivity, cadmium, COD, lead, nickel, nitrate, nitrite, oxygen saturation, pH, temperature, total phosphorus and TKN.</p> <p>Consumption of the steam generation and cooling water process is supplied after being purified by passing through appropriate process steps; ultrafiltration (UF), reverse osmosis (RO), electrode ionization (EDI) respectively. Treated water quality has been monitoring to ensure process technical specification requirement on Cation Conductivity, Sodium, Silica Dissolved Oxygen, pH via on-line sample system by DCS screens.</p>
<p>Water discharges – total volumes</p>	<p>100%</p>	<p>We have three types of water discharge as domestic, industrial waste water and rainwater discharge. Domestic and industrial waste water resources are regularly measured and monitored on separate line.</p> <p>Rainwater is separately collected from the other waste water lines around the site and discharged to the stream directly without any measurement.</p> <p>We have waste water discharge permit document is prepared by Ministry of Environment, Urbanization and Climate Change for domestic and effluent waste water. All waste water collection underground lines separately reach the related treatment plants and the discharge points on the river side.</p> <p>Mechanical flow meters have been installed at the wastewater discharge points to monitor the amounts on daily basis.</p> <p>Installation of flowmeter on the industrial waste water discharge line is regulation requirement but the monitoring of domestic waste water amount is HEAS's internal requirement to manage and control the water mass balance.</p>

Water discharges – volumes by destination	100%	All treated waste waters, such as domestic and industrial, are discharged into the Bağlar Stream which is close to the HEAS site. Upstream and downstream samples are taken from the HEAS's discharge point on Bağlar Stream, twice a year to monitor the stream water chemical and microbiological quality as to whether any impact of HEAS's treated waste water.
Water discharges – volumes by treatment method	100%	<p>HEAS has two separate waste water treatment plant, one of them for domestic waste water and the other one for industrial waste water. Treatment plants project document has been approved by Ministry of Environment, Urbanization and Climate Change (EUCC) for their capability, ability and efficiency of the treatment process to comply the Turkish Water Pollution Control Regulation requirements. The domestic wastewater is treated at the Biological Package Wastewater Treatment Plant as secondary treatment type and discharged to Bağlar Stream.</p> <p>The industrial wastewater is treated at the Chemical Wastewater Treatment Plant as secondary treatment type and discharged to Bağlar Stream.</p>
Water discharge quality – by standard effluent parameters	100%	<p>The discharge samples are taken and analysed on monthly basis for industrial waste water and on bimonthly basis for domestic waste water by accredited laboratories. Responsible parameters and taken period of samples are determined by the Ministry of EUCC according to Turkish Water Pollution Control Regulation requirements.</p> <p>HEAS has environmental permit for waste water discharge and stack emissions which are held by Ministry of EUCC.</p> <p>Industrial wastewater discharge parameters are as follows; conductivity, dissolved oxygen, oxygen saturation, temperature, COD, TKN, chloride, sulphate, pH, ZSF, iron, oil, total phosphorus, hydrazine and settable solid.</p> <p>The domestic wastewater discharge parameters are as follows; conductivity, dissolved oxygen, oxygen saturation, temperature, TSS, BOD, COD, pH.</p>

		On-line pH analyser has been furnished on industrial water treatment discharge pit to shut off the discharge process if occur any noncompliance on limit value.
Water discharge quality – temperature	100%	Water-steam cycle is cooled down by Heller Type closed cycle cooling towers to avoid the fresh water consumption and any discharge with high temprature cooling water. HRSG blowdown waste water is cooled by heat exchanger before receive to the industrial waste water treatment plant to decrease the temprature of waste water.
Water consumption – total volume	100%	We regularly measure and monitor the 100% of our water withdrawals and discharges at HEAS. Therefore, water consumption is regularly measured and monitored by 100%.
Water recycled/reused	Not relevant	Water-steam cycle is cooled down by Heller Type closed cycle cooling towers so approximately 4000m3 water is recycled in the cooling system at all time except the during maintenance activities on cooling system.
The provision of fully-functioning, safely managed WASH services to all workers	100%	HEAS services the tap water from the ground water, after the ultrafiltration process for human use. The water quality of the samples were taken monthly basis from taps at different points (such as dining hall, main control room, kitchen, office building kitchen) and results of the analyzes are provided to all site team for their information. Tap water is analysed on chemical and biological parameters according to Regulation Related to Water Used for Human Consumption by the accredited laboratory. Additionally Public Health Center Laboratory takes the sample on quarterly basis from these points. The bottled water was used for drinking purposes and, treated and disinfected tap water is used for cooking and washing purposes. Tap water is monitored on daily basis by mechanical flow meter. HEAS has domestic waste water treatment plant and domestic waste water collection system is separate the other waste water line.

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	366.5	Higher	<p>HEAS threshold can be explained as about the same: $\pm 0-5\%$, lower-higher: $\pm 5-25\%$, much lower - much higher: $> \pm 25\%$.</p> <p>HEAS has mechanical flow meter on four water wells for each one. All flow meters have been monitored on daily basis for daily water production report also all withdrawals can be monitored on water treatment plant DCS. HEAS has higher water withdrawal (+17,4%) compared with previous year withdrawal amount.</p> <p>85% of the all-water withdrawals is consumed by steam generation process and the rest of amount for human usage and other necessities. Power generation amount is higher than the previous year so water withdrawal amount was increased accordingly. 2020 COVID-19 pandemic condition has been effected the energy demand in Turkey market so HEAS energy production amount is lower than 2021.</p>
Total discharges	219.5	Higher	<p>HEAS's effluent discharged amount increased (+21%) due to the high operation time and also more maintenance activities, compared with previous year. Total discharge coverages domestic and industrial waste water discharge. Industrial waste water is monitored via mechanical flow meter at discharge point on daily basis. Domestic waste water has been calculated by estimation (domestic waste water=150lt/day-person*site personnel on monthly average) until June2021.</p> <p>As of the June 2021, domestic waste water discharge line has been furnished with mechanical flowmeter and the readings is reported on weekly basis.</p>
Total consumption	147	Higher	<p>HEAS's water consumption amount increased (+11%) due to the high realised operation time</p>

			<p>compared with previous year. Consumption has been calculated via withdrawals minus discharge estimation. In the reporting year, power generation amount is higher than the previous year so withdrawal amount was increased accordingly. Although higher water consumption, 6% water saving per MW has been recorded in the reporting year by HEAS with follows corrective and preventative actions; current potable and service water pipe line has been changed with new line to control the water leakage. Corrective and preventative maintenance has been conducted on HRSG tube and valves against water leakage.</p>
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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	% withdrawn from areas with water stress	Comparison with previous reporting year	Identification tool	Please explain
Row 1	Yes	100%	Higher	WWF Water Risk Filter	<p>HEAS uses WWF Water Risk Filter tool to assess the basin and operational risk and scenarios in detailed. We supply all water from four separate water wells at one basin for all kind of consumption. HEAS has one site to electricity generation so this site location coordinate is entered on the tool. The water is vital for steam cycle process. According to assessment by using the WWF Water Risk Filter tool; water depletion, available water remaining, baseline water stress is classified as 5-Very High-Risk level and blue water scarcity as 2-Low Risk Level.</p>

					HEAS has higher water withdrawal (+17,4%) compared with previous year withdrawal amount. HEAS uses water to power generation on steam turbine.
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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	Not relevant			We don't use Fresh surface water, including rainwater, water from wetlands, rivers, and lakes.
Brackish surface water/Seawater	Not relevant			We don't use Brackish surface water/Seawater
Groundwater – renewable	Not relevant			We don't use Groundwater – renewable
Groundwater – non-renewable	Relevant	366.5	Higher	We supply necessary water for consumption from four non-renewable ground water wells. All wells are furnished with mechanical flow meter are monitored on daily basis. Next year, we anticipate that the value will be lower than 2021 in the light of HEAS's electricity power generation outlook.
Produced/Entrained water	Not relevant			No withdrawal from this source. We don't use Produced/Entrained water.
Third party sources	Not relevant			We don't use Third party sources.

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

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

Enterprise risk management
International methodologies and standards

Tools and methods used

Enterprise Risk Management
ISO 31000 Risk Management Standard
Environmental Impact Assessment
ISO 14001 Environmental Management Standard

Contextual issues considered

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

Stakeholders considered

Customers
Employees
Investors
Local communities
NGOs
Regulators

Comment

HEAS uses WWF Water Risk Filter to assess the basin and operational risk, scenarios in detailed.

HEAS has conducted risk assessment studies according to his enterprise risk management procedure with risk assessment and management team on annually basis. HSE and related responsible white-collar team member and their manager such as operation, maintenance, finance and administrative are the body of the team. Asst. HSE Manager is lead of the risk assessment and management team and sustainability committee such as Social People, Healthy Planet and Inclusive Development. Enterprise risk management procedure has coverage the risk, threat, weakness and strength, opportunities in a wide range and perspective.

In the light of the risk-based thinking process management approached, for the water related risks are assed address their financial, operational, regulation, customer satisfaction, reputation and the public detrimental impact on site specific. All risk management process with assessment and planning the mitigation activities, identifying the necessary action to decrease the risk categories as acceptable, has been described with HEAS Integrated Management System Risk Assessment Procedure. The risk prioritizing has been divided by five categories according to result of multiplying with its likelihood, impact and importance level.

The risk management process is conducted in comply with the ISO 9001 Quality Management Standard and the ISO 31000 Risk Management Standard and also ISO 14001 Environmental Management Standard requirement and expectation.

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.

HEAS uses WWF Water Risk Filter to assess the basin and operational risk, scenarios in detailed.

HEAS has conducted risk assessment studies according his enterprise risk management procedure with risk assessment and management team on annually basis. HSE and related responsible white-collar team member and their manager such as operation, maintenance, finance and administrative are the body of the team. HSE team is lead of the risk assessment and management team and sustainability committee such as Social People, Healthy Planet and Inclusive Development. Enterprise risk management procedure has coverage the risk, threat, weakness and strength, opportunities in a wide range and perspective.

In the light of the risk-based thinking process management approached, for the water related risks are assed address their financial, operational, regulation, customer satisfaction, reputation and the public detrimental impact on site specific. All risk management process with assessment and planning the mitigation activities, identifying the necessary action to decrease the risk categories as acceptable, has been described with HEAS Integrated Management System Risk Assessment Procedure. The risk prioritizing has been divided by five categories according to result of multiplying with its likelihood, impact and importance level.

The risk management process is conducted in comply with the ISO 9001 Quality Management Standard and the ISO 31000 Risk Management Standard and also ISO 14001 Environmental Management Standard requirement and expectation.

EIA and ESIA reports have been prepared before starting of the construction activity at site.

EIA and ESIA benefit are to be identified the potential impacts of the project may have on the environment and water-related risks the project may cause during pre-construction, commissioning, operation and also decommissioning phase.

The EIA embraces all the studies to be carried out for the determination of potential positive and adverse impacts of the planned projects on the environment, for the determination and the evaluation of the measures to be taken to prevent or minimise the adverse impacts to an extent not to damage the environment through the determination and assessment of the selected locations and technology alternatives and for the monitoring and

control of the project implementation. HEAS has requested to responsible discharge water pollutant parameter and also limit value from the Ministry of Environmental, Urbanization and Climate Change during pre-construction phase of plant and waste water treatment plant.

Public Consultation and Disclosure Plan has been prepared to conduct the stakeholder analysis for Different Phases of the Project according to IFC and World Bank's Environmental, Social Guidelines, EBRD, Equator Principle and International Finance Institutions requirement and expectation on environmental and social issues. In the light of the output of the plan, all risks has been determined and planned the control measures. The Public Consultation and Disclosure Plan is a combination of the activities that are enable the stakeholders that might have an influence on the Project (such as Public, governmental organizations, Non Governmental Organizations (NGO)) to incorporate each phases of the Project.

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?

No

W4.2b

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

	Primary reason	Please explain
Row 1	Evaluation in progress	<p>HEAS uses WWF Water Risk Filter to assess the basin and operational risk, scenarios in detailed.</p> <p>HEAS is working to conduct direct operation process risk assessment studies according his enterprise risk management procedure with risk assessment and management team on annually basis. HSE and related responsible white-collar team member and their manager such as operation, maintenance, finance and administrative are the body of the team. HSE team is lead of the risk assessment and management team and sustainability committee such as Social People, Healthy Planet and Inclusive Development. Enterprise risk management procedure has coverage the risk, threat, weakness and strength, opportunities in a wide range and perspective.</p> <p>In the light of the risk-based thinking process management approached, for the water related risks are assed address their financial, operational, regulation, customer satisfaction, reputation and the public detrimental impact on site specific. All risk management process with assessment and planning the mitigation activities, identifying the necessary action to decrease the risk categories as acceptable, has been described with HEAS Integrated Management System Risk Assessment Procedure. The risk prioritizing has been divided by five categories according to result of multiplying with its likelihood, impact and importance level.</p> <p>The risk management process is conducted in comply with the ISO 9001 Quality Management Standard and the ISO 31000 Risk Management Standard and also ISO 14001 Environmental Management Standard requirement and expectation. Detailed risk assessment study will be finalized in 2022 according to CDP expectation covered by physical, regulatory, reputation & markets and technology for both of operation and value chain. According to pre-review study on operational risk, tighter regulatory standards, Drought, water stress, water scarcity will be at the center of the conclusion report.</p>

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 but are unable to realize them

W4.3b

(W4.3b) Why does your organization not consider itself to have water-related opportunities?

	Primary reason	Please explain
Row 1	Opportunities exist, but we are unable to realize them	Demineralized water treatment plant and HRSG samples reuse project was initiated in 2021, after completion of the project in 2022, more than 20,000 m ³ /year demineralised water saving will be planned to occur with almost 2000euro cost. for the future time, after completion of the HRGS hot drains (included blowdowns and other condensates) recover project, more than 100,000 m ³ /year demineralised water saving will be planned to occur with almost 20000euro cost.

W6. Governance

W6.1

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

No, but we plan to develop one within the next 2 years

W6.2

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

Yes

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

CEO is the decision maker for HEAS water policy. Acting with the principle of “fulfilling today’s requirements without jeopardizing the capacity to fulfill the requirements of the future generations” in its entire operations and activities, HEAŞ follows and applies a balanced and environmental-friendly growth strategy. HEAS publishes Sustainability Report periodically and updating the sustainability map conducted with the HEAS and Limak Group of Companies Sustainability Committee periodically. Sustainability activities and targets are prioritized and discussed on board of management meetings on more frequently than quarterly period.

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

President

Responsibility

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

Frequency of reporting to the board on water-related issues

More frequently than quarterly

Please explain

Water is vital for HEAS plant availability and sustainable power generation with low operation cost, high efficiency and environment friendly manner.
Water is vital for HEAS plant availability and sustainable power generation with low operation cost, high efficiency and environment friendly manner. President is responsible to conduct risk assessment and mitigation plan with related parties.
President encourages the team to continuously improvement, to decrease the water consumption and to allocate any sources on new investments for reuse/recycle projects.
President is responsible to generate water policy with the related parties. The president reports to CEO and the board.

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

Risk committee

Responsibility

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

Frequency of reporting to the board on water-related issues

Not reported to board

Please explain

Risk committee is responsible to generate water related risk assessment and mitigation studies according his enterprise risk management procedure on annually basis. HSE and related responsible white-collar team member and their manager such as operation, maintenance, finance and administrative are the body of the team. Risk committee reports to president.

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

Sustainability committee

Responsibility

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

Frequency of reporting to the board on water-related issues

Annually

Please explain

It measures and reports environmental impact across all areas of activity and takes improvement actions.
It enables the development and implementation of environmentally friendly products and services.
The Group continuously monitors, develops, and works to build the required infrastructure or to renew the existing one in all sectors.
It strives to increase the use of renewable energy sources (FEC) in energy consumption.
It develops projects to ensure the efficient use of water and to provide awareness in all stakeholders, starting with employees.
It calculates, verifies and tracks emissions from its activities to combat climate change. CEO, President, Maintenance, Operation, Human Resources, Procurement Managers and one white collar employee of each team is member of the committee.

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

Safety, Health, Environment and Quality committee

Responsibility

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

Frequency of reporting to the board on water-related issues

Not reported to board

Please explain

Operation, maintenance team foremen and supervisors, HSE team, HR manager, administrative responsible, health and safety expert are the member of the committee. To raise the site blue collar awareness on water related issue, to bring up any opportunities to decrease water consumption and pollution control also improvement site WASH facilities condition. The committee reports to the president.

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

Business unit manager

Responsibility

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

Frequency of reporting to the board on water-related issues

More frequently than quarterly

Please explain

All of responsibilities of the managers are mentioned on related parts above.

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

Other, please specify
Asst. Environment, Health and Safety Manager

Responsibility

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

Frequency of reporting to the board on water-related issues

More frequently than quarterly

Please explain

Asst. HSE Manager is the leader of risk committee, sustainability committee and Safety, Health, Environment, and Quality committee. To follow up the any climate adaption issue in the light of Limak Sustainability Policy, local and international legislation requirement, Paris Agreement, Green Deal and good practices in the sector.

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	<p>HEAS has a commitment to encourage to all team members to improve the environment and employee health condition on his environmental and health safety policy. There are no dedicated monetary reward program for the achievement of the related targets. for non-monetary reward program, HEAS has personal performance system for his all-level employees. Key performance indicator with related operational availability, environmental, social, health and safety issue has been assigned to parties on their responsibility areas.</p> <p>To comply with any legislation and standard requirements, during planning and execution of their activities is assigned for president and all managers.</p> <p>Reduction of water consumption and withdrawal targets are assigned to operation, maintenance and Asst. HSE manager on annually personal targets.</p> <p>Employee awareness campaign or training program target are assigned on HSE and human resources manager.</p>

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	No, water-related issues were reviewed but not considered as strategically relevant/significant	16-20	Detailed risk assessment study will be finalized in 2022 in parallel with CDP expectation covered by physical, regulatory, reputation & markets and technology. According to pre-review study, tighter regulatory standards, Drought, water stress, water scarcity will be at the center of the conclusion report. Outcome of the study, Long-term business objectives will be developed in parallel with Turkey's energy market and net zero emission targets.

Strategy for achieving long-term objectives	No, water-related issues were reviewed but not considered as strategically relevant/significant	16-20	Detailed risk assessment study will be finalized in 2022 in parallel with CDP expectation covered by physical, regulatory, reputation & markets and technology. According to pre-review study, tighter regulatory standards, Drought, water stress, water scarcity will be at the center of the conclusion report. Outcome of the study, Long-term business objectives will be developed in parallel with Turkey's energy market and net zero emission targets.
Financial planning	No, water-related issues were reviewed but not considered as strategically relevant/significant	16-20	Detailed risk assessment study will be finalized in 2022 in parallel with CDP expectation covered by physical, regulatory, reputation & markets and technology. According to pre-review study, tighter regulatory standards, Drought, water stress, water scarcity will be at the center of the conclusion report. Outcome of the study, Long-term business objectives will be developed in parallel with Turkey's energy market and net zero emission targets.

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 Site/facility specific targets and/or goals	Targets are monitored at the corporate level Goals are monitored at the corporate level	Acting with the principle of "fulfilling today's requirements without jeopardizing the capacity to fulfill the requirements of the future generations" in its entire operations and activities, HEAŞ follows and applies a balanced and environmental-friendly growth strategy. Efficiency and availability in production, reducing the environmental impacts (social, energy, emission, water and waste management) and relations with the society are three of all HEAS's sustainability priorities. HEAS publishes Sustainability Report periodically and updating the sustainability map conducted with the HEAS and Limak Group of Companies sustainability team periodically. Sustainability activities and targets are

		<p>prioritized and discussed on board of management meetings periodically. HEAS has integrated the UN Sustainability Development Goal (SDG) to his business plan. HEAŞ 2030 Sustainability Road Map has been prepared with HEAS Sustainability Committee to integrate his goals and targets to his business. All goals and targets have been dedicated and prioritized in the light of EIA, ESIA and water risk assessment study which is conducted by HEAS Sustainability Committee via WWF Water Risk Filter tool. HEAŞ aims to create minimum environmental impact and perform management by complying with the entire legislation, regulation and technical standards related to the environment. In this context, during the process of establishment of the environmental impact management mechanism, the TS EN ISO 14001:2015 Environmental Management System has been established to fulfill the requirements and expectations of employees, subcontractors, stakeholders and the entire related parties, fulfilling the local and international legal requirements and aiming at the continuous improvement of environmental performance. Environmental Management System achieves its intended outputs and encourage the entire employees and stakeholders to participate in the processes for the purpose of accomplishing the environmental goals. Target progress is monitored on periodically and reported to top management and related parties via monthly basis.</p> <p>HEAŞ, encouraging the continuous improvement, ensures the periodical review of the compliance with the environmental requirements in its operations, reducing the risks by observing the feasible opportunities in technical and economic terms, reducing the potential negative environmental impacts and analysing these entire opportunities for developing the environmental applications and practices. The company monitors the effectiveness of the measures taken in order to manage the environmental impacts in the best way with proactive methods applied by organizing regional internal audits in a manner that the entire parties from different departments shall convene with special working groups established within this scope.</p>
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W8.1a

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

Target reference number

Target 1

Category of target

Water withdrawals

Level

Site/facility

Primary motivation

Cost savings

Description of target

HEAS has set demineralized water treatment plant efficiency for its all bodies- plant overall efficiency at least 74%, EDI at least 90% , UF at least 95%, RO at least 75% - according to their design basis.

Quantitative metric

% reduction in total water withdrawals

Baseline year

2020

Start year

2021

Target year

2021

% of target achieved

100

Please explain

HEAS has achived demineralized water treatment plant efficiency for its all bodies- plant overall efficiency as 76%, EDI as %95 , UF as 97,90%, RO as 77,28%

Target reference number

Target 2

Category of target

Product water intensity

Level

Site/facility

Primary motivation

Climate change adaptation and mitigation strategiess

Description of target

HEAS has set water withdrawal target as below 0,048m3 per MWh.

Quantitative metric

% reduction per business unit

Baseline year

2020

Start year

2021

Target year

2030

% of target achieved

0

Please explain

Target has not been achieved with -0,094% deviation.

In reporting year water withdrawal has been metered as 0,049 m3/MWh.

Target reference number

Target 3

Category of target

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

Level

Company-wide

Primary motivation

Commitment to the UN Sustainable Development Goals

Description of target

Water withdrawal for services and Potable water usage target has been set as below 30000m3/year.

Quantitative metric

Proportion of employees using safely managed sanitation services, including a hand-washing facility with soap and water

Baseline year

2020

Start year

2021

Target year

2030

% of target achieved

100

Please explain

In reporting year water consumption has been meteralized as 23.760 m3/year.

Target reference number

Target 4

Category of target

Community engagement

Level

Company-wide

Primary motivation

Brand value protection

Description of target

HEAS is desired to construct powerful engagement of his stakeholder and local community. To conduct any community engagement activities at least one time, such as site meetings, technical site visit by educational institution is in the targets to raise community awareness of control measures power plant on environmental impact, energy efficiency or technical operability of plant.
Zero complaint target coming from stakeholder on any environmental and social impact issue has been set by HEAS.

Quantitative metric

Total number of population participating in community-engagement activities

Baseline year

2015

Start year

2015

Target year

2030

% of target achieved

100

Please explain

In the reporting year only one site visit has been conducted by Trakya University Mechanical Engineering Department due to the COVID-19 pandemic control measures. No complaint has been raised to HEAS.

Target reference number

Target 5

Category of target

Water pollution reduction

Level

Site/facility

Primary motivation

Brand value protection

Description of target

Comply with environmental permit and legislation and standart limitation and requirement

Quantitative metric

% proportion of wastewater that is safely treated

Baseline year

2015

Start year

2015

Target year

2030

% of target achieved

100

Please explain

Industrial wastewater discharge parameters are as follows; conductivity, , dissolved oxygen, oxygen saturation, temperature, COD, TKN, chloride, sulphate, pH, ZSF, iron, oil, total phosphorus, hydrazine and settable solid.

The domestic wastewater discharge parameters are as follows; conductivity, dissolved oxygen, oxygen saturation, temperature, TSS, BOD, COD, pH.

Upstream and downstream samples are taken from the HEAS's discharge point on Bağlar Stream on chemical and biological parameters.

No limit exceed has been occurred in the reporting period.

W8.1b

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

Goal

Engaging with customers to help them minimize product impacts

Level

Company-wide

Motivation

Shared value

Description of goal

as the one of thermal power plants in Turkey energy market, to generate environmental friendly power with lower water and carbon footprint by high energy efficiency.

Baseline year

2020

Start year

2015

End year

2030

Progress

HEAS's water and carbon footprint has been calculated and verification process will be conducted in 2022. Opportunities and risks has been assessed and mitigation plan has been prepared.

Goal

Engagement with public policy makers to advance sustainable water management and policies

Level

Company-wide

Motivation

Shared value

Description of goal

To being part of any stewardship activities which is conducted by Ministry of Environmental, Urbanization and Climate Change and Ministry of Energy and Natural Resources to improve climate resiliency and decrease environmental impact of thermal power plant.

Baseline year

2020

Start year

2021

End year

2030

Progress

HEAS has attended the Management of Emergency Case for Thermal Power Plant Worksop which was conducted by Turkish Electricity Generation Cooperation to improve of the preparedness and resilience on extreme weather condition due to climate change. Environmental analysis results has been continued to share with Ministry of Environmental, Urbanization and Climate Change via on-line system.

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.

HEAŞ, acting with the awareness that the existence of water resources is in line with the own existence of the company, adopting a responsible consumption approach, ensures the existence and production of natural resources for many years by constantly monitoring water consumption throughout the plant, identifying water losses and leaks at an early stage with preventive maintenance and controls at place.

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	Assistant Environment, Health and Safety Manager	EHS manager

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