Module: Introduction

Page: W0. Introduction

W0.1

Introduction

Please give a general description and introduction to your organization

Akenerji, a member of the Akkök Group of Companies, is one of the largest private electricity producers in Turkey in terms of both installed capacity and number of customers. The company was established in 1989 and formed a strategic equal partnership with one of the largest energy companies in Europe, ČEZ, in 2009. ČEZ joined other energy companies that declared their specific goals in the context of the Paris climate conference.

Akenerji operates at different levels of the electricity supply chain (generation, wholesale and retail) and is pursuing further opportunities to support its leading position through investments in the market. With more than 25 years of experience, Akenerji has maintained steady growth with a balanced portfolio. As of end of 2016, the company has total installed capacity of 1211 MW, which consists of 1 Natural Gas Combined Cycled Power Plant (NGCCPP) (904 MW), 7 Hydroelectric Power Plants (HPPs) (292 MW) and 1 Wind Power Plant (WPP) (15 MW). We have no thermal power plants operating with coal.

The mission of Akenerji is to make reliable and long-term contribution to Turkey’s energy needs by operating with a quality-focused approach at every stage of the energy sector value chain. Within the framework of this mission, in addition to natural gas-based generation, Akenerji also makes large-scale investments in renewable energy sources. Akenerji started to diversify the sources of its generation portfolio significantly starting in 2005, at which time the company's installed power consisted solely of thermal power plants. In 2009, Akenerji launched its first wind energy generation plant, Ayyıldız WPP. Akenerji has been the first private company to invest in HPP in Turkey, when the Energy Market Regulatory Authority initiated its first tenders for private sector to build hydroelectric power plants. As of the end of 2016, total installed capacity from renewable energy resources is 307 MW with existing 7 HPPs and 1 WPP, which in total corresponds to 25 % of Akenerji’s total installed capacity. Akenerji is still investing in renewable, wind energy, by increasing its Ayyıldız WPP’s installed capacity by 88%.
Akenerji’s Sustainability Approach:
Every year, sustainability is integrated into increasing number of decision making mechanisms within the company. As a tool for managing and maintaining the efforts to reach sustainability, Akenerji gives importance to monitor quality performance in its services together with stakeholder engagement performance.

As a part of monitoring the environmental sustainability performance, Akenerji launched the “Carbon Management Project” which includes regular monitoring of the company`s GHG emissions. GHG inventory of Erzin Natural Gas Power Plant is monitored, reported and verified in ISO 14064-1 standard for 2016.

We benefit from a variety of dialogue platforms to learn about the sustainability expectations of our stakeholders including employees, customers, creditors, investors, regulatory bodies, suppliers, local communities, local authorities, society, and media as well as to give them information on these issues. The communication channels are Integrated management systems, “We Are the Energy” Employee Suggestion System, Customer satisfaction surveys, Environmental

Impact Assessment (EIA) reports, workshops/events etc. Moreover, Akenerji participates to CDP since 2010; prepares annual Environmental & OHS reports since 2010; and submits IFC Annual Environmental and Social Performance Monitoring Reports since 2010. As a part of our communication channels with our stakeholders, we also benefit from sustainability reports. Akenerji published its Sustainability Report according to the Global Reporting Initiative's international reporting standard. We are proud to be the first energy company in Turkey to issue a Sustainability Report (for 2014 reporting period) based on GRI G4. Since 2010, Akenerji has received certification for ISO 9001:2015 Quality, OHSAS 18001:2007 Occupational Health and Safety and the ISO 14001: 2015 Environment Management Systems.

Moreover, as of 2015, CDP Water Program has been initiated in our country. We have been among the pioneer companies that started to report to the program in its initial year and conveyed our water management system. Akenerji has been the one and only energy company to participate in the CDP Turkey Water Program. In 2016, we increased our scores from both CDP Climate Change and Water to "B".

W0.2

Reporting year

Please state the start and end date of the year for which you are reporting data

Period for which data is reported
Fri 01 Jan 2016 - Sat 31 Dec 2016

W0.3

Reporting boundary

Please indicate the category that describes the reporting boundary for companies, entities, or groups for which water-related impacts are reported

Companies, entities or groups over which operational control is exercised

W0.4

Exclusions

Are there any geographies, facilities or types of water inputs/outputs within this boundary which are not included in your disclosure?

Yes

W0.4a

Exclusions

Please report the exclusions in the following table

Exclusion	Please explain why you have made the exclusion
Ankara Office	In Ankara, we have a very small office with only 4 employees, which have a very small water consumption and very limited environmental footprint. Therefore, the effect of Ankara Office is negligible.

Further Information

Module: Current State

Page: W1. Context

W1.1

Please rate the importance (current and future) of water quality and water quantity to the success of your organization

Water quality and quantity	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital for operations	Neutral	For direct use; water is vital for our operations. Especially at Hydroelectric Power Plants (HEPP) electricity can be generated by means of water. The potential energy of water is transformed to mechanical energy so as to generate electricity. Therefore, availability of water (water quantity) is vital for our operations. Besides; we have a natural gas combined cycle power plant (NGCCPP) and significant volume of water is necessary for cooling purposes. The importance will be kept and increase in the future. For indirect use; water is used for WASH purposes by our contractors and sub-contractors currently and in the future.
Sufficient amounts of recycled, brackish and/or produced water available for use	Vital for operations	Not very important	About direct use of water: Cooling, process and other usage water is provided from Mediterranean Sea in Erzin natural gas combined cycle power plant (NGCCPP). Significant amount of seawater is used for cooling purpose in condenser and discharged to the sea; small amount of this source is used for process and WASH water in the plant. Water quality and quantity are both important for these operations currently and in the future. Cooling water technology is recirculating or closed-loop systems, which reuse cooling water rather than immediately releasing it back to the sea. Such systems withdraw comparatively small amounts of water but lose most of it to evaporation. For indirect use; water is used for WASH purposes by our contractors and sub-contractors currently and in the future.

W1.2

For your total operations, please detail which of the following water aspects are regularly measured and monitored and provide an explanation as to why or why not

Water aspect	% of sites/facilities/operations	Please explain
Water withdrawals- total volumes	76-100	100% of all water withdrawals are regularly measured and monitored at all sites.
Water withdrawals- volume by sources	76-100	We have different types of power plants and 100% of water withdrawals are regularly measured and monitored: At our Erzin Natural Gas Combined Cycle Power Plant (NGCCPP) Cooling, process, WASH and other usage waters in Erzin NGCCPP is provided from Mediterranean Sea and we are

Water aspect	% of sites/facilities/operations	Please explain
		monitoring water withdrawals. In HEPP's; potential energy of water is transformed into mechanical energy and this process electricity generates. Water withdrawals in all HEPPs are used only for domestic use (cooking, WC, etc., garden irrigation). We measure and monitor water withdrawals volume by sources at all sites.
Water discharges- total volumes	76-100	100% of total volumes of water discharged is regularly measured and monitored at all sites. At Erzin NGCCPP wastewater is discharged into the Mediterranean Sea. One of the Erzin Plant's environmental permit's index is the monitoring of the deep-sea discharges. Therefore, we always measure and monitor this parameter. In HEPPs; domestic wastewater is collected in septic tanks and transported with sewage trucks to municipal treatment plants. Therefore, this parameter is measured and monitored.
Water discharges- volume by destination	76-100	100% of total volumes of water discharged by destination is regularly measured and monitored at all sites. At Erzin NGCCPP wastewater is discharged into the Mediterranean Sea. One of the Erzin Plant's environmental permit's index is the monitoring of the deep-sea discharges. Therefore, we always measure and monitor this parameter. In HEPPs; domestic wastewater is collected in septic tanks and transported with sewage trucks to municipal treatment plants. Therefore, this parameter is measured and monitored.
Water discharges- volume by treatment method	76-100	100% of total volumes of water discharged by treatment method is regularly measured and monitored at all sites. At Erzin NGCCPP wastewater is discharged into the Mediterranean Sea. One of the Erzin Plant's environmental permit's index is the monitoring of the deep-sea discharges. Therefore, we regularly measure and monitor this parameter. In HEPPs; domestic wastewater is collected in septic tanks and transported with sewage trucks to municipal treatment plants. Therefore, this parameter is measured and monitored.
Water discharge quality data- quality by standard effluent parameters	76-100	99.98% of total volumes of water discharged is regularly measured and monitored by water quality by standard effluent parameters. As Erzin is a Natural Gas Combined Cycle Power Plant, it needs high amount of water for cooling process and for that reason 99.98% of our total volumes of water discharged sourced from Erzin NGCCPP. Erzin NGCCPP wastewater is discharged into the Mediterranean Sea. One of the Erzin Plant's environmental permit's index is the monitoring of the water quality by standard effluent parameters. Therefore, we regularly measure and monitor this parameter. In HEPPs; domestic wastewater is collected in septic tanks and transported with sewage trucks to municipal treatment plants. Therefore, waste water quality by standard effluent parameters is not monitored. But it is 0.02% by volume and source is domestic use.
Water consumption- total volume	76-100	We regularly measure and monitor the 100% of our water withdrawals and discharges at all sites. Therefore, water consumption is regularly measured and monitored by 100%.
Facilities providing fully-functioning WASH services for all workers	76-100	In HEPPs; domestic wastewater is collected in septic tanks and transported with sewage trucks to municipal treatment plants. Therefore, this parameter is measured and monitored. For our Erzin NGCCPP; water for facilities providing fully-functioning WASH services for all workers is not measured

Water aspect	% of sites/facilities/operations	Please explain
		separately. Therefore, water aspects could not regularly be measured and monitored only 1 of 7 power plants for WASH services.

W1.2a

Water withdrawals: for the reporting year, please provide total water withdrawal data by source, across your operations

Source	Quantity (megaliters/year)	How does total water withdrawals for this source compare to the last reporting year?	Comment
Fresh surface water	3.41	Lower	Fresh surface water withdrawals are lower, particularly owing to our water efficiency, awareness raising activities and sustainability targets.
Brackish surface water/seawater	8555.53	Lower	Seawater withdrawals are lower, particularly owing to our water efficiency, awareness raising activities and sustainability targets. We are trying to minimize the withdrawal and use of water without risking operational safety and production.
Rainwater	0	About the same	We do not use rainwater.
Groundwater - renewable	2.96	Lower	Ground-water renewable consumed is lower by 7.5% compared to last year.
Groundwater - non-renewable	0	About the same	We do not use non-renewable groundwater.
Produced/process water	0	About the same	We do not use produced / process water.
Municipal supply	1.68	Lower	Last year, water consumption at the Head Office was not reported but there has been a decrease by 24.7%.
Wastewater from another organization	0	About the same	We do not use wastewater from another organization.
Total	8563.57	Lower	Total water withdrawal in 2016 has decreased by 27.7% compared to the previous year. We are trying to minimize the withdrawal and use of water without risking

Source	Quantity (megaliters/year)	How does total water withdrawals for this source compare to the last reporting year?	Comment
			operational safety and production.

W1.2b

Water discharges: for the reporting year, please provide total water discharge data by destination, across your operations

Destination	Quantity (megaliters/year)	How does total water discharged to this destination compare to the last reporting year?	Comment
Fresh surface water	0	About the same	We do not discharge to fresh surface water.
Brackish surface water/seawater	7276.19	Much lower	We discharge the water to deep sea in line with the environmental permit at Erzin NGCCPP. According to the reporting year figures; 99.9% of our withdrawal is sourced from our Erzin NGCCPP. There has been a decrease by 37.2% according to the last year. We are trying to minimize our water footprint and care the environment without risking operational safety and production.
Groundwater	0	About the same	We do not discharge to groundwater.
Municipal/industrial wastewater treatment plant	3.55	Lower	In HEPPs; domestic wastewater is collected in septic tanks and transported with sewage trucks to municipal treatment plants. In 2016, we added the data from Ayyıldız WPP and Head Office AKHAN. They also discharge to municipal wastewater treatment plant. Even though they are included, discharge is 0.6% lower than the last year.
Wastewater for another organization	0	About the same	We do not give wastewater to another organization.
Total	7279.74	Much lower	There has been a decrease by 37.2% according to the last year. We are trying to minimize our water footprint and care the environment without risking operational safety and

Destination	Quantity (megaliters/year)	How does total water discharged to this destination compare to the last reporting year?	Comment
			production.

W1.2c

Water consumption: for the reporting year, please provide total water consumption data, across your operations

Consumption (megaliters/year)	How does this consumption figure compare to the last reporting year?	Comment
1283.83	Higher	The total volume of water consumed is increased by 406% in comparison to the last year. There are two particular reasons for that increase 1) 99% of our consumption is from our Erzin NGCCPP which has increased by 415% compared to 2015.Water is used for cooling purposes and consumption is increased by 415.4%.We care about environment & try to minimize our water footprint.On the other hand, we couldn't risk the operational safety and production.The operating capacity of the cooling tower is independent of the utilized capacity of an NGCCPP for electricity generation. 2) the figures of 2016 are the most accurate of the last three years of water reporting, as we have improved our measurement system over the last two years.

W1.3

Do you request your suppliers to report on their water use, risks and/or management?

No

W1.3a

Please provide the proportion of suppliers you request to report on their water use, risks and/or management and the proportion of your procurement spend this represents

Proportion of suppliers %	Total procurement spend %	Rationale for this coverage

W1.3b

Please choose the option that best explains why you do not request your suppliers to report on their water use, risks and/or management

Primary reason	Please explain
Lack of internal resources	Akenerji puts importance on both direct and indirect water management. Being the one and only CDP Turkey Water Programme participant from Turkish energy sector until 2016 is one of the examples. We are improving our internal systems, policies, assessments and strategies. Besides; we are willing to disseminate it through our value chain. As a solid example for 2016; we included some terms and conditions about environmental and occupational health and safety to our general procurement agreement. In addition to that; we do not request our suppliers to report on their water use, risks and management at the moment, but some water relevant issues are evaluated during the supplier audits that we started last year and extended significantly beyond our target this year.

W1.4

Has your organization experienced any detrimental impacts related to water in the reporting year?

No

W1.4a

Please describe the detrimental impacts experienced by your organization related to water in the reporting year

Country	River basin	Impact driver	Impact	Description of impact	Length of impact	Overall financial impact	Response strategy	Description of response strategy

W1.4b

Please choose the option below that best explains why you do not know if your organization experienced any detrimental impacts related to water in the reporting year and any plans you have to investigate this in the future

Primary reason	Future plans

Further Information

Module: Risk Assessment

Page: W2. Procedures and Requirements

W2.1

Does your organization undertake a water-related risk assessment?

Water risks are assessed

W2.2

Please select the options that best describe your procedures with regard to assessing water risks

Risk assessment procedure	Coverage	Scale	Please explain
Comprehensive company-wide risk assessment	Direct operations	All facilities	Akenerji has a holistic approach to sustainability, which integrates the environmental, economic and social dimensions of sustainability through the support of various departments. The ultimate responsibility is given to the highest level of decision making authority, and it is the Board of Directors. To maintain this; a Sustainability Committee was established within Akenerji in 2013. In addition to that, assessment of the risks and opportunities (if any) including Climate Change and Water Management related risks & opportunities are also evaluated and managed by the Risk Management Committee. The Committee members are General Manager, Deputy General Manager, Asisstant General Managers, Directors, and Strategic Planning and Risk Manager. The Committee convenes on a monthly basis, and it is ensured that the necessary actions are taken by discussing the risks that the company incurs currently or may incur in the future due to changing market conditions. Climate change risks such as drought, flood and landslide are assessed in each power plant and headquarters in a holistic approach.

W2.3

Please state how frequently you undertake water risk assessments, at what geographical scale and how far into the future you consider risks for each assessment

Frequency	Geographic scale	How far into the future are risks considered?	Comment
Six-monthly or more frequently	Facility	>6 years	Water related risks & opportunities (if any) are assessed/managed mainly by Sustainability Committee and Risk Mng. Com.(RMC) RMC convenes on a monthly basis and mitigating actions for existing or foreseen risks are tracked. Climate change risks such as drought, flood and landslide are assessed for each power plant and HQ in a holistic approach. During the evaluation of a new HEPP investment, projections are performed for more than 20 yrs according to the historical flow rates of the river basin.

W2.4

Have you evaluated how water risks could affect the success (viability, constraints) of your organization's growth strategy?

Yes, evaluated over the next 10 years

W2.4a

Please explain how your organization evaluated the effects of water risks on the success (viability, constraints) of your organization's growth strategy?

Water is one of the most important assets of humanity and life. Electricity is a crucial need for economic development and living in modern life standards and we generate electricity. While doing so, we prefer cleaner technologies. In addition to that we have to provide a base load and continuous electricity generation. For that reason, we diversified our type of power plants.

While generating electricity, we utilize the different features of water. Erzin is a NGCCPP and it has a very high installed capacity when compared to HEPPs, and even to some natural gas plants. This plant is important for us and for our country to generate high amount of electricity continuously. Considerable amount of water is needed particularly for cooling purposes at natural gas power plants. For Erzin NGCCPP, we preferred to use the seawater in order to minimize our effect on environment. We invested in a desalination facility to make the seawater appropriate for our use. For those reasons; availability of water in appropriate conditions is very crucial for our operations and growth strategy.

On the other hand, we operate 7 Hydroelectric Power Plants and we use the potential energy of water to generate electricity. It means that if there is not sufficient amount of water, we could not operate at HEPPs. Therefore, availability of water directly affects our electricity generation. Our production and growth strategy is fully depended on water. Precipitation regimes are also important for us.

Besides, our dams are very important tools for water management and to make use of water for third parties. Water in our dams could be used for irrigation, fishery, therefore it is also important for the economic development of both local community and the country.

W2.4b

What is the main reason for not having evaluated how water risks could affect the success (viability, constraints) of your organization's growth strategy, and are there any plans in place to do so in the future?

Main reason	Current plans	Timeframe until evaluation	Comment

W2.5

Please state the methods used to assess water risks

Method	Please explain how these methods are used in your risk assessment
Internal company knowledge Regional government databases	Akenerji has a holistic approach to sustainability, which integrates the environmental, economic and social dimensions of sustainability through the support of various departments. The ultimate responsibility is given to the highest level of decision making authority, and it is the Board of Directors. To maintain this; a Sustainability Committee was established within Akenerji in 2013. All climate change-related efforts and achievements at Akenerji are reported to the CEO. To manage these efforts, Akenerji has a Quality Project Team under the lead of the Health, Safety, Environment and Quality (HSEQ) department. The Quality Project Team consists of 11 employees including environmental engineers, health & safety specialists, and engineers and operators from the power plants. The risks and opportunities (if any) including Climate Change and Water Management related risks & opportunities are also evaluated and managed by the Risk Management Committee. The Committee members are General Manager, Deputy General Manager, Asisstant General Managers, Directors, and Strategic Planning and Risk Manager. The Committee convenes on a monthly basis, and it is ensured that the necessary actions are taken by discussing the risks that the company incurs currently or may incur in the future due to changing market conditions. At company level; in order to manage the risks and opportunities caused by climate change, both global and national risks are defined, and responsibilities to

Method	Please explain how these methods are used in your risk assessment
	manage them are shared among different levels of decision making and implementation bodies within Akenerji. Reputational risks and opportunities are of our company level risks managed. All of our risks, both at company level and asset level, are assessed and followed up under 5 main headings: Reputational, Compliance, Strategic, Operational, Financial. Risks associated with climate change are evaluated by related departments in its own risk registers. Climate change risks such as drought, flood and landslide are assessed in each power plant and headquarters in a holistic approach. In order to achieve a successful risk assessment Akenerji uses diversified methods and systems. Akenerji is operating for more than 27 years and Akenerji uses its accumulated experiences, in other words its internal company knowledge to the largest extent. Besides, Akenerji receives professional consultancy services on sustainability, carbon and water reporting. In addition to them, Akenerji benefits from private and governmental information services such as weather forecast, river basin management plans.

W2.6

Which of the following contextual issues are always factored into your organization's water risk assessments?

Issues	Choose option	Please explain
Current water availability and quality parameters at a local level	Relevant, included	Akenerji has both a NGPP and HEPPs in its portfolio. For Erzin NGCCPP, seawater is the source for withdrawal and discharge. Inline with Erzin NGCCPP's environmental permit; the relevant KPIs should be measured, monitored and expected to be met in certain limits (Eg; monitoring the standard effluent parameters, temperature rise in water discharge). Similarly, HEPPs have certain KPIs to be met about water management (Eg. environmental flow: the minimum amount of water to be released from dams). Therefore, we have special performance standards for each facility.
Current water regulatory frameworks and tariffs at a local level	Relevant, included	1. For HEPPs; environmental flow is measured by output water monitoring stations hourly and daily, and they are submitted to the General Directorate of State Hydraulic Works every six months. 2. For HEPPS, according to Protection of Wetlands Regulation Principles Applications, facilities which are located in Stream Protection Band have to own operation permits for two years. Therefore, the permit should be renewed by fully complying to law from the relevant Ministry. 3. Akenerji implements “The Regulation on Procedures and Principles Regarding the Signing of Water Usage Rights Agreement to make production in the Electricity Market”. 4. Downstream Water Rights Reports are prepared for all HEPPs 5. Erzin NGCCPP has permission to use seawater. Every year Seawater usage fee is paid to Erzin prefecture. 6. Also wastewater analysis is carried out in accordance with environmental permit regularly.
Current stakeholder conflicts	Relevant,	It is included into our risk assessment. One of our management method of this risk is HEPP

Issues	Choose option	Please explain
concerning water resources at a local level	included	informative meetings. Akenerji aims to raise awareness and provide information to local communities about its operations. For the sake of informing the local communities living where the HEPPs are, HEPP informative presentations also including how clean energy is generated via Hydropower Plants were realized. At the last 4 years 3.914 students & 229 teachers were trained at our HEPP Informative Meetings. Number of participants trained and number of informative meetings organized are of the measures of success.
Current implications of water on your key commodities/raw materials	Relevant, included	While generating electricity, we utilize the different features of water. For Erzin NGCCPP is important for us and for our country to generate high amount of electricity continuously. Considerable amount of water is needed particularly for cooling purposes at natural gas power plants. For HEPPs, water is the raw material to generate electricity for us. For those reasons; current implications of water on our key commodities/raw materials are included to our risk assessment.
Current status of ecosystems and habitats at a local level	Relevant, included	Current status of ecosystems and habitats at a local level is factored at our risk assessment. Especially for water discharges we measure and monitor many parameters.
Current river basin management plans	Relevant, included	Current river basin management plans are factored at our risk assessment. During the evaluation of a new investment on HEPPs; projections are performed according to the historical flow rates of the river basin.
Current access to fully-functioning WASH services for all employees	Relevant, included	Current access to fully-functioning WASH services for all employees are factored at our risk assessment.
Estimates of future changes in water availability at a local level	Relevant, included	Current river basin management plans are factored at our risk assessment. During the evaluation of a new investment on HEPPs; projections are performed according to the historical flow rates of the river basin and the weather forecasts.
Estimates of future potential regulatory changes at a local level	Relevant, not yet included	We are aware that Water Management regulation is subject to change in Turkey and we are planning to include the estimates of future potential regulatory changes at a local level.
Estimates of future potential stakeholder conflicts at a local level	Relevant, not yet included	We are eager to include the estimates of future potential stakeholder conflicts at a local level to our organizational risk assessment.
Estimates of future implications of water on your key commodities/raw materials	Relevant, included	Current river basin management plans are factored at our risk assessment. During the evaluation of a new investment on HEPPs; projections are performed according to the historical flow rates of the river basin and the weather forecasts.
Estimates of future potential changes in the status of ecosystems and habitats at a local level	Relevant, not yet included	We are willing to include the estimates of future potential changes in the status of ecosystems and habitats at a local level to our organizational risk assessment.
Scenario analysis of availability of sufficient quantity and quality of water relevant for your operations at a local level	Relevant, not yet included	We are willing to include the scenario analysis of availability of sufficient quantity and quality of water relevant for our operations at a local level to our organizational risk assessment.
Scenario analysis of regulatory and/or	Relevant, not	We are willing to include the scenario analysis of regulatory and/or tariff changes at a local level to

Issues	Choose option	Please explain
tariff changes at a local level	yet included	our organizational risk assessment.
Scenario analysis of stakeholder conflicts concerning water resources at a local level	Relevant, not yet included	We are willing to include the scenario analysis of stakeholder conflicts concerning water resources at a local level to our organizational risk assessment.
Scenario analysis of implications of water on your key commodities/raw materials	Relevant, not yet included	We are willing to include the scenario analysis of implications of water on your key commodities/raw materials to our organizational risk assessment.
Scenario analysis of potential changes in the status of ecosystems and habitats at a local level	Relevant, not yet included	We are willing to include the scenario analysis of potential changes in the status of ecosystems and habitats at a local level to our organizational risk assessment.
Other	Not relevant, explanation provided	There is no other factor.

W2.7

Which of the following stakeholders are always factored into your organization's water risk assessments?

Stakeholder	Choose option	Please explain
Customers	Relevant, included	Customers are always included into our risk assessments.
Employees	Relevant, included	Employees are one the most important assets of Akenerji and it is included into our risk assessments.
Investors	Relevant, included	Akenerji is a public company and also a private partnership company with Akkök Group and ČEZ a.s. from Czech Republic. Therefore, investors are factored at risk assessments.
Local communities	Relevant, included	Local communities are factored at risk management. We are organizing HEPP Informative Meetings to manage it.
NGOs	Relevant, not yet included	We are willing to factor the NGOs more in depth at our risk assessments in the future.
Other water users at a local level	Not relevant,	It is not relevant for us. As a water supplier, we consider them in other stakeholder categories.

Stakeholder	Choose option	Please explain
	explanation provided	
Regulators	Relevant, included	Full compliance to laws and procedures is always to priority of Akenerji, for that reason, regulators are always factored into our risk assessments.
River basin management authorities	Relevant, included	Full compliance to laws and procedures is always to priority of Akenerji, for that reason, river basin management authorities are always factored into our risk assessments.
Statutory special interest groups at a local level	Not relevant, explanation provided	There are no statutory special interest groups at a local level
Suppliers	Relevant, not yet included	We are willing to factor the suppliers more in depth at our risk assessments in the future.
Water utilities at a local level	Relevant, included	We supply water to water utilities, therefore we closely interact. As a conclusion; we consider and factor them in our risk assessment.
Other	Not relevant, explanation provided	There is no other factor.

W2.8

Please choose the option that best explains why your organisation does not undertake a water-related risk assessment

Primary reason	Please explain

Further Information

Module: Implications

Page: W3. Water Risks

W3.1

Is your organization exposed to water risks, either current and/or future, that could generate a substantive change in your business, operations, revenue or expenditure?

Yes, direct operations and supply chain

W3.2

Please provide details as to how your organization defines substantive change in your business, operations, revenue or expenditure from water risk

Akenerji is an electricity generation and trading company and we are operating a NGCCPP, 7 HEPPs and a WPP. Particularly for natural gas and hydroelectric power plants, which generates 99% of our production, water risks could have significant effects on our business, operations, revenue, market value, and expenditures.

While generating electricity, we utilize the different features of water.Erzin NGCCPP is important for generating high amount of electricity continuously.For NGPPs; considerable amount of water is needed for cooling purposes.For Erzin NGCCPP, we preferred to use the seawater in order to minimize our effect on environment and also to minimize the water availability risk.We invested in a desalination facility to make the seawater appropriate for our use.For those reasons; availability of water in appropriate conditions is very crucial for our operations and growth strategy.Lack of sufficient water means disruption or closure of production and it has a huge opportunity cost. Hence, 74,6% of our installed capacity with 904 MW is from Erzin NGCCPP, which has a total generation capacity of approximately 7,4 TWh, (approximately 3% of total Turkey's overall electricity demand),the opportunity cost of not generating electricity due to water risk is huge.

On the other hand, we operate 7 HEPPs and we use the potential energy of water to generate electricity.If there isn't sufficient amount of water, we couldn't operate at HEPPs.Therefore, availability of water directly affects our electricity generation.Our production and growth strategy is fully depended on availability of water. Lack of sufficient water means disruption or closure of production and it has a huge opportunity cost.Hence, 24,1% of our installed capacity with 292 MW is from HEPPs and considering the total generation capacity of HEPPs is approximately 0,85 TWh, the revenue loss due to water risk is high.

We are aware that Akenerji is also open to physical water risks.Until now, Akenerji has invested US$ 700 million in renewable energy.The investment done to be prevented from detrimental effects of the floods are in that figure, however it is not possible to separate the relevant amount spend on that purpose.Besides, approximately US$ 900 million has been invested in Erzin NGCCPP.If we add company level risks like reputational risks, the cumulative effect of the risk could be huge.

W3.2a

Please provide the number of facilities* per river basin exposed to water risks that could generate a substantive change in your business, operations, revenue or expenditure; and the proportion of company-widefacilities this represents

Country	River basin	Number of facilities exposed to water risk	Proportion of company-wide facilities that this represents (%)	Comment
Turkey	Other: Seyhan River Basin	4	11-20	Feke I, Feke II, Himmetli, Gökkaya HEPPs are built on Göksu River and they are in Seyhan River Basin. Please hence that proportions of total operations are calculated according to the installed capacities of our power plants.
Turkey	Tigris & Euphrates	2	1-5	Burç HEPP is built on Burç Stream and Bulam HEPP is built on Bulam Stream. They are in Tigris & Euphrates River Basin. Please hence that proportions of total operations are calculated according to the installed capacities of our power plants.
Turkey	Other: Susurluk River Basin	2	6-10	Uluabat Lake - Çınarcık Dam is in Susurluk River Basin. Ayyıldız Wind Power Plant is in Susurluk River Basin (As it is a Wind Power Plant its water footprint is negligible.) Please hence that proportions of total operations are calculated according to the installed capacities of our power plants.
Turkey	Other: Mediterranean River Basin	1	71-80	Erzin Natural Gas Combined Cycle Power Plant is in Mediterranean River Basin. Please hence that proportions of total operations are calculated according to the installed capacities of our power plants.
Turkey	Other: Marmara River Basin	1	Less than 1%	Istanbul AKHAN Head Office is in Marmara River Basin. Please hence that proportions of total operations are calculated according to the installed capacities of our power plants.

W3.2b

For each river basin mentioned in W3.2a, please provide the proportion of the company's total financial value that could be affected by water risks

Country	River basin	Financial reporting metric	Proportion of chosen metric that could be affected	Comment
Turkey	Other: Seyhan River Basin	% global production capacity	11-20	Our main business is to generate and trade electricity. The revenue generated from the electricity generation is correlated with the installed capacity of the power plant. Therefore, it is assumed that the proportion of financial value that could be affected at river basin level is correlated with the installed capacity.
Turkey	Tigris & Euphrates	% global production capacity	1-5	Our main business is to generate and trade electricity. The revenue generated from the electricity generation is correlated with the installed capacity of the power plant. Therefore, it is assumed that the proportion of financial value that could be affected at river basin level is correlated with the installed capacity.
Turkey	Other: Susurluk River Basin	% global production capacity	6-10	Our main business is to generate and trade electricity. The revenue generated from the electricity generation is correlated with the installed capacity of the power plant. Therefore, it is assumed that the proportion of financial value that could be affected at river basin level is correlated with the installed capacity.
Turkey	Other: Mediterranean River Basin	% global production capacity	71-80	Our main business is to generate and trade electricity. The revenue generated from the electricity generation is correlated with the installed capacity of the power plant. Therefore, it is assumed that the proportion of financial value that could be affected at river basin level is correlated with the installed capacity.
Turkey	Other: Marmara River Basin	% global production capacity	Less than 1%	Our main business is to generate and trade electricity. The revenue generated from the electricity generation is correlated with the installed capacity of the power plant. Therefore, it is assumed that the proportion of financial value that could be affected at river basin level is correlated with the installed capacity.

W3.2c

Please list the inherent water risks that could generate a substantive change in your business, operations, revenue or expenditure, the potential impact to your direct operations and the strategies to mitigate them

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
Turkey	Other: Seyhan River Basin	Physical-Drought Physical-Flooding Regulatory-Regulatory uncertainty Reputational-Community opposition	Reduction in revenue	We are operating 4 HEPPs in that river basin. The potential impact of the drought could lead to disruption in electricity generation and even to closure of operations. This will lead to reduction in the revenue generated. The potential impact of the flood could cause detrimental effects at our power plants. It will lead to disruption in electricity generation and even to closure of operations. Consequently, this will lead to reduction in the revenue generated. Water	1-3 years	Probable	Medium-high	Develop flood emergency plans Engagement with community Engagement with public policy makers Increased capital expenditure Strengthen links with local community	Until now, Akenerji has invested US$ 700,000,000 in renewable energy. The investment done to be prevented from detrimental effects of the floods are in that figure. If these risks are realized then it will be a medium to high scale negative financial impact (cost) on Akenerji. We spent 1.1 mio TL on community investment in 2016. Audio-visual warning system and fences for HEPPs	Akenerji includes water inherent risks in its risk assessment and strategy development processes. To minimize or cope with these risks takes some precautions and/or manages these risks. On this purpose, Akenerji develops flood emergency plans, assesses precipitation regimes; engages and strengthen links with community with several occasions like HEPP Informative

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
				management regulation in Turkey is subject to change and the uncertainity about the implementation of new law could create a risk and impact. There could be community opposition to HEPPs and this could lead to disruption in electricity generation and even to closure of operations. Consequently, this will lead to reduction in the revenue generated.					costed around 186,500 TL. Printing of the informative leaflets handed out to local community costed 944 TL.	Meetings; engages with public policy makers and local authorities; invests on preventive infrastructural and capacity building activities. Until now, Akenerji has invested US$ 700,000,000 in renewable energy. The investment done to be prevented from detrimental effects of the floods are in that figure, however it is not possible to separate the relevant amount spend on that purpose. As an example of

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
										an action; we established audio-visual warning systems to protect the safety of the local community located around the HEPPs. This action selected as a best practice by State Hydraulic Works (DSI) and DSI stated it this implementation as a necessity for HEPPs. Audio-visual warning system and fences costed around 186,500 TL. Printing of the informative leaflets handed out to

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
										local community costed 944 TL.
Turkey	Tigris & Euphrates	Physical-Drought Physical-Flooding Regulatory-Regulatory uncertainty Reputational-Community opposition	Reduction in revenue	We are operating 2 HEPPs in that river basin. The potential impact of the drought could lead to disruption in electricity generation and even to closure of operations. This will lead to reduction in the revenue generated. The potential impact of the flood could cause detrimental effects at our power plants. It will lead to disruption in electricity generation and even to closure of operations. Consequently,	1-3 years	Probable	Low-medium	Develop flood emergency plans Engagement with community Engagement with public policy makers Increased capital expenditure Strengthen links with local community	Until now, Akenerji has invested US$ 700,000,000 in renewable energy. The investment done to be prevented from detrimental effects of the floods are in that figure. If these risks are realized then it will be a medium to high scale negative financial impact (cost) on Akenerji. We spent 1.1 mio TL on community investment in 2016. Audio-	Akenerji includes water inherent risks in its risk assessment and strategy development processes. To minimize or cope with these risks takes some precautions and/or manages these risks. On this purpose, Akenerji develops flood emergency plans, assesses precipitation regimes; engages and strengthen links with

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
				this will lead to reduction in the revenue generated. Water management regulation in Turkey is subject to change and the uncertainty about the implementation of new law could create a risk and impact. There could be community opposition to HEPPs and this could lead to disruption in electricity generation and even to closure of operations. Consequently, this will lead to reduction in the revenue generated.					visual warning system and fences for HEPPs costed around 186,500 TL. Printing of the informative leaflets handed out to local community costed 944 TL.	community with several occasions like HEPP Informative Meetings; engages with public policy makers and local authorities; invests on preventive infrastructural and capacity building activities. Until now, Akenerji has invested US$ 700,000,000 in renewable energy. The investment done to be prevented from detrimental effects of the floods are in that figure, however it is not possible to separate

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
										the relevant amount spend on that purpose. As an example of an action; we established audio-visual warning systems to protect the safety of the local community located around the HEPPs. This action selected as a best practice by State Hydraulic Works (DSI) and DSI stated it this implementation as a necessity for HEPPs. Audio-visual warning system and fences costed around

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
										186,500 TL. Printing of the informative leaflets handed out to local community costed 944 TL.
Turkey	Other: Susurluk River Basin	Physical-Drought Physical-Flooding Regulatory-Regulatory uncertainty Reputational-Community opposition	Reduction in revenue	We are operating 1 HEPP in that river basin, Uluabat HEPP, with its 100MW installed capacity, is the Akenerji's biggest HEPP in terms of installed capacity. In addition to that, we are operating our Wind Power Plant Ayyıldız WPP in this river basin. The potential impact of the drought could lead to disruption in	1-3 years	Probable	Medium	Develop flood emergency plans Engagement with community Engagement with public policy makers Increased capital expenditure Strengthen links with local community	Until now, Akenerji has invested US$ 700,000,000 in renewable energy. The investment done to be prevented from detrimental effects of the floods are in that figure. If these risks are realized then it will be a medium to high scale negative financial impact (cost) on Akenerji.	Akenerji includes water inherent risks in its risk assessment and strategy development processes. To minimize or cope with these risks takes some precautions and/or manages these risks. On this purpose, Akenerji develops flood emergency plans, assesses

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
				electricity generation and even to closure of operations. This will lead to reduction in the revenue generated. The potential impact of the flood could cause detrimental effects at our power plants. It will lead to disruption in electricity generation and even to closure of operations. Consequently, this will lead to reduction in the revenue generated. Water management regulation in Turkey is subject to change and the uncertainty about the implementation					We spent 1.1 mio TL on community investment in 2016. Audio-visual warning system and fences for HEPPs costed around 186,500 TL. Printing of the informative leaflets handed out to local community costed 944 TL.	precipitation regimes; engages and strengthen links with community with several occasions like HEPP Informative Meetings; engages with public policy makers and local authorities; invests on preventive infrastructural and capacity building activities. Until now, Akenerji has invested US$ 700,000,000 in renewable energy. The investment done to be prevented from detrimental effects of the

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
				of new law could create a risk and impact. There could be community opposition to HEPPs and this could lead to disruption in electricity generation and even to closure of operations. Consequently, this will lead to reduction in the revenue generated.						floods are in that figure, however it is not possible to separate the relevant amount spend on that purpose. As an example of an action; we established audio-visual warning systems to protect the safety of the local community located around the HEPPs. This action selected as a best practice by State Hydraulic Works (DSI) and DSI stated it this implementation as a necessity for HEPPs.

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
										Audio-visual warning system and fences costed around 186,500 TL. Printing of the informative leaflets handed out to local community costed 944 TL.
Turkey	Other: Marmara River Basin	Physical-Drought Physical-Flooding Regulatory-Poor coordination between regulatory bodies Regulatory-Poor enforcement of water regulation Regulatory-Regulatory uncertainty Reputational-Community opposition Reputational-Negative media coverage	Disruption to sales	Akenerji's Head Office is in that river basin. The potential impact of the drought could be on employees health and well being. The potential impact of the flood could cause detrimental effects at our Head Office, AKHAN. It will lead to disruption in management of	1-3 years	Unlikely	Low	Develop flood emergency plans Engagement with community Engagement with public policy makers Increased capital expenditure Strengthen links with local community	Please find some examples of costs to manage these risks below: Akenerji is member of many associations and NGOs to engage indirectly with policy makers. The overall roughly cost as	Akenerji develops emergency and backup plans to cope with floods in its HQ. On the other hand, HQ has water tanks to minimize the effects of disruption on access to water from municipal supply. To cope with regulatory

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
				operations and sales. Energy trade operations are particularly management at Head Office. This will lead to disruption in sales. Consequently, reputational risks like negative media coverage to reduction in the revenue generated.					membership fees for these organizations is US$ 20,000. Akenerji invest 1.1 Million TL in community investment in 2016.	risks such as poor coordination or poor enforcement of water regulation Akenerji actively engages with policy makers on its own or via business associations. To manage reputational risks; Akenerji engages with community, briefs the media. Above all develops and conducts sustainability strategies and policies.
Turkey	Other: Mediterranean River Basin	Physical-Flooding Regulatory-Increased difficulty in obtaining withdrawals/operations permit	Reduction in revenue	We are operating a NGCCPP in that river basin. The potential impact of the flood could	1-3 years	Unlikely	High	Develop flood emergency plans Engagement with community	Approximately US$ 900,000,000 has been invested to establish our state of art	Approximately US$ 900,000,000 has been invested to establish our state of art

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
				cause detrimental effects at our power plant. It will lead to disruption in electricity generation and even to closure of operations. Consequently, this will lead to reduction in the revenue generated. Water management regulation in Turkey is subject to change and the uncertainty about the implementation of law could create a risk and impact.				Engagement with public policy makers Strengthen links with local community	Natural Gas Combined Cycle Power Plant with a desalination system that makes the use of seawater possible for the plant. The investment done to be prevented from detrimental effects of the floods are in that figure, however it is not possible to separate the relevant amount spend on that purpose. If these risks are realized then it will be a high scale negative financial impact (cost)	Natural Gas Combined Cycle Power Plant with a desalination system that makes the use of seawater possible for the plant. The investment done to be prevented from detrimental effects of the floods are in that figure, however it is not possible to separate the relevant amount spend on that purpose. Akenerji includes water inherent risks in its risk assessment and strategy development processes. To

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
									on Akenerji.	minimize or cope with these risks takes some precautions and/or manages these risks. Akenerji develops flood emergency plans, assesses precipitation regimes; engages and strengthen links with community with several occasions like sponsoring Erzinspor; engages with public policy makers and local authorities; invests on preventive infrastructural and capacity building

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
										activities. In 2016, Akenerji spend 1.1 Million TL on community investment.

W3.2d

Please list the inherent water risks that could generate a substantive change in your business operations, revenue or expenditure, the potential impact to your supply chain and the strategies to mitigate them

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
Turkey	Other: Seyhan River Basin	Physical-Drought Physical-Flooding Regulatory-Higher water prices Reputational-	Other: Disruption or Decrease in their operation or production	If there is drought, then our suppliers may face may face inadequate access to water sanitation and hygiene.	1-3 years	Unlikely	Low	Develop flood emergency plans Engagement with suppliers Supplier diversification	Supplier audits are performed by both from HQ employees and employees	Akenerji develops and conducts sustainability strategies and policies. In line with its sustainability

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
		Inadequate access to water, sanitation and hygiene Reputational-Negative media coverage		Consequently, their employee well-being and health may be affected adversely and this may lead to disruption in their services or production. Also, drought may cause water scarcity and/ higher water prices may be introduced by governmental bodies. This may lead to decrease or disruption in production or services. Our suppliers may face reputational risks and negative media coverage. If there is flooding, then our suppliers, employees, products or				Other: Supplier audits on OHSE	from our power plants. The cost of audits resulting from travel and food & beverage costs are roughly 3,000 TL.	strategy, Akenerji manages the topic in its value chain as well. In 2015, Akenerji also started supplier audits and in 2016 rapidly increased the number of suppliers audited on Occupational Health & Safety and Environment. We also put effort to train and inform our suppliers. Supplier audits are performed by both from HQ employees and employees from our power plants. The cost of audits resulting from travel and food

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
				service/ production facilities may be damaged. This may lead to disruption in their services or production. Also, their employees may face water sanitation and hygiene problems. Consequently, their employee well-being and health may be affected adversely. Our suppliers may face reputational risks and negative media coverage.						& beverage costs are roughly 3,000 TL.
Turkey	Tigris & Euphrates	Physical-Drought Physical-Flooding Regulatory-Higher water prices Reputational-	Other: Disruption or Decrease in their operation or production	If there is drought, then our suppliers may face may face inadequate access to water sanitation and hygiene.	1-3 years	Unlikely	Low	Develop flood emergency plans Engagement with suppliers Supplier diversification	Supplier audits are performed by both from HQ employees and employees	Akenerji develops and conducts sustainability strategies and policies. In line with its sustainability

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
		Inadequate access to water, sanitation and hygiene Reputational-Negative media coverage		Consequently, their employee well-being and health may be affected adversely and this may lead to disruption in their services or production. Also, drought may cause water scarcity and/ higher water prices may be introduced by governmental bodies. This may lead to decrease or disruption in production or services. Our suppliers may face reputational risks and negative media coverage. If there is flooding, then our suppliers, employees, products or				Other: Supplier audits on OHSE	from our power plants. The cost of audits resulting from travel and food & beverage costs are roughly 3,000 TL.	strategy, Akenerji manages the topic in its value chain as well. In 2015, Akenerji also started supplier audits and in 2016 rapidly increased the number of suppliers audited on Occupational Health & Safety and Environment. We also put effort to train and inform our suppliers. Supplier audits are performed by both from HQ employees and employees from our power plants. The cost of audits resulting from travel and food

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
				service/ production facilities may be damaged. This may lead to disruption in their services or production. Also, their employees may face water sanitation and hygiene problems. Consequently, their employee well-being and health may be affected adversely. Our suppliers may face reputational risks and negative media coverage.						& beverage costs are roughly 3,000 TL.
Turkey	Other: Susurluk River Basin	Physical-Drought Physical-Flooding Regulatory-Higher water prices Reputational-	Other: Disruption or Decrease in their operation or production	If there is drought, then our suppliers may face may face inadequate access to water sanitation and hygiene.	1-3 years	Unlikely	Low	Develop flood emergency plans Engagement with suppliers Supplier diversification	Supplier audits are performed by both from HQ employees and employees	Akenerji develops and conducts sustainability strategies and policies. In line with its sustainability

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
		Inadequate access to water, sanitation and hygiene Reputational-Negative media coverage		Consequently, their employee well-being and health may be affected adversely and this may lead to disruption in their services or production. Also, drought may cause water scarcity and/ higher water prices may be introduced by governmental bodies. This may lead to decrease or disruption in production or services. Our suppliers may face reputational risks and negative media coverage. If there is flooding, then our suppliers, employees, products or				Other: Supplier audits on OHSE	from our power plants. The cost of audits resulting from travel and food & beverage costs are roughly 3,000 TL.	strategy, Akenerji manages the topic in its value chain as well. In 2015, Akenerji also started supplier audits and in 2016 rapidly increased the number of suppliers audited on Occupational Health & Safety and Environment. We also put effort to train and inform our suppliers. Supplier audits are performed by both from HQ employees and employees from our power plants. The cost of audits resulting from travel and food

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
				service/ production facilities may be damaged. This may lead to disruption in their services or production. Also, their employees may face water sanitation and hygiene problems. Consequently, their employee well-being and health may be affected adversely. Our suppliers may face reputational risks and negative media coverage.						& beverage costs are roughly 3,000 TL.
Turkey	Other: Marmara River Basin	Physical-Drought Physical-Flooding Regulatory-Higher water prices Reputational-	Other: Disruption or Decrease in their operation or production	If there is drought, then our suppliers may face may face inadequate access to water sanitation and hygiene.	1-3 years	Unlikely	Low	Develop flood emergency plans Engagement with suppliers Supplier diversification	Supplier audits are performed by both from HQ employees and employees	Akenerji develops and conducts sustainability strategies and policies. In line with its sustainability

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
		Inadequate access to water, sanitation and hygiene Reputational-Negative media coverage		Consequently, their employee well-being and health may be affected adversely and this may lead to disruption in their services or production. Also, drought may cause water scarcity and/ higher water prices may be introduced by governmental bodies. This may lead to decrease or disruption in production or services. Our suppliers may face reputational risks and negative media coverage. If there is flooding, then our suppliers, employees, products or				Other: Supplier audits on OHSE	from our power plants. The cost of audits resulting from travel and food & beverage costs are roughly 3,000 TL.	strategy, Akenerji manages the topic in its value chain as well. In 2015, Akenerji also started supplier audits and in 2016 rapidly increased the number of suppliers audited on Occupational Health & Safety and Environment. We also put effort to train and inform our suppliers. Supplier audits are performed by both from HQ employees and employees from our power plants. The cost of audits resulting from travel and food

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
				service/ production facilities may be damaged. This may lead to disruption in their services or production. Also, their employees may face water sanitation and hygiene problems. Consequently, their employee well-being and health may be affected adversely. Our suppliers may face reputational risks and negative media coverage.						& beverage costs are roughly 3,000 TL.
Turkey	Other: Mediterranean River Basin	Physical-Drought Physical-Flooding Regulatory-Higher water prices Reputational-	Other: Disruption or Decrease in their operation or production	If there is drought, then our suppliers may face may face inadequate access to water sanitation and hygiene.	1-3 years	Unlikely	Low	Develop flood emergency plans Engagement with suppliers Supplier diversification	Supplier audits are performed by both from HQ employees and employees	Akenerji develops and conducts sustainability strategies and policies. In line with its sustainability

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
		Inadequate access to water, sanitation and hygiene Reputational-Negative media coverage		Consequently, their employee well-being and health may be affected adversely and this may lead to disruption in their services or production. Also, drought may cause water scarcity and/ higher water prices may be introduced by governmental bodies. This may lead to decrease or disruption in production or services. Our suppliers may face reputational risks and negative media coverage. If there is flooding, then our suppliers, employees, products or				Other: Supplier audits on OHSE	from our power plants. The cost of audits resulting from travel and food & beverage costs are roughly 3,000 TL.	strategy, Akenerji manages the topic in its value chain as well. In 2015, Akenerji also started supplier audits and in 2016 rapidly increased the number of suppliers audited on Occupational Health & Safety and Environment. We also put effort to train and inform our suppliers. Supplier audits are performed by both from HQ employees and employees from our power plants. The cost of audits resulting from travel and food

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
				service/ production facilities may be damaged. This may lead to disruption in their services or production. Also, their employees may face water sanitation and hygiene problems. Consequently, their employee well-being and health may be affected adversely. Our suppliers may face reputational risks and negative media coverage.						& beverage costs are roughly 3,000 TL.

W3.2e

Please choose the option that best explains why you do not consider your organization to be exposed to water risks in your direct operations that could generate a substantive change in your business, operations, revenue or expenditure

Primary reason	Please explain

W3.2f

Please choose the option that best explains why you do not consider your organization to be exposed to water risks in your supply chain that could generate a substantive change in your business, operations, revenue or expenditure

Primary reason	Please explain

W3.2g

Please choose the option that best explains why you do not know if your organization is exposed to water risks that could generate a substantive change in your business operations, revenue or expenditure and discuss any future plans you have to assess this

Primary reason	Future plans

Further Information

Page: W4. Water Opportunities

W4.1

Does water present strategic, operational or market opportunities that substantively benefit/have the potential to benefit your organization?

Yes

W4.1a

Please describe the opportunities water presents to your organization and your strategies to realize them

Country or region	Opportunity	Strategy to realize opportunity	Estimated timeframe	Comment
Turkey	Carbon management Climate change adaptation Competitive advantage Cost savings Increased brand value Increased shareholder value Social licence to operate Staff retention	Akenerji put great importance on Climate Change Adaptation and Mitigation Activities. We are proud to be the first energy company in Turkey to issue a Sustainability Report (for 2014 reporting period) based on GRI G4. Since 2010, Akenerji has received certification for ISO 14001: 2004 Environment Management Systems and updated it to ISO 14001:2015. Moreover, as of 2015, Akenerji has been the one and only energy company to participate in the CDP Turkey Water Program. In 2016 Akenerji kept being the one and only firm reporting to CDP Turkey Climate Change and Water. In addition to natural gas-based generation, Akenerji also makes large-scale investments in renewable energy sources. Akenerji started to diversify the sources of its generation portfolio significantly starting in 2005. In 2009, Akenerji launched its first wind energy generation plant, Ayyıldız WPP. Akenerji keeps on investing in wind power, Ayyıldız WPP's capacity will be increased by 88% in 2017. In comparison to the other thermal electricity generation types such as lignite, coal, gas oil & fuel oil; Hydroelectric Power Plants have a cleaner technology and low cost advantage.	1-3 years	Akenerji utilizes the opportunities presented by water especially both in its Hydropower and NGCCP Plants. By its HEPPs, Akenerji generates energy. In its Erzin NGCCPP, Akenerji uses seawater for cooling. Akenerji put great importance on Climate Change Adaptation and Mitigation Activities. In parallel to that, Akenerji has invested US$ 700,000,000 in renewable energy until the end of 2016.

W4.1b

Please choose the option that best explains why water does not present your organization with any opportunities that have the potential to provide substantive benefit

Primary reason	Please explain

W4.1c

Please choose the option that best explains why you do not know if water presents your organization with any opportunities that have the potential to provide substantive benefit

Primary reason	Please explain

Further Information

Module: Accounting

Page: W5. Facility Level Water Accounting (I)

W5.1

Water withdrawals: for the reporting year, please complete the table below with water accounting data for all facilities included in your answer to W3.2a

Facility reference number	Country	River basin	Facility name	Total water withdrawals (megaliters/year) at this facility	How does the total water withdrawals at this facility compare to the last reporting year?	Please explain
Facility 1	Turkey	Other: Seyhan River Basin	Feke I HEPP	0.58	Much higher	Water withdrawals increased by 26%. Even tough we are trying to increase our water efficiency, raise the awareness and manage sustainability goals. Water withdrawals increased particularly due to irrigation.
Facility 2	Turkey	Other: Seyhan River Basin	Feke II HEPP	0.68	Lower	Water withdrawals for 2016 decreased by 11% in comparison to last year. We are trying to minimize the withdrawal and use of water without risking operational safety and production. We are trying to increase our water efficiency, raise the awareness and manage sustainability goals.
Facility 3	Turkey	Other: Seyhan River Basin	Himmetli HEPP	1.44	Lower	Water withdrawals for 2016 decreased by 10% in comparison to last year. We are trying to minimize the withdrawal and use of water without risking operational safety and production. We are trying to increase our water efficiency, raise the awareness and manage sustainability goals.
Facility 4	Turkey	Other: Seyhan River Basin	Gokkaya HEPP	0.62	Much lower	Water withdrawals for 2016 decreased by 20% in comparison to last year. We are trying to minimize the withdrawal and use of water without risking operational safety and production. We are trying to increase our water efficiency, raise the awareness and manage sustainability goals.
Facility 5	Turkey	Tigris & Euphrates	Burc HEPP	0.22	Lower	Water withdrawals for 2016 decreased by 10% in comparison to last year. We are trying to minimize the withdrawal and use of water without risking operational safety and production. We are trying to increase our water efficiency, raise the awareness and manage sustainability goals.
Facility 6	Turkey	Tigris & Euphrates	Bulam HEPP	0.09	Much lower	Water withdrawals for 2016 decreased by 36% in comparison to last year. We are trying to minimize the withdrawal and use of water without risking operational safety and production. We are trying to

Facility reference number	Country	River basin	Facility name	Total water withdrawals (megaliters/year) at this facility	How does the total water withdrawals at this facility compare to the last reporting year?	Please explain
						increase our water efficiency, raise the awareness and manage sustainability goals.
Facility 7	Turkey	Other: Susurluk River Basin	Uluabat HEPP	2.62	Lower	Water withdrawals for 2016 decreased by 3% in comparison to last year. We are trying to minimize the withdrawal and use of water without risking operational safety and production. We are trying to increase our water efficiency, raise the awareness and manage sustainability goals.
Facility 8	Turkey	Other: Mediterranean River Basin	Erzin NGCCP	8555.53	Much lower	Water withdrawals for 2016 decreased by 27.7% in comparison to last year. We are trying to minimize the withdrawal and use of water without risking operational safety and production. We are trying to increase our water efficiency, raise the awareness and manage sustainability goals.
Facility 9	Turkey	Other: Susurluk River Basin	Ayyıldız WPP	0.12	This is our first year of measurement	2016 was the initial year of reporting for Ayyıldız WPP.
Facility 10	Turkey	Other: Marmara River Basin	Head Office (AKHAN)	1.68	Much lower	Water withdrawals for 2016 decreased by 24.7% in comparison to last year. We are trying to minimize the withdrawal and use of water without risking operational safety and production. We are trying to increase our water efficiency, raise the awareness and manage sustainability goals.

Further Information

Page: W5. Facility Level Water Accounting (II)

W5.1a

Water withdrawals: for the reporting year, please provide withdrawal data, in megaliters per year, for the water sources used for all facilities reported in W5.1

Facility reference number	Fresh surface water	Brackish surface water/seawater	Rainwater	Groundwater (renewable)	Groundwater (non-renewable)	Produced/process water	Municipal water	Wastewater from another organization	Comment
Facility 1	0.58	0	0	0	0	0	0	0	Feke I HEPP uses only fresh surface water.
Facility 2	0.68	0	0	0	0	0	0	0	Feke II HEPP uses only fresh surface water.
Facility 3	1.44	0	0	0	0	0	0	0	Himmetli HEPP uses only fresh surface water.
Facility 4	0.62	0	0	0	0	0	0	0	Gökkaya HEPP uses only fresh surface water.
Facility 5	0	0	0	0.22	0	0	0	0	Burç HEPP uses only renewable groundwater.
Facility 6	0.09	0	0	0	0	0	0	0	Bulam HEPP uses only fresh surface water.
Facility 7	0	0	0	2.62	0	0	0	0	Uluabat HEPP uses only renewable groundwater.
Facility 8	0	8555.53	0	0	0	0	0	0	Erzin NGCCPP uses seawater. Desalination system has established to minimize its environmental footprint.
Facility 9	0	0	0	0.12	0	0	0	0	Ayyıldız WPP uses

Facility reference number	Fresh surface water	Brackish surface water/seawater	Rainwater	Groundwater (renewable)	Groundwater (non-renewable)	Produced/process water	Municipal water	Wastewater from another organization	Comment
									only renewable groundwater.
Facility 10	0	0	0	0	0	0	1.68	0	Akhan Head Office uses municipal water supply.

W5.2

Water discharge: for the reporting year, please complete the table below with water accounting data for all facilities included in your answer to W3.2a

Facility reference number	Total water discharged (megaliters/year) at this facility	How does the total water discharged at this facility compare to the last reporting year?	Please explain
Facility 1	0.58	Much higher	Total water discharged in Feke I HEPP is increased by 110%.
Facility 2	0.29	Higher	Total water discharged in Feke II HEPP is increased by 25%.
Facility 3	0.56	Much higher	Total water discharged in Himmetli HEPP is increased by 37%.
Facility 4	0.13	Much higher	Total water discharged in Gökkaya HEPP is increased by 91%.
Facility 5	0.01	Much lower	Total water discharged in Burç HEPP is decreased by 91%.
Facility 6	0.01	Much lower	Total water discharged in Bulam HEPP is decreased by 89%.
Facility 7	0.25	Higher	Total water discharged in Uluabat HEPP is increased by 20%.

Facility reference number	Total water discharged (megaliters/year) at this facility	How does the total water discharged at this facility compare to the last reporting year?	Please explain
Facility 8	7276.19	Much lower	Total water discharged in Erzin NGCCPP is decreased by 37%.
Facility 9	0.06	This is our first year of measurement	This is our first year of reporting.
Facility 10	1.68	Lower	Total water discharged in AKHAN decreased by 25%.

W5.2a

Water discharge: for the reporting year, please provide water discharge data, in megaliters per year, by destination for all facilities reported in W5.2

Facility reference number	Fresh surface water	Municipal/industrial wastewater treatment plant	Seawater	Groundwater	Wastewater for another organization	Comment
Facility 1	0	0.58	0	0	0	Wastewater in Feke I HEPP is sent to Municipal Wastewater Treatment Plant with septic tanks.
Facility 2	0	0.29	0	0	0	Wastewater in Feke II HEPP is sent to Municipal Wastewater Treatment Plant with septic tanks.
Facility 3	0	0.56	0	0	0	Wastewater in Himmetli HEPP is sent to Municipal Wastewater Treatment Plant with septic tanks.
Facility 4	0	0.13	0	0	0	Wastewater in Gökkaya HEPP is sent to Municipal Wastewater Treatment Plant with septic tanks.
Facility 5	0	0.01	0	0	0	Wastewater in Burç HEPP is sent to Municipal Wastewater Treatment Plant with septic tanks.
Facility 6	0	0.01	0	0	0	Wastewater in Bulam HEPP is sent to Municipal Wastewater Treatment Plant with septic tanks.
Facility 7	0	0.25	0	0	0	Wastewater in Uluabat HEPP is sent to Municipal Wastewater Treatment Plant with septic tanks.
Facility 8	0	0	7276.19	0	0	Water in Erzin NGCCPP is discharged to deep-sea

Facility reference number	Fresh surface water	Municipal/industrial wastewater treatment plant	Seawater	Groundwater	Wastewater for another organization	Comment
						with relevant environmental permit.
Facility 9	0	0.06	0	0	0	Wastewater in Ayyıldız WPP is sent to Municipal Wastewater Treatment Plant with septic tanks.
Facility 10	0	1.68	0	0	0	Wastewater in AKHAN is sent to Municipal Wastewater Treatment Plant with sewage system.

W5.3

Water consumption: for the reporting year, please provide water consumption data for all facilities reported in W3.2a

Facility reference number	Consumption (megaliters/year)	How does this compare to the last reporting year?	Please explain
Facility 1	0.00	Much lower	Water consumption decreased by 97.9%.
Facility 2	0.39	Much lower	Water consumption decreased by 26.7%.
Facility 3	0.89	Much lower	Water consumption decreased by 25.7%.
Facility 4	0.49	Much lower	Water consumption decreased by 30.2%.
Facility 5	0.21	Higher	Water consumption increased by 17.1%. particularly resulting from the improvements in the measurement system. While the figures of 2014 were based on assumptions and indirect calculations, the figures of 2015 and 2016 are more based on measurement.
Facility 6	0.09	About the same	Water consumption increased by 2%.
Facility 7	2.37	Lower	Water consumption decreased by 4.7%.
Facility 8	1279.33	Much higher	Water is used for cooling purposes and consumption is increased by 415.4%. We care about environment & try to minimize our water footprint. On the other hand, we couldn't risk the operational safety and production. The operating capacity of the cooling tower is independent of the utilized capacity of an NGCCPP for electricity generation

Facility reference number	Consumption (megaliters/year)	How does this compare to the last reporting year?	Please explain
Facility 9	0.06	Lower	Water consumption decreased by 44.9%.
Facility 10	0.00	About the same	At our Head Office AKHAN; we do not measure our discharge amount, but we assume that we discharge all the water that we withdraw.

W5.4

For all facilities reported in W3.2a what proportion of their water accounting data has been externally verified?

Water aspect	% verification	What standard and methodology was used?
Water withdrawals- total volumes	Not verified	Metering, assumptions, extrapolations, and estimations are used. We are willing and planning to verify our water account in the future, but at the moment we are not able to do so due to lack of internal sources.
Water withdrawals- volume by sources	Not verified	Metering, assumptions, extrapolations, and estimations are used. We are willing and planning to verify our water account in the future, but at the moment we are not able to do so due to lack of internal sources.
Water discharges- total volumes	Not verified	Metering, assumptions, extrapolations, and estimations are used. We are willing and planning to verify our water account in the future, but at the moment we are not able to do so due to lack of internal sources.
Water discharges- volume by destination	Not verified	Metering, assumptions, extrapolations, and estimations are used. We are willing and planning to verify our water account in the future, but at the moment we are not able to do so due to lack of internal sources.
Water discharges- volume by treatment method	Not verified	Metering, assumptions, extrapolations, and estimations are used. We are willing and planning to verify our water account in the future, but at the moment we are not able to do so due to lack of internal sources.
Water discharge quality data- quality by standard effluent parameters	Not verified	Metering, assumptions, extrapolations, and estimations are used. We are willing and planning to verify our water account in the future, but at the moment we are not able to do so due to lack of internal sources.

Water aspect	% verification	What standard and methodology was used?
Water consumption- total volume	Not verified	Metering, assumptions, extrapolations, and estimations are used. We are willing and planning to verify our water account in the future, but at the moment we are not able to do so due to lack of internal sources.

Further Information

Module: Response

Page: W6. Governance and Strategy

W6.1

Who has the highest level of direct responsibility for water within your organization and how frequently are they briefed?

Highest level of direct responsibility for water issues	Frequency of briefings on water issues	Comment
Board of individuals/Sub-set of the Board or other committee appointed by the Board	Scheduled - monthly	In Akenerji’s risk register water risks and opportunities are assessed and analysed in a quantitative way. Water quality does not affect Akenerji's electricity generation activities directly. Akenerji Risk Management Committee analyses all risks monthly. Key risks and opportunities are reported bimonthly to the Early Determination of Risk Committee and, then to the BoD. Key risks could include risks and opportunities related to water management and climate change associated impacts.

W6.2

Is water management integrated into your business strategy?

Yes

W6.2a

Please choose the option(s) below that best explains how water has positively influenced your business strategy

Influence of water on business strategy	Please explain
Greater regulator engagment	Turkey is in the process of approximation to European Union Water Management regulation and system. In that manner, a new law about water management had put into force. It is planned that the authority of the management of water will be gathered under the General Directorate of Water Management. According to the view of new regulation, there will be no unique procedures or limits for all around Turkey, evaluations are done locally and the management will be decentralized. Akenerji has both a natural gas power plant and hydropower plants in its portfolio. Akenerji's focus on water management will help to itself for better compliance on existing and upcoming regulations.
Publicly demonstrated our commitment to water	Akenerji was the one and only Turkish energy company participated to the CDP Turkey 2015 Water Programme. With its publicly published respond to CDP Turkey, Akenerji underlined its pioneering role in the sector. In 2016, for both CDP Water and CDP Climate Change Programmes we increased our scores to B.

W6.2b

Please choose the option(s) below that best explains how water has negatively influenced your business strategy

Influence of water on business strategy	Please explain

Influence of water on business strategy	Please explain
Closure of operations	Water is vital for our main scope, which is generation of electricity. We have both a natural gas power plant and hydropower plants in our portfolio. For NGPPs; considerable amount of water is vital for particularly cooling process. Besides, we could say that water is our raw material to generate electricity from our HPPs. Absence of sufficient amount of water means closure of operations for us.

W6.2c

Please choose the option that best explains why your organization does not integrate water management into its business strategy and discuss any future plans to do so

Primary reason	Please explain

W6.3

Does your organization have a water policy that sets out clear goals and guidelines for action?

Yes

W6.3a

Please select the content that best describes your water policy (tick all that apply)

Content	Please explain why this content is included
Publicly available Company-wide Select facilities only Performance standards for direct operations Acknowledges the human right to water, sanitation and hygiene Other: Incorporated within group environmental, sustainabiilty or EHS policy	Akenerji publishes its Sustainability Report in Global Reporting Initiative standards, and made its sustainability policies publicly announced since 2013. Besides, Akenerji has a company-wide risk & opportunity evaluation procedure also including water management dimension. Akenerji has both a NGPP and HPPs in its portfolio. For Erzin NGCCPP, seawater is the source for withdrawal and discharge. In line with Erzin NGCCPP's environmental permit; the relevant KPIs should be measured, monitored and expected to be met in certain limits (Eg; monitoring the standard effluent parameters, temperature rise in water discharge). Similarly, HEPPs have certain KPIs to be met about water management (Eg. environmental flow: the minimum amount of water to be released from dams). Therefore, we have special performance standards for each facility. All the things mentioned above are incorporated within company environmental, sustainability, and EHS policies. Akenerji aims to raise awareness and provide information to local communities about its operations. For the sake of informing the local communities living where the HPPs are, HPP informative presentations also including how clean energy is generated via Hydropower Plants were realized. Consequently, 1,813 students & 107 teachers in Adana; and finally, within the last 4 years, 3,914 students and 229 teachers in total were trained. Number of participants trained and number of informative meetings organized are of the measures of success.

W6.4

How does your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) during the most recent reporting year compare to the previous reporting year?

Water CAPEX (+/- % change)	Water OPEX (+/- % change)	Motivation for these changes
		We could not publicise this information due to our confidentiality procedure.

Further Information

Page: W7. Compliance

W7.1

Was your organization subject to any penalties, fines and/or enforcement orders for breaches of abstraction licenses, discharge consents or other water and wastewater related regulations in the reporting year?

No

W7.1a

Please describe the penalties, fines and/or enforcement orders for breaches of abstraction licenses, discharge consents or other water and wastewater related regulations and your plans for resolving them

Facility name	Incident	Incident description	Frequency of occurrence in reporting year	Financial impact	Currency	Incident resolution

W7.1b

What proportion of your total facilities/operations are associated with the incidents listed in W7.1a?

W7.1c

Please indicate the total financial impacts of all incidents reported in W7.1a as a proportion of total operating expenditure (OPEX) for the reporting year. Please also provide a comparison of this proportion compared to the previous reporting year

Impact as % of OPEX	Comparison to last year

Further Information

Page: W8. Targets and Initiatives

W8.1

Do you have any company wide targets (quantitative) or goals (qualitative) related to water?

Yes, targets and goals

W8.1a

Please complete the following table with information on company wide quantitative targets (ongoing or reached completion during the reporting period) and an indication of progress made

Category of target	Motivation	Description of target	Quantitative unit of measurement	Base-line year	Target year	Proportion of target achieved, % value
Community engagement	Recommended sector best practice	We are operating 7 HEPPs and we deliver HEPP Informative Meetings to local community. HEPP Informative Meetings", are one of the best examples of Akenerji's activities hand in hand with the society, we conveyed to the regional community living in the sphere of influence of our power plants, The content includes of environmental consciousness, how HEPPs operate and the personal	Other: Man.hour	2016	2017	0%

Category of target	Motivation	Description of target	Quantitative unit of measurement	Base-line year	Target year	Proportion of target achieved, % value
		safety. measures to be taken to be exempted from the detrimental effects of water. Together with the trainings we realized this year, we reached a total of 3,914 students and 229 teachers in the last four years. We aim to organize a total of 7 trainings at the schools at each HEPP to raise awareness the students and the teachers about dangers and related protective measures.				
Community engagement	Recommended sector best practice	We put importance to be engaged with the local community, especially where we operate in. Our target is to organize 1 Local Community Awareness Training in Himmetli Village of Adana.	Other: Number of community awareness training	2016	2017	0%

W8.1b

Please describe any company wide qualitative goals (ongoing or reached completion during the reporting period) and your progress in achieving these

Goal	Motivation	Description of goal	Progress
Other: Providing Sustainability Training to employees	Brand value protection	Akenerji puts great importance on sustainability and development the capacity of its employees. We are aware that Climate Change Mitigation and Adaptation activities could bring us significant risks and opportunities as an electricity generating and trading company. In that sense, we aim to initiate a "Sustainability Training Programme" among Akenerji.	We aim to initiate a "Sustainability Training Programme" among Akenerji until to the end of 2017.

W8.1c

Please explain why you do not have any water-related targets or goals and discuss any plans to develop these in the future

Further Information

Module: Linkages/Tradeoff

Page: W9. Managing trade-offs between water and other environmental issues

W9.1

Has your organization identified any linkages or trade-offs between water and other environmental issues in its value chain?

Yes

W9.1a

Please describe the linkages or trade-offs and the related management policy or action

Environmental issues	Linkage or trade-off	Policy or action
Natural Gas Power Plants need considerable amount of water for cooling processes. In order not to cause water scarcity we operate a desalination system. Sea water treatment will be performed with reverse osmosis system and distributed to the plant for process and using water. Therefore, both our electricity consumption and our carbon footprint are increasing due to desalination system, but we are not causing water scarcity.	Trade-off	Electricity is a basic and a crucial need for development and living in modern life standards and Akenerji generates electricity. While doing so, we prefer cleaner technologies. However, we have to provide a base load for the grid and generate electricity continuously. To do so, we diversified our type of power plants. Erzin is a NGCCPP and it has a very high installed capacity in comparison to HEPPs, and even to some NGPPs. NGPPs need considerable amount of water for cooling

Environmental issues	Linkage or trade-off	Policy or action
		processes. In order not to cause water scarcity, we operate a desalination system. The salt and minerals of Mediterranean Sea is removed by reverse osmosis system which operates with an average of 40,5 m3/hour flow. The desalinated water is used for irrigation, domestic use, fire prevention and process. Differently from classical treatment techniques, reverse osmosis systems include membrane filtration processes. It operates with high conductance and remove all kinds of undesired mineral from the water. Prior to reverse osmosis system, the usage of micro sieve and ultra-filtration system will abolish the usage of any colouring chemical related to special backwash. Therefore, both our electricity consumption and our carbon footprint are increasing due to desalination system, but we are not causing water scarcity.

Further Information

Module: Sign Off

Page: Sign Off

W10.1

Please provide the following information for the person that has signed off (approved) your CDP water response

Name	Job title	Corresponding job category
Serhan GENÇER	Chief Executive Officer (CEO)	Chief Executive Officer (CEO)

W10.2

Please indicate that your organization agrees for CDP to transfer your publicly disclosed data regarding your response strategies to the CEO Water Mandate Water Action Hub.

Note: Only your responses to W1.4a (response to impacts) and W3.2c&d (response to risks) will be shared and then reviewed as a potential collective action project for inclusion on the WAH website.

By selecting Yes, you agree that CDP may also share the email address of your registered CDP user with the CEO Water Mandate. This will allow the Hub administrator to alert your company if its response data includes a project of potential interest to other parties using water resources in the geographies in which you operate. The Hub will publish the project with the associated contact details. Your company will be provided with a secure log-in allowing it to amend the project profile and contact details.

Yes

Further Information

CDP