Water 2017 Information Request ARÇELİK A.Ş.

**Module: Introduction** 

Page: W0. Introduction

W0.1

Introduction

#### Please give a general description and introduction to your organization

Arçelik A.Ş., founded in 1955, has operations in durable consumer goods and electronics sector with production, marketing and after sales services, offers products and services more than 130 countries around the world with its 30,000 employees.

Arçelik has 18 production plants in 7 countries (Turkey, Russia, Romania, China, South Africa, Thailand, Pakistan), sales and marketing companies all over the world with its 11 own brands (Arçelik, Beko, Grundig, Altus, Blomberg, ElektraBregenz, Arctic, Leisure, Flavel, Defy, Dawlance).

Arcelik management provides its commitment to present future environmental and social issues with its announced vision "Respects the Globe, Respected Globally". Arcelik conducts its business processes in accordance with ISO 9001 Quality Management System Standard, ISO 14001 Environmental Management System (EMS) Standard, ISO 14064-1 Greenhouse Gas Reporting Standard and ISO 50001 Energy Management System Standard.

Arçelik's environmentally responsive "sustainable development" approach which is controlled in all processes from design to product cycle has been achieved as a result of mentioned management systems and its vision.

With its EMS, Arcelik is the winner of "EU Business Awards for the Environment-Turkey Programme" in "Management" category in 2010.

Parallel to its vision, one of Arcelik's goals is to prevent consuming of resources. Arcelik focuses to achieve continuous improvement of the products, starting from design stage. In Arcelik, R&D, Industrial Design and Product Development Departments are responsible to conduct technological and product development studies. With these studies, Arcelik always achieved to be the "world's mosts and firsts".

Arcelik received 'AAA' rating, the highest in the MSCI Global Sustainability Index Series. Arcelik is among the companies listed in the BIST SI. Arcelik shares its sustainability approach with its Sustainability Reports.

In the scope of producer responsibility, Arçelik conducts projects to reduce water withdrawal and especially groundwater usage reduction is one of the key focus of reduction projects. As an example; in Cooking Appliances Plant, that consumes groundwater, we realized a waste water and rain water recycling project in cooperation with Istanbul Technical University. This project was a R&D project funded by TUBITAK (The Scientific and Technological Research Council of Turkey). In addition, water efficiency studies performed in Cooking Appliances Plant were also published in scientific papers (e.g. World Academy of Science Engineering and Technology, International Journal of Environmental and Ecological Engineering Vol:3, No:3, 2016, "Assessment of Water Reuse Potential in a Metal Finishing Factory", "Assessment of Waste Water Reuse Potential for an Enamel Coating Industry). In Washing Machine Plant, that also uses groundwater, a project has been performed to reduce water withdrawal. Within this project, biological wastewater and rain water has been recycled with an advanced treatment technologies and used in the production. This project was funded by Istanbul Development Agency.

Apart from these two examples, we are conducting water efficiency studies in our other plants. Thanks to our studies on water efficiency, we reduced our average water withdrawal per product by 26% in 2015 compared to our base year 2012.

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#### 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

Thu 01 Jan 2015 - Thu 31 Dec 2015

## 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

#### Exclusions

### Please report the exclusions in the following table

Exclusion	Please explain why you have made the exclusion
This report includes Arcelik's production plants which are located in Turkey. Abroad plants are not included.	Abroad plants are excluded from this report because of the following reasons: -These data & information will be reported in TurkeySome of the abroad plants haven't started their production yet, now they are under construction or some of them just started, therefore they do not have any historical data.

## **Further Information**

For further information please see Arcelik A.Ş. Sustainability Report 2015.

#### Attachments

https://www.cdp.net/sites/2017/15/21115/Water 2017/Shared Documents/Attachments/Water2017/W0.Introduction/Sustainability-Report-2015.pdf

# **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	Important	Not very important	Arçelik directly uses freshwater for production processes, such as metal processing, painting, enamel, cooling, laboratories and employee usage(in offices). The freshwater is important for sustaining our operations. In addition, the freshwater is not directly used in our products as a raw material, we're using the freshwater for producing our products. For this reason, we selected the importance rating of freshwater as 'important'. Indirect use of freshwater is used in Arçelik's suppliers' production processes, but this is not under the financial and/or operational control of Arçelik. In addition, the freshwater is not directly used in our suppliers' products as a raw material, they are using the freshwater for producing their products. For this reason, indirect use of freshwater is ranked as "not very important" for Arçelik's indirect usage.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Not very important	Direct use of recycled water is used in Arçelik's production processes such as metal processing, painting, cooling, laboratories and for the aim of employee usage (for such purposes as flushing office lavatories). For this reason, recycled water is "important". Indirect use of recycled water can be used in Arçelik's suppliers' production processes, but this is not under the financial and/or operational control of Arçelik. The amount of recycled water usage effects the usage of freshwater consumption and therefore the operational costs of suppliers. For this reason, indirect use of freshwater "not very important" for Arçelik's indirect use.

# 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 production facilities' water withdrawals are monitored.
Water withdrawals- volume by sources	76-100	100% of production facilities' water withdrawals volume by sources are monitored.
Water discharges- total volumes	76-100	100% of production facilities' water discharges are monitored.

Water aspect	% of sites/facilities/operations	Please explain
Water discharges- volume by destination	76-100	100% of production facilities' water discharges by destination are monitored. Tracking destination provides data regarding how watersheds may be affected.
Water discharges- volume by treatment method	76-100	100% of production facilities' water discharges by treatment method are monitored. Arçelik has list of treatment methods by plant in order to better understand water quality, discharge locations and the effect, if any, on the watershed.
Water discharge quality data- quality by standard effluent parameters	76-100	100% of production facilities' water discharges quality data are monitored. Arçelik has a standard which requires facilities to meet minimum discharge quality standards or local regulatory requirements.
Water consumption- total volume	76-100	100% of production facilities' water consumption are monitored.
Facilities providing fully- functioning WASH services for all workers	76-100	Arçelik is providing a safe and healthy work environment for all employees at 100% of its facilities.

# 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	0	Not applicable	Arçelik does not use fresh surface water.
Brackish surface water/seawater	0	Not applicable	Arçelik does not use brackish surface water.
Rainwater	0.5	Lower	Arçelik uses rainwater. We used 1 megaliter rain water last year (2014).
Groundwater - renewable	359.3	Lower	Arçelik uses groundwater-renewable. Groundwater – renewable withdrawal was 396.57 megaliters last year (2014).
Groundwater - non-	0	Not applicable	Arçelik does not use groundwater-non-renewable.

Source	How o Quantity witho Source (megaliters/year) source last r		Comment
renewable			
Produced/process water	0	Not applicable	Arçelik does not use produced/process water.
Municipal supply	925.45	Lower	Arçelik uses municipal supply water. Municipal water withdrawal was 1047.43 megaliters last year (2014).
Wastewater from another organization	0	Not applicable	Arçelik does not use wastewater from another organization.
Total	1285.25	Lower	Arçelik uses rainwater, groundwater and municipal water in the operations. Total withdrawal was 1445 megaliters last year (2014).

## 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	Not applicable	Arçelik does not discharge to freshwater.
Brackish surface water/seawater	0	Not applicable	Arcelik does not discharge to brackish surface water/seawater.
Groundwater	0	Not applicable	Arçelik does not discharge to groundwater.
Municipal/industrial wastewater treatment plant	831.43	About the same	Arçelik discharges to Municipal/industrial wastewater treatment plant. The total water discharge was 819.33 megaliters last year (2014).
Wastewater for another organization	0	Not applicable	Arçelik does not discharge to wastewater for another organization.
Total	831.43	About the same	The total water discharge was 819.33 megaliters last year (2014).

# 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
453.82	Lower	Consumption data reported is calculated as water withdrawal quantity minus water discharge quantity. For 2015, the total withdrawal is 1285.25 megaliters and water discharge is 831.43 megaliters, the water consumption calculated for 2015 is 453.82 megaliters. Additionally, in 2014, the total withdrawal was 1445 megaliters and water discharge was 819.33, the water consumption calculated for 2014 was 625.67 megaliters.

# W1.3

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

# 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
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#### 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
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# 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
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#### 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	
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#### **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	In Arçelik, Risk Management System is an integrated multidisciplinary process. Strategic, operational, physical, financial, reputational and environmental risks and opportunities are covered in Arçelik Risk Management System, to the fulfilment of the short and long term goals. That's why Arçelik A.Ş. uses "comprehensive company-wide risk assessment". Arçelik monitors all of its facilities' water consumption independently of its location, specify water performance indicators applicable to all of plants and define water targets for long term. As a result of monitoring, Arçelik Sustainability Council evaluates corporate risks and opportunities are presented by the Sustainability Council to Risk Management Committee for providing the integrity of corporate main risks. The water used in Arçelik's main operations is more critical than the suppliers'. That's why Arçelik 's water risk management system covers only companies' direct operations.

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
Annually	Facility	>6 years	Sustainability Council(SC) evaluates corporate risks&opportunities (R&O) related to water and presents to Risk Management Committee(RMC).RMC carries out its activities by recommending to the Board of Directors concerning the determination and assessment of R&O,estimation of their impact,the management of these risks,their consideration in decision-making mechanism,the establishment of effective internal control systems.The R&O results are monitored and assessed by the Board of Directors,annually

# 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 5 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?

In Arçelik, Environmental Coordination Working Group is responsible to integrate water efficiency efforts and ensures that all efforts comply to Arçelik's strategy. This WG collects and reports to the SC. SC evaluates and prioritizes corporate risks and opportunities. Water risks, strategies and influence to business targets are monitored and assessed by SC, biannual.

Groundwater is relatively inexpensive resource compared to municipal water supply in Turkey.On the other hand, according to the draft Law of Water, the groundwater supply will be more expensive (now,discharge water connection price is being paid, but after the law enters into force, the withdrawal of groundwater will also be priced as well) and the withdrawal limit of groundwater cannot be exceeded whether there is necessity.Consequently, from a business perspective, it is important for Arçelik to reduce water withdrawal before facing price increases or further water-use restrictions.

Washing Machine (WM) and Cooking Appliances (CA) Plants are main plants that use ground water (95% of total in Turkey). In 2011, WM Plant has a project for recycling of biological wastewater with advanced treatment tech, by this project the Plant achieved to reduce its municipal water withdrawal by 30% and ground water withdrawal by 40% in 2015 against to 2011.

In 2015, CA Plant has realized a project in cooperation with Istanbul Technical University which aims to recycle of process wastewater generated during production and rainwater through advanced treatment tech. 50,000 m3/year water saving is achieved.

Thanks to our studies on water efficiency, we reduced our average water withdrawal per product 26% on in 2015 compared to base year 2012. We achieved 302,216 m3 of water savings through efficient water usage, in 2015.

For all new investments, manufacturing processes utilizing water are evaluated during the design&planning stages. In accordance with our sustainability roadmap, our new plant investment in Romania will be a good example for Sustainable Factory, advanced production technology and Industry 4.0. In this factory, there will not be a paint process which is the highest water consuming process in our sector. And new tech cooling system which consumes less water will be used instead of cooling towers. Rainwater and wastewater sourced from processes, laboratory, employee use etc. will be recycled and reused.

#### 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
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# Please state the methods used to assess water risks

Method	Please explain how these methods are used in your risk assessment
Internal company knowledge WRI Aqueduct WWF-DEG Water Risk Filter	In Arçelik, risk and opportunity identification, determination and prioritization methods have been defined and published in the "Risk Management Procedure". The prioritization of the risks and opportunities is based on Arçelik's scoring methodology. Water related risks and opportunities are being scored and prioritized by the Sustainability Committee (SC). According to Arçelik's risk and opportunity scoring methodology, the risks and opportunities are scored (1-5 points) considering financial, reputation, production, human and legal impacts and the max. score is defined as impact point. The risk (R) and opportunity (O) points are scored by multiplying frequency (F) and impact point (I) for prioritization (R, O=F*I). For physical risks and future scenario risks WWF-DEG Water Risk Filter and WRI Aqueduct used for scoring (1-5 points).

# 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	Water is not directly used in as a raw material for our products, but it is important for our production activities. We included this issue in our risk assessment according to WWF-DEG Water Risk Filter. We monitor water availability, water consumption and quality parameters of our production plants daily and all data are reported monthly basis.
Current water regulatory frameworks	Relevant,	In Turkey, there are no strict regulations on water withdrawal. Assessments are done according to

Issues	Choose option	Please explain
and tariffs at a local level	included	internal company knowledge. We follow closely new developments and we are working closely with Ministry Environment and Urban Planning for draft regulations. The draft Law of Water is expected to enter into force in the near future, in Turkey. The most critical requirements are especially focused on the usage of groundwater (pricing&limiting) and river basin management approach.
Current stakeholder conflicts concerning water resources at a local level	Not relevant, explanation provided	In Turkey, there are no regulations for river basin management yet. So, there is no stakeholder conflicts for now, but when the draft Water Law comes into force, we will add this issue into our risk assessment. Because of the uncertainties (e.g. discharge parameter amendments, prioritization of supply, prices etc.) coming with the new draft and lack of river basin management approach in Turkey, it's not possible to manage our water risks in accordance with river basin management approach. In addition, our sector is not a critical sector for water consumption.
Current implications of water on your key commodities/raw materials	Not relevant, explanation provided	Water is not added as a raw material in our products, we use water in our production processes to produce our products.
Current status of ecosystems and habitats at a local level	Not relevant, explanation provided	Arçelik's plants have no impact on ecosystems and habitats, the plants are out of scope of Environmental Impact Assessment (EIA) according to Turkish legislation.
Current river basin management plans	Not relevant, explanation provided	In Turkey, there are no regulations for river basin management, but when the draft Water Law comes into force, we will add this issue into our risk assessment.
Current access to fully-functioning WASH services for all employees	Relevant, included	Assessments are done according to internal company knowledge. We include this issue in our workplace risk assessments also as a part of our corporate responsibility to respect and ensure implementation of the human rights to water and sanitation (SDG Goal 6). Arçelik's corporate responsibility standards and health and safety standards require healthy work environment for all employees.
Estimates of future changes in water availability at a local level	Relevant, included	Water is important for Arçelik's production activities and because of this reason, estimation of future changes about water availability is assessed according to WWF-DEG Water Risk Filter. We monitor water availability, water consumption and quality parameters of our plants daily and all data are reported monthly basis.
Estimates of future potential regulatory changes at a local level	Relevant, included	In Turkey, there are no strict regulations on water withdrawal. We assessed this issue according to company knowledge. We follow closely new developments, draft regulations, EU regulations and we are working closely with Ministry Environment and Urban Planning. The draft Law of Water is expected to enter into force in the near future. The most critical requirements are especially focused on the usage of groundwater (pricing&limiting) and river basin management approach.
Estimates of future potential stakeholder conflicts at a local level	Not relevant, explanation provided	In Turkey, there are no regulations for river basin management. So there are no stakeholder conflicts for now, but if any regulation comes into force, we will add this issue into our risk assessment. Because of the uncertainties (e.g. discharge parameter amendments, prioritization of supply, prices etc.) coming with the new draft and lack of river basin management approach in Turkey, it's not

Issues	Choose option	Please explain
		possible to manage our water risks in accordance with river basin management approach. In addition, our sector is not a critical sector for water consumption. The law is expected to be published within 2 years.
Estimates of future implications of water on your key commodities/raw materials	Not relevant, explanation provided	Water is not a raw material for our products, we use water in our production processes.
Estimates of future potential changes in the status of ecosystems and habitats at a local level	Not relevant, explanation provided	Arçelik's plants have no impact on ecosystems and habitats, they are out of scope of Environmental Impact Assessment (EIA) according to Turkish legislation.
Scenario analysis of availability of sufficient quantity and quality of water relevant for your operations at a local level	Relevant, included	Availability of sufficient quantity and quality of water risk assessed according to WRI Aqueduct. According to scenario analysis for 2040 local water quantity will be decreased 1.2-1.7x times in our locations of plants. Therefore, Arçelik sets targets to reduce the water consumption.
Scenario analysis of regulatory and/or tariff changes at a local level	Not relevant, explanation provided	Because of the uncertainties (e.g. discharge parameter amendments, prioritization of supply, prices etc.) coming with the new draft (it didn't publish yet) and lack of river basin management approach in Turkey, it's not possible to manage our water risks in accordance with river basin management approach, for this reason it is not included in our assessments. When the draft Water Law comes into force, we will add this issue into our risk assessment. The law is expected to be published within 2 years.
Scenario analysis of stakeholder conflicts concerning water resources at a local level	Relevant, included	Risk is assessed according to WRI-Aqueduct. According to scenario analysis for 2040 water quantity will be decreased 1.2-1.7x times in our locations of plants despite of 1.2-1.7 times increasing water demand. So stakeholder conflicts will increase. As a precaution to this risk, Arçelik has been setting targets to reduce the water consumption.
Scenario analysis of implications of water on your key commodities/raw materials	Not relevant, explanation provided	Water is not added as a raw material in our products, we use water in our production processes to produce our products.
Scenario analysis of potential changes in the status of ecosystems and habitats at a local level	Not relevant, explanation provided	Arçelik's plants have no impact on ecosystems and habitats, the plants are out of scope of Environmental Impact Assessment (EIA) according to Turkish legislation.
Other		

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

Stakeholder	Choose option	Please explain
Customers	Relevant, included	Arçelik produces washing machines and dishwashers. Because of these products work with freshwater, customers are considered for our risk assessment process. We engage and raise our customers' awareness by advertisements, documentaries and publications related to water efficiency and by producing best water efficient products.
Employees	Relevant, included	Arçelik's corporate responsibility standards and health and safety standards requires healthy work environment for all employees. And also water consumption caused by the office activities are also important. Because of these reasons, employees are also considered in our risk assessment. We provide awareness on water savings to our employees by internal trainings for engaging with our employees.
Investors	Relevant, included	We are reporting our water data and water saving projects to investors via Sustainability Reports and Sustainability Indexes Worldwide (MSCI, BIST SI, FTSE4Good etc.). And also this year we started to report CDP Water project. These are our engagement processes with our investors on water issues.
Local communities	Relevant, included	We have a particular responsibility toward our production sites' neighbors especially for our plants located in organized industrial zones. We participate the environmental meetings organized in these zones periodically. This is our engagement methodology with the parties in organized industrial zones.
NGOs	Relevant, included	Arçelik works closely with NGOs (such as; TOBB, TUSIAD, TÜRKBESD, ISO, UNEP, UNDP, CECED, Sustainable Development Association) on water strategies of country and private sector. Arçelik is a part of Sustainable Development Assoc. Water Working Group and Istanbul Chamber of Industry's Environmental Committee. We are a member of CECED Steering Committee and also take part in CECED sub-working groups. Arçelik is also member of TUSIAD Climate Change Task Force, president of TUSIAD Environmental Working Group and president of TOBB Council of Durable Goods' Environmental Working Group. We have also projects with UNEP and UNDP.
Other water users at a local level	Not relevant, explanation provided	As Arçelik, we do not use fresh surface water from the receiving environment and for the usage of ground water, we have officially-approved limits for consuming groundwater. Because of these reasons Arçelik has not an impact to water users at local level.
Regulators	Relevant, included	Arçelik complies with all related regulations and standards and ensure its compliance via periodic controls. Arçelik also works closely with Ministry of Environment and Urban Planning and Ministry of Forestry and Water Affairs, attends Ministries' seminars and workshops, follows closely new developments and give its opinions on draft regulations. Arçelik has also developed a project to use its recycled waste water and rainwater into its production processes to decrease water consumption. This project has been funded by Istanbul Development Agency.
River basin management authorities	Not relevant, explanation provided	Turkey has not a river basin management system yet but Arçelik closely follows the Ministry's studies and draft regulations to be ready for river basin management. That's why we have not included this stakeholder into our risk assessment.
Statutory special interest groups at a local level	Relevant, included	Statutory specials interest groups are also considered in our risk assessment and we carry out joint studies with these groups. E.g. Arçelik has developed a project to use its recycled waste water in its production processes with Istanbul Technical University and funded by TUBITAK (The Scientific and Technological Research Council of Turkey).

Stakeholder	Choose option	Please explain
Suppliers	Not relevant, explanation provided	The water usage of Arçelik's suppliers' is not under the financial and/or operational control of Arçelik. In addition, water is not directly used in our suppliers' products as a raw material, they are using the water for producing their products. However, as Arçelik, we request from our suppliers to monitor their own water consumption, to implement measures to reduce water consumption and meet our requirements regarding these activities. We have planned external body audits for our suppliers to monitor their environmental management implementations (including water management as well). In addition, we are studying of green procurement policy, and as a part of these studies water management is an essential requirement. We have developed a special award ceremony to encourage our suppliers' environmental management implementations.
Water utilities at a local level	Relevant, included	Water utilities are considered in our risk assessment process during assessments to ensure that water supply is substantial at all our plants. Also in our new investment in Romania, we are working closely with the authorities to ensure that water process supply is adequate to our new plants' operations.
Other		

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

Primary reason	Please explain
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# **Further Information**

# **Module: Implications**

# Page: W3. Water Risks

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?

No

#### W3.2

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

For its direct operations, Arçelik defines, the plants that could contribute to substantive change in its business by using a screening process as follows: 1) identify plants indicated as High (>4 points) or Very High (>5 points) in total basin risk results by using the WFF-DEF Water Risk Filter. 2) cross check whether these sites are considered strategic and/or if they account for >15% of global revenue at corporate level. If both criteria are met, then the risks faced by these plants can contribute to a substantive change in business and would be reported in questions.

For indirect operations, supplier water use is not critical for Arçelik's production activities. However, as Arçelik, we request from our suppliers to monitor their own water consumption, to implement measures to reduce water consumption and meet our requirements regarding these activities. We have planned external party audits for our suppliers to monitor their environmental management implementations (including water management as well). In addition, we are studying of green procurement policy and sustainable supplier system, and as a part of these studies water management is an essential requirement. We have developed a special award ceremony to encourage our suppliers' environmental management implementations.

In addition, Arçelik selects and purchases multiple components to prevent the risks of all supply chain.

#### 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
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#### 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
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#### 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
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#### 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
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#### 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
Risks exist, but no substantive impact anticipated	Arçelik defines, the plants that could contribute to substantive change in its business by using a screening process as follows: 1) identify plants indicated as High (>4 points) or Very High (>5 points) in total basin risk results by using the WFF-DEF Water Risk Filter. 2) cross check whether these sites are considered strategic and/or if they account for >15% of global revenue at corporate level. If both criteria are met, then the risks faced by these plants can contribute to a substantive change in business and would be reported in questions. All of our plant locations are analyzed according to WFF-DEF Water Risk Filter analysis and total basin risk of all plants are found below: • Çerkezköy: 3.9 • Beylikdüzü:3.9 • Çayırova:2.7 • Bolu:2.7 • Eskişehir:3.8 • Ankara: 3.8 They are all below <4 score and none of them scored as "High" risk. Also according to revenue Çayırova and Eskişehir is above the 15%. None of our plants met both criteria according to our substantive risk determination methodology. Because of this reason none of our plants exposed to a water risk that generate a substantive change in our business.

## 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
Risks exist, but no substantive impact anticipated	Supplier water use is not critical for Arçelik's production activities. However, as Arçelik, we request from our suppliers to monitor their own water consumption, to implement measures to reduce water consumption and meet our requirements regarding these activities. We have planned external party audits for our suppliers to monitor their environmental management implementations (including water management as well). In addition, we are studying of green procurement policy and sustainable supplier system, and as a part of these studies water management is an essential requirement. We have developed a special award ceremony to encourage our suppliers' environmental management implementations. In addition, Arçelik selects and purchases multiple components to prevent the risks of all supply chain. Because of these reasons none of our suppliers exposed to a water risk that generate a substantive change in our business.

#### 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
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## 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?

Country or region	Opportunity	Strategy to realize opportunity	Estimated timeframe	Comment
Turkey	Cost savings Improved water efficiency	Reducing water use by water efficiency and water recycling projects leads to lower operational costs as well as natural resource consumption decrease. Because of this reason Arçelik plants have water withdrawal targets every year. In addition in scope of Arçelik's sustainability roadmap, Arçelik 's water reduction target is to decrease water withdrawal per product (m3/eq. product) by 35% compared to 2012 base year until 2020. Every plant implements water efficiency and water recycling projects to meet the target. In 2015, we achieved 302,216 m3 of water savings through efficient water usage. Some of the improvement projects we have conducted regarding water discharge during the reporting period are as follows: 23,054 m3 of water was decreased through RO (reverse osmosis) wastewater recovery project in the boiler room at the Refrigerator Plant. 26,013 m3 of savings was achieved by means of the reduction in water consumption at the Dishwasher Plant. Besides, stored rain water was used for the irrigation of gardens. 17,460 m3 of water savings was achieved as a consequence of the studies undertaken with mangan phosphate, zinc phosphate baths and test pools at the Compressor Plant. Thanks to recycling of biological waste water and rainwater usage project, a total of 92,273 m3 water was reused in Washing Machine Plant. By achieving all these projects, in 2015 above 1 Mio TL was saved.	4-6 years	Payback time for water efficiency projects can be estimated as 1 year. Besides, payback time for water recycling projects are generally more than 5 years.
Turkey	Competitive advantage Increased brand value	Arçelik 's 4th core business strategy is,to increase the ability to offer enriching,pioneer, innovative,climate change respected and environmental friendly product,solution and technology to society and customer through product life	1-3 years	Arçelik 's 4th core business strategy is,to increase the ability to offer enriching,pioneer, innovative,climate change respected and environmental friendly product,solution and technology to society and customer through product life

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

# W4.1a

Country or region	Opportunity	Strategy to realize opportunity	Estimated timeframe	Comment
		cycle.In line with this strategy,environmental friendly production and products are the main elements of Arçelik's sustainability management. Environmental-friendly products&production activities are also opportunities to increase our brand value and provides competitive advantage.In 2015, we have allocated resources worth approx 47 Mio TL to environmentally friendly product R&D studies. In 2005,the Arçelik's consolidated sales revenue was 3.1 billion EUR (approx 4.96 billion TL), while the international sales share was 40% of total sales revenue.In 2015,the consolidated net sales turnover reached 14.166 billion TL and international sales comprised 60% of consolidated sales.One of the main reason of the increase in international sales share is our investment on environmentally friendly R&D activities. Environmentally friendly production is also important for sustainability indexes as well as products. From the point of view of investors, these indexes are also proof that we are doing our business in sustainable way.Thus it is an element that enhances our brand value.In scope of our sustainability studies, Arçelik was rated "AAA" in MSCI SI and listed in the BIST SI. In addition, Arçelik was entitled to enter the CDP Climate "The Global A List".		cycle.In line with this strategy,environmental friendly production and products are the main elements of Arçelik's sustainability management. Environmental-friendly products&production activities are also opportunities to increase our brand value and provides competitive advantage.In 2015, we have allocated resources worth approx 47 Mio TL to environmentally friendly product R&D studies. In 2005,the Arçelik's consolidated sales revenue was 3.1 billion EUR (approx 4.96 billion TL), while the international sales share was 40% of total sales revenue.In 2015,the consolidated net sales turnover reached 14.166 billion TL and international sales comprised 60% of consolidated sales.One of the main reason of the increase in international sales share is our investment on environmentally friendly R&D activities. Environmentally friendly production is also important for sustainability indexes as well as products. From the point of view of investors, these indexes are also proof that we are doing our business in sustainable way.Thus it is an element that enhances our brand value.In scope of our sustainability studies, Arçelik was rated "AAA" in MSCI SI and listed in the BIST SI. In addition, Arçelik was entitled to enter the CDP Climate "The Global A List".

# 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
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#### 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
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## **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
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# 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 (me	Total water discharged negaliters/year) at this facility	How does the total water discharged at this facility compare to the last reporting year?	Please explain
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### 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

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 exp
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# 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?
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# **Further Information**

# Module: Response

Page: W6. Governance and Strategy

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 - twice per year	Arçelik's sustainability approach is to consider social, economic, environmental and ethics aspects into its activities, to integrate these aspects into its corporate business targets, to manage its activities in accordance with sustainability principles, corporate policies and strategies. The highest level of direct responsibility of sustainability including water issues is Sustainability Council. Arçelik Sustainability Council is comprised of the full executive board, including the COO (Chief Operations (Production&Technology) Officer), CFO, Assistant General Manager - Turkey Trade, Finance Director, Strategic Planning Director, Human Resources Director, Customer Services Director, Innovation Director, Corporate Communications Coordinator, Sustainability and Corporate Affairs Director. The head of Sustainability Council is CFO and the General Secretariat of the council is Sustainability and Corporate Affairs Director. The Sustainability Council meets biannual.

## 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

W6.1

Influence of water on business strategy	Please explain						
Establishment of sustainability goals	Arçelik 's 4th core business strategy is,to increase the ability to offer enriching,pioneer,innovative,climate change respected and environmental friendly product, solution and technology to society and customer through product life cycle.In scope of Sustainability Targets, Arçelik has yearly water reduction targets and also 2020 target to decrease water withdrawal per product 35% compared to 2012 base year. To reach targets, we perform water efficiency projects in plants. In 2015, we reduced our average water withdrawal per product 26% on in 2015 compared to 2012. We colloborate with our suppliers and universities to benefit from their expertise in our projects. Also we try to get funding to decrease the payback time. Examples of water efficiency studies: -In Cooking Appliances Plant, we have realized process R&D study in collaboration with ITU and funded by TUBITAK.In this project, process waste waters generated during production and rain waters were recovered through advanced treatment technology. 50,000 m3 total water withdrawal reduced and paintshop water usage reduced by 40%In Washing Machine Plant, we developed a project to use recycled waste water and rainwater into production processes to decrease water consumption. In 2015, 92,273 m3 water withdrawal decreased with this project. This project was funded by IDAIn Refrigerator Plant water saving was performed through process improvement studies conducted in the paint shop in collaboration with one of our supplier.						
Water resource considerations are factored into new product development	In line with our 4th core business strategy, we design high technology products that pioneer in our industry with regards to water saving. In 2015, the wash cycle water consumption of 60 cm 'good' level dishwashers were reduced. As this model constitutes 85 percent of the dishwasher machine product range, a resultant 560 liter per year of water saving for each product was achieved. With the inclusion of variable speed motors in 60 and 45 cm 'good' level products, 840 and 560 liters per year water savings were achieved, respectively.As part of the Lotus project a dishwasher that consumes just 5.5 liters of water was designed and put into use. Within the scope of its Extended Producer Responsibility, Arçelik established its own recycling facilities in Eskişehir and Bolu. Arçelik is the first and only producer company to establish its own WEEE recycling facility.In addition "The Greatest Renewal Movement of Turkey Campaign" that was started across Turkey for the purpose of collecting WEEEs and reintroducing them to the nature and national economy. As part of the exchange campaign, WEEEs collected from customers by Arçelik and Beko dealers and authorized services, and were sent to WEEE recycling plants. From the establishment of these facilities to end of 2016, 2.3 million tons of water was saved thanks to the replacement of products with old technology with new, environmentally friendly products. This amount is equivalent to the daily water consumption of 2.8 million households.						

### 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
No measurable influence	Water has not negatively influenced Arçelik's business strategy now or in the future because of following reasons: Water is not a raw material, it is only use in production processes and Arçelik considers quality and quantity of water with its risk management process for new investments. According to the draft Law of Water in Turkey, the groundwater will be more expensive (now, discharge water connection price is being paid, but after the law enters into force, the withdrawal of groundwater will also be priced as well) and the withdrawal limit of groundwater cannot be exceeded whether there is necessity. Consequently, from a business perspective, it is important for Arçelik to reduce water withdrawal before facing price increases or further water-use restrictions. Because of this reason Arçelik only focuses water reduction activities for future water insecurity and water scarcity and increased price of water.

### 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
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## W6.3

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

Yes

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 Performance standards for direct operations Commitment to customer education Incorporated within group environmental, sustainability or EHS policy Acknowledges the human right to water, sanitation and hygiene	Arçelik water policy is included in Environmental Policy and integrated with Health & Safety Policy and Sustainability Policy in line with our corporate policy. Arçelik Environmental Policy is company-wide and publicly available in its web-site in accordance with ISO 14001. Arçelik also participates its water management strategy, targets and performance via Sustainability Reports as a requirement of GRI Standard. Arçelik's policy does not address for the selected facilities only. The aim of the policy is to affect substantial, sustainable and measurable impacts and this would not be possible if only selected facilities are considered. In the framework of our producer responsibility, Arçelik commits inherit clean and healthy environment to the new generations and increase the awareness of society are its responsibilities. In addition, for customer awareness, our product's user manuals include information about increasing washing performance, how to perform efficient washing, which program consumes how much water etc. in "washing tips" sections. In our website, customers can reach water consumption information of our products. Arçelik's suppliers use water in their production processes and not directly used as raw materials, but this is not under the financial and/or operational control of Arçelik. For this reason, supplier use of water "not very important" and that is why Arçelik's policy does not cover "performance standards for supplier, procurement and contracting best practice".

# 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
0	0	Arçelik has operational and capital expenditures related to water, however capital and operational expenditures specific to water are not listed separately from other environmental capital expenditures.

## **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
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#### 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
Reduction of product water intensity	Brand value protection	In scope of Sustainability Targets; Arçelik 's water reduction target is to decrease water withdrawal per product (m3/eq. product) by 35% compared to 2012 base year until 2020.	% reduction per product	2012	2020	74%

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: Carrying out environmental awareness trainings to our employees for helping them minimize operational and domestic environmental impacts related with water and other.	Shared value	Carrying out environmental awareness raising activities for the purpose of generalizing environmental awareness (including water efficiency) in 2015.	In 2015, we have achieved our training target for our employees. A total of 21,497 man*hour of environmental trainings have been given to 11,310 employees. These trainings also include water management, water reduction & recycling and water efficiency issues.

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?

#### W8.1b

## 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		
Water, energy and GHG emissions are closely connected	Linkage	Water efficiency projects provide us to decrease our water withdrawal. Decreasing water withdrawal provides the country's energy consumption minimization of the grid water distribution process. For the distribution process of grid water of municipalities, there are pumping stations within the locations, and these pumps use energy and causes GHG. As Arçelik, we do not discharge to surface water, we discharge to channel of municipal wastewater treatment plant. For this reason, we use less energy consumption in our waste water treatment plant for discharging than surface water discharge. Energy is required to pump and treat water, so certain water savings result in energy savings, and by extension, a reduction in carbon emissions. To manage the linkages and tradeoffs, Arçelik A.Ş. integrates ISO 14001, ISO 50001 and ISO 14064-1 systems into its business operations. Some of the water efficiency projects in Arçelik have been shared below: 23,054 m3 of water was decreased through RO (reverse osmosis) wastewater recovery project in the boiler room at the Refrigerator Plant. 26,013 m3 of savings was achieved by means of the reduction in water consumption at the Dishwasher Plant. Besides, stored rain water was used for the irrigation of gardens. 17,460 m3 of water savings was achieved as a consequence of the studies undertaken with mangan phosphate, zinc phosphate baths and test pools at the Compressor Plant.		
Water, energy and GHG emissions are closely connected	Trade- off	Decreasing the grid water withdrawal causes more energy consumption. Because, to treat waste water for using into the operations, advanced treatment technologies need to be installed. For this reason, the energy consumption and GHG emissions increase. So this a tradeoff between water and energy & GHG. Some of the wastewater recycling projects in Arçelik have been shared below: In Cooking Appliances Plant, we have realized process R&D study in collaboration with ITU (Istanbul Technical University) and funded by TUBİTAK (The Scientific and Technological Research Council of Turkey). In this project, process waste waters generated from paintshop and rain waters were recycled through an advanced treatment plant. In Washing Machine Plant, we developed a project to use recycled waste water and rainwater into production processes to decrease water consumption. This project was funded by IDA (Istanbul Development Agency). To manage the linkages and tradeoffs, Arçelik A.Ş. integrates ISO 14001, ISO 50001 and ISO 14064-1 systems into its business operations.		

**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
Polat Şen	Chief Financial Officer (CFO) and Head of Arcelik Sustainability Council	Chief Financial Officer (CFO)

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.

No

#### **Further Information**

CDP