Welcome to your CDP Water Security Questionnaire 2019

W0. Introduction

W0.1

(W0.1) Give a general description of 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 145 countries around the world with its 30,000 employees.
Arçelik has 21 production plants in 8 countries (Turkey, Russia, Romania, China, South Africa, Thailand, Pakistan, Bangladesh), sales and marketing companies all over the world with its 12 own brands (Arçelik, Beko, Grundig, Altus, Blomberg, ElektraBregenz, Arctic, Leisure, Flavel, Defy, Dawlance, Singer).
Arçelik management provides its commitment to present future environmental and social issues with its announced vision "Respects the Globe, Respected Globally". Arçelik 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.
Parallel to its vision, one of Arçelik's goals is to prevent consuming of resources. Arçelik focuses to achieve continuous improvement of the products, starting from design stage. In Arçelik, R&D, Industrial Design and Product Development Departments are responsible to conduct technological and product development studies. With these studies, Arçelik always achieved to be the “world's mosts and firsts”.
Arçelik became the only industrial company from Turkey to enter the Dow Jones Sustainability Indices in 2017 in the category of “Emerging Markets”. Arçelik received 'AAA’ rating, the highest in the MSCI Global Sustainability Index Series. Arçelik is among the companies listed in the BIST SI. Additionally, in 2017, Arçelik received the “A performance score” in both CDP Climate and CDP Water and entered in the Global A List in both programs, and become one of the 25 companies in the world that achieved this success. At the European Business Awards for the Environment (EBAE) organized by the European Commission, we were awarded the first prize in the Management category, becoming the first Turkish company to win this award in our industry. Arçelik 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 36% in 2017 compared to our base year 2012. In addition, we collaborate with International Finance Corporation(IFC) to evaluate the water efficiency of our production plants.In the project,the efficiency of water consumption in each process is evaluated and benchmarked.

W0.2

(W0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date
Reporting year	January 1, 2017	December 31, 2017

W0.3

(W0.3) Select the countries/regions for which you will be supplying data.

Turkey

W0.4

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

TRY

W0.5

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

Companies, entities or groups over which operational control is exercised

W0.6

(W0.6) Within this boundary, are there any geographies, facilities, water aspects, or other exclusions from your disclosure?

Yes

W0.6a

(W0.6a) Please report the exclusions.

Exclusion	Please explain
This report includes Arçelik'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 Turkey. -Some 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.

W1. Current state

W1.1

(W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Important	Neutral	Arçelik directly uses freshwater for production processes, e.g. metal processing,painting,enamel,cooling, laboratories and employee usage.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/operational control of Arçelik.The freshwater is not directly used in our suppliers' products as a raw material,they are using the freshwater for producing their products.Our suppliers need to freshwater to maintain their production processes.Also, our customers need to freshwater to use our products such as washing machine and dishwashers. For this reason, indirect use of freshwater is ranked as neutral for Arçelik's indirect usage. We do not plan to do extensive process,raw material and product changes in future and therefore we do not anticipated any changes on direct and indirect water dependency and importance rating.

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. We do not plan to do process changes, raw material changes and product changes in future and because of this reason we do not anticipated any changes on direct and indirect water dependency and importance rating.

W1.2

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

	% of sites/facilities/operations	Please explain
Water withdrawals – total volumes	100%	100% of production facilities' water withdrawals are monitored and measured by counters and invoices in monthly period. In addition, Arçelik A.Ş.'s total water withdrawal 2017 data reported in Arçelik Sustainability Report 2017 is verified in accordance with AA1000AS.
Water withdrawals – volumes from water stressed areas	100%	100% of production facilities' that located in water stressed areas water withdrawal volumes from water stressed areas are monitored and measured by counters and invoices in monthly period.
Water withdrawals – volumes by source	100%	100% of production facilities' water withdrawals volume by sources are monitored measured by counters and invoices in monthly period.In addition, Arçelik A.Ş.'s total water withdrawal 2017 data reported in Arçelik Sustainability Report 2017 is verified in accordance with AA1000AS.

Water withdrawals quality	100%	100% of production facilities' water withdrawals quality are monitored by testing and analysing in yearly period.
Water discharges – total volumes	100%	100% of production facilities' water discharges are monitored and measured by counters in monthly period.
Water discharges – volumes by destination	100%	100% of production facilities' water discharges by destination are monitored and measured by counters in daily and monthly period. Tracking destination provides data regarding how watersheds may be affected.
Water discharges – volumes by treatment method	100%	100% of production facilities' water discharges by treatment method are monitored and measured by counters in daily period. 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 – by standard effluent parameters	100%	100% of production facilities' water discharges quality data are monitored by testing and analysing in monthly period. Arçelik has a standard which requires facilities to meet minimum discharge quality standards or local regulatory requirements.
Water discharge quality – temperature	Not monitored	Our plants do not monitor the temperature of water discharge, because it is not an obligatory parameter according to Turkish Regulations.
Water consumption – total volume	100%	100% of production facilities' water consumption are monitored measured by counters in monthly period.
Water recycled/reused	100%	100% of production facilities' recycled/reused water are monitored measured by counters in monthly period.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Arçelik is providing a safe and healthy work environment for all employees at 100% of its facilities. Drinking waters are monitored by analysing 3-month period and other domestic water monitored by analysing yearly period.

W1.2b

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

	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total withdrawals	1,163.2	Lower	Arçelik uses rainwater, groundwater and municipal water in the operations.Total withdrawal was 1305.85 megaliters last year (2016). Despite the production amount is increased in 2017, the total withdrawals decrease compared to 2016 thanks to water efficiency studies realized in plants. Similarly, despite the increasing production volumes, it is expected to be at the same level or slightly decrease in total water withdrawal thanks to water efficiency projects and outsourced processes. In addition, it is expected that water withdrawal per product will be decreased with water efficiency studies.
Total discharges	744.04	Lower	Arçelik discharges to Municipal/industrial wastewater treatment plant. The total water discharge was 855.49 megaliters last year (2016). Despite the production amount is increased in 2017, the total discharges decrease compared to 2016 thanks to water efficiency studies realized in plants. Similarly, despite the increasing production volumes, it is expected to be at the same level or slightly decrease in total water discharge thanks to water efficiency projects and outsourced processes. In addition, it is expected that water discharge per product will be decreased with water efficiency studies.
Total consumption	419.16	About the same	Consumption data reported is calculated as water withdrawal quantity minus water discharge quantity. For 2017, the total withdrawal is 1163.20 megaliters and water discharge is 744.04 megaliters, the water consumption calculated for 2017 is 419.16 megaliters (1163.20-744.04=419.16). The water consumption for 2016 was 450.35 megaliters. Despite the production amount is increased in 2017, the total water consumption remains about same levels compared to 2016 thanks to water efficiency studies realized in plants. Similarly, despite the increasing production volumes, it is expected to be at the same level in total water

			consumption thanks to water efficiency projects and outsourced processes. In addition, it is expected that water consumption per product will be decreased with water efficiency studies.

W1.2d

(W1.2d) Provide the proportion of your total withdrawals sourced from water stressed areas.

	% withdrawn from stressed areas	Comparison with previous reporting year	Identification tool	Please explain
Row 1	7.6	Much lower	WRI Aqueduct	Arçelik evaluates water stressed areas as “extremely high” and “high” risk areas according to WRI Aqueduct. Only Electronic Plant is located in “high” water stressed area. Other Arçelik plants are located in “medium to high” water stressed areas according to WRI Aqueduct.The total water withdrawal from water stressed areas is 88.03 megaliter in 2017. That is the 7.6% of total withdrawal ((88.03/1163.2)*100). This amount was 78% previous year (1019.02/1305.85)*100).

W1.2h

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	0.5	About the same	Arçelik uses rainwater. We used 0.5 megaliter rain water last year (2016). It is expected same levels in total rain water withdrawal because expected rain volumes will be same in future.
Brackish surface water/Seawater	Not relevant			Arçelik does not use brackish surface water /seawater and does not

				plan to use brakish/surface water/seawater in future.
Groundwater – renewable	Relevant	374.38	About the same	Arçelik uses groundwater-renewable. Groundwater–renewable withdrawal was 374.37 megaliters last year (2016). It is expected to lower volumes in total groundwater-renewable withdrawal because in future, because Arçelik is study on reducing its groundwater - renewable withdrawal.
Groundwater – non-renewable	Not relevant			Arçelik does not use groundwater-non-renewable and does not plan to use groundwater-renewable in future.
Produced/Entrained water	Not relevant			Arçelik does not use produced/process water and does not plan to use in future.
Third party sources	Relevant	788.32	Lower	Arçelik uses municipal supply water. Municipal water withdrawal was 930.98 megaliters last year (2016). Despite the production amount is increased in 2017, the municipal water withdrawals decrease compared to 2016 thanks to water efficiency studies realized in plants. Despite the increasing production volumes, it is expected to be at the same level or slightly decrease in municipal water withdrawal thanks to water efficiency projects and outsourced processes. In addition, it is expected that municipal water withdrawal per product

				will be decreased with water efficiency studies.

W1.2i

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water	Not relevant			Arçelik does not discharge to freshwater.
Brackish surface water/seawater	Not relevant			Arçelik does not discharge to brackish surface water/seawater.
Groundwater	Not relevant			Arçelik does not discharge to groundwater.
Third-party destinations	Relevant	744.04	Lower	Arçelik discharges to Municipal/industrial wastewater treatment plant. The total water discharge was 855.49 megaliters last year (2016). Despite the increasing production volumes, it is expected to be at the same level or slightly decrease in water discharges thanks to water efficiency projects and outsourced processes. In addition, it is expected that water withdrawal per product will be decreased with water efficiency studies.

W1.2j

(W1.2j) What proportion of your total water use do you recycle or reuse?

	% recycled and reused	Comparison with previous reporting year	Please explain
Row 1	76-99%	About the same	The rate of recycled/reused water was 92.45% last year (in cooling towers, chillers, circulated waters in processes and other recycled waters with projects included). In 2017, it is calculated as 93.22%. Reducing water use by water efficiency,water recycling projects and water reuse leads to

			lower operational costs as well as natural resource consumption decrease. Because of this reason Arçelik plants have water withdrawal targets. 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 38% compared to 2012 base year until 2020. Because of this reason it is expected that this ratio will be increased in the future.

W1.4

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

Yes, our suppliers

Yes, our customers or other value chain partners

W1.4a

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

Row 1

% of suppliers by number

1-25%

% of total procurement spend

76-100

Rationale for this coverage

For the coverage of this survey, we priorizated the suppliers to send the questionnaire. The coverage of this survey is; domestic suppliers and suppliers located in risky countries (in scope of sustainability) with a total of 90% of Arçelik purchasing revenue. We have sent the questionnaire which includes water management issues to our 270 suppliers. 9.6% of 270 suppliers reports to Arçelik their water consumptions. Also, Arçelik will request to water risks and opportunities of suppliers and evaluate its suppliers according to their water risks within next two years.

Impact of the engagement and measures of success

Arçelik achieves to get answer from 9.6% of our 270 suppliers. And, Arçelik will increase this ratio.

Comment

W1.4b

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

Type of engagement

No other supplier engagements

Details of engagement

% of suppliers by number

% of total procurement spend

Rationale for the coverage of your engagement

Impact of the engagement and measures of success

Comment

W1.4c

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

Water is not added as a raw material into our products but dishwashers and washing machines uses water in consumer product usage phase. Because of these products work with freshwater, we engage and raise our customers' awareness by advertisements, documentaries and publications related to water efficiency and by producing best water efficient products. To decrease customers' water consumption and risks, R&D projects are being developed in our R&D departments. As an example, Arçelik has developed a new dishwasher which has lower water consumption with 7 L per usage while having optimum performance and efficiency.
We develop projects that protect our environment. As an example, we develop a technology to filter high incidence of the microfibers polluting the oceans and seas.

W2. Business impacts

W2.1

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

No

W2.2

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

No

W3. Procedures

W3.3

(W3.3) Does your organization undertake a water-related risk assessment?

Yes, water-related risks are assessed

W3.3a

(W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.

Direct operations

Coverage

Full

Risk assessment procedure

Water risks are assessed as part of other company-wide risk assessment system

Frequency of assessment

Six-monthly or more frequently

How far into the future are risks considered?

>6 years

Type of tools and methods used

Tools on the market
Other

Tools and methods used

WRI Aqueduct
WWF-DEG Water Risk Filter
Internal company methods

Comment

Arçelik uses company-wide risk assessment system. Arçelik monitors all of its facilities' water consumption,specify water performance indicators and define targets. Arçelik Sustainability Council evaluates water R&O and presents to Risk Management Committee(RMC) for integrition to corporate main risks. RMC meets 6 times/year to assess the risks.Water used in Arçelik's operations is more critical than the suppliers' so

Arçelik water risk management covers direct operations.

Supply chain

Coverage

None

Comment

Other stages of the value chain

Coverage

None

Comment

W3.3b

(W3.3b) Which of the following contextual issues are considered in your organization's water-related risk assessments?

	Relevance & inclusion	Please explain
Water availability at a basin/catchment level	Relevant, always 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.
Water quality at a basin/catchment level	Relevant, always 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, water discharge and quality parameters of our production plants daily and all data are reported monthly basis.
Stakeholder conflicts concerning water resources at a basin/catchment 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.
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.Because of this reason this issue will not be relevant in the future.
Water-related regulatory frameworks	Relevant, always included	In Turkey, there are no strict regulations on water withdrawal. Assessments are done according to internal company knowledge. We follow closely new developments and we are working closely with Ministry Environment and Urbanization 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.
Status of ecosystems and habitats	Relevant, always included	In line with its “Respecting the World, Respected Worldwide” vision, Arçelik has always study on minimize its effects on ecosystem and habitat. Arçelik’s plants have no impact on ecosystems and habitats according to internal company method and the plants are legally out of scope of Environmental Impact Assessment (EIA) according to Turkish legislation. But this isssue always in scope of Arçelik’s risk management system.
Access to fully-functioning, safely managed WASH services for all employees	Relevant, always included	Assessments are done according to internal company methods. 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.
Other contextual issues, please specify	Relevant, always included	Water is not added as a raw material in our products but dishwashers and washing machines uses water in consumer product usage phase. To decrease water consumption of products R&D projects are being developped in both R&D department of production and central R&D department.

W3.3c

(W3.3c) Which of the following stakeholders are considered in your organization’s water-related risk assessments?

	Relevance & inclusion	Please explain
Customers	Relevant, always 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. In addition, to decrease water consumption of products R&D projects are being developped in both R&D department of production and central R&D department.
Employees	Relevant, always 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, always 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 we started to report CDP Water Project in 2017. These are our engagement processes with our investors on water issues.
Local communities	Relevant, always 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, always included	Arçelik works closely with NGOs (such as; TOBB, TUSIAD, TÜRKBESD, ISO, UNEP, UNDP, APPLiA, 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 APPLiA Steering Committee and also take part in APPLiA 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 basin/catchment 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, always 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, always 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).
Suppliers	Relevant, always included	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 environmental audits for our suppliers. 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, always included	Water utilities are considered in our risk assessment process during assessments to ensure that water supply is substantial at all our plants.

Other stakeholder, please specify	Relevant, sometimes included	To minimize our water risks, we collaborate with International Finance Corporation(IFC) to evaluate the water efficiency of our production plants.In the project,the efficiency of water consumption in each process is evaluated and benchmarked.

W3.3d

(W3.3d) Describe your organization's process for identifying, assessing, and responding to water-related risks within your direct operations and other stages of your value chain.

In Arçelik, Environmental Coordination Working Group (WG) is responsible to integrate water efficiency efforts and ensures that all efforts comply to Arçelik's strategy.This WG collects and reports to the Sustainability Council(SC). SC evaluates and prioritizes corporate risks and opportunities (R&O). Water risks, strategies and influence to business targets are monitored and assessed by SC,biannual. The prioritization of the R&Os is based on Arçelik's scoring methodology.Water related risks and opportunities are being scored and prioritized by the 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) and analysis results from these tools are reviewed annually.
In addition, we collaborate with International Finance Corporation(IFC) to evaluate the water efficiency of our production plants.In the project,the efficiency of water consumption in each process is evaluated and benchmarked.
Groundwater is relatively inexpensive resource compared to municipal water supply in Turkey.But, according to the draft Law of Water, the groundwater supply will be more expensive and the withdrawal limit of groundwater cannot be exceeded.It is important for Arçelik to reduce water withdrawal before facing price increases or further water-use restrictions.One of the main plant that use ground water is Washing Machine plant. 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 nearly 37.5% and ground water withdrawal by 35% in 2017 against to 2011.
Thanks to our studies on water efficiency, we reduced our average water withdrawal per product 36% in 2017 compared to base year 2012. We achieved 160285 m3 of water savings through efficient water usage, in 2017.

W4. Risks and opportunities

W4.1

(W4.1) Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business?

No

W4.1a

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

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. 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: 3.4 • Beylikdüzü:3.6 • Çayırova:3.1 • Bolu:2.5 • Eskişehir:3.2 • Ankara: 3.1 .They are all below <4 score and none of them scored as “High” risk. 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.

Arçelik’s suppliers do not use water at critical level in their production processes.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.

W4.2b

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

	Primary reason	Please explain
Row 1	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: 3.4 • Beylikdüzü:3.6 • Çayırova:3.1 • Bolu:2.5 • Eskişehir:3.2 • Ankara: 3.1 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.

W4.2c

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

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	Arçelik's suppliers do not use water at critical level in their production processes.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. 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 types" sections.In our website,customers can reach water consumption information of our products.

W4.3

(W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes, we have identified opportunities, and some/all are being realized

W4.3a

(W4.3a) Provide details of opportunities currently being realized that could have a substantive financial or strategic impact on your business.

Type of opportunity
Efficiency

Primary water-related opportunity
Cost savings

Company-specific description & strategy to realize opportunity
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 38% compared to 2012 base year until 2020. Every plant implements water efficiency and water recycling projects to meet the target.In 2017, we achieved 160285 m3 of water savings through efficient water usage. Some of the improvement projects we have conducted during the reporting period are as follows: 17,490 m3 of water was recycled in Bolu Cooking Appliances Plant through domestic and industrial waste recycling studies, 27,000 m3 of water was recycled in Eskisehir Refrigerator Plant through minimizing the use of chemicals with the automatic measurement of pH and conductivity, 19,313 m3 of water was recycled in Cerkezkoy Tumble Dryer Plant and Cayirova Washing Machine Plant thanks to reuse studies.By achieving all these projects, in 2017, 612512 TL was saved.

Estimated timeframe for realization
4 to 6 years

Magnitude of potential financial impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
612,512

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact
In scope of Arçelik's sustainability roadmap, Arçelik 's water reduction target is to decrease water withdrawal per product (m3/eq. product) by 38% compared to 2012

base year until 2020. Every plant implements water efficiency and water recycling projects to meet the target. In 2017, we achieved 160285 m3 of water savings through efficient water usage. Some of the improvement projects we have conducted during the reporting period are as follows: 17,490 m3 of water was recycled in Bolu Cooking Appliances Plant through domestic and industrial waste recycling studies, 27,000 m3 of water was recycled in Eskişehir Refrigerator Plant through minimizing the use of chemicals with the automatic measurement of pH and conductivity, 19,313 m3 of water was recycled in Çerkezköy Tumble Dryer Plant and Çayırova Washing Machine Plant thanks to reuse studies. 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.

Type of opportunity

Markets

Primary water-related opportunity

Increased brand value

Company-specific description & strategy to realize opportunity

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 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 2017,we have allocated resources worth approx 58 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. In 2017, the consolidated net sales turnover reached 20.841 billion TL and international sales comprised 61% of consolidated sales (Aprox. 12.7 billion TL).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, listed in the BIST SI and entitled to enter the CDP Climate&Water “The Global A List”.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

12,700,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

Environmental-friendly products&production activities are also opportunities to increase our brand value and provides competitive advantage. In 2017,we have allocated resources worth approx 57 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 2017, the consolidated net sales turnover reached 20.841 billion TL, and international sales comprised 61% of consolidated sales (Aprox. 12.7 billion TL).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.

W6. Governance

W6.1

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

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

W6.1a

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

	Scope	Content	Please explain
Row 1	Company-wide	Description of business dependency on water Description of business impact on water Description of water-related performance standards for direct operations	As a global company operating throughout the world, Arçelik acknowledges water is an essential resource of life and appreciates that its policy and actions related water,have significant effect on employees,customers, and other communities.For this reason,Arçelik has a company-wide water policy and it is integrated with its Environmental Policy,Health&Safety Policy,Sustainability approach.It is available in company web-site (http://www.arcelikas.com/page/2283/Su_Politikamiz) Arçelik participates water management strategy, targets,performance via Sustainability Reports. The aim of the policy is to minimise the impact of our activities on water through product lifecycle.Arçelik's water policy and

		Description of water-related standards for procurement Reference to international standards and widely-recognized water initiatives Company water targets and goals Commitment to align with public policy initiatives, such as the SDGs Commitments beyond regulatory compliance Commitment to water-related innovation Commitment to stakeholder awareness and education Commitment to water stewardship and/or collective action Acknowledgement of the human right to water and sanitation Recognition of environmental linkages, for example, due to climate change	management covers minimizing business water impact;water performance;water targets&goals; commitment to beyond regulatory compliance,SDG alignment,water related innovation,stakeholder awareness,water stewardship and recognition linkage to climate change.Arçelik has been also studying on green procurement policy and water management is a part of it.

W6.2

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

Yes

W6.2a

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

Position of individual	Please explain
Director on board	Arçelik's board level oversight for sustainability&climate change issues including water belongs to the assigned member of Board of Directors.Arçelik Sustainability Council(SC) is responsible for the management of sustainability&climate change issues including water.SC is comprised of the full executive board,including the COO,CFO,Assistant General Manager-Turkey Trade,Finance Director,Strategic Planning Director,Human Resources Director,Customer Services Director,Innovation Director,Corporate Communications Coordinator,Sustainability&Corporate Affairs Director.The head of SC is CFO.CFO reports critical issues regarding studies of SC including water to the assigned member of Board of Directors,that is why member of Board of Directors has selected as board oversight for water issues.Water issues are one of the priority agenda item of Board of Directors' investment&strategy meetings. The assigned member of Board of Directors informs Board of Directors about SC studies on water.

W6.2b

(W6.2b) Provide further details on the board's oversight of water-related issues.

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	Monitoring implementation and performance Overseeing acquisitions and divestiture Overseeing major capital expenditures Providing employee incentives Reviewing and guiding annual budgets	Arçelik board level responsibility in sustainability including water issues belongs to the assigned member of Board of Directors. Water issues are one of the priority agenda item of Board of Directors' investment and company strategy meetings. At Arçelik, the Sustainability Council is responsible for the management of sustainability issues including water. 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

		Reviewing and guiding business plans Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy Reviewing and guiding corporate responsibility strategy Reviewing innovation/R&D priorities Setting performance objectives	Corporate Affairs Director. Water issues are one of the priority agenda item of all Sustainability Council meetings held annualy. Sustainability Council including CFO, meet and monitor the progress on water targets and discuss company's water strategy, major plans&action, business plans, performance objectives for the next year plan.

W6.3

(W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).

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

Chief Financial Officer (CFO)

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

Half-yearly

Please explain

Below board level,the highest level management position of sustainability including water issues belongs to CFO, the head of Sustainability Council(SC).SC is comprised of the full executive board,including COO,CFO,Assistant General Manager-Turkey Trade,Finance Director,Strategic Planning Director,Human Resources Director,Customer Services Director,Innovation Director,Corporate Communications Coordinator,Sustainability&Corporate Affairs Director.The head of SC is CFO and General Secretariat of SC is Sustainability&Corporate Affairs Director.Sustainability Working Groups(WG) are established to control&coordinate sustainability

implementations.Members of Sustainability WG consist of specialists/managers.Environmental Coordination WG 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.Water risks,strategies and influence to targets are monitored and assessed by SC including CFO,biannual.

W6.5

(W6.5) Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?

Yes, direct engagement with policy makers

Yes, trade associations

Yes, other

W6.5a

(W6.5a) What processes do you have in place to ensure that all of your direct and indirect activities seeking to influence policy are consistent with your water policy/water commitments?

Arçelik complies with all related regulations and standards and ensure its compliance via periodic controls. Arçelik also works closely with Ministry of Environment and Urbanization and Ministry of Forestry and Water Affairs, attends Ministries' seminars and workshops, follows closely new developments and give its opinions on draft regulations. Arçelik also works closely with trade associations and NGOs (such as; TOBB, TUSIAD, TÜRKBESD, ISO, UNEP, UNDP, APPLiA, Sustainable Development Association, İTÜ) on water strategies of country and private sector.In 2017, Arçelik was also president of TUSIAD – Environment and Climate Change Working Group and TOBB – Consumer Durable Goods Council Environmental Sub-Working Group. Wıth these methods Arçelik ensures that its activities are in consistent with national and international policy. Arçelik realized its activities under these process and develop projects in line with the national and international policy. E.g. 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. Another example; in Cooking Appliances Plant, we realized a wastewater 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).

W6.6

(W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report?

No, but we plan to do so in the next two years

W7. Business strategy

W7.1

(W7.1) Are water-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	11-15	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 line with this strategy Arçelik defines its long-term business plans and objectives. On water issue, water reduction, reusing and recycling are integrated in long term business plans &objectives. Arçelik’s long term business objective is becoming “closed loop cycle” in production by 2030. This period is selected to complete following processes: set up a substructure for the improvement of the water measuring system; doing wastewater recycling feasibility studies and determining of the design; taking of the investment decision and the initiation of the investment; trial production and finally transition to serial production. To achieve long term business objectives, Arçelik defines its short and medium term business goals, KPIs and action plans and integrated with Arçelik’s global strategic plan process. For becoming closed loop cycle, defined targets/oblectives for business plan are as follows: Decreasing water consumption amount Water efficiency, recycling projects Water withdrawal data verification Using rainwater Improving water measuring system Raising Sustainability indices’ scores

			related with water In scope of this targets/KPIs Arçelik defines its action plans for each KPIs.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	11-15	To achieving long term target, Arçelik defines its short and medium term business goals, KPIs and action plans. As an example; in scope of Arçelik Sustainability Targets, Arçelik has yearly water reduction targets and also 2020 target to decrease water withdrawal per product 38% compared to 2012 base year. To reach the long term target, short term target is selected as 2020. To reach water related objectives, we perform water efficiency projects in plants. Thanks to projects realized in our plants, in 2017, we reduced our average water withdrawal per product 36% on in 2017 compared to 2012. We colloborate with our suppliers and universities to benefit from their expertise in our projects. Examples of water efficiency studies: 17,490 m3 of water was recycled in Bolu Cooking Appliances Plant through domestic and industrial waste recycling studies, 27,000 m3 of water was recycled in Eskisehir Refrigerator Plant through minimizing the use of chemicals with the automatic measurement of pH and conductivity, 19,313 m3 of water was recycled in Cerkezkoy Tumble Dryer Plant and Cayirova Washing Machine Plant thanks to reuse studies.
Financial planning	Yes, water-related issues are integrated	11-15	Arçelik's global strategic plan process includes estimated budgets for realizing business plans & targets. To reach the Arçelik's closed loop cycle long term business objective, the following actions are defined and they are integrated to financial planning process: Improving water measuring infrastructure of plants Provide an appropriate water measuring system of the new construction projects Realizing of water efficiency projects for major/prioritized withdrawal points Water data verification Rain water & waste water recycling project studies (feasibility &

			investment) Water efficiency projects (feasibility & investment) Arçelik's long term business objective is becoming "closed loop cycle" in production by 2030. This period is selected to complete following processes: set up a substructure for the improvement of the water measuring system; doing wastewater recycling feasibility studies and determining of the design; taking of the investment decision and the initiation of the investment; trial production and finally transition to serial production. For this purpose,we collaborate with International Finance Corporation(IFC) to evaluate the water efficiency of our production plants.In the project,the efficiency of water consumption in each process is evaluated and benchmarked.

W7.2

(W7.2) What is the trend in your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?

Row 1

Water-related CAPEX (+/- % change)

0

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

0

Water-related OPEX (+/- % change)

0

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

0

Please explain

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.

W7.3

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

	Use of climate-related scenario analysis	Comment
Row 1	Yes	Arçelik uses climate-related scenario analysis to inform business strategy on water issues.

W7.3a

(W7.3a) Has your organization identified any water-related outcomes from your climate-related scenario analysis?

Yes

W7.3b

(W7.3b) What water-related outcomes were identified from the use of climate-related scenario analysis, and what was your organization's response?

	Climate-related scenario(s)	Description of possible water-related outcomes	Company response to possible water-related outcomes
Row 1	Other, please specify A2 scenario of IPCC	Based on different scenarios,climate scientists estimate temperature increases 1.5-4.5oC by the end of the this century.Turkey is one of the countries that affected by the climate change(CC).Arçelik considers CC to sustain its activities and use climate scenario analysis to assess the impacts.Arçelik uses A2 scenario of IPCC.Assessment of CC impact studies for Turkey are generally based on A2 scenario and that's why	According to Turkey's scenario analysis, it seems that there will be substantial reductions in the southern basins, while little or no changes in the northern basins occur. Although Arçelik's Turkey plants are located in nothern basins, Arçelik take actions on reducing its dependency on water. Arçelik's long term strategy is becoming "closed loop cycle" in production. And Arçelik's 2020 target is to decrease water withdrawal per product 38% compared to 2012 base year. In line with its targets, Arçelik plants realize water efficiency studies. Examples of water efficiency studies: 17,490 m3 of water was recycled in Bolu Cooking Appliances Plant through domestic and industrial waste recycling studies, 27,000 m3 of water was recycled in Eskisehir Refrigerator Plant through minimizing the use of chemicals with the automatic measurement of pH and conductivity, 19,313 m3 of water was recycled in Cerkezkoy Tumble Dryer Plant and Cayirova Washing Machine Plant thanks to reuse studies.

		we select it.Turkey's future climate analysis based on CMIP3 simulation that was used in the IPCC 4.Assessment Report.The projection involves the simulation of the ECHAM5 General Circulation Model.CC projections indicate that the precipitation Turkey receives will decrease in the future,which will result in a reduction in water resources,hence the amount of useable water.Based on a pessimistic scenario(A2),the model projections indicate that there will be 16% and 27% reductions in water potentials in Turkey by 2050 and 2075. If we consider these numbers instead of assuming constant usable water through the present century,Turkey will have 1000 m3 water per capita in 2050 and 915 m3 in 2075.This will place us in the category of water scarce countries.According to analysis,it seems there will be substantial	

		reductions in the southern basins,while little or no changes in northern basins occur. (Turkey's CC projections mentioned in this section are quated from A Holistic View ff Climate Change and Its Impacts In Turkey Report prepared by Istanbul Policy Center.)	

W7.4

(W7.4) Does your company use an internal price on water?

Row 1

Does your company use an internal price on water?

Yes

Please explain

Arçelik uses different internal water prices(IWP) for each plant.To calculate IWPs,water stress was determined by using Aqueduct tool in current condition for Arçelik plants.Then,water stress was modelled for 2020,2030 and 2040 years in 3 different cases(business as usual,optimistic&pessimistic).For the determination of water stress impact on watershed due to water consumption,internal water prices(IWP) were assumed between 0.2-1.0 TL/m3 for well water and 0.1-0.5 TL/m3 for municipal water depending on water stress score(1-5point).Then,IWP was added to water bills paid monthly.Then,directly and indirectly water and wastewater prices were added.Total unit prices including IWP of our plants change between 1-17 TL/m3.

W8. Targets

W8.1

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

	Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals

Row 1	Company-wide targets and goals Site/facility specific targets and/or goals Brand/product specific targets and/or goals Country level targets and/or goals	Targets are monitored at the corporate level Goals are monitored at the corporate level	Arçelik Sustainability Council (SC) is responsible for setting targets/goals both company, facility and country level in line with business R&O and business strategy. At first stage the total company level targets and goals identified by SC and they are distributed to facilities /countries. Environmental Coordination Working Group (WG) is responsible to integrate water efficiency efforts and ensures that all efforts comply to Arçelik's goals&targets .This WG collects and reports to the Sustainability Council(SC). Sustainability Council including CFO, meet and monitor the progress on water targets and discuss company's water strategy, major plans&action, business plans, performance objectives for the next year plan.

W8.1a

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

Target reference number

Target 1

Category of target

Water withdrawals

Level

Company-wide

Primary motivation

Commitment to the UN Sustainable Development Goals

Description of target

In scope of Sustainability Targets; Arçelik 's water reduction target is to decrease water withdrawal per product (m3/eq. product) by 38% compared to 2012 base year until 2020.

Quantitative metric

% reduction per product

Baseline year

2012

Start year

2016

Target year

2020

% achieved

94.74

Please explain

Thanks to water efficiency projects realized in our plants, in 2017, we reduced our average water withdrawal per product 36% (incl. Turkey, China, Romania, Russia) compared to 2012.

W8.1b

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

Goal

Other, please specify

Environmental awareness trainings

Level

Company-wide

Motivation

Shared value

Description of goal

Our goal is; carrying out environmental awareness raising activities for the purpose of generalizing environmental awareness (including water efficiency) in 2017. Employee awareness is the first step of the companies' water reduction activities. Carrying out environmental awareness trainings to employees can support them to minimize operational and domestic environmental impacts including water.

Baseline year

2016

Start year

2016

End year

2018

Progress

In 2016, we have achieved our training target for our employees. A total of 12,688 man*hour of environmental trainings have been given to 6575 employees. These trainings also include water management, water reduction & recycling and water efficiency issues. In 2017, In this scope, 6,670 employees in Turkey operations were offered a total of 12,682 person*hour, and 325 subcontractor employees a total of 432

person*hour of environmental training.

Goal

Other, please specify

Water withdrawal

Level

Company-wide

Motivation

Commitment to the UN Sustainable Development Goals

Description of goal

In scope of Sustainability Targets; Arçelik ‘s water reduction target is to decrease water withdrawal.

Baseline year

2016

Start year

2017

End year

2018

Progress

Water withdrawal was 1,305.85 megaliters last year (2016). In 2017, the water withdrawals decrease 11% compared to 2016 thanks to water efficiency studies realized in plants.

Goal

Other, please specify

Water discharge

Level

Company-wide

Motivation

Commitment to the UN Sustainable Development Goals

Description of goal

Arçelik aims to increase in water recycling/reuse instead of directly discharge. Arçelik uses the recycled/reused water in some production proceseses.

Baseline year

2016

Start year

2017

End year

2018

Progress

Arçelik decreases total water discharge by 5.5% compared to 2016 with recycling/reuse projects.

Goal

Other, please specify

Flowmeter change

Level

Company-wide

Motivation

Risk mitigation

Description of goal

100% of Arçelik production facilities' water usage is already monitored and measured by both digital and mechanical flowmeters. Arçelik mostly uses digital flowmeters. Thus, Arçelik aims to change the mechanical flowmeters used in some processes to digital flowmeters.

Baseline year

2017

Start year

2017

End year

2020

Progress

Mechanical flowmeters will be changed to digital flowmeters.

Goal

Other, please specify

Increase in water efficient product

Level

Brand/product

Motivation

Commitment to the UN Sustainable Development Goals

Description of goal

Arçelik always aims to increase water-efficient products.

Baseline year

Start year

End year

Progress

Arçelik always aims to increase water-efficient products.

Goal

Other, please specify

Supplier engagement

Level

Business activity

Motivation

Commitment to the UN Sustainable Development Goals

Description of goal

Arçelik aims to increase in proportion of suppliers engaged.

Baseline year

2017

Start year

2017

End year

2020

Progress

As Arçelik, we have sent a questionnaire which includes water management issues to our 270 suppliers. 9.6% of our suppliers report to Arçelik their water consumptions. Also, Arçelik will increase this ratio and request to water risks and opportunities of suppliers and evaluate its suppliers according to their water risks within next two years.

W9. Linkages and trade-offs

W9.1

(W9.1) Has your organization identified any linkages or tradeoffs between water and other environmental issues in its direct operations and/or other parts of its value chain?

Yes

W9.1a

(W9.1a) Describe the linkages or tradeoffs and the related management policy or action.

Linkage or tradeoff

Linkage

Type of linkage/tradeoff

Decreased energy use

Description of linkage/tradeoff

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.

Policy or action

To manage the linkages and tradeoffs, Arçelik A.Ş. integrates ISO 14001, ISO 50001 and
ISO 14064-1 systems into its business operations. In 2017, we achieved 160285 m3 of water savings through efficient water usage. Some of the improvement projects we have conducted during the reporting period are as follows: 17,490 m3 of water was recycled in Bolu Cooking Appliances Plant through domestic and industrial waste recycling studies, 27,000 m3 of water was recycled in Eskisehir Refrigerator Plant through minimizing the use of chemicals with the automatic measurement of pH and conductivity, 19,313 m3 of water was recycled in Cerkezkoy Tumble Dryer Plant and Cayirova Washing Machine Plant thanks to reuse studies.

Linkage or tradeoff

Tradeoff

Type of linkage/tradeoff

Increased wastewater treatment

Description of linkage/tradeoff

Water treatment facilities provides efficient use of waste water in operations.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 Istanbul Technical University and funded by TUBİTAK.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 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.

Policy or action

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. This advanced treatment plant consumes approx. 63.000 kWh energy in a year and this causes approx. 27 tCO2e emissions. 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). This system consumes 79.000 kWh energy in a year. To manage the linkages and tradeoffs, Arçelik A.Ş. integrates ISO 14001, ISO 50001 and ISO 14064-1 systems into its business operations.

W10. Verification

W10.1

(W10.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1d)?

Yes

AA1000AS_Water_consumption_2017.pdf

AA1000AS_Water_consumption_2018.pdf

W10.1a

(W10.1a) Which data points within your CDP disclosure have been verified, and which standards were used?

Disclosure module	Data verified	Verification standard	Please explain
W1. Current state	Arçelik A.Ş.'s total water withdrawal 2017 data reported in Arçelik Sustainability Report 2017 is verified in accordance with AA1000AS as follows: municipal:801627 m3 Well water: 374382 m3 Rain water: 500 m3 Total:1176509 m3	AA1000AS	Water withdrawal (m3) data which is shared in Arçelik Sustainability Report 2017 and verified according to AA1000AS standard includes water withdrawals of production plants and headquarter. However, in the "W1.Current state" section, we only share water withdrawal of our production plants.
W10. Verification	Arçelik A.Ş.'s total water withdrawal 2018 data reported in Arçelik Sustainability Report 2018 is verified in accordance with AA1000AS as follows: municipal:572367 m3 Well water: 376488 m3 Rain water: 455 m3 Total:949387 m3	AA1000AS	Arçelik A.Ş.'s total water withdrawal 2018 data reported in Arçelik Sustainability Report 2018 is verified in accordance with AA1000AS as follows: municipal:572367 m3 Well water: 376488 m3 Rain water: 455 m3 Total:949387 m3

W11. Sign off

W-FI

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

W11.1

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

	Job title	Corresponding job category
Row 1	Chief Financial Officer (CFO)	Chief Financial Officer (CFO)

W11.2

(W11.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate's Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].

No

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	Public or Non-Public Submission	I am submitting to
I am submitting my response	Public	Investors

Please confirm below

I have read and accept the applicable Terms