AKÇANSA ÇİMENTO SANAYİ VE TİCARET A.Ş. - Water Security 2019

W0. Introduction

W0.1

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

Akcansa, a JV of Sabancı Holding and HeidelbergCement, is the leader of Turkish Cement industry. Company produces clinker and cement at 3 plants, ready-mixed concrete under “Betonsa” brand at 30 plants and aggregates under “Agregasa” brand in 4 plants. As the leader of the Turkish cement industry, Akçansa supplies 10% of Turkey’s cement demand and nearly 12% of the country’s total cement and clinker exports.
Akçansa vision statement “Sustainable growth beyond all limits” reflects Company’s sustainability strategy which is in line with Company’s business strategy. The sustainability journey dates back to 2009 when Sustainability Committee was established, and 2020 Sustainability Ambitions were set. The sustainability vision is maintained by the Company’s mission as well which is “to be a leading building materials company” enhancing the quality of life of the society by means of our culture committed to environmental, legal and ethical principles. Our climate change strategy mainly focuses on mitigating CO2 through maximizing alternative fuels and biomass, decreasing rate of clinker in cement and increasing energy efficiency.

Akçansa adopts a sustainability management approach as the main element of its corporate vision, covering all business processes from raw material production to after-sales services to end-users. We are participatory of the UN Global Compact, UN Women’s Empowerment Principles, CDP Climate Change/Water programs and is the member of WBCSD Turkey.

In 2018, sustainability management has been reorganised and Akçansa 2030 sustainability targets will be set and published in 2019.

In the new sustainability management structure, Sustainability Working Committee (SWC) takes the key position to set corporate targets and to develop and implement projects. Being chaired by Deputy General Manager (DGM) of Operations Function who directly reports to General Manager (GM), it is composed of 6 pillars managed by relevant corporate managerial positions. Committee Members build Working Groups (WGs) or Task Forces (TFs) to develop and implement projects to maintain sustainability targets.

SWC reports to Sustainability Steering Committee (SSC) which consists of Akçansa Executive Committee Members (GM and DGMs). Its main mission is to approve and follow up sustainability targets & relevant projects.

And finally, SSC reports to Akçansa Board of Directors which is responsible of defining sustainability vision and strategy. In Board, Chairman is representing Sabancı Holding and Vice President is representing HeidelbergCement. Akçansa GM shares key sustainability KPIs and relevant ongoing projects to Board regularly.

From setting up of sustainability strategy to follow up targets and approval of investment budgets, SSC and Board of Directors directly own the whole process.

The climate-related targets (alternative fuel rate and energy efficiency KPIs) are defined by Deputy GM-Operations, Plant Managers and Raw Materials & Environmental Manager (RMEM), both are direct reports of Deputy GM-Operations. RMEM is Head of “Reducing Environmental Footprint” pillar in SWC. He is supported by direct reports (environmental engineers at plants responsible of 14001 EMS management, compliance to regulations, CO2 emissions follow-up/calculations/reporting). Climate-related targets are reviewed and approved by SSC. Targets are extended to relevant employee at 3 Plants through annual personal performance targets. Alternative Fuels & Energy Manager and his team, responsible of sourcing alternative fuels to plants, also have annual performance targets on alternative fuel supply rate and cost. CO2 emissions (total of 3 plants) are reported to HeidelbergCement annually. CO2 calculations are based on “WBCSD Cement Sustainability Initiative Cement CO2 and Energy Protocol, Version 3.1 CO2 Emissions and Energy Inventory”. Year 2018 scope-1 emissions is 5611429 tCO2e and scope-2 emissions is 248900 tCO2e.

Climate-related risks are defined and followed by RMEM and Corporate Risk Manager (CRM). Risks are reported by CRM who is Head of Compliance & Transparency pillar at SWC. Akçansa manages climate-related risks as a part of integrated risk management system through specific procedures issued both from Sabancı Holding and HeidelbergCement. Climate-related risks are regularly reported to both shareholders. Defined risk parameters are checked and evaluated regularly.

Akçansa publicly disclosed its 2020 specific CO2 emission target in 2010 sustainability report (first report and first CO2 target in Turkish cement industry) as 830 kg CO2/ton clinker (by end of 2018 we realised 837 kg CO2/ton clinker). The entire organisation from technicians to GM directly contributes to CO2 emission target through annual sustainability KPI targets such as specific heat consumption, rate of alternative fuels, cement/clinker ratio and energy efficiency.

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 2018	December 31 2018

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
Head office	Akcansa takes care of water footprint in the head office and the consumption is negligible in amount therefore it is not included in our disclosure.
Guest houses	Akcansa takes care of water footprint in the guest houses and the consumption is negligible in amount therefore it is not included in our disclosure.
Ready-mix concrete plants (RMC), aggregate plants (AGG), terminals (TER)	Akcansa takes into account the water footprint in all business activities. For RMC, AGG and TER operations implementation of water measurement tools have still been under investment. Therefore we hereby disclose only data of cement plants that accounts for the most of our water footprint.

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	Not very important	Safe and good quality groundwater is used in the cement operations.
Sufficient amounts of recycled, brackish and/or produced water available for use	Not very important	Not very important	Treated waste water and runoff water is recycled in cleaning, spraying for dust emission.

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%	In all 3 plants we regularly measure, monitor and report water withdrawals by total volumes. To implement water management measures and to meet stakeholders' expectations, water data should be credible, relevant and easy to understand. This requires the consistent use of metrics, terminology and definitions. Therefore, we regularly measure and monitor total water withdrawals, track water footprint on monthly basis, check regularly well permit limits, evaluate water consumptions with respect to production volumes.
Water withdrawals – volumes from water stressed areas	100%	In all 3 plants we regularly measure, monitor and report water withdrawals by volumes from water stressed areas. To implement water management measures and to meet stakeholders' expectations, water data should be credible, relevant and easy to understand. This requires the consistent use of metrics, terminology and definitions. Therefore, we regularly measure and monitor total water withdrawals as volumes from water stressed areas, track water footprint on monthly basis, check regularly well permit limits, evaluate water consumptions with respect to production volumes.
Water withdrawals – volumes by source	100%	In all 3 plants we regularly measure, monitor and report water withdrawals by total volumes by source. To implement water management measures and to meet stakeholders' expectations, water data should be credible, relevant and easy to understand. This requires the consistent use of metrics, terminology and definitions. Therefore, we regularly measure and monitor total water withdrawals as volumes by source, track water footprint on monthly basis, check regularly well permit limits, evaluate water consumptions with respect to production volumes.
Entrained water associated with your metals & mining sector activities - total volumes [only metals and mining sectors]	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<Not Applicable>	<Not Applicable>
Water withdrawals quality	100%	In all 3 plants we regularly check water withdrawals quality through water analysis and report to the Ministry of Environment.
Water discharges – total volumes	100%	In all 3 plants we regularly measure, monitor and report water discharges by total volumes. According to CSI water reporting guideline, domestic waste water discharges are not considered to be able to make an industrial benchmark. Additionally, according to the Turkish regulation, discharges below 10,000 m3/day are not required to be continuously measured. In our plants wastewater treatment units are permitted based on daily average discharge flowrate. The discharge volumes are accepted as defined in the permits. Total volumes are calculated by adding up all discharges.
Water discharges – volumes by destination	100%	In all 3 plants we regularly measure, monitor and report water discharges by total volumes by destination. According to CSI water reporting guideline, domestic waste water discharges are not considered to be able to make an industrial benchmark. Additionally, according to the Turkish regulation, discharges below 10,000 m3/day are not required to be continuously measured. In our plants wastewater treatment units are permitted based on daily average discharge flowrate. The discharge volume is accepted as defined in the permits by destination.
Water discharges – volumes by treatment method	100%	In all 3 plants we regularly measure, monitor and report water discharges by total volumes by treatment method. According to CSI water reporting guideline, domestic waste water discharges are not considered to be able to make an industrial benchmark. Additionally, according to the Turkish regulation, discharges below 10,000 m3/day are not required to be continuously measured. In our plants wastewater treatment units are permitted based on daily average discharge flowrate. The discharge volume is accepted as defined in the permits by destination. We monitor each treatment unit discharge, but we do not report volumes by treatment method.
Water discharge quality – by standard effluent parameters	100%	According to CSI water reporting guideline, domestic waste water discharges are not considered to be able to make an industrial benchmark. Quality by standard effluent parameters are measured regularly according to regulation. At three discharge points, measurements done every 2 months and at the other two points, every 4 months.
Water discharge quality – temperature	Not relevant	There is no obligation to follow temperature quality parameters according to regulation for cement sector.
Water consumption – total volume	100%	According to CSI Water protocol and guideline, the water consumption is the difference between withdrawal and discharge.
Water recycled/reused	100%	The water harvested and collected in the pools is used partly for cooling and for dedusting.
The provision of fully-functioning, safely managed WASH services to all workers	100%	In all 3 plants clean water access is available for sanitation and hygiene purposes.

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	1781.4	About the same	Last year amount: 1880.53 (megaliters/year) There is no significant difference
Total discharges	211.8	About the same	Last year amount: 227.05 (megaliters/year) There is no significant difference
Total consumption	1569.6	About the same	Last year amount: 1653.47 (megaliters/year) There is no significant difference

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	16.6	About the same	WRI Aqueduct	Büyükçekmece Plant is located at water stressed area.

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	0.8	This is our first year of measurement	This amount is a very small amount relative to other sources. Harvested rainwater in BÇM is apprx. 80.000m3/year, is used for ground dedusting.
Brackish surface water/Seawater	Not relevant	<Not Applicable>	<Not Applicable>	Water from these sources is not used.
Groundwater – renewable	Relevant	1510.3	Please select	Last year amount: 1687.21 (megaliters/year). There is no significant difference
Groundwater – non-renewable	Not relevant	<Not Applicable>	<Not Applicable>	Water is not used from these sources.
Produced/Entrained water	Not relevant	<Not Applicable>	<Not Applicable>	There is no producing water.
Third party sources	Relevant	191.1	About the same	Last year amount: 188.04 (megaliters/year). There is no significant difference. Purchased water +Authority

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	<Not Applicable>	<Not Applicable>	
Brackish surface water/seawater	Relevant	195.6	Much higher	
Groundwater	Not relevant	<Not Applicable>	<Not Applicable>	
Third-party destinations	Relevant	16.2	Much lower	BÇM Domestic waste water is lined to Local Wastewater Authority infrastructure (İSKİ). (City collectors)

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	None	Please select	

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
Other

Tools and methods used
Internal company methods
Other, please specify (Sabancı Holding Compliance Report and HeidelbergCement Risk Management Guide)

Comment
Water-related risks are defined, followed and reported by Plant Managers, Raw Materials and Environmental Manager and Corporate Risk Manager. The risks are reported to Sabancı Holding at quarterly basis. The water risk assessment is defined in a procedure in compliance with the Heidelberg Cement Risk Management Guideline. The risks and opportunities are identified and presented to Risk Committee (established to report Corporate Governance Committee). In addition, One of the 6 Pillars constituting Akçansa Sustainability Working Committee is “Reducing Environmental Footprint” at which one topic is water management. Akçansa is going to announce 2030 Sustainability Targets in year 2019. There will be targets on managing water footprint.

Supply chain

Coverage
None

Risk assessment procedure
<Not Applicable>

Frequency of assessment
<Not Applicable>

How far into the future are risks considered?
<Not Applicable>

Type of tools and methods used
<Not Applicable>

Tools and methods used
<Not Applicable>

Comment
We consider water risk very seriously and set targets to mitigate our water footprint.

Other stages of the value chain

Coverage
Partial

Risk assessment procedure
Water risks are assessed as part of an enterprise risk management framework

Frequency of assessment
Six-monthly or more frequently

How far into the future are risks considered?
>6 years

Type of tools and methods used
Other

Tools and methods used
Other, please specify (We consider water risk very seriously and set targets to mitigate our water footprint.)

Comment
Akçansa has a Corporate Risk Assessment Procedure. Water related risks are also reported to Sabancı Holding through Compliance Report and to HeidelbergCement as well.

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	In monthly basis, collected water quality data are checked and reported by environmental department to Executive Committee.
Water quality at a basin/catchment level	Not relevant, explanation provided	Not applicable
Stakeholder conflicts concerning water resources at a basin/catchment level	Not relevant, explanation provided	No complaints or conflict has occurred up till now.
Implications of water on your key commodities/raw materials	Not relevant, explanation provided	We do care water management in our raw material quarries and take required measures to mitigate our water footprint.
Water-related regulatory frameworks	Relevant, always included	3 cement plants have ISO 14001 Environmental Management Certificate. Water footprint is managed as a part of the management system. Environmental Engineers at each Plants follow up the regulations and report status, any upcoming regulatory revisions, monitors and reports Legal Compliance Report.
Status of ecosystems and habitats	Not relevant, explanation provided	We do care biodiversity in our raw material quarries and do rehabilitation activities where the operations are over. In such areas we do care protection water sources.
Access to fully-functioning, safely managed WASH services for all employees	Not relevant, explanation provided	WASH Services is not a risk therefore not evaluated.
Other contextual issues, please specify	Not relevant, explanation provided	No other contextual issues exist.

W3.3c

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

	Relevance & inclusion	Please explain
Customers	Not considered	National and local stakeholder meetings are done annually where environmental concerns are discussed. So far, water management was not in the agenda of the stakeholders.
Employees	Relevant, always included	Annually environmental trainings, toolbox talks are planned.
Investors	Not considered	National and local stakeholder meetings are done annually where environmental concerns are discussed. So far, water management was not in the agenda of the stakeholders.
Local communities	Not considered	National and local stakeholder meetings are done annually where environmental concerns are discussed. So far, water management was not in the agenda of the stakeholders.
NGOs	Not considered	National and local stakeholder meetings are done annually where environmental concerns are discussed. So far, water management was not in the agenda of the stakeholders.
Other water users at a basin/catchment level	Not considered	National and local stakeholder meetings are done annually where environmental concerns are discussed. So far, water management was not in the agenda of the stakeholders.
Regulators	Relevant, always included	As Company policy, regulatory conformity is mandatory. Always included to assessments.
River basin management authorities	Not considered	National and local stakeholder meetings are done annually where environmental concerns are discussed. So far, water management was not in the agenda of the stakeholders.
Statutory special interest groups at a local level	Not considered	National and local stakeholder meetings are done annually where environmental concerns are discussed. So far, water management was not in the agenda of the stakeholders.
Suppliers	Relevant, sometimes included	Third party supplement sustainability risks are considered.
Water utilities at a local level	Not considered	
Other stakeholder, please specify	Not considered	

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.

Water supply is a critical issue in cement manufacturing process within the content of ISO 14001:2015 system. We have targets to the decrease water withdrawal from wells. Instead we attempt to use recycled and rain harvested water. we have invested for water collection ponds. The water is reused in the process and in dedusting works. Each cement plant has water reduction targets annually. To achieve the best water management methodology the flow diagrams have been prepared and measuring process via flowmeters has already been completed. Water consumption has been controlled regularly on monthly basis and reported to Executive Committee. Regarding our value-chain, on the other hand, we do care water management from our quarries which are operated by 3rd party subcontractors. We have water plans, we do protect water resources. And we do report to Local Environmental Offices about our impact while operating. All suppliers should obey our environmental procedures within the content of ISO 14001:2015 which includes measures of water management to mitigate water footprint, protect water resources from contamination.

Water-related risks are defined, followed and reported by Plant Managers, Raw Materials and Environmental Manager and Corporate Risk Manager. The risks are reported to Sabancı Holding at quarterly basis. The water risk assessment is defined in a procedure in compliance with the Heidelberg Cement Risk Management Guideline. The risks and opportunities are identified and presented to Risk Committee (established to report Corporate Governance Committee).

In addition, One of the 6 Pillars constituting Akçansa Sustainability Working Committee is "Reducing Environmental Footprint" at which one topic is water management. Akçansa is going to announce 2030 Sustainability Targets in year 2019. There will be targets on mitigating water footprint.

W4. Risks and opportunities

W4.1

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

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

W4.1a

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

Upon global water risk assessments and reports, it is anticipated that Turkey is potentially in water-scarcity area. Therefore, Akcansa defines water management under sustainability ambitions.

Following actions are integrated in company road map;

1. Implementation of CSI water guideline to all cement plants.

2. Water recovery/recycle and rain water harvesting investments in all cement plants.

3. Investment for water flowmeters at all cement plants

4. Alternative water sources like seawater desalination project have been studied for Çanakkale Plant.

W4.1b

(W4.1b) What is the total number of facilities exposed to water risks with the potential to have a substantive financial or strategic impact on your business, and what proportion of your company-wide facilities does this represent?

	Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
Row 1	1	26-50	The production site is located ±500 meters East from the Buyukcekmece Lake. Water is not directly extracted from the lake but from the 8 wells located on plant site. According to the Falkenmark water scarcity index, Marmara Basin is classified as potential water scarcity area

W4.1c

(W4.1c) By river basin, what is the number and proportion of facilities exposed to water risks that could have a substantive impact on your business, and what is the potential business impact associated with those facilities?

Country/Region
Turkey

River basin
Other, please specify (Marmara Basin)

Number of facilities exposed to water risk
1

% company-wide facilities this represents
26-50

Production value for the metals & mining activities associated with these facilities
<Not Applicable>

% company's annual electricity generation that could be affected by these facilities
<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities
<Not Applicable>

% company's total global revenue that could be affected
Less than 1%

Comment
Increase of water supply costs will lead to higher operation cost.

W4.2

(W4.2) Provide details of identified risks in your direct operations with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

Country/Region
Turkey

River basin
Other, please specify (Marmara Basin)

Type of risk
Physical

Primary risk driver
Increased water scarcity

Primary potential impact
Increased operating costs

Company-specific description
Difficult access to water increases the operational expense

Timeframe
4 - 6 years

Magnitude of potential impact
Medium-low

Likelihood
Likely

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

Potential financial impact figure (currency)
1500000

Potential financial impact figure - minimum (currency)
<Not Applicable>

Potential financial impact figure - maximum (currency)
<Not Applicable>

Explanation of financial impact
Increased operational cost

Primary response to risk
Adopt water efficiency, water re-use, recycling and conservation practices

Description of response
Establish site-specific targets Infrastructure investment Promote best practice and awareness Water management incentives

Cost of response

Explanation of cost of response
The cost is an estimated value and related to the construction of water recycling systems in case of water scarcity in the region of our cement plants, recycling, harvesting and desalination systems will be alternative solutions. The promotion of best practices and awareness do not pose considerable costs. Employees will have performance initiatives related to water management and/or reduction target

W4.2a

(W4.2a) Provide details of risks identified within your value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

Country/Region
Turkey

River basin
Other, please specify (Marmara Basin)

Stage of value chain
Supply chain

Type of risk
Regulatory

Primary risk driver
Higher water prices

Primary potential impact
Increased operating costs

Company-specific description
Increase of water supply costs will lead to higher operation cost

Timeframe
>6 years

Magnitude of potential financial impact
Low

Likelihood
Likely

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

Potential financial impact figure (currency)
1000000

Potential financial impact figure - minimum (currency)
<Not Applicable>

Potential financial impact figure - maximum (currency)
<Not Applicable>

Explanation of financial impact
Higher operating costs

Primary response to risk
Other, please specify (Finding alternative water resources and purchase from 3rd parties)

Description of response
Finding alternative water resources and purchase from 3rd parties

Cost of response
250000

Explanation of cost of response
The estimated cost is due to increase of cost to access water. promotion of best practices and awareness do not pose considerable costs.

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
- Investing for rainwater harvesting systems. - Improving existing rainwater harvesting design to provide additional source by preventing overflows

Estimated timeframe for realization
1 to 3 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)
750000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact
This opportunity will help saving the water related costs.

Type of opportunity
Other

Primary water-related opportunity
Other, please specify (Increased shareholder value)

Company-specific description & strategy to realize opportunity
- Having the water management as a top priority in all operations. - To reach the 2020 water management ambitions with the help of the ambitions, Akcansa shows its progress in water management. The progress is communicated through the sustainability reports, stakeholder meetings.

Estimated timeframe for realization
1 to 3 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)
500000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact

W5. Facility-level water accounting

W5.1

(W5.1) For each facility referenced in W4.1c, provide coordinates, total water accounting data and comparisons with the previous reporting year.

Facility reference number
Facility 1

Facility name (optional)
Büyükçekmece Cement Plant

Country/Region
Turkey

River basin
Other, please specify (Marmara Basin)

Latitude
41.0118

Longitude

28.3327

Primary power generation source for your electricity generation at this facility
<Not Applicable>

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
362.04

Comparison of withdrawals with previous reporting year
Higher

Total water discharges at this facility (megaliters/year)
16.2

Comparison of discharges with previous reporting year
About the same

Total water consumption at this facility (megaliters/year)
345.8

Comparison of consumption with previous reporting year
About the same

Please explain
There is no significant difference with previous year. Harvested rainwater is added in total withdrawal.

Facility reference number
Facility 2

Facility name (optional)
Çanakkale Cement Plant

Country/Region
Turkey

River basin
Other, please specify (North Aegean Basin)

Latitude
39.5156

Longitude
26.1439

Primary power generation source for your electricity generation at this facility
<Not Applicable>

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
1283.5

Comparison of withdrawals with previous reporting year
About the same

Total water discharges at this facility (megaliters/year)
171.7

Comparison of discharges with previous reporting year
About the same

Total water consumption at this facility (megaliters/year)
1111.8

Comparison of consumption with previous reporting year
About the same

Please explain

Facility reference number
Facility 3

Facility name (optional)
Ladik Cement Plant

Country/Region
Turkey

River basin
Other, please specify (Yesilirmak Basin)

Latitude
40.5607

Longitude
35.5306

Primary power generation source for your electricity generation at this facility
<Not Applicable>

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
135.9

Comparison of withdrawals with previous reporting year
About the same

Total water discharges at this facility (megaliters/year)
23.9

Comparison of discharges with previous reporting year
About the same

Total water consumption at this facility (megaliters/year)
112

Comparison of consumption with previous reporting year
About the same

Please explain

W5.1a

(W5.1a) For each facility referenced in W5.1, provide withdrawal data by water source.

Facility reference number
Facility 1

Facility name
Büyükçekmece Cement Plant

Fresh surface water, including rainwater, water from wetlands, rivers and lakes
0.8

Brackish surface water/seawater

Groundwater - renewable
91

Groundwater - non-renewable

Produced/Entrained water

Third party sources
191

Comment
3rd party- Tap water is supplied by local City authority (İSKİ) in BÇM 3rd Party- Purchased water from external supplier

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Facility reference number
Facility 2

Facility name
Çanakkale Cement Plant

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

Brackish surface water/seawater

Groundwater - renewable
1283.5

Groundwater - non-renewable

Produced/Entrained water

Third party sources

Comment
Only Wells

Facility reference number
Facility 3

Facility name
Ladik Cement Plant

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

Brackish surface water/seawater

Groundwater - renewable
135.5

Groundwater - non-renewable

Produced/Entrained water

Third party sources

Comment
Only Wells

W5.1b

(W5.1b) For each facility referenced in W5.1, provide discharge data by destination.

Facility reference number
Facility 1

Facility name
Büyükçekmece Cement Plant

Fresh surface water

Brackish surface water/Seawater

Groundwater

Third party destinations
16.2

Comment
This domestic water used amount is calculated average consumption per person/day by TUİK data. Plant's domestic wastewater is lined to local Wastewater Authority's pipeline (İSKİ).

Facility reference number
Facility 2

Facility name
Çanakkale Cement Plant

Fresh surface water

Brackish surface water/Seawater
171.7

Groundwater

Third party destinations

Comment
Wastewater treatment plants' discharged value and domestic water used calculated by average person/day consumption

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Facility reference number
Facility 3

Facility name
Ladik Cement Plant

Fresh surface water

Brackish surface water/Seawater
23.9

Groundwater

Third party destinations

Comment
Wastewater treatment plants' discharged value and domestic water used calculated by average person/day consumption

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W5.1c

(W5.1c) For each facility referenced in W5.1, provide the proportion of your total water use that is recycled or reused, and give the comparison with the previous reporting year.

W5.1d

(W5.1d) For the facilities referenced in W5.1, what proportion of water accounting data has been externally verified?

Water withdrawals – total volumes

% verified
1-25

What standard and methodology was used?
İSKİ authority controls every month for Public Source in Buyukcekmece Plant

Water withdrawals – volume by source

% verified
Not verified

What standard and methodology was used?

Water withdrawals – quality

% verified
Not verified

What standard and methodology was used?

Water discharges – total volumes

% verified
1-25

What standard and methodology was used?
İSKİ authority controls every month for Public Source in Buyukcekmece Plant

Water discharges – volume by destination

% verified
Not verified

What standard and methodology was used?

Water discharges – volume by treatment method

% verified
Not verified

What standard and methodology was used?

Water discharge quality – quality by standard effluent parameters

% verified
76-100

What standard and methodology was used?
Canakkale (every 2 months) / Ladik (every 4 months) Plant wastewaters are measured by accredited laboratories. Buyukcekmece has no discharge but domestic wastewater. SM2540D, TS5676, EPA200.7,SM5220B, TS4164, SM3500-Cr B, SM4500, SM2120C, SM2550B, SM4500, SM5520B

Water discharge quality – temperature

% verified
76-100

What standard and methodology was used?
Canakkale (every 2 months) / Ladik (every 4 months) Plants are measured by accredited laboratories. Method SM 2550 B

Water consumption – total volume

% verified
Not verified

What standard and methodology was used?

Water recycled/reused

% verified
Not verified

What standard and methodology was used?

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	Other, please specify ((Incorporated within group environmental,) Incorporated within group environmental, sustainability or EHS policy)	Akcansa Environmental Policy is open to public access on our web site. The water management strategy is communicated in our Sustainability Reports. Performance targets are set at plant level and at employee level.

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	Akçansa Chairman of the Board and Vice Chairman are the highest-level individuals with direct responsibility for all issues relating to environmental sustainability issues. The Chairman (representing Sabancı Holding) and Vice chairman (representing HeidelbergCement) are informed by Akcansa General Manager about the progress on sustainability actions of Akcansa. The developments are periodically tracked by the Sustainability Working Committee, chaired by Deputy GM – Operations, who informs GM regularly at Executive Committee Meetings. Besides water data has been reported to HeidelbergCement on monthly basis with OCR reports.

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	Sporadic - as important matters arise	Reviewing and guiding business plans Reviewing and guiding major plans of action Reviewing and guiding strategy	Akçansa GM briefs board when critical issues arise.

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)

Sustainability committee

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

Half-yearly

Please explain

Sustainability Steering Committee (SSC) which consists of Akçansa Executive Committee Members (GM and DGMs) is the highest-level management committee below Board-level. Its main mission is to approve and follow up sustainability targets & relevant projects.The annual practices and performance measurement of the company according to Sustainability Ambitions 2020 are conducted by Sustainability Working Committee which reports the practices realized, performance results obtained, performance improvements achieved in materiality issues to Sustainability Steering Committee directly and to the Board of Directors by means of risk reports. One of the critical tasks in environmental sustainability agenda has been the risks and opportunities in water related issues. The Plant has their own water management targets. The data collected from the plants are always checked and controlled by environmental and site engineers. The annual figures are shared in the Committee.

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, 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?

Akcansa has actively been involved in various NGO's to influence policy. Volunteering involvement to working groups and projects on water and sustainability issues gives new insights and experience as well as taking the opportunity for policy developments. Some NGO's are as follows:

• ÇEVKO (Environmental protection foundation - sustainability and water working group)

• WBCSD Turkey (Circular economy, water and sustainability reporting working groups).

• TUSIAD (the Turkish Industry and Business Association - Environmental and sustainability working group) We give opinions in the regulations changes, lobbying activities in relevant authorises develop projects and involve in projects, work to raise awareness and knowledge about water and sustainability, and support the public through working groups for COPs.

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	5-10	Water is a critical issue for our process. Hence it is already integrated to our business plans. The water utilization targets are already included in 2020 Sustainability Ambitions. Also, we are in the process of setting 2030 sustainability goals. Water related issues will also be in our 2030 targets
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	5-10	Water utilization targets are included in 2030 sustainability goals. The strategy ia to achieve reduction targets, to improve water management process through bringing new technology if available and to train site employee so that every person takes responsibility to reach company targets.
Financial planning	No, water-related issues were reviewed but not considered as strategically relevant/significant	5-10	Especially in Canakkale Plant a financial analysis have been studied for desalination project for the future need of plant. as a new production investment gets in place current sources will be insufficient and such a new source can be needed.

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)

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

Water-related OPEX (+/- % change)

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

Please explain

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	No, but we anticipate doing so within the next two years	

W7.4

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

Row 1

Does your company use an internal price on water?
No, and we do not anticipate doing so within the next two years

Please explain

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	Targets are monitored at the corporate level	

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 consumption

Level
Company-wide

Primary motivation
Reduced environmental impact

Description of target
5% reduction of water consumption

Quantitative metric
% reduction in total water consumption

Baseline year
2013

Start year
2013

Target year
2020

% achieved

Please explain

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
Tradeoff

Type of linkage/tradeoff
Other, please specify (Energy saving but increasing water using)

Description of linkage/tradeoff
Akcansa installed an energy recovery unit, to generate electricity from its own waste heat energy. This plant is a BAT (Best Available Technique) for energy saving in cement industry. However, this plant requires water supplyto operate.

Policy or action

W10. Verification

W10.1

(W10.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1d)?
No, we do not currently verify any other water information reported in our CDP disclosure

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	General Manager	Board/Executive board

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)].
Yes

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