

Kobe Steel., Ltd. - Water Security 2019

W0. Introduction

W0.1

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

Kobe Steel, Ltd. is one of Japan's leading steelmakers, as well as a major supplier of aluminum and copper products. Other business segments consist of wholesale power supply, machinery, construction machinery and electronic materials and other businesses.

The Kobe Steel Group is comprised of numerous consolidated and equity-valued companies in Japan, the Americas, Asia and Europe.

KOBELCO is the corporate logo mark and brand name of the Kobe Steel Group. Behind the KOBELCO mark is Kobe Steel's commitment to excellence and quality.

COMPANY NAME:

Kobe Steel, Ltd.

JAPANESE NAME:

Kabushiki Gaisha Kobe Seikoshō

FOUNDED:

September 1, 1905

INCORPORATED:

June 28, 1911

CAPITAL:

JPY250,930,033,900 (as of March 31, 2019)

PRESIDENT & CEO:

Mitsugu Yamaguchi

NUMBER OF EMPLOYEES:

11,401 (Nonconsolidated, as of March 31, 2019)

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	April 1 2018	March 31 2019

W0.3

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

Japan

W0.4

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

JPY

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 financial 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
Non production sites	Since usage of water of these sites is very few, we recognize that there are few risk for water in these sites.

W1. Current state

W1.1

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

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital	Important	Use of fresh water in direct operation: used in cleaning steel, aluminum, copper, etc. in the manufacturing process. Basically, water is being recycled through cascade use, but because of evaporation and wastewater discharging, fresh water are added as makeup water. Use of fresh water in indirect use: Used by secondary processing manufacturers
Sufficient amounts of recycled, brackish and/or produced water available for use	Vital	Important	Use of water other than fresh water in direct operation: Used to clean steel, aluminum, copper, etc. in the manufacturing process. Basically, water is being recycled through cascade use. Seawater is also used as cooling water at some facilities. Indirect use: Recycled water is used by a secondary processing manufacturer.

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%	Monitoring is carried out once a year.
Water withdrawals – volumes from water stressed areas	26-50	According to the WRI Aqeduct, six of our 12 facilities are considered to be areas with high water stress.
Water withdrawals – volumes by source	100%	The amount of water withdrawal is grasped for cost management.
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	1-25	The turbidity, temperature, etc. of the received water are measured at facilities.
Water discharges – total volumes	100%	Monitoring is carried out once a year.
Water discharges – volumes by destination	100%	Monitoring is carried out once a year.
Water discharges – volumes by treatment method	100%	Monitoring is carried out once a year.
Water discharge quality – by standard effluent parameters	100%	Monitoring is carried out at least once a year at the frequency promised by laws and local governments.
Water discharge quality – temperature	1-25	The temperature of wastewater is measured at some facilities.
Water consumption – total volume	100%	The gap between water withdrawal and wastewater are monitored once a year.
Water recycled/reused	51-75	Monitoring is carried out once a year. Some parts of the amount of recycled water is estimated from the equipment specifications.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Tap water is used for water which employees use for drinking. The water quality of the tap water is guaranteed by local water authorities.

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	1427146	About the same	There was no significant change over last year, as there were no business changes that would have a significant impact on total withdrawals. There will probably be no significant change over the next few years.
Total discharges	1402032	About the same	There was no significant change over last year, as there were no business changes that would have a significant impact on total discharges. There will probably be no significant change over the next few years.
Total consumption	25114	About the same	There was no significant change over last year, as there were no business changes that would have a significant impact on total consumption. There will probably be no significant change over the next few years.

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	74	About the same	WRI Aqueduct	According to the WRI Aqueduct, six of our 12 plants are evaluated as areas with relatively high water stress, and the water withdrawal rate of these plants accounts for 74% of the total. In this column, the total freshwater withdrawal is described. According to the response to W0. 6a, the report on water withdrawal excludes headquarters and so on that are not manufacturing bases.

W1.2h

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Not relevant	<Not Applicable>	<Not Applicable>	All our fresh water, except groundwater, is supplied from a third-party source, so we chose "Not relevant" here.
Brackish surface water/Seawater	Relevant	1378170	About the same	Brackish surface water/Seawater are important as they are used as cooling water for equipment in the production process of our products. There was no significant change from the previous year, as there was no business change that would have a significant impact on the brackish surface water/Seawaterwater withdrawal. There will probably be no significant change over the next few years.
Groundwater – renewable	Relevant	4833	About the same	Groundwater is important because it is used as cleaning water in the production of our products. There has been no significant change since last year in the production status of groundwater used facilities. There will probably be no significant change over the next few years.
Groundwater – non-renewable	Not relevant	<Not Applicable>	<Not Applicable>	Non-renewable groundwater is not used.
Produced/Entrained water	Not relevant	<Not Applicable>	<Not Applicable>	We believe that produced/Entrained water is negligibly small in our manufacturing process, since we mainly manufacture metal products.
Third party sources	Relevant	44143	About the same	All our fresh water except groundwater is supplied from a third party sources. Third party water sources are important because the water is used as cleaning water in the manufacture of our products. There was no significant change from the previous year, as there was no business change that would have a significant impact on the water from hird party sources. There will probably be no significant change over the next few years.

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	Relevant	1648	About the same	It is important to discharge some of the water used as wash water, etc. in the manufacture of our products. Facilities with nearby rivers discharge into them. The wastewater generated at the facilities is purified by wastewater treatment facilities to a level that meets legal requirements, and then discharged to nearby rivers. There was no significant change from the previous year, as there were no business changes that would have a significant impact on the volume of wastewater. There will probably be no significant change over the next few years.
Brackish surface water/seawater	Relevant	1399733	About the same	98% of the wastewater discharged to the sea is indirect cooling water derived from seawater. Semi-saline surface water and sea water are important as they are used as cooling water for equipment in the production of our products. The generated process wastewater(derived from fresh water) in the manufacturing process at the facilities is purified by wastewater treatment facilities to a level that meets legal requirements, and then discharged to the sea. There was no significant change from the previous year, as there were no business changes that would have a significant impact on the total water discharge . There will probably be no significant change over the next few years.
Groundwater	Not relevant	<Not Applicable>	<Not Applicable>	No water has been discharged into the ground.
Third-party destinations	Relevant	651	About the same	It is important to discharge some of the water used as wash water, etc. in the manufacture of our products. Some business sites drain into sewage systems managed by third-party. The wastewater generated at the facilities is purified by wastewater treatment facilities to a level that meets legal requirements, and then discharged to sewerage. There was no significant change from the previous year, as there were no business changes that would have a significant impact on the volume of wastewater. There will probably be no significant change over the next few years.

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	Our total water recycling rate is approximately 96%. Since there were no business changes that would have a major impact on water recycling and reuse, the recycling or reusing rate was almost the same as previous year. We believe there will be no major changes in the future. By recycling water, the amount of water withdrawal can be reduced. In calculating the recycling/reusing rate, some parts are estimated based on equipment specifications.

W1.4

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

Yes, our customers or other value chain partners

W1.4c

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

We believe it is important to respond sincerely to customer requests.

By responding to the CDP Supply Chain module requested by customers, we believe that we are working properly with customers.

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 a standalone issue

Frequency of assessment

Annually

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

Internal company methods

Comment

Every year, forecasts for the next fiscal year are calculated at each facilities to determine whether or not the contract amount of industrial water is appropriate. In addition, if drought is anticipated, the securing of alternative means and the accompanying production impact are evaluated. The headquarters also uses the WRI Aqueduct to assess the risks of each facility.

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 haven't try to assess for suply chain yet.

Other stages of the value 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 haven't try to assess for value chain yet.

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	River water, the source of third-party water supply, is critical to our operations. Evaluations considering the availability of river water are conducted.
Water quality at a basin/catchment level	Relevant, always included	River water is crucial for our operations. River water quality (temperature and turbidity) is considered for evaluation.
Stakeholder conflicts concerning water resources at a basin/catchment level	Relevant, always included	River water is crucial for our operations. The water withdrawal restriction during drought is evaluated.
Implications of water on your key commodities/raw materials	Relevant, always included	The use of water is very important in the manufacture of our products. Consideration is given to the amount and the quality of the water used.
Water-related regulatory frameworks	Relevant, always included	We emphasize compliance with regulations. As an example, it is necessary to comply with the amount of notification when drawing groundwater.
Status of ecosystems and habitats	Relevant, not included	This has not been included in the evaluation at this time yet.
Access to fully-functioning, safely managed WASH services for all employees	Relevant, always included	It is important to have access to sanitation facilities that are appropriate for the health of employees. Enough environment is in place, and it is always evaluated that there are no problems.
Other contextual issues, please specify	Not relevant, explanation provided	In particular, other issues are not recognized.

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, not included	Because our customers are diverse, they are not currently included in the evaluation. The timing of future evaluation is undetermined.
Employees	Relevant, always included	It is extremely important to check the hazard maps of facilities and to check whether employees are likely to suffer water-related disasters during work.
Investors	Relevant, sometimes included	Opinions from investors are valuable in assessing our water-related risks.
Local communities	Relevant, always included	It is extremely important to coexist with local communities, and large facilities communicate with local communities and receive their opinions.
NGOs	Not relevant, explanation provided	We are not aware of NGOs which related to us regarding water issues.
Other water users at a basin/catchment level	Relevant, not included	We do not evaluate it because it is supplied by a third party and a third party adjusts water.
Regulators	Relevant, always included	It is extremely important to comply with water withdrawal limits and wastewater regulations established by regulatory bodies, river basin management authorities, and local water utilities.
River basin management authorities	Relevant, always included	It is extremely important to comply with water withdrawal limits and wastewater regulations established by regulatory bodies, river basin management authorities, and local water utilities.
Statutory special interest groups at a local level	Relevant, sometimes included	It is considered very important to consider the relationship with fishery associations and other related organizations.
Suppliers	Not considered	
Water utilities at a local level	Relevant, always included	It is extremely important to comply with water withdrawal limits and wastewater regulations established by regulatory bodies, river basin management authorities, and local water utilities.
Other stakeholder, please specify	Not relevant, explanation provided	Other stakeholders have not been aware yet.

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.

Every year, forecasts for the next fiscal year are calculated at each facility to determine whether or not the contract amount of industrial water is appropriate. In addition, if drought is anticipated, the securing of alternative means and the accompanying production impact are evaluated.

The head office also uses the WRI Aqueduct to assess the risks of each facility.

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?

Definition of Substantial Effects: Regarding fresh water and seawater (for cooling) used in direct operation, decrease in operation mainly due to inability to obtain necessary water due to deterioration in quality, depletion of quantity (necessary and sufficient for operation), increase in cost, etc. For example, shutdown due to a decrease in water withdrawal due to drought, etc.

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	6	26-50	Baseline water stress at Kakogawa Works, Kobe Works, Fujisawa Plant, Ibaraki Plant, Harima Plant, and Kobe Corporate Research Laboratories are evaluated as relatively high in the WRI AQUEDUCT Baseline Water Stress category.

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

Japan

River basin

Other, please specify (Kako River, Yodo River, Aigawa River, Akashi River, and Kashiokawa River)

Number of facilities exposed to water risk

6

% 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

Unknown

Comment

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

Japan

River basin

Other, please specify (Kako River, Yodo River, Aigawa River, Akashi River, and Kashiokawa River)

Type of risk

Physical

Primary risk driver

Rationing of municipal water supply

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

Limited supply of third party sources can affect production, such as the inability to clean our products. At the upstream side of the water used at the Kakogawa Works, there is a Gongen dam (11 million tons of stored water) constructed for the purpose of stable supply of water for industrial use in the Kakogawa area, and a large weir (1.96 million tons of stored water) constructed for the purpose of ensuring the flow rate of industrial water. Therefore, we believe that there is a low risk of impacting production for Kakogawa works. The amount of water from suppliers is also secured at other facilities.

Timeframe

More than 6 years

Magnitude of potential impact

Medium-high

Likelihood

Unlikely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

If the supply of third party sources is restricted, it is necessary to secure the necessary water by another means, or if it can not be done, the operation has to be dropped, resulting in cost increase and a decrease in profitability.

Primary response to risk

Adopt water efficiency, water re-use, recycling and conservation practices

Description of response

In the production process, efforts are made to reduce water consumption by thoroughly improving water efficiency, reusing water, and recycling. Our total water recycling rate is approximately 96%.

Cost of response

Explanation of cost of response

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

Australia

River basin

Not known

Stage of value chain

Supply chain

Type of risk

Physical

Primary risk driver

Flooding

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

Part of coal, which is a raw material for the steel business, is procured from Australia. In the event of a natural disaster such as a flood in the area, procurement may become difficult, and production might be affected.

Timeframe

>6 years

Magnitude of potential financial impact

Medium-high

Likelihood

Unlikely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

Part of coal, which is a raw material for the steel industry, is procured from Australia. In the event of a natural disaster such as a flood in the area, procurement may become difficult, and production might be affected.

Primary response to risk

Other, please specify

Description of response

We diversify its risks by procuring coal from the North American region and by using multiple suppliers.

Cost of response

Explanation of cost of response

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

Products and services

Primary water-related opportunity

Increased sales of existing products/services

Company-specific description & strategy to realize opportunity

We have products such as grid-Type Sabo Dams for Erosion Control and water treatment facilities and these sales may be promoted.

Estimated timeframe for realization

Current - up to 1 year

Magnitude of potential financial impact

Low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact

Sales of grid-Type Sabo Dams for Erosion Control and water treatment facilities may be promoted.

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)

Kakogawa Works, Kobe Works, Fujisawa Plant, Ibaraki Plant, Harima Plant, and Kobe Corporate Research Laboratories

Country/Region

Japan

River basin

Other, please specify (Kako River, Yodo River, Aigawa River, Akashi River, and Kashiokawa River)

Latitude

34.723782

Longitude

134.824782

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)

1414531

Comparison of withdrawals with previous reporting year

About the same

Total water discharges at this facility (megaliters/year)

1391854

Comparison of discharges with previous reporting year

About the same

Total water consumption at this facility (megaliters/year)

22677

Comparison of consumption with previous reporting year

About the same

Please explain

Although the amount of water used in some processes has been reduced, there is no significant change in the amount of water withdrawal, discharged and consumption as a whole.

W5.1a

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

Facility reference number

Facility 1

Facility name

Kakogawa Works, Kobe Works, Fujisawa Plant, Ibaraki Plant, Harima Plant, and Kobe Corporate Research Laboratories

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

0

Brackish surface water/seawater

1378170

Groundwater - renewable

0

Groundwater - non-renewable

0

Produced/Entrained water

0

Third party sources

36361

Comment

W5.1b

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

Facility reference number

Facility 1

Facility name

Kakogawa Works, Kobe Works, Fujisawa Plant, Ibaraki Plant, Harima Plant, and Kobe Corporate Research Laboratories

Fresh surface water

22

Brackish surface water/Seawater

1391762

Groundwater

0

Third party destinations

70

Comment

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.

Facility reference number

Facility 1

Facility name

Kakogawa Works, Kobe Works, Fujisawa Plant, Ibaraki Plant, Harima Plant, and Kobe Corporate Research Laboratories

% recycled or reused

76-99%

Comparison with previous reporting year

About the same

Please explain

In calculating the recycling rate, some parts are estimated based on equipment specifications.

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

Not verified

What standard and methodology was used?

Not verified yet

Water withdrawals – volume by source

% verified

Not verified

What standard and methodology was used?

Not verified yet

Water withdrawals – quality

% verified

Not verified

What standard and methodology was used?

Not verified yet

Water discharges – total volumes

% verified

Not verified

What standard and methodology was used?

Not verified yet

Water discharges – volume by destination

% verified

Not verified

What standard and methodology was used?

Not verified yet

Water discharges – volume by treatment method

% verified

Not verified

What standard and methodology was used?

Not verified yet

Water discharge quality – quality by standard effluent parameters

% verified

76-100

What standard and methodology was used?

Wastewater is inspected by an external qualified laboratory to ensure that it is within legal and regulatory standards.

Water discharge quality – temperature

% verified

76-100

What standard and methodology was used?

Regarding the temperature of wastewater, we constantly measure the temperature of wastewater appropriately at facilities that are stipulated by laws, regulations, and agreements with the government.

Water consumption – total volume

% verified

Not verified

What standard and methodology was used?

Not verified yet

Water recycled/reused

% verified

Not verified

What standard and methodology was used?

Not verified yet

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.

Row	Scope	Content	Please explain
1	Company-wide	Description of business dependency on water Description of business impact on water Company water targets and goals Commitments beyond regulatory compliance	In our Basic Environmental Management Policy, we hold up "Pursuing environmentally friendly manufacturing". In addition, as one of the Six Initiatives for Environmental Management in order to implement the Basic Environmental Management Policy, we have set "Environmentally friendly manufacturing" and "Comprehensive risk management procedures". integrated-reports2018-en(Policy).pdf

W6.2

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

No

W6.2c

(W6.2c) Why is there no board-level oversight of water-related issues and what are your plans to change this in the future?

	Primary reason	Board level oversight of water-related issues will be introduced in the next two years	Please explain
Row 1	This is because various voluntary initiatives have already been developed at facilities in accordance with the Basic Environmental Management Policy.	No	Board-level oversight is currently under consideration, and it is unclear whether it will be introduced within two years.

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)

Other C-Suite Officer, please specify (Chief officer responsible for companywide environmental management (Senior Managing Executive Officer))

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

As important matters arise

Please explain

The Environmental Management Subcommittee, which is headed by the Chief officer responsible for companywide environmental management, oversees water-related issues.

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, trade associations

Yes, funding research organizations

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?

It is implemented through participation in various review committees and opinion opinions as industry groups.

W6.6

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

Yes (you may attach the report - this is optional)

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	
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	5-10	
Financial planning	Yes, water-related issues are integrated	5-10	

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)

-55

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

0

Water-related OPEX (+/- % change)

6

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

0

Please explain

There will probably be no significant fluctuation in water-related CAPEX and OPEX in the following fiscal year.

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	Goals are monitored at the corporate level	Monitoring is carried out every fiscal year by reporting the results on water usage and wastewater volume from each site and the forecast for the following fiscal year.

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 (Reducing environmental impact by reducing usage volume of water)

Level

Company-wide

Motivation

Cost savings

Description of goal

We believe that reducing water consumption not only reduces costs, but also increases resilience to water shortages, resulting in continuing our business.

Baseline year

2016

Start year

2016

End year

2020

Progress

Our total water recycling rate is approximately 96%.

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

Increased energy use

Description of linkage/tradeoff

We actively promote the recycling of water, but the pumps used to recycle water consume electricity, leading to an increase in energy consumption. However, these pumps have a limited impact on our overall energy use.

Policy or action

Energy conservation is thoroughly promoted by optimizing the number of pumps operated according to the load.

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	Chief officer responsible for companywide environmental management (Senior Managing Executive Officer)	Other C-Suite Officer

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