

Welcome to your CDP Water Security Questionnaire 2021

W0. Introduction

W0.1

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

Kao. The Company is a Japan-based company that operates through two business segments: Consumer Product and Chemical. The Consumer Product segment has three divisions. The Cosmetic Business provides cosmetics such as lotion, foundation and lipstick. The Skin Care and hair Care Business offers premium skincare products such as face washes, as well as premium hair care products including shampoos, hair styling products and hair colouring products, among others. The Human Health Care Business provides food and beverage products such as drinks ; sanitary products including hygiene products and paper diapers, as well as personal health products such as bath additives. The Fabric and Home Care Business offers fabric care products including detergents for apparel use, and home care products including detergents for kitchen use. The Chemical Business provides oil and fat products such as fatty acids; functional materials products such as surface acting agents and additives for plastic use, as well as specialty chemical products such as essences, among others. The Cosmetic Business accounted for 16.9% of total turnover in fiscal 2020; The Skin Care and hair Care Business,22.4%; The Human Health Care Business,16.9%; The Fabric and Home Care Business, 27.1%; and The Chemical Business,16.7%. The Company reported JPY 1,382.0 b in revenues and 33,409 permanent employees at December 31, 2020.

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, 2020	December 31, 2020

W0.3

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

- Australia
- Austria
- Belgium
- Canada

China
China, Hong Kong Special Administrative Region
Czechia
Denmark
Finland
France
Germany
Indonesia
Italy
Japan
Malaysia
Mexico
Netherlands
New Zealand
Norway
Philippines
Republic of Korea
Russian Federation
Singapore
South Africa
Spain
Sweden
Switzerland
Taiwan, Greater China
Thailand
United Kingdom of Great Britain and Northern Ireland
United States of America
Viet Nam

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 operational control is exercised

W0.6

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

No

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	Vital	<p>As Kao plans to increase sales to reach the 2030 goal, production will rise accordingly, leading to higher water consumption.</p> <ul style="list-style-type: none"> - Primary use of freshwater in direct operation Freshwater is used as a raw material of our products and is indispensable to produce steam and cooling water used in the production process at our plants. It is also used as drinking water and water for sanitation for our employees. - Primary use of freshwater in indirect operation Freshwater is used as a raw material of our suppliers' products and is indispensable to produce steam and cooling water used in the production process at our suppliers' plants. It is also used as drinking water and water for sanitation for their employees. - Why the chosen importance rating was selected for freshwater in direct operations Main products of our company include products used on human bodies, or body washing products. That is why our factories require pure water with a certain quality as a material. Fresh water is also needed for safety of drinking water for our employees. As Kao has set a goal of reducing water strength in direct operations, Kao's water dependence in direct operations will weaken for the future. Kao is working to achieve the goal. - Why the chosen importance rating was selected for freshwater in indirect operations Main products of our company include products used on human bodies, or body washing products.

			<p>That is why our suppliers' factories require pure water with a certain quality as a material. Fresh water is also needed for safety of drinking water for their employees. As Kao has set a goal of reducing water strength in indirect operations, Kao's water dependence in indirect operations will weaken for the future. Kao is working to achieve the goal.</p>
<p>Sufficient amounts of recycled, brackish and/or produced water available for use</p>	<p>Vital</p>	<p>Not important at all</p>	<p>According to Kao's business plan until 2030, we plan to increase sales and the production volume at our Mexico Plant, which uses recycled water. Our Mexico plant has been improving its water footprint per product unit, but again, a production increase is planned, and water consumption during production will exceed the amount saved through the improvement effort. Consumption of recycled water will therefore increase.</p> <p>- Primary use in direct operation At our Mexico Plant, recycled water is essential for operation because it is difficult to obtain enough amount of fresh water. We receive water recycled at another facility, purify it, and use it to produce steam and cooling water.</p> <p>- Primary use in indirect operation None of our suppliers use non-freshwater.</p> <p>- Why the chosen importance rating was selected for their direct operation According to Kao's business plan until 2030, we plan to increase sales and the production volume at our Mexico Plant, which uses recycled water. Since it is difficult to obtain fresh water, recycled water is essential for Mexico Plant to operate. Our Mexico plant has been improving its water footprint per product unit, but again, a production increase is planned, and water consumption during production will exceed the amount saved through the improvement effort. Future dependency of recycled water will therefore increase.</p> <p>- Why the chosen importance rating was selected for their indirect operation</p>

			<p>Since we know from our surveys that none of Kao's suppliers use, and intend to use in future, non-freshwater, non-freshwater is not, and will not be, important at all for our suppliers. Kao believes that the dependence of recycled water in the future will not change.</p>
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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%	<p>We consider the water withdrawals volume as the amount appearing on invoice, etc. that shows the measurement by the flowmeter installed by a third party when water is supplied from that third party.</p> <p>When ground water is pumped at each site by the relevant base, we consider the water withdrawals volume to be the amount of water pumped as measured by the flowmeter.</p> <p>The person in charge at each site enters the water withdrawals volume into the database operated by the Kao Group once every month or two.</p> <p>The person in charge at the head office then checks the values entered into the database every month; if this person identifies any significant data fluctuation, he or she confirms the cause with the relevant base.</p>
Water withdrawals – volumes by source	100%	<p>We consider the water withdrawals volume by source as the amount appearing on invoice, etc. that shows the measurement by the flowmeter installed by a third party when water is supplied from that third party.</p> <p>When ground water is pumped at each site by the relevant base, we consider the water withdrawals volume to be the amount of water pumped as measured by the flowmeter.</p>

		<p>The person in charge at each site enters the water withdrawals volume for each source into the database operated by the Kao Group once every month or two.</p> <p>The person in charge at the head office then checks the values entered into the database every month; if this person identifies any significant data fluctuation, he or she confirms the cause with the relevant base.</p>
Water withdrawals quality	100%	<p>The person in charge at each base checks the water withdrawals quality like as color, odor and temperature every day.</p> <p>The person in charge at each production site checks the water color by comparing it against the color chart, and also checks the smell. If there were any problems, the person in charge report to the water supplier to solve it.</p>
Water discharges – total volumes	100%	<p>At each production site, the volume of water discharge is measured daily with a voluntarily installed flowmeter.</p> <p>The person in charge there inputs monthly results in the database managed by the Kao Group.</p> <p>At the Head Office, the person responsible checks the inputted data every month and, if data fluctuates significantly, checks with relevant sites about the cause.</p>
Water discharges – volumes by destination	100%	<p>At each production site, the volume of water by discharge destination is measured daily with a voluntarily installed flowmeter.</p> <p>The person in charge there inputs monthly results by destination in the database managed by the Kao Group.</p> <p>At the Head Office, the person responsible checks the inputted data every month and, if data fluctuates significantly, checks with the relevant sites about the cause.</p>

<p>Water discharges – volumes by treatment method</p>	<p>100%</p>	<p>At each production site, the volume of effluent by treatment method is measured daily with a voluntarily installed flowmeter.</p> <p>The person in charge there inputs monthly results in the database managed by the Kao Group.</p> <p>At the Head Office, the person responsible checks the inputted data every month and, if data fluctuates significantly, checks with the relevant sites about the cause.</p> <p>The person responsible at the Head Office tabulates data by treatment method and annually checks whether each production site has changed its effluent treatment method.</p>
<p>Water discharge quality – by standard effluent parameters</p>	<p>100%</p>	<p>The person in charge at each base checks the water discharge quality by standard effluent parameters every day. He or she check them by using automatic evaluate equipment or by manual or third party evaluate equipment or under the standard on each base. They also input the measurement results of water quality (COD etc,) of the discharge into the database operated by Kao group every month.</p> <p>Headquarters personnel check the values entered in the database monthly. If this person identifies a significant data change, he or she will check the cause on a relevant basis.</p>
<p>Water discharge quality – temperature</p>	<p>Not relevant</p>	<p>The temperature of discharged water is not subject to monthly management by the Kao Group using the company-wide system. At Kao's plants, high-temperature water is generated at cogeneration power facilities, incinerators, chemical reaction facilities, air conditioning. All of these hot water is cooled in a closed-loop cooling tower, and heat is released into the atmosphere.</p> <p>Kao also recognizes the following. The effluent at each site is discharged externally after it is returned to room temperature at the wastewater treatment facilities in the plant. Therefore, there is no impact on the ecosystem due to the</p>

		temperature of the discharged water.
Water consumption – total volume	76-99	<p>Since Kao considers the amount of water consumption to be the difference between the amount of water withdrawals and the amount of water discharge, monitoring the amount of water withdrawals and the amount of water discharge achieves monitoring of the amount of water consumption.</p> <p>The person in charge at each base checks the amount of water withdrawals and the amount of water discharge every month or every other month and enters the relevant data for each intake source into a database managed by the Group.</p> <p>The person in charge at the head office checks the values entered into the database every month; if this person identifies any significant data fluctuation, he or she confirms the cause with the relevant base.</p>
Water recycled/reused	100%	<p>At facilities where water is recycled, the facility operation status is monitored to measure the volume of water recycled every day by using a flowmeter or by estimating the pump capabilities and operation time.</p> <p>Note that in order to check which production sites actually do recycle water, the person responsible at the Head Office conducts an annual survey with all group companies to examine whether production sites that did not recycle water still do not recycle or reuse it.</p>
The provision of fully-functioning, safely managed WASH services to all workers	100%	<p>In accordance with the basic policy on environmental safety, we provide a fully-equipped water, sanitation and hygiene (WASH) service to all workers at all our bases.</p> <p>At each base, a committee run by each base (for example, the Safety and Health Committee) checks them every month. Providing fully-functioning, safely managed WASH services to all workers.</p>

		Every year, the Head Office checks for water or hygiene problems in services by conducting on-site audits, comparing responses against the Sedex survey, and conducting employee surveys.
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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	17,101	About the same	<p>If fluctuation in the water withdrawals volume in a year is within 5% when compared with the previous year, Kao regards the water withdrawals volume in both years as almost the same in its management of water withdrawals. We set 5%, which is below 8%, as the criterion because we need to continue growing our operation by about 8% per year to achieve the sales target for 2030.</p> <p>Although total revenues of Kao decreased by 8.0% from 2019 to 2020, total water withdrawals decreased by 3.7% from 2019 to 2020. Kao promotes water conservation activities throughout the company. In 2020, however, the rate of decline in water withdrawal was lower than the rate of decline in total revenues due to the following reasons. In Odawara site, Japan, the air conditioning of some buildings was changed from 12 hour operation to 24 hour operation to meet the requirement on the quality of product. In Kao Chemicals GmbH, Germany and Kao Industrial (Thailand) Co.,Ltd, amount of water increased due to the proportion of products that requires much water for cleaning equipments. In Sakata plant, Japan, etc., a lot of industrial water was used for excavation work on the constructions of solar power generation facilities.</p> <p>We are in the process of growing business as a</p>

			corporate group and the total volumes of water withdrawals is expected to increase accordingly.
Total discharges	11,198	About the same	<p>If fluctuation in the water discharge volume in a year is within 5% when compared with the previous year, Kao regards the water discharge volume in both years as almost the same in its management of water discharges. We set 5%, which is below 8%, as the criterion because we need to continue growing our operation by about 8% per year to achieve the sales target for 2030.</p> <p>Although total revenues of Kao decreased by 8.0% from 2019 to 2020, total water withdrawals decreased by 4.0% from 2019 to 2020. Kao promotes water conservation activities throughout the company. In 2020, however, the rate of decline in water discharge was lower than the rate of decline in total revenues due to the following reasons. In Odawara site, Japan, the air conditioning of some buildings was changed from 12 hour operation to 24 hour operation to meet the requirement on the quality of product. In Kao Chemicals GmbH, Germany and Kao Industrial (Thailand) Co.,Ltd, amount of water increased due to the proportion of products that requires much water for cleaning equipments. In Kao Chemical Corporation Shanghai, the volume of discharged water increased due to an increase in rainwater.</p> <p>We are in the process of growing business as a corporate group and the total volumes of water withdrawals is expected to increase accordingly.</p>
Total consumption	5,903	About the same	<p>If fluctuation in the water consumption volume in a year is within 5% when compared with the previous year, Kao regards the water consumption volume in both years as almost the same in its management of water consumption. We set 5%, which is below 8%, as the criterion because we need to continue growing our operation by about 8% per year to achieve the sales target for 2030.</p> <p>Total water consumption is calculated as</p>

			<p>follows; Total withdrawals : 17,101, Total discharge : 11,198 -->Total consumption : 17,101-11,198=5,903</p> <p>Although sales decreased by 8.0% since 2019, total water consumption decreased by 3.0% from 2019.</p> <p>We are in the process of growing business as a corporate group and the total volumes of water consumption is expected to increase accordingly.</p>
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W1.2d

(W1.2d) Indicate whether water is withdrawn from areas with water stress and provide the proportion.

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Identification tool	Please explain
Row 1	Yes	11-25	Higher	WRI Aqueduct	<p>-Why or why not the percentage of water withdrawn from stressed areas has changed from the previous reporting year? Kao manages the volume of water withdrawals by considering that it is about the same as the previous year if it is in the range of 5% difference. We chose 5% as the reference since it is lower than 8%, which is the target percentage for annual growth we need in order to achieve the 2030 sales target. In 2020, in areas with high water stress, the total water withdrawals rate was 18.2%, an increase of 7.4% from 17.0% in the previous year, partly because many sites had</p>

					<p>increased production compared to the previous year.</p> <p>-How the selected tool was applied to evaluate whether the water has been withdrawn from stressed areas? Kao is a consumer product manufacturer and its plants are located near sites of consumption. Most sites of consumption are large cities around the world. In these cities the population is predicted to further increase, and we recognize that this will lead to water supply risk. For this reason, Kao uses the WRI Aqueduct, whose indicators include future water risk, as an assessment tool. We check Baseline water stress and identify areas rated "High" and "Extremely high" as areas with high water stress.</p>
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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			<p>Main products of our company include products used on human bodies, or body washing products.</p> <p>That is why our factories require pure water with a certain quality as a material. Freshwater is also used as drinking water, water for sanitation, for our</p>

				<p>employees.</p> <p>Therefore we don't use fresh surface water, including rainwater, water from wetlands, rivers, and lakes. We think that the possibility of using it in the future is low so far.</p>
Brackish surface water/Seawater	Not relevant			<p>Main products of our company include products used on human bodies, or body washing products.</p> <p>That is why our factories require pure water with a certain quality as a material.</p> <p>Therefore we don't use non-fresh water including brackish surface water/seawater. We think that the possibility of using it in the future is low so far.</p>
Groundwater – renewable	Relevant	5,149	About the same	<p>Kao uses groundwater if there is abundant supply and if the company concludes that water withdrawals will not affect residents in neighboring areas or those who are downstream of underwater channels.</p> <p>Kao uses groundwater at seven plants, and its volume accounts for approximately 30% of the total volume of water withdrawals.</p> <p>Kao manages the volume of water withdrawals by considering that it is about the same as the previous year if it is in the range of</p>

				<p>5% difference.</p> <p>In 2020, groundwater consumption increased by 2.8% compared to previous year due to a increase in the amount of groundwater that can be used in Fuji and Odawara Plant, etc., but since it is less than 5%, we chose “almost the same”.</p> <p>Since Kao plans to increase sales to achieve the 2030 target, production at plants using groundwater will increase, and groundwater withdrawals will also grow.</p>
Groundwater – non-renewable	Not relevant			<p>Kao has a policy of not using non-renewable groundwater as it was suggested by third-party experts to suspend the use of such water because it is precious.</p> <p>In this regard, non-renewable groundwater is not relevant. We will not change this policy in the future, so we will not take water from non-renewable groundwater either in the future.</p>
Produced/Entrained water	Not relevant			<p>Main products of our company include products used on human bodies, or body washing products. That is why our factories require pure water with a certain quality as a material.</p> <p>Therefore we don't use non-fresh water including produced/entrained water. We think that the possibility</p>

				of using it in the future is low so far.
Third party sources	Relevant	11,951	Lower	<p>Main products of our company include products used on human bodies, or body washing products. That is why our factories require pure water with a certain quality as a material.</p> <p>To secure quality water, we purchase 70% of our total water withdrawal from local water utilities.</p> <p>Kao manages the volume of water withdrawals by considering that it is about the same as the previous year if it is in the range of 5% difference.</p> <p>As our sales decreased by 8.0% from previous year, the amount of water withdrawal from a third-party water source decreased by 6.2% compared to the previous year. From the above, we chose "lower".</p> <p>Since we plan to increase sales to achieve the 2030 target, production at plants that bring in water from third-party sources will increase, and water withdrawal from third-party sources will also increase.</p>

W1.2i

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

	Relevance	Volume (megaliters/year)	Comparison with previous	Please explain
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			reporting year	
Fresh surface water	Relevant	2,713	Higher	<p>At 4 plants of Kao Group, used water is purified by the plant's purification equipment before being discharged to nearby rivers, so the Group's business is related to fresh surface water.</p> <p>So Kao manage it as the important factor to influent the environment around our factory.</p> <p>Kao manages the volume of effluent by considering that it is about the same as the previous year if it is in the range of 5% difference.</p> <p>In 2020, our sales volume decreased by 8.0% from the previous year, but the amount of water discharge to the river after purification increased 8.7% from the previous year, mainly due to the increase in the amount of water discharge from Fuji and Odawara Plant. Since it is more than 5%, we chose "higher".</p> <p>Since Kao plans to increase sales to achieve the 2030 target, production at plants that discharge effluent into fresh surface water will rise, as will the volume of discharge.</p>
Brackish surface water/seawater	Relevant	5,657	Lower	<p>At 6 plants and some offices in Kao Group, used water is purified by the plant's purification equipment before being discharged into the adjacent sea, so the Group's business is related to sea water.</p> <p>Kao is aware that the amount and</p>

				<p>quality of water discharged directly affect sea water quality. So Kao manage it as the important factor to influent the environment around our factory.</p> <p>Kao manages the volume of effluent by considering that it is about the same as the previous year if it is in the range of 5% difference.</p> <p>In 2020, our sales volume decreased by 8.0% from the previous year, but the water discharged into the sea from Wakayama Plant, which accounts for about 90% of group's water discharge, decreased by 11.3%, so the total water discharge into the sea after purification decreased by 10.6% from the previous year. Since it is more than 5%, we chose "lower".</p>
Groundwater	Not relevant			<p>Kao Group's business is not related to groundwater, as there are no plants or offices draining underground.</p> <p>We have never done drainage to groundwater and we will not do it in the future.</p>
Third-party destinations	Relevant	2,828	About the same	<p>Many Kao plants discharge wastewater into sewer. Therefore, Kao is aware that the amount and quality of water discharged from such plants matter because they impact the quality of wastewater discharged from processing facilities run by other organizations located downstream of the sewer.</p> <p>For this reason, Kao manages discharging of wastewater to other</p>

				<p>organizations as one of the company's critical environmental load items. In this regard, discharging wastewater to other organizations is relevant.</p> <p>Kao manages the volume of effluent by considering that it is about the same as the previous year if it is in the range of 5% difference.</p> <p>Our sales volume decreased by 8.0% from the previous year, but due to the increase in Thailand, China, etc., the amount of water discharged to third parties decreased by 0.6% in 2020 compared to the previous year. Since it is less than 5%, we chose "almost the same".</p>
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W1.2j

(W1.2j) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Relevant	452	About the same	1-10	At sites where secondary treatment is not enough to meet strict emission standards for wastewater such as COD,

					nitrogen, phosphorus, wastewater passes through additional facilities (tertiary treatment) before discharging. Kao periodically conducts water quality inspections.
Secondary treatment	Relevant	10,300	About the same	61-70	At sites where water is used other than cooling, wastewater passes through secondary treatment facilities. Kao periodically conducts water quality inspections.
Primary treatment only	Relevant	100	Higher	1-10	At sites where water is used only for cooling, wastewater passes through primary treatment facilities before

					<p>discharging. Kao periodically conducts water quality inspections. In some cases after primary treatment, wastewater is adjusted with its pH, then entrusted to a third party. Also in this case, Kao periodically conducts water quality inspections to comply with the acceptance criteria of the third party.</p>
Discharge to the natural environment without treatment	Not relevant				<p>All sites directly operated by Kao conducts wastewater treatment. There are no sites that match this category.</p>
Discharge to a third party	Relevant	346	Lower	11-20	<p>In Japan and overseas, Kao's</p>

without treatment					offeces, distribution sites, and some plants discharge wastewater directly into sewage because own wastewater treatment is not required.
Other	Not relevant				All sites directly operated by Kao conducts wastewater treatment. There are no sites that match this category.

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

26-50

Rationale for this coverage

Kao participates in the Water section of the CDP SC Program and asks key suppliers to provide responses. For reporting purposes, suppliers were selected from the three fields of business that use the most water in Japan. The objectives of this supplier response system for the Water section of the CDP SC Program are to make Kao's suppliers more sensitive to water, efficiently improve their resilience against water risk, and ensure their sustainability.

Supplier incentives are as follows: Kao uses its own method to assess responses to the CDP SC Program, and sends feedback to each supplier. We also send them an assessment result for Kao's suppliers as a whole. This allows suppliers to easily compare their efforts with those of other companies and efficiently address the water risk. The CDP score is reflected in our Supplier Scorecards.

Suppliers with a high Supplier Scorecard rating will receive recognition at the Vendor Summit, to which we invite our key suppliers.

Impact of the engagement and measures of success

We request our suppliers to provide information through the CDP SC Program on the volumes of water intake and discharged water, targets to reduce them, facility water risk, and water-related management levels.

In assessing our suppliers' water-risk management levels, we use our own method to evaluate their CDP SC Program responses. We provide feedback on the results to each supplier, share the results with Procurement Division personnel, and use it to strengthen engagement to enhance the suppliers' water-risk management levels. We also use this information to check the water risk for suppliers' plants where products supplied to us are manufactured.

Kao evaluates what percentage of suppliers have reached the levels. The goal is for all target suppliers to reach this level.

Comment

W1.4b

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

Type of engagement

Incentivizing for improved water management and stewardship

Details of engagement

Demonstrable progress against water-related targets is incentivized in your supplier relationship management

Water management and stewardship action is integrated into your supplier evaluation

Water management and stewardship is featured in supplier awards scheme

% of suppliers by number

76-100

% of total procurement spend

76-100

Rationale for the coverage of your engagement

Since Kao requests the plants of all suppliers to participate in Sedex, which allows us to survey water-related and other matters, respond to questions, and set data access rights in accordance with the Kao Guidelines for Supplier's Assessment, the coverage for both the number of suppliers and the purchase amount is 100%.

Impact of the engagement and measures of success

-Details of the engagement activity's beneficial outcomes

We believe that, as our suppliers improve their Sedex performance, their ability to respond to ESG issues including water management will improve. This will make our supply chain more resilient.

-A clear description of how success of supplier engagement is measured

By the end of 2020, suppliers that had necessary settings in place that allow Kao to check their Sedex performance accounted for 83% of the total amount purchased by Kao. We consider that the first stage of success is the ability to check the activity status of all suppliers. In 2020, we evaluated Sedex performance on a five-point scale, specifically S, A, B, C, and No access right. The evaluation results indicated that 54% of suppliers were rated either S or A. For Kao, the ultimate level of success is all suppliers gain an S or A rating.

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?

We understand the percentages of the amount of water used at each lifecycle stage of Kao products to be as follows: 88% in the usage stage, 11% in the ingredients procurement stage, and 1% in the manufacturing stage. Accordingly, Kao considers these three stages in which much water is used to be the important phases. For this reason, Kao engages in various activities with consumers, suppliers, and other stakeholders related to our plants. For this reason, the company hosts various types of engagement activities, mainly for consumers and stakeholders connected with suppliers and Kao plants.

For consumers, Kao offers plant tours and visits schools to give lectures. We also transmit information in collaboration with the national government, local governments, and other parties involved in distribution. For suppliers, Kao promotes the establishment of water management systems and requests that important suppliers respond to the CDP SC Program. As for plants, Kao continues to reduce the amount of water used from the viewpoint of 3R (Reduce, Reuse,

and Recycle) and works on joint projects related to water with the local government on-site at each Kao plant.

In assessing our suppliers' water-risk management levels, we use our own method to evaluate their CDP SC Program responses. We hope our suppliers would manage their water related risk by establish internal rules or organizational frameworks by themselves. Kao evaluates what percentage of suppliers activities. have reached the levels. The goal is for all target suppliers to reach this level.

Furthermore, we measure the effects of our consumer engagement activities. One of these effects is sales of products marked with the "eco together" symbol. This symbol is affixed to products that have a low environmental impact through significantly reducing water consumption during product use and have met our own strict certification criteria. In 2020, sales of "eco together" products in Japan accounted for 28% of total sales.

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 an enterprise risk management framework

Frequency of assessment

Annually

How far into the future are risks considered?

More than 6 years

Type of tools and methods used

Tools on the market
International methodologies
Other

Tools and methods used

WRI Aqueduct
Life Cycle Assessment
Internal company methods

Comment

Supply chain

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?

More than 6 years

Type of tools and methods used

Tools on the market
International methodologies
Other

Tools and methods used

WRI Aqueduct
Life Cycle Assessment
Internal company methods

Comment

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

Annually

How far into the future are risks considered?

More than 6 years

Type of tools and methods used

- Tools on the market
- International methodologies
- Other

Tools and methods used

- WRI Aqueduct
- Life Cycle Assessment
- Internal company methods

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	<p>- An explanation why this issue is included in the assessment</p> <p>A large portion of Kao products uses water as an ingredient (solvent or dilutant) and/or as a processing aid (to remove heat from mixing vessels, etc.). If the availability of water is insufficient, Kao can not produce enough amounts of products. Thus, in a risk assessment, Kao includes the availability of water in the watershed or catchment areas where plants locate.</p> <p>- Which tool/method was used in the assessment.</p> <p>Kao has set 2.5 trillion yen (167% of the 2017 figure) as the sales target for 2030. Accordingly, production volume and water consumption at Kao plant will continue to increase in the future. Therefore, an objective and long-term evaluation tool for water availability is needed. Kao chose WRI Aqueduct to meet the requirement. Kao also uses the</p>

		<p>internal company method to evaluate the current and near-future water risks (water availability and regulations, etc.).</p> <p>- An explanation how the issue has been assessed for water-related risks;</p> <ol style="list-style-type: none"> 1. The Responsible Care Promotion Committee Secretariat uses Aqueduct to investigate the potential risks of water availability that plants may face. 2. The Responsible Care Promotion Committee Secretariat and the person in charge of each factory investigate the potential risks of water availability, and legal and regulatory risks through internal knowledge. 3. The officer in charge of SCM, the Responsible Care Promotion Committee Secretariat, or another individual / unit assesses the availability of water at the watershed / catchment level of the respective plants using the outcomes of 1 and 2.
<p>Water quality at a basin/catchment level</p>	<p>Relevant, always included</p>	<p>An explanation why this issue is included in the assessment</p> <p>A large portion of Kao products use water as an ingredient (solvent or dilutant) and/or as a processing aid (to remove heat from mixing vessels, etc.). If supplied water quality were out of specification, Kao invest additional equipment to improve water quality, or Kao can not keep product quality. For this reason, in a risk assessment, Kao includes water quality (COD. number and size of particles etc.) in watershed or catchment where plants locate.</p> <p>-Which tool/method was used in the assessment.</p> <p>Kao has set 2.5 trillion yen (167% of the 2017 figure) as the sales target for 2030. Accordingly, production volume and water consumption at Kao plant will continue to increase in the future. Therefore, an objective and long-term evaluation tool for water quality is needed. Kao chose WRI Aqueduct to meet the requirement. Kao also uses the internal company method to evaluate the current and near-future water risks (water quality and regulations, etc.)</p> <p>- An explanation how the issue has been assessed for water-related risks;</p> <ol style="list-style-type: none"> 1. The Responsible Care Promotion Committee Secretariat uses Aqueduct to investigate the potential risks of water quality that plants may face. 2. The Responsible Care Promotion Committee Secretariat and the person in charge of each factory investigate the potential risks of water quality, and legal and regulatory

		<p>risks through internal knowledge.</p> <p>3. The officer in charge of SCM, the Responsible Care Promotion Committee Secretariat, or another individual / unit assesses the quality of water at the watershed / catchment level of the respective plants using the outcomes of 1 and 2.</p>
<p>Stakeholder conflicts concerning water resources at a basin/catchment level</p>	<p>Relevant, always included</p>	<p>- An explanation why this issue is included in the assessment</p> <p>A large portion of Kao products uses water as an ingredient (solvent or dilutant) and/or as a processing aid (to remove heat from mixing vessels, etc.). Thus, if there is a conflict with stakeholders regarding water resources in watershed or catchment areas, there is a risk for water supply with adequate quantity and quality. Kao also understands a conflict in the watershed or catchment where Kao plants locate may deteriorate Kao's reputation.</p> <p>- Which tool/method was used in the assessment.</p> <p>Kao has set 2.5 trillion yen (167% of the 2017 figure) as the sales target for 2030. Accordingly, production volume and water consumption at Kao plant will continue to increase in the future. Therefore, an objective and long-term evaluation tool for reputation is needed. Kao chose WRI Aqueduct to meet the requirement. Kao also uses the internal company method to evaluate the current and near-future water risks (reputation and regulations, etc.).</p> <p>- An explanation how the issue has been assessed for water-related risks;</p> <p>1. The Responsible Care Promotion Committee Secretariat uses Aqueduct to investigate the potential risks associated with stakeholder conflicts that plants may face.</p> <p>2. The Responsible Care Promotion Committee Secretariat and the person in charge of each factory investigate the potential risks associated with stakeholder conflicts, and legal and regulatory risks through internal knowledge.</p> <p>3. The officer in charge of SCM, the Responsible Care Promotion Committee Secretariat, or another individual / unit assesses the risks associated with stakeholder conflicts at the watershed / catchment of the respective plants using the outcomes of 1 and 2.</p>
<p>Implications of water on your key commodities/raw materials</p>	<p>Relevant, always included</p>	<p>- An explanation why this issue is included in the assessment</p> <p>A large portion of Kao products use water as an ingredient (solvent or dilutant). Thus, in a risk assessment, Kao</p>

	<p>includes the availability and quality of water in the watershed or catchment areas where plants locate. If the availability of water is insufficient, Kao can not produce enough amounts of products. If supplied water quality were out of specification, additional investment to improve water quality may be needed.</p> <p>A large proportion of Kao products use surfactants as their main ingredients. Most of surfactant made by Kao is made from palm oil, which are taken from Palm tree grown in tropical rainforest. Changes in rainfall pattern in tropical rainforest may alter the growth of palm tree, which is very important to Kao products.</p> <p>- Which tool/method was used in the assessment. Kao has set 2.5 trillion yen (167% of the 2017 figure) as the sales target for 2030. Accordingly, production volume and water consumption at Kao plant and purchasing amount of Palm oil will continue to increase in the future. Therefore, an objective and long-term evaluation tool, for water availability and water quantity of where Kao plant locate, and rainfall pattern of where Kao purchase Palm oil from, is needed. Kao chose WRI Aqueduct to meet the requirement. Kao also uses the internal company method to evaluate the current and near-future water-related risks (water availability, water quantity, water issues for raw materials, and regulations, etc.).</p> <p>- An explanation how the issue has been assessed for water-related risks;</p> <ol style="list-style-type: none"> 1. The Responsible Care Promotion Committee Secretariat uses Aqueduct to investigate the availability and quality of water that plants may face and the risk of water in areas where palm oil is sourced. 2. The Responsible Care Promotion Committee Secretariat and the person in charge of each factory use their internal knowledge to investigate the availability and quality of water at the watershed / catchment level of their plants, water related to raw material procurement, and legal and regulatory risks. 3. The officer in charge of SCM, the Responsible Care Promotion Committee Secretariat, or another individual / unit assesses the availability and quality of water at the watershed / catchment level of the respective plants, and the risks associated with raw material procurement, using the outcomes of 1 and 2.
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<p>Water-related regulatory frameworks</p>	<p>Relevant, always included</p>	<p>- An explanation of why this issue is relevant for the company's business</p> <p>A large portion of Kao products, such as laundry detergent or body wash, use water when the products are used. For example, laundry detergent and water are used together when clothes are washed. They use body wash and water together when they take a bath.</p> <p>Thus, in the risk assessment, Kao include the regulations of water in the watershed or catchment areas where Kao user live.</p> <p>Which tool/method was used in the assessment.</p> <p>Kao has set 2.5 trillion yen (167% of the 2017 figure) as the sales target for 2030. Accordingly, amount of water used together with Kao products will continue to increase in the future. Therefore, an objective and long-term evaluation tool for the current and future regulations concerning water is needed. According to the internal company method, the secretariat of the Responsible Care Promotion Committee of Kao surveys the trend of regulation with internal and external databases.</p> <p>- An explanation how the issue has been assessed for water-related risks;</p> <ol style="list-style-type: none"> 1. The Responsible Care Promotion Committee Secretariat uses the internal company method to investigate the risks of water laws and regulations using internal and external database. 2. The Responsible Care Promotion Committee Secretariat, or another individual/unit use the outcome of 1 to assess the water risk associated with Kao users.
<p>Status of ecosystems and habitats</p>	<p>Relevant, always included</p>	<p>'- An explanation why this issue is included in the assessment</p> <p>Most of Kao plants are located in river basins. The habitat of living things can be found in the areas where Kao plants are located, as well as in the upstream and downstream of basins. Therefore, Kao plants may have impacts on the ecosystem. For example, a Kao plant in Philippines is the largest in the river basin. Therefore, in general, it is recognized that the plant has a dominant impact on the ecosystem and habitat in the relevant river basin.</p> <p>- Which tool/method was used in the assessment.</p> <p>Using the internal company method, Kao conducts a risk assessment associated with the status of ecosystems and</p>

		<p>habitat based on the results of an investigation of the ecosystem within and surrounding the plant (as to whether endangered species live there or have nests, etc.).</p> <p>- An explanation how the issue has been assessed for water-related risks;</p> <ol style="list-style-type: none"> 1. The Responsible Care Promotion Committee Secretariat uses the internal company method to investigate the risks that ecosystems in watershed areas where plants are located may face. 2. The Responsible Care Promotion Committee Secretariat, or another individual/unit assesses the ecosystems in the watershed where the plants are located, using the outcome of 1.
<p>Access to fully-functioning, safely managed WASH services for all employees</p>	<p>Relevant, always included</p>	<p>'- An explanation why this issue is included in the assessment</p> <p>As published in the Kao Group Health Declaration in 2008 both internally and externally, we are committed to achieving Health and Productivity Management by actively implementing support programs for our employees and their families to achieve a healthy lifestyle, which form the foundation of human resource utilization. Our policy stipulates that the health and safety of all employees have a greater priority over other matters, so the WASH service has been introduced in all work sites. However, if there is an issue with the service, it will violate Kao's policy on human resource utilization.</p> <p>- Which tool/method was used in the assessment.</p> <p>To conduct the assessment, we employ the internal company method, including an in-house audit, on-site inspections, and a biennial satisfaction survey covering all employees.</p> <p>- An explanation how the issue has been assessed for water-related risks;</p> <ol style="list-style-type: none"> 1. A committee in each site (for example, the Safety and Health Committee) conducts a survey regarding WASH service with the internal company method (on-site inspections, and a biennial satisfaction survey covering all employees). 2. The Responsible Care Promotion Committee Secretariat, or another individual/unit uses the outcome of 1 to assess the risks associated with WASH service.

Other contextual issues, please specify		
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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	<p>-An explanation of why these stakeholders are included in the risk assessment</p> <p>In assessing water risk, consumers are the most important stakeholders because the majority of our products require water when used by consumers. In fact, water consumption by consumers during product use accounts for approximately 90% of the total water consumption throughout the product life cycle. We gather consumer queries about water through direct or indirect dialogues, including environment events and calls, emails, and social media posts by consumers. Product developers and brand managers use these consumer inputs for water-related risk assessment.</p> <p>-Stakeholder engagement method</p> <p>Kao has the Consumer Communication Center in place as a way collect consumer inquiries about water risk. Water-risk information obtained from consumers is used as part of the information that product developers and brand managers use to assess water risk.</p>
Employees	Relevant, always included	<p>-An explanation of why these stakeholders are included in the risk assessment</p> <p>As described above, Kao is a company that has strong affinity with water. Kao believes it is crucial that all employees understand this notion when the company as a whole addresses water risk. For example, product developers in the R&D Division staying highly sensitive to water risk should lead to development of highly water-conscious products. This means when addressing water risk, employees are critical stakeholders. The company collects employees' opinions on water and grasps their sensitivity to water risk through small, large, regular, and occasional meetings. Information obtained through these meetings is used as part of the information that the ISO 14001 Office or the ESG Division use to assess water risk.</p> <p>-Stakeholder engagement method</p> <p>Furthermore, all researchers have participated in a lecture on employees' opinions described above as part of ISO 14001.</p>

		They collect employee opinions through the lecture and use them as part of the information that the ISO 14001 Office or the ESG Division use to assess water risk.
Investors	Relevant, always included	<p>- an explanation of why these stakeholders are included in the risk assessment</p> <p>Investors understand that a large amount of water is needed to use Kao's key products (for example, ATTACK clothing detergent, Bioré body detergent, etc.) and Kao understands that it is in a business sector that has strong affinity with water. The company at the same time understands that gaining support from investors is one of the requirements for sustainable corporate activities. Therefore, we believe it is important that investors correctly understand Kao's water-related activities. When addressing water risk, investors are important stakeholders, and water-related information provided by investors to the IR Division or ESG Division through personal dialogues or seminars is used by the IR Division or the ESG Division as part of the information in assessing water risk.</p> <p>- The method of engagement with the stakeholder</p> <p>We have several means to create and maintain relationships with investors. Through CDP Water, the Sustainability Data Book, and our annual report, Kao provides information on our water risk mitigation activities to investors. We also participate in the Ministry of the Environment's Environmental Information Disclosure Project to communicate with investors and NGOs.</p>
Local communities	Relevant, always included	<p>-An explanation of why these stakeholders are included in the risk assessment</p> <p>Kao is a manufacturing company, and a manufacturer carries out its business by producing products at plants and selling them. This means a stable and continuous plant operation is vital to Kao. Since our key products (such as ATTACK [detergent], Bioré [body soap]) require a large amount of water during use and a large amount of water is discharged afterwards, local communities could be skeptical about the effluent discharged from Kao plants. To ensure stable and continuous plant operation, Kao considers it important that local communities correctly understand water-related activities by Kao plants. For this reason, local communities are important stakeholders when addressing water risk. Water-related information that plants obtain from dialogues with local communities is used as part of the information plants use to assess water risk.</p> <p>- The method of engagement with the stakeholder</p> <p>For example, at the Sumida Plant in Tokyo , we invite community representatives to the plant to demonstrate our actual plant</p>

		operations and hold meetings to discuss their thoughts on Kao every year.
NGOs	Relevant, always included	<p>-An explanation of why these stakeholders are included in the risk assessment</p> <p>Since Kao is a consumer product manufacturer, reputation risk is one of the risk that may have a large impact on consumer behavior and significantly affect corporate sales. NGOs are a type of information source that could distribute information that may lead to reputation risk. Therefore, an important activity for Kao includes ensuring that NGOs understand our water management activities. For this reason, NGOs are important stakeholders when addressing water risk. Water-related information that various divisions, including the ESG Division, obtain from dialogues with NGOs is used as part of these divisions' information in assessing water risk.</p> <p>-Stakeholder engagement method</p> <p>When Kao obtains information from NGOs that may lead to reputation risk, it assesses the authenticity of the information and the potential extent of impact, and then chooses a responsible division. It then, if necessary, meets the group that distributed the information in question and aims for fact-based communication. Various divisions, including the ESG Division, use the information related to water risk obtained through such engagement activities with NGOs as part of the information for assessing water risk.</p> <p>As for NGO, a case study with CDP is shown. Kao takes part in CDP's supply chain program and aims to increase its resilience against water risk of supply chain, with engaging its suppliers to promote activity for assessing water risk management. Kao is the first Japanese company to participate in CDP's supply chain program. CDP continues to expand the program with taking advantage of its track record.</p>
Other water users at a basin/catchment level	Relevant, always included	<p>—An explanation of why these stakeholders are included in the risk assessment</p> <p>Kao is a manufacturing company, and a manufacturer carries out its business by producing products at plants and selling them. This means a stable and continuous plant operation is vital to Kao. Kao plants in general take in and discharge a relatively large amount of water. Residents and factories around our plants usually use water obtained from the same sources as the water used at our plants, and since water is a public good, Kao should not monopolize it. We therefore think it is important to use water within the extent to which other water users at the basin/catchment level and Kao can live side by side.</p>

		<p>Understanding the water demand of other water users at the basin/catchment level is necessary for plants to continue stable water use, so when addressing water risk, other water users at the basin/catchment level are important stakeholders. Water-related information that plants obtain from dialogues with other water users at the basin/catchment level is used as part of the plants' information for assessing water risk.</p> <p>- The method of engagement with the stakeholder For example, our plants in Japan prepare site reports containing environmental information to communicate with their neighborhoods. At the Sumida Plant in Japan, we hold meetings at least once a year to discuss environmental issues, including water issues, with local residents who use water from the same water source as the Office.</p>
Regulators	Relevant, always included	<p>—An explanation of why these stakeholders are included in the risk assessment Kao is a manufacturing company, and a manufacturer carries out its business by producing products at plants and selling them. This means a stable and continuous plant operation is vital to Kao. Kao plants in general use and discharge a relatively large amount of water, and if the effluent exceeds discharge regulations, an offending plant may not be allowed to operate. Therefore, it is essential to understand the behavior of regulators in charge of discharge regulations and implement necessary measures for plants to continue stable operation. For this reason, when addressing water risk, regulators are important stakeholders. Water-related information that the RC Division or plants obtain from committees led by these regulators or from industry is used as part of the information plants use to assess water risk.</p> <p>—Stakeholder engagement method We attend meetings such as committee meetings held by regulators to discuss law amendments in order to learn the trends as early as possible, participate in Environment Working Group Meetings of the Japan Chemical Industry Association or explanatory meetings hosted by other organizations where regulators provide explanations, and exchange information with other parties. Information related to water risk obtained through such engagement activities with regulators is shared with plants and used as part of their information for assessing water risk.</p>

<p>River basin management authorities</p>	<p>Relevant, always included</p>	<p>—An explanation of why these stakeholders are included in the risk assessment</p> <p>Kao is a manufacturing company. A manufacturer carries out its business by manufacturing products at plants and selling them. Therefore, stable and continuous plant operation is very important to Kao. When a Kao plant uses a river as a water source, we recognize that understanding of the water management policy (e.g., future supply forecasts, regulations during scarcity) applied to that source provides a part of information necessary for stable plant operation. For this reason, when addressing water risk, river basin management authorities are important stakeholders. Water-related information that plants obtain from dialogues with river basin management authorities is used as part of information in water risk assessment by plants.</p> <p>- The method of engagement with the stakeholder</p> <p>During regularly held meetings, we confirm with the authorities whether there are any plans to change the policies on regulations. For example, at the Wakayama Plant, we have a regular meeting for the purpose of obtaining information on future upgrades to water supply facilities and water price trends.</p>
<p>Statutory special interest groups at a local level</p>	<p>Relevant, always included</p>	<p>—An explanation of why these stakeholders are included in the risk assessment</p> <p>Kao is a manufacturing company, and a manufacturer carries out its business by producing products at plants and selling them. This means a stable and continuous plant operation is vital to Kao. Kao plants in general use and discharge a relatively large amount of water, and statutory special-interest groups at a local level in some situations enforce regulations similar to those enforced by regulators. Kao therefore understands that plant operation cannot continue while ignoring these groups' opinions. To secure stable plant operation, we need to check whether there are any statutory special-interest groups at a local level in the area where a plant is, and if so, grasp the trends in effluent regulations that they implement and take necessary measures. For this reason, when addressing water risk, statutory special-interest groups at the local level are important stakeholders. Plants use water-related information that they obtain from committees led by these groups or from industry as part of the information for assessing water risk.</p> <p>-The method of engagement with the stakeholder</p> <p>Qumi-Kao in Mexico once experienced a situation in which a sufficient amount of water could not be secured due to restrictions on taking groundwater. Therefore, Qumi-Kao consulted with statutory special interest groups at the local level</p>

		<p>and agreed that water discharged from sewage treatment plants in the city would be directly carried in to plants instead of discharging it into rivers. As a result, Qumi-Kao's plant operations were not hindered, and now it can increase production further.</p> <p>This collaboration will contribute to the stability of its business operations. As a stable income from Qumi-Kao is taken into force for statutory special interest groups at the local level, this collaboration will contribute to the stability of business operations. Therefore, Qumi-Kao and the statutory special interest groups are exchanging information about future water use.</p>
Suppliers	Relevant, always included	<p>—An explanation of why these stakeholders are included in the risk assessment</p> <p>Kao is a manufacturing company, and a manufacturer carries out its business by producing products at plants and selling them. This means a stable and continuous plant operation is vital to Kao. One of the key requirements is to ensure such operation is that we maintain a stable and continuous supply of materials from our suppliers. A large portion of Kao products use a wide variety of chemical substances and paper containers, and these materials come from suppliers in the three fields of business (chemicals, steel, and paper and paper processing/manufacturing) that use the most water in Japan. We therefore understand that most of our suppliers are highly dependent on water, so when addressing water risk, suppliers are important stakeholders. Water-related information that the Procurement Division or plants obtain from dialogues with suppliers is used as part of the information the Procurement Division or plants use to assess water risk.</p> <p>—Stakeholder engagement method</p> <p>We joined the Water section of the CDP SC Program in 2015, and since then have been checking how our suppliers manage their water risk. We use our own unique method to evaluate their responses and subsequently their water risk. We also gather information on the water-risk levels of supplier plants that manufacture products for Kao and how they address such risk. Furthermore, our employees in charge of plant quality and Procurement Division personnel collect information about suppliers' water risk when they exchange information with them. The Procurement Division uses information related to water risk obtained through such engagement activities with these suppliers as part of the information for assessing water risk.</p>

Water utilities at a local level	Relevant, always included	<p>—An explanation of why these stakeholders are included in the risk assessment</p> <p>Kao is a manufacturing company, and a manufacturer carries out its business by producing products at plants and selling them. This means a stable and continuous plant operation is vital to Kao. Water used at many Kao plants is received from local water utilities, and in this case, we recognize that understanding their water management policies (e.g., future supply forecasts, regulations during scarcity) provides part of the information necessary for stable plant operation. Therefore, when addressing water risk, local water utilities are important stakeholders. Water-related information that plants obtain from dialogues with these utilities is used as part of their information for assessing water risk.</p> <p>- The method of engagement with the stakeholder</p> <p>We explain our policy and the situation of our activities to them so as to have them understood through meetings. For example, at Wakayama factory, at least once a year regular meeting is held to exchange information.</p>
Other stakeholder, please specify		

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.

Kao identifies, evaluates, and addresses water-related risk every year.

Examples involving our plants are as follows:

Employees in charge of plants (e.g., plant managers, officers in charge of SCM), who have been chosen internally in advance, use internal company methods to conduct primary assessment of short-term water risk for each size of risk to be addressed, and approve payments.

In a yearly audit, The Responsible Care Promotion Committee Secretariat checks how Kao understands water risks and how Kao responds to. If the action and response are found to be insufficient in a periodically held meetings with the person in charge of each factory, improvement will be requested, and guidance will be given.

To identify long-term water risk (ten years or more), the Responsible Care Promotion Committee Secretariat refers to WRI Aqueduct Water Stress Projections and information provided by employees in charge of plants. At each plant, the risk level is assessed using the

internal company method and a long-term response plan is created. The officer in charge of SCM, the Responsible Care Promotion Committee Secretariat, or another individual/unit checks the plan and requests corrections as necessary.

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, only within our direct operations

W4.1a

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

- A definition of substantive financial or strategic impact is given

We define an event as having a substantive impact if the amount of financial damage exceeding 1 billion yen (or equivalent to roughly 0.1% of the sales figure) is expected to appear within ten years and continue for several years. We recognize that the relevant risk no longer exists if a measure for preventing the existence of the relevant risk has been developed and implemented.

We review the validity of this definition every year and correct it as necessary.

- The measure(s), metric(s) or indicator(s) used to identify substantive change
Kao evaluates substantial changes in terms of financial aspects and the continuity of direct operation.

- The threshold or amount of change in the metric/measure/indicator which indicates substantive change

We define an event as a substantive change if it is expected that the amount of financial damage will exceed 1 billion yen and a suspension of our operation in terms of direct operation for one day or more will appear within ten years. We recognize that the relevant risk ceases to exist if a measure has been developed and implemented to prevent the existence of the relevant risk.

We review the validity of this definition every year and correct it as necessary.

- Whether the definition applies to direct operations, or supply chain, or both

The above definition applies to both direct operation and the supply chain.

- At least one example of substantive impact considered

In Japan, which accounts for over 60% of Kao's sales, torrential downpours high tide occurring due to climate change and natural disasters causing devastating damage, though in a limited area, are becoming apparent nowadays.

There are following risks to direct operation:

If such a torrential downpour hightide occurs in an area where there is a Kao plant or logistics base, we may need to suspend the production and supply of products, which would lead to not only a decrease in sales, but also reduced profit due to the cost of repairs incurred. For example, the book value of the facilities at the Wakayama Plant is 48 billion yen. If about 2% of the facility is damaged with the storm surge, it is equivalent to 1 billion yen, which Kao defines as the amount that will have a substantial impact on businesses. Based on our scenario analysis on climate change, Wakayama Plant is expected to be more likely to suffer from storm surges due to global warming. Therefore, the person in charge in the site is currently considering measures to reduce risks such as seawalls.

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	8	1-25	We recognize that many of the sites in Asia which make up the majority of Kao's bases have water risks.

W4.1c

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

Country/Area & River basin

China
Yangtze River (Chang Jiang)

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

% company's total global revenue that could be affected

1-10

Comment

Country/Area & River basin

Philippines

Other, please specify

Cabulig

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

% company's total global revenue that could be affected

1-10

Comment

Country/Area & River basin

Thailand

Other, please specify

Bang Pakong

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

% company's total global revenue that could be affected

1-10

Comment

Country/Area & River basin

Indonesia

Other, please specify

Saluran Irigasi Kali Malang and Sungai Bekasi

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

% company's total global revenue that could be affected

1-10

Comment

Country/Area & River basin

Taiwan, Greater China

Other, please specify

Touqian River

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

% company's total global revenue that could be affected

1-10

Comment

Country/Area & River basin

Mexico

Balsas

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

% company's total global revenue that could be affected

1-10

Comment

Country/Area & River basin

Spain

Other, please specify

El Besos

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

% company's total global revenue that could be affected

1-10

Comment

Country/Area & River basin

Japan

Other, please specify

Toyokawa

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

% company's total global revenue that could be affected

1-10

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/Area & River basin

China

Yangtze River (Chang Jiang)

Type of risk & Primary risk driver

Physical

Increased water stress

Primary potential impact

Constraint to growth

Company-specific description

According to WRI Aqueduct Water Stress Projections, the water supply in the area where Kao Chemical Corporation Shanghai operates will be under strong stress in 2040. At the same time, interviews with plant employees have indicated that the number of residents will be on an upward trend in this area and the quality of water for daily living is predicted to deteriorate.

Meanwhile, Kao has a sales target of 2.5 trillion yen (167% of the 2018 target) for 2030. China is one of the key areas for achieving this target and we will continue to increase production at our Chinese plants.

From the information described above, Kao has concluded that the risk to water availability and quality will increase, thus limiting future growth or profit increases for these plants. Production cannot increase if water availability will not rise or the efficiency of water use inside the plants does not increase. If this happens, production will remain the same even though it actually needs to increase by 67%, and resulting production will fall 40% short $((100/167) - 1) * 100 = -40\%$.

Timeframe

More than 6 years

Magnitude of potential impact

Medium

Likelihood

More likely than not

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

90,871,000,000

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact

In 2018, sales in China were 135.629 billion yen. If sales in China grow at the same rate as that needed for the Kao Group to achieve the 2030 sales target, sales in China in 2030 will be 226.5 billion yen. If this sales growth does not become a reality due to water risk, the impact is forecast to be 90.871 billion yen $(90.871 = 226.5 - 135.629)$

Primary response to risk

Establish site-specific targets

Description of response

Kao has set a goal to improve the water usage efficiency in the entire Group by 45% by 2030. Due to high water supply risk in the future, the plant has continued to reduce risks that may hinder business growth by setting a goal higher than the above and

implementing activities to improve water usage efficiency. As part of such efforts, the plant is now using rainwater.

Cost of response

15,340,000

Explanation of cost of response

The volume of water intake by Kao Chemical Corporation Shanghai, a plant that stands in a river basin, was 90.86 million liters in 2018. If this plant's production increases at the same rate as that needed for the Kao Group to achieve the 2030 sales target, but the intensity of water use remains the same, the volume of water intake will increase by 60.88 million liters. The cost of recycling effluent generated from this additional amount of water has been calculated obtained. At one particular manufacturer, the annual running cost of an effluent recycling facility with a water-treatment capacity of 25 million liters per year is 6.3 million yen. When applying this running cost to our case, the necessary cost will be 15.34 million yen ($15.34 = 6.3/25 \times 60.88$).

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	<p>Kao has expanded the scope of its water-related risk surveys not only directly to its business, but also to its value chain. The person in charge conducted a risk survey using AQUEDUCT at the supplier plants. He or she surveyed 97 high-risk suppliers selected by Kao, using CDP SC programme. He or she evaluated the result of CDP SC programmes. As a result, Kao now recognizes that there are no supplier factories exposed to substantial financial or strategic impacts. The flow of activities and results are managed by the Risk Crisis Management Committee.</p> <p>Many of Kao's products require a large amount of water during the use stage in products' lifecycle. If the water infrastructure is not introduced at a pace commensurate with the GDP growth rates of each country and region where Kao plans to increase its sales drastically, there will be risks with respect to product sales.</p> <p>The person in charge surveyed the water infrastructure. As a result, Kao currently anticipates no substantial financial or strategic impact at the product use stage.</p> <p>The flow of activities and results are managed by the Risk Crisis Management Committee.</p>

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

In 2030, Kao has set a target of reducing the volume of water used in direct operations by 45%. If this reduction is achieved, 1.125 billion yen will be reduced. This reduction estimate is greater than the value which Kao determines to have a material impact. Therefore, activities to increase water efficiency in direct operations are viewed as strategic opportunities.

Estimated timeframe for realization

Current - up to 1 year

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)

1,250,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

The sales target for Kao products for 2030 is 2.5 trillion yen. If the cost of water required to manufacture such products accounts for 0.1% of sales, the cost of water will be 2.5 billion yen. Thus, it can be expected that improving the water usage efficiency by 50% will reduce the cost by 1.25 billion yen.

W5. Facility-level water accounting

W5.1

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

Facility reference number

Facility 1

Facility name (optional)

Kao Chemical Corporation Shanghai

Country/Area & River basin

China

Yangtze River (Chang Jiang)

Latitude

31.215818

Longitude

121.456731

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

76.74

Comparison of total withdrawals with previous reporting year

About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

76.74

Total water discharges at this facility (megaliters/year)

40.39

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

40.39

Total water consumption at this facility (megaliters/year)

36.35

Comparison of total consumption with previous reporting year

About the same

Please explain

In 2020, the production volume decreased by 0.4% compared to the previous year, resulting in a decrease of less than 5% in water withdrawal, water discharge and water consumption.

Facility reference number

Facility 2

Facility name (optional)

Pilipinas Kao, Incorporated

Country/Area & River basin

Philippines

Other, please specify

Cabulig

Latitude

8.652755

Longitude

124.756451

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

1,227.86

Comparison of total withdrawals with previous reporting year

About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

1,227.86

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

200.61

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

200.61

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

1,027.25

Comparison of total consumption with previous reporting year

About the same

Please explain

In 2020, the production volume decreased by 4.1% compared to the previous year, so the amount of water withdrawal, water discharge and water consumption decreased by about 5% from the previous year.

Facility reference number

Facility 3

Facility name (optional)

Kao Industrial (Thailand) Co., Ltd.

Country/Area & River basin

Thailand

Other, please specify

Bang Pakong

Latitude

13.326396

Longitude

101.003311

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

629.47

Comparison of total withdrawals with previous reporting year

Much higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

629.47

Total water discharges at this facility (megaliters/year)

463.73

Comparison of total discharges with previous reporting year

Much higher

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

463.73

Total water consumption at this facility (megaliters/year)

165.74

Comparison of total consumption with previous reporting year

About the same

Please explain

In 2020, the production volume increased by 3.1% compared to the previous year, but we have increased the production of beauty care products that use large amounts of water to clean the compounding tank, so the amount of water withdrawal and water discharge increased by more than 10% from the previous year.

Facility reference number

Facility 4

Facility name (optional)

PT. Kao Indonesia Chemicals

Country/Area & River basin

Indonesia

Other, please specify

Saluran Irigasi Kali Malang and Sungai Bekasi

Latitude

-6.219573

Longitude

107.065754

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

482.65

Comparison of total withdrawals with previous reporting year

Higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

482.65

Total water discharges at this facility (megaliters/year)

307.58

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

307.58

Total water consumption at this facility (megaliters/year)

175.07

Comparison of total consumption with previous reporting year

Much higher

Please explain

In 2020, the production volume increased by 6.7% compared to the previous year, and the amount of water withdrawal also increased by 6.2% from the previous year, but water discharge decreased by 3.8% from the previous year. The reason is that most of the rainwater flowed to the WWT facility in 2019, which was also recorded as water discharge, but in 2020, the rainwater pit was improved and the rainwater was separated, so the rainwater flowed to the WWT facility decreased significantly.

Facility reference number

Facility 5

Facility name (optional)

Kao (Taiwan) Corporation

Country/Area & River basin

Taiwan, Greater China

Other, please specify

Touqian River

Latitude

24.803945

Longitude

120.964686

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

177.62

Comparison of total withdrawals with previous reporting year

Higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

177.63

Total water discharges at this facility (megaliters/year)

91.47

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

91.47

Total water consumption at this facility (megaliters/year)

86.16

Comparison of total consumption with previous reporting year

Much higher

Please explain

In 2020, the production volume increased by 8.8% compared to the previous year, and the amount of water withdrawal also increased by 6.2% from the previous year. On the other hand, water discharge increased by 1.5% from the previous year because of the wastewater reduction activities like recovery of reclaimed wastewater from pure water equipment etc.

Facility reference number

Facility 6

Facility name (optional)

Quimi-Kao S.A. de C.V.

Country/Area & River basin

Mexico

Balsas

Latitude

19.947483

Longitude

-101.640844

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

201.18

Comparison of total withdrawals with previous reporting year

Higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

100.17

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

101.01

Total water discharges at this facility (megaliters/year)

133.16

Comparison of total discharges with previous reporting year

Higher

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

133.16

Total water consumption at this facility (megaliters/year)

68.02

Comparison of total consumption with previous reporting year

About the same

Please explain

In 2020, the production volume increased by 1.0% compared to the previous year, and the amount of water withdrawal and water discharge increased by more than 5% from the previous year. The reason is that In addition to increased production, new factory equipment went into operation in 2020, using more water for cooling, steam, etc.

Facility reference number

Facility 7

Facility name (optional)

Kao Corporation S.A. Mollet plant

Country/Area & River basin

Spain

Other, please specify

El Besos

Latitude

41.525107

Longitude

2.213861

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

157.32

Comparison of total withdrawals with previous reporting year

Much higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

157.32

Total water discharges at this facility (megaliters/year)

119.89

Comparison of total discharges with previous reporting year

Much higher

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

119.89

Total water consumption at this facility (megaliters/year)

37.43

Comparison of total consumption with previous reporting year

Much lower

Please explain

In 2020, the production volume increased by 5.6% compared to the previous year, but the amount of water withdrawal increased by 18.0% from the previous year because new factory went into operation in 2020 and consumed water for cooling towers, freezing, steam, etc.

In addition, the amount of water discharge increased by 40.2% from the previous year. The reason is that since 2020 was a very rainy year compared to 2019, rainwater increased the water discharge.

Facility reference number

Facility 8

Facility name (optional)

Kao Corporation, Toyohashi plant

Country/Area & River basin

Japan

Other, please specify

Toyokawa

Latitude

34.708937

Longitude

137.322836

Located in area with water stress

No

Total water withdrawals at this facility (megaliters/year)

167.16

Comparison of total withdrawals with previous reporting year

Higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

167.16

Total water discharges at this facility (megaliters/year)

94.12

Comparison of total discharges with previous reporting year

Higher

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

94.12

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

73.04

Comparison of total consumption with previous reporting year

Much higher

Please explain

In 2020, the production volume decreased by 2.1% compared to the previous year, but the amount of water withdrawal and water discharge increased by more than 5% from the previous year for the following reasons;

- Compared to the previous year, the production of products such as whole body cleaning agents and shampoos, which contain a large amount of water, increased and the amount of cleaning wastewater also increased.
- A water leak occurred in a building inside the factory in April, causing a temporary significant increase in clean water usage and discharge.

W5.1a

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

Water withdrawals – total volumes

% verified

76-100

What standard and methodology was used?

ISAE3000, limited assurance

Water withdrawals – volume by source

% verified

76-100

What standard and methodology was used?

ISAE3000, limited assurance

Water withdrawals – quality

% verified

Not verified

Water discharges – total volumes

% verified

76-100

What standard and methodology was used?

ISAE3000, limited assurance

Water discharges – volume by destination

% verified

76-100

What standard and methodology was used?

ISAE3000, limited assurance

Water discharges – volume by treatment method

% verified

Not verified

Water discharge quality – quality by standard effluent parameters

% verified

Not verified

Water discharge quality – temperature

% verified

Not verified

Water consumption – total volume

% verified

Not verified

Water recycled/reused

% verified

Not verified

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
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<p>Row 1</p>	<p>Company-wide</p>	<p>Description of water-related standards for procurement</p> <p>Reference to international standards and widely-recognized water initiatives</p> <p>Company water targets and goals</p> <p>Commitment to align with public policy initiatives, such as the SDGs</p> <p>Commitments beyond regulatory compliance</p> <p>Commitment to water-related innovation</p> <p>Commitment to water stewardship and/or collective action</p> <p>Acknowledgement of the human right to water and sanitation</p> <p>Recognition of environmental linkages, for example, due to climate change</p>	<p>Water-related policies are included in the following five policies. All policies apply to the entire Kao Group (Company wide). Kirei Lifestyle Plan, Environmental Statement, Responsible Care Policy, Purchasing Guidelines, Human Rights Policy.</p> <p>Kao defines Kirei Lifestyle Plan as its ESG strategy. It is subject to the following contents.</p> <ul style="list-style-type: none"> - Company water targets and goals: Kao reduces its lifecycle water consumption per unit of production by 10% (target year: 2030, base year: 2017). - Commitment to align with public policy initiatives, such as the SDGs: Kao's water targets are related to SDGs 6, 12, 15 and 17. - Recognition of environmental linkages, for example, due to climate change: Kao recognizes that heavy rain, flooding and drought are correlated with climate change. <p>Kao issued the Environmental Declaration in 2009. It is subject to the following content.</p> <ul style="list-style-type: none"> - Commitment to water-related innovation: Kao has set a target of reducing water (in Japan) during product use by 30% in the medium-term target for the year 2020 (per unit of sales, 2005 base year) <p>Kao operates a Design for Environment Guidelines in developing its products. This includes the following:</p> <ul style="list-style-type: none"> - Commitment to water stewardship and/or collective action: Kao is checking reduce water amount at use phase in Design for Environment Guidelines. <p>Kao establishes a Responsible Care Policy. It is subject to the following content.</p> <ul style="list-style-type: none"> - Commitments beyond regulatory compliance: Kao shall comply with all relevant laws, regulations, and agreements in all aspects of its business activities, and shall establish and faithfully implement voluntary standards of conduct. <p>Kao has established purchasing guidelines. It is subject to the following content.</p> <ul style="list-style-type: none"> - Description of water-related standards for procurement - Reference to international standards and widely-
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			<p>recognized water initiatives</p> <p>Regarding the two issues above, Kao requires suppliers to establish a system to evaluate and manage environmental aspects of laws and regulations related to products, as well as to voluntarily manage the effective use of water or other aspects as an item of environmental consideration for suppliers.</p> <p>Kao has a human rights policy. The following content apply to WASH.</p> <p>- Acknowledgement of the human right to water and sanitation: Kao provides a safe and pleasant working environment.</p>
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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
Chief Executive Officer (CEO)	<p>Water-related risks are managed by the RC Committee and the Risk Crisis Committee under the jurisdiction of the Internal Control Committee. Persons (executive officer) to deal with each identified risk are assigned. The person in charge shall formulate and implement countermeasures and report the status of the measures to the committee. Both committees are chaired by the CEO.</p> <p>Opportunities for water are managed by the ESG Committee. A person in charge (executive officer) shall be appointed for each identified opportunity. The person in charge shall formulate and implement the implementation of the KPI and the overall promotion plan, and the committee shall report on the progress. The CEO serves as the chairman of the committee.</p> <p>The activities of the above committees are being oversight by the board. Accordingly, the CEO has all responsibility and authority for Kao's water issues. Case Study: In 2019, the ESG Commission, chaired by the CEO, developed water-related targets and approved by the board.</p> <p>In 2020, the Board of Directors decided that there was no need to review water-related targets.</p>

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	<ul style="list-style-type: none"> Monitoring implementation and performance Overseeing acquisitions and divestiture Overseeing major capital expenditures Providing employee incentives Reviewing and guiding annual budgets 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 	<p>The Risk and Crisis Management Committee holds a meeting at least four times per year and the Responsible Care Promotion Committee checks the status of activities at bases every month. Both committees are under the Internal Control Committee, which is under the control of the Board of Directors, and manage water-related risks. The ESG Committee, which is under the control of the Board of Directors, holds a meeting at least four times per year and manages water-related opportunities. The status of activities of these committees is explained to the Board of Directors by the secretary-general of each committee. Since water-related issues have an impact on Kao's business and thus must be supervised as one of the business management issues, they are under the oversight of the Internal Control Committee and the ESG Committee, with the CEO serving as chairperson.</p>

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 Executive Officer (CEO)

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

Quarterly

Please explain

Under the Board of Directors is the Internal Control Committee(ICC). The Risk and Crisis Management Committee(RCMC) and the Responsible Care Promotion Committee(RCPC), both under the ICC, manage water-related risk, while the ESG Committee, under the Board, manages water-related opportunities. The CEO chairs the RCMC and the RCPC because water is one of the management issues that influences Kao's business. Under the CEO's direction, these committees report on goals, plans, and results for water-related issues and revision proposals for plans (if necessary) to the Board once a year or more. This means water-related issues are reported to the Board four or more times a year.

The RCMC has established a system for managing water risk and a plan for operating the system, and the RCPC checks that the plan is carried out properly at all divisions, subsidiaries, and affiliated companies. The ESG Committee is responsible for setting the direction of activities and promoting them.

W6.4

(W6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?

	Provide incentives for management of water-related issues	Comment
Row 1	Yes	

W6.4a

(W6.4a) What incentives are provided to C-suite employees or board members for the management of water-related issues (do not include the names of individuals)?

	Role(s) entitled to incentive	Performance indicator	Please explain
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<p>Monetary reward</p>	<p>Director on board Corporate executive team</p>	<p>Reduction of water withdrawals Reduction in consumption volumes Improvements in efficiency - direct operations Improvements in efficiency - supply chain Improvements in efficiency - product-use Improvements in waste water quality - direct operations Improvements in waste water quality - supply chain Improvements in waste water quality - product-use Implementation of employee awareness campaign or training program Supply chain engagement Increased access to workplace WASH Implementation of water-related community project</p>	<p>Kao's director on board and the corporate executive team receive monetary rewards based on the growth rate of EVA (Economic Value Added) that includes a track record of water-related activities. Here, EVA is a profitability indicator proposed by G. Bennett Stewart III, that indicates the economic value of the return from the annual operation minus the cost of capital incurred for the invested capital. Specifically, it is calculated by $EVA = NOPAT - CE \times WACC$. NOPAT: the net operating profit after tax CE: Interest-bearing debt + shareholders' equity WACC: the weighted average cost of capital The water-related activities contained above are as follows. Kao uses EVA as an indicator that can comprehensively evaluate these activities. All environmental matter such as level of achievement of "Reduction of water withdrawals", "Reduction in consumption volumes", "Improvements in efficiency – direct operations, – supply chain" -related to variable cost reduction by efficiency projects, problems related to variable cost reduction such as "Improvements in waste water quality, – direct operations, – supply chain – product-use", "Implementation of employee awareness campaign or training program", "Supply chain engagement", "Increased access to workplace WASH", "Implementation of water-related community project", and "improvement of efficiency" -- sales of "water-saving products". With these activities increased, it is expected to increase the company's profits and sales.</p>
<p>Non-monetary reward</p>	<p>Director on board Corporate executive team</p>	<p>Reduction of water withdrawals Reduction in consumption volumes Improvements in efficiency - supply chain</p>	<p>Kao does not grant C-Suite employees or board members recognition (non-monetary). However, because Kao's water-related activities are highly evaluated from outside the company, C-Suite employees or board members receive non-monetary rewards from outside the company.</p>

		Improvements in efficiency - product-use Supply chain engagement	
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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

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?

Kao supports the Water Project activities of Japan's policy makers who are working on communicating the importance of water used in Japan. To support their activities, the secretariat of the ESG Committee, which manages water-related opportunities, consults with the relevant policy makers to understand the objective and details of such activities. The secretary-general of the ESG Committee determines whether the details are consistent with Kao's policies and how Kao should support such activities. If there is any inconsistency with Kao's policies, Kao will report it to the policy makers and ask for the inconsistency to be resolved. If the inconsistency is not resolved, Kao will suspend the support for such activities based on the decision of the secretary-general of the ESG Committee.

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	> 30	<p>When selecting a new plant location, Kao includes in its long-term strategy the water stress assessment results such as long-term ease of water intake, stability of water quality, and flood probability.</p> <p>This is because Kao recognizes that building a new plant is an inevitable task since the company aims to increase sales by 1.5 times or more by 2030, and it is Kao's policy that, once built, a plant will operate for over 30 years.</p> <p>In 2014, PT. Kao Indonesia Chemicals built a plant in the Karawang International Industrial City in Indonesia. This company looked for land with low risk in water supply and effluent treatment. As this industrial city possesses an industrial water plant and effluent plant that can process at least 30,000 m³ of water a day, Kao chose to build a plant there based on the low water risk.</p>
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	11-15	<p>Kao includes in its long-term strategy water stress assessment results such as long-term ease of water intake and the stability of water quality.</p> <p>This is because, while Kao aims to increase sales by 1.5 times or more by 2030, large Asian urban centers like Japanese cities, which are the key areas of Kao product consumption, will grow enormous, and securing of ease of water intake and stable water quality will become an important future task. As preventive measures, we are already aiming to increase sales of products that do not require much water during use. Throughout the product life cycle, Kao is targeting a 10% decrease in water consumption in general, and a 40% reduction in areas of water scarcity. In the Kao product life cycle, approximately 90% of water consumption occurs during the product use stage. Therefore, in developing products that can contribute to achievement of the 2030 sales target, creating products that ignore water issues is not an option.</p> <p>Kao's current sales target is set for 2030, and we have set 11 to 15 years as the time frame for developing new products that contribute to achieving the target.</p>
Financial planning	Yes, water-related issues are integrated	11-15	<p>Kao has incorporated into its long-term strategy water stress evaluations regarding the ease of water intake, stability of water quality, etc. over a long period.</p> <p>This is because while Kao aims to increase sales by more than 1.5 times the current level by 2030, we are aware that the ease of water intake and stability of water quality will be future issues as large cities in Asia,</p>

			including those in Japan, which is Kao products' main consumption area, will expand. As part of efforts to increase the sales of products that consume little water when they are used, we have already expanded the scope of water-saving clothing detergent to include the non-concentrated type, and incorporated it into the financial plan for 2017 as the measures. This has affected our earnings forecast, including sales and operating profit margin. Kao's current sales target is set to 2030, and we selected 11 to 15 years as the time scale for water-related new product development as a measure that will contribute to achieving the target.
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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)

-49

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

5

Water-related OPEX (+/- % change)

-2.7

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

5

Please explain

Environmentally related CAPEX and OPEX are calculated annually mainly for the purpose of managing of investment in water withdrawal reduction measures and investment in wastewater treatment capacity improvement, and operating costs for maintaining and managing these.

In 2020, there were few large-scale investment projects, such as the renewal of wastewater treatment facilities, resulting in a significant decrease in water-related investment.

Water-related capital investment is expected to continue to increase in line with the expansion of production facilities due to increased production volume.

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	

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 scenarios and models applied	Description of possible water-related outcomes	Company response to possible water-related outcomes
Row 1	IEA B2DS	For example, an increase in temperatures will raise the risk of a poor crop of palm oil, which is one of the ingredients used, may cause the price to soar and make it difficult to purchase.	We reviewed published literature to assess the impact of climate change on palm grown in Malaysia and Indonesia, where Kao's purchase palm oil from. As a result, we confirmed that the increase in temperature is likely to decrease palm yields, such as the decline in the number of areas suitable for cultivation as the temperature rises, and the reduction of yields by about 10% in Malaysia as the temperature rises by an additional one degree Celsius (about 2 degrees Celsius above the pre-industrial level). The reason for this is that as the temperature rises, the rainfall conditions change, so that the period of time for growing palm that does not satisfy the required amount of precipitation will be longer throughout the year.

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

At Kao plants, we use water in different quality levels according to the requirement of the facility and product. Since improving the water quality requires additional processes, we indicate water costs according to the water quality level and manage them as one of manufacturing cost items.

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 Business level specific targets and/or goals Site/facility specific targets and/or goals	Targets are monitored at the corporate level Goals are monitored at the corporate level	We have made it clear in the Environmental Statement that we will engage in environmental activities through products. As a result of our investigation on the amount of water consumed for products in each phase, we understand that 90% of the total water consumption is attributable to the phase in which products are used. Therefore, Kao has set a goal of reducing water consumption when the products are used. We have also set a goal of improving the water usage efficiency at all bases including plants because we consider it necessary to improve water usage efficiency in order to continue manufacturing products.

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

Shared value

Description of target

- Relevant to the goal of achieving water security

At Kao bases, we set a goal of managing water security so that we can continue the business for a long period of time.

- Consistent with the category, level and metric chosen

We manage the amount of water intake as the first item in the management of water security at Kao bases. In order to continue the business for a long period of time, we have set a goal of reducing the water usage load (the amount of water intake per sales) by 40%.

Quantitative metric

% reduction per revenue

Baseline year

2005

Start year

2013

Target year

2020

% of target achieved

97.5

Please explain

With 2005 as the base year, Kao's water intake (all sites) reached 17.1 million m3, with a reduction rate of 39% on a per-unit basis. Although the absolute volume decreased from 17.7 million m3 last year, the reduction rate on a per-unit basis worsened due to an increase in sales of hand-washing products caused by the COVID-19 pandemic.

Target reference number

Target 2

Category of target

Water consumption

Level

Business

Primary motivation

Shared value

Description of target

' - Relevant to the goal of achieving water security

Kao's key products are clothing detergent and body detergent. Thus, in order for Kao to continue the business for a long period of time, we have set a goal of managing water security when the products are used.

- Consistent with the category, level and metric chosen

We manage the amount of water consumption when the products are used as the first item in the management of water security when Kao products are used. In order to continue the business for a long period of time, we have set a goal of reducing the water usage load (the amount of water consumption per sales, for consumer products in Japan) by 30%.

Quantitative metric

% reduction per revenue

Baseline year

2005

Start year

2009

Target year

2020

% of target achieved

Please explain

Our water consumption during product use (Kao Group in Japan) increase 34 million m³. The per unit of sales reduction rates deteriorated 3 points from previous year to a 26% reduction.

Deterioration of the water-conservation is due to increased volume of hand wash, with the demand in COVID-19 pandemic.

2020 target : 30%

2020 % achieved : $26/30 \times 100 = 87\%$

W8.1b

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

Goal

Engaging with customers to help them minimize product impacts

Level

Company-wide

Motivation

Shared value

Description of goal

- Details on why this goal is important to the company

Kao conducts a LCA (Life Cycle Analysis) to found that 90% of water is consumed in “use phase” among the total life cycle of Kao products, This figure shows that consumers’ behavior is very important to reduce water consumption related to Kao products. Kao believes that raising awareness is essential for consumers to understand environmentally friendly lifestyles and realizing a sustainable world.

- How the company is implementing the goal across their chosen level

Kao is conducting engagement with consumers to promote environmentally friendly lifestyles and realizing a sustainable world such as water saving in different contact points; elementary schools (lecture), plant (plant tours), local governments (events), stores (promotion), and website (information).

- How the target was set

Japan's working population is about 68 million and about 15 million, from elementary school to university students. On the other hand, 2.5% of the population is said to be early adapters, and more than 2 million people, or 2.5% of the total number of students and workers, are expected to enter the diffusion process. Kao set half of them, or 1 million people, for the milestone as of 2020.

Baseline year

2005

Start year

2009

End year

2020

Progress

- A description of the indicators that are used to assess progress

As an index for measuring engagements with consumers, we calculate the number of people who have been enlightened through school visits by Kao, plant tours, environmental events, and so on.

- The threshold of success and how they have progressed against it

Our goal for the total number of people who have been enlightened is 1 million for 2020, and we have reached 1.57 million as of 2020.

2020 target : 1 million%

2020 % achieved : $1.57/1*100=157\%$

W9. Verification

W9.1

(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?

Yes

W9.1a

(W9.1a) Which data points within your CDP disclosure have been verified, and which standards were used?

Disclosure module	Data verified	Verification standard	Please explain
W8 Targets	Water withdrawal (all sites) , water consumption during product use(Kao Group in Japan) , Water consumption across the entire product lifecycle (Kao Group), COD pollution load(all production site), Water withdrawal amount by source, Wastewater discharge by destination	ISAE 3000	The status of water-related items that Kao has set as goals is reviewed every year by a third party. We disclose the results in our Sustainability Data Book 2021.

W10. 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.

W10.1

(W10.1) Provide details for the person that has signed off (approved) your CDP water response.

	Job title	Corresponding job category
Row 1	President and Chief Executive Officer	Chief Executive Officer (CEO)

W10.2

(W10.2) 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