

Welcome to your CDP Water Security Questionnaire 2022

W0. Introduction

W_{0.1}

(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 four divisions. The Hygiene and Living Care Business offers fabric care products including detergents for apparel use, and home care products including detergents for kitchen use and hygiene products and paper diapers. The Health and Beauty Care Business offers premium skincare products such as face washes, as well as premium hair care products including shampoos, hair styling products and hair coloring products, among others. The Life Care Business provides food and beverage products such as drinks and professional use products. The Cosmetic Business provides cosmetics such as lotion, foundation and lipstick. 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 Hygiene and Living Care Business accounted for 36.4% of total turnover in fiscal 2021; The Health and Beauty Care Business, 26.2%; The Life Care Business, 3.8%; The Cosmetic Business, 16.9%; and The Chemical Business, 16.7%. The Company reported JPY 1,418.8 b in revenues and 33,507 permanent employees at December 31, 2021.

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, 2021	December 31, 2021

W_{0.3}

(W0.3) Select the countries/areas in which you operate.

Australia

Austria

Belgium

Canada



China

Czechia

Denmark

Finland

France

Germany

Hong Kong SAR, China

Indonesia

Italy

Japan

Malaysia

Mexico

Netherlands

New Zealand

Norway

Philippines

Republic of Korea

Russian Federation

Singapore

South Africa

Spain

Sweden

Switzerland

Taiwan, China

Thailand

United Kingdom of Great Britain and Northern Ireland

United States of America

Viet Nam

W_{0.4}

(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



W0.7

(W0.7) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization.	Provide your unique identifier
Yes, an ISIN code	JP320580000

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	As Kao plans to increase sales to reach the 2030 goal, production will rise accordingly, leading to higher water consumption. - Primary use of freshwater in direct operation Freshwater is consumed not only as a raw material of our products, such as liquid laundry detergents, body washing products, and household products including shampoos and conditioners, but also chemicals products, and that 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. 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. Therefore, it is rated as Vital for our operation. 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.
Sufficient amounts of recycled, brackish and/or produced water available for use	Vital	Not important at all	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.
			- 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. Therefore, it is rated as Vital for our operation.
			- Primary use in indirect operation None of our suppliers use non-freshwater. The products handled in the Hygiene & Living Care Business, Health & Beauty Care Business, Cosmetics Business, and Life Care Business are



for the body, require high quality water, and cannot use recycled water. These businesses account for about 80% of sales. - Why the chosen importance rating was selected for their direct operation
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.
- Why the chosen importance rating was selected for their indirect operation 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.

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%	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. 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. 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. 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.
Water withdrawals – volumes by source	100%	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. 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. 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. 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.
Water withdrawals quality	100%	The person in charge at each base checks the water withdrawals quality like as color, odor and temperature every day. 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.
Water discharges – total volumes	100%	At each production site, the volume of water discharge is measured daily with a voluntarily installed flowmeter. The person in charge there inputs monthly results in the database managed by the Kao Group. 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.
Water discharges – volumes by destination	100%	At each production site, the volume of water by discharge destination is measured daily with a voluntarily installed flowmeter. The person in charge there inputs monthly results by destination in the database managed by the Kao Group. 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.



Water discharges – volumes by treatment method	100%	At each production site, the volume of effluent by treatment method is measured daily with a voluntarily installed flowmeter. The person in charge there inputs monthly results in the database managed by the Kao Group. 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. 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.
Water discharge quality – by standard effluent parameters	100%	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. 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.
Water discharge quality – temperature	Not relevant	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. 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, it is rated as Not relevant, as there is no impact on the ecosystem due to the temperature of the discharged water. The Kao Group is expanding its business as a corporate group, and it is expected that the scale of wastewater treatment equipment will be expanded accordingly. However, there is no change in our basic direction of returning wastewater to room temperature, thus it is not considered to have



		any impact on the ecosystem and continues to be no relevant in the future.
Water consumption – total volume	76-99	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. 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. 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. However, at some business sites, the rainwater that has fallen inside the sites is drained to the outside, so the monitoring ratio is not 100%.
Water recycled/reused	100%	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. 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.
The provision of fully- functioning, safely managed WASH services to all workers	100%	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. 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. 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.



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	17,285	About the same	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 about 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. Although total revenues of Kao increased by 2.7% from 2020 to 2021, total water withdrawals increased only by 1.1% from 2020 to 2021, which is less than 5% increase compared to the previous year. Therefore, we rated as About the same. In 2021, the rate of decline in water withdrawal was lower than the rate of decline in total revenues due to the following reasons. Kao promotes group-wide water conservation activities. Another reason is that Kao Chemical Corporation Shanghai no longer exists due to the integration within the group, resulting in zero water usage in 2021. In Kao Chemicals GmbH (Germany), amount of water consumption decreased, although the total production volume increased, the procurement of raw materials delayed due to heavy snow, and production was suspended for about a month. Furthermore, the amount of water consumption decreased due to cool summer that required no use of air conditioning. The Kao Group is in the process of growing business as a corporate group and the total volumes of water withdrawals is expected to increase accordingly.
Total discharges	11,429	About the same	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 about the same in its management of water discharges. In order to achieve the sales target for 2030, it is necessary to continue business growth at an annual rate of about 8%, so we set the standard at 5%, which is below 8%. Kao's total sales increased by 2.7% from 2020 to 2021, while total drainage increased by 2.5% from 2020 to 2021, at about the same rate of increase. We chose "about the same" because it is an increase of less than 5% compared to the previous year. One of the reasons why the rate of increase in total wastewater was higher than the rate of increase in total amount of water used was that during production troubles in FCM (Malaysia), cooling water continued to flow and the amount of wastewater increased even though production was stopped. Will be. In the future, it is expected that the total amount of water intake will increase in the process of expanding the business as a corporate group. It is expected that the amount of wastewater will increase as the amount of water intake increases.
Total	5,857	About the same	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 about the same in its management of water consumption. The total water consumption is 17,285, total drainage: 11,429 → total water consumption: 17,285-11,429 = 5,857 ((thousand tons)). Sales have increased by 2.7% since 2020, but total water usage has decreased by 1.5% from 2020 as a result of company-wide water conservation activities. We chose "about the same" because it is less than 5% less than the previous year. In the case of Kao, total consumption greatly depends on the sales situation of products that contain a lot of water. We are in the stage of expanding our business as a corporate group, and it is expected that the total amount of water used will increase in the future.



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		Please explain
Row 1	Yes	11-25	Higher	WRI Aqueduct	-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 2021, in areas with high water stress, the total water withdrawals rate was 17.1%, an decrease of 1.1% from 18.2% in the previous year, partly because thereis the suspension of operation in Kao siteHow 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.

W1.2h

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	2	This is our first year of measurement	In 2020, we built a new office building on the premises of the Sumida Plant. We started using the rainwater that fell on the roof of this building in the toilet, and in 2021, we recorded a large amount of usage, so we reported it for the first time. At the Sumida Plant, an underground storage tank for rainwater has been installed as an emergency response such as a fire in the site, and some rainwater was used for watering the green space in the site. Therefore, it was not included in the amount of water intake and drainage.
Brackish surface water/Seawater	Not relevant			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. Therefore we don't use nonfresh water including brackish surface water/seawater. We think



				that the possibility of using it in the future is low so far.
Groundwater – renewable	Relevant	5,241	About the same	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. Kao uses groundwater at seven plants, and its volume accounts for approximately 30% of the total volume of water withdrawals. 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. In 2021, groundwater consumption increased by 1.8% compared to previous year due to a increase in the amount of groundwater used increased at the Fuji / Odawara Plant and Qimi Kao, but since it is less than 5%, we chose "about the same". Since Kao plans to increase sales to achieve the 2030 target, production at plants using groundwater will increase, and groundwater withdrawals will also grow.
Groundwater – non- renewable	Not relevant			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. In this regard, non-renewable groundwater is not relevant. We will not change this policy in the future, so we will not take



Produced/Entrained water	Not relevant			water from non-renewable groundwater either in the future. 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. Therefore we don't use non-fresh water including produced/entrained water. We think that the possibility of using it in the future is low so far.
Third party sources	Relevant	12,042	About the same	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. To secure quality water, we purchase 70% of our total water withdrawal from local water utilities. 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. In 2021, there was no major change in the operation content, and the amount of water taken from third-party water sources increased by 1.5% (less than 5%) from the previous year, so we chose "about the same" 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.

W1.2i

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water	Relevant	2,904	Higher	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. So Kao manage it as the important factor to influent the environment around our factory. 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. In 2021, the total amount of discharge to rivers increased by 7.0% from the previous year as a result of the increase in water intake due to the increase in production at each of the Fuji, Odawara, and KPG factories by more than 5% from the previous year. have become. Since it is more than 5%, we chose "higher". 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.
Brackish surface water/seawater	Relevant	5,653	About the same	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. Kao is aware that
				the amount and quality of water
				discharged directly affect sea
				water quality. So Kao manage it
				as the important factor to influent
				the environment around our
				factory. 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. The production volume
				of the Wakayama Plant which accounts for about 90% of the
				Group's drainage to the sea, was
				about the same as the previous
				year in 2021, and the
				displacement to the sea
				decreased by 0.7%. As a result,
				the total amount of wastewater to
				the sea after purification
				decreased by 0.1% from the
				previous year, which is less than
				5%, so we chose "about the
				same".
Groundwater	Not			Kao Group's business is not
	relevant			related to groundwater, as there
				are no plants or offices draining
				underground. We have never
				done drainage to groundwater and
				we will not do it in the future.
Third-party	Relevant	2,873	About the	Many Kao plants discharge
destinations			same	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. For this reason, Kao
				manages discharging of
				wastewater to other organizations
				as one of the company's critical
				as one of the company s chical
				environmental load items. Kao



considering that it is about the same as the previous year if it is in the range of 5% difference. In 2021, Kao Chemical Coporation Shanghai was shut down, but the production volume of Kao (Shanghai) Chemical Industries, which took over the production, increased by 130% from the previous year, and the amount of wastewater increased by 60% or more. , The amount of wastewater
previous year, and the amount of
more., The amount of wastewater discharged to third parties increased by 3.3% from the previous year. Since it is less than 5%, we chose "about the same".

W1.2j

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

	Relevanc e of treatment level to discharge	(megaliters/year	Compariso n of treated volume with previous reporting year	% of your sites/facilities/operation s this volume applies to	Please explain
Tertiary treatment	Relevant	510	Much higher	1-10	At plants where secondary treatment is not enough to meet strict emission standards for wastewater such as COD, nitrogen, phosphorus, wastewater passes through additional facilities



		 /torticlly
		(tertially
		treatment)
		before
		discharging.
		Since Kao
		periodically
		conducts water
		quality
		inspections,
		the concerned
		plants meet all
		the effluent
		standards and
		voluntary
		standards.
		In 2021, at
		Kawasaki
		Plant, which is
		one of the
		target plants,
		the amount of
		wastewater
		increased due
		to the increase
		in wastewater
		from filtration
		equipment,
		etc. due to the
		expansion of
		pure water
		production
		equipment,
		resulting in an
		increase of
		12.8%
		compared to
		the previous
		year that is an
		increase of
		10% or more.
		Therefore,
		Much higher is
		selected.



0	Dalacist	40.540	Alexand the	04.70	In plants that
Secondary	Relevant	10,513	About the	61-70	In plants that
treatment			same		do not meet
					effluent
					standards with
					only primary
					treatment,
					wastewater
					goes through
					secondary
					treatment
					facilities
					(biological
					treatment,
					coagulation
					sedimentation,
					etc.). For
					plants that
					meet water
					quality
					standards
					without
					removing
					phosphorus,
					nitrogen, and
					heavy metals
					from
					wastewater,
					we also carry
					out secondary
					treatment. Kao
					conducts water
					quality
					inspections on
					a regular
					basis, and
					most of the
					plants meet all
					the effluent
					standards and
					voluntary
					standards. We
					are currently
					-
					considering
					applicable
					equipment for



	1	T	1	T	T
					plants which
					may exceed
					the standards,
					in addition to
					the
					enhancement
					of operational
					management.
					The amount of
					wastewater
					discharged at
					the target
					plants
					increased by
					2.1% in 2021
					to compared to
					the previous
					year, but still
					remains below
					5%, About the
					same is
					selected.
Primary	Relevant	93	About the	1-10	In plants that
Primary treatment	Relevant	93	About the same	1-10	
treatment	Relevant	93		1-10	In plants that
-	Relevant	93		1-10	In plants that can meet the wastewater
treatment	Relevant	93		1-10	In plants that can meet the wastewater standards only
treatment	Relevant	93		1-10	In plants that can meet the wastewater
treatment	Relevant	93		1-10	In plants that can meet the wastewater standards only by the primary
treatment	Relevant	93		1-10	In plants that can meet the wastewater standards only by the primary treatment, the wastewater is
treatment	Relevant	93		1-10	In plants that can meet the wastewater standards only by the primary treatment, the wastewater is discharged
treatment	Relevant	93		1-10	In plants that can meet the wastewater standards only by the primary treatment, the wastewater is discharged after passing
treatment	Relevant	93		1-10	In plants that can meet the wastewater standards only by the primary treatment, the wastewater is discharged
treatment	Relevant	93		1-10	In plants that can meet the wastewater standards only by the primary treatment, the wastewater is discharged after passing through the
treatment	Relevant	93		1-10	In plants that can meet the wastewater standards only by the primary treatment, the wastewater is discharged after passing through the primary treatment
treatment	Relevant	93		1-10	In plants that can meet the wastewater standards only by the primary treatment, the wastewater is discharged after passing through the primary treatment facility
treatment	Relevant	93		1-10	In plants that can meet the wastewater standards only by the primary treatment, the wastewater is discharged after passing through the primary treatment facility (physical
treatment	Relevant	93		1-10	In plants that can meet the wastewater standards only by the primary treatment, the wastewater is discharged after passing through the primary treatment facility
treatment	Relevant	93		1-10	In plants that can meet the wastewater standards only by the primary treatment, the wastewater is discharged after passing through the primary treatment facility (physical treatment). Kao conducts
treatment	Relevant	93		1-10	In plants that can meet the wastewater standards only by the primary treatment, the wastewater is discharged after passing through the primary treatment facility (physical treatment). Kao conducts water quality
treatment	Relevant	93		1-10	In plants that can meet the wastewater standards only by the primary treatment, the wastewater is discharged after passing through the primary treatment facility (physical treatment). Kao conducts water quality inspections on
treatment	Relevant	93		1-10	In plants that can meet the wastewater standards only by the primary treatment, the wastewater is discharged after passing through the primary treatment facility (physical treatment). Kao conducts water quality inspections on a regular
treatment	Relevant	93		1-10	In plants that can meet the wastewater standards only by the primary treatment, the wastewater is discharged after passing through the primary treatment facility (physical treatment). Kao conducts water quality inspections on



standards and voluntary standards. In addition, even if the pH of the wastewater after the primary treatment is adjusted and the wastewater is outsourced to a third party, the water quality is
standards. In addition, even if the pH of the wastewater after the primary treatment is adjusted and the wastewater is outsourced to a third party, the water
addition, even if the pH of the wastewater after the primary treatment is adjusted and the wastewater is outsourced to a third party, the water
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to a third party, the water
the water
regularly
inspected to
confirm that it
complies with
the
acceptance
standards of
the third party.
Since the
amount of
wastewater
discharged at
the target
factories in
2021
decreased by
2.1% from the
previous year
to less than
5%, "almost
the same" was
selected.
Discharge Not All the
to the relevant business sites
natural directly
environmen operated by
t without Kao, which
treatment discharge
wastewater to
the natural



					environment conduct wastewater treatment. Therefore, this category, discharge to the natural environment without treatment, is not relevant to the group.
Discharge to a third party without treatment	Relevant	313	About the same	11-20	Partially, some plants discharge wastewater directly into sewage, because they meet effluent standards without their own wastewater treatment facilities. Although the amount of wastewater discharged at the target plants increased by 2.5% in 2021 compared to the previous year, it still remains below 5%. Therefore About the same is selected.



Other	Not		None of the
	relevant		Kao Group's
			business sites
			are not
			relevant to this
			as all the Kao
			Group's
			business sites
			are applicable
			to one of the
			aforementione
			d selections.

W1.3

(W1.3) Provide a figure for your organization's total water withdrawal efficiency.

	Revenue	Total water withdrawal volume (megaliters)	Total water withdrawal efficiency	Anticipated forward trend
Row 1	1,418,768,000,000	17,285	82,080,879.3751808	Kao is conducting reduction activities with the goal of reducing the total amount of water intake per sales. Therefore, it is expected that the water intake efficiency will tend to improve in the future.

W1.4

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

Yes, our suppliers

Yes, our customers or other value chain partners

W1.4a

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

Row 1

% of suppliers by number

1-25

% of total procurement spend



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, we selected 97 suppliers from the three business fields such as domestic water, industrial water and agricultural water, which use the most water in Japan. This covers 53% of suppliers on a purchase price basis. 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. Through the CDP SC Programmes, we evaluated water risks including drought and divided into four levels such as the information disclosure level *, awareness level**, management level***, and leadership level****. There were 35 companies with the management level **** or higher that is required by Kao. As a result, Kao evaluates what percentage of suppliers have reached the levels. The goal is for all target suppliers to reach this level. By managing water risk by all suppliers, businesses with 80% of sales, which are largely related to water, will be operated stably in the future.

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 2021, 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 2021, sales of "eco together" products in Japan accounted for 29% of total sales.

W2. Business impacts

W2.1

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

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.



Value chain stage

Direct operations

Coverage

Full

Risk assessment procedure

Water risks are assessed as part of an established 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 and standards Other

Tools and methods used

WRI Aqueduct
Life Cycle Assessment
Internal company methods
External consultants

Contextual issues considered

Water availability at a basin/catchment level

Water quality at a basin/catchment level

Stakeholder conflicts concerning water resources at a basin/catchment level Implications of water on your key commodities/raw materials

Water regulatory frameworks

Status of ecosystems and habitats

Access to fully-functioning, safely managed WASH services for all employees

Stakeholders considered

Customers

Employees

Investors

Local communities

NGOs

Regulators

Suppliers

Water utilities at a local level

Other water users at the basin/catchment level

Comment



Value chain stage

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 and standards Other

Tools and methods used

WRI Aqueduct
Life Cycle Assessment
Internal company methods

Contextual issues considered

Water availability at a basin/catchment level

Stakeholder conflicts concerning water resources at a basin/catchment level

Water regulatory frameworks

Status of ecosystems and habitats

Access to fully-functioning, safely managed WASH services for all employees

Stakeholders considered

Local communities

Suppliers

Water utilities at a local level

Other water users at the basin/catchment level

Comment

Value chain stage

Other stages of the value chain

Coverage

Partial



Risk assessment procedure

Water risks are assessed as part of an established 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 and standards Other

Tools and methods used

WRI Aqueduct Life Cycle Assessment Internal company methods

Contextual issues considered

Water availability at a basin/catchment level

Stakeholder conflicts concerning water resources at a basin/catchment level

Water regulatory frameworks

Status of ecosystems and habitats

Access to fully-functioning, safely managed WASH services for all employees

Stakeholders considered

Local communities

Suppliers

Water utilities at a local level

Other water users at the basin/catchment level

Comment

W3.3b

(W3.3b) 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, used internal company methods to conduct primary assessment of flood and storm surge risks using WRI Aqueduct Water Stress Projections for each size of risk to be addressed, and identified high-risk business bases.



In addition, once a year, an audit by the Responsible Care Promotion Committee Secretariat confirms the status of water risks such as short-term droughts, floods, and tsunamis. 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 for water risks, we request improvement and give guidance.

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.

Reasons for including considered stakeholders in the evaluation

-customer

Consumers are the most important stakeholder in assessing water risk. Consumer water consumption during product use accounts for approximately 90% of water consumption throughout the product life cycle.

-employee

Kao is a company that has a high affinity with water. We believe that it is important for all employees to understand this in order to tackle water risks company-wide. The high sensitivity of product developers in the R & D department to water risks should lead to the development of products that are highly water-friendly.

-Investor

Kao requires a large amount of water to use its main products (clothing detergent "Attack", body cleanser "Biore", etc.), and we understand that Kao is a business field that has a high affinity with water. .. At the same time, we understand that gaining investor support is one of the requirements for sustainable corporate activities.

-Community

Kao is a manufacturing industry, and the manufacturing industry operates by producing products at factories and selling them. Therefore, stable and continuous operation of the factory is very important for Kao. Kao believes that in order for the factory to operate stably and continuously, it is important for the local community to correctly understand Kao's factory's water initiatives.

-Regulatory authority

Kao's factories generally use and discharge a relatively large amount of water, and if the wastewater exceeds the emission regulations, the violating factory may not be able to operate. Therefore, it is essential to understand the trends of the regulatory authorities in charge of emission control and take necessary measures to continue stable operation of the factory. As a result, regulatory agencies are important stakeholders when dealing with water risks. -supplier

To that end, one of the important requirements is to have our business partners supply raw materials in a stable and continuous manner. Many of Kao's products use a wide variety of chemical substances and paper containers, and these raw materials are used in the three business fields that use the most water in Japan (chemical, steel, paper / paper processing / manufacturing). Supplied by the supplier. Therefore, we understand that most suppliers are



highly dependent on water, and suppliers are important stakeholders when dealing with water risks.

-Regional level water companies

The water used in many factories is supplied by the local water system, but in this case, understanding the water management policy (future supply forecast, regulation in case of shortage, etc.) is the stability of the factory. We recognize that it will be part of the information needed to operate.

-Other water users at the basin / catchment level

Kao factories generally take in and discharge a relatively large amount of water. Residents and factories around the factory usually use water obtained from the same water source as the water used in the factory, and since water is a public good, Kao should not monopolize it. Therefore, we believe that it is important to use water within the range where Kao can coexist with other water users in the basin / catchment area. In order for the factory to continue stable water use, it is necessary to understand the water demand of other water users in the basin / catchment area, and when dealing with water risks, other water users in the basin / catchment area Become an important stakeholder.

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 define our production bases in areas marked with a high water risk level or higher either in 2030 or 2040 by Aqueduct, as potential changes. 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 hightide 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?



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, China
Other, please specify
Tougian 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

Chronic physical 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 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 (176% of the 2021 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 76%, and resulting production will fall 43% short (((100/176) – 1)*100 = -43%).

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. To achieve this, we set company-wide goals on a yearly basis. Based on this company-wide goals, each business site in each country sets a goal every year and is working to achieve it. Since the area where Kao Corporation Shanghai operates has a particularly high risk of water supply in the future, the company is ambitiously working on to improve water consumption efficiency and continues to reduce the risk of hindering business growth. At the plant of Kao Corporation Shanghai, as a result of promoting activities to improve water efficiency, such as leak prevention measures and the introduction of water-saving equipment, the basic unit for water consumption in 2021 decreased by 7.7% compared to the previous year.

Cost of response

9,770,000

Explanation of cost of response

The volume of water intake by Kao Corporation Shanghai, a plant that stands in a river basin, was 50.85 million liters in 2021. 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 38.75 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 9.77 million yen (9.77 = 6.3/25*38.75).

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	Risks exist, but	Kao has expanded the scope of its water-related risk surveys not only	
1	no substantive	directly to its business, but also to its value chain. The person in charge	
	impact	conducted a risk survey using AQUEDUCT at the supplier plants. 97 high-	
anticipated		risk suppliers selected by Kao were surveyed, Through the CDP SC	
		Programmes, we evaluated water risks including drought and divided into	



four levels such as the information disclosure level *, awareness level**, management level***, and leadership level***. There were 35 companies with the management level **** or higher that is required by Kao. As a result, Kao now recognizes that no supplier plants will be significantly financially and strategically affected, as applicable suppliers in the CDP SC programme cover 53% on a purchase price basis, The flow of activities and results are managed by the Risk Crisis Management Committee. Many of Kao's products require a large amount of water during product use in products' lifecycle. 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. 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. The flow of activities and results are managed by the Risk Crisis Management Committee.

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

Kao has set a target of reducing the amount of water consumption in direct operations by 45% compared to 2005 by 2030. In addition, as a milestone, we have set a goal of reducing 43% by 2025. At each Kao plant, we are working on reduction activities to achieve the company-wide target set at the end of the previous year (2021 target: 41% reduction). Each plant uses water for compounding products and cleaning and cooling equipment. In order to continue stable operation of plants and conserve the ecosystem of the basin where the plants operate, we set a reduction target for water consumption every year and work on water consumption reduction and reuse from the viewpoint of 3R (Reduce, Reuse, Recycle). For example, Kao Thailand has reduced the amount of



water consumption by making efforts to improve the efficiency of pure water production. In 2021, the total water consumption of the Kao Group was reduced by 13% compared to 2005. 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 Corporation Shanghai

Country/Area & River basin

China

Yangtze River (Chang Jiang)



Latitude

31.03815

Longitude

121.38262

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

50.85

Comparison of total withdrawals with previous reporting year

This is our first year of measurement

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

0

Withdrawals from brackish surface water/seawater

C

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

50.85

Total water discharges at this facility (megaliters/year)

41.18

Comparison of total discharges with previous reporting year

This is our first year of measurement

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

0

Discharges to groundwater

n

Discharges to third party destinations

41.18



Total water consumption at this facility (megaliters/year)

9.67

Comparison of total consumption with previous reporting year

This is our first year of measurement

Please explain

Due to the suspension of operation at Kao Chemical Corporation Shanghai, the figures for Kao Corporation Shanghai, which is operating in the same area have been recorded.

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)

1,117.44

Comparison of total withdrawals with previous reporting year

Lower

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

1,117.44

Withdrawals from groundwater - non-renewable



Withdrawals from produced/entrained water

0

Withdrawals from third party sources

n

Total water discharges at this facility (megaliters/year)

175.21

Comparison of total discharges with previous reporting year

Much lower

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

175.21

Discharges to groundwater

n

Discharges to third party destinations

C

Total water consumption at this facility (megaliters/year)

1,027.25

Comparison of total consumption with previous reporting year

Lower

Please explain

In 2021, the production volume decreased by 9.7% compared to the previous year, resulting in a decrease of around 10% in water withdrawal, water discharge and water consumption.

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)

614.58

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

614.58

Total water discharges at this facility (megaliters/year)

449.75

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

449.75

Total water consumption at this facility (megaliters/year)

164.83



Comparison of total consumption with previous reporting year

About the same

Please explain

In 2021, the production volume decreased by 1.9% compared to the previous year, but the water withdrawal and water discharge decreased slightly by 2.4% and 3.0% respectively compared to the previous year by adding the effect of water reduction activities. The water withdrawal, and water discharge increased by more than 10% compared to the previous year and water consumption remained about the same.

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)

491.3

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



Withdrawals from produced/entrained water

0

Withdrawals from third party sources

491.3

Total water discharges at this facility (megaliters/year)

321.01

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

O

Discharges to third party destinations

321.01

Total water consumption at this facility (megaliters/year)

170.29

Comparison of total consumption with previous reporting year

About the same

Please explain

In 2021, the production volume increased by 2.3% compared to the previous year, and the amount of water withdrawal decreased by 2.7% from the previous year.

Facility reference number

Facility 5

Facility name (optional)

Kao (Taiwan) Corporation

Country/Area & River basin

Taiwan, 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)

180.11

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

180.11

Total water discharges at this facility (megaliters/year)

82.55

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

n

Discharges to groundwater

0

Discharges to third party destinations

82.55

Total water consumption at this facility (megaliters/year)

97.56

Comparison of total consumption with previous reporting year



Much higher

Please explain

In2021, the production volume increased by 3.4% compared to the previous year, and the amount of water withdrawal also increased by 1.4% from the previous year. Water consumption increased by 13.2% from the previous year due to the increase in the ratio of products containing a large amount of water, but as a result of promoting activities to reduce wash water in the production line, the amount of wastewater decreased by 9.7% from the previous year.

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)

216.53

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

205.92

Withdrawals from groundwater - non-renewable

n

Withdrawals from produced/entrained water



0

Withdrawals from third party sources

10.61

Total water discharges at this facility (megaliters/year)

144.94

Comparison of total discharges with previous reporting year

Higher

Discharges to fresh surface water

O

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

144.94

Total water consumption at this facility (megaliters/year)

71.59

Comparison of total consumption with previous reporting year

Higher

Please explain

In 2021, the production volume slightly increased by 0.2%, or remained about the same level compared to the previous year, while the amount of water withdrawal, water discharge and the amount of water consumption increased respectively by more than 5% from the previous year. The reason is that the total amount of water handled increased as a result of suspension of the use of recycled water several times due to the deterioration of the water quality, and that that amount of shortage covered with groundwater. In addition to increased production, new plant equipment went into operation in 2020, using more water for cooling, steam, etc., In the breakdown of water withdrawal, the amount of recycled water decreased by 90% and the amount of groundwater increased by 106% respectively compared to the previous year.

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)

156.38

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

O

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

156.38

Total water discharges at this facility (megaliters/year)

110.74

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

0

Discharges to groundwater



Discharges to third party destinations

110.74

Total water consumption at this facility (megaliters/year)

45.64

Comparison of total consumption with previous reporting year

Much higher

Please explain

In 2021, production decreased by 14.2% year-on-year, but water intake decreased by 0.6% year-on-year, almost unchanged. On the other hand, the amount of wastewater decreased by 7.6% from the previous year, because 2020 was a very rainy year, while 2021 was less rainy and the amount of water discharged decreased.

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)

172.85

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

172.85

Total water discharges at this facility (megaliters/year)

98.57

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

98.57

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

74.27

Comparison of total consumption with previous reporting year

About the same

Please explain

In 2021, production volume increased by 2.8% from the previous year, and along with this, water intake / drainage and water consumption all increased by less than 5% from the previous year.

W5.1a

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

Water withdrawals - total volumes

% verified

76-100



Verification standard used

ISAE3000, limited assurance

Water withdrawals - volume by source

% verified

76-100

Verification standard used

ISAE3000, limited assurance

Water withdrawals - quality by standard water quality parameters

% verified

Not verified

Please explain

This is not a company-wide management target item.

Water discharges - total volumes

% verified

76-100

Verification standard used

ISAE3000, limited assurance

Water discharges - volume by destination

% verified

76-100

Verification standard used

ISAE3000, limited assurance

Water discharges - volume by final treatment level

% verified

Not verified

Please explain

This is not a company-wide management target item.

Water discharges - quality by standard water quality parameters

% verified



76-100

Verification standard used

ISAE3000, limited assurance

Water consumption - total volume

% verified

Not verified

Please explain

This is not a company-wide management target item.

W6. Governance

W6.1

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

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

W6.1a

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

	Scope	Content	Please explain
Row 1	Companywide	Description of business dependency on water Description of business impact on water Description of water-related standards for procurement Reference to international standards and widely-recognized water initiatives Company water targets and goals Commitment to align with public policy initiatives, such as the SDGs Commitments beyond regulatory compliance	Many household products such as liquid laundry detergents and shampoos use water as one of the raw materials, and Kao's business relies heavily on water. The raw material stage accounts for about 10% of the amount of water consumed throughout the life cycle of Kao products. On the other hand, Kao's business has a great impact on local water risks, as the amount of water consumed at the use stage in general household accounts for about 90% that constitutes about 15% of domestic water in Japan. 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. Kao defines Kirei Lifestyle Plan as our ESG strategy. Company water targets and goals: Kao reduces its lifecycle water consumption per unit of production by



Commitment to waterrelated innovation
Commitment to water
stewardship and/or
collective action
Acknowledgement of the
human right to water
and sanitation
Recognition of
environmental linkages,
for example, due to
climate change

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.

Kao issued the Environmental Declaration in 2009.

- Commitment to water-related innovation: Kao has set a target of reducing water (in Japan) of overall Kao Group product lifecycles by 10% in the medium-term target for the year 2030 (per unit of sales, 2017 base year)

Kao operates a Design for Environment Guidelines in developing its products.

- Commitment to water stewardship and/or collective action: Kao is checking reduce water amount at use phase in Design for Environment Guidelines.

Kao establishes a Responsible Care Policy.

- 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.

Kao has established purchasing guidelines.

- Description of water-related standards for procurement
- Reference to international standards and widelyrecognized water initiatives

Kao has a human rights policy. The following content apply to WASH.

- Acknowledgement of the human right to water and sanitation: Kao provides a safe and pleasant working environment.

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	Water-related risks are managed by the RC Committee and the Risk Crisis
Executive	Committee under the jurisdiction of the Internal Control Committee(chaired by the
Officer (CEO)	CEO). 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.
	Opportunities for water are managed by the ESG Management 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.
	serves as the shairman of the committee.
	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 2021, the Board of Directors decided that there was no need to
	review water-related targets. Therefore, the CEO has all responsibility and authority
	of Kao to comply with water-related laws and regulations and to set and achieve water reduction targets.

W6.2b

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

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	Monitoring implementation and performance Overseeing acquisitions and divestiture Overseeing major capital expenditures Providing employee incentives	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 Management Committee, which is under the control of the Board of Directors, holds a meeting at least four times per year and manages water-



	Reviewing and	related opportunities. The status of activities of
	guiding annual	these committees is explained to the Board of
	budgets	Directors by the secretary-general of each
	Reviewing and	committee. Since water-related issues have an
	guiding business	impact on Kao's business and thus must be
	plans	supervised as one of the business management
	Reviewing and	issues, they are under the oversight of the Internal
	guiding major plans of	Control Committee and the ESG Committee, with
	action	the CEO serving as chairperson.
	Reviewing and	
	guiding risk	
	management policies	
	Reviewing and	
	guiding strategy	
	Reviewing and	
	guiding corporate	
	responsibility strategy	
	Reviewing	
	innovation/R&D	
	priorities	
	Setting performance	
	objectives	
	-	

W6.2d

(W6.2d) Does your organization have at least one board member with competence on water-related issues?

	Board member(s) have competence on water-related issues	Criteria used to assess competence of board member(s) on water-related issues
Row 1	Yes	Worked in R&D that is responsible for the development of water-related products for one year or more, or in divisions related to water risk management such as the ESG Division and the Supply Chain Management Division, or served as a member of the Risk & Crisis Management Committee.

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).

Chief Executive Officer (CEO)



Responsibility

Assessing future trends in water demand Assessing water-related risks and opportunities 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). Risk and Crisis Management Committee(RCMC) and Responsible Care Promotion Committee(RCPC), both under the ICC, manage water-related risk, while ESG Committee, under the Board, manages water-related opportunities. CEO chairs RCMC and RCPC. Under 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. RCMC has established a system for managing water risk and a plan for operating the system, and RCPC checks that the plan is carried out properly at all divisions, subsidiaries, and affiliated companies. ESG Committee is responsible for setting the direction of activities and promoting them. CEO is responsible for water risk management system developed by RCMC, its operational plans and implementations checked by RCPC.

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
Monetary reward	Director on board	Reduction of water withdrawals	Kao's directors and executive officers can receive long-term incentive compensation according to ESG
Toward	Corporate executive team	Improvements in efficiency - product-use Improvements in waste water	strength metrics, including performance of water activities. Here, the evaluation of the ESG strength evaluation index is determined by the evaluation by external indicators such as DJSI and CDP and the degree of achievement of internal goals. Long-term incentive rewards are paid 0-40% of the basic reward



		quality - direct operations Supply chain engagement	depending on the outcome. Kao has a goal of reducing "water withdrawal" by 45% in 2030, and has set an annual goal to manage progress. We are working on reducing and reusing water from the perspective of the 3R (Reduce, Reuse, Recycle). We will promote activities such as using it. "Improved efficiency – product use" aims to reduce the overall life cycle by 10% in 2030. We will reduce the amount of water used by launching products with good rinse properties such as laundry and dishwashing detergents and body cleaners. As "improvement of wastewater quality-direct operation", we are striving for appropriate wastewater treatment in order to comply with the relevant laws and regulations of each country. Kao also recognizes that water risk also affects the entire value chain. Therefore, in order to make suppliers aware of water risks, we promote "Supply chain engagement" using Sedex etc. The goal is to complete the risk survey of all suppliers by 2025. We continue to promote water engagement in the supply chain by developing awareness of all suppliers on water risks.
Non- monetary reward	Director on board Corporate executive team	Reduction of water withdrawals Reduction in consumption volumes Improvements in efficiency - supply chain Improvements in efficiency - product-use Supply chain engagement	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.

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?

At each Kao site, we regularly check public policies and regulations in the relevant areas regarding water risk every year. Significant changes in public policies will be reported to the Risk & Crisis Management Committee (RCMC). RCMC confirms the impact of policy changes on all business sites, and if there is any inconsistency, proposes changes to their policies and targets. These proposals will be deliberated and approved by the ESG Managing Committee chaired by the CEO. And then, 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 Managing 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 Managing 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 Managing 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)

securities-fy2021-all-01.pdf

securities-fy2021-all-01.pdf

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?		Please explain
Long-term business objectives	Yes, water- related issues are integrated	> 30	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. 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. 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.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	11-15	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. 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. 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. Kao has been developing water-saving products since before 2000, and will gradually market new water-saving products by 2030.
Financial planning	Yes, water- related issues are integrated	11-15	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. 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,



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. Kao has been developing water-saving products since before 2000, and will gradually market new water-saving products by 2030.

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)

213

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

5

Water-related OPEX (+/- % change)

-18.4

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 2021, there were large-scale investment projects (the United States, Mexico and Spain) compared to 2020, when there were few investment projects due to the impact of COVID-19, therefore water-related investment increased significantly. 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 scenario analysis to inform its business strategy?

	Use of scenario analysis	Comment
Row 1	Yes	

W7.3a

(W7.3a) Provide details of the scenario analysis, what water-related outcomes were identified, and how they have influenced your organization's business strategy.

	Type of scenario analysis used	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
Row 1	Climate-related	Parameters Future temperature rise Assumption Changes in precipitation patterns due to rising temperatures Analytical choice 2 °C and 4 °C scenarios RCP1.9, RCP2.6, RCP8.5 Quantitative, qualitative or mixed mixed	For example, climate change increases the risk of poor crops of palm oil, which is one of Kao's main ingredients, and that can lead to high prices and difficulty in purchasing. If about 500,000 tons of palm oil cannot be purchased, not only will it make us unable to sell chemical products such as surfactants, but we will also become impossible to manufacture household products such as detergents and cleaning agents. This is expected to impact businesses that account for 80% of our sales.	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. One of the cause of global warming is the clearing of forest for palm plantations, causing deforestation. To prevent this, Kao aims to procure 100% RSPO(Roundtable on Sustainable Palm Oil)-certified oil for the palm oil used by the Kao



	Group by 2025. The ratio of the
	certified oil purchase was 27'% in
	2021.

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.

W7.5

(W7.5) Do you classify any of your current products and/or services as low water impact?

	Products and/or services classified as low water impact	Definition used to classify low water impact	Please explain
Row 1	Yes	Products that use less water when used than products that have been widely used in the area.	As a result of investigating the amount of water consumption in Kao products for each phase, it was found that 90% of the total is related to the product use phase. Therefore, Kao is developing products with the goal of reducing the amount of water consumption when using the products.

W8. Targets

W8.1

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

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



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

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 all 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 all 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 45% in 2030.

Quantitative metric

% reduction in total water withdrawals

Baseline year

2005

Start year



Target year

2030

% of target achieved

89.4

Please explain

With 2005 as the base year, Kao's water intake (all sites) reached 17.3 million m3, with a reduction rate of 40.2% on a per-unit basis in 2021. The absolute volume increased from 17.1 million m3 in 2021.

Target reference number

Target 2

Category of target

Water consumption

Level

Business activity

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 In the hydiana & living care hysiness such as clothing a

In the hygiene & living care business such as clothing and household detergents, and in the health & beauty care business such as body cleansers and shampoos, 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, the target is to reduce the amount by 10% in 2030 compared to 2017. Since the usage stage accounts for 90% of the entire life cycle, we are developing water-saving products.

Quantitative metric

% reduction in total water consumption

Baseline year

2017

Start year

2009

Target year



% of target achieved

0

Please explain

Water usage over the entire product life cycle was 2968 million m3, an increase of 7 m3 compared to 2017. We released water-saving shampoos, etc., but the cause was that sales of hand soaps, etc. increased. 2030 target 2665m3, 2017 standard 2961m3. (2961-2968) / (2961-2665) * 100 = -2.3%

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 The all Kao Group is promoting 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

2016

Start year



End year

2030

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 100 million for 2030, and we have reached 45.0 million as of 2021.

2021 % achieved: 45.0million/100million*100=45%

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 2022.

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