

Ajinomoto Co.Inc. CDP Water Security 2023

W0. Introduction

W0.1

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

Ajinomoto Co., Inc. is a Japanese company that produces food seasonings, processed foods, sweeteners, amino acids and pharmaceuticals. Ajinomoto Group is active in 130 countries and regions worldwide, employing around 34,000 people. Sales in fiscal 2022 was 1,359 billion yen.

W-FB0.1a/W-AC0.1a

(W-FB0.1a/W-AC0.1a) Which activities in the food, beverage, and tobacco and/or agricultural commodities sectors does your organization engage in?

Processing/Manufacturing

W0.2

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

	Start date	End date
Reporting year	April 1, 2022	March 31, 2023

W0.3

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

Belgium
 Brazil
 Cambodia
 China
 France
 India
 Indonesia
 Japan
 Malaysia
 Myanmar
 Peru
 Philippines
 Thailand
 United States of America
 Viet Nam

W0.4

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

JPY

W0.5

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

Companies, entities or groups over which operational control is exercised

W0.6

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

No

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	3119600009

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	Ajinomoto group produces amino acid, processed food and seasoning. We have recognized that a great deal of good fresh water is used for direct amino acid production operation such as dilution of raw material and cleaning for amino acid crystal. We have recognized that a great deal of good fresh water is used for indirect production such as cultivation of agricultural crop for raw material and steam for sterilization of equipment.

			Therefore, we have regarded this type of water as important. In our business, for direct operations and indirect operations, the sufficient amounts of good quality fresh water will be also important in the future because we will continue to produce processed food and seasoning in the future.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Important	Ajinomoto group has regarded this type of water as important, because recycled water is used in direct production operation for cooling our products such as amino acid and frozen food, and in indirect production such as cooling raw material. We have been developing a new production technology to decrease recycled water in our plants. In order for effective water use in our value chain, recycled water have been regarded as important in our supply chain. In our business, for direct operations and indirect operations, the recycled water will be also important in the future, because we will continue to cool our products such as processed food and raw material in the future.

W-FB1.1a/W-AC1.1a

(W-FB1.1a/W-AC1.1a) Which water-intensive agricultural commodities that your organization produces and/or sources are the most significant to your business by revenue? Select up to five.

Agricultural commodities	% of revenue dependent on these agricultural commodities	Produced and/or sourced	Please explain
Maize/corn	Less than 10%	Sourced	Ajinomoto group factories in USA use starch of Maize for raw material of Amino acid fermentation. Maize need much fresh water while nurturing.

W1.2

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

	% of sites/facilities/operations	Frequency of measurement	Method of measurement	Please explain
Water withdrawals – total volumes	100%	Continuously	Water flowmeter such	We monthly grasp and monitor total volumes of water

			as Karman vortex	<p>withdrawals of all relevant sites through Ajinomoto group environmental performance survey. The parameter of water have been measured in our facilities of 100% for Ajinomoto group. Ajinomoto group has recognized that it is necessary to minimize the environmental impact by operation of our factories. We have recognized that it is the important step for plan implementation to measure general quantity and quality of total water intake. Therefore, we had made a plan non-financial targets of environment. According to targets, it is important for Ajinomoto group to measure the amount of withdrawals water and the quality of water. Therefore, we monthly monitor water amount used by water flowmeter such as Karman vortex, and consider its reduction based on the results.</p>
Water withdrawals – volumes by source	100%	Continuously	Water flowmeter such as Karman vortex	We monthly grasp and monitor volumes by source of all relevant sites

				<p>through Ajinomoto group environmental performance survey. The parameter of water have been measured in our facilities of 100% for Ajinomoto group. Ajinomoto group has recognized that it is necessary to minimize the environmental impact by operation of our factories. We have recognized that it is the important step for plan implementation to measure general quantity and quality of water intake. Therefore, we had made a plan non-financial targets of environment. According to targets, it is important for Ajinomoto group to measure the amount of withdrawals water and the quality of water. Therefore, we monthly monitor water amount used by water flowmeter such as Karman vortex, and consider its reduction based on the results.</p>
Water withdrawals quality	100%	Continuously	PH meter	We monthly grasp and monitor the quality of water withdrawals of all relevant sites through Ajinomoto

				<p>group environmental performance survey. The parameter of water have been measured in our facilities of 100% for Ajinomoto group. Ajinomoto group has recognized that it is necessary to minimize the environmental impact by operation of our factories. We have recognized that it is the important step for plan implementation to measure general quantity and quality of water intake. Therefore, we had made a plan non-financial targets of environment. According to targets, it is important for Ajinomoto group to measure the amount of withdrawals water and the quality of water. Therefore, we monthly monitor water quality by PH meter, and consider its reduction based on the results.</p>
Water discharges – total volumes	100%	Continuously	Water flowmeter such as Karman vortex	<p>We monthly grasp and monitor total volumes of water discharges of all relevant sites through Ajinomoto group environmental performance survey. The parameter of</p>

				<p>water have been measured in our facilities of 100% for Ajinomoto group. Ajinomoto group has recognized that it is necessary to conserve the environment by operation of our factories. We have recognized that it is the important step for plan implementation to measure discharges water volumes and quality. Therefore, we had made a plan non-financial targets of environment. According to targets, it is important for Ajinomoto group to measure the quantity and quality of discharges water. Therefore, we monthly monitor water amount used by water flowmeter such as Karman vortex, and consider its reduction based on the results.</p>
Water discharges – volumes by destination	100%	Continuously	Water flowmeter such as Karman vortex	<p>We monthly grasp and monitor volumes by destination of water discharges of all relevant sites through Ajinomoto group environmental performance survey. The parameter of water have been measured in our</p>

				<p>facilities of 100% for Ajinomoto group. Ajinomoto group has recognized that it is necessary to conserve the environment by operation of our factories. We have recognized that it is the important step for plan implementation to measure discharges water volumes and quality. Therefore, we had made a plan non-financial targets of environment. According to targets, it is important for Ajinomoto group to measure the quantity and quality of discharges water by destination. Therefore, we monthly monitor water amount used by water flowmeter such as Karman vortex, and consider its reduction based on the results.</p>
Water discharges – volumes by treatment method	100%	Continuously	Water flowmeter such as Karman vortex	<p>We monthly grasp and monitor volumes by treatment method of water discharges of all relevant sites through Ajinomoto group environmental performance survey. The parameter of water have been measured in our facilities of 100% for</p>

				<p>Ajinomoto group. Ajinomoto group has recognized that it is necessary to conserve the environment by operation of our factories. We have recognized that it is the important step for plan implementation to measure discharges water volumes and quality. Therefore, we had made a plan non-financial targets of environment. According to targets, it is important for Ajinomoto group to measure the quantity and quality of discharges water by treatment method. Therefore, we monthly monitor water amount used by water flowmeter such as Karman vortex, and consider its reduction based on the results.</p>
Water discharge quality – by standard effluent parameters	100%	Continuously	PH and TOC meter	<p>We monthly grasp and monitor water discharge quality by standard effluent parameters of all relevant sites through Ajinomoto group environmental performance survey. The parameter of water have been measured in our facilities of 100% for</p>

			<p>Ajinomoto group. Ajinomoto group has recognized that it is necessary to conserve the environment by operation of our factories. We have recognized that it is the important step for plan implementation to measure discharges water quality. Therefore, we had made a plan non-financial targets of environment. According to targets, it is important for Ajinomoto group to measure the quality of discharges water by standard effluent parameters. Therefore, we monthly monitor water quality by PH and TOC meter, and consider its reduction based on the results.</p>
<p>Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)</p>	<p>Not relevant</p>		<p>We yearly grasp and monitor this data of all relevant sites through Ajinomoto group environmental performance survey. The parameter of water have been measured in our facilities of less than 50% water discharge volumes in Ajinomoto group. Ajinomoto group has</p>

				<p>recognized that it is important to conserve the environment by operation of our factories. We have recognized that it is the important step for plan implementation to measure discharges water quality. Therefore, we had made a plan non-financial targets of environment. According to targets, it is important for Ajinomoto group to measure the quality of discharges water by standard effluent parameters. Therefore, we yearly monitor quality of water discharged by Spectrometric method using sulfosalicylic acid.</p>
Water discharge quality – temperature	1-25	Continuously	Thermoelectric couple temperature meter	<p>We monthly grasp and monitor this data of all relevant sites through Ajinomoto group environmental performance survey. The parameter of water have been measured in our facilities of less than 25% for Ajinomoto group. Ajinomoto group has recognized that it is important to conserve the</p>

				<p>environment by operation of our factories. We have recognized that it is the important step for plan implementation to measure discharges water quality. Therefore, we had made a plan non-financial targets of environment. According to targets, it is important for Ajinomoto group to measure the quality of discharges water by standard effluent parameters. Therefore, we monthly monitor quality of water discharged by thermoelectric couple temperature meter.</p>
Water consumption – total volume	100%	Continuously	Water flowmeter such as Karman vortex	<p>We monthly grasp and monitor water consumption volumes of all relevant sites through Ajinomoto group environmental performance survey. The parameter of water have been calculated in our facilities of 100% for Ajinomoto group. Ajinomoto group has recognized that it is necessary to conserve the environment by operation of our</p>

				factories. We have calculated water consumption volumes. Therefore, we monthly monitor water amount used by water flowmeter such as Karman vortex, and consider its reduction based on the results.
Water recycled/reused	100%	Continuously	Water flowmeter such as Karman vortex	We monthly grasp and monitor water recycled/reused data of all relevant sites through Ajinomoto group environmental performance survey. The parameter of water have been calculated in our facilities of 100% for Ajinomoto group. Ajinomoto group has recognized that it is necessary to conserve the environment by operation of our factories. We have measured amount of recycled/reused water. Therefore, we monthly monitor water amount used by water flowmeter such as Karman vortex, and consider its reduction based on the results.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Continuously	Chlorine residual meter	We monthly grasp and monitor this and information about the provision of fully-functioning, safely managed WASH

				<p>services to all workers of all relevant sites through Ajinomoto group environmental performance survey. The parameter of water is watched in our facilities of 100% for Ajinomoto group. We consider it is important for our employee to lead healthy and comfortable life. Therefore, we recognize that offering safe water and the clean environment to the employee is obligation for us. Therefore, we monthly monitor water quality by chlorine residual meter, and consider keep quality based on the results.</p>
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W1.2b

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

	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Please explain
Total withdrawals	60,000	About the same	Increase/decrease in efficiency	Lower	Increase/decrease in efficiency	Total withdrawals in FY2022 is about the same of previous

						<p>fiscal year. We are trying to reduce water consumption intensity by technology development, reducing, reusing, or recycling, therefore expect total consumption to be decreased in the future.</p>
Total discharges	46,500	About the same	Increase/decrease in efficiency	Lower	Increase/decrease in efficiency	<p>Total discharges in FY2022 is about the same of previous fiscal year. We are trying to reduce water consumption intensity by technology development, reducing, reusing, or recycling, therefore expect total consumption to be decreased</p>

						in the future.
Total consumption	13,500	Higher	Increase/decrease in business activity	Lower	Increase/decrease in efficiency	Total consumption is higher than that of previous fiscal year by 12.5%. We are trying to reduce water consumption intensity by technology development, reducing, reusing, or recycling, therefore expect total consumption to be decreased in the future.

W1.2d

(W1.2d) Indicate whether water is withdrawn from areas with water stress, provide the proportion, how it compares with the previous reporting year, and how it is forecasted to change.

Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Identification tool	Please explain

Row	Yes	Less than 1%	About the same	Increase/decrease in efficiency	About the same	Increase/decrease in efficiency	WRI Aqueduct	
1								<p>Ajinomoto group factories producing amino acid use much withdrawal water. We have assessed these 21 factories by AQUEDUCT and factory detail information. We input factories location latitude longitude data to AQUEDUCT, and utilized output information such as water related risk. By utilizing AQUEDUCT (Physical risk quantity, physical risk quality, regulatory &</p>

								<p>reputation risk) and detail information, we recognize which a few factories are exposed to high water stress. We have selected factory located in water stressed area in terms of focusing Baseline Water Stress and Groundwater Stress of the assessment results. The factory located in water stressed area among Ajinomoto group is only Peru. From the previous reporting fiscal</p>
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								year, the amount of water withdrawals from area with water stress has decreased by 3%.
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W-FB1.2e/W-AC1.2e

(W-FB1.2e/W-AC1.2e) For each commodity reported in question W-FB1.1a/W-AC1.1a, do you know the proportion that is produced/sourced from areas with water stress?

Agricultural commodities	The proportion of this commodity produced in areas with water stress is known	The proportion of this commodity sourced from areas with water stress is known	Please explain
Maize/corn	Not applicable	Yes	We do not produce Maize. We do not source Maize from area under water stress (0%), because Ajinomoto Group Policies commit to fulfill social responsibility including environmental preservation. We assess suppliers based on “Ajinomoto Group Policies” (4.4 We involve our subcontractors and suppliers in our efforts to fulfill our social responsibilities, including environmental preservation and protection of human rights.) and “Group Shared Policy for Suppliers (5. Taking into Consideration the Global Environment), Guidelines for Group Shared Policy for Suppliers (5. Taking into Consideration the Global Environment). Therefore, we have not purchased raw material from water stress area. By using Aqueduct and factory detail information, we identify the area around Peru factory as water stressed area. Peru factory has used Sucrose or Cane Molasses for raw material. The factory has never used maize starch.

W-FB1.2g/W-AC1.2g

(W-FB1.2g/W-AC1.2g) What proportion of the sourced agricultural commodities reported in W-FB1.1a/W-AC1.1a originate from areas with water stress?

Agricultural commodities	% of total agricultural commodity sourced from areas with water stress	Please explain
Maize/corn	0%	<p>Our factories will never use raw material from water stress area in the future, because Ajinomoto Group Policies commit to be fulfilled social responsibility including environmental preservation. We assess supplier based on “Ajinomoto Group Policies” (4.4 We involve our subcontractors and suppliers in our efforts to fulfill our social responsibilities, including environmental preservation and protection of human rights.) and “Group Shared Policy for Suppliers (5. Taking into Consideration the Global Environment), Guidelines for Group Shared Policy for Suppliers (5. Taking into Consideration the Global Environment). Therefore, we have not purchased raw material from water stress area. The Group head quarter is reported every month kinds and quantities their raw material by all Group factories to confirm no water stress. Peru factory has used Sucrose or Cane Molasses for raw material. The factory has never used maize starch, and will not use it for the future, therefore the 0% will stay the same. We have a policy not to source raw materials from water stressed area as our strategy. We check compliance of this policy every year.</p>

W1.2h

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	17,900	About the same	Increase/decrease in efficiency	The volume of fresh surface water in FY 2022 is about the same that of previous

					<p>fiscal year (higher than that of previous fiscal year by 3%).</p> <p>Ajinomoto group has used industrial water meter that accuracy is plus-minus 5% at 100% scale.</p> <p>Therefore, the group consider that under 5% difference data from previous fiscal year is within the range of metering error. We estimate that amount used may increase accompanying our merger and acquisition in the future, however, at the same time, we will reduce water consumption intensity by technology development, reducing, reusing, or recycling.</p>
Brackish surface water/Seawater	Not relevant				The Ajinomoto Group does not use brackish surface

					water/seawater . It is because the Group produces amino acid and frozen food using only fresh water for the safety of people who eat our products. We had answered 'not relevant' of this data in previous reporting year.
Groundwater – renewable	Relevant	13,400	About the same	Increase/decrease in efficiency	The volume of groundwater is about the same that of previous fiscal year (lower than that of previous fiscal year by 3%). We are trying to reduce water consumption intensity by technology development, reducing, reusing, or recycling, therefore expect total consumption to be decreased in the future.
Groundwater – non-renewable	Not relevant				The Ajinomoto Group does not use groundwater (non-

					renewable). It is because the Group produces amino acid and frozen food using only fresh water for the safety of people who eat our products. We had answered 'not relevant' of this data in previous reporting year.
Produced/Entrained water	Not relevant				The Ajinomoto Group has not used this kind of water. Because the Group produces amino acid and frozen food using only fresh water for the safety of people who eat our products. We had answered not relevant of this data in previous reporting year.
Third party sources	Relevant	28,700	About the same	Increase/decrease in efficiency	The volume of third party sources is about the same that of previous fiscal year (lower than that of previous fiscal

					<p>year by 0.3%). We are trying to reduce water consumption intensity by technology development, reducing, reusing, or recycling, therefore expect total consumption to be decreased in the future.</p>
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W1.2i

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water	Relevant	35,200	About the same	Increase/decrease in efficiency	The discharge volume of fresh surface water is about same that of previous fiscal year (lower than that of previous fiscal year by 4%). Ajinomoto group produces amino acid, processed food and seasoning. We have recognized that a great deal of treated waste water have discharged to fresh surface water. Therefore,

					<p>the Group has measured amount of this kind of water. Ajinomoto group has used water meter that accuracy is plus-minus 5% at 100% scale. Therefore the group consider that under 5% difference data from previous year is accident error. We assume that we are able to reduce approximately 5% volume/intensity of involved water after installing innovation new technology.</p>
Brackish surface water/seawater	Not relevant				<p>Ajinomoto group do not discharge to Brackish surface water/seawater. Because the group has produced amino acid and frozen food by fresh water for the safety of people eating our products. We had answered not relevant of this data from previous reporting year.</p>

Groundwater	Not relevant				<p>Ajinomoto group do not discharge to Groundwater. Because the group has produced amino acid and frozen food by fresh water for the safety of people eating our products, and doesn't use Groundwater, therefore we don't discharge to the groundwater. We had answered not relevant of this data from previous reporting year.</p>
Third-party destinations	Relevant	11,300	About the same	Increase/decrease in efficiency	<p>Third party destinations is the same. Ajinomoto group produces amino acid, processed food and seasoning. We have recognized that a great deal of treated waste water have discharged to fresh surface water. Therefore, the Group has measured amount of this kind of water. Ajinomoto group has used water meter that</p>

					accuracy is plus-minus 5% at 100% scale. Therefore the group consider that under 5% difference data from previous year is accident error. We assume that we are able to reduce approximately 5% volume/intensity of involved water after installing innovation new technology.
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W1.2j

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

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	Primary reason for comparison with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Relevant	19,700	About the same	Increase/decrease in efficiency	100%	Ajinomoto group has our own standard for the quality of water discharged, BOD is under 10ppm, TN is under

						<p>5ppm, which is confirmed to be higher than every local regulation . We have confirmed for reporting year that all of our discharged water pass our own standards , which is stricter than local regulation . If our factories treat waste water by themselves, our factories should install tertiary treatment for all of the water discharged from our production process. Our water discharge</p>
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						itself has decreased from last year, the amount of tertiary treatment also decreased.
Secondary treatment	Not relevant					Ajinomoto has a policy to provide tertiary treatment to all of our discharged water, therefore secondary treatment is not relevant.
Primary treatment only	Not relevant					Ajinomoto has a policy to provide tertiary treatment to all of our discharged water, therefore primary treatment is not relevant.
Discharge to the natural	Relevant	15,500	About the same	Increase/decrease in efficiency	100%	Ajinomoto group has our own

<p>environment without treatment</p>						<p>standard for the quality of water discharged, BOD is under 10ppm, TN is under 5ppm, which is confirmed to be higher than every local regulation . We have confirmed for reporting year that all of our discharged water pass our own standards , which is stricter than local regulation . Water discharged to the natural environment without treatment is limited to the water used for</p>
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						indirect cooling of surface water, and confirmed to pass Ajinomoto's standards for the reporting year.
Discharge to a third party without treatment	Relevant	11,300	About the same	Increase/decrease in efficiency	100%	Ajinomoto group has our own standard for the quality of water discharged, BOD is under 10ppm, TN is under 5ppm, which is confirmed to be higher than every local regulation. We have confirmed for reporting year that all of our discharged water pass our own standards

						<p>, which is stricter than local regulation . Water discharge d to a theird party without treatment is limited to the water used for indirect cooling of surface water, and confirmed to pass Ajinomoto 's standards for reporting year.</p>
Other	Not relevant					<p>We have no other water discharge rather than relevant types above. We have policy to make sure all discharge d water is above our own standards</p>

						, which are confirmed to be higher than local regulations.
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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	1,359,115,000,000	60,000	22,651,916.6666667	We are trying to reduce water withdrawal intensity by technology development, reducing, reusing, or recycling, therefore expect total consumption to be decreased in the future.

W-FB1.3/W-AC1.3

(W-FB1.3/W-AC1.3) Do you collect/calculate water intensity for each commodity reported in question W-FB1.1a/W-AC1.1a?

Agricultural commodities	Water intensity information for this produced commodity is collected/calculated	Water intensity information for this sourced commodity is collected/calculated	Please explain
Maize/corn	Not applicable	Yes	Ajinomoto group factories have measured and evaluated every month productivity based on input unit consumption of raw material and fuel and energy and water. Only Ajinomoto group factories in USA use maize starch. Ajinomoto group factories in USA also have measured and evaluated every month productivity based on unit consumption of raw material (Maize starch also) and so on.

		<p>Ajinomoto group has assessed water footprint of some products for understanding water risk. Ajinomoto group had evaluated water footprint of products in USA using water inventory of maize starch and so on. Water risk of these products are not so serious. Water intensity in this question is cited from Water Footprint Network. Therefore, water intensity value of maize is the same as previous year. Comparison with the previous reporting year is same as this year because we had just referred from Water footprint Network. Water intensity will be lower in the future. Nevertheless, the group factories including in USA have been analyzing and decreasing input unit consumption of raw material by developing new strain.</p>
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W-FB1.3b/W-AC1.3b

(W-FB1.3b/W-AC1.3b) Provide water intensity information for each of the agricultural commodities identified in W-FB1.3/W-AC1.3 that you source.

Agricultural commodities

Maize/corn

Water intensity value (m3/denominator)

757.8

Numerator: Water aspect

Freshwater withdrawals

Denominator

Tons

Comparison with previous reporting year

About the same

Please explain

Only Ajinomoto group factories in USA use maize starch. Ajinomoto group factories including in USA have measured and evaluated every month productivity based on unit consumption of raw material (Maize starch also) and so on. Ajinomoto group have assessed water footprint of some products for understanding water risk. Ajinomoto group had evaluated water footprint of products in USA using water inventory of maize starch and so on. Water risk of these products are not so serious. Water intensity in this question is cited from Water Footprint Network. Therefore, water intensity value of maize is the same as previous year. Comparison with the previous reporting year is same as this year because we had just referred from Water footprint Network. Water intensity will be lower in the future. Nevertheless, the group factories including in USA have been analyzing and decreasing input unit consumption of raw material by developing new strain.

W1.4

(W1.4) Do any of your products contain substances classified as hazardous by a regulatory authority?

	Products contain hazardous substances	Comment
Row 1	No	Ajinomoto Co., Inc. is a Japanese company that produces food seasonings, processed foods, sweeteners, amino acids and pharmaceuticals. Therefore, Ajinomoto Co., Inc. has never produced products included Hazardous substances.

W1.5

(W1.5) Do you engage with your value chain on water-related issues?

	Engagement
Suppliers	Yes
Other value chain partners (e.g., customers)	Yes

W1.5a

(W1.5a) Do you assess your suppliers according to their impact on water security?

Row 1

Assessment of supplier impact

Yes, we assess the impact of our suppliers

Considered in assessment

Other, please specify

Setting reduction target of water withdraw

Number of suppliers identified as having a substantive impact

0

% of total suppliers identified as having a substantive impact

None

Please explain

We use CDP supply chain program to evaluate whether our suppliers set reduction target of water withdraw or not.

W1.5b

(W1.5b) Do your suppliers have to meet water-related requirements as part of your organization’s purchasing process?

Suppliers have to meet specific water-related requirements	
Row 1	Yes, suppliers have to meet water-related requirements, but they are not included in our supplier contracts

W1.5c

(W1.5c) Provide details of the water-related requirements that suppliers have to meet as part of your organization’s purchasing process, and the compliance measures in place.

Water-related requirement

Setting and monitoring water withdrawal reduction targets

% of suppliers with a substantive impact required to comply with this water-related requirement

Less than 1%

% of suppliers with a substantive impact in compliance with this water-related requirement

Less than 1%

Mechanisms for monitoring compliance with this water-related requirement

On-site third-party audit
Supplier self-assessment

Response to supplier non-compliance with this water-related requirement

Retain and engage

Comment

We have asked all suppliers for Ajinomoto Co., Inc. to abide "Guideline for Group Shared Policy for Suppliers".

In 2016, the Group had conducted another supplier survey to promote mutual understanding by confirming whether the Group and its suppliers were achieving adequate two-way communication in accordance with company standards, and by incorporating supplier requests into future policies and actions. The Group also

developed a self-assessment questionnaire (SAQ) for suppliers to assess performance on socially responsible procurement. It has periodically asked suppliers to answer the SAQ and we provide feedback on their responses. SAQ include items on fostering pleasant working environments. The measures of success; The Group has evaluated and communicated with suppliers using Sedex from fiscal 2019, it also collect information from suppliers that do not join by asking them to respond to a self-assessment questionnaire similar to that used by Sedex.

W1.5d

(W1.5d) Provide details of any other water-related supplier engagement activity.

Type of engagement

Innovation & collaboration

Details of engagement

Educate suppliers about water stewardship and collaboration

% of suppliers by number

1-25

% of suppliers with a substantive impact

Less than 1%

Rationale for your engagement

[First item] Ajinomoto group has joined CDP supply chain program in fiscal 2017. We have got information of Water Security from our suppliers. We have requested answering CDP Supply chain program to our suppliers that are big chemical companies in Japan and the main raw material companies in Thailand and Brazil and France and USA. The reason why we selected these suppliers is water footprint account for over 70% by raw material such as amino acid.

[Second item] The Ajinomoto Group produces the amino acids used in its products through fermentation processes from crops that are easily available in each region. Nearly 100% of the nutritionally rich by-products (co-products) that remain after extracting amino acids in the fermentation process are then used as fertilizer and feed. The Group considers such recycling-based amino acid fermentation processes that procure sustainable agricultural production while enriching regional agriculture as "bio-cycles." These bio-cycles are a means of simultaneously contributing to reliable supplies of food resources and realizing sustainable agriculture. For this reason, the Group is introducing these cycles at its fermentation factories worldwide. Leveraging its accumulated expertise, the Group is also actively guiding farmers on raising value-added crops and quality control, provide training and support on sustainable agriculture practices to improve water stewardship.

Impact of the engagement and measures of success

[First item] Our answering ratio of FY2022 was 86%, we consider that FY2022 engagement was success by increasing response rate from previous FY.

[Second item] For example, Ajinomoto Co., (Thailand) Ltd. has been providing co-products as organic fertilizers to farmers near the plant for more than 40 years. Its agricultural subsidiary, FD Green (Thailand) Co., Ltd. (FDG), is handling the overall sales of co-products since 2001.

Leveraging its accumulated expertise, FDG is also actively guiding farmers on raising value-added crops and quality control in recent years. FDG then purchases these crops for use in Ajinomoto Group products and new value-added local products, thereby creating a new cycle. The Group's relationship with farmers developed over many years helped to inexpensively and steadily procure raw materials of stable quality, as it brings profits to local farmers and food processing industries in a positive cycle.

Comment

None

W1.5e

(W1.5e) Provide details of any water-related engagement activity with customers or other value chain partners.

Type of stakeholder

Customers

Type of engagement

Education / information sharing

Details of engagement

Run an engagement campaign to educate stakeholders about your water-related performance and strategy

Rationale for your engagement

Ajinomoto group CO2 emissions is Scope 3 of category 11 (Use of sold products) account for around 10% of Scope 1, 2, 3. Therefore, the group has made engagement to consumers to aim for reduction of CO2 emissions. We have disclosed on web pages and package labels about features of decreasing use emissions of sold products. For example, the group has some frozen food products by no required heat thaw. There are "Aji-pen® ECO" label on these products package, and their features explain on web pages. Consumers easily identify low environmental burden by label, and can decrease CO2 emissions of thaw by purchasing these our products.

Impact of the engagement and measures of success

Our successful indicator of this engagement is not less than previous fiscal year sales amount of home-use products. FY2021 sales of home-use products increased due to the expansion in at-home dining demand by corona pandemic, our engagement of FY2021 was success. As engagement effect, under global warming, we recognize that consumers purchase our products since they recognize low environmental burden with our products.

W2. Business impacts

W2.1

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

No

W2.2

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

	Water-related regulatory violations	Comment
Row 1	No	In fiscal 2021, there was one fine for exceeding wastewater standards outside Japan, but the appropriateness of the fine is currently being disputed in court.

W3. Procedures

W3.1

(W3.1) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or human health?

	Identification and classification of potential water pollutants	How potential water pollutants are identified and classified
Row 1	Yes, we identify and classify our potential water pollutants	The method used to identify the potential water pollutants and details on whether the company follows an established standard; Ajinomoto group manufactures several kinds of amino acid, many processed food and seasoning. The Group factories which produce several kinds of amino acids among the Group products, have used much water for starch raw material dissolution and products/facilities for cleaning, and have used much nitrogen for fermentation. Discharged waste water from these Group factories contain nitrogen and biochemical oxygen demand (BOD). There are waste water quality regulations of nitrogen and BOD for preventing detrimental impacts on water ecosystems and human health at all concerned area of these Group factories. The group has set voluntary waste water standard about nitrogen and BOD, there is no country with regulations that go beyond our voluntary standard now. Our voluntary waste water standards are BOD \leq 10ppm

		and total-nitrogen <5ppm. The Group factories have measured every day BOD and total-nitrogen of their treated waste water before discharge to confirm preserving the Group voluntary standard and prevent water pollution. The Group is committed to developing water-saving processes.
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W3.1a

(W3.1a) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities.

Water pollutant category

Other nutrients and oxygen demanding pollutants

Description of water pollutant and potential impacts

Ajinomoto group manufactures several kinds of amino acid, many processed food and seasoning. The Group factories which produce several kinds of amino acids among the Group products, have used much water for starch raw material dissolution and products/facilities for cleaning, and have used much nitrogen for fermentation. Discharged wastewater from these Group factories contain nitrogen and biochemical oxygen demand (BOD). Increasing BOD, that is low oxygen by increasing organic substance in river, fishes and plants in river cannot live by much pollution of no natural deputation. Biodiversity in river is destroyed.

Value chain stage

Direct operations

Actions and procedures to minimize adverse impacts

Beyond compliance with regulatory requirements

Please explain

There are wastewater quality regulations of nitrogen and BOD for preventing detrimental impacts on water ecosystems and human health at all concerned area of these Group factories. As waste water management , the group has set voluntary wastewater standard about nitrogen and BOD, there is no country with regulations that go beyond our voluntary standard now. Our voluntary waste water standards are BOD \leq 10ppm and total-nitrogen <5ppm. This is half the harshest requirement value (20ppm) from any regulation in the world, therefore we follow regulation standards in all of our operation. The group have assessed water footprint of amino acid products for identifying potential water pollutants associated with entire our value chain. The group had evaluated water footprint of products in USA using water inventory of maize starch and so on. Water risk of these products are not so serious.

We evaluate all treated wastewater quality and evaluate as success when BOD is under 10 ppm and nitrogen under 5 ppm. In the reporting year all wastewater were confirmed to be under 10 ppm for BOD, under 5 ppm for nitrogen. In addition, based on its belief

that it is vital to minimize water usage, the Group is committed to developing water-saving processes as product innovation of the monosodium glutamate production process. The Group is committed to developing water-saving processes. Our target is: Water consumed per unit of production 80% or more reduction (compared to fiscal 2005).

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
Supply chain

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

Tools and methods used

SEDEX
WRI Aqueduct
IPCC Climate Change Projections

Contextual issues considered

Water availability at a basin/catchment level
Water quality at a basin/catchment level
Implications of water on your key commodities/raw materials
Water regulatory frameworks

Stakeholders considered

- Local communities
- Regulators
- Suppliers

Comment

Products in the Ajinomoto Group’s business domains range from food such as seasonings, frozen foods and coffee to healthcare. Further, our operations span the globe. Climate change may impact Group operations in many ways. Major natural disasters may become diminished our business activities, affecting our ability to procure raw materials and fuel. Disasters may also alter the consumption of our products. We review production over the short, medium, and long terms, considering the physical risks of climate change (droughts, floods, rising sea levels, changes in yield of our main raw materials, etc.) and transition risks (introduction of carbon tax, rising energy prices, tight supply and demand and price increases of our main raw materials due to competition with other food sources and biofuels, etc.).

In fiscal 2019, the Ajinomoto Group has conducted a scenario analysis of the potential impact of climate change in fiscal 2050 under the assumption that the average temperature will rise by 2°C for all production sites by 2100 modeled using our mainstay umami seasoning AJI-NO-MOTO®. In fiscal 2022, we expanded this analysis to cover other mainstay products such as foods and specialty chemicals and analyzed the impacts in fiscal 2030 in the events that the average temperature rises by 1.5°C and 4°C, respectively, by 2100.

As a result, we estimated there to be an impact of approximately 13 billion yen by fiscal 2030, and 30 billion yen by fiscal 2050 from increased risk of higher energy unit prices and higher carbon tax payments due to the advancement of low-carbon societies. When considering procurement of raw materials in fiscal 2030, we expect yields of sugarcane, tapioca, etc. to remain stable. However, increased water stress in production areas, more widespread pests and diseases, and more infectious diseases in livestock may result in more instability in the procurement of corn, pork, and dairy products, etc., or an increase in unit prices. Additionally, more severe and frequent wind and water damage are expected to have an impact on raw material production volumes and distribution. For fishery resources, we predicted that quantities of skipjack tuna would remain stable, however procuring the extract could be problematic.

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.

	Rationale for approach to risk assessment	Explanation of contextual issues considered	Explanation of stakeholders considered	Decision-making process for risk response
Row 1	We have considered implications of water on our key raw	We have investigated the water consumption,	[Drought impact to direct operation] We have set key targets to	We evaluated results of assessment, for example, we reported

<p>materials and suppliers in our risk analysis, because most of our suppliers are farmers, because raw material of amino acid, which is the main product of Ajinomoto group, is agricultural crops, and needs high quality water for production. By this reason, we have investigated the water consumption, the water risk and the management of water for raw material.</p>	<p>the water risk and the management of water for raw material by Water Footprint and WBCSD global water tool and AQUEDUCT once a every fiscal year covering direct operation and whole supply chain.</p>	<p>reduce discharged water and water consumption by 80% compared to the level of FY 2005. We have improved position of water intake as necessary, while regularly conducting maintenance of water intake. [Flood impact to direct operation] We have investigated Business Continuity Plan. As part of the investigation on the BCP, we have improved the height of plant outer wall and others. Foods and clothes are kept in our plants for operators to continue manufacturing even if supply chain stops. We have reviewed and revised Business Continuity Plan every fiscal year. [Drought and Flood impact to suppliers] The level of water risk of agricultural crop is high. There is a huge coverage area where suppliers and facilities of agricultural irrigation are located. Therefore, we have purchased raw material from a number of area and suppliers.</p>	<p>the results of the scenario analysis to the Sustainability Committee and used them to consider possible measures in the future. The risk of water scarcity which affect raw materials exists at present. When large-scale diversion dam in the upstream region where the country border was made, there is a fear that a drought occurs in the downstream. The drought would cause a water shortage and raw materials crop shortage. Therefore we will stop operating a factory if it occurs. In order to secure the endurance of the business, we have worked on dispersing our production base all over the world.</p>
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W4. Risks and opportunities

W4.1

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

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

W4.1a

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

The Ajinomoto Group conducts an annual review of the materiality items which have a substantial impact on our ability to create value through ASV (Ajinomoto group Shared Value). Operational risks that may affect the Ajinomoto Group’s performance and financial position are listed as follow by risk factor. Taking into account the business environment including financial, material issues across the globe, the Ajinomoto Group has identified Group-wide risks that require cross-organizational management based on comprehensive consideration of factors including the magnitude of impact (Major, Moderate, Small), probability and timing of manifestation (High, Moderate, Low). Materiality issues identified Group-wide risks are as follow: Climate change adaptation and mitigation, Contribution to a circular economy, Reduction of food loss and waste, Sustainable materials sourcing, Conservation of water resources, management of production plants’ water usage and wastewater discharge. When the materiality issue is evaluated comprehensive factors which one is Moderate and another one is Major or High, the Group assess that the materiality is very material. In addition, the Group is formulating Group-wide response measures and working to monitor and manage the progress of its response to risk on a regular basis.

The Group has developed various responses and mechanisms to minimize such management and operational risks.

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	3	1-25	In the worst case in this basin, both of direct factory operation and raw material production are exposed to flood and drought risk.

W4.1c

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

Country/Area & River basin

Thailand
Chao Phraya

Number of facilities exposed to water risk

3

% company-wide facilities this represents

1-25

% company's total global revenue that could be affected

1-10

Comment

In the worst case in this basin, both of direct factory operation and raw material production are exposed to flood and drought risk.

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

Thailand
Chao Phraya

Type of risk & Primary risk driver

Acute physical
Flood (coastal, fluvial, pluvial, groundwater)

Primary potential impact

Supply chain disruption

Company-specific description

Ajinomoto group manufactures several kinds of amino acid, many processed food and seasoning. The Group factories which produce several kinds of amino acids among the Group products, have used much water for starch raw material dissolution and products/facilities for cleaning. If flood occur and surface water is polluted, our factories cannot continue operation.

How the impact identified will uniquely affect our direct operations; The factories in Thailand are important base of amino acid and food production of the Group. Amount of production and sales and profit at these factories account for over 10% of that of the whole Group profit. So when flood occur in Thailand, surface water around the factories in Thailand will be polluted, and will not be able to continue producing amino acids for several days. We have 3 factories in Thailand with relatively high risk of flood. All of them sited along the Chao Phraya river, because the factories need to use the water for the production. It has occurred floods on the Chao Phraya river during past a few decade.

The method for identifying the impact "Supply chain disruption"; Ajinomoto Co., Inc. enhance its sustainability promotion framework in order to continuously increase corporate value from the perspective of sustainability. We establish the Sustainability Advisory Council under the Board of Directors and the Sustainability Committee under the Executive Committee. The Sustainability Committee, based on the reports of the Sustainability Advisory Council, hold discussions on countermeasures to risks and opportunities posed by company-wide management issues and how to reflect these in business strategy, pursuant to Materiality and the strategic direction approved by the Board of Directors. Among our risks, we also consider global climate change risk and water related issues because our main raw materials are crops dependence to water. The Sustainability Committee report to the Executive Committee.

In order to avoid the substantive financial or strategic impact, each factory has high walls water and waste water stock pond and raw material warehouse to avert flood and drought. The business continue plan activity by each factory has applied regional climate history such as flood and drought. For example, there are walls, ponds and warehouses at Ayutthaya factory in Thailand. We have made a plan of independent waste water quality standard at non-financial targets of environment.

Timeframe

1-3 years

Magnitude of potential impact

Medium-high

Likelihood

Likely

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

100,000,000,000

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact

The factories in Thailand are important base of amino acid and food production of Ajinomoto group. Amount of production and sales and profit at these factories account for over 10% of Ajinomoto group of the world. Sales of Ajinomoto group is approximately 1000 billion JPY. Therefore, we calculate potential financial impact 100 billion JPY.

Primary response to risk

Increase capital expenditure

Description of response

Our strategy to respond to this risk is, to 1) Monitor drought and flood to be well prepared, 2) build a wall to prevent/reduce water inflow.

[Case study]

At Ayutthaya factory in Thailand, where we produce MSG, it experienced flood in 2011, and factory construction work stopped at the time, caused serious damage to the construction schedule.

While Ayutthaya factory operation, the Factory will cause serious damage to the production. Therefore, Ajinomoto decided to extend 0.5 meter high wall in 2011. It is approximately 3000 meter long, and covers all of the factory side facing the Chaopraya river. The construction finished in 2012.

As a result, in 2021 when rather heavy rain occurred, Ayutthaya factory did not suffer from water inflow, and could continue business as usual.

Cost of response

260,000,000

Explanation of cost of response

We had installed 1 meter high wall than initial design at Ayutthaya factory in Thailand. Because Ayutthaya factory had experienced not foreseen flood. Ayutthaya factory had spent additional expenditure about 95 mTHB (about 260,000,000 yen) as this higher wall.

W4.2a

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

Country/Area & River basin

Thailand
Chao Phraya

Stage of value chain

Supply chain

Type of risk & Primary risk driver

Acute physical

Flood (coastal, fluvial, pluvial, groundwater)

Primary potential impact

Supply chain disruption

Company-specific description

The method for identifying the impact "Supply chain disruption"; Ajinomoto group manufactures several kinds of amino acid, many processed food and seasoning. The Group factories which produce several kinds of amino acids among the Group products, have used much water for starch raw material dissolution and products/facilities for cleaning. If flood occur and surface water is polluted, our factories cannot continue operation.

How the impact identified will uniquely affect our direct operations; The factories in Thailand are important base of amino acid and food production of the Group. Amount of production and sales and profit at these factories account for over 10% of that of the whole Group profit. So when flood occur in Thailand, surface water around the factories in Thailand will be polluted, and will not be able to continue producing amino acids for several days. We have 3 factories in Thailand with relatively high risk of flood. All of them sited along the Chao Phraya river, in order to be able to use the water. It has occurred floods on the Chao Phraya river during past a few decade.

The method for identifying the impact "Supply chain disruption"; Ajinomoto Co., Inc. enhance its sustainability promotion framework in order to continuously increase corporate value from the perspective of sustainability. Effective April 1, 2021, we establish the Sustainability Advisory Council under the Board of Directors and the Sustainability Committee under the Executive Committee. The Sustainability Committee, based on the reports of the Sustainability Advisory Council, hold discussions on countermeasures to risks and opportunities posed by company-wide management issues and how to reflect these in business strategy, pursuant to Materiality and the strategic direction approved by the Board of Directors. Among our risks, we also consider global climate change risk and water related issues because our main raw materials are crops dependence to water. The Sustainability Committee report to the Executive Committee.

Each organizational unit and group company appoints a person responsible for risk management (general manager) and risk personnel who conduct their own management using the PDCA cycle. Aggregating and analyzing these bottom-up risks gives a clear overview of risk trends across the Ajinomoto Group.

Timeframe

1-3 years

Magnitude of potential impact

Medium-high

Likelihood

Likely

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

100,000,000,000

Potential financial impact figure - minimum (currency)**Potential financial impact figure - maximum (currency)****Explanation of financial impact**

The factories in Thailand are important base of amino acid and food production of Ajinomoto group. Amount of production and sales and profit at these factories account for over 10% of Ajinomoto group of the world. Sales of Ajinomoto group is approximately 1000 billion JPY. Therefore, we calculate potential financial impact 100 billion JPY.

Primary response to risk

Direct operations
Include in Business Continuity Plan

Description of response

We set BCP(Business Continuity Plan) plan as follows. 1. We have secured a raw material supplier in more than one area. The cost is less than 5% rise of the raw material costs for this. There is almost no financial influence. 2. We have researched and developed new production technology. Our expenditure for Research and Development is more than 30 billion yen per year. These theme are (1) reducing major raw materials use by maximizing bacterial productivity, (2) reducing auxiliary materials use and water discharge and so on. We're freed by this measure from raw material risk by water risk.

Cost of response

1,000,000,000

Explanation of cost of response

Amount of production and sales and profit at these factories account for over 10% of Ajinomoto group of the world. Sales of Ajinomoto group is approximately 1000 billion JPY. Sales of Ajinomoto group in Thailand is approximately 100 billion yen. The cost of main raw material is approximately 25 billion yen, account for 25% of the sales. Therefore, raw material cost rise is 1 billion yen, in order to secure a raw material supplier in more than one area, as described above.

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

Improved water efficiency in operations

Company-specific description & strategy to realize opportunity

By installing the new system with high specification, we are able to decrease the amount of water withdrawals. By reducing the amount of water withdrawals, we have improved water efficiency and reduced our cost for production by reduction of water flow. The Ajinomoto Group has conducted installing the new system which reduce the amount of water used in the process of producing amino acid. We installed similar systems in approximately 10 factories in all the Group from 2006 to 2016. For example, Ajinomoto Vietnam had installed some water economize systems to decrease water withdrawals from 27 million tonnes in 2005 to 1.7 million tonnes in 2016.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

5,000,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

There became much more quantity of the amino acid producing in our company than any other companies more effectively. Our plants installed waste treatment system with high specification. Regarding amino acid, we have two advantages comparing with other companies. First one is that the amino acid we produce has the good quality. Second one is that we have the knowledge about how to utilize amino acid. We make an effort for the spread of feed and market development with an amino acid in the drought area by uniting the validity of this amino acid for a customer. Explanation of feed contained amino acid (low protein feed) is follow. Soybean meal contents of Low protein feed

which is supplemented industrial manufactured amino acid instead of essential amino acid of soybean meal is over 10% lower than conventional feed. As coordinating metabolic energy, amount of wheat in low protein feed are over 20% higher than conventional feed. However, soybean meal water consumption inventory over 1000 (m³/t-raw material) is 3 times higher than wheat water consumption inventory a few hundreds (m³/t-raw material), soybean meal content of low protein feed is over 10% lower than conventional feed, therefore water footprint of low protein feed is lower than conventional feed. Water risk will become higher, pig farmers change to apply low protein feed and feed use amino acid supply by Ajinomoto group will be increase more. Therefore, potential financial impact will be 5 billion JPY which was calculated as 2% of revenue of the Health care business segment.

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)

Ayutthaya factory

Country/Area & River basin

Thailand

Chao Phraya

Latitude

14.35

Longitude

100.58

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

1,770

Comparison of total withdrawals with previous reporting year

Lower

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

1,770

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

0

Total water discharges at this facility (megaliters/year)

1,770

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

1,770

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

0

Comparison of total consumption with previous reporting year

About the same

Please explain

This factory data at previous year were withdrawals 1940 (mega-liters), discharges 1940 (mega-liters), consumption 0 (mega-liters). The Ajinomoto group has used industrial water meter that accuracy is plus-minus 5% at 100% scale. Therefore the group consider that under 10% difference data from previous year is accident error.

Facility reference number

Facility 2

Facility name (optional)

Kamphaeng Phet factory

Country/Area & River basin

Thailand
Chao Phraya

Latitude

16.47

Longitude

99.53

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

3,500

Comparison of total withdrawals with previous reporting year

Higher

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

3,500

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

0

Total water discharges at this facility (megaliters/year)

1,460

Comparison of total discharges with previous reporting year

Higher

Discharges to fresh surface water

1,460

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

2,040

Comparison of total consumption with previous reporting year

Higher

Please explain

This factory data at previous year were withdrawals 2830 (mega-liters), discharges 1376 (mega-liters), consumption 1454 (mega-liters). The Ajinomoto group has used industrial water meter that accuracy is plus-minus 5% at 100% scale. Therefore the group consider that under 10% difference data from previous year is accident error.

Facility reference number

Facility 3

Facility name (optional)

Pathum Thani Factory

Country/Area & River basin

Thailand

Chao Phraya

Latitude

13.98

Longitude

100.51

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

2,020

Comparison of total withdrawals with previous reporting year

Lower

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

2,020

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

0

Total water discharges at this facility (megaliters/year)

1,580

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

1,580

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

440

Comparison of total consumption with previous reporting year

About the same

Please explain

This factory data at previous year were withdrawals 2110 (mega-liters), discharges 1890 (mega-liters), consumption 220 (mega-liters). The Ajinomoto group has used industrial water meter that accuracy is plus-minus 5% at 100% scale. Therefore the group consider that under 10% difference data from previous year is accident error.

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

Not verified

Please explain

Water withdrawals – volume by source

% verified

Not verified

Please explain

Water withdrawals – quality by standard water quality parameters

% verified

Not verified

Please explain

Water discharges – total volumes

% verified

Not verified

Please explain

Water discharges – volume by destination

% verified

Not verified

Please explain

Water discharges – volume by final treatment level

% verified

Not verified

Please explain

Water discharges – quality by standard water quality parameters

% verified

Not verified

Please explain

Water consumption – total volume

% verified

Not verified

Please explain

W6. Governance

W6.1

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

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

W6.1a

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

	Scope	Content	Please explain
Row 1	Company-wide	Description of business dependency on water Description of business impact on water Commitment to align with international frameworks, standards, and widely-recognized water initiatives Commitment to prevent, minimize, and control pollution Commitment to reduce or phase-out hazardous substances Commitment to reduce water withdrawal and/or consumption volumes in direct operations Commitment to safely managed Water, Sanitation and Hygiene (WASH) in the workplace Commitment to safely managed Water, Sanitation and Hygiene (WASH) in local communities	Ajinomoto group produces amino acid, processed food and seasoning. We have recognized that a great deal of good fresh water is used for direct amino acid production operation such as dilution of raw material and cleaning for amino acid crystal. We have recognized that a great deal of good fresh water is used for indirect production such as cultivation of agricultural crop for raw material and steam for sterilization of equipment. Therefore, we create and disclose a few kinds of policies including our way of thinking on water. These policies cover company-wide and describe performance standards for whole life cycle. Because, we need a great deal of good fresh water which participates directly in our products. These policies describe performance standards for supplier, procurement and contracting best practice. Because, it is important for us that we purchase agricultural crops for raw material by dependence of water. In addition, we carry on a dialog with external and internal stakeholders and experts. Cooperation with our suppliers, our customers and local communities are important for us to settle water risk. By this reason, we regard customer education as important theme for us. In addition, we also recognize offering safe water, sanitation and hygiene to our employee are important. As the global population rises, so does the expected demand for water. Another issue is the ubiquitous

	<p>Commitment to stakeholder education and capacity building on water security</p> <p>Commitment to water stewardship and/or collective action</p> <p>Commitment to the conservation of freshwater ecosystems</p> <p>Commitments beyond regulatory compliance</p> <p>Reference to company water-related targets</p> <p>Acknowledgement of the human right to water and sanitation</p> <p>Recognition of environmental linkages, for example, due to climate change</p>	<p>presence of fresh water around the world. The depletion of water resources not only impacts water used for production, but also the procurement of raw materials. Drought, flooding, or poor water quality could also result in production delays.</p> <p>The Ajinomoto Group is committed to further reduction in water use and wastewater emissions in our ongoing production processes, maintaining forests for water resources and engaging in other actions to create an environment that allows for sustainable water usage. As the Group Shared Policy on Environment, “We contribute to the security of food resources, the conservation of natural environment including ecosystem and biodiversity, and the conservation of water resources for future generations.” The Group aims to reduce water consumption per production volume unit (intensity) by 80% by fiscal 2030 (compared with fiscal 2005).</p>
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W6.2

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

Yes

W6.2a

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

Position of individual or committee	Responsibilities for water-related issues
Chief Executive Officer (CEO)	The Ajinomoto Group enhances its sustainability promotion framework to continuously increase corporate value from the perspective of sustainability. Effective April 1, 2021, we establish the Sustainability Advisory Council (SAC) under the Board of Directors and the Sustainability Committee under the Executive Committee. The Board of Directors is responsible for all decision of the SAC and Materiality including water resources.

W6.2b

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

Frequency that water-related	Governance mechanisms into	Please explain
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	issues are a scheduled agenda item	which water-related issues are integrated	
Row 1	Scheduled - all meetings	<p>Monitoring implementation and performance</p> <p>Monitoring progress towards corporate targets</p> <p>Overseeing and guiding scenario analysis</p> <p>Overseeing the setting of corporate targets</p> <p>Reviewing and guiding corporate responsibility strategy</p> <p>Reviewing and guiding major plans of action</p> <p>Reviewing and guiding risk management policies</p> <p>Reviewing and guiding strategy</p> <p>Setting performance objectives</p>	<p>Ajinomoto Co., Inc. enhance its sustainability promotion framework in order to continuously increase corporate value from the perspective of sustainability. Effective April 1, 2021, we establish the Sustainability Advisory Council under the Board of Directors and the Sustainability Committee under the Executive Committee. In addition, the following decision was made on the appointment of Sustainability Advisory Council members. The Sustainability Advisory Council is responsible for the following 1) to 4):</p> <ol style="list-style-type: none"> 1) Discuss Materiality with a long-term perspective (up to 2050) and reflect it into Materiality and the strategy for the Medium-Term Management Plan. 2) Review Materiality from a multi-stakeholder perspective and response plans to environmental changes (risks and opportunities) linked to Materiality, and in turn report to the Board of Directors. Among our risks, we also consider global climate change risk and water related issues because our main raw materials are crops dependence to water. 3) Examine key points expected or requested of companies in 2030 and beyond along with review of appropriate involvement in the creation of social rules. 4) Discuss and review targets beyond 2030 concerning the creation of social value, including commitment to extend healthy life expectancy and environmental impact reduction. <p>The Sustainability Advisory Council meet semi-annually and actively disclose the details of its discussions by publishing meeting minutes and press releases.</p> <p>The Sustainability Committee, based on the reports of the Sustainability Advisory Council, hold discussions on countermeasures to risks and opportunities posed by company-wide management issues and how to reflect these in business strategy, pursuant to Materiality and the strategic direction approved by the Board of Directors. The Sustainability Committee report to the Executive Committee.</p>

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	Our company's basic policy is to ensure that the Board of Directors is composed of Independent Directors who can objectively supervise business execution from an independent perspective, Internal Directors who also serve as Executive Officers including the Chief Executive Officer, and Internal Director who is a Member of the Audit Committee (Standing), taking into consideration the number of Directors, the ratio of people from inside and outside the Company, the proportion of Directors who also serve as Executive Officers, and the diversity with regard to individual experience, capacities, expertise, international background, gender, etc. The Ajinomoto Group accelerates ASV (Ajinomoto Group Creating Shared Value) Management by realising our outcome to reduce our environmental impact by 50% including reducing greenhouse gas emissions by 50% as priority issues. In selecting candidates for Directors, including Outside Directors, in order to indicate major direction and appropriately supervise execution through active discussions regarding important management matters, we select candidates based on their respective abilities and insights, such as management strategy, global, sustainability including climate change, digital, R&D/Production, sales & marketing, finance/accounting, HR/HR development, and legal affairs/risk management, in consideration of the diversity of Directors. Ms. Kimie IWATA, Mr. Scott Trevor Davis and Mr. Tatsuya SASAKI who have skills to supervise and promote appropriate strategies for resolving social issues through business to realize a sustainable society were appointed as Directors in order to reduce our environmental impact including climate change through ASV management.

W6.3

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

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

Chief Executive Officer (CEO)

Water-related responsibilities of this position

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

More frequently than quarterly

Please explain

The Ajinomoto Group recognizes conservation of water resources a significant issue and the depletion of water conservation possibly effects to our business operation negatively. In order to prevent it, Director, President & CEO is responsible for environmental issues, including water related issues which the Sustainability Committee has determined the action policy. The CEO also nominated the chairperson of the Sustainability Committee who is an Executive Officer & Senior Vice President. The Group views water related issues at the management level as both a risk and an opportunity. To track and improve the Group’s environmental performance, the Sustainability Committee under the Executive Committee monitor the Group’s progress toward attaining reduction rate of water consumption per production volume unit as a target indicator and consider necessary measures, and report them to the Board, and the Board makes the final decision of responses.

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	No, and we do not plan to introduce them in the next two years	

W6.5

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

- Yes, direct engagement with policy makers
- Yes, trade associations
- Yes, funding research organizations

W6.5a

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


The Sustainability Committee and the Sustainability Development Dept. formulate the Group’s sustainability strategy and roadmaps of related initiatives such as environment including water-related issue, and report to the Executive Committee and the Board of Directors. The Ajinomoto Group regards direct and indirect activities that influence policy as important elements in our ASV (Ajinomoto Group Creating Shared Value) management, which is based on the perspective of sustainability. The Committee and the Dept. discuss activities through industry associations in which the Group participates. They ensure that industry association initiatives


are aligned with the Group's initiatives. In addition, through such activities, they also ensure that policy influences by industry associations are consistent with the Group's initiatives and direction. For example, the Group actively participates in Clean Ocean Material Alliance (CLOMA), including serving as the Chair of the Dissemination & Promotion Working Group. The CLOMA is a platform for promoting sustainable use of plastic products, developing innovative alternatives that lead to plastic waste reduction, and strengthening collaboration to accelerate innovation among a wide range of stakeholders across industries in order to solve emerging issue on marine plastic litter. This is in line with the Group's policy aiming sustainable society while addressing water pollution issues such as resource recycling and marine plastic measures.

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)

 145th_Securities report_Ajinomoto Co Inc (味の素株式会社 145 期有価証券報告書) .pdf

 Ajinomoto Group ASV report (integrated Report) 2022 EN.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?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	11-15	Which water issues are integrated; The Group aim for reduction 80% water usage at plants per production volume by FY 2030 compared to FY 2005 on the Integrated Target for 2025. How they are integrated into the business plans; By carrying on the aspiration of our founding through our "Food" and "Amino Science" businesses, we are aiming to become a solution-providing company for food and health issues that can grow sustainability and contribute to a healthy future for humanity and the earth. Our mission is to fulfill our social responsibilities by leveraging the entire value chain. Thus, we actively aim to contribute to the resolution of issues related to "health and well-being," "food resources," and "global sustainability" for all stakeholders. The Group produces the amino acids

			<p>used fresh surface water for dilution of raw material.</p> <p>How they are integrated into the plan; We decided to pursue initiatives to address these concerns under the integrated target that combine both financial and non-financial targets. To realize sustainable growth through ASV (Ajinomoto Shared Value) and become a company that is even more essential for society, we have established the integrated targets including reduction target of water usage, which centers on ASV value creation stories.</p> <p>Explain Why the time horizon chosen was selected with a rationale unique to your company; We set the environmental target including water reduction target which aims to the year of 2030 referred from SDGs.</p>
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	11-15	<p>Which water issues are integrated; The Group aim for reduction 80% water usage at plants per production volume by FY 2030 compared to FY 2005 on the Integrated Target for 2025.</p> <p>How they are integrated into the plan; We decided to pursue initiatives to address these concerns under the integrated target that combine both financial and non-financial targets. To realize sustainable growth through ASV(Ajinomoto Shared Value) and become a company that is even more essential for society, we have established the integrated targets including reduction target of water usage, which centers on ASV value creation stories. The Ajinomoto Group Environment Plan has established target values for pollutant load in wastewater (10 ppm or less for BOD and 5 ppm or less for TN) which are stricter than regulations around the world. To achieve these challenging targets, the Group is improving performance in wastewater treatment by modifying existing treatment facilities, developing more efficient processes, the use of water from cooling towers for indirect cooling applications, recirculating water on-site.</p> <p>Explain Why the time horizon chosen was selected with a rationale unique to your company; We set the environmental target including water reduction target which aims to the year of 2030 referred from SDGs.</p>
Financial planning	Yes, water-related issues are integrated	11-15	<p>Which water issues are integrated; There is the target of conservation of water resources among the integrated targets. The Group aim for reduction 80% water usage at plants per production volume by FY 2030 compared to FY 2005 on the Integrated Target for 2025.</p> <p>How they are integrated into the plan; Ajinomoto group</p>

			<p>aims for reduce financial risk 8 billion yen through results of our contribution of the global sustainability. The management indicators adopted are as follows. For financial targets, we will continue to realize profit growth. Such growth will act as a milestone for becoming a solution-providing company for food and health issues for 2030. For non-financial targets, we will focus on contributing to healthy living for humankind, as mentioned in the ASV value creation stories. At the same time, we will pursue a policy of proactively engaging ourselves in the United Nations' Sustainable Development Goals (SDGs) and other efforts related to the international consensus on ESG. One of non-financial target is the mid-long term environmental targets which includes the water reduction target. Explain Why the time horizon chosen was selected with a rationale unique to your company; We set the environmental target including water reduction target which aims to the year of 2030 referred from SDGs.</p>
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W7.2

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

Row 1

Water-related CAPEX (+/- % change)

198

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

-10

Water-related OPEX (+/- % change)

-3

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

-1

Please explain

Water related CAPEX was mainly for the installation and improvement of wastewater treatment equipments. OPEX was mainly for the electricity fee to run these wastewater treatment equipment. CAPEX has increased, because of installing the new wastewater treatment equipment. OPEX is the same as that of previous year because new wastewater treatment equipment was more electricity efficient than older ones.

W7.3

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

	Use of scenario analysis	Comment
Row 1	Yes	<p>In May 2019, the Ajinomoto Group endorsed the recommendations of TCFD. The Ajinomoto Group's business domain of products ranges from seasonings and coffee to frozen foods. The Group's operation is considered to be affected by climate change in many ways, such as a major natural disaster halting its business activities, affecting its ability to procure raw materials and fuel, and altering consumption of its products.</p> <p>In FY 2019, the Group conducted a scenario analysis of the potential impact from climate change on global umami seasoning AJI-NO-MOTO®. The Group determined that a 2 °C rise in the average temperature would have relatively small impact on the main raw materials including water as well as demand for the product, so that these will not seriously affect the Group's profit. However, the risk of environmental taxes for the fermentation business as a whole including MSG is around 8 billion yen to create a low-carbon society.</p>

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	Water-related Climate-related	<p>[Parameters] The analysis examined rising energy prices, tight supply and demand, and price increases due to competition for major raw materials with other food sources and biofuels, as transition risks by global macro economic.</p> <p>[Assumption] The Ajinomoto Group has conducted a scenario analysis of potential impact from the climate change risk covering</p>	<p>The Ajinomoto Group views climate change at the management level as both a risk and an opportunity. To track and improve the Group's environmental performance, the Management Risk Committee and Environmental Committee under the Executive Committee monitor the Group's progress toward attaining target indicators and consider necessary measures.</p> <p>In May 2019, the Ajinomoto</p>	<p>In terms of the greenhouse gas problem, when we conducted scenario analysis in line with Task Force on Climate-related Financial Disclosures (TCFD) recommendation , the risk of flood in ChaoPraya area increased, and at the same time risk of drought in Ayutthaya region also increased, which can affect to the production of amino acid, and also food products. Therefore, business objectives and strategies have been added</p>

		<p>until 2030 for globe, under the scenario of a 2°C rise in average global temperature as SSP3 in 2100. The reason of choosing 2030 as time horizon for first scenario analysis, 2030 business plans rather than 2050 ones should be linked to current business plans. [Analytical choices] Our scenario analysis has been used analytical choices which are IPCC, IEA WEO, World Bank Climate Change Knowledge Portal, AQUEDUCT Water Risk Atlas, AQUEDUCT FLOODS.</p>	<p>Group endorsed the recommendations of TCFD. Our business domain of products ranges from seasonings and coffee to frozen foods. The geographic range of its operations spans the globe including Southeast Asia and South America. Climate change can impact the Group's operations in many ways, such as a major natural disaster halting its business activities, affecting its ability to procure raw materials and fuel, and altering consumption of its products. In FY 2019, we conducted a scenario analysis of the potential impact from climate change on global umami seasoning AJI-NO-MOTO®. We determined that a 2 °C rise in the average temperature would have relatively small impact on the main raw materials including water as well as demand for the product, so that these will not seriously affect our profit. However, the risk of flood will continue to increase in Chao Praya area where amino acids are produced, and produce 10% of group revenue. The findings reconfirmed the need to continue diversifying our suppliers, and take measure to avoid financial impact from flood in these</p>	<p>as follow. The Group aims to fast-track ongoing measures, such as research and development of alternative raw materials diversification of suppliers from less risk regions, and to take measure to avoid economic impact in the case of flood and drought. The group also took temporary measure to avoid the financial impact of flood in Chao Praya region, by building 1 meter wall between the river and factories in 2011. We anticipate to finish diversification of suppliers by 2025, and building wall by 2022.</p>
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			factories closed to Chao Praya.	
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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

We anticipate that the increased global food demand with increased population will make securing raw material more difficult in the future. We would like to demonstrate to the top management that continued resource-saving fermentation technologies helps Ajinomoto in securing business opportunities by natural capital argument. We have compared two scenarios of “AJI-NO-MOTO®” produced at Ayutthaya factory in Thailand. One is status quo, which uses edible biomass for the raw material, another is the case with Research and Development to enable efficient use of non-edible biomass for the raw material. At first, we have calculated Carbon and Water footprint and farm land area for raw material crop as both scenarios. We have converted from these data to monetary environmental impact by minimum and maximum economic value. Finally, we have assessed sensitive monetary impact analysis about the technologies in terms of natural capital.

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	We have recognized that agricultural crops require a lot of water for cultivation. Therefore, we define classifying our products as low water impact, our products which our customers can be reduced amount of agricultural crops consumption by these products. Explanation of feed contained amino acid (low protein feed) is follow. Soybean meal contents of Low protein	Ajinomoto group manufactures and sells several kinds of amino acid for feed. Regarding amino acid, we have two advantages comparing with other companies. First one is that the amino acid we produce has the good quality. Second one is that we have the knowledge about how to utilize amino acid. We make an effort for the spread of feed and market development with an amino acid in the

		<p>feed which is supplemented industrial manufactured amino acid instead of essential amino acid of soybean meal is over 10% lower than conventional feed. As coordinating metabolic energy, amount of wheat in low protein feed are over 20% higher than conventional feed. However, soybean meal water consumption inventory over 1000 (m3/t-raw material) is 3 times higher than wheat water consumption inventory a few hundreds (m3/t-raw material), soybean meal content of low protein feed is over 10% lower than conventional feed, therefore water footprint of low protein feed is lower than conventional feed. Water risk will become higher, pig farmers change to apply low protein feed and feed use amino acid supply by Ajinomoto group will be increase more.</p>	<p>drought area by uniting the validity of this amino acid for a customer.</p>
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W8. Targets

W8.1

(W8.1) Do you have any water-related targets?

Yes

W8.1a

(W8.1a) Indicate whether you have targets relating to water pollution, water withdrawals, WASH, or other water-related categories.

	Target set in this category	Please explain
Water pollution	No, but we plan to within the next two years	<p>Ajinomoto Co., Inc. is a company that produces food seasonings, processed foods, sweeteners, amino acids and pharmaceuticals. Therefore, water resource is indispensable resource for our business activities. We identify "water resources" in one of priority themes and act for correspondence, the management that is appropriate to be able to minimize load to environment about improvement of effectiveness for the supply of water in all bases treating water, water intake, the drainage.</p> <p>At the setting of targets by production sites, we consider if the sites are located at the area with water-risks, such as scarcity</p>

		and pollutions. When we find out water is scarce at the site, we emphasize monitoring the quantity of the water withdrawals, but when the site are located at the area with pollution risks, then we emphasize monitoring the pollution.
Water withdrawals	Yes	
Water, Sanitation, and Hygiene (WASH) services	No, and we do not plan to within the next two years	As a food production company, the Ajinomoto Group is already fully committed to water safety, including the concept of WASH. We consider it is important for our employees to lead healthy and comfortable life. And also, we recognize that offering safe water and clean environment to the employees is obligation for us. Therefore, we already monitor parameters of WASH at 100% entire of our facilities and we do not plan to set target for WASH.
Other	Yes	

W8.1b

(W8.1b) Provide details of your water-related targets and the progress made.

Target reference number

Target 1

Category of target

Water withdrawals

Target coverage

Company-wide (direct operations only)

Quantitative metric

Reduction in withdrawals per unit of production

Year target was set

2017

Base year

2005

Base year figure

123

Target year

2030

Target year figure

24.6

Reporting year figure

25.5

% of target achieved relative to base year

99.0853658537

Target status in reporting year

Achieved

Please explain

Figures: Water consumption per production volume unit (intensity per ton of product). We have made a target reduction of the amount of the used water per the production 80 % to fiscal year 2005 with a target by the plan. We had achieved 98% in fiscal year 2022. [99% = (Reduction 79%) / (Target 80%)]

Target reference number

Target 2

Category of target

Other, please specify
Recharge rate of drinking water into forest

Target coverage

Product level

Quantitative metric

Other, please specify
ha

Year target was set

2016

Base year

2015

Base year figure

0.92

Target year

2025

Target year figure

26

Reporting year figure

27.8

% of target achieved relative to base year

107.1770334928

Target status in reporting year

Achieved

Please explain

Unit of the figures: ha

Base year figure: 0.92 ha (Progress of Recharge rate of drinking water into forest: 0%)

Target year figure: 26.0 ha (Progress of Recharge rate of drinking water into forest: 100%)

Reporting year figure: 27.8 ha (Progress of Recharge rate of drinking water into forest: 107%) -> Achieved

Recharge rate of drinking water into forest is the target metric, because it represents forest conservation at water sources.

Ajinomoto AGF, Inc. production bases, AGF Suzuka, Inc. and AGF Kanto, Inc., withdraw water from the Suzuka River and Arato River (a tributary of the Tone River). Their sources are conserved by forests located in the foothills of the Suzuka Mountains and the south foothills of Mt Akagi, respectively. The companies are continuously engaged in the Forest of Blendy® initiative aimed at conserving these forests. By FY 2025, Ajinomoto AGF, Inc. aims to expand the area of these forests 5-fold compared to their March 2017 size, and supply all water used in Blendy® bottled coffee and other production from Forest of Blendy® groundwater (recharge volume). As of the end of FY2018, the two forests' contracted areas combined covered approximately 22.0 ha, about 4.2 times the original size.

In fiscal 2022, production and sale of Blendy® brand bottled coffee was transferred to a company outside the Ajinomoto Group. Therefore, Fiscal 2022 is the final year to set and report this metric. However, we will continue our Forest of Blendy® conservation efforts, seeking to use these as a forum for sustainable education.

W9. Verification

W9.1

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

No, we are waiting for more mature verification standards and/or processes

W10. Plastics

W10.1

(W10.1) Have you mapped where in your value chain plastics are used and/or produced?

	Plastics mapping	Value chain stage	Please explain
Row 1	Yes	Direct operations	The plastics we purchase, and use are categorized as product packaging, plastics used in the manufacturing process, plastics used

			<p>in distribution, plastics used in premiums and promotions, and other single-use plastics. In addition, there are plastics used in the packaging of raw materials that we purchase. We conducted a survey on the amount of plastic used by our group companies and grasped the actual usage situation.</p> <p>As a result, about 87% of the plastic is used for product packaging, amounting to about 67,000 tons.</p>
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W10.2

(W10.2) Across your value chain, have you assessed the potential environmental and human health impacts of your use and/or production of plastics?

	Impact assessment	Value chain stage	Please explain
Row 1	Yes	Direct operations Supply chain Product use phase	<p>Problems related to plastics are: 1) Marine plastics and microplastics, 2) Non-renewable resources, that is, the problem of being dependent on petroleum and not sustainable resource use (resource problem), 3) Incineration of plastics. 1) 2) 3) greatly affect the environment, and 1) greatly affects human health.</p> <p>Products in the Ajinomoto Group’s business domains range from food such as seasonings, frozen foods and coffee to healthcare. Further, our operations span the globe. We also use plastic packaging for many of our products, and we are responsible for addressing three challenges. Japan, Thailand, Indonesia, Brazil, and the Vietnam accounted for 80% of total use of plastic. Especially in countries where waste sorting and collection systems are not in place, there is a risk that our product packaging materials will leak into the environment and become marine litter. Marine plastics and microplastics accelerate the loss of biodiversity, and there are also concerns about the serious impact on health when they are taken into the human body through the food chain. In addition, in evaluating our own business using Leap, an evaluation tool of TNFD, we understand that the plastic waste problem in Southeast Asia, Brazil, and Nigeria is an important issue.</p>

W10.3

(W10.3) Across your value chain, are you exposed to plastics-related risks with the potential to have a substantive financial or strategic impact on your business? If so, provide details.

	Risk exposure	Value chain stage	Type of risk	Please explain
Row 1	Yes	Direct operations Supply chain Product use phase	Regulatory Reputational Technology Physical	<p>The Ajinomoto Group has set "Contribution to a circular economy" as one of Ajinomoto Group materiality. Products and services of the Ajinomoto Group are created using a variety of resources. We have a duty to use the Earth's limited resources efficiently, and contribute to the creation of a sustainable recycling-oriented society.</p> <p>This materiality identifies the following as opportunities and risks. Opportunity: Gaining market share through the development of environmentally conscious. Risks: 1) Damaged corporate value due to delays in waste reduction or recycling efforts. 2) Loss of business opportunities due to delays in complying with plastic waste regulations, etc.</p> <p>We'll give you a little concrete example. New regulations on plastics are being created in each country. In Indonesia in particular, strict regulations have been enacted such as a switch to recyclable packaging by 2030, a ban on the use of small bags weighing 50g or less, and an obligation to voluntarily collect used packaging equal to sales volume. We are promoting initiatives such as switching to bigger packaging, switching to recyclable packaging, and establishing a collection scheme for used packaging with start-up company and local government.</p> <p>There are moves to consider regulations in the EU and the United Nations, and there are risks of opportunity loss and reputation due to the inability to respond quickly to new regulations.</p> <p>Also, some products are difficult to switch to recyclable packaging from the perspective of storage. Therefore, there are also risks such as opportunity loss due to delays in technological development, rising packaging material costs, and increased costs due to increased food loss. We also know that plastics have an impact on biodiversity, as assessed by Leap. We understand that this impacts sustainable food systems and affects our raw material procurement.</p> <p>We started the groupwide project launched in March 2020 to reduce these risks.</p>

W10.4

(W10.4) Do you have plastics-related targets, and if so what type?

	Targets in place	Target type	Target metric	Please explain
Row 1	Yes	Plastic packaging Plastic goods	Reduce the total weight of plastic packaging used and/or produced Eliminate problematic and unnecessary plastic packaging Increase the proportion of plastic packaging that is recyclable in practice and at scale Eliminate single-use plastic goods Reduce the total weight of plastics in our goods Eliminate problematic and unnecessary plastics within our goods Increase the proportion of our goods that are recyclable in practice and at scale	<p>The Ajinomoto Group set a goal to reduce plastic waste to zero by fiscal 2030. This means that we intend to eliminate all plastics released to the environment that are not used effectively.</p> <p>Goals for fiscal 2030</p> <ul style="list-style-type: none"> • Choose to use plastics in the minimum quantity and purpose required for safety and quality (reduce) • Switch to using only plastic packaging made of mono-material or recyclable products (recycle) • Support and contribute to measures for social implementation of collection, sorting, and recycling in countries and regions where our products are manufactured and sold <p>Through our Group wide project launched in March 2020, we are working strategically toward the following goals.</p> <p>Under our plan to achieve zero plastic waste, while promoting the technological development of mono-materialization, we will also promote reduction. This reduction will be completed by fiscal 2025, and our conversion to recyclable materials will also be completed by fiscal 2030. After confirming barrier property requirements for each product, we will implement new technologies for packaging materials that use aluminium foil currently, starting from those with a relatively low required barrier</p>

W10.5

(W10.5) Indicate whether your organization engages in the following activities.

	Activity applies	Comment
Production of plastic polymers	No	
Production of durable plastic components	No	
Production / commercialization of durable plastic goods (including mixed materials)	No	
Production / commercialization of plastic packaging	No	
Production of goods packaged in plastics	Yes	
Provision / commercialization of services or goods that use plastic packaging (e.g., retail and food services)	No	

W10.8

(W10.8) Provide the total weight of plastic packaging sold and/or used, and indicate the raw material content.

	Total weight of plastic packaging sold / used during the reporting year (Metric tonnes)	Raw material content percentages available to report	% virgin fossil-based content	% virgin renewable content	% post-industrial recycled content	% post-consumer recycled content	Please explain
Plastic packaging used		% virgin fossil-based content % virgin renewable content % post-industrial recycled content % post-consumer recycled content	99	0.3	0.04	0.2	In order to calculate the raw material content percentages, we conducted a questionnaire survey of 16 business divisions and affiliate companies that use a large amount of plastic. The coverage rate is approximately

						<p>90% of all plastic usage. Total plastic consumption is obtained using a system called ACSES from all business divisions and affiliate companies. We plan to introduce a new system next year and we will use this system to obtain all data.</p> <p>Packaging materials laminated with plastic and paper are also included in the amount of plastic used.</p> <p>Regarding recycled plastics, most of our products are flexible packaging main materials made of PE or/and PP. The use of recycled plastics other than PET for food packaging is quite difficult due to hygiene issues. We are working with CLOMA to</p>
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							consider the collection of food packaging and recycling into food packaging.
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W10.8a

(W10.8a) Indicate the circularity potential of the plastic packaging you sold and/or used.

	Percentages available to report for circularity potential	% of plastic packaging that is reusable	% of plastic packaging that is technically recyclable	Please explain
Plastic packaging used	% reusable % technically recyclable	0.6	48	We have not calculated % of recyclable in practice at scale. Some old survey results are included in the percentage of recyclable packaging materials. We plan to introduce a new system next year and we will use this system to obtain all data.

W11. Sign off

W-FI

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

W11.1

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

	Job title	Corresponding job category
Row 1	Director / Member of the Board	Director on board

