Conservation of water resources

As the global population rises, so does the expected demand for water. Another issue is the ubiquitous 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.

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.

Specific examples						
· Water and wastewater management	· Agriculture and livestock water use					
Related opportunities and risks (\bigcirc Opportunity \bullet Risk	.)					
 Stable procurement of raw materials and stable supply of products by reducing water risk 	 Damage to corporate value due to delays in addressing water resource conservation 					
 Production stagnation due to droughts, floods or water quality deterioration 						
Key initiatives by the Ajinomoto Group						
· Optimize production processes						
Related SDGs						
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Activity Report by Materiality Items

Conservation of Water Resources

Performance

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 > Environmental Data
 > CDP Water Security

Conservation of water resources in production processes

The Ajinomoto Group used 59,979,000 kiloliters of water in fiscal 2021, with the top five countries including Japan, Thailand and the United States making up 85% of the total. The ratio of water consumed in regions with high water stress^[1] was less than 1%. The Group aims to reduce water consumption per production volume unit (intensity) by 80% by fiscal 2030 (compared with fiscal 2005). In fiscal 2021, water usage decreased due to the introduction of a new MSG manufacturing method at AJINOMOTO CO., (THAILAND) LTD. and AJINOMOTO VIETNAM CO., LTD., resulting in 161,884,000 kiloliters of water usage reduction compared to the base year. This figure achieved our yearly goal in water usage reduction per production volume unit (intensity), at approximately 79%. Typical indicators of suspended substances in wastewater are BOD (biochemical oxygen demand) and total nitrogen. In fiscal 2021, total emissions were 263 tons for BOD and 430 tons for total nitrogen. We will continue in fiscal 2022 to implement water-saving measures and improve production processes in every facility. We encourage our suppliers to disclose water impacts in our supply chains through the CDP supply chain program.

[1] Only Peru is applicable for the Ajinomoto Group.

Water usage volumes by area^[2] (Fiscal 2021)



[2] Turkey is included in Asia/Africa.

Reduction rate of water consumption per production volume unit

	FY2	021	FY2022	FY2030
	Target	Result	Target	Target
Reduction rate of water consumption per production volume unit (vs. FY2005)	78%	79%	78%	80%

Conservation of Water Resources

Water use/intensity						(1,000 kl)
	FY2005 (Base year)	FY2017	FY2018	FY2019	FY2020	FY2021
Total water withdrawal ^[1]	221,863	74,844	69,892	66,926	64,406	59,979
Fresh surface water	180,363	24,433	20,672	19,630	17,004	17,259
Brackish surface water, seawater	0	0	0	0	0	0
Fresh groundwater, renewable	—	16,371	15,076	14,366	13,041	13,769
Fresh groundwater, non-renewable ^[2]	0	0	0	0	0	0
Processed water	0	0	0	0	0	0
Municipal water (including industrial water)	41,500	34,041	34,144	32,930	34,361	28,950
Water consumption per production volume unit (intensity per ton of product)	123	28	27	27	27	25
Reduction rate (vs. FY2005)	—	77%	78%	78%	78%	79%
Ref.: Production volume (1,000 t)	1,800	2,684	2,627	2,512	2,423	2,360
Total water discharge	201,300	60,464	55,800	52,342	51,564	48,034
Fresh surface water (processed by the Group)	47,000	28,341	27,498	24,297	24,088	20,490
Brackish surface water, seawater	0	0	0	0	0	0
Groundwater	0	0	0	0	0	0
Third-party destinations ^[2]	10,300	11,299	11,273	11,291	11,139	11,360
Total water recycled or reused	144,000	20,824	17,029	16,754	16,338	16,184
Proportion of water recycled or reused	65%	28%	24%	25%	25%	27%
Total water consumption	20,563	14,380	14,092	14,584	12,842	11,945
BOD (tons)	550	294	312	283	284	263
Nitrogen (tons)	3,200	394	501	506	583	430

[1] Water withdrawal is disclosed as the volume measured and invoiced in accordance with the laws of each country and region, or as a converted volume based on pump power use and pipe water speed. Data for quantity and quality of wastewater is aggregated in accordance with the laws of each country and region. [2] Data categories were reviewed based on that fresh groundwater is reclaimed and used as well water.

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Conservation of Water Resources

	(1,000					
	FY2017	FY2018	FY2019	FY2020	FY2021	
Total water withdrawal	573	575	521	481	496	
Fresh surface water	0	0	0	0	0	
Brackish surface water, seawater	0	0	0	0	0	
Fresh groundwater, renewable	570	572	518	480	494	
Fresh groundwater, non-renewable	0	0	0	0	0	
Processed water	0	0	0	0	0	
Municipal water (including industrial water)	3	3	3	1	2	
Water consumption per production volume unit (intensity per ton of product)	16	15	13	13	11	
Reduction rate (vs. FY2005)	5%	10%	22%	23%	37%	
Ref.: Production volume (1,000 t)	36	38	40	37	46	
Total water discharge	257	234	220	198	214	
Fresh surface water (processed by the Group)	230	215	211	188	207	
Brackish surface water, seawater	0	0	0	0	0	
Groundwater	0	0	0	0	0	
Third-party destinations	27	19	10	10	7	
Total water recycled or reused	0	0	0	0	0	
Proportion of water recycled or reused	0%	0%	0%	0%	0%	
Total water consumption	316	341	301	283	282	

Water use/intensity in regions with high water stress (Peru)

Forest conservation near water sources

Performance

GRI303-1

 > Protecting forests and nurturing waterforest expansion activities (Japanese only) The Ajinomoto Group aims to increase our water forest recharge rate to 100% or more by fiscal 2025. In fiscal 2020, we achieved a 107% rate, beating our goal and maintaining this level in fiscal 2021.

AGF Suzuka, Inc. and AGF Kanto, Inc., production bases for Ajinomoto AGF, Inc., use water from the Suzuka River and Arato River (a tributary of the Tone River), respectively. These water sources come from the Forest of *Blendy*_® of the Suzuka Mountains and the southern foothills of Mount Akagi.

Given the spread of COVID-19 during fiscal 2021, our Forest of $Blendy_{\odot}$ conservation efforts were limited to small groups of volunteers from both production bases.

In fiscal 2022, production and sale of $Blendy_{\otimes}$ brand bottled coffee was transferred to a company outside the Ajinomoto Group. However, we will continue our *Forest of Blendy*_{\otimes} conservation efforts, seeking to use these as a forum for sustainable education.

Recharge rate of drinking water into forest

