Reduce Our Environmental Impact by 50%

Environmental management P055
Climate change (disclosures based on the TCFD) P059
Reduction of greenhouse gas emissions in the value chain P066
Reduction of waste across product lifecycles P074
Contribution to sustainable agriculture P084
Food loss and waste P088
Biodiversity and natural capital (disclosures based on TNFD) P092
Sustainable materials sourcing P103
Animal welfare P107

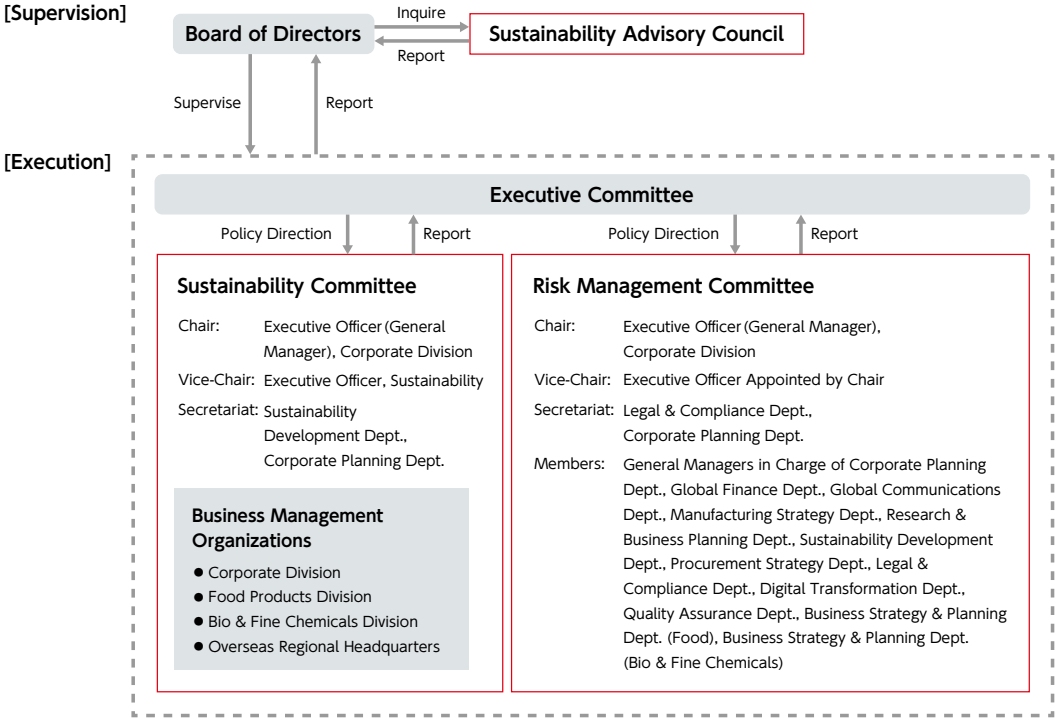
Environmental management

Environmental management framework

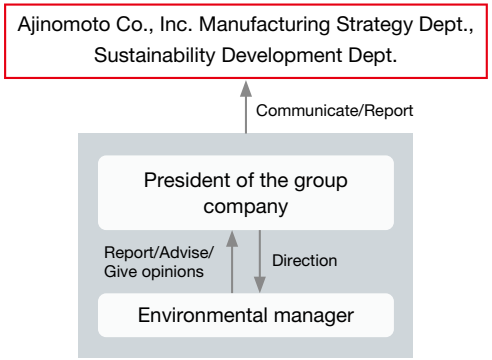
Governance

The Ajinomoto Group has established the Sustainability Advisory Council as a subordinate body of the Board of Directors, and the Sustainability Committee as a subordinate body of the Executive Committee. These promote sustainability management, and include deliberations on policies and measures related to environmental activities. Each Group company will appoint one environmental manager from among manager class employees. Environmental managers formulate their company's own plans based on the Group Shared Policy on Environment, and the decisions made by the Sustainability Committee, and disseminate the plan throughout the company. Then, they report to the presidents of Group companies and give advice and recommendations regarding the performance status of environmental activities and improvement issues, etc., and also contact and report to Ajinomoto Co., Inc. Sustainability Development Dept. and other related organizations.

Framework for ESG and sustainability



Management framework at group companies



Status of ISO 14001 certification

Risk Management

As of March 2025, the Ajinomoto Group has acquired ISO 14001 certification at 67 of subject 97 eligible factories. Even those companies not yet certified are conducting management based on the ISO 14001 approach.

Environmental assessments

Risk Management

When the Ajinomoto Group launches new products and businesses, or when we change the use of existing raw materials or production processes, we assess the potential environmental impact of our business plans. We then take any necessary measures to minimize future risks. Environmental assessments at Group companies are performed by relevant departments in accordance with internal rules. The results of these assessments are reviewed from a Group-level perspective by the environmental management departments.

Environmental assessment categories

1. Legal compliance	—
2. Seven types of typical pollution	Air pollution, water pollution, soil contamination, noise, vibration, land subsidence, and odor
3. Global environmental issues	GHG emissions, energy savings, renewable energy use, fluorocarbons, distribution efficiency, etc.
4. Food loss and waste reduction	Extension of “best-before” periods, month-year labeling, etc.
5. Sustainable procurement	Biodiversity conservation, certified ingredients, certified paper, bioplastics, etc.
6. Water resources	Water use and wastewater reduction
7. Waste disposal	Proper waste disposal, waste generator responsibilities, etc.
8. Creation of a recycling-oriented society	3Rs, excess packaging, effective use of by-products, waste generation reduction, etc.
9. Management of hazardous substances	New chemical substances, PCBs, asbestos, etc.
10. Impact of buildings and structures	Right to sunlight, radio wave disturbance, etc.
11. Consumer awareness of green living	Display of environmental labels

Environmental audits

Risk Management

The Ajinomoto Group receives external audits for compliance with ISO 14001. In addition, locations experiencing issues are audited by the Ajinomoto Co., Inc. Manufacturing Strategy Dept. based on the Guidelines for Environmental Audits. There were no sites subject to environmental audits in fiscal 2024.

Response to environmental laws and accidents

Risk Management

We established measures to quickly address any legal violations or accidents related to the environment.

In fiscal 2024, there were two legal violations, and we made appropriate corrective actions in response to administrative guidance.

Two incidents affecting the environment outside work sites occurred in Japan (one sludge discharge and one fluorocarbon leak) and two incidents occurred overseas (one case of rainwater runoff into neighboring land and one wastewater leak). We reported the incidents to the government promptly as required, and we investigated the causes, taking necessary measures. We have established measures to quickly address any violations of environmental laws or accidents related to the environment.

Amount of fines paid

(thousand yen)

Fiscal year	2020	2021	2022	2023	2024
Amount of fines paid	0	0	1,130	515	75,731

Environmental education

Strategy

The Ajinomoto Group conducts environmental education for employees to acquire the expertise and skills for environmentally responsible business operations.

We continue to provide e-learning, first introduced in 2021, for Group employees in Japan and overseas to acquire basic knowledge of overall sustainability and environmental initiatives. In 2024, we began offering training on topics such as biodiversity based on global trends. Employees at Ajinomoto Co., Inc. and Ajinomoto Group companies in Japan have completed the training, and we plan to provide this training to overseas subsidiaries beginning fiscal 2025. In Japan, we provide ongoing education to the environmental officers, managers, and staff in each organization as well as environmental assessment training for staff in business and research departments responsible for developing new businesses and products. We also conduct environmental law seminars for relevant staff to stay up- to-date with the frequent revisions in environmental regulations and to ensure compliance.

■ Main environmental programs in fiscal 2024

- E-learning for all employees (overseas)
- Environmental law training (Seminar on trends in revisions to laws) (Japan)
- Training on waste treatment laws (Japan)

Material balance

Metrics and Targets

The Ajinomoto Group aggregates carbon footprint results for products and administrative office data, calculating the overall environmental impact of our business activities as Scope 1, 2, and 3[1] data.

In fiscal 2024, we reduced Scope 1 and 2 emissions by approximately 90 kt-CO_2 and 70 kt-CO_2, respectively.

This significant reduction was due in part to the plants of PT AJINOMOTO INDONESIA and AJINOMOTO CO., (THAILAND) LTD. converting from coal to biomass fuel and the procurement of renewable energy certificates by the Kyushu Plant of Ajinomoto Co., Inc

[1] Scope 1: Direct greenhouse gas emissions from sources that are owned or controlled by the organization (burning fuel, industrial processes, vehicle use, etc.)
Scope 2: Indirect emissions from the generation of purchased electricity, heat, or steam consumed by the company.
Scope 3: Other indirect emissions (product use, disposal and transport, employee commuting and business travel, investment, etc.)

INPUTS

	FY2018 (Base year)	FY2020	FY2021	FY2022	FY2023	FY2024
Main raw material (kt)	1,548	1,282	1,137	1,217	1,147	1,122
Sub raw material (kt)	2,901	2,069	2,006	2,011	1,928	1,990
Acids/alkalis (kt)	501	482	421	464	411	433
Other (kt)	2,400	1,588	1,585	1,547	1,516	1,557
Packaging material (kt)	276	244	259	251	236	219
Plastic (kt)	69	70	71	69	68	66
Paper, cardboard (kt)	177	148	165	157	143	128
Other (kt)	31	26	24	25	24	25
Fuel (TJ)	28,680	24,494	24,557	24,952	22,863	22,806
Oil (TJ)	2,141	1,653	1,556	1,722	507	355
Coal (TJ)	4,703	3,157	3,593	3,334	787	73
Biomass (TJ)	7,330	6,875	7,132	7,989	8,900	9,936
Natural gas (TJ)	14,506	12,809	12,277	11,906	12,668	12,440
Purchased electricity (derived from fossil fuels) (TJ)	7,834	7,200	4,440	4,381	3,733	3,377
Purchased electricity (derived from renewable energy) (TJ)	42	60	2,174	2,249	2,367	2,761
Purchased steam, etc. (TJ)	1,954	1,800	563	542	401	405
Water (1,000 kl)	63,687	59,386	59,979	60,039	58,358	56,098
Surface water (1,000 kl)	20,672	17,004	17,259	17,890	17,520	17,494
Municipal water (1,000 kl)	5,954	5,262	5,152	5,099	4,719	4,013
Municipal water (Industrial) (1,000 kl)	22,192	24,076	23,794	23,677	23,605	23,451
Ground water (1,000 kl)	14,865	13,041	13,769	13,369	12,507	11,139
Other (rainwater, etc.) (1,000 kl)	3	4	4	4	8	1
Transportation distance (km)	2,756	2,872	2,886	3,974	3,397	3,855
Use (soups, frozen foods, coffee) (t)	556,549	603,420	583,737	521,302	483,737	447,898

*1 Calculated excluding companies that left Ajinomoto group after FY2019, in accordance with SBTi standards.

OUTPUTS

($t\text{-}CO_2e$)

	FY2018 (Base year)	FY2020	FY2021	FY2022	FY2023	FY2024
Scope 3 Category 1: Raw materials	8,115,946	7,614,734	6,960,412	6,610,392	6,494,563	5,902,119
Scope 1:	1,196,969	1,008,811	1,005,363	973,780	767,084	675,022
Scope 3 Category 3: Production	381,765	630,823	583,499	604,719	587,760	610,676
Scope 2:	Market-based method 1,015,723 Location-based method 1,026,764	Market-based method 901,789 Location-based method 910,791	Market-based method 606,594 Location-based method 622,059	Market-based method 611,712 Location-based method 620,751	Market-based method 512,652 Location-based method 516,707	Market-based method 444,362 Location-based method 477,929
Scope 3 Category 4: Transport	1,274,589	1,210,741	1,121,673	1,037,133	981,743	1,241,268
Scope 3 Category 11: Use	1,294,392	1,355,477	1,396,947	1,386,049	1,296,947	1,245,292
Scope 3 Category 12: Disposal	443,333	425,003	409,500	405,337	400,585	401,455
Scope 3 Category 2: Capital goods	249,944	262,711	232,674	219,172	241,466	302,696
Scope 3 Category 5: Waste generated in operations	140,678	85,714	92,884	97,854	82,326	80,534
Scope 3 Category 6: Business travel	4,479	4,226	4,350	4,446	4,500	4,532
Scope 3 Category 7: Employee commuting	16,206	15,292	15,740	16,087	16,283	16,398
Scope 3 Category 8: Upstream leased assets	Included in category 1	Included in category 1	Included in category 1	Included in category 1	Included in category 1	Included in category 1
Scope 3 Category 9: Downstream transportation and distribution	3,780	3,183	3,448	2,535	2,802	4,981
Scope 3 Category 10: Processing of sold products	8,158	179,801	126,716	108,585	78,445	60,659
Scope 3 Category 13: Downstream leased assets	0	0	0	0	0	0
Scope 3 Category 14: Franchises	0	0	0	0	0	0
Scope 3 Category 15: Investments	0	0	0	0	0	0
Scope 3 total	11,933,270	11,787,705	10,947,844	10,492,309	10,187,420	9,870,610
Scope 1, 2, and 3 total	14,145,962	13,698,305	12,559,801	12,077,801	11,467,156	10,989,993

Data calculation
Scope of reporting: All 128 business sites covered by ISO 14064-1 (100%)
Reporting period: April 1, 2024 to March 31, 2025
The Ajinomoto Group refers to ISO 14064-1 and uses the latest CO_2 e emission factor to calculate the CO_2 e emissions in the above material balance table.
These CO_2 e emissions are independently verified in accordance with ISO 14064-3 requirements by LRQA Limited.

> Environmental Data: Third-party assurance
> Environmental Data: Ajinomoto Group products carbon footprint
> Environmental Data: Composition of consumed energy
> CDP Corporate Questionnaire 2024

Climate change (disclosures based on the TCFD)

Approach to climate change risks

Our business depends on sound agrifood systems and a rich global environment. Today, the global environment is reaching its limits. Climate change affects the Group's business in many ways, including delays to business due to large-scale natural disasters, impact on procuring raw materials such as agricultural produce and fuels, and changes in product consumption. At the same time, however, our business activities have an environmental footprint. In particular, the production of glutamic acid and other amino acids, the raw materials for umami seasonings, requires significant amounts of energy. Addressing climate change is an urgent issue. In 2020, we set GHG reduction targets in line with the Science Based Target initiative (SBTi) 1.5°C scenario. We also received new certification in 2024 from the SBT Initiative for our GHG emissions reduction targets, including net-zero emissions. We are studying measures based on the TCFD recommendations, moving forward with related information disclosures.

Governance

The Ajinomoto Group complies with the Ajinomoto Group Policies (AGP), which outlines the concepts and actions to be observed by each Group company, officers, and employees. We continue to improve internal control systems and control operations. At the same time, we strengthen systems, treating sustainability as an active risk and striving to enhance corporate value.

The Board of Directors has established the Sustainability Advisory Council, and established a system to recommend the Group's approach to sustainability and ESG. The Board determines materiality items related to sustainability that serve as guidelines for ASV management and supervises the execution of initiatives related to sustainability.

The Executive Committee has established the Sustainability Committee and Risk Management Committee as subordinate bodies and selects and extracts risks and opportunities based on important issues (Materiality) for the Ajinomoto Group, assessing the degree of impact, formulating measures, and managing progress. In fiscal 2024, the Executive Committee received two activity reports from the Sustainability Committee and the Risk Management Committee.

> Group Shared Policy on Environment
> Annual Securities Report for the 147th fiscal year P022-023
> CDP Corporate Questionnaire 2024

Strategy

The Ajinomoto Group has a wide range of product areas in the food business, from seasonings and foods to frozen foods, and is also expanding the Group's business into fields such as healthcare. Climate change affects the Group's business in many ways, including delays to business due to large-scale natural disasters, impact on procuring raw materials such as agricultural produce and fuels, and changes in product consumption.

(1) Scenario analysis assumptions

Based on the scenarios that the average global temperature will rise from post-industrial revolution levels by 1.5°C or 4°C by 2100[1], in fiscal 2024, we conducted a scenario analysis on the impact of climate change between 2030 and 2050 for global umami seasonings and mainstay domestic and overseas products.

Among the effects of climate change impacting production over the medium- to long-term, drought, floods, rising sea levels, and changing yields of raw materials were analyzed as physical risks, while the introduction of carbon pricing and tightening of other laws and regulations, rising energy prices, and changes in consumer preferences were analyzed as transition risks.

Opportunities show the scenario analysis risks and opportunities when the average temperature difference between the 1.5°C and 4°C scenarios as of 2030 is considered to be about 0.2°C with no significant difference in physical risk, and when the average temperature difference as of 2050 is expected to be about 1°C with differences in physical risks.

The following is a summary of the changes in the assumptions used in our scenario analysis to date.

[1] Scenarios referenced are SSP1-1.9 (1.5°C scenario) and SSP5-8.5 (4°C scenario) by the UN Intergovernmental Panel on Climate Change (IPCC) and scenarios by the International Energy Agency (IEA).

	FY2020	FY2021	FY2022	FY2023
Business	Umami seasonings (global), mainstay products in Japan	Umami seasonings (global), mainstay products in Japan	Umami seasonings (global), mainstay products in Japan and overseas	Umami seasonings (global), mainstay products in Japan and overseas
Time of occurrence	2030	2030/2050	2030/2050	2030/2050
Scenario	2°C/4°C	2°C/4°C	1.5°C/4°C	1.5°C/4°C
Sales basis coverage	24%	24%	55%	65%

(2) Scenario analysis: Risks

1.5°C scenario (2050): When certain policy measures are taken to reduce GHG emissions and the use of fossil fuels decreases						
Risk	Average temperature increase	Increased severity and frequency of floods and droughts	Mandates and regulations on products	Changes in consumer preferences	Items to the right are for the Group as a whole	Carbon pricing mechanisms
Risk categories	Transition risks	Physical risks	Transition risks	Transition risks		Transition risks
Business impact	Increased raw materials (e.g., coffee beans) procurement costs due to carbon pricing, etc.	Measures to ensure consistent supply taken since our founding	Cost increases due to tightening of laws and regulations regarding raw materials used (Assumption: Laws and regulations on the traceability of raw materials and recycling)	Reduced demand due to rising temperatures (Assumption: Miso soup, other soups, hot coffees, shift from heating element to microwave cooking)		Increased cost of fuel used due to carbon pricing
Potential financial impact	0.2 billion yen/year	Insignificant	—	—		2030: 18 billion yen/year[1] 2050: 43 billion yen/year[1]
Countermeasures	• Support for raw material production areas • Considering raw materials made by different production methods	• More diversified areas of procurement • R&D on alternative raw materials	• Construction of a comprehensive upstream/downstream cooperation system in the supply chain	• Communication to create better eating habits by highlighting nutritional value • Marketing toward chilled soup and iced coffee • Exploration/proposal of microwave cooking options		• Visualization of financial impact with internal carbon pricing • Fossil fuel phase-out • Use of renewable energies • Development of ecofriendly manufacturing methods

4°C scenario (2050): In the event that no policy measures are taken to reduce GHG emissions				
Risk	Average temperature increase	Increased severity and frequency of floods and droughts	Changes in consumer preferences	Increasing fuel costs
Risk categories	Physical risks	Physical risks	Transition risks	Transition risks
Business impact	Increased costs from decline in productivity of agricultural, livestock, and fishery products (Assumption 1: Worsening aquaculture environment, Assumption 2: Decrease in livestock growth rate and productivity, Assumption 3: Decrease in milk yields from dairy cows, Assumption 4: Infectious disease epidemics in livestock, Assumption 5: Poor growth of agricultural produce and pest epidemics)	Decreased sales due to increased raw material procurement costs, shutdown of operations, and delivery delays (Assumption 1: Flooding in Thailand, Assumption 2: Drought in Thailand, Assumption 3: Flooding from localized torrential rains in Japan)	Reduced demand due to rising temperatures (Assumption: Miso soup, other soups, hot coffees, shift from heating element to microwave cooking)	Rising prices of fossil fuels and electricity
Potential financial impact	9.0 billion yen/year	0.1 billion yen/year	—	2 billion yen/year[2]
Countermeasures	• More diversified areas of procurement • Stronger cooperation with suppliers/farmers • Development of recipes with reduced extracts • R&D on alternative raw materials • Introduction of high temperature-tolerant varieties • Reflection in sales price	• More diversified areas of procurement • R&D on alternative raw materials • Continuation and improvement of water saving production • Improvement of supply and logistics systems	• Communication to create better eating habits by highlighting nutritional value • Improvement of communication about easy meals using heating elements • Marketing toward chilled soup and iced coffee • Exploration/proposal of microwave cooking options	• Fossil fuel phase-out • Use of renewable energies • Development of ecofriendly manufacturing methods

[1] Calculated by multiplying the Ajinomoto Group's FY2018 standard GHG emissions (approved by the SBTi) by the International Energy Agency's (IEA) carbon pricing forecasts projected under the 1.5°C scenario for 2030 and 2050. Carbon pricing for 2030 is forecast at $25/t-$CO_2$ for emerging countries, $90/t-$CO_2$ for Brazil, China, India, and Indonesia, and $140/t-$CO_2$ for developed countries. For 2050, the forecasted prices are $180/t-$CO_2$ for emerging countries, $200/t-$CO_2$ for Brazil, China, India, and Indonesia, and $250/t-$CO_2$ for developed countries. The 4°C scenario is the outcome of the current situation with no additional or higher CO_2 pricing expected.

[2] The IEA World Energy Outlook 2024 edition (based on 2023 data) shows little projected price increase for fossil fuels under the 4°C scenario, unlike the 2022 edition (based on 2021 data), which forecasted a significant rise by 2050. As a result, our projected financial impact is smaller than the estimate in the fiscal 2023 forecast.

(3) Scenario analysis: Opportunities

1.5°C scenario (2050): When certain policy measures are taken to reduce GHG emissions and the use of fossil fuels decreases		
Opportunities	Low emission products and services	Changes in consumer preferences
Opportunity categories	Products and services	Products and services
Business impact	Increased sales from products with low environmental impact due to rise in popularity of ethical-mindedness among consumers and customers	• Expanding needs due to health consciousness = Increase in sales • Expanding needs for beverages due to rising temperatures = Increase in sales
Countermeasures	• Development of eco-friendly manufacturing methods and products • Initiatives to obtain favorable ESG rating • Strengthening reliable data to prove low environmental impact • Measures to shift customer preferences toward medium- and large-quantity products	• Product development that improves nutritional value • Communication to create better eating habits by highlighting nutritional value • Development of eco-friendly manufacturing methods and products

4°C scenario (2050): In the event that no policy measures are taken to reduce GHG emissions		
Opportunities	Low Emission Products and Services	Changes in consumer preferences
Opportunity categories	Products and services	Products and services
Business impact	Increased sales from products with low environmental impact due to rise in popularity of ethical-mindedness among consumers and customers	• Expanding needs due to health consciousness = Increase in sales • Expanding needs for beverages due to rising temperatures = Increase in sales
Countermeasures	• Development of eco-friendly manufacturing methods and products • Strengthening reliable data to prove low environmental impact • Measures to shift customer preferences toward medium- and large-quantity products	• Product development that improves nutritional value • Communication to create better eating habits by highlighting nutritional value • Development of eco-friendly manufacturing methods and products

(4) Reflecting scenario analysis results in strategy

(i) Reflection in our business strategy

Based on the impact of the scenario analysis on our business, we plan to invest in fossil fuel phase-out and the use of renewable energies, as well as eco-friendly manufacturing methods to further reduce our GHG emissions in the future. We will also work on formulating new business strategies to achieve ASV, where sustainability initiatives lead to greater added value for our products.

We will review risks and opportunities in scenario analyses for fiscal 2025 and beyond, based on updated data from various sources.

(ii) Reflection on financing strategy

Sustainable finance forms the basis for acquiring the necessary funds for our various initiatives.

Beginning with the issuance of sustainable bonds in October 2021, we have continued to procure funds through sustainable finance. Our efforts here include securing a commitment line agreement through positive impact financing in January 2022, a commitment line agreement through Sustainability Linked Loans in December 2022, and the issuance of Sustainability Linked Bonds in June 2023.

Most recently, we issued two new sustainability-linked loans in March and April of 2024.

Through this financing, we will further accelerate our efforts to realize one of our two Ajinomoto Group outcomes by 2030, namely, to reduce our environmental impact by 50%, as well as to realize a sustainable society.

> Sustainable Finance

Risk management

To achieve the Medium-Term ASV Initiatives 2030 Roadmap, we must identify risks accurately and respond to these risks promptly and appropriately.

The Sustainability Committee and the Risk Management Committee work closely together to ensure no risk is left unaddressed between the two. The committees select and identify risks and opportunities based on matters of importance to the Ajinomoto Group (Materiality) and propose these risks and opportunities to the Executive Committee.

The Sustainability Committee formulates response measures and manages progress on matters related to sustainability, including social, environmental, and nutritional issues. The Risk Management Committee handles risks that require management attention (e.g., pandemics, geopolitical risks, and information security risks).

We implement risk management processes at each domestic and overseas work site to identify risks and formulate countermeasures, taking individual business strategies and local political, economic, and social conditions into account.

The Risk Management Committee improves these processes and compiles the risks identified by each work site and addresses those that management should take the initiative to address. In addition, each business and corporation has formulated a business continuity plan (BCP) in preparation for emergencies, and the Risk Management Committee has established a system for constant verification of each BCP's effectiveness and regularly monitors and manages risk response.

Full-time Audit Committee members attend the Sustainability Committee and the Risk Management Committee to monitor risk management process.

Metrics and targets

(i) Targets

The Ajinomoto Group received new certification from the SBT Initiative in December 2024 for our GHG emission reduction targets, including net zero. Following this recognition, we are reviewing our strategies to further accelerate efforts toward achieving these targets. The newly approved Ajinomoto Group GHG reduction targets are as follows.

【Near-term targets】

Scope 1 and 2: Reduce GHG emissions by 50.4% by FY2030, compared to the base year of FY2018

Scope 3: Reduce GHG emissions by 30% by FY2030, compared to the base year of FY2018

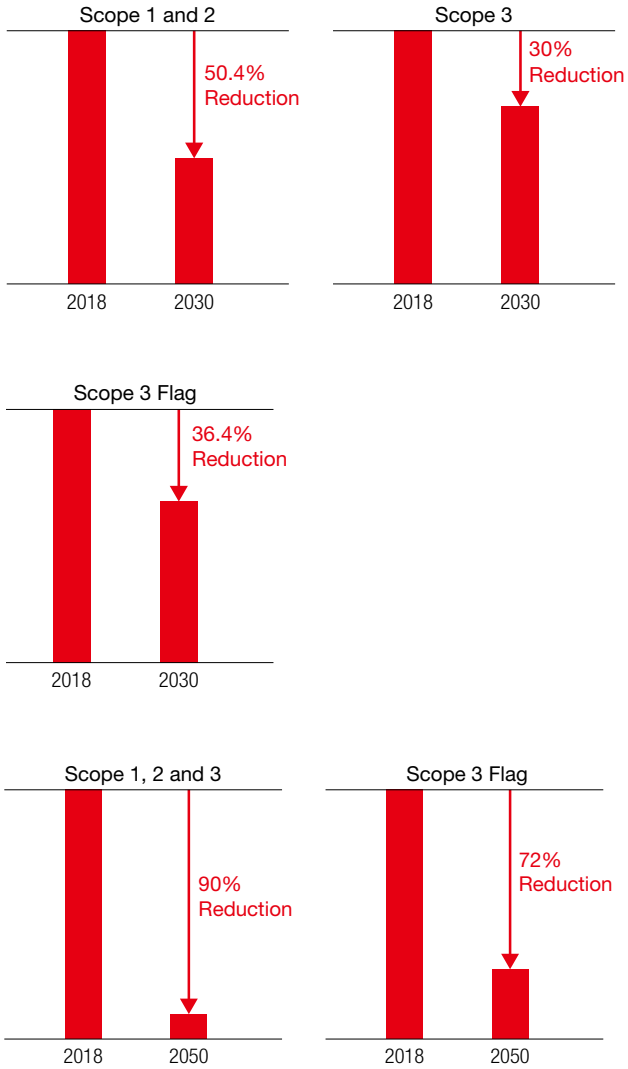
Scope 3 FLAG: Reduce FLAG-related emissions by 36.4% by FY2030, compared to the base year of FY2018

Zero deforestation: Commit to eliminating deforestation for key products linked to deforestation by December 31, 2025

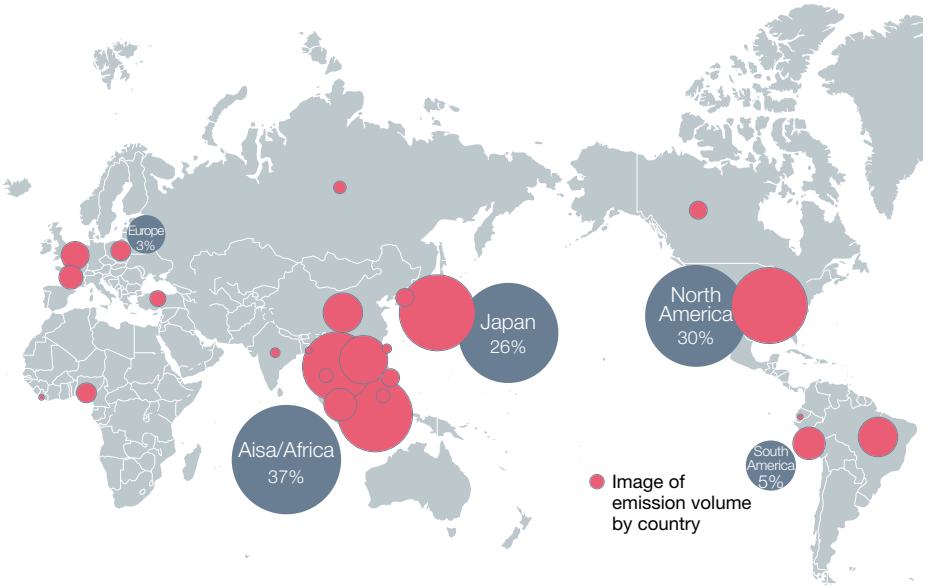
【Long-term targets】

Scope 1, 2, and 3: Reduce GHG emissions by 90% by FY2050, compared to the base year of FY2018

Scope 3 FLAG: Reduce FLAG-related emissions by 72% by FY2050, compared to the base year of FY2018



CO_2 emissions (Scope 1 and 2) by area[1] (FY2024)



1,119,383 t-CO_2e
CO_2 emissions

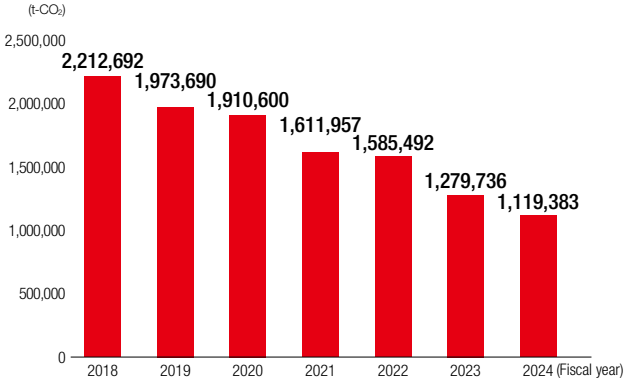
Top five countries for final disposal volume / resource recovery ratios

	326,709	29%
	289,632	26%
	183,398	16%
	89,484	8%
	74,580	7%

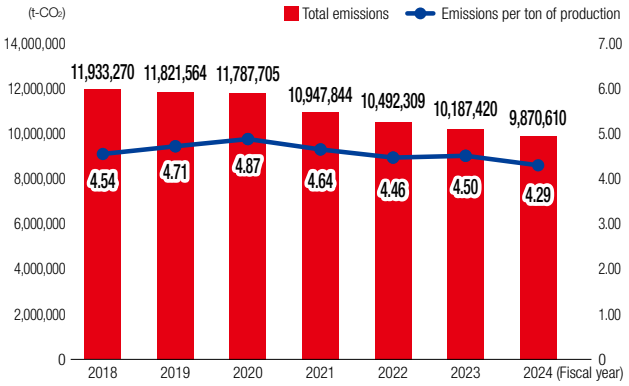
Units: ton-CO_2e / Total of Scope 1 and 2

[1] Turkey is included in Asia/Africa.

Scope 1 and 2 total emissions



Scope 3 emissions per ton of production



(ii) FY2024 results

Total Scope 1 and 2 GHG emissions for fiscal 2024 decreased by nearly 160,000t-CO_2 e from the previous fiscal year. This GHG reduction was driven by full transition from coal to biomass at P.T. AJINOMOTO INDONESIA, the complete shift from heavy oil to city gas at the Ajinomoto Co., Inc. Kyushu Plant, and procurement of renewable energy certificates at P.T. AJINOMOTO INDONESIA. Scope 3 GHG emissions (covering all categories) decreased by approximately 3% year on year, despite increased production volume. This result was due to the use of more primary data for raw materials and improved calculation accuracy. Emissions declined by 17% compared to the base year of fiscal 2018, reflecting a decrease in the Group's total production volume (excluding retrospective adjustments for emissions from businesses that left the Group after the base year).

We achieved a 43% reduction in Scope 1 and 2 emissions and a 13% reduction in Scope 3 emissions (excluding Category 11; compared to fiscal 2018) toward our SBTi-certified 2030 GHG emissions target for Scope 1+2 (50.4% reduction from 2018 levels). Ajinomoto Co., Inc. adjusted these targets in line with SBTi criteria to remove emissions from companies that left the Group after fiscal 2019. We are on track to achieve approximately 90% of our Scope 1 and 2 reduction targets based on our current plan. However, we will consider further reduction activities to achieve even greater emissions reductions. For Scope 3, we will continue our efforts to reduce GHG emissions through primary data collection and reduction initiatives enabled by deeper engagement with raw material suppliers, as well as through joint procurement of low-GHG raw materials.

(iii) Efforts to achieve targets

Our measures to meet our Scope 1 and 2 targets include conducting energy-saving activities, switching to fuels with low GHG emissions, using renewables such as biomass and solar power, and introducing processes to lower energy consumption (e.g., procurement of renewable energy certificates at Group companies in Japan).

For Scope 3 targets, raw materials are causing approximately 60% of total GHG emissions over the whole product life cycle. Therefor, we encourage raw materials suppliers to reduce their GHGs and consider introducing new technologies and reducing GHG emissions through agricultural initiatives centered on regenerative agriculture.

(1) Selected for the CDP Climate Change A List (top rating) for a fifth consecutive year

Ajinomoto Co., Inc. was selected for the CDP 2024 Climate Change A List by CDP, an international environmental non-profit organization. This recognition reflects our comprehensive climate-related disclosures and proactive initiatives, and marks our fifth consecutive year on the A List. Only approximately 2% of the 22,400 companies assessed received the highest rating of A.

(2) AJINOMOTO VIETNAM CO., LTD. initiatives

Ajinomoto Vietnam has used compressed rice husks as boiler fuel in place of fossil fuels since 2014, resulting in approximately a 48% reduction in GHG emissions.

GHG emissions calculated from IEA[1] CO_2 emissions factors

($t\text{-}CO_2e$)

	FY2018 (Base year)	FY2020	FY2021	FY2022	FY2023	FY2024
Scope 1 emissions	1,196,969	1,008,811	1,005,363	973,780	767,084	675,022
Scope 2 emissions (market-based method)	1,015,723	901,789	606,594	611,712	512,652	444,362
Scope 1 and 2 total emissions	2,212,692	1,910,600	1,611,957	1,585,492	1,279,736	1,119,383
Scope 3 emissions	11,933,270	11,787,705	10,947,844	10,492,309	10,187,420	9,870,610
Scope 1, 2, and 3 total emissions	14,145,962	13,698,305	12,559,801	12,077,801	11,467,156	10,989,993

GHG emissions per volume unit calculated from IEA[1] CO_2 emissions factors

	FY2018 (Base year)	FY2020	FY2021	FY2022	FY2023	FY2024
Scope 1 and 2 emissions per volume unit (intensity per ton of product)	0.84	0.79	0.68	0.67	0.57	0.49
Scope 3 emissions (excluding Category 11) per volume unit (intensity per ton of product)	4.54	4.87	4.64	4.46	4.50	4.29
Ref.: Production volume (1,000 t)[2]	2,627	2,423	2,360	2,350	2,265	2,301
Scope 1 and 2 emissions per volume unit (intensity per million yen sales)	1.99	1.78	1.40	1.17	0.89	0.73
Scope 3 emissions per volume unit (intensity per million yen sales)	10.71	11.00	9.53	7.72	7.08	6.45
Consolidated sales (million yen)	1,114,308	1,071,453	1,149,370	1,359,115	1,439,231	1,530,556

[1] International Energy Agency.
[2] Production volume from other environmental data is reported differently to make it easier to add up.

Scope 1 and 2 emissions and Scope 3 emissions retroactively for companies excluded from the Ajinomoto Group after FY2019, in accordance with SBTi standards

	FY2018 (Base year)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Scope 1 and 2 total emissions (market-based method)	1,961,516	1,779,380	1,752,812	1,611,957	1,585,492	1,279,736	1,119,383
Scope 3 emissions (excluding Category 11) (t-CO_2e)	9,876,834	9,858,584	9,951,981	9,550,897	9,106,260	8,890,473	8,625,318
Scope 3 emissions per volume unit (excluding Category 11)	4.01	4.12	4.26	4.05	3.87	3.93	3.75

SBTi targets and progress

	FY2023		FY2024		FY2025	FY2030
	Target	Performance	Target	Performance	Target	Target
Scope 1 and 2 GHG emission reduction rate (vs. FY2018)	At least 25% decrease	35% decrease	Over 29% decrease	43% decrease	32% decrease	50.4% decrease
Scope 3 (excluding Category 11) GHG emission reduction rate (vs. FY2018)	9% decrease	10% decrease	12% decrease	13% decrease	15% decrease	30% decrease

Reduction of greenhouse gas emissions in the value chain

Internal carbon-pricing

Strategy

The Ajinomoto Group utilizes internal carbon pricing to prevent and mitigate future financial risks. We visualize the financial impact of our business investments on GHG emissions through internal carbon pricing. In this way, we pursue measures for fuel conversion and renewable energy to reduce environmental impact and prevent and/or mitigate future financial risks.

Internal carbon-pricing

	2030 CO_2 price forecasts[1]	2050 CO_2 price forecasts
OECD member countries (excluding Mexico)	\$140/t-CO_2	\$250/t-CO_2
China, India, Indonesia, Brazil	\$90/t-CO_2	\$200\$/t-CO_2
Thailand, Vietnam, Philippines, Malaysia, Myanmar, Peru, Russia, Cambodia, Singapore, Egypt, Ecuador, Mexico, Taiwan	\$25\$/t-CO_2	\$180\$/t-CO_2
Pakistan, Bangladesh, Nigeria	\$15/t-CO_2	\$55/t-CO_2

[1] We apply the 2030 carbon prices as projected by the 1.5°C scenario of the International Energy Agency (IEA).

Shifting to renewable energy

Strategy

In August 2020, the Ajinomoto Group announced our participation in RE100, an international environmental initiative comprising companies aiming to achieve 100% renewable energy for electricity. Companies participating in RE100 are from diverse fields such as information technology to automobile manufacturing. Member companies are asked to publicly announce their goals to use 100% renewable energy sources, such as solar power, wind power, hydroelectric power, biomass, and geothermal power, in their business activities by the year 2050. The ratio of renewable energy used for electric power increased in fiscal 2024 with the procurement of renewable energy certificates by Ajinomoto Indonesia.

Reducing GHG through collaboration with suppliers

Strategy

We pursue GHG reduction efforts in collaboration with our suppliers as an important measure for Scope 3 reduction.

In fiscal 2022, we began dialogues with MSG feedstock suppliers in Thailand. These dialogues have now shifted to trials of reduction measures in fiscal 2024, including regenerative agriculture initiatives in combination with biostimulants. Beginning in fiscal 2025, we plan to expand this project to other areas, and we will continue to monitor actual emissions data. In Vietnam, we are looking into GHG reductions through agricultural measures. These measures include partnerships with third-party organizations to establish measurement, reporting and verification (MRV) for GHG emissions at the cultivation and processing stages, as well as support for GHG emissions calculations by suppliers.

Also, in fiscal 2024, we used the CDP supply chain program to select roughly 50 suppliers with high procurement volumes. Through this program, we requested primary data and responses regarding GHG reduction initiatives to gain a better understanding of the state of GHG reductions related to major raw materials at our suppliers.

Management of fluorocarbons, NOx, etc.

Strategy

The Ajinomoto Group aims to eliminate all Hydrofluorocarbons (HFCs) by fiscal 2030 at factories with equipment that use fluorocarbons. Our intent is to switch to natural refrigerants or refrigerants with low Global Warming Potential (GWP) of less than 150 when installing new or upgrading existing equipment. In 2001, when Japanese frozen food factories were not yet required to discontinue their use of equipment using specified Chlorofluorocarbons (CFCs), we started with an initiative to phase out the usage of freezers using these chemicals, and as of the end of March 2021, we have eliminated the use of those freezers in Ajinomoto Frozen Foods Co., Inc. We are continuing efforts at our plants to fully eliminate CFC substitutes by fiscal 2030, and will work to decrease use of fluorocarbons across the entire Ajinomoto Group.

NOx and other atmospheric emissions

(t)

	FY2018	FY2020	FY2021	FY2022	FY2023	FY2024
Nitrogen oxide (NOx)	9,421	6,637	5,673	4,730	3,977	4,135
Sulfur oxide (SOx)	10,701	7,016	7,676	5,311	1,068	857
Particulates	1,827	1,310	871	3,492	762	143
CFCs[1]	11	7	5	4	11	5

[1] Figures for fiscal 2019 and beyond exclude natural refrigerants and other non-fluorocarbons due to the redefinition of CFCs, HCFCs, and HFCs.

Promote modal shifts

Strategy

From the very earliest stages, the Ajinomoto Group began preparing for truck driver shortages and the environmental impact of the logistics industry. We have been pursuing modal shift from trucks and other automobile transportation methods to rail and marine transportation methods that place less of a burden on the environment. While the industry average modal shift rate is 50% to 60%, in fiscal 2024, we achieved an overall 97% long-distance transport modal shift by using ships. We will continue to maintain high standards and foster sustainable transportation systems.

Strategy

The Ajinomoto Group is working to establish a sustainable logistics system.

In Japan, the F-LINE Project launched in 2015 by six food manufacturers[2] operates joint transport in Hokkaido and Kyushu, as well as a joint mainline trunk transport in Hokkaido, in a spirit of competing on products, but distribute in cooperation.

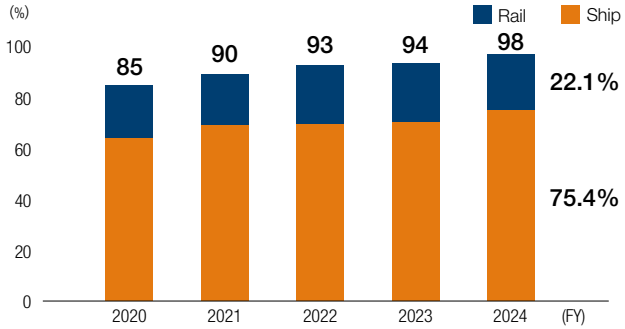
In April 2019, we also established a joint logistics company, F-LINE CORPORATION, as an effort between five food manufacturers[3], including Ajinomoto Co., Inc. During fiscal 2024, we expanded modal shift to Ajinomoto Food Manufacturing Co., Ltd. shipments as well, targeting transportation along the mainline linking the Ajinomoto Food Manufacturing Kawasaki Plant (a major production and logistics base in Kanagawa Prefecture), the Ajinomoto Co., Inc. Kawasaki Logistics Center (Kanagawa Prefecture), and the F-LINE Co., Ltd. Nishinomiya Logistics Center (Hyogo Prefecture). We achieved a complete modal shift between these locations by increasing the number of rail and ship trips. As a result, Ajinomoto Food Manufacturing reduced CO_2 emissions by approximately 80% compared to the previous year.

In recognition of these efforts, the company received the Modal Shift Excellent Business Award (Collaboration Category) in December 2024 in the 2024 Modal Shift Excellent Business Awards sponsored by the Japan Association for Logistics and Transport. The company also endeavors to communicate externally and raise awareness of these activities as initiatives that contribute to society. For example, Ajinomoto Food Manufacturing highlighted key activities during tours of the Kawasaki Administration & Coordination Office, attended by nearly 14,000 people between November 2024 and March 2025.

[2] House Foods Group Inc., Kagome Co., Ltd., Nisshin Seifun Welna Inc., Nisshin Oillio Group, Ltd., Mizkan Co., Ltd., and Ajinomoto Co., Inc.
[3] Five companies listed in above [2], excluding Mizkan Co., Ltd.

Modal shift ratio

Modal shift ratio of Ajinomoto Co., Inc. for 500 km or more



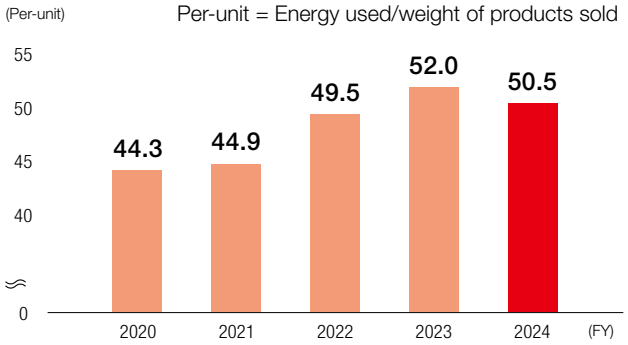
Per-unit energy use in logistics

Performance

Ajinomoto Co., Inc., Ajinomoto Frozen Foods Co., Inc., and Ajinomoto AGF, Inc. are considered specified consignors under the Energy Conservation Act.

Each company is legally obligated to make efforts in reducing per-unit energy use (crude oil equivalent) within their cargo logistics by at least 1% per year on average over five years, reporting results to the Japanese government. By revising inventory movement, modal shift, and other measures, we reduced per-unit energy use, and the per-unit energy use of the three companies combined in fiscal 2024 was 1.5 points lower than the previous fiscal year. Inventory movement reductions by Ajinomoto Frozen Foods and efficiency gains by Ajinomoto AGF stemming from trunk line transportation contributed to this reduction.

Per-unit energy use in logistics[1]



[1] Combined results for Ajinomoto Co., Inc., Ajinomoto Frozen Foods Co., Inc., and Ajinomoto AGF, Inc.

Working toward sustainable transportation in the Philippines

Initiatives

Ajinomoto Co., Inc. has partnered with First Logistics in the Philippines for ESG initiatives based on electric vehicles. Using electric vehicles in logistics operations is expected to reduce CO_2 emissions, optimize delivery times, and ease traffic congestion. Through this alliance, we aim to build a sustainable supply chain that benefits the company, the community, and the planet.

Modal shift at AJINOMOTO DO BRASIL INDUSTRIA E COMERCIO DE ALIM

Initiatives

In Brazil, trucks are often used for cargo transportation, which poses challenges not only from an environmental perspective, but also in terms of traffic accident risk, cargo theft risk, high transportation costs, and large fluctuations in fuel prices due to oil price fluctuations and unstable exchange rates. Ajinomoto do Brasil implements the Green Transportation Project, which aims to solve environmental issues by transforming logistics through cargo optimization, multimodal transportation, and the use of sustainable vehicles.

The company expanded the GHG emissions inventory in fiscal 2024 to include international marine transportation, and in parallel, Ajinomoto do Brasil conducted a comprehensive review of emissions calculation methods. The review took into account Brazil's energy matrix, which relies on renewable energy, while aligning with global best practices to ensure greater accuracy, traceability, and data reliability. This methodological improvement, coupled with expanded operations and enhanced monitoring, resulted in a reduction in fiscal 2024 GHG emissions of approximately 2% compared with the previous fiscal year.

This progress has led to a strategic alignment with the Sustainability Development Departments, as well as an updated GHG emissions reduction target of a 24% reduction by fiscal 2030 compared to fiscal 2018. Within the framework of the global Green Transportation Project, Ajinomoto do Brasil conducts initiatives in line with the reality of its logistics infrastructure, while maintaining alignment with each of the planned phases. At the same time, the company is considering new initiatives to improve logistics efficiency and sustainability. Specific initiatives include installing a transportation management system to optimize transportation route planning and fuel use, as well as the use of vehicles fueled by compressed natural gas and biomethane. These initiatives underscore the Ajinomoto do Brasil commitment to building a green and resilient logistics system.

The Five Steps of the Green Transportation Project

2022
1st Step
WORD PROJECT

- Introduce coastal, rail, and long-distance vehicles in Japan

2023
2nd Step
GREEN TRANSPORT

- Increase use of vehicles in Step 1
- Introduce renewable energy

2024
3rd Step
BOOKING GREEN REASSESSMENT

- Review emissions calculation method
- Conduct a technical reassessment of the project in collaboration with shipping companies

2026
4th Step

- Adopt standards for effective emission reductions in marine transportation

2028
5th Step

- Introduce heavy-duty electric trucks to supply distribution centers

Contributing to CO_2 emission reduction with electronic materials to evolve into a Smart Society

Strategy

Demand and arithmetic processing speeds for semiconductors used in PCs, servers, 5G base stations, and other devices are increasing rapidly as we transform into a data-driven society. Over the past five years, the performance per power consumption unit of the semiconductors that support this demand has increased by approximately 100 times. We mainly use our interlayer insulation material, which reduces electrical signal loss in semiconductor packages, with energy-conserving magnetic and other materials for semiconductors. With these technologies, the Ajinomoto Group contributes to semiconductor energy conservation and, in turn, reduces CO_2 emissions.

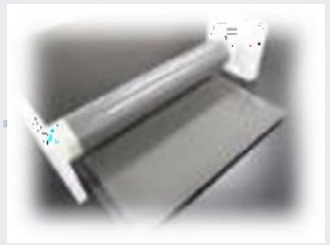
The development of optical computing and photoelectric fusion technologies is advancing as we evolve into a Smart Society. These technologies require an increase in energy efficiency by a factor of 100 times compared to current levels. In response, the Ajinomoto Group will continue to develop new materials in this new field to contribute to faster arithmetic processing speeds and reduced environmental impacts.

Reduces electrical signal transmission loss

Interlayer Insulation Material
Ajinomoto Build-up Film™ (ABF)

Semiconductor Package Substrate

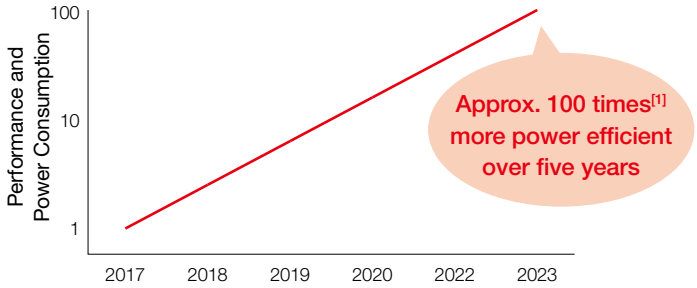
Saves energy in semiconductor packages



Magnetic Materials

Contributes to higher performance semiconductors

Semiconductor performance per power concentration unit



Future Use Example: **Photoelectric Fusion**

We strive to achieve power efficiency 100 times[2] higher than that of electric signals to provide timely solutions that utilize our technologies.

Potential of 100 times the power efficiency of conventional technology

[1] Company estimate based on 2017 levels.
[2] Target power efficiency of parts using photonics technology.
Reference: NTT Technology Journal

Sustainable livestock production using specialized feed-grade amino acids and contributing to GHG emissions reduction

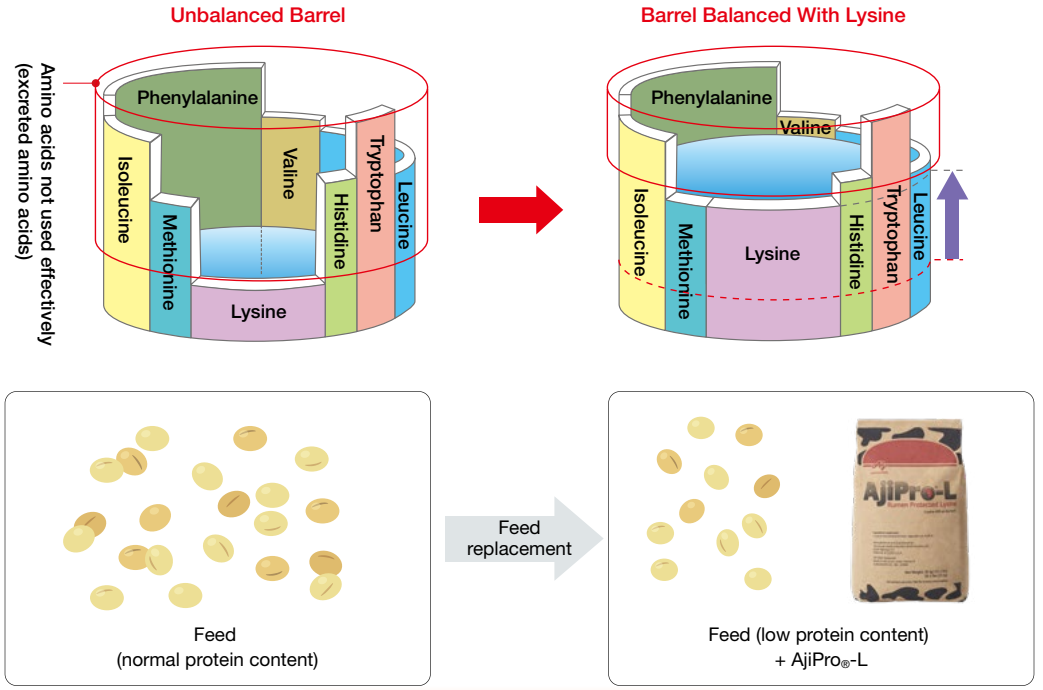
Strategy

Demand for protein increases as the global population grows. However, GHGs generated during cattle farming, which produces beef and milk sources of protein, are one of the most pressing issues in global warming, accounting for 9.5%[1] of global emissions. AjiPro®-L, an amino acid lysine formulation for cattle developed from the Ajinomoto Group "AminoScience," is an answer to this issue. We developed AjiPro®-L using unique granulation technology to effectively deliver lysine, the most commonly deficient essential amino acid in cattle during the growth process. Using AjiPro®-L to supplement amino acid deficiencies and balance the amino acid content in feed not only improves cattle productivity and health, but also reduces methane and nitrous oxide emissions from cattle. Furthermore, AjiPro®-L can abate the CO_2 emissions associated with the procurement of soybean meal in feed. Converted to CO_2 emission equivalent, we expect to reduce emissions by approximately 1 ton per cow per year, and we are looking to reduce approximately 1 million tons of GHG emissions by the year 2030.

[1] Reference: Food and Agriculture Organization "Livestock solutions for climate change"

The Barrel Theory of Amino Acids

This diagram depicts the Barrel Theory of amino acids, with each stave of the barrel representing a specific essential amino acid. In the same way that the capacity of a barrel is limited by its shortest stave, our bodies only intake amino acids at the level of the most deficient amino acid.



N_2O emissions from manure	Approx. -25%[2]
CO_2 emissions related to procurement of protein source raw materials (e.g., soybean meal)	Approx. -20%[2]

Our technology reduces about **1 ton**[3] of CO_2 per head of cattle per year, including other factors.

We will strengthen initiatives, striving to reduce CO_2 on a scale of **approx. 1 million tons** per year by 2030.

[2] Per cow per year, calculated by the Company.
[3] Reductions dependent on the farmer's feed design and other factors.

Building a business model to reduce GHG emissions and create economic value through domestic and international collaboration

Initiatives

In Japan, we collaborate with the Meiji Group to promote a J-Credit Scheme[1] utilizing AjiPro®-L to reduce GHG emissions in the dairy industry while creating economic value at the same time. This project converts the value of GHG emissions reduced through the use of AjiPro®-L at farms affiliated with the Meiji Group into credits within the J-Credit Scheme. The credits we acquire are purchased by the Meiji Group, and the purchase price is paid to farmers, creating a new source of farmer income. In addition, the credits purchased by the Meiji Group can be used to offset Meiji Group GHG emissions, contributing to emissions reduction for the dairy industry as a whole.

We entered into a collaboration agreement with Kagoshima Prefecture and livestock-related organizations in the prefecture to reduce GHG emissions and encourage industrial development related to beef and dairy cattle. Kagoshima Prefecture adopted AjiPro®-L as a GHG emissions reduction solution and pursues Green Transformation[2] in collaboration with several livestock-related organizations, livestock operators, universities, financial institutions, and other entities within the prefecture.

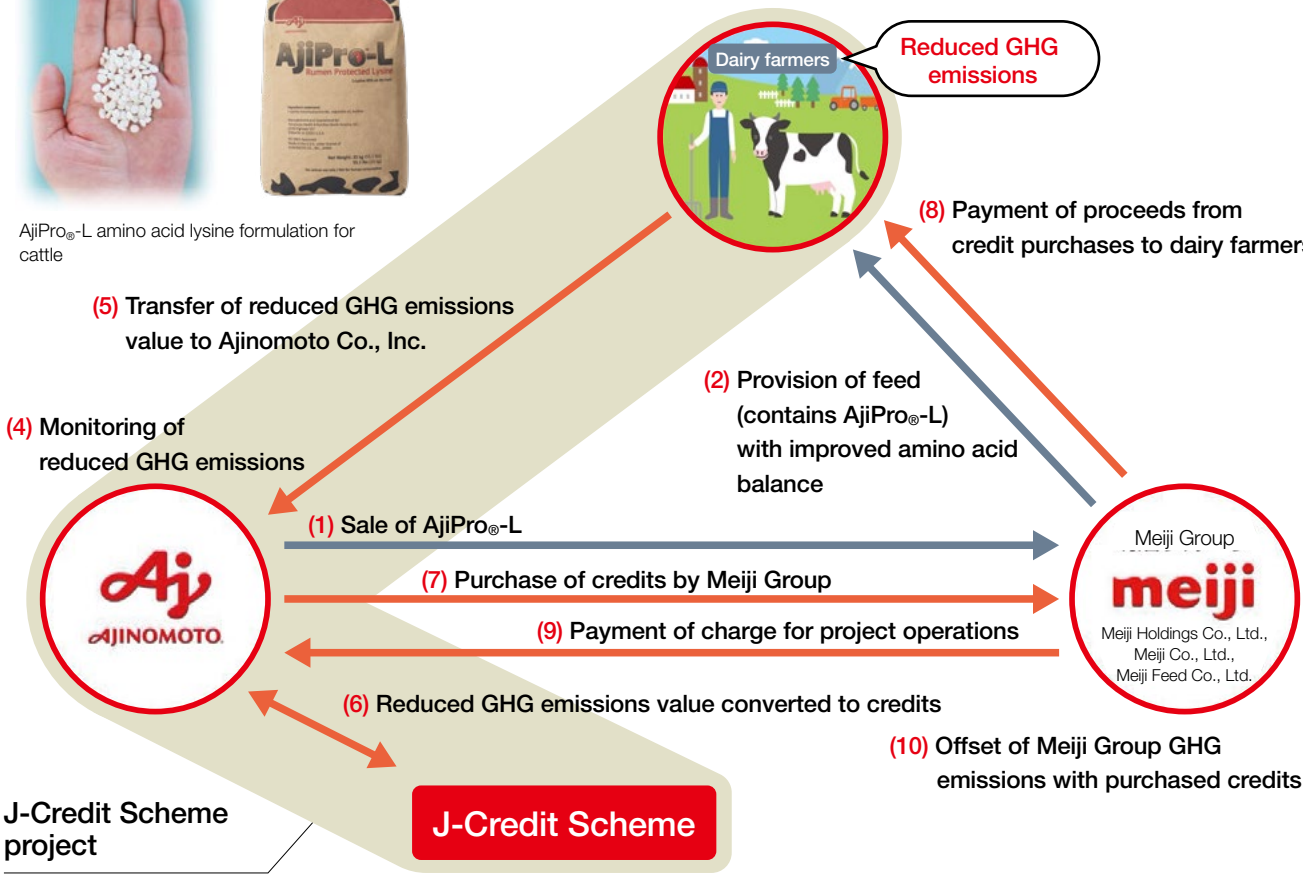
In February 2025, together with Kagoshima Prefecture, we received the Consumer Affairs Agency Commissioner's Award in the Fiscal 2024 Good Practices of Consumer-Oriented Management, sponsored by the Consumer Affairs Agency. The award recognized our efforts to reduce GHG emissions and production costs through the collaborative use of AjiPro®-L by government, industry, academia, and financial institutions. Using the J-Credit Scheme, carbon credits issues according to GHG reductions become incentives for livestock farmers in a business model that generates income from a new source. Our work in this area has been commended for contributing to environmental sustainability and industrial development, and our initiative was the first-ever public-private endeavor involving a local government to receive this award. We are pursuing global collaborations, and entered into a strategic partnership with Danone in France.

The World Business Council for Sustainable Development (WBCSD) recognized our efforts to reduce GHG emissions (avoided emissions) beyond our value chain through AjiPro®-L and AjiPro®-L has been included as a use case pilot on the WBCSD platform (April 2025). These developments clearly demonstrate the impact of our solutions and GHG reduction efforts. We expect the WBCSD to release guidance documents in the third quarter of fiscal 2025 referencing our reduction contributions.

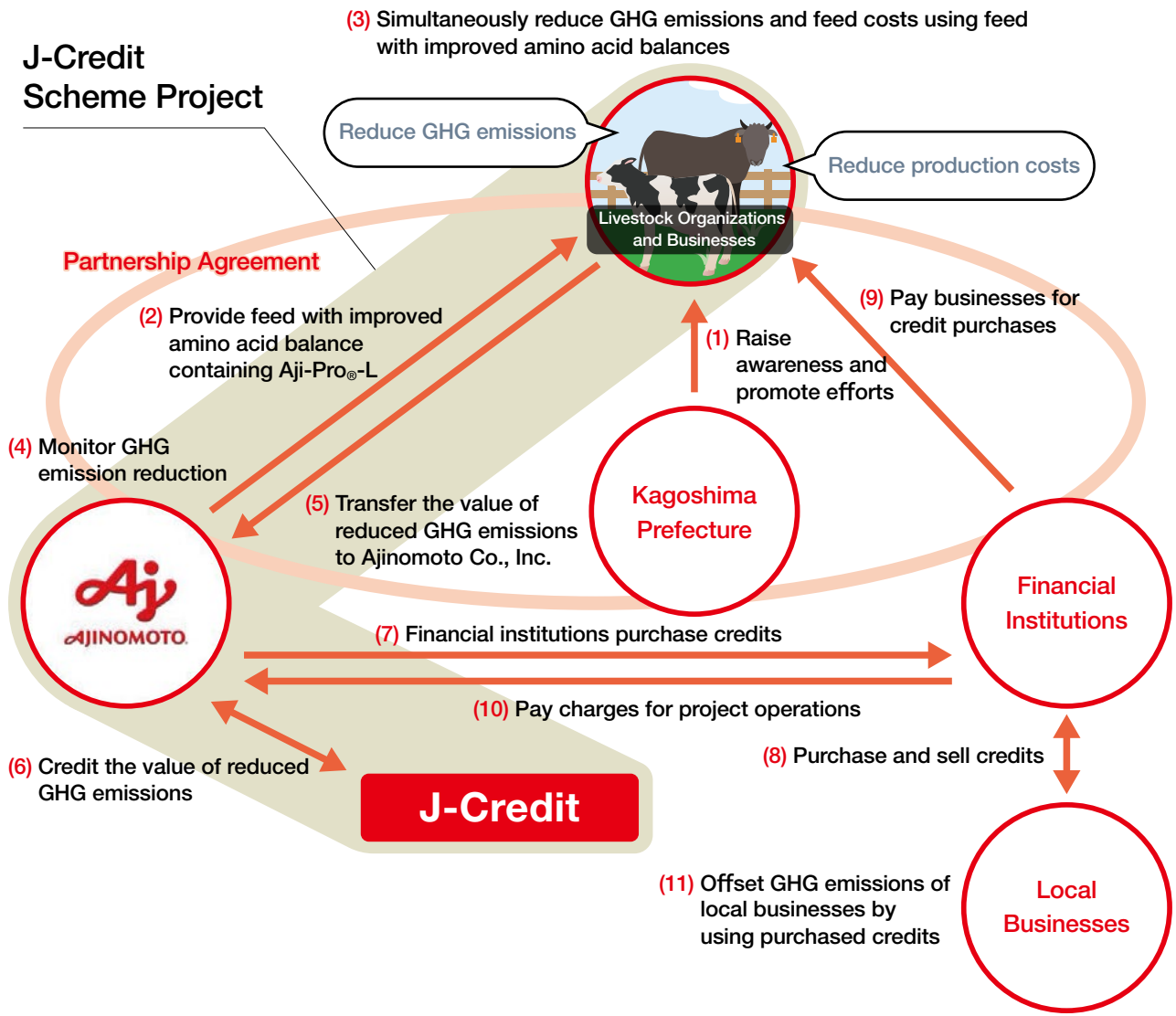
[1] A scheme in which the Japanese government certifies the amount of CO_2 and other GHG emissions reductions and removals as tradable credits.
[2] Efforts to transform industrial structures while aiming for carbon neutrality (reducing overall GHG emissions to zero) and economic growth.

Business Model Utilizing the J-Credit System

AjiPro®-L amino acid lysine formulation for cattle



Partnership Agreement Business Model in Kagoshima Prefecture



(Implementation plans will be discussed going forward with partnership agreement participants.)

Reduction of waste across product lifecycles

Minimizing the environmental impact of core businesses

Governance

Throughout our history, the Ajinomoto Group has endeavored to reduce waste and various other environmental impacts. We continue to accelerate our efforts to minimize the environmental impact of our core businesses (amino acids, seasonings, and processed foods) on a global level.

The Ajinomoto Group strives to conserve the environment and resources in a sustainable manner, contribute to society through our business, and strengthen our business competitiveness and sustainable development. To this end, we launched the Ajinomoto Group Zero Emissions in 2003 based on globally uniform standards. These standards are unique to the Group as we aim to minimize the environmental impact of all our business activities. Under these standards, we work thoroughly to reduce waste generation in our business activities to utilize limited resources effectively. For waste generated, our goal is to covert 99% of waste into resources. To this end, we strive to ensure the effective use of generated waste while adding value to waste for use in resource recycling. We improve amino acid production efficiency in particular by recovering by-products as resources and introducing new technologies. The Group is also engaged in various initiatives to improve the precision of sales forecasts and conduct find-tuned procurement. In this way, we minimize the waste of raw materials and packaging materials.

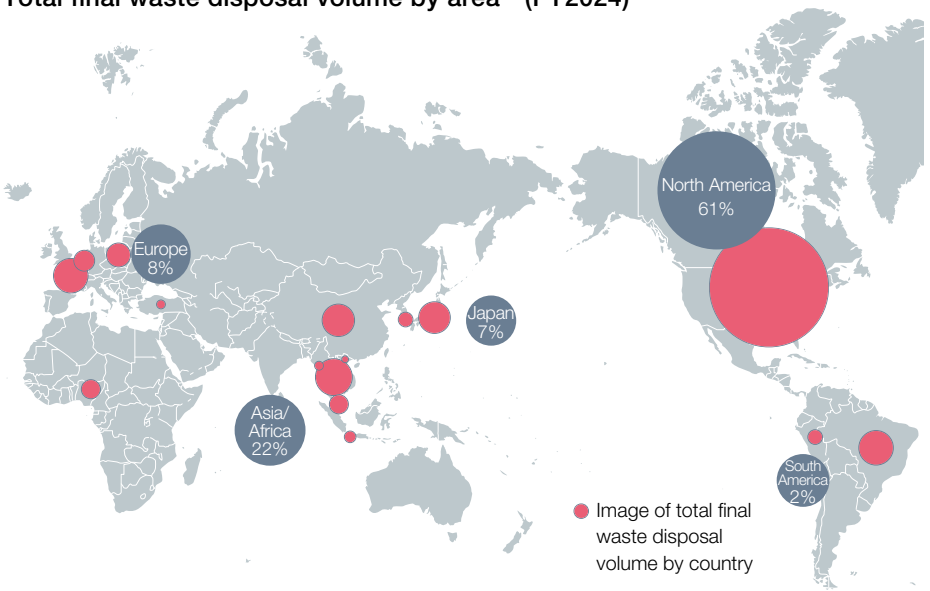
Total final waste disposal volume (waste volume)

Strategy

Our final waste disposal (emissions) distribution volume for the Group in fiscal 2024 was as shown in the accompanying figure. The Ajinomoto Group amounted to approximately 1,708 thousand tons (103% of previous fiscal year). Final waste disposal amounted to approximately 22.2 thousand tons, or a minor 0.1% increase year on year. Disposal in Thailand, United States, Japan, France, and Vietnam accounted for about 81% of total final waste.

> P055

Total final waste disposal volume by area[1] (FY2024)



22,211 t
Total final waste disposal volume (1.3%)

Top five countries for final disposal volume/ resource recovery ratios

	13,028	92.8%
	2,107	99.0%
	1,509	99.0%
	1,271	98.6%
	1,263	98.6%

Unit: tons

[1] Turkey is included in Asia/Africa.

Recovering waste as resources

Strategy

We recovered 98.7% of waste as resources in fiscal 2024, compared to a resource recovery target of 99%. Separating waste and by-products such as animal and plant residues has led to progress in feed conversion, composting, and paper resource recycling. However, the resource recovery rate decreased slightly year on year due to the amount of construction waste generated.

Volume of waste and by-products and resource recovery ratio

(tons)

	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Hazardous waste (waste acids, waste alkali, waste oil, cinder)							
Generated	69,991	83,834	81,216	83,770	106,161	96,507	90,104
Recycled	68,422	83,429	80,892	83,399	105,997	96,323	89,687
Incinerated	40	60	38	24	12	105	127
Landfills	1,529	345	286	347	152	78	290
Non-hazardous waste: By-products (sludge, bacteria, waste filter aids, etc.)[1]							
Generated	2,194,566	2,021,002	1,615,808	1,546,599	1,470,197	1,386,673	1,351,248
Composted	2,194,470	2,020,885	1,615,713	1,543,988	1,470,110	1,386,659	1,350,505
Incinerated	0	0	0	0	0	0	0
Landfills	96	117	95	2,611	87	15	743
Non-hazardous waste: Other (sludge, animal and plant residue, plastic waste, etc.)[2]							
Generated	174,651	181,246	173,310	195,832	208,120	174,906	266,843
Recycled	153,388	156,432	150,295	169,243	182,956	155,715	245,792
Incinerated	2,821	2,121	1,784	2,318	3,969	1,535	3,225
Landfills	18,442	22,693	21,231	24,271	21,195	17,656	17,826
Total generated	2,439,208	2,286,082	1,870,334	1,826,201	1,784,478	1,658,086	1,708,195
Total recycled	2,416,280	2,260,745	1,846,900	1,796,630	1,759,063	1,638,698	1,685,984
Total waste	22,928	25,337	23,434	29,571	25,415	19,389	22,211
Resource recovery ratio	99.10%	98.90%	98.70%	98.40%	98.60%	98.80%	98.7%

[1] Sludge, bacteria, humus carbon, waste activated carbon, gypsum sludge, salts, fermentation final concentrate, waste filter aids, etc.
[2] Sludge, animal and plant residues, plastic waste, glass and ceramic waste, metal scrap, paper waste, wood waste, rubber scrap, waste construction materials, office waste, etc.

Reducing plastic waste

Risk Management

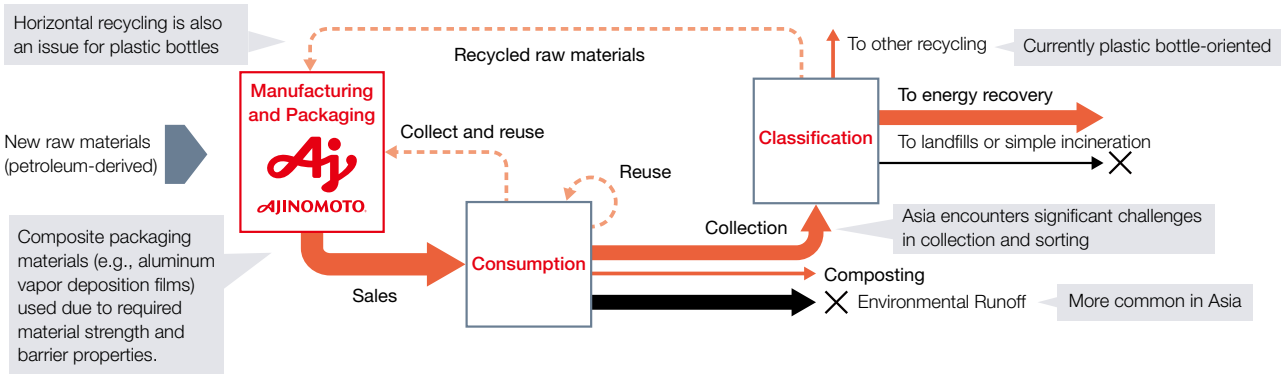
The Ajinomoto Group focuses on reducing plastic waste as part of our sustainability efforts.

Plastic is an important material used in food quality preservation and safety. However, the use of plastics leads to marine pollution, resource deletion, and various other environmental problems.

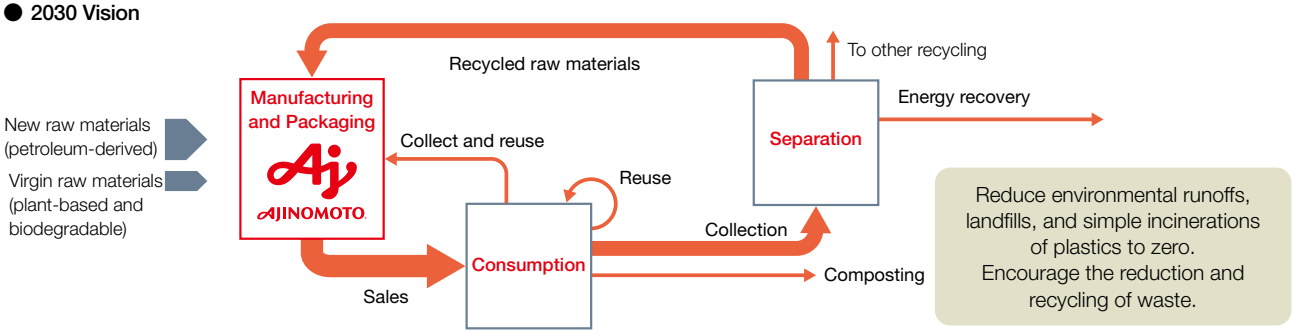
Plastic waste that runs into the ocean without proper treatment is said to take hundreds of years to decompose. Such runoff is cause for concerns regarding use in the food chain as microplastic, accidental ingestion by organisms, and other impacts on ecosystems. Microplastics are also found in facial cleansing foams and various other household products.

The Ajinomoto Group set a goal to reduce plastic waste to zero by 2030. This means that we intend to eliminate all plastics released to the environment that are not used effectively. Through a group-wide project launched in March 2020, the Group engages in initiatives aimed at creating resource-recycling societies. The Group cannot accomplish these initiatives alone; we must address such initiatives throughout the entire value chain, considering the entire product lifecycle. To this end, the Ajinomoto Group cooperates with external stakeholders in the countries and regions in which we do business.

● Current Flow



● 2030 Vision



Plastic usage by area

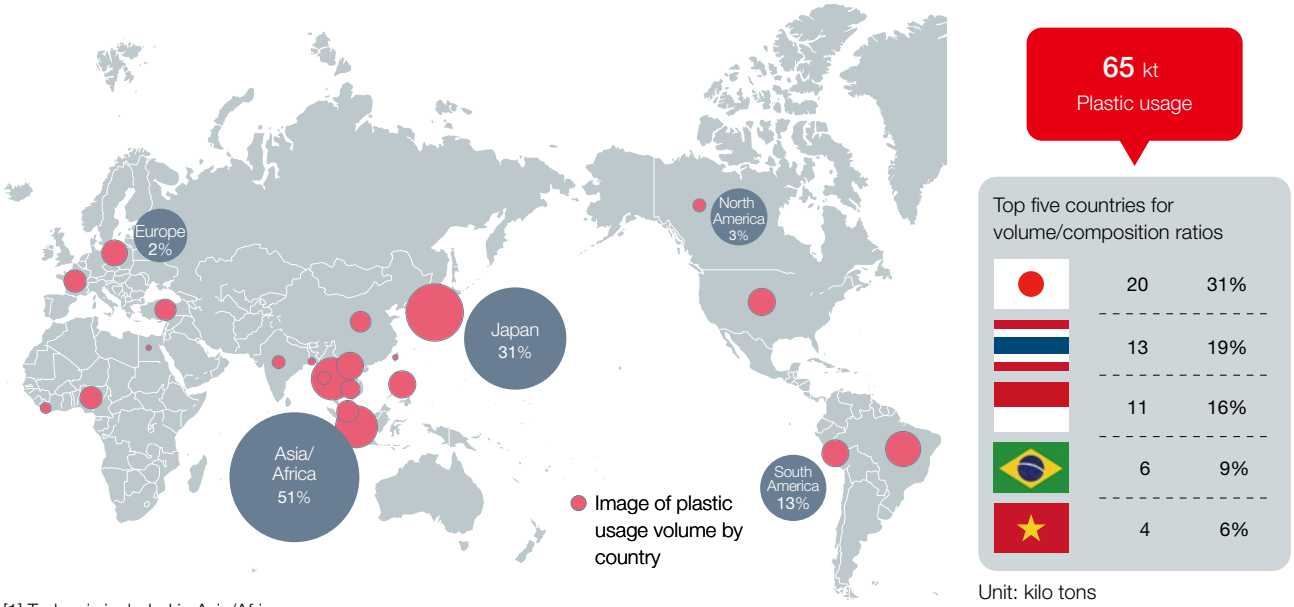
Strategy

The distribution of plastic usage volume for the Group in fiscal 2024 was as shown in the accompanying figure.

The total amount of plastic used by the entire Group was 65 kilo tons, a decrease year on year. Japan, Thailand, Indonesia, Brazil, and Vietnam accounted for 81% of total use. Of these 65 kilo tons, 94% were used in product packaging materials. In addition, we have already converted approximately 31 kilo tons to mono-materials and other easily recyclable packaging materials.

Excluding increases and decreases in sales, we made progress in fiscal 2024 in reducing plastic usage by approximately 130 tons per year. These gains were mainly due to efforts to reduce plastic usage by making products thinner. We also converted approximately 830 tons per year of packaging materials to more easily recyclable designs such as mono-materials. In addition, waste collection efforts have begun in Indonesia, the Philippines, Brazil and other countries. Going forward, we will explore possible topics further for technology development and possible contributions to building mechanisms for collection and recycling in various countries.

Plastic usage by area[1] (FY2024)



[1] Turkey is included in Asia/Africa.

Ajinomoto Group total plastic usage volumes

	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Plastic usage (Of which, product packaging materials[2])	71 kilo tons (94%)	70 kilo tons (94%)	71 kilo tons (93%)	69 kilo tons (93%)	67 kilo tons[2] (94%)[2]	65 kilo tons (94%)

[2] Figures have been corrected in line with reviewed totals.

Goals for fiscal 2030

Metrics and Targets

- 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-materials 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

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 aluminum foil currently, starting from those with a relatively low required barrier.

Roadmap to achieving zero plastic waste

Stage 1: Reduce (e.g., thinner packaging, switching to paper)

★: Established technology

Area	Details	FY2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Japan	Elimination/reduction of secondary packaging			From adoption to completion								
Japan	Thinner packaging	★	From adoption to completion									
Overseas	Switching to paper		★	From adoption to completion								

Stage 2: Recycle (mono-materials)

Area	Details	FY2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Japan	Non-barrier items	★	From adoption to completion									
Japan	Barrier items (moderate properties)			★	From adoption to completion							
Japan	Barrier items (high properties)						★	From adoption to completion				
Overseas	Barrier items (high properties)						★	From adoption to completion				

Confirm necessary barrier properties

Lateral deployment

Container and packaging design for the environment

Strategy

The Ajinomoto Group engages in environmentally friendly container and packaging design in accordance with ISO 18600 series and JIS Z 0130. We pursue the 3Rs by minimizing the amount of packaging material to the extent such does not interfere with original function considering how to easily separate and sort our packaging by material for recycling. We select and develop optimal containers and packaging, engaging in environmentally friendly design tailored to the different characteristics and shapes of our products. Containers and packaging include everything from plastic, pouches to trays, bottles, glass bottles, PET bottles, paper boxes, and exterior packaging (cardboard boxes). The Group also strives to reduce the amount of food loss and waste generated by extending “best-before” dates through the use of containers and packaging that better maintain product freshness. Our efforts here include adopting single-serve packaging that leaves no food waste.

Environmental assessments of containers and packaging

Risk Management

Before releasing new or revised products, the Ajinomoto Group conducts an environmental assessment based on a checklist. We use this assessment to confirm compliance with product-specific regulations and compatibility with Group environmental targets (Table 1). In addition, Ajinomoto Co., Inc. assesses the details of product revisions using a points-based Eco-Index for Containers and Packaging (Table 2).

Table 1: Environmental assessment checklist

Objective		Checklist item
Compliance	Waste 3Rs	Compliance with environmental laws and regulations
	Food loss and waste reduction	Prevention of product degradation and damage
	Risk	Prevention of usage of packaging materials with environmental issues
Compatibility with Group environmental targets	Waste 3Rs	Use of packaging materials compatible with the 3Rs
	Sustainable procurement	Use of sustainable packaging material(s)
	Food loss and waste reduction	Use of packaging materials that reduce food loss and waste
	GHG emissions reduction	Reduction of environmental impact in the supply chain
	Fostering consumer awareness of green living	Display of environmental labels

Table 2: Eco-Index for containers and packaging

Environmental plan item	Assessment item (example)	Assessment standard (example)
Transition to zero plastic waste	Plastic container/packaging weight reduction	At least 450 kg reduced per year
	Space per packaging volume	No more than 15%
	Compatibility with recycling systems	Easily recyclable materials used in all areas
GHG emissions reduction	LC-CO_2 emissions reduction	Transport efficiency
	Reduction compared to previous product version	At least 80% loading efficiency
Sustainable procurement	Use of eco-friendly materials	Use of forest-certified paper
Realization of a recycling-oriented society	Environmental labeling	Display of the Aji-na Eco mark
Food loss and waste reduction	Food loss and waste reduction	Extension of shelf life
		Adoption of single-serve packaging

The recycling of containers and packaging waste in Japan

Strategy

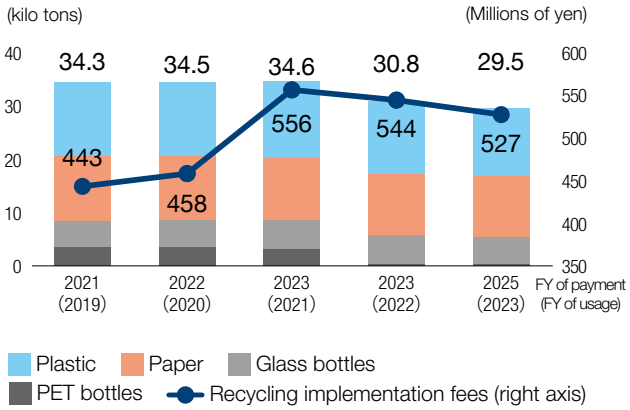
Under the Containers and Packaging Recycling Act in Japan, the recycling of containers and packaging waste from households is consigned to the Japan Containers and Packaging Recycling Association.

In fiscal 2023, Ajinomoto Co., Inc., Ajinomoto Frozen Foods Co., Inc., and Ajinomoto AGF, Inc. used a combined 29.5 thousand tons of containers and packaging subject to recycling requirements, 96% compared with the previous fiscal year.

Based on this usage, the recycling outsourcing fee for fiscal 2025 amounted to 527 million yen, or 97% compared with the previous fiscal year.

Paper and plastic usage decreased to 98% and 94% of the prior fiscal year, respectively. The overall reduction in usage led to lower payment amounts for fiscal 2025.

Use of containers and packaging and recycling implementation fee payments for household products for Ajinomoto Co., Inc., Ajinomoto Frozen Foods Co., Inc., and Ajinomoto AGF, Inc.[1]



[1] Correction has been made as a result of a review of totals.

Cooperation with outside organizations

Strategy

■ Initiatives in Japan

The Ajinomoto Group works with Japanese container and packaging recycling groups and government-related organizations to implement social recycling of plastic resources.

As part of our efforts to reduce plastic waste, we participate as a founding member company of CLOMA[1], a platform for accelerating innovation by strengthening cross-industry cooperation across a wide range of stakeholders and industries. We are active in secretary and chair positions in the Promotion Subcommittee and other bodies, and we take part in activities that include proof-of-concept tests for large-scale waste collection methods.

CLOMA established the Design for the Future Task Force, which works actively to envision an ideal future in the year 2050 and to achieve the organization's goals, which include increasing the materials recovery ratios.

In July 2024, we launched a pilot project for the horizontal recycling of used mayonnaise bottles in cooperation with various companies and local governments participating in CLOMA to implement social recycling of plastics. Our first step is to develop recycling technology for used mayonnaise bottles while identifying the issues related to the collection of the bottles.

[1] Japan Clean Ocean Material Alliance

> P029

■ Initiatives in Thailand

AJINOMOTO COMPANY (THAILAND) LIMITED launched the Happy Upcycling Project to upcycle multi-layered plastic waste. The project is a collaboration with Wastebuy Delivery, a Bangkok-based waste management company. The goal is to create a circular economy by recycling used sachets, condiment packages, and more into bags, household items, fashion accessories, and other useful items through upcycling. The Bangkok Metropolitan Administration of each district supports the project, announcing the encouragement of community participation through information and guidelines for the proper collection of multi-layered plastic waste. The parties involved have high expectations that the project will become a model for sustainable resource utilization in the region through public-private collaboration.

■ Initiatives in Malaysia

In April 2024, AJINOMOTO (MALAYSIA) BERHAD announced a collaboration with the Malaysian Recycling Alliance (MAREA). AJINOMOTO (MALAYSIA) BERHAD set a goal making 100% of its packaging materials recyclable under the company's fiscal 2030 roadmap. Through the collaboration with MAREA, Ajinomoto (Malaysia) aims to create a voluntary extended producer responsibility (EPR)[1] program. Creating an EPR program is consistent with Ajinomoto Co., Inc. policies and the legal

requirements of the Malaysian government. The program will be an important step forward in encouraging sustainable practices in Malaysia.

[1] The concept that the producer is responsible for the disposal of their products.

■ Initiatives in Indonesia

Much of the waste in Indonesia is disposed of directly in landfills due to the lack of infrastructure in place for waste separation, collection, and disposal.

P.T.AJINOMOTO INDONESIA began collaborating with Rekosistem (a local start-up company) to launch waste collection and recycling activities at a traditional market (Pasar) in Surabaya City in December 2022. Collection sites operated by Rekosistem accept all types of waste other than food waste. Ajinomoto Indonesia became the brand owner of this initiative, offering an incentive of 1,000 rupiah to residents who bring two used product packaging of Ajinomoto Indonesia for every kilogram of non-organic waste. In this way, the company raises awareness of waste separation among residents. During the two-year period beginning December 2022, the Company collected 47 tons of non-organic waste, including 10 tons of plastic waste. Ajinomoto Indonesia also launched measures to create recycled plastic pallets using collected plastic, using these pallets for certain manufacturing processes in fiscal 2024. In addition, Ajinomoto Indonesia is working with Rekosistem and a number of Japanese-affiliated companies to begin plastic waste collection efforts at the TPST (waste collection station) operated by the City of Mojokerto (launched in September 2024).

■ Initiatives in the Philippines

Ajinomoto Philippines Corporation held a celebration to observe the first anniversary of SariCycle®, an incentive program for plastic collection and disposal. In its first year, SariCycle® collected over 10 tons of single-use plastics (equivalent to approximately 22 million sachets) in Quezon City, contributing to a significant reduction of plastic waste in the city. The project was made possible by the contributions of 1,000 *SariCyclers* working across 23 districts, as well as the willing participation of local community members to take an active role in addressing environmental challenges. Based on the success in Quezon City, Ajinomoto Philippines is considering expanding SariCycle® to other municipalities.

■ Initiatives in Brazil

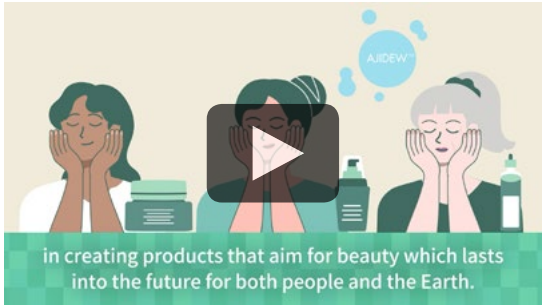
Ajinomoto do Brasil (ABR) participates in Rede pela Circularidade do Plástico, a platform to foster a circular plastics economy led by the Brazilian Plastic Industry Association (ABIPLAST). Among other efforts, ABR funds Circula Flex, a project focusing on the circulation of flexible packaging materials (e.g., film plastics). About 80% of the plastic use at ABR relates to the food sector. Of that amount, about 80% is flexible packaging plastics made of multi-layered materials (multi-materials). Through this project, ABR encourages the recyclability of flexible plastics (social implementation efforts) and achieves the Ajinomoto Group goal of eliminating all plastics released to the environment that are not used effectively to zero.

Reducing environmental impact by supplying highly biodegradable amino acid-based cosmetic materials

Strategy

AJIDEW® is a moisturizer developed by Ajinomoto Co., Inc. In the more than 50 years since 1971, numerous cosmetics manufacturers have used AJIDEW® in their products. AJIDEW® is an amino acid-based cosmetics material that has a low environmental impact and provides natural moisture, composed of the same natural moisturizing factor (NMF) produced by the skin itself. Glutamic acid serves as the raw material of AJIDEW®, and represents one of the plant-derived amino acids made from sugarcane and other agricultural crops as raw materials. We do not dispose of by-products left over from the manufacturing process, but rather use these by-products as fertilizer for crops in a resource-recycling manufacturing system known as a biocycle. AJIDEW® is a skin-friendly moisturizer that has a low environmental impact and is made with a sustainable manufacturing process that is truly ahead of its time.

> AJIDEW® Video



AMIAURA™ low environmental impact powder treatment kit for makeup applications

Strategy

We launched AMIAURA™, a new product for makeup applications, in 2024. AMIAURA™ utilizes the technology of the AMISOFT® series, marketed as our mainstay amino acid-based surfactant products.

AMIAURA™ is an amino acid-based powder treatment kit that improves the functions of cosmetic powders (mica, titanium dioxide, etc.) used to improve the textures and light scattering functions of cosmetics. AMIAURA™ forms amino acid barriers on the surface of cosmetic powders, improving the adhesion and hydration of powders to the skin as well as the stable dispersion of powders in emulsions, sunscreen creams, and other cosmetic products. AMIAURA™ is also highly biodegradable and has a low environmental impact.

Continued development of alternative raw materials to microplastic beads in cosmetics

Strategy

As consumers grow more concerned about reducing environmental impact, various countries and regions are tightening to ban or reduce the use of polymer plastics. These plastics have significant negative impacts the environment and marine pollution, even in the cosmetics industry. In addition to the use of plastics in packaging, the cosmetics industry, in particular, faces the major issue of microplastic beads in personal care products flowing into the ocean after use. In 2023, the European Commission enacted a regulation that enforces a gradual ban on the use of microplastic beads for washable personal care products. However, developing alternative materials for the plastic microbeads used in skin care and makeup products has been considered difficult in terms of retaining their feel and user experience. Amid these conditions, Ajinomoto Co., Inc. has succeeded in using our unique technologies harnessing amino acid-based personal care ingredients to develop the AMIHOPE®SB series to replace conventional microplastic beads. This new product launched in 2022. The AMIHOPE®SB series uses naturally derived raw materials, making it highly biodegradable. The series also features both the feel of microplastic beads and the functions of improved UV absorber efficacy used in sunscreen creams (SPF boost). AMIHOPE®SB is highly acclaimed worldwide, featured in the TOP 10 in the Oral category, out of 76 products, at the 2023 Barcelona International Federation of Societies of Cosmetic Chemists (IFSCC), the world's largest cosmetics technology research and presentation conference. In 2024, we also launched AMIHOPE® SB-103, a new product that is soft to the touch and has excellent adhesion to the skin. Ajinomoto Co., Inc. is committed to developing alternatives to microplastic beads with superior textures and function while pursing the possibilities of amino acids.

Developing alternatives to plastic microbeads for cosmetics products

Video (YouTube)
The cosmetics you use could save the world!?

Lecture at the International Federation of Societies of Cosmetic Chemists (IFSCC)

Ajinomoto Group eco-labels

Strategy

In response to feedback from consumers such as wanting to choose products that are as good for the environment as possible and wanting to know the eco-friendliness of a product at a glance, the Ajinomoto Group has labeled products with our original *Aji-na Eco* and *Hotto-suru Eco* marks since 2010. We strive to provide easy-to-understand explanations of improvements in packaging and details of our environmental initiatives, considering the environment in which customers use our products and throughout the value chain. In March 2024, we formulated internal guidelines for environmental communication, striving to ensure appropriate labeling of our environmental marks in reference to these guidelines.

> Aji-na Eco® mark (Japanese only)

味なエコ eco ®

Number of *Aji-na Eco* mark products **181**

As of March 2024

What is *Aji-na Eco*?

Aji-na Eco is a term describing smart and ecological products. The logo mark expresses the image of the green of the earth, the pleasure of eating, and a global environment made even better through food.

eco ほっとするエコ

Number of *Hotto-suru Eco* mark products **296**

As of March 2024

What is *Hotto-suru Eco*?

Hotto-suru Eco identifies Ajinomoto AGF, Inc. products that have special environmental features. The logo mark expresses the comfort felt when drinking one's favorite beverage, colored in the green of the earth. The *Hotto-suru Eco* label was introduced in 2015.

Number of *Aji-pen® Eco* mark products **27**

As of March 2024

What is *Aji-pen® Eco*?

This mark indicates the eco-friendliness of Ajinomoto Frozen Foods Co., Inc. products. The *Aji-pen® Eco* logo mark using the company's penguin mascot in 2020, taking the place of the *Aji-na Eco* logo mark.

Contribution to sustainable agriculture

Governance

The Ajinomoto Group is deeply dependent on agriculture, using large amounts of agricultural products in our business activities. However, agriculture today faces various serious challenges, including environmental impact issues, climate change responses, and human rights considerations. Such challenges affect not only our business but also the sustainability of the entire planet.

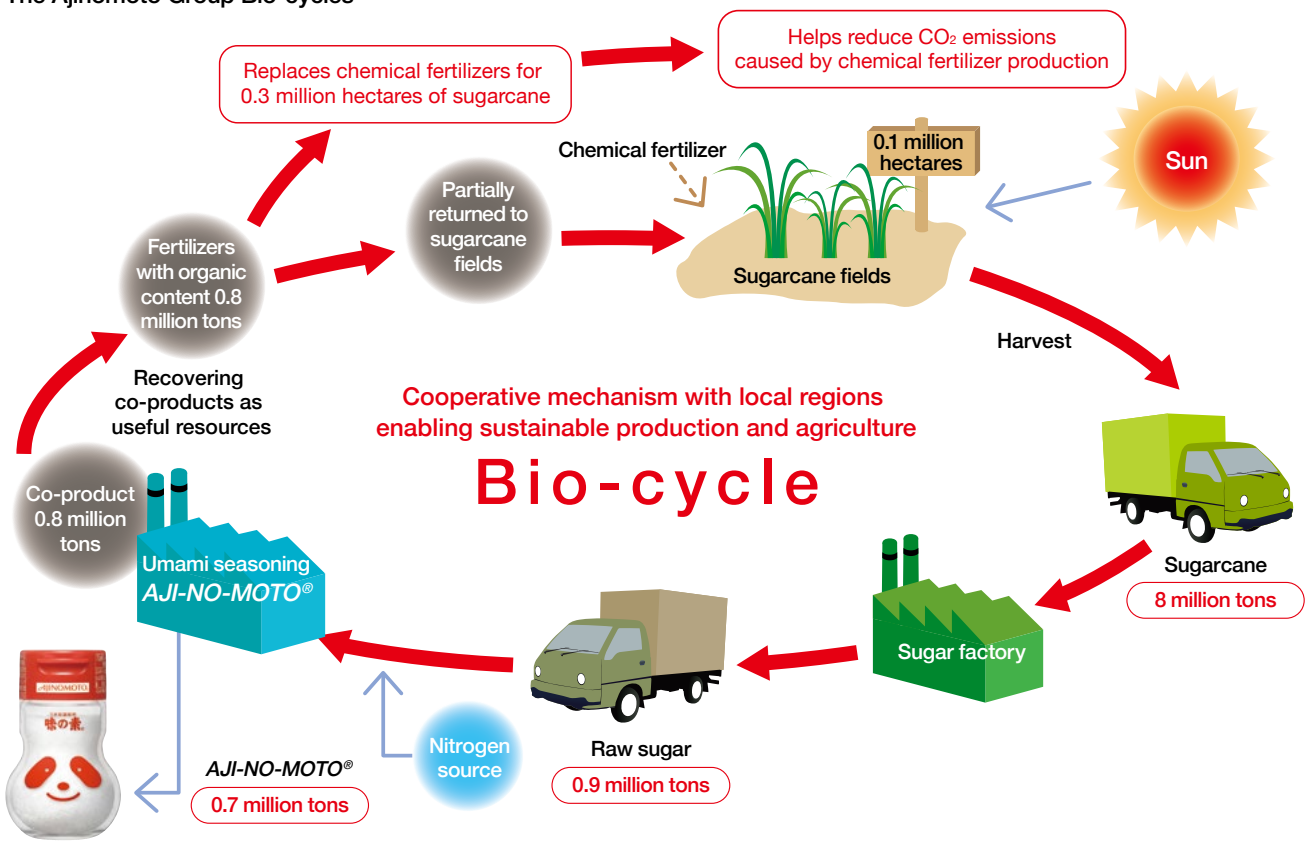
In response, the Ajinomoto Group is committed to finding solutions to these issues through our business activities, aiming to contribute to sustainable agriculture. Our efforts include promoting the use of "AminoScience," utilizing by-products of the fermentation process effectively as fertilizer and feed, and developing biostimulants. Through these efforts, we aim to create social, environmental, and economic value and build a resilient food system. Our contributions to sustainable agriculture have deep connections to our business strategy and serve as an important step in our efforts to work together to think and bring about the future of food and agriculture.

Bio-cycles contribute to reductions in greenhouse gas emissions

Strategy

The Ajinomoto Group produces amino acids through fermentation processes from crops that are easily available in each region. We use as fertilizer and feed nearly 100% of the nutritionally rich by-products (co-products) that remain after extracting amino acids in the fermentation process. We call this type of circular amino acid fermentation processing a bio-cycle, and by introducing this in fermentation facilities around the world, we are working to reduce GHG emissions associated with production of ordinary chemical fertilizer and support sustainable agriculture.

The Ajinomoto Group Bio-cycles



[1] The chart assumes worldwide annual Group production of ap-proximately 0.7 million tons of the umami seasoning AJI-NO-MO-TO® using only sugarcane. The figures for sugarcane grown and sugar production are commonly used global figures. The figures related to resources used for producing AJI-NO-MOTO® are based on actual statistics from the Group. The bio-cycle concept and image were revised considering the changes of production process and raw material procurement situation.

Effective use of by-products (co-products)

Strategy

Plants synthesize amino acids from absorbed nitrogen and sugars gained through photosynthesis, then use amino acids to synthesize proteins necessary for growth. Even under poor photosynthesis conditions caused by cloudy weather or low temperatures, plant growth can be stimulated by supplying amino acids as fertilizer. For more than 40 years, the Ajinomoto Group has effectively utilized co-products as a fertilizer containing organic amino acids. Overseas offices in Thailand, Vietnam, Brazil, and other countries sell co-products that are used by local farmers, thereby contributing to improved agricultural productivity.

Co-products in agriculture offer a low-carbon alternative due to their ability to replace chemical fertilizers, reducing greenhouse gas (GHG) emitted in the production of chemical fertilizers by significant amounts. We also develop fertilizers with higher added value by blending co-products with suitable amounts of phosphoric acid, potassium, and other elements necessary for plants.

Ajinomoto Group agriculture initiatives around the world

Strategy

■ Japan

The Ajinomoto Co., Inc. Kyushu Plant produces high-quality fertilizers, making effective use of co-products derived from the amino acid and nucleic acid manufacturing process. In the past, the plant dried co-products for use as solid fertilizer. However, the amount of fuel oil necessary for drying amounted to 600 kiloliters per year and released 2,000 tons of CO_2 into the atmosphere. Through trial and error, the Ajinomoto Co., Inc. Kyushu Plant worked with AEON Kyushu to find a solution for using co-products as compost. The heat generated during the fermentation of compost is used to dry the compost naturally at between 60°C and 80°C. This approach not only reduces environmental impact, but also improves the quality of crops by increasing amino acid and sugar content. The vegetables produced using this compost are called Kyushu Rikisaku Vegetables® and the project serves as a means to revitalize local agriculture under a campaign called Energizing Kyushu Agriculture!, building a cooperative value chain including agricultural professionals and distributors.

■ Vietnam

Vietnam is one of the world's leading exporters of rice. The Mekong Delta in the south is a center of rice production, where rice cultivation takes place two or three times a year. Continued use of nonorganic fertilizers in this region has degraded soil fertility, resulting in unstable quality and yields, making farmers difficult to make a living through rice cultivation. In 2007, AJINOMOTO VIETNAM CO., LTD. began conducting research using a co-product called AMI-AMI® (liquid fertilizer) in small-scale test farms. Today, this co-product business in Vietnam, which maintains soil fertility while keeping farm production costs down, is essential among local communities, leading to sustainable agriculture.

■ Thailand

In Thailand, a major cause of PM2.5 particulates is the burning of sugarcane leaves after harvest. However, spraying the co-product AMI-AMI® (liquid fertilizer) on the fields promotes the composting of leaves and is helpful in preventing burnoffs. The Ajinomoto Group also launched the Thai Farmer Better Life Partner Project in fiscal 2020 to support farmer autonomy, contributing to the sustainability of food resources in Thailand. The project works with more than 500 cassava farmers in Kamphaeng Phet Province, where an Ajinomoto Group's factory is located, to improve productivity and incomes. We have seen a more than 20% improvement in productivity and incomes through proper fertilizer management based on soil diagnosis, the use of microbial materials, access to seed stalks uninfected with cassava mosaic disease, and educational programs. The number of participating farmers is increasing year by year, and collaboration with government, universities, and other companies is flourishing. This program is quickly becoming a model for sustainable raw materials procurement.

■ Brazil

AJINOMOTO DO BRASIL INDUSTRIA E COMERCIO DE ALIM. (ABR) sells co-products such as liquid foliar fertilizer and fertilizing material AJIFOL® and soil mineral fertilizer AMIORGAN® mainly to coffee and fruit plantations. More recently, we have seen a movement among plantations toward sustainable management, making a full-scale transition from chemical fertilizers to co-products from ABR. In fiscal 2022, we launched Amino Imune, a new high-value-added liquid foliar fertilizer offering enhanced plant immunity. This product has received high praise from the market and continues to grow in sales. In addition, we continue to use AJIFOL® at coffee plantations that Ajinomoto AGF, Inc. supports in the production region to further improve quality. We undertook three initiatives to this end: (1) Reduce N_2O[1] through the use of AMIORGAN®, which applies the function of amino acids to fertilizers; (2) Reduce CO_2e. in agricultural operations through the use of AMINO Plus®, which contains glutamic acid; and (3) Engage in soil carbon sequestration through the use of AMINO Arginine, which contains arginine. As a result of these efforts, we reduced greenhouse gas emissions by 3,400 t-CO_2e[2] in 2020 and 3,800 t-CO_2e[2] in 2021, increased soil carbon sequestration by 1,100 t-CO_2e[2] in 2020 and 1,200 t-CO_2e[2] in 2021. We not only improved productivity and quality for farmers, but also contributed to the preservation of the global environment.

[1] A gas that has a greenhouse effect about 300 times greater than that of CO_2; N_2O is an ozone-depleting substance.
[2] vs. FY2018.

Contributing to sustainable agriculture with biostimulants

Metrics and Targets

The Ajinomoto Group works to improve agricultural efficiency, enhance crop quality, and reduce environmental impact through our biostimulant business. Biostimulants are agricultural materials that utilize “AminoScience.”

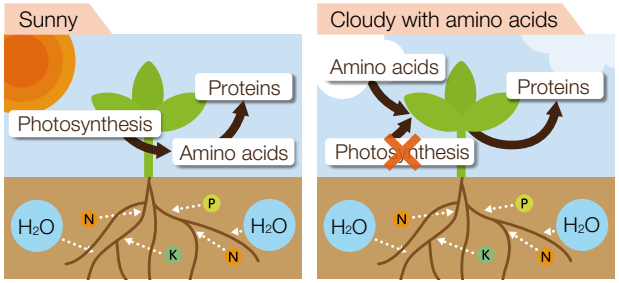
Biostimulants promote natural plant health and plant growth by blending natural materials (fermented microorganism-derived ingredients such as amino acids) and natural extracts. Unlike pesticides, which protect plants from abiotic stresses (e.g., diseases and pests), biostimulants work to reduce non-biotic stresses, including high and low temperatures and drought damage. Genetics determines the maximum yield of a crop when the crop is still a seed. This yield is then reduced during growth depending on the abiotic and non-biotic stresses that the crop undergoes. Biostimulants play a role in lowering reduced yields stemming from these non-biotic stresses.

Ajinomoto Group company Agro2Agri, S.L. (Spain) manufactures and sells biostimulant products. With strengths in advanced product development based on knowledge and expertise in amino acids, the company operates in more than 50 countries around the world, contributing to sustainable agriculture through improved yields and quality of agricultural products. Research conducted by Agro2Agri, S.L. (Spain) indicated that biostimulants improved yields by approximately 24%. This data also estimates a 25% reduction in water and chemical fertilizer use. We also expect biostimulants to improve the quality of crops, while tests confirmed a 39% increase in the protein content of wheat, a 20% increase in vitamin C in bell peppers, and a 13.5% increase in the starch content of corn.

In March 2025, we decided to participate as a partner in the “Recovery of Degraded Pasture Verification Study” Project in Brazil, an effort under the Japan-Brazil Green Partnership Initiative ("Japan-Brazil GPI") program implemented by the governments of Japan and Brazil. The Japan-Brazil GPI aims to achieve environmental and climate change measures and sustainable development by providing Japanese technology and knowledge to Brazil. Through our consolidated subsidiary, AJINOMOTO DO BRASIL INDUSTRIA E COMERCIO DE ALIM, we provide products made from biostimulant development and production technologies to restore degraded soil in fields at model farms in Brazil. Our participation in the Japan-Brazil GPI will contribute to sustainable agriculture and agrifood systems.

Amino acids and their effects

	Effect	Bad weather	Good weather
Nucleic acids	• Improved rooting	• Drought tolerant • Stimulation of plant growth • Improvements in root rot	• Improved fertilizer efficiency • Reduced collapses
Amino acids	• Increased protein synthesis	• Reduced stress (due to cloudy weather, low temperatures, and high temperatures)	• Increased revenues



Expected effects of utilizing biostimulants

Higher yield per acreage	Reduced water use
Improved nutritional composition (protein, vitamins, sugars, etc.)	Reduced chemical fertilizers and pesticides
Reduced water use	Improved quality
Reduced fuel use	Climate change (drought, heat waves, cold) resilience

Contributing to sustainable agriculture through regenerative agriculture and optimized farming methods

Metrics and Targets

The Ajinomoto Group pursues regenerative agriculture, optimized agricultural methods, biostimulants, and other agricultural measures, mainly through our overseas corporations. We began and pilot tests in Thailand and Indonesia in anticipation of introducing regenerative agriculture into our own supply chain. Our Sustainable Cassava Project improves the productivity of cassava potatoes, a raw material used in AJI-NO-MOTO®. The project introduces new varieties developed at a local agricultural research institutes, encourages the use of fertilizers made from by-products from the production of AJI-NO-MOTO®, optimizes agricultural methods, and teaches/provides guidance regarding the methods to farmers. In fiscal 2023, we conducted a test assessment on five hectares of cultivated land, confirming the effectiveness of the project. We continued our assessments in fiscal 2024, expanding the area covered to 500 hectares and confirming a doubling in productivity.

One of the outcomes of regenerative agriculture and other measures is the reduction of greenhouse gas (GHG) emissions from agricultural products. We aim to establish methods for calculating and verifying (MRV: Measurement, Reporting, and Verification) GHG emissions from the cultivation, transportation, and processing of cassava sweet potatoes into tapioca starch. Specifically, we support our suppliers in calculating GHG emissions, leveraging partnerships with third-party entities or developing in-house methods for suppliers who face challenges in making calculations.

Left of center: Cassava cultivated using farming methods and varieties developed by the Sustainable Cassava Project (Vietnam)
Right of center: Cassava cultivated using conventional farming methods and varieties

Food loss and waste

Reducing food loss and waste

Governance

The current food system has many problems. Around one-third of all food produced globally is wasted. Food imbalances, where some areas have too much while others have too little, and the risk of future shortages of food and protein are also issues. We think that reducing food loss and waste is the key to solving these issues.

The Ajinomoto Group plans to reduce food loss and waste by 50% from the receipt of raw materials to customer delivery by 2025. We also aim to achieve a 50% reduction across the entire product life cycle by 2050. To achieve this goal, we leverage the Ajinomoto Group's strengths in “AminoScience," such as production process design and improvement technologies, taste design technologies, and quality control technologies, to reduce food loss and waste throughout the value chain. We also provide materials to producers and information to consumers to further support this effort.

Definition and scope of food loss and waste

Governance

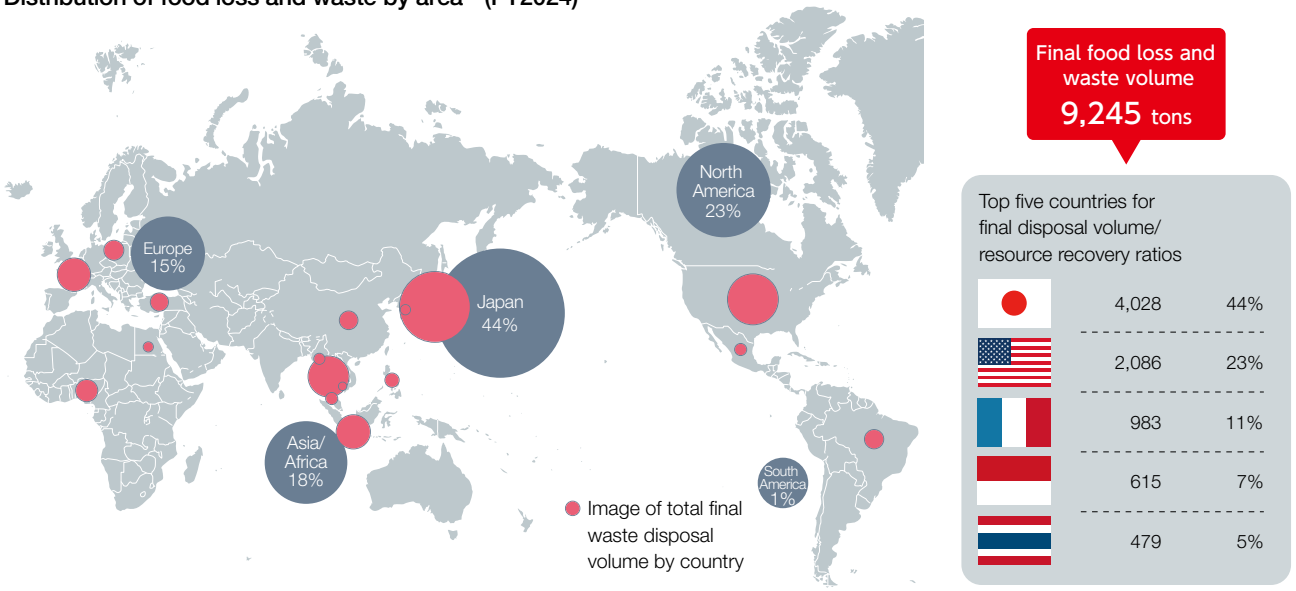
The Ajinomoto Group defines food loss and waste as food (edible portions) that is treated or disposed of in waste water treatment, landfill, or incineration. This definition excludes food ultimately redistributed for food use or used for feed or fertilizer.
The major food loss and waste categories generated by the Group are as follows:

- Raw materials and materials in process: Disposal due to product revisions, production item changes, expired use-by dates, production incidents, etc.
- Products: Expired sales time limit caused by product revisions or inaccurate demand forecasting, product returns due to erroneous shipment, goods damaged at warehouse or at the time of delivery, disposal of sample items
- Loss due to standard factory operations: Waste generated by standard operations, including line cleaning to switch products and sample inspections

As a result, the Group generated 9,245 tons of food loss and waste in fiscal 2024. The following graph depicts our food loss and waste ratio by area.

> P055

Distribution of food loss and waste by area[1] (FY2024)



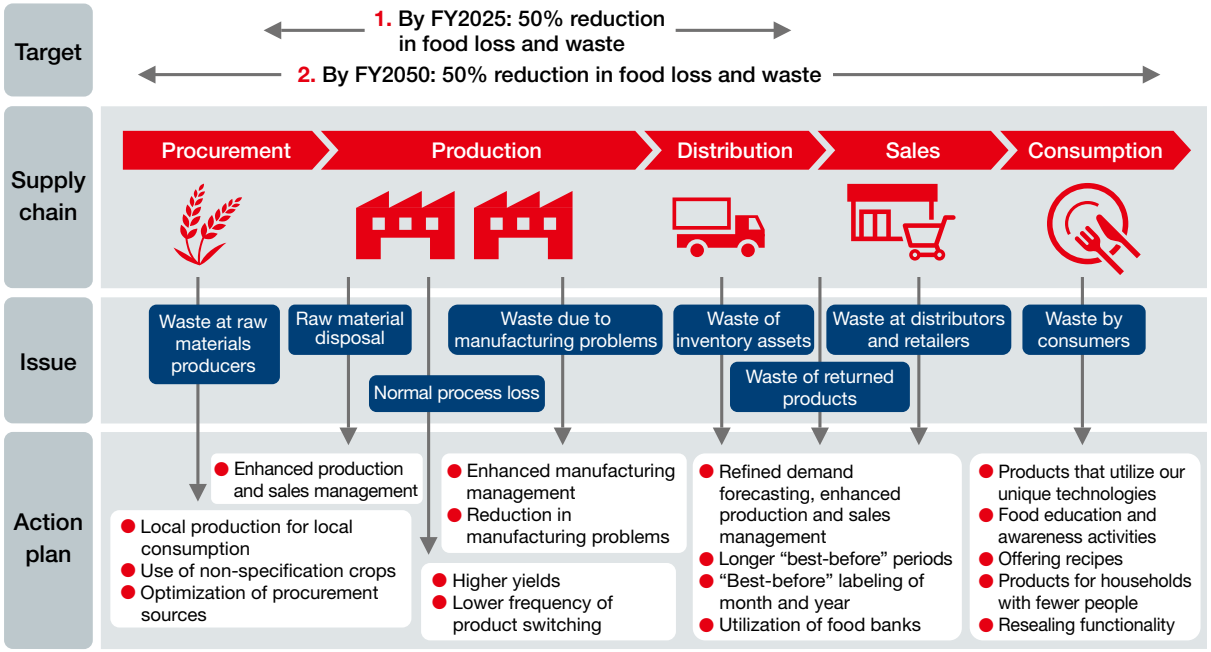
[1] Türkiye is included in Asia/Africa.

Food loss and waste reductions in the supply chain

Risk management

The Ajinomoto Group has been promoting a range of measures to reduce issues with food loss and waste in each process of the supply chain, from raw material procurement through to consumption by customers. In production, we face the issue of raw material losses. To deal with this issue, we are promoting measures such as enhanced production and sales management, reducing manufacturing problems, improving yields, and reducing the frequency of product switching. Issues in logistics and sales include disposal of inventory and returned products, and disposal at distributors and retailers. Our efforts include improving demand forecasting, enhancing sales management, extending product shelf life, labeling best-before dates by month and year, and making effective use of food banks. To respond to the issue of waste by consumers, we are offering products that utilize our unique technologies and providing recipes with less food loss and waste.

Measures to achieve food loss and waste reductions in the supply chain



Strategy

In the Japanese B2C product Knorr® Cup Soup, we make full use of the entire super sweet corn, not just the kernels. Leaves and stalks left over from corn harvests are used as fertilizer to nourish fields, eliminating waste. We separate corn delivered to the factory into kernels, husks, and cores. The kernels go into our soup, while the husks and cores do not go to waste, but are rather used to feed cattle. The amount of feed generated is approximately 6,500 tons per year. Corn feed is rich in nutrients not found in grass, and cattle manure also becomes compost. Cattle manure from pastures is returned to the fields in a cycle of corn production.

The food industry uses the enzymes we offer as B2B products in the manufacture of a variety of products. In 1993, Ajinomoto Co. Inc. launched Activa®, the first product in the world to use transglutaminase, an enzyme that binds proteins together, for food. We have been engaged in a range of applied research projects and product developments with the goal of enhancing transglutaminase functionality in response to challenges in various food products. We use this enzyme in the production of a wide variety of food products worldwide, including meat products, dairy products, processed fisheries products, noodles, bread, and plant-based proteins, by improving texture and physical properties, as well as by enhancing formability. In addition, this enzyme helps improve food quality and productivity, reduce costs, reduce deterioration over time, extend freshness, and reduce food loss and waste among our customers.

Cooperation with outside organizations

Strategy

■ Participation in outside initiatives

Ajinomoto Co. Inc. is part of the Consumer Goods Forum (CGF), an international trade association. The Company collaborates with other member companies in the Food Waste Working Group, which is one of the Japan Sustainability Local Groups, to reduce food loss and waste. During Japan's Food Loss Reduction Month in 2024, we teamed up with the Consumer Affairs Agency and eight other member companies, using social media to encourage consumers across Japan to reduce food loss and waste.

■ Cooperation with the government

We took part in the Voluntary Declaration of Food Loss initiative by the Consumer Affairs Agency in 2023. This initiative aimed to showcase efforts to reduce food loss and waste and create a system that informs consumers about corporate efforts.

Disseminating recipes and content that reduce food loss and waste

Strategy

In Japan, households waste about 2.36 million tons of food each year (according to the Ministry of Agriculture, Forestry, and Fisheries for fiscal 2022). This amount is about half of the country's total food loss and waste, which is 4.72 million tons. In August 2022, the Ajinomoto Group launched the brand TOO GOOD TO WASTE to help reduce household food loss and waste across the entire value chain. We've launched a special section on our AJINOMOTO PARK website to help people enjoy food more. It features recipes to reduce food loss and waste, including TOO GOOD TO WASTE recipes, along with tips and ideas for making food waste reduction fun and easy.

In fiscal 2024, we extended our efforts to four overseas companies: AJINOMOTO COMPANY (THAILAND) LIMITED, P.T. AJINOMOTO SALES INDONESIA, AJINOMOTO DO BRASIL INDUSTRIA E COMERCIO DE ALIM, AJINOMOTO PHILIPPINES CORPORATION. We created country-specific recipes and engaged with consumers through our own media and social networks. Since 2009, the Ajinomoto Group has published Eco-Uma Recipes® (eco-friendly and delicious recipes) through websites and events, encouraging consumers to create delicious everyday meals without waste.

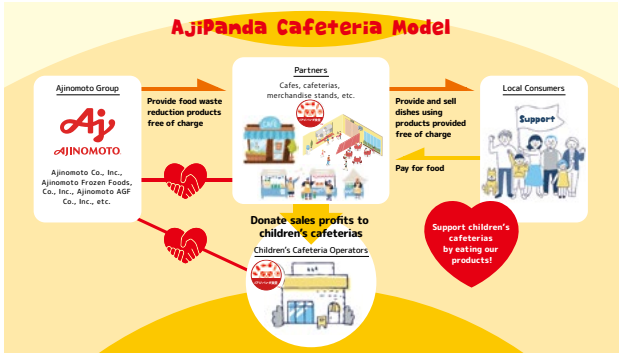
The Group also received the Minister of the Environment Award in October at the FY2024 Food Loss Reduction Awards, hosted by the Ministry of the Environment and the Consumer Affairs Agency. The award recognized our multifaceted efforts to reduce food loss and waste, including developing recipes in collaboration with local governments and organizations across all 47 prefectures in Japan, and implementing awareness initiatives for consumers in partnership with distribution companies and other stakeholders.

> Recipes Within the TOO GOOD TO WASTE™! Website (Japanese Only)
> Eco-Uma Recipes® (Japanese Only)
> PARK MAGAZINE (Japanese Only)
(1) Ideas to Reduce Household
(2) Menu Ideas to Use Up Food Ingredients Series

AjiPanda Cafeteria initiative

The Ajinomoto Group launched the AjiPanda Cafeteria initiative in fiscal 2023 to offer continuous support for food loss and waste reduction for the funding of local children's cafeteria operations.

AjiPanda Cafeteria provides donates products subject to food loss and waste within the Group to our partner organization. These partners sell the donated products to local residents and use the proceeds to support the operation of community-based children's cafeteria.



As of the end of March 2025, 105 organizations had partnered with the initiative. The AjiPanda Cafeteria has been held more than 570 times, with a cumulative total of over 35,000 participants.

> AjiPanda Cafeteria (Japanese only)

Initiatives in Brazil

In Brazil, Ajinomoto do Brasil (ABR) production, logistics, supply chain management (SCM), sales, and marketing teams work together to reduce food loss and waste in the food sector supply chain.

The company cut waste by 124 tons per year and increased useful resources, including fertilizer, to 838 tons per year by improving production processes at the plant. ABR is taking measures to diversify disposal contractors by product category, allowing for broader reuse as animal feed and fertilizer to expand the range of recycling options. The company is first working to develop second and third partners, rather than relying on a single contractor. The company also conducts research and studies on the conversion of food loss and waste into feed to create higher-value uses. For example, ABR is collaborating with a livestock feed maker to explore the commercialization of food loss and waste generated during powdered beverage production.

The company also works with a state-run fisheries research institute to evaluate whether food loss and waste from certain products can be used as fish feed.

The company also holds monthly meetings with marketing, sales, and warehouse staff to reduce unsold and expired inventory as much as possible. The team uses SCM data systems to analyze inventory turnover and products nearing their best-before dates, and discusses promotions such as discounts and donations. As one such initiative, we work with startups that work to reduce food loss and waste.

The Too Good to Waste™ campaign continues to use TV commercials, social media influencers, cooking classes, and popular reality shows to help reduce food loss and waste from home. Through this initiative, the Too Good To Waste™ recipe collection reached 56 recipes in fiscal 2024, bringing the total to 239 recipes since 2021 (as of March 2025).

ABR launched their first product under the Too Good To Waste™ initiative: Sazón® TEMPERA & TRANSFORMA. Rice is the most discarded food in Brazil. Sazón® TEMPERA & TRANSFORMA addresses this issue by greatly reducing food loss and waste in households by making it easy to repurpose leftover rice into new dishes.

The company also continued to raise employee awareness of food loss and waste through foundational environmental education using the Portal E-learning platform.

These efforts have helped raise awareness of food loss reduction within ABR and reduced ABR's total food loss and waste in fiscal 2024 to 95% of the fiscal 2018 level.

Food loss and waste reduction targets

Metrics and Targets

The Ajinomoto Group is committed to a long-term vision to halve food loss and waste generated throughout the entire product lifecycle by fiscal 2050 as compared to fiscal 2018. Our first target is to reduce food loss and waste between the acceptance of raw materials and the delivery of products to customers by 50% by fiscal 2025 (compared to fiscal 2018).

We reduced food loss and waste occurring from raw material acceptance through to customer delivery by 53% in fiscal 2023 compared to our fiscal 2018 baseline, reaching our goal two years ahead of schedule. We made further progress in fiscal 2024, resulting in a 62% reduction from the fiscal 2018 baseline. This progress was driven by several factors, including the sharing of best Group practices and increased collaboration across businesses and departments with high food loss and waste volumes; the successful recovery of value from products previously considered difficult to repurpose as fertilizer or feed; and ongoing joint efforts between business divisions and production and research departments to suppress the generation of food waste (edible portions).

In fiscal 2025, the Ajinomoto Group intends to continue working to reduce over 50% of food loss and waste compared to fiscal 2018, while also developing new targets. We recognize that this initiative helps reduce waste of limited food resources and is also closely linked to a wide range of environmental and social issues. Taking a full product life-cycle perspective, we are committed to strengthening collaboration with suppliers and raising further awareness among society and consumers, with the aim of advancing efforts to reduce food loss and waste both at the raw material production stage and in the home.

Food loss and waste reduction rate per production volume unit

	FY2022 (Result)	FY2023 (Result)	FY2024 (Result)	FY2025 (Target)
Food loss and waste reduction rate from the acceptance of raw materials to delivery to customers (vs. FY2018)	39% decrease	53% decrease	62% decrease	Over 50% decrease

Volumes of food loss and waste[1]

		FY2018 (Base year)	FY2020	FY2021	FY2022	FY2023	FY2024
Ref.: Production volume (1,000 t)[2]		2,609	2,423	2,357	2,354	2,265	2,301
Food loss and waste	Total volume (t)	27,710	22,267	19,262	15,167	11,279	9,245
	Per production volume unit (per ton of product) (kg/t)	10.6	9.2	8.2	6.4	5.0	4.0
	vs. FY2018 (%)	—	87	77	61	47	38

[1] Measurements taken in reference to the Food Loss & Waste Accounting and Reporting Standard (measurement methods may differ among target organizations).
[2] Production volume from other environmental data is reported differently to make it easier to add up.

Biodiversity and natural capital (disclosures based on TNFD)

Biodiversity approach

Approach

The Ajinomoto Group sells products in more than 130 countries and regions. The entirety of our business activities, from the procurement of raw materials to manufacturing and sales, are dependent on the bounty of nature, or in other words, ecosystem services that include agriculture, livestock, and fishery resources, genetic resources, water and soil, and pollinators such as insects. These natural bounties come from healthy biodiversity shaped by the diversity of living organisms and their connections.

However, biodiversity is currently being lost at an unprecedented rate, making biodiversity conservation a pressing issue worldwide. The Ajinomoto Group recognizes the importance of reducing our impact on biodiversity and protecting the global environment as we continue to conduct our business. Since issues related to biodiversity are also closely related to environmental boundaries and social issues such as climate change, water and soil, waste, and human rights, we will work to resolve these issues so as to create mutual benefit. In conserving biodiversity, we believe it is necessary to establish a system of action to halt and reverse the loss of biodiversity through our business. Accordingly, we will support the Kunming-Montreal Global Biodiversity Framework[1] adopted at the 15th Conference of the Parties to the Convention on Biological Diversity (COP 15) in 2022 and contribute to its achievement.

[1] Global Biodiversity Targets adopted in December 2022 consisting of a vision and global goals for 2050, as well as a mission and global targets for 2030.
Original document:
https://www.cbd.int/doc/decisions/cop-15/cop-15-dec-04-en.pdf
Ministry of the Environment provisional translation:
https://www.env.go.jp/content/000107439.pdf

> Biodiversity

Biodiversity framework

Governance

The Ajinomoto Group complies with the Ajinomoto Group Policies (AGP), which outlines the concepts and actions to be observed by each Group company, officers, and employees. We continue to improve internal control systems and control operations. At the same time, we strengthen systems, treating sustainability, including biodiversity, as an active risk and striving to enhance corporate value.

The Board of Directors has established the Sustainability Advisory Council, and established a system to recommend the Group's approach to sustainability and ESG. It determines materiality items related to sustainability that serve as guidelines for ASV management and supervises the execution of initiatives related to sustainability.

The Executive Committee has established the Sustainability Committee and Risk Management Committee as subordinate bodies and selects and extracts risks and opportunities based on important issues (Materiality) for the Ajinomoto Group, assessing the degree of impact, formulating measures, and managing progress. In fiscal 2024, the Executive Committee received two activity reports from the Sustainability Committee and the Risk Management Committee.

Biodiversity Guidelines

Governance

The AGP states that we work with the community and customers to contribute to harmonious coexistence with the Earth, in order to realize a sustainable Recycling-Oriented Society. Based on this Group Shared Policy on Environment, in July 2023, the Ajinomoto Group established and announced the Ajinomoto Group Biodiversity Guidelines to recognize issues related to biodiversity, as well as our approach, action guidelines, and targets.

We believe biodiversity is related intrinsically to environmental and social issues in connection with our sustainable procurement efforts, including issues related to deforestation and other land modification in the production of raw materials, pesticide use and waste, child labor, and slave labor. In addition to existing palm oil and paper procurement guidelines, we restructured our coffee and soybean procurement guidelines in July 2023. In addition, our Guideline for Group Shared Policy for Suppliers require suppliers to comply with laws and regulations, and to give consideration to and endorse the Ajinomoto Group's policies on human rights and the environment.

> Ajinomoto Group Biodiversity Guidelines
> Ajinomoto Group Paper Procurement Guidelines
> Ajinomoto Group Palm Oil Procurement Guidelines
> Ajinomoto Group Soy Procurement Guidelines
> Ajinomoto Group Coffee Procurement Guidelines
> Guidelines for Group Shared Policy for Suppliers

Biodiversity strategy

Strategy

The Ajinomoto Group offers a wide range of products in the food business, from seasonings and food products to frozen foods. We are also expanding into healthcare and other fields. Our businesses depend heavily on the bounty of nature, including agriculture, livestock, fishery resources, genetic resources, water, soil, and pollinators such as insects. These natural bounties come from healthy biodiversity shaped by the diversity of living organisms and their connections. However, biodiversity is currently being lost at an unprecedented rate, making biodiversity conservation a pressing issue worldwide. In July 2023, the Ajinomoto Group created the Ajinomoto Group Biodiversity Guidelines. Since issues related to biodiversity are also closely related to environmental boundaries and social issues such as climate change, water and soil, waste, and human rights, we will work to resolve these issues so as to create mutual benefit.

Examining risks and opportunities in line with the LEAP approach

Strategy

(1) The LEAP Approach

The LEAP approach is guidance proposed by the TNFD that provides a process for the systematic, science-based assessment of nature-related risks and opportunities within corporations and financial institutions.

In fiscal 2023, we assessed risks and opportunities across the value chain for raw materials that make up more than 80% of Ajinomoto Group sales, including seasonings, foods, frozen foods, and healthcare businesses. We assessed these factors using the LEAP approach analysis on dependencies and impacts.

In fiscal 2024, we conducted a detailed analysis of sugarcane (Assess step), the physical risk of which has a significant financial impact.

(2) Selection of Target Raw Materials

We selected 12 raw materials from our business value chain that are either listed under High Impact Commodity (HIC) or High Impact Commodity List (HICL), provided by SBTs for Nature, created by the Science Based Targets Network (SBTN), and have a large procurement volume for raw materials, providing 80% coverage of net sales. Note that we excluded paper (packaging material), which is considered an HICL material.

<Selected Raw Materials>

Sugarcane, cassava, corn, raw milk, soybeans, rapeseed, rice, cattle, coffee, palm, copper, and crude oil

(3) Analysis Tools

We combined the following tools at each step of the analysis.

ENCORE, SBT's High Impact Commodity List, SBTN Materiality Screening Tool, Geographic Information System, World Database Protected Area, IUCN Red List, GLOBIO, Aqueduct, Aqueduct Water Atlas, Nature Map Explore, Aqueduct Global Maps, Past and future trends in grey water footprints of anthropogenic nitrogen and phosphorus inputs to major world rivers, International Institute for Applied Systems Analysis, What a Waste

(4) Analysis Method

The first three steps, Locate, Evaluate, and Assess (LEA), were used to analyze the four processes of raw materials, production, sales, and consumption.

(1) Locate

■ Analysis Process

For the businesses analyzed, we identified the areas in the upstream and downstream of our group's supply chain that have a high risk of causing biodiversity loss.

L1: Inventory the value chain

L2: Identify dependencies and impacts of value chain inventories and each process

We organized the upstream and downstream industries and raw materials in Group business supply chains and identified processes, products, and raw materials with a high degree of dependence and impact on ecosystems and biomes.

We found that our business impacts raw material production for agricultural products through extensive land and water use in fields and irrigation. Results also indicated that we have significant impacts through water consumption and show a high dependency on water resources in manufacturing processes.

L3: Identify operating locations for processes with significant dependencies and impacts

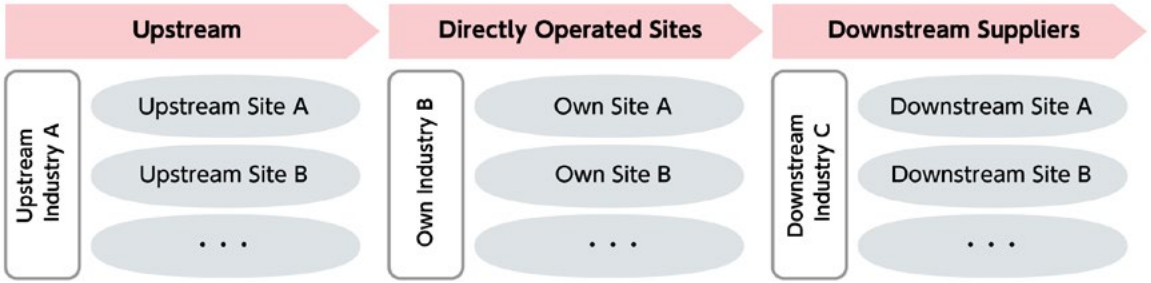
We identified the countries and regions involved in the supply chain from raw material production to consumption for each of the 12 targeted raw materials.

L4: Pinpoint areas with high risk of biodiversity loss

From the areas involved identified in L3, we prioritized those with high biodiversity risks requiring further analysis.

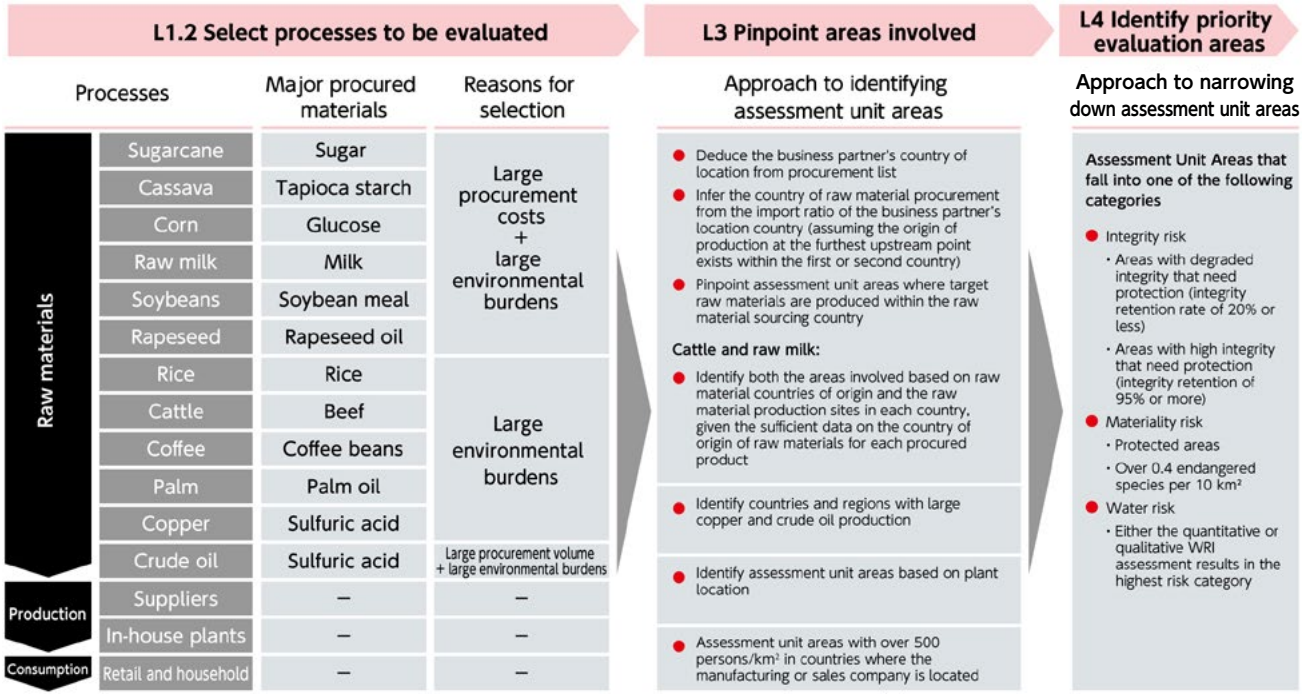
Priority Area Evaluation Axes (Five LEAP Indicators)

1. Key biodiversity areas
2. High biodiversity integrity areas
3. Areas of rapid ecosystem integrity decline
4. High physical water risk areas
5. Areas providing essential ecosystem services to indigenous peoples, local communities, and stakeholders (based on available data)



■ Analysis Results

For the target raw materials, we identified and evaluated the points of contact with nature across square units of areas of 25 km to 50 km (“assessment unit areas”) in the supply chain of our Group's business. We then identified the assessment unit areas requiring detailed analysis based on the degree of natural degradation. In the Locate step, of the total of 24,000 assessment unit areas, we identified 20,000 areas as falling into at least one of the following categories: areas of importance for biodiversity, areas of rapid degradation, areas of potential degradation, areas of high water stress, and areas inhabited by indigenous peoples.



(2) Evaluate

■ Analysis Process

We identified factors underlying dependencies and impacts on nature across the Ajinomoto Group supply chain. We assessed how our dependencies and impacts on nature might look by 2050. We did this by setting specific indicators and thresholds to measure these factors.

E1: Identify dependency and impact targets

We used LEAP-recommended tools for the dependency and impact targets identified in L2 to extract material factors in each process.

E2: Consider changes in dependency and impact targets and select potential high-risk targets

We organized the pathways for the dependency and impact targets identified in E1, accounting for changes from internal and external factors, and selected priority evaluation areas.

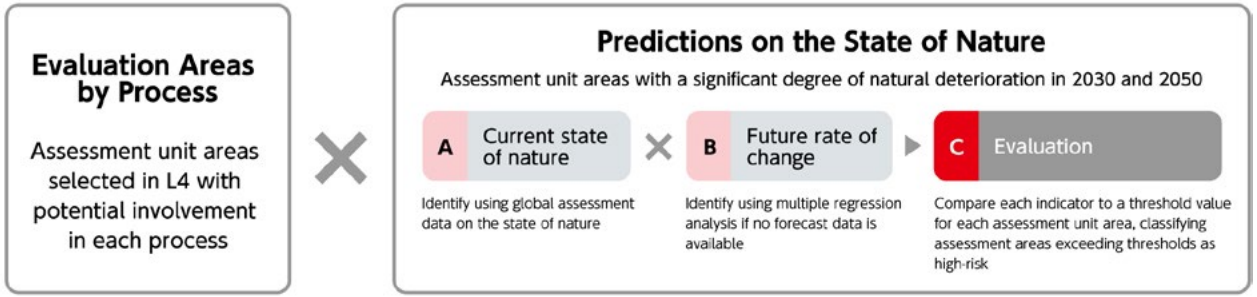
Pathways	Pathway objectives
Dependency pathways	Identify significant dependency factors by organizing what external and natural changes may affect the natural functions (ecosystem services) essential to business activities
Impact pathways	Identify significant impact factors by organizing how the impacts of our business activities interact with natural changes and how these may, in turn, affect business

[1] We consider business plans, existing burden reduction measures, and other information when assessing changes in dependencies and impacts from internal factors.
[2] We assess changes from external factors only for items with data available in databases and other similar sources.

E3: Prioritize dependencies and impacts

We established indicators and thresholds for each dependency and impact item based on LEAP and previous studies.

We assessed the assessment unit areas of each operation site to determine if it was high risk and selected subsequent targets for analysis.

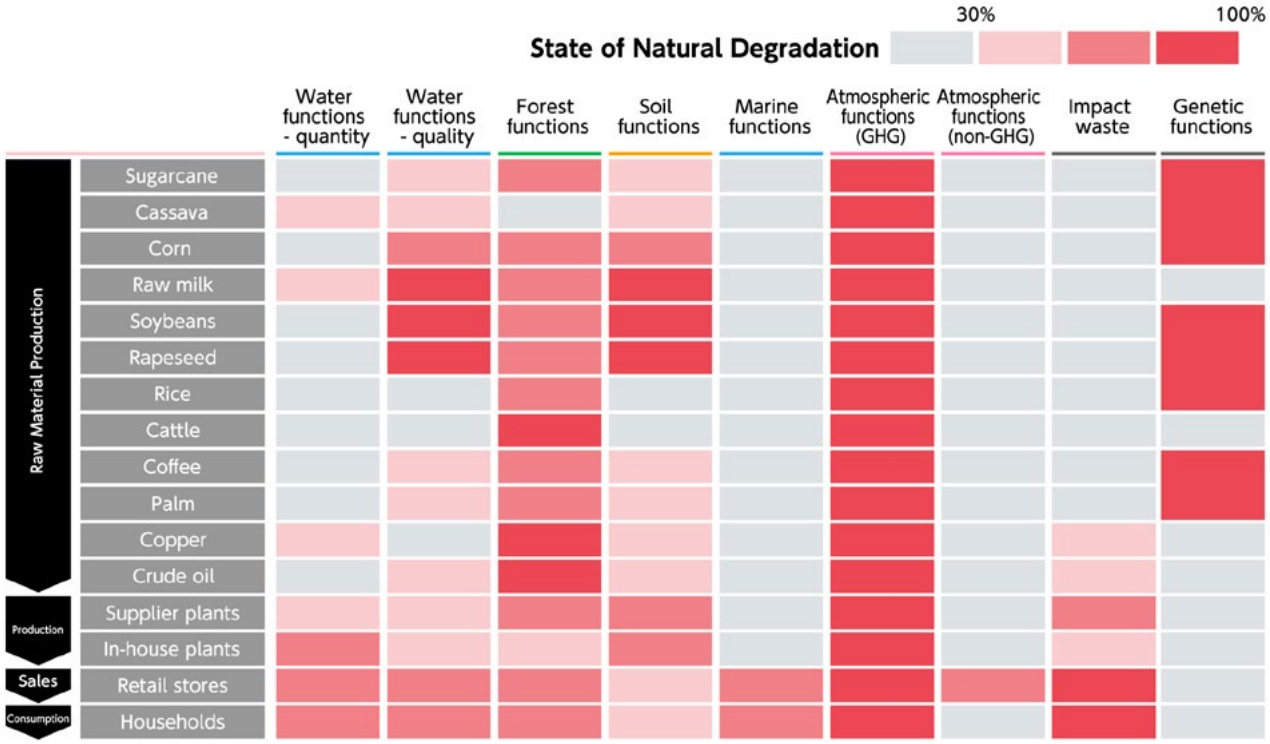


■ Analysis Results

For the 20,000 identified assessment unit areas, we assessed how each stage of our supply chain's (upstream, our company, downstream) dependencies and impacts affect nature, establishing indicators and thresholds assuming natural degradation occurs by 2050. We found that different types of natural resources degrade in different ways. Forests and air deteriorate worldwide, while water and soil issues are more concentrated in specific regions. We confirmed a risk of soil degradation in the countries where we source rapeseed and other materials.

Degraded state of nature in 2050

Use areas projected to experience 30% or greater degradation of natural conditions by 2050 as the evaluation target for subsequent risk analyses



(3) Assess

■ Analysis Process

We forecast risks in scenarios where our dependencies and impacts on nature could lead to future problems or degradation. We used those results to estimate the financial impact of the Group's responses and assessed the level of risk and opportunity.

Risk Categories

Risk categories		Summary
Physical risks	Acute	Increased costs due to extreme weather and disasters
	Chronic	Increased costs due to natural deterioration
Transition risks	Regulations	Increased costs due to tax payments and regulatory compliance (e.g., from use of renewable energy) resulting from stricter regulations
	Liabilities	Increased penalties for all natural capital and increased costs due to fines for regulatory violations
	Reputation	Decreased sales due to reduced consumer motivation, driven by heightened awareness of the need for natural disaster response
	Markets	Decreased sales due to lower demand from changes in the market value of all natural capital
	Technologies	Increased costs due to rising expenses for implementing new technologies at inhouse plants in response to trends towards stricter environmental measures

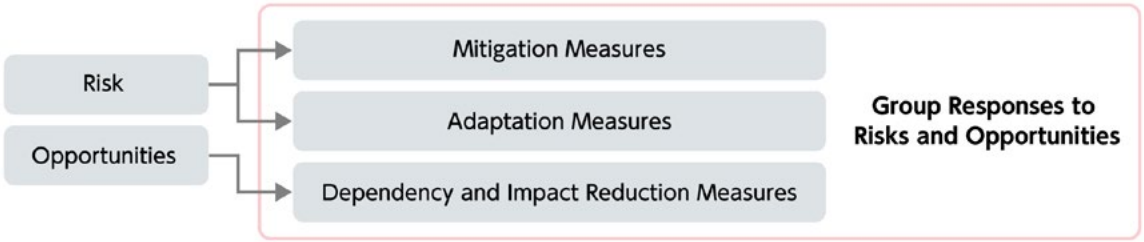
A1: Define scenarios and specify business risks and opportunities

We specified risks and opportunities based on the E3 key dependency and impact factors. Defining scenarios enables us to understand the background of future natural changes and expresses more concrete potential risks.

* Opportunities are for existing initiatives only.

A2: Organize risks and opportunity response status

We summarized the status of Group responses to the risks and opportunities identified in A1.



A3-A4: Measure risks and opportunities and select those for disclosure

We measured the impact on the Group of the risks and opportunities identified in A1 from a financial perspective.

We also selected LEAP-recommended risks and opportunities in addition to risks and opportunities with significant financial impact.

■ Analysis Results

In the Evaluate step, assuming the state of natural degradation in 2050, we forecast what risks could occur in two scenarios: one in which nature conservation and economic development can coexist (SSP1[1]), and one in which nature degrades and the economy stagnates (SSP3[1]). We identified a number of risks that could arise due to the degradation of nature, but in particular, we confirmed that the financial impact would be significant, and that the price of raw materials would rise due to chronic physical risks. The main raw materials with significantly rising procurement costs were corn and sugar cane. For sugar cane production, this was caused by degradation of soil in Thailand, while for corn, this was caused by degradation of soil in the United States.

[1] SSP: Shared Socioeconomic Pathways.
The Integrated Assessment Modeling Consortium developed Shared Socioeconomic Pathways in response to the IPCC chair's call to create new scenarios.
SSP1: A scenario where nature conservation and economic development work well together.
SSP3: A scenario that leads to natural degradation and economic stagnation.

High Priority Raw Materials and Processes (Conceptual Image)

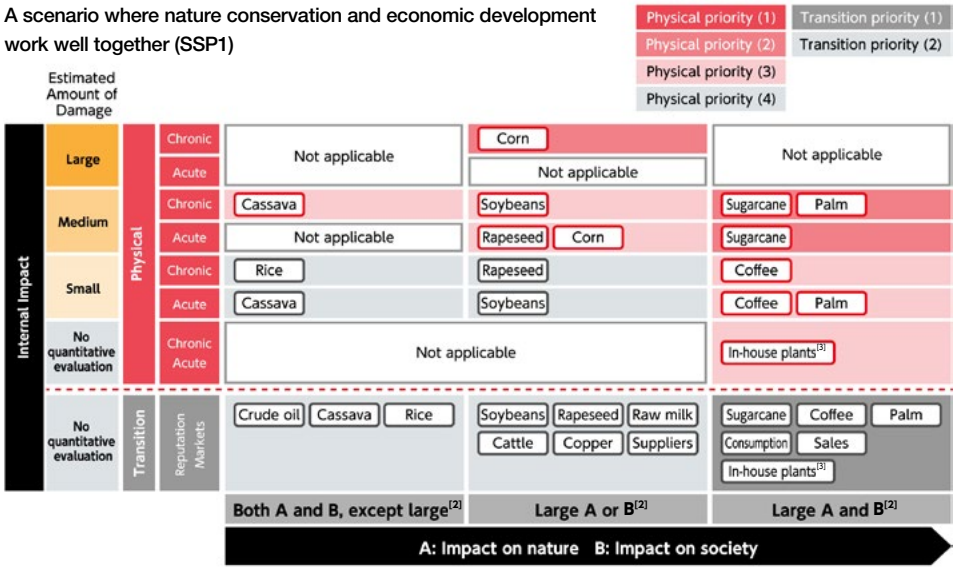
Scenario for Balancing Nature Conservation and Economic Development (SSP1)

SSP1 gives high priority to physical risks of sugarcane and palm. Of such risks, the financial impact of physical and acute sugarcane risks is the highest priority due to significant impacts on nature and society.

Scenario of Natural Degradation and Economic Stagnation (SSP3)

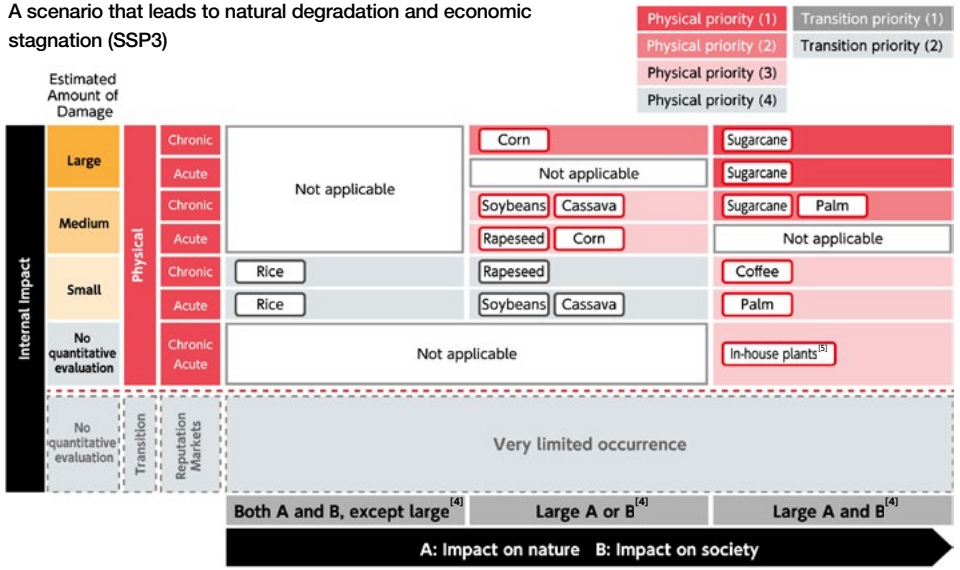
SSP3 prioritizes the physical risks associated with sugarcane and palm. Among these risks, the chronic and acute physical risks of sugarcane pose the greatest financial, environmental, and social impact.

A scenario where nature conservation and economic development work well together (SSP1)



[2] Large impact criteria: Impact on nature (A) is considered large when three or more factors in the E3 evaluation indicate a degradation state close to 100% (marked in red). Impact on society (B) is considered large when a certain proportion of assessment unit areas in which our company is involved show an overlap between (1) areas with a degradation state close to 100% (marked in red) in the E3 evaluation and (2) areas identified in L4 as inhabited by Indigenous peoples.
[3] Both A and B are positioned at the same priority level as large financial impacts given that our in-house plants are required to respond directly to the process.

A scenario that leads to natural degradation and economic stagnation (SSP3)



[4] Large impact: A: At least three Level 1 items / B: Overlap of 20% or higher
[5] Both A and B are positioned at the same priority level as large financial impacts given that our in-house plants are required to respond directly to the process.

Reflecting analysis results in strategy

(1) Reflection in business strategy

In fiscal 2025, we plan to conduct a field survey of water risk, deforestation risk, and soil degradation risk in sugarcane farmlands. Issues related to biodiversity based on this are also closely related to the environment and society, including human rights, climate change, water and soil, and waste, and we therefore strive to solve these issues in ways that create effective synergies. We will also work on formulating new business strategies to achieve ASV, where sustainability initiatives lead to greater added value for our products.

(2) Reflecting in financing strategy

Sustainable finance forms the basis for acquiring the necessary funds for our various initiatives. Beginning with the issuance of sustainable bonds in October 2021, we have continued to procure funds through sustainable finance. Our efforts here include securing a commitment line agreement through positive impact financing in January 2022, a commitment line agreement through Sustainability Linked Loans in December 2022, and the issuance of Sustainability Linked Bonds in June 2023. Most recently, we issued two new sustainability-linked loans in March and April of 2024.

Through this financing, we will further accelerate our efforts to realize one of our two outcomes by 2030, namely, to reduce our environmental impact by 50%, as well as to realize a sustainable society.

> TNFD: LEAP - the risk and opportunity assessment approach
> Sustainable Finance

Managing risks to biodiversity

Risk management

To achieve the Medium-Term ASV Initiatives 2030 Roadmap (which includes two outcomes), we must identify risks accurately and respond to these risks promptly and appropriately. The Sustainability Committee and the Management Risk Committee work closely together to ensure no risk is left unaddressed between the two. The committees select and identify risks and opportunities based on matters of importance to the Ajinomoto Group (Materiality) and propose these risks and opportunities to the Executive Committee. The Sustainability Committee formulates response measures and manages progress on matters related to sustainability, including social, environmental, and nutritional issues. The Management Risk Committee handles risks that require management attention (e.g., pandemics, geopolitical risks, and information security risks).

We implement risk processes at each domestic and overseas work site to identify risks and formulate countermeasures, taking individual business strategies and local political, economic, and social conditions into account. The Risk Management Committee improves this process and compiles the risks identified by each work site and addresses those that management should take the initiative to address. In addition, each business and corporation has formulated a business continuity plan (BCP) in preparation for emergencies, and the Risk Management Committee has established a system for constant verification of each BCP's effectiveness and regularly monitors and manages risk response. Full-time Audit Committee members attend the Sustainability Committee and the Risk Management Committee to monitor risk management process. Full-time Audit Committee members attend the Sustainability Committee and the Risk Management Committee to monitor risk management process.

Conservation of water resources in production processes

Metrics and Targets

As the world's population grows, the demand for water is increasing, but the challenge is that fresh water is distributed unevenly. The depletion of water resources impacts both the water used in production and the procurement of raw materials. Droughts and floods can also cause production to stop. The Ajinomoto Group will enhance our ongoing efforts to reduce water usage and emissions in production, helping to create a sustainable water management system throughout the supply chain.

Ajinomoto Group water use

Performance

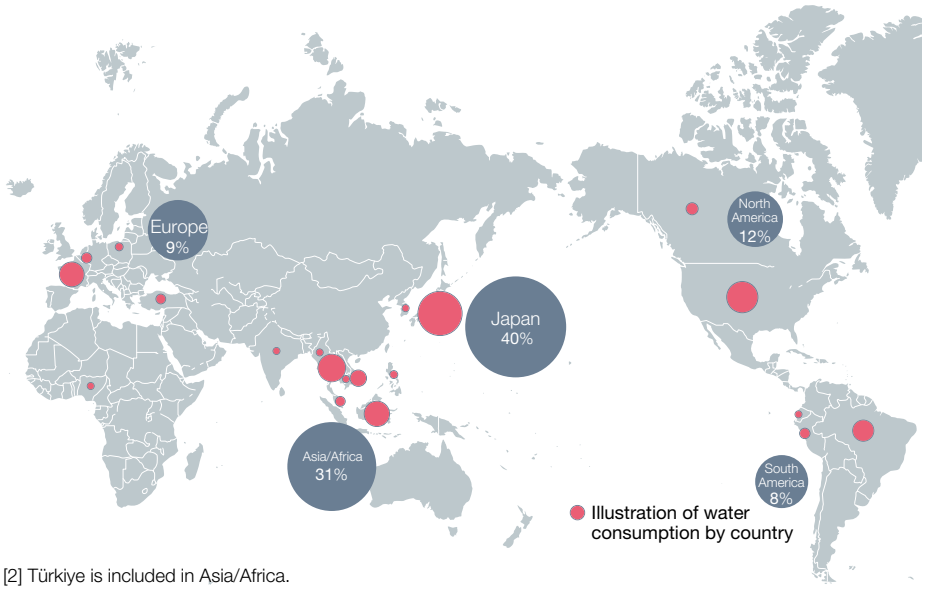
In fiscal 2024, the Ajinomoto Group used 56,098,000 kiloliters of water. The top five countries, including Japan, Thailand, and the United States, accounted for about 85% of this total.
The ratio of water withdrawal in regions with high water stress[1] was less than 1%. The Group aims to reduce water use by 15% by fiscal 2040, compared with fiscal 2018. Common measures of suspended substances in wastewater are BOD (biochemical oxygen demand) and nitrogen. In fiscal 2024, our wastewater contained 198 tons of BOD and 531 tons of nitrogen.

Starting in fiscal 2024, the Ajinomoto Group will focus on reducing water use at the Kawasaki, Tokai, and Kyushu plants. These plants have the highest water use in the Group. Water conservation issues are linked closely to other environmental and social concerns, such as climate change, soil health, biodiversity, waste, and human rights. We work to address these problems in ways that create mutual benefits.

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

> P055
> Environmental Data: Conservation of water resources
> CDP Corporate Questionnaire 2024

Distribution of water consumption by area (FY2024)



56,098,000 kl
Water usage

Top five countries for water usage/ composition ratios

	22,181	40%
	8,817	16%
	6,559	12%
	5,714	10%
	4,499	8%

Unit:1,000kl

[2] Türkiye is included in Asia/Africa.

Water Use Reduction (%)

(%)

	FY2024		FY2025	FY2030	FY2040
	Target	Result	Target	Target	Target
Water Use Reduction (%) (vs. FY2018)	8	12	9	11	15

Water use/intensity

(1,000 kl)

	FY2018 (Base year)[4]	FY2020[4]	FY2021	FY2022	FY2023	FY2024
Total water withdrawal[1] [2]	63,687	59,386	59,979	60,039	58,358	56,098
Fresh surface water	20,672	17,004	17,259	17,890	17,520	17,494
Brackish surface water/seawater	0	0	0	0	0	0
Fresh groundwater, renewable	14,865	13,041	13,769	13,369	12,507	11,139
Fresh groundwater, non-renewable	0	0	0	0	0	0
Produced water	0	0	0	0	0	0
Municipal water (including industrial water)	28,150	29,342	28,950	28,781	28,332	27,465
Reduction rate of water use (vs. FY2018)	-	7%	6%	6%	8%	12%
Water consumption per production volume unit (intensity per ton of product)	26	25	25	26	26	24
Ref.: Production volume (1,000 t)	2,461	2,335	2,360	2,354	2,265	2,301
Total water discharge[2] [3]	51,305	47,833	48,034	46,353	45,735	47,419
Fresh surface water (processed by the Group) (treated by the Company)	23,174	20,357	20,490	19,655	19,048	20,369
Brackish surface water/seawater	0	0	0	0	0	0
Groundwater	0	0	0	0	0	0
Third-party destinations	11,101	11,139	11,360	11,245	11,049	12,211
Total water recycled or reused (Drainage of indirect cooling water into rivers)	17,029	16,338	16,184	15,453	15,638	14,839
Proportion of water recycled or reused	27%	28%	27%	26%	27%	26%
Total water consumption	12,382	11,553	11,945	13,685	12,623	8,678

BOD (tons)[3]	312	284	263	269	210	198
Nitrogen (tons)[3]	501	583	430	327	303	531

[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.
[2] The KPI for the water resource reduction target has been revised to a 15% reduction in water usage by FY2040 compared to FY2018.
[3] Data for quantity and quality of wastewater is aggregated in accordance with the laws of each country and region.
[4] In accordance with SBT standards, companies that have been excluded from our group since FY2019 are not included.

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

(1,000 kl)

	FY2018 (Base year)	FY2020	FY2021	FY2022	FY2023	FY2024
Total water withdrawal[1]	575	481	496	535	491	455
Fresh surface water	0	0	0	0	0	0
Brackish surface water/seawater	0	0	0	0	0	0
Fresh groundwater, renewable	572	480	494	533	488	452
Fresh groundwater, non-renewable	0	0	0	0	0	0
Produced water	0	0	0	0	0	0
Municipal water (including industrial water)	3	1	2	2	3	3
Reduction rate of water use (vs. FY2018)	-	16%	14%	7%	15%	21%
Water consumption per production volume unit (intensity per ton of product)	15	13	11	11	10	10
Reference: Production volume (1,000t)	38	37	46	47	51	46
Total water discharge[1]	234	198	214	213	233	203
Fresh surface water (processed by the Group)	215	188	207	207	210	194
Brackish surface water/seawater	0	0	0	0	0	0
Groundwater	0	0	0	0	0	0
Third-party destinations	19	10	7	6	7	9
Total water recycled or reused (Drainage of indirect cooling water into rivers)	0	0	0	0	15	0
Proportion of water recycled or reused	0%	0%	0%	0%	3%	0%
Total water consumption	341	283	282	322	259	252

[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.

Sustainable materials sourcing

Sustainable raw materials procurement to support ASV management

Governance

Our business is built on a resilient food system, or in other words, built using stable food resources supported by an abundant global environment and a healthy, vibrant society. At the same time, our business faces environmental and social risks, including greenhouse gas emissions arising at every stage—from raw materials production to—plastic waste, and food loss. Deforestation, peatland development, and the pollution of water resources and soils can damage ecosystems and make it difficult to maintain food resources. Improving animal welfare is also important, since we use raw materials of animal origin. Further, we must ensure that the human rights of every person involved in the supply chain are protected, and that the occupational health and safety of workers is guaranteed. We work hand-in-hand with supply chain stakeholders to address these procurement-related issues and to build a supply chain that has a positive impact on the environment and society. Through these efforts, we contribute to more resilient and sustainable agrifood systems and the restoration of the global environment. The Ajinomoto Group identifies priority raw materials derived from agriculture, forestry, and fishery sources which demand more focused action. The identification process involves first determining all the raw materials used in business operations. We then work with internal divisions and external experts, including NGOs, to conduct periodic risk assessments. In pursuing sustainable procurement, the Group also utilizes frameworks and tools developed in recent years in biodiversity and natural capital to mitigate risks and identify opportunities.

Identification of priority raw materials

Governance

The Ajinomoto Group identifies priority raw materials derived from agriculture, forestry, and fishery sources which demand more focused action. The identification process involves determining all the raw materials used in business operations, which are then analyzed by internal divisions and external experts, including NGOs. We base our assessment on an overall perspective that includes several factors such as dependency on the materials used, availability of alternative materials, and relevance to global environmental sustainability. Priority raw materials are reviewed every year in line with changes in business and global environmental conditions.

> Ajinomoto Group Palm Oil Procurement Guidelines
> Ajinomoto Group Paper Procurement Guidelines
> Ajinomoto Group Coffee Procurement Guidelines
> Ajinomoto Group Soy Procurement Guidelines
> Ajinomoto Group Sugarcane Procurement Guidelines
> Ajinomoto Group Beef Procurement Guidelines
> CDP Corporate Questionnaire 2024
> P029

Metrics and Targets

Ajinomoto Group priority raw materials

	Major countries and regions of procurement
Palm oil	Thailand, Indonesia, Malaysia, Peru, Brazil
Paper	China, Indonesia, Cambodia, Philippines, Vietnam, Malaysia, Thailand, Bangladesh, EU, Türkiye, USA, Canada, Mexico, Brazil, Peru, Australia
Sugarcane	Brazil, Thailand, Vietnam, Peru, Indonesia
Green coffee beans	Indonesia, Vietnam, Ethiopia, Tanzania, Colombia, Brazil
Beef	The United States, Canada, Brazil, Australia, Indonesia
Soybeans	The United States, Brazil, India, Thailand

Initiatives related to raw materials

Risk management

To ensure sustainable raw materials procurement, we must reduce risks across a range of categories, including climate change, waste, biodiversity, and human rights. We believe in the importance of recognizing the relationship between each of these initiatives and pursuing efforts toward synergistic effectiveness. The connection to biodiversity, particularly forests, is critical. To this end, the Ajinomoto Group views raw material initiatives as part of a broader response to issues surrounding natural capital dependency and climate change, and actively assess and manage related risks.

We establish individual procurement guidelines for identified priority raw materials and communicate our approach and 2030 targets to internal and external stakeholders. Specifically, we track the types, volumes, and value of procured materials across the Group, ensure traceability, and increase our use of certified products. We also engage with external partners, including international initiatives, certification bodies, and supplier networks.

The Ajinomoto Group received new certification from the Science Based Targets initiative (SBTi) covering GHG reduction targets that include the FLAG sector (forestry, land, and agriculture). We are advancing No-Deforestation efforts based on our commitments in this initiative for palm oil, paper, soy, and beef by the end of 2025 as part of our priority material strategy.

> P029

Sustainable procurement of palm oil

Strategy

The Ajinomoto Group has established Palm Oil Procurement Guidelines which stipulate criteria that must be met by the palm oil we procure. The Ajinomoto Group uses palm oil in a variety of products and applications, from packaged food products such as cup soup, instant noodle, and coffee creamer, to specialty chemicals made in Japan, Southeast Asia, Europe, and South America.

Certain products use palm kernel oil, which is harder to procure in certified form. Further, certain regions have limited supplies of certified palm oil. Therefore, the Group continues to purchase palm oil certified by RSPO and confirm traceability. In regions where it is difficult to procure RSPO-certified oil, we make every effort to confirm traceability. In so doing, we ascertain whether production takes place in regions where environmental destruction is a concern. In addition, we can respond quickly if human rights violations or other problems occur. The Ajinomoto Group procured 37 kilo tons of palm oil in fiscal 2024, 34% of which was RSPO-certified. We advanced risk assessments during the same year aimed at achieving a deforestation-free supply chain by engaging in dialogue with local suppliers and using satellite monitoring and other tools. One example of such efforts involved Wan Thai Foods, our instant noodle business in Thailand and the largest palm oil procurer in the Group. We conducted on-site visits to both refineries and plantations while holding discussions with palm oil suppliers to encourage sustainable, deforestation-free sourcing. The Ajinomoto Group will engage in dialogue with stakeholders to expand sustainable palm oil procurement further beginning in fiscal 2025.

FY2024 palm procurement volume	FY2024 RSPO-certified palm oil ratio	FY2024 traceabiloty ratio[1]
37 kilo tons	34%	93%

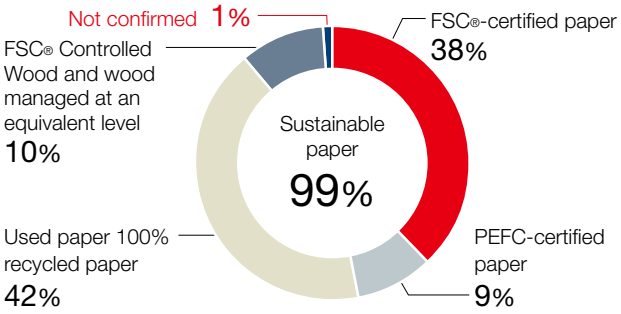
[1] Traceability to oil mill.

Sustainable procurement of paper

Strategy

The Ajinomoto Group has established Paper Procurement Guidelines which stipulate criteria that must be met by the paper we procure. We procure paper that is not derived from deforestation in areas of high conservation value and paper that is procured from suppliers who use proper production procedures in accordance with local laws and regulations, as well as in line with international human rights standards. Paper that meets Ajinomoto Group guidelines includes not only FSC®-certified and other certified paper, but also recycled paper and paper made from FSC® Controlled Wood. We used paper that met our procurement guidelines for 99% of total paper usage in fiscal 2024.

FY2024 paper procurement results



Promoting procurement of sustainable sugarcane

Strategy

The Ajinomoto Group uses sugar obtained from various crops, including sugarcane, sugar beet, cassava, and corn as raw materials for fermentation. We designated sugarcane as a priority raw material.

In fiscal 2024, we continued to assess risks related to sugarcane-based raw materials used for fermentation, which account for the largest share of our sugarcane-derived procurement, using the TNFD's LEAP approach. We also worked to secure traceability to the sugar mill level.

We launched efforts to identify issues in Thailand, one of our key regions, through direct dialogue with suppliers and sugarcane farmers. In Indonesia, we launched a joint initiative with the Indonesian Sugar Research Institute (ISRI/P3GI) to evaluate farming methods that support both improved farmer livelihoods and environmentally responsible sugarcane production.

We intend to advance supply chain visibility further and expand procurement of certified products in fiscal 2025. We will also align these efforts with other initiatives, including GHG emissions reduction, and work with producers and suppliers to accelerate sustainable sugarcane production.

FY2024 traceability ratio
90%

[1] Traceability to sugar mill.
[2] Results of six Group companies that together account for over 90% of procurement across the Ajinomoto Group.

Sustainable procurement of coffee beans

Strategy

Coffee beans are produced in areas rich in biodiversity. And much of that production is from small farmers. In procuring coffee beans, we recognize the need for safer, more secure working environments for producers and the importance of working to improve agricultural productivity, in addition to acting with concern for the global environment.

The Ajinomoto Group endeavors to advance sustainability in the production and distribution of coffee beans by procuring beans produced at farms that adhere to standards set by the 4C certification system and ensuring traceability. AJINOMOTO COMPANY (THAILAND) LIMITED, which sells Blendy, the top canned coffee brand in Thailand, procures 4C-certified imported coffee beans. The company also advances sustainable coffee production through a Thai GAP project and works to ensure traceability to the farm level.

Starting with the first 4C certification logo in Asia on the packaging for stick coffee released in August 2020, we have promoted ethical consumption related to the sustainable procurement of coffee beans. As of March, 2025, a total of 38 products now have the 4C certification logo. The Group has been continuing with tests in different coffee-producing regions with the goal of using high value-added fertilizers made from by-products (co-products) of fermentation processing of amino acids. Our hope is that, eventually, this coffee will be part of a Group circular economy. In particular, we continue to support farms in Vietnam and Brazil through AJIFOL® fertilizer co-product. In Colombia, we improve product value and support producers by helping rebuild the lives of farmers displaced from their land by civil war.

■ Vietnam

We will expand and continue to support the application of high value-added fertilizer in the Krong Nang/Ea H'leo districts of Dak Lak province, and the Ham Rong/Dak Doa districts of Gia Lai province. We also survey the effects (sugar content, ratio of red fruit, size) on the yield and maturity of the harvested crops.

■ Brazil

We examine the effect of harvest on unit yield and ripeness (sugar content, ratio of red fruit, size) by providing AJIFOL® fertilizer co-product.

FY2024 green coffee procurement volume
49 thousand tons

FY2024 4C-certified or traceable green coffee ratio
36%

[3] Traceability to farm.

Initiatives related to raw materials

Strategy

The Ajinomoto Group began efforts to understand the beef supply chain, starting with ensuring traceability, as part of our goal to achieve sustainable beef procurement by fiscal 2030. Four companies accounted for over 90% of our total beef procurement volume in fiscal 2024, with traceability confirmed at 100% to the slaughterhouse level and 9% to the final farm.

A comprehensive assessment conducted in fiscal 2021 identified Australia as a high-risk region for deforestation. Based on this finding, we plan to prioritize verifying that Australian beef is not linked to deforestation. We will engage with Australian beef suppliers in fiscal 2025 to encourage no-deforestation practices and improve visibility across the entire beef supply chain.

Traceability to slaughterhouse
100%

* Results of four Group companies that together account for over 90% of procurement across the Ajinomoto Group.

Sustainable soybean procurement

Strategy

The Ajinomoto Group aims to procure 100% sustainable soybeans by fiscal 2030. We are currently considering specific initiatives that include the purchase of certified soybeans and traceability. In fiscal 2024, 70% of the soybeans and soybean oil used by Ajinomoto Group companies in Japan met the United States Soybean Sustainable Assurance Protocol (SSAP certification). The remaining soybean products were sourced from South America, a region considered high risk for deforestation and important from a GHG emissions reduction standpoint. We conducted site visits along the supply chain from farms to export facilities and held discussions with local suppliers to address this issue. We are also expanding procurement from soybean producers committed to no-deforestation practices.

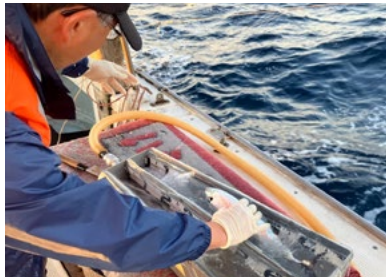
We remain committed to ensuring traceability and engaging with suppliers as we pursue sustainable soybean procurement in fiscal 2025.

Monitoring sustainable procurement of fishery resources

Strategy

The Ajinomoto Group uses skipjack as an ingredient in HON-DASHI®, our popular flavor seasoning product in Japan. We are committed to conserving resources and sustainable procurement. Therefore, we have conducted the joint skipjack tagging survey with the Research Institute of Fisheries Resources in Japan since 2009. In fiscal 2020 and fiscal 2021, due to the impact of the COVID-19 pandemic, travel to Taiwan and the remote islands of Okinawa Prefecture, where we had previously conducted skipjack tagging surveys, proved difficult, and we were unable to conduct further tagging surveys. In fiscal 2022, however, we resumed skipjack tagging surveys in the waters around Amami Oshima Island, where previous surveys confirmed skipjack are migrating.

We conducted a skipjack tagging survey off the coast of Makurazaki City, Kagoshima Prefecture in fiscal 2024. In southern Kyushu, we accumulated data on skipjack migration routes and investigated the impacts of the winding Kuroshio Current and rising sea water temperatures on skipjack distribution. We also visited the Hachijojima Branch of the Tokyo Metropolitan Islands Area Research and Development Center for Agriculture, Forestry and Fisheries, located closer to our primary skipjack tuna fishing grounds, and held discussions. In fiscal 2025, the Ajinomoto Group is focusing on analyzing the data accumulated to date and considering expanding the survey area.



> WCPFC

Animal welfare

The five initiatives of the Group Shared Policy on Animal Welfare

Governance

The Ajinomoto Group deals with animals throughout our businesses and product development, with animal-derived ingredients such as meat, eggs, and extracts being essential. In the Group Shared Policy on Better Mutual Relationships with Animals established in 2018, the Group defines our approach to procurement in keeping with the concept of animal welfare, and shares this policy with all primary suppliers in Japan when we start working with them. Also, so that we can respond flexibly to social trends and demands, we hold dialogues with experts in the field of animal welfare and exchange opinions with stakeholders regarding livestock. Given these, the Group policy above was renamed in 2021 as the Group Shared Policy on Animal Welfare. This was updated with more specific content, and shared with all primary suppliers within Japan.

The Group Shared Policy on Animal Welfare describes five initiatives. Among these initiatives is the development of technologies for effective utilization and substitution of animal-derived raw materials. Here, we leverage our strengths in *Deliciousness Technologies*® and leading-edge bio-technologies to develop technologies, ingredients, and product lines that reduce the use of animal products without sacrificing taste, as well as technologies and ingredients that allow for the substitution of animal proteins.

> Group Shared Policy on Animal Welfare

The Ajinomoto Group approach to egg procurement

Strategy

On the basis of our Group Shared Policy on Animal Welfare, Ajinomoto Co., Inc. has set out the Ajinomoto Approach to Egg Procurement. With this approach, we promote stable and sustainable procurement to ensure the safety and security of our product quality by working in cooperation with the relevant stakeholders.

We recognize that the supply chain for eggs differs around the world, and we will make decisions around the procurement of cage-free eggs based on the local situation in each region and market. In Europe, we aim to switch all eggs used in the production on our products to cage-free eggs. In France, we have set a goal to procure 100% cage-free eggs by 2025. In Japan, we support and participate in an initiative developed by the Japan Association of Mayonnaise & Dressings, an industry organization of which we are a member. Based on "The Association's Views and Policy on Animal Welfare for Laying Hens", the initiative promotes a flexible, comprehensive approach to animal welfare that emphasizes the principles of the "Five Freedoms" while taking into account Japan's unique environment and the varied circumstances of local producers.

> The Ajinomoto Group Approach to Egg Procurement

Commitment to Minimizing Animal Testing

Metrics and Targets

In April 2021, the Ajinomoto Group announced our Approach to Minimizing Animal Testing. We clearly state that we will not test seasonings, processed foods, frozen foods, and beverages using animals. The only exception will be when it is required by law or by national or government authorities. In addition, our efforts to minimize animal testing are leading us to develop alternative technologies and to adopt replacement methods to using animals.

> Commitment to Minimizing Animal Testing

Ongoing engagement

Risk management

We have continued our ongoing engagement with the experts, producers, NPOs and NGOs who participated in the Animal Welfare Roundtable and Working Group held in 2020.

■ Experts

We participate in recurring meetings with experts and gatherings of industry associations to obtain information on trends in animal welfare, government administration, and other relevant matters.

■ Producers

We are gaining a greater understanding of the condition of our livestock feedstock through dialogues with our suppliers and producers. As interest in animal welfare rises in Japan, these dialogues provide an opportunity to share the challenges in the field and changes in the external environment.

■ NPOs and NGOs

Every year, we conduct multiple engagements with domestic and international NPOs and NGOs. These are opportunities to share the latest global trends and discuss the current status and challenges facing the Ajinomoto Group that are related to animal welfare.

■ Consumers

We held a dialogue with high school students engaged in activities to improve animal welfare, exchanging opinions on the state of animal welfare in Japan, as well as discussing the Ajinomoto Group approach and initiatives related to this topic.