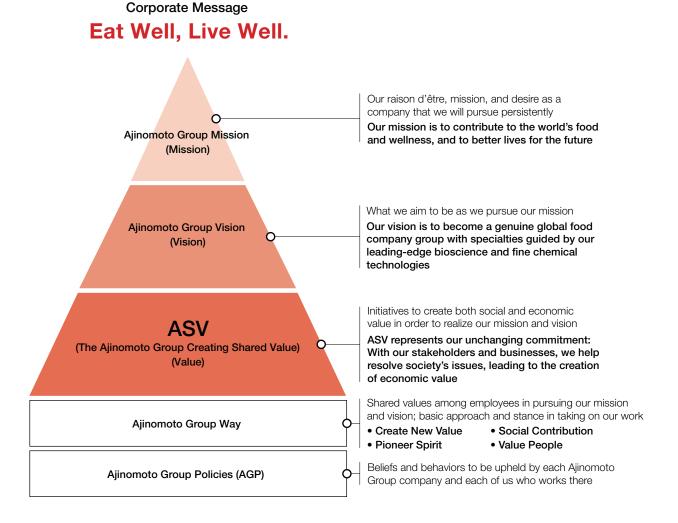


Ajinomoto Group Sustainability Data Book 2019

#### **Our Philosophy**

Since its founding, the Ajinomoto Group ("the Group") has been consistently engaging in initiatives to resolve social issues through its business. By improving economic value through the creation of shared value with society and local communities, these initiatives have contributed to the Group's growth. These kinds of initiatives have been named ASV (The Ajinomoto Group Creating Shared Value). ASV has been positioned at the core of the Group's corporate philosophy "Our Philosophy" to realize the mission and vision adopted under this philosophy.



#### **Editorial Policy**

This sustainability data book is a supplement to the integrated report, organized by the materiality items.

Through this report, the Group hopes to deepen the understanding of all of its stakeholders, starting with shareholders and other investors, regarding its approach to realizing sustainable growth.

#### Organizational Scope

This report covers the activities of the Group, comprising, unless otherwise noted, Ajinomoto Co., Inc. ("the Company") and its Group companies (as of March 31, 2019), including consolidated subsidiaries and other Group companies subject to reporting under the equity method. Where sufficient information for the entire Group was unavailable, the limitation in scope is explicitly defined.

#### Period Covered by This Report

Fiscal 2018 (April 1, 2018 to March 31, 2019)

When appropriate, however, exceptions to this general rule are made, as when citing past circumstances and data or using recent examples for illustration purposes.

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### **Integrated Report 2019**

URL

https://www.ajinomoto.com/en/ir/library/ annual.html





More detailed information is available on our corporate website.

https://www.ajinomoto.com/en/activity/



# Framework for ESG and sustainability

The Ajinomoto Group has been striving to foster a Group-wide understanding of ASV as the core of corporate strategies for realizing its vision over the medium- to long-term. In its FY2017-2019 (for FY2020) Medium-Term Management Plan ("17-19 MTP"), the Group set non-financial targets in line with international initiatives such as the SDGs and Paris Agreement, and is now working to quantify these objectives while managing progress through PDCA.

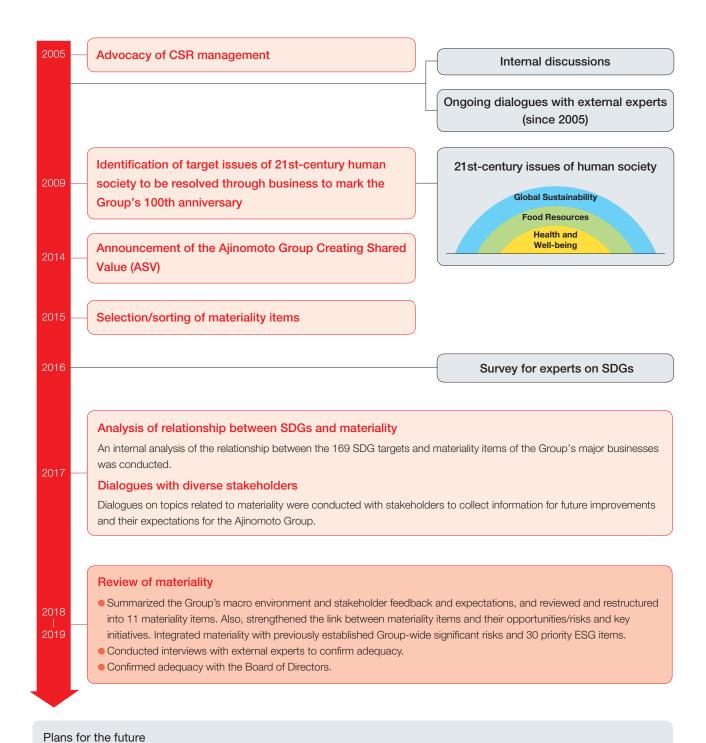
For ESG and sustainability management, the Group has been building and implementing a management system modeled after ISO 9001, ISO 14001 and other standards, based on the Ajinomoto Group Policies (AGP) and relevant internal rules, and has been also keeping processes optimized on a continual basis.

In addition, the Management Risk Committee was placed directly under the Executive Committee to establish measures across organizations for managing risks and opportunities, including climate change and social issues, at the management level of the entire Group. The committee is chaired by the executive officer in charge of the Corporate Planning Department, and the chair summarizes the discussions at committee meetings and reports to the Executive Committee and Board of Directors at least once a year.

From fiscal 2018 to 2019, the Management Risk Committee organized separate working groups on the subjects of plastic waste, sustainable procurement (human rights, animal welfare and the environment), and Task Force on Climaterelated Financial Disclosures (TCFD), to work on formulating policies and project planning.

## Identification of material issues

To develop its business activities, the Ajinomoto Group identifies the materiality items that have a substantial impact on the Group's ability to create value through ASV and determines their order of importance and priority.



 Carry out concrete activities based on the restructured materiality. Collect feedback from stakeholders on the restructured materiality. Review materiality every year with the fast changing social conditions.

# Ajinomoto Group materiality

In 2019, the Ajinomoto Group revised its materiality items based on the recent social conditions and the views and expectations of its stakeholders. In addition, the Group aims to create value by identifying opportunities and risks from the materiality items and developing corresponding initiatives.



Ajinomoto Group corporate message Eat Well, Live Well.

#### Health and well-being

Realize wellness for people around the world

#### Related SDGs







### **Materiality items**

Assurance of product safety

Contribution to health and nutritional issues

Rapid response to consumer lifestyle changes

P9 P32

#### Food resources

Maximize limited food resources and provide more value

#### Related SDGs









Sustainable materials sourcing

Reduction of food loss and waste

P33 P48

#### Global sustainability

Reduce impact of business activities for global sustainability

#### Related SDGs











Contribution to a circular economy

Climate change

adaptation and

mitigation

P49 P61

Conservation of water resources

#### **Business foundation**

Create a corporate group that grows sustainably

#### Related SDGs





#### Diverse talent

Strong corporate governance

Preparation for intense global competition

P66 P90

▶ For details, please see the Ajinomoto Group Materiality

[4] Intergovernmental Panel on Climate Change, 2013

[5] 2018 Revision of World Urbanization Prospects, UN

▶ Integrated Report 2019 P11-12

# List of stakeholders

The Ajinomoto Group aims to maintain ongoing dialogues with various stakeholders and incorporate their feedbacks into its corporate activities, in order to sustainably create value as a "Genuine Global Specialty Company."

Stakeholders	Key engagement opportunities
Customers/Consumers	Customer call centers  AJINOMOTO. Park. recipe & community website  Factory tours
Shareholders/Investors	<ul> <li>General meeting of shareholders</li> <li>Analysts' meetings on financial results</li> <li>Briefings on Integrated Report Topics for institutional investors</li> <li>Online company briefings for individual investors</li> </ul>
Suppliers	<ul><li>Food defense explanatory meetings and audits</li><li>Sedex briefings</li></ul>
Employees	<ul> <li>By-rank/division training</li> <li>Engagement Survey</li> <li>AGP worksite meetings</li> <li>Whistleblower hotline</li> <li>Harassment advisory service</li> </ul>
Local Communities	<ul> <li>Factory dialogues with neighborhood residents</li> <li>Participation in and sponsorship of community events</li> <li>Recovery assistance for communities affected by natural disasters</li> <li>Activities through the foundation (in four countries)</li> </ul>
NPOs/NGOs and external experts	<ul> <li>Hearings for identification of material issues</li> <li>Keynote speech by the President and CEO at the Sustainable Brands conference</li> <li>Meeting between CDP CEO Paul Simpson and the Corporate Vice President</li> <li>AIN program for supporting NPOs/NGOs working in the food and nutrition field<sup>[1]</sup></li> <li>[1] Supports through a foundation</li> </ul>

# Expectations and recommendations from external stakeholders

To continue responding to varying sustainability requirements in different parts of the world, the Ajinomoto Group collected opinions from local experts on the Group's overall approach to sustainability and specific initiatives regarding human rights, the environment and other issues.

I think there is an opportunity for the Ajinomoto Group take leadership in driving crosssector partnership for changing perceptions of food as a contributor to healthy lifestyles - collaborations with partners through the lifecycle value of food and the food supply/ value chain to identify ways to optimize the entire food chain as it meets new and diverse needs. This could include consumers, suppliers and customers and also other companies in the same space-manufacturers using the Group's ingredients and healthcare companies advancing healthy nutrition. The entire food/consumer ecosystem needs to be mapped to drive optimization for targeted needs.

I'd also like to see more science behind the value of amino acids in food and the regenerative properties – how can the Group prove the value of the core proposition through research in current lifestyle settings.



Elaine Cohen Founder and CEO Beyond Business Ltd.

With its new materiality framework, the Ajinomoto Group continues to crystalize the connection between material ESG items and the Group's overall business strategy - a positive, forward-looking development. As risks and opportunities associated with specific materiality items are explored, I look forward to reading the Group's financial impact analysis.

For example, as single-use plastic bans proliferate, rethinking containers and packaging will become increasingly important. In line with the TCFD recommendations, I believe that using climate-related scenario analysis as a lens to inform climate change adaptation efforts will further focus and streamline the Group's business strategy and initiatives.

In the future reports, I hope to see measurable, time-bound targets for all the material items.



Celine Solsken Ruben-Salama FOR THE LONG-TERM, LLC Lecturer and Faculty Advisor M.S. Sustainability Management Program, Columbia University (NY)

The Ajinomoto Group is at the forefront of executing good practices of corporate sustainability and governance, living up to high expectations of social responsibility and sustainable development. In my perspective, the approach that the Group should look forward to is developing impact strategy in order to connect between actual initiatives and measurable social impact. I hope to see the Group conducts more localized multi-stakeholder initiatives to better address specific issues for each country/region of its operations.

The Group could organize outreach activities that are related to various stakeholder groups along the value chain, including capacity building for lower tier suppliers, education for underprivileged people in agricultural sector, etc. Internally, moving towards "happy workplace" should be one of the top priorities for the Group especially in the era that Generation Y and Z are coming into workforce.



Vasu Srivibha Chief Impact Officer Sasin School of Management Chulalongkorn University (Thailand)

#### Dialogues and Collaboration with Stakeholders

In the future, I hope to see the Ajinomoto Group work on more initiatives toward the SDG Goal 17: Partnerships for the Goals. Creating partnerships is not for a specific problem area, rather it is a process and stance in tackling all issues. As a global company, how does the Group promote cross-border initiatives, and how does it co-create value not just within the industry and the Group but also with NGOs and local communities? I believe that this is an extremely important point that improves the quality and outcome of its activities, and leads to higher corporate value as a source of innovation.



Junko Edahiro President, e's Inc. Professor, Graduate School of Leadership and Innovation, Shizenkan University President, Institute for Studies in Happiness, Economy, and Society (ISHES)

While it may not be aligned with the medium-term plan timeline, I would like the Ajinomoto Group to show its long-term (2030) business vision from here on. The Group may, for example, set highly challenging goals such as closing the loop for carbon (fossil resources) or food resources. As a leader in the food industry, I hope that the Group will take the lead in transforming our world by revolutionizing the Japanese food industry and creating crosssectoral collective impact.



Hidemi Tomita Director Lloyd's Register Japan Co. Ltd.

Providing a workplace where employees can feel safe and engaged in their work is the foundation of companies, and is of the highest priority in terms of securing the best human resources. With greater human resource mobility as Japanese companies move away from traditional lifetime employment, investment in human resources will likely be even more important in the future. I have heard that Japanese companies are sensitive to the herd instinct, and that it is sometimes difficult for one company alone to go one step further to work on sustainability. As the Ajinomoto Group aims to become a Global Top 10 Class Food Company, I hope that it will reconsider its corporate ideals and become a leader in sustainability in Japan and globally. Achieving all these will help ensure future corporate sustainability, including profitability.



Takeshi Shimotaya **Executive Director** The Global Alliance for Sustainable Supply Chain

# **Health and Well-being**

#### Realize wellness for people around the world

What we demand from food, such as safety and security, good nutritional balance and connection between people, continuously change with the times and the country or region. To meet the diverse food needs and lifestyle changes, the Ajinomoto Group aims to provide healthy, delicious, high-quality products and services.



#### Contribution to health and nutritional issues P18 Specific · Undernutrition and overnutrition (customer welfare) · Regenerative medicine examples · Nutrition for infants, young women, and seniors · Preventive medicine · Well-being Related O Rising health awareness and needs of consumers opportunities Brand trust and risks Enhancing corporate value (○ Opportunity ● Risk) Key initiatives by · Offering tasty food and amino acid products as well as menus that nourish health and well-being the Ajinomoto $\cdot$ Low-salt, low-sugar and low-fat products Group · Promoting protein intake · Contributing to disease prevention with "AminoIndex technology" · Developing nutritional standards that Group products should meet Customized programs to each consumer for improving nutrition (personal nutrition)

#### Rapid response to consumer lifestyle changes P30 Specific · Fair marketing and advertising · Response to diversification of values (smart cooking, joy of eating) examples · Product access and affordability · Eating alone, eating personalized meals O Enhancing corporate reputation by offering the joy of eating together Related O New value creation using digital technology opportunities and risks Loss of growth opportunities due to delayed response to consumer lifestyle changes or diversifying values (○ Opportunity ● Risk) Impact on seasonings business due to less cooking time and skills Key initiatives by Creating strong communities and social bonds through food the Ajinomoto Advanced marketing efforts by leveraging big data and consumer data Group Building strategies to deal with smaller markets (due to urbanization, etc.) Properly delivering products, services and information to customers Expanding products and services to meet the need for convenience, such as smart cooking

**Targets** 

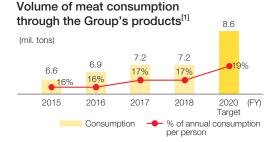
GRI203-DMA

Since its founding, the Ajinomoto Group has aspired to promote health by making nutritionally rich, delicious food that make good use of umami widely available and has spread this message across the world. Aside from making proteins and vegetables tastier through the umami seasoning AJI-NO-MOTO® and other products, the Group offers well-balanced meals and menus that suit the food culture and help meet various food and nutritional issues and needs of each country and region for a richer daily diet.

By pursuing a balance between deliciousness and nutrition, the Group has constantly aimed to help people live well by nourishing both mind and body. Smart cooking, which lets anyone cook easily and encourages people to enjoy cooking even if they are busy, creates spare time and helps support diverse lifestyles. Increasing opportunities for eating together to connect people and families, and offering beverage and other products, also create more relaxation and peaceful time. Based on the corporate message "Eat Well, Live Well.", the Group aims for continuous contribution to greater wellness for people by creating value with communities and society through its business.

#### FY2020 Targets for Health and Well-being

#### Better nutritional balance by eating more protein and vegetables with umami



#### Volume of vegetable consumption through the Group's products[1]



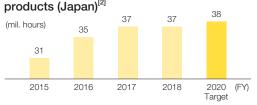
#### More eating together

#### Contribution to people eating together through the Group's products[1]



#### Realizing smart and delicious cooking

### Spare time created through the Group's



#### Realizing comfortable lifestyles for people

#### Contribution to comfortable lifestyles through amino acid products (AminoScience)[3]



- [1] Japan: Five types of menu-specific seasoning Cook Do products and frozen Gyoza (Japanese-style dumplings), Five Stars (Thailand, Brazil, Indonesia, Vietnam, the Philippines): flavor seasonings
- [2] Japan: Frozen foods (Gyoza, Yawaraka Wakadori Kara-Age (fried chicken), The ★<sub>®</sub>CHA-HAN (fried rice)) and three types of Knorr® Cup Soup
- [3] Amino acids for pharmaceutical and health food use, aminoVITAL®, No Mikata®, Glyna®, etc.

#### Approach

#### GRI416-DMA GRI417-DMA

- ▶ Group Shared Policy on Quality
- Group Shared Safety

# Quality management

Since its founding, the Ajinomoto Group constantly strives to put the customer first by its commitment to the safety of products and services. Assurance of product safety has been identified as one of the Group's material issues.

To provide product safety, it is essential to have comprehensive quality assurance systems and proper disclosure. In addition, the Group listens carefully and responds to customer needs to deliver products and services that earn the trust of customers and ensure their satisfaction.

#### Ajinomoto System of Quality Assurance (ASQUA)

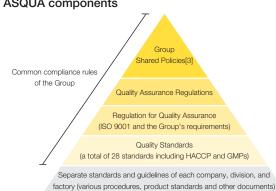
The Ajinomoto Group has its own quality assurance system, ASQUA. As of March 2019, ASQUA has been applied to 105 Group companies.

Its core content is based on ISO 9001, the international quality management system standard, and supplemented by manufacturing management standards such as Hazard Analysis and Critical Control Points (HACCP)<sup>[1]</sup>, Good Manufacturing Practices (GMPs)<sup>[2]</sup>, and the Group's own rules and requirements. ASQUA is also composed of common compliance rules of the Group as well as rules established by each internal organization.

#### **ASQUA framework**



#### **ASQUA** components



#### Quality standards

- 1. Document Control (1)
- 2. Educational Training (1)
- 3. Establishing Specifications, Examination (3) Establishing Quality Specification
- •Establishing Packaging Material Specification •Establishing Examination Frequency
- 4. Quality Assessment (1)
- 5. Purchasing (2)
- Quality Control of Ingredients
- Quality Control of Subcontracted and Procured
- 6. Manufacturing (10)
- •Food GMP\*
- •GMP for Food Additives
- •GMP for Personal Care Ingredients\* •GMP for Active Pharmaceutical Ingredients •GMP for Pharmaceutical Drug Products\*
- •GMP for Feed Use Amino Acids\* •HACCP
- Food Defense[4] Product Labeling
- Safety and Sanitation of Food Packaging
  - \*Adapted to suit specific products
- 7. Preservation and Transportation (2) Preservation and Transportation of
- Products
- Management of Warehouse
- 8. Quality Information (2)
- •Quality Information Manag
- Traceability
- 9. Handling of "Voice of Customer" (4) Responding to Complaint
- Determination of Responding to Quality Emergencies

10. Accommodating Religious

Beliefs (2)
•Halal[5] Control

•Kosher[6] Control

- •Handling of "Voice of Custome •Effective Reflection of "Voice of Customer
- [1] Management standards for manufacturing foods in a safe and sanitary manner
- [2] Standards relating to manufacturing management
- [3] Group Shared Policy on Quality, Group Shared Policy on Food Safety
- [4] Measures to prevent deliberate tampering with products. Monitoring is carried out at every stage from raw material procurement to product sales
- [5] Halal means permissible and legitimate in Arabic. The word indicates things and actions that are allowable to use and handle under Islamic law. Halal also refers to foods that followers of Islam are permitted to eat.
- [6] Kosher means fitting or appropriate in Hebrew, or foods that followers of the Jewish faith are permitted to eat.

Framework

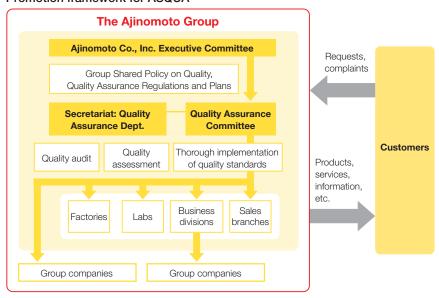
GRI416-DMA GRI417-DMA

#### **Promotion Framework for Quality Assurance**

The Ajinomoto Group established the Quality Assurance Committee under the Executive Committee to deliberate on policies and various measures regarding quality assurance.

The Quality Assurance Committee drafts basic policies and plans based on customer feedback, and promotes their Group-wide implementation once approved by the Executive Committee. The status is reviewed by the Quality Assurance Committee every six months.

#### Promotion framework for ASQUA



#### **Initiatives for Third-Party Certification**

The Ajinomoto Group encourages the acquisition and maintenance of third-party certification of ISO 9001. As of March 2019, 60 out of 82 eligible Group companies have acquired ISO 9001 certification. For the eligible companies not yet certified (many of which are newly acquired or established companies), the Group is working to build quality assurance systems for certification. In cases such as receiving customer requests, the Group also acquires certification of other standards such as FSSC 22000 approved by the Global Food Safety Initiative (GFSI).

#### FY2017-2019 Ajinomoto Group Medium-Term Plan for Quality Assurance

For quality assurance, the Group is focused on working on the following topics for the period of the 17-19 MTP. Refer to related sections for details of each initiative.

Guidelines	Key targets
Keep faith with customers	Reduce product quality claims and problems, and work harder to prevent them
Fulfill customers'expectations	Secure attractive quality improvements and gain customer trust through interactive communication with customers
Aim for adequate management	Pursue through ASQUA-based quality assurance activities
Aim for adequate management	Develop human resources to improve quality assurance levels

#### Performance

GRI416-DMA GRI417-DMA

#### Human Resources Development to Raise Quality Assurance Levels

The Ajinomoto Group focuses on human resources development to further improve quality assurance levels. Each year, the Group reviews its quality training plan, and implements systematic programs to meet the needs of individual organizations. Continuing with its efforts from the previous fiscal year, the Group also expanded its e-learning training programs in fiscal 2018.

#### Main programs in fiscal 2018

- Japan
  - · Programs for Group employees by Ajinomoto Co., Inc.
  - · Programs for quality assurance managers for posting to overseas offices
  - · "Ajinomoto Management and Technical Conference on Quality" for Group company executives and employees: Approx. 400 participants
  - · ISO 9001 food product business operations training for newly transferred employees (e-learning)
- Overseas
  - · ASEAN Quality Assurance Seminar, EU Quality Management System (QMS) Meeting, China Quality School.
  - · Regional Quality Assurance Management (RQM) Training Course for general manager candidates of quality assurance divisions in regional headquarters (e-learning)
  - · QMS Training Course for managers responsible for quality assurance in Group companies (e-learning)

#### TOPIC

#### Convey the right information on umami and MSG worldwide

The umami substance monosodium glutamate (MSG) has been the object of vague unease and concerns about safety since the 1960s. As a global leader that first commercialized MSG products in the world, the Ajinomoto Group believes in the need to convey the right information and communicate its benefits to consumers, especially now when there is heightened interest in food safety and health.

As part of these efforts, the Group held the World Umami Forum (WUF) in New York City in September 2018. Experts on food and nutrition, history, and science delivered talks, and a cooking competition on the use of umami was held. At the panel discussion on misconceptions regarding MSG, five experts in various fields corrected these misconceptions and talked about the importance of education and providing correct information going forward.

In Japan, a media conference was also held in April 2019 on social issues in food product labeling, particularly on the correct understanding of umami seasoning (MSG) and its benefits. Outside experts on food additives also engaged in in-depth discussions on its benefits and to dispel misconceptions about MSG. In the post-event survey, more than 90% of participants said that it was informative. Moving forward, the Group is considering holding seminars and other activities that leverage the networks of dietitians and chefs, and actively expanding communications to disseminate correct information on umami and MSG.

▶ Integrated Report 2019 P41-42

# Quality assurance across the supply chain

#### Quality Assurance Initiatives at Each Step by ASQUA

The Ajinomoto Group practices strict quality assurance by globally applying the Ajinomoto System of Quality Assurance (ASQUA) at each step from product development to customer communication. These efforts are guided by the Group Shared Policy on Quality and the Group Shared Policy on Food Safety.



## Policy on Quality

Framework

GRI102-9

GRI102-10

GRI414-DMA GRI414-1 GRI416-DMA ▶ Group Shared

▶ Group Shared Policy on Food

#### Development

To deliver safe, high-quality products, the Ajinomoto Group strictly implements quality assessments in each phase of the product development process in accordance with the ASQUA Standard for Quality Assessment. Only products that pass all of these assessments reach customers.

#### Raw material procurement

The Ajinomoto Group selects suppliers according to the ASQUA Standard for Quality Control of Ingredients. The quality of raw materials purchased from suppliers is strictly controlled through lot-by-lot inspections.

The Group works with its suppliers to improve quality and reduce quality risks through measures such as regular appraisals, quality audits, information sessions and surveys. Through closer cooperation with suppliers, the Group is making continuous quality improvements. 13 suppliers were newly selected/engaged in fiscal 2018.

#### Framework / Performance

GRI102-9 GRI308-1 GRI416-DMA GRI416-1

#### Supplier audits in fiscal 2018

Audited organization	Audited items	Number of audits
Group Procurement Center, Ajinomoto Co., Inc.	Raw materials	166
Group Frocurement Center, Ajmornoto Co., inc.	Packaging materials	67
Ajinomoto Frozen Foods Co., Inc.	Raw materials	83

#### Performance

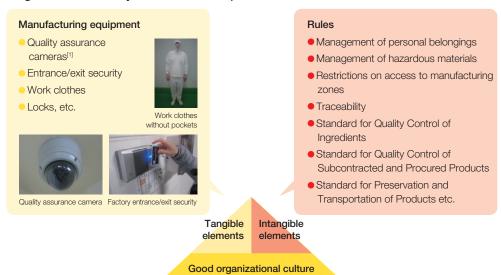
GRI102-9 GRI414-2 GRI416-DMA GRI416-1 GRI416-2 GRI417-2

#### Production

Structural enhancement for food safety

The Ajinomoto Group believes that creating a workplace culture that is open and based on the trust of its employees is the key to making its food safety system more robust. In addition, the Group is reviewing and improving its tangible elements such as production facilities, and intangible elements such as quality standard and guidelines, to minimize the risk of intentional product tampering and strengthen quality assurance across the supply chain.

#### Diagram of food safety assurance concept



[1] Cameras to monitor for accidents and errors in the factory. Quality assurance cameras help to gain customer confidence.

#### Measures to prevent manipulation of quality-related data

In order to prevent manipulation of data related to product quality, the Ajinomoto Group is working to improve its workplace culture to foster employee compliance and awareness of quality assurance from the customer's perspective. The validity of data related to development, production, and the functional features of food products is evaluated and judged objectively and fairly at quality assessment meetings and by committees of internal experts. To ensure the proper operation of these systems, they are continually verified by means of internal quality audits and third-party certification audits.

In addition, systems that can store analysis data on manufactured pharmaceuticals and active pharmaceutical ingredients without manipulation are required as a global standard; the Group is strengthening management based on such standards and applying them to its other businesses.

#### Initiatives to reduce quality-related claims and incidents

The Ajinomoto Group carefully investigates each quality-related complaint and incident to identify the cause and prevent recurrence. Details of any quality-related incident and information on preventative measures are promptly communicated to Group companies both home and abroad to prevent recurrences.

In fiscal 2018, there were two recalls due to quality and another two due to mislabeling.

#### Number of recalls and collections from distribution by the Ajinomoto Group

FY2014	FY2015	FY2016	FY2017	FY2018
0	3	6	4	4

▶ P32

#### Framework

GRI102-9 GRI416-DMA

#### Performance

GRI102-9 GRI416-DMA GRI417-DMA GRI417-1

▶ Ajinomoto Group **Quality Assurance** 

#### Framework

GRI102-9 GRI416-DMA GRI417-DMA GRI417-1

#### Distribution

Product quality, which includes factors such as freshness, temperature and moisture, is strictly controlled during storage and transportation from factories until it reaches customers. These activities follow ASQUA standards (in Japan only) on the management of storage, transportation, warehouses, and other operations.

#### Sales

The Ajinomoto Group shares helpful information on its packaging and websites, so customers can purchase and use its products with greater peace of mind.

#### Product packages

The packages of retail products marketed by the major Group companies in Japan indicate not only all legally required information but also the following kinds of quality-related information (except when space is limited, etc.).

- Method of storage (once opened)
- Product usage warnings
- Explanations of raw materials that may be unfamiliar to customers and prompt a large number of inquiries
- Easy-to-identify list of allergens (both mandatory and recommended)
- Easy-to-identify labeling of packaging materials
- Customer service contact

#### Websites

Group company websites provide information tailored to their local customers, including product information, recipes and product FAQs. The websites of Ajinomoto Co., Inc., Ajinomoto Frozen Foods Co., Inc. and Ajinomoto AGF, Inc. provide clear and accessible information on their respective quality assurance systems and other quality-related topics.

The Ajinomoto Group corporate website<sup>[1]</sup> now includes a section that highlights the Group's quality assurance activities in seven languages, and provides more extensive information. In fiscal 2018, Spanish was added to the previous offering of six languages.

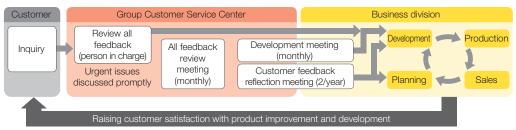
[1] The Company manages two sites: a corporate website, which focuses on Aijnomoto Group activities, and a product website, which presents information on the Company's products.

#### Customer feedback

#### Initiatives to reflect customer feedback

The Ajinomoto Group welcomes feedback from customers, which is used to develop attractive products and services and make improvement according to the ASQUA standard. In fiscal 2018, the operation based on the same standard, used at the Group companies in Japan as well as Brazil, Thailand, Vietnam and Indonesia, was rolled out in Peru.

#### Product development system reflecting Voice of Customer (VOC) at the Group Customer Service Center[2]

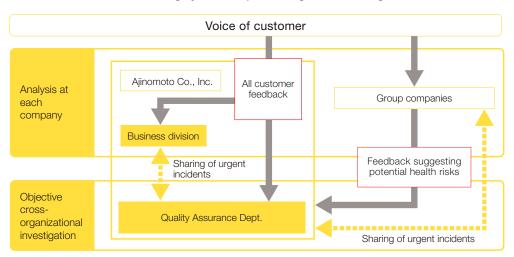


[2] In April 2019, the customer service offices of Ajinomoto Co., Inc., Ajinomoto Frozen Foods, Co., Inc. and Ajinomoto AGF Co., Inc. were integrated to form the Group Customer Service Center.

#### Enhanced monitoring of customer feedback

Any customer feedback shall be analyzed by a Group company, and any such feedback, that concerns a serious issue that may lead to health risks or a violation of law, is also checked and analyzed by Ajinomoto Co., Inc. promptly, objectively and in a cross-organizational manner. The system ensures that any case deemed to be urgent is shared with relevant departments immediately. In fiscal 2018, the system was extended to the US and Malaysia in addition to Group companies in Japan, Thailand, Brazil, Indonesia, Vietnam and Peru.

#### Customer feedback monitoring system for preventing health damage



#### Breakdown of VOC in fiscal 2018

#### Performance

- VOC received by Ajinomoto Co., Inc.: 29,300 (90% of the total in fiscal 2017)
- VOC received by five Ajinomoto Group food product companies in Japan: 61,600 (91% of the total in fiscal 2017)

#### Breakdown of VOC (Ajinomoto Co., Inc.) Retailers 16% Quality-related Suggestions 0.5% General inquiries claims 4% -Praise **0.5**% 19% Preparation methods 12% Breakdown Other 10% Best before date 12% of inquiries Labeling 2% Inquiries 95% Raw materials/ Quality 3% manufacturing methods Nutritiona content 4% **– 9**% Safety 5% Product varieties/price 7%

#### Efforts to improve customer satisfaction

Five food product Group companies in Japan regularly conduct a survey to confirm and improve customer satisfaction with the quality of responses to their quality-related claims. The investigation, business, and customer service divisions work to share and improve the results of the survey. The fiscal 2018 survey by Ajinomoto Co., Inc. indicated that 95% of customers were satisfied with the response to issues they raised, 81% were satisfied with the survey report, and 93% will continue to use the Company's products.

### Contribution to nutritional issues

#### Approach

One nutritional issue faced globally is the "double burden of malnutrition," the coexistence of overnutrition and undernutrition, which can occur in a country or region as well as in an individual. To help resolve this complex issue, the Ajinomoto Group will leverage its food industry expertise in synthesizing the functional benefits of amino acids with various technologies, while utilizing networks developed through other activities to strengthen Group-wide nutritional improvement initiatives.

In July 2017, the Ajinomoto Group established the Group Shared Policy on Nutrition and the

Nutrition Strategy Guideline based on the policy. These provide a foundation for the Group's

nutrition strategy with specific commitments along with a system to ensure the strategy is

business activities to promote "health and well-being." Since fiscal 2018, a cross-organizational

task force headed by a Corporate Senior Vice President has been formulating a comprehensive

#### Framework

- ▶ Integrated Report 2019 P43
- ▶ Group Shared Policy on Nutrition

#### Ajinomoto Group Nutrient Profiling System (ANPS)

**Food and Nutrition Management** 

effectively executed.

Performance

GRI203-2

The Ajinomoto Group is developing its own nutrient profiling system (Ajinomoto Group Nutrient Profiling System: ANPS) as a tool for developing healthy food products and menus. The ANPS will clarify upper and lower intake limit of sensitive and positive nutrients in food based on values recommended by the World Health Organization (WHO) and other independent bodies. Sodium, added sugars, and saturated fat are being considered as sensitive nutrients, and vegetables, fruits, and protein as positive nutrients.

One unique feature of ANPS is that it's designed to be used for menus as well as product reformulation. For menus, the Group is considering setting its own indicators of deliciousness, such as umami, in addition to the above-mentioned nutrient items. For products, the Group is developing ANPS based on existing NPSs (e.g., HSR<sup>[1]</sup>) recommended by international research institutes and experts.

The Group is piloting ANPS in certain regions and, as improvements are made, plans to roll out the system worldwide starting in fiscal 2020.

#### Overview of the Ajinomoto Group Nutrient Profiling System (ANPS)

ANPS for menus	Nutrients to reduce to avoid overconsumption: Sodium, added sugars, saturated fat Nutrients to actively consume: Vegetables, fruits, protein (Note: Addition of "deliciousness" indicators (umami, etc.) under consideration)
ANPS for products	Nutrients to reduce to avoid overconsumption: Sodium, added sugars, saturated fat Nutrients to actively consume: Vegetables, fruits, protein (Note: Modifications based on existing NPSs under consideration)

<sup>[1]</sup> Developed through an industry-academic-government partnership in Australia, the Health Star Rating rates packaged foods by number of stars based on their nutritional profiles. http://www.healthstarrating.gov.au

#### Performance

GRI203-2

▶ P22

#### **Nutrition Improvement Initiatives by Region**

Improving the nutritional balance of consumers' day-to-day diet is critical for addressing issues related to the underconsumption of protein and vegetables and overconsumption of sugar, fat and salt.

Since its founding, the Ajinomoto Group has refined its leading-edge bioscience and fine chemical technologies with research centered on amino acids. The Group continues to propose easy-to-make, delicious and nutritionally balanced meals that leverage its proprietary "deliciousness technologies" and expertise in nutrition designing. For example, the Group offers seasonings to help with eating adequate protein and vegetables; low-salt, low-sugar and low-fat seasonings and processed foods; and supplements for nutrients lacking in meals. It also actively shares basic knowledge and recipes for eating a balanced diet using available ingredients and considering traditional ways of cooking to each country or region worldwide.

- Major initiatives
- Development and marketing of products that help nutritional improvement

	Measures to reduce salt, sugar, fat	utritional improvement  Measures to increase protein, micronutrients, etc.
Japan	Salt reduction  Salt, Japanese flavor seasonings, consomme soup stocks, cup soups, etc.  Sugar reduction  Fat reduction  Mayonnaise, non-dairy powdered creamer, etc.	Japanese flavor seasonings, soups, menu-specific seasonings, amino acid supplements, etc.  Amino acid prime mix
Southeast Asia	_	Powdered drinks, amino acid supplements, flavor seasonings, medical foods, etc.
North America	Salt reduction  Frozen foods	Medical foods, amino acid supplements, frozen foods etc.  Amino acid prime mix
South America	Sugar reduction Powdered drinks	Amino acid prime mix
Europe	_	Amino acid prime mix  Medical foods, frozen foods, etc.

- ▶ P20 ▶ P21 ▶ P22 ▶ P23
- ▶ P27

#### Meal suggestions, information provision

	Initiatives
Japan	$\cdot$ Kachimeshi $_{\odot}$ $\cdot$ Victory Project $_{\odot}$ (collaboration with JOC and JPC) $\cdot$ Love Vege $_{\odot}$ (project to promote vegetable consumption) $\cdot$ "Salt reduction / Optimal salt" $\cdot$ Food education $\cdot$ Measures to address and undernutrition among young women and seniors $\cdot$ AminoIndex $^{\text{TM}}$
Southeast Asia	· Nutritionally balanced meal planning · Food education and school lunch assistance · $Kachimeshi_{\otimes}$ · Supporting top athletes
North America	· Promoting reduction of salt with umami · Providing information on medical foods (food therapy)
South America	$\cdot$ Promoting reduction of salt with umami $\cdot$ Kachimeshi $_{@}$ $\cdot$ Victory Project
Europe/ Africa	· Disseminating information on initiatives to address undernutrition

#### TOPIC

#### Meeting with opinion leaders to end malnutrition in Asia

Ajinomoto Co., Inc. is the only Japanese corporate member of the SUN Business Network (SBN), a network of businesses that are part of Scaling Up Nutrition (SUN), a global movement to end malnutrition led by countries and supported by the UN, civic groups, and businesses. The Company also voluntary participates as a member of the SBN Advisory Group.

At the SBN Asia Country Gathering held in February 2019, the Company shared examples of Ajinomoto Group initiatives in nutrition improvement and talked with opinion leaders from across the region.

#### Performance

#### GRI203-2

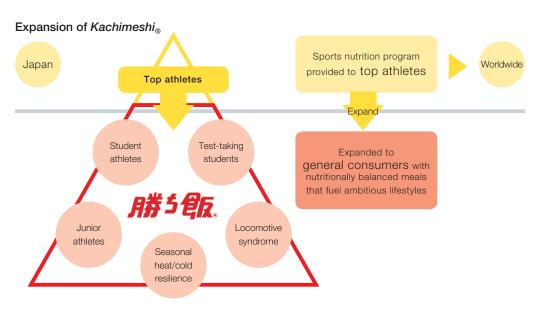
GRI102-12

- ▶ Victory Project® (Japanese)
- ▶ Kachimeshi<sub>®</sub> websites
- ▶ "AJINOMOTO×SPORTS" (Japanese)
- ► Kachimeshi<sub>®</sub> Recipe (Japanese)

#### Support for healthy living and conditioning with Kachimeshi.

Since 2003, Ajinomoto Co., Inc. has provided conditioning support in the form of food and amino acids to world-class athletes through the Victory Project, a partnership with the Japanese Olympic Committee. The Company has concentrated this knowledge into Kachimeshi, for general consumers in Japan. This program supports healthy living and conditioning by sharing health and nutrition information as well as easy, delicious meal plans arranged by theme at stores of major retailers, restaurants, and company cafeterias.

Outside Japan, in fiscal 2018, the Ajinomoto Group started nutrition support activities for top athletes in Southeast Asia, and entered into partnership with the Brazilian Olympic Committee. The Group will support top athletes in each country with a Kachimeshi® program adapted to local ingredients and dietary culture.



Performance

GRI203-2

#### Support for national nutrition initiative in the Philippines

In 2018, AJINOMOTO PHILIPPINES CORPORATION (APC) developed a two-week menu consisting of 37 recipes as a part of Pinggang Pinoy, a nutrition improvement initiative of the Philippine government and initiated an education program "Mag-Pinggang Pinoy® Tayo!" In addition, APC developed 40 nutritionally balanced healthy recipes that incorporate food groups recommended in the government dietary standards.

The initiatives began by extracting the most popular foods from those prepared and eaten in the Philippines and then identifying through analysis those nutrients that tend to be under and overconsumed relative to national dietary standards. The nutritional analysis utilized a-Menu, the Ajinomoto Group's own database on local daily meals and nutritional balance data. Based on the analysis, the company supports the government initiative by developing delicious, nutritionally balanced, affordable and easy-to-cook recipes and communicating through social media and product packages ways consumers can solve nutritional issues while enjoying their daily meals.



Recipe book

#### **TOPIC**

#### Nutritionally balanced meal ideas for every region

- O Ajinomoto Co., Inc.'s Tokyo Branch is partnering with the local government (Shinjuku City, Tokyo) and retailers to suggest Kachimeshi® meals targeting a higher intake of vegetables for city residents. In fiscal 2018, in addition to these recipe suggestions, the Company also held a locomotive syndrome screening event at supermarkets.
- O Ajinomoto (Malaysia) Berhad encourages vegetable intake and low sodium diet among consumer by using umami seasoning AJI-NO-MOTO® in various promotional activities such as "Mix, Mix, Ready" campaigns and scientific exhibition to promote healthy living.
- AJINOMOTO CO., (THAILAND) LTD. published cookbooks for food distributors and consumers, offering ideas for preparing easy, nutritious recipes (number of subscribers: 13,000).







Malaysia



Thailand

#### Efforts to Resolve Excessive Intake

#### Performance

GRI203-2

▶ P19

#### Salt reduction

The Ajinomoto Group offers products and recipes that use umami to help consumers reduce their salt intake while still enjoying the deliciousness and satisfaction of food.

In 2018, Ajinomoto KK Consommé (low-salt) won the gold award in the 4th Reduced-Salt Food Product Awards<sup>[1]</sup> hosted by the Japanese Society of Hypertension (JSH). Since 2014, Ajinomoto Co., Inc. has been partnering with local government and distributors to promote reduced and proper salt intake in Japan's Tohoku region. Iwate Prefecture, where the Company promotes reduced-salt products at stores and holds salt-reduction seminars for dieticians and others on Salt Reduction / Optimal Salt Day each month, has reduced salt intake by 10 to 20% over a fouryear period (2012, 2016 National Health and Nutrition Survey). This salt-reduction initiative with government and distributors is being expanded to 32 prefectures, with the suggestion of reducedsalt recipes using local ingredients and salt-reduction seminars serving to raise awareness in each community.

[1] Awarded to reduced-salt food products listed on the JSH website that are recognized as making an outstanding contribution to reduced salt intake

#### Sugar reduction

The Ajinomoto Group has utilized its amino acid production technologies in the use of two amino acid sweeteners, aspartame and advantame, which are roughly 200 and 20,000-40,000 times sweeter than sugar, respectively. Selective use of high-intensity sweeteners can meet consumers' sugar-reduction needs without sacrificing the taste of sweetness, and the Group provides these sweetness applications to businesses across the food and beverage industry. The Group also markets products developed to support sugar reduction and appropriate sugar intake. These include Pal Sweet®, a smooth-tasting low-calorie sweetener with zero sugar, Refresco FIT, a powdered juice that uses aspartame and is sold in Brazil and PAL SWEET DIET® for B to B that enhances the taste of food with natural sweetness.

#### Fat reduction

The Ajinomoto Group has identified substances that impart a rich taste and deep flavor to cooking, and calls this function "kokumi." It is increasingly understood that kokumi serves to compensate for the sensation of fat in foods. Utilizing this function, the Group has developed and markets Pure Select, Koku Uma, Mayonnaise, which has the same rich taste as regular mayonnaise due to a proprietary manufacturing method and 65% fewer calories (compared to the Company's regular mayonnaise), as well as a low-fat-type Marim<sub>®</sub> creaming power with 50% less fat.

#### Performance

#### GRI203-2

- ▶ The Ajinomoto
- ▶ Sustainability Data Book 2018 P26

#### **Efforts to End Malnutrition**

#### Contribution to nutritional issues in infants and toddlers

The Ajinomoto Group is helping to eliminate malnutrition in weaning children in the Republic of Ghana through donation to the Ajinomoto Foundation's Ghana Nutrition Improvement Project.

#### Contribution to nutritional issues from early childhood to adolescence

The Ajinomoto Group is actively working to resolve the nutritional issues of children and adolescents in many countries and regions.

In Vietnam, many children suffer from stunted growth and low body weight especially in rural areas, while a growing number of children in urban areas are overweight and obese. To resolve these issues, AJINOMOTO VIETNAM CO., LTD. launched the School Meal Project in 2012 to apply ideas from Japan's school lunch system. Working with central government ministries, including the Ministry of Education and Training, and the Ministry of Health, the company has been carrying out a range of activities to deploy well-balanced school meals nationwide. The project has developed and provided school-meal menu books and food and nutrition education materials; developed and implemented a menu-making software (adopted in 3,048 schools in fiscal 2018); set up model kitchens which has accepted tours from over 500 schools and organizations with over 1,700 guests from all over Vietnam. The project offered nutritionally balanced school meals to 1.286 million elementary school children by the end of fiscal 2018.

In Indonesia, the high percentage of children with low body weight, stunted growth and anemia is a serious social problem. PT AJINOMOTO INDONESIA implemented a school meal project in partnership with the Department of Nutrition at Institut Pertanian Bogor University. The ten-month program provided nutritionally-balanced school lunches and taught diet and nutrition to teenage students, and has led to more balanced nutritional intakes, lifestyle changes and the improvement of anemic conditions of the students.





(left) Children eating school lunch (Vietnam) (right) Model kitchen (Vietnam)



Students eating school lunch (Indonesia)

#### Dealing with nutritional issues in young women (Japan)

In Japan, weight loss has become noticeably more common among women in their 20s and 30s. Unhealthy weight loss has been linked to poor health, risk of obesity in future offspring, risk of diabetes due to insufficient muscle mass and risk of falling and bone fracture in old age. To address the nutritional issues in young women, Ajinomoto Co., Inc. has been conveying the importance of eating a wellbalanced diet to professionals at conferences and seminars.



Lunchon seminar of the Japan Academy of Midwifery

#### Nutrition seminar for midwife (Indonesia)

PT AJINOMOTO INDONESIA, Indonesia Midwives Association and the Indonesian Association of Fitness and Sports Nutritionist jointly hosted nutrition seminars for midwife. The six seminars attended by 1,500 women discussed balanced nutrition and food safety for pregnant women, MSG safety regulation and the role of midwife in the first 1,000 days of life.



Nutrition seminar for midwife

Performance

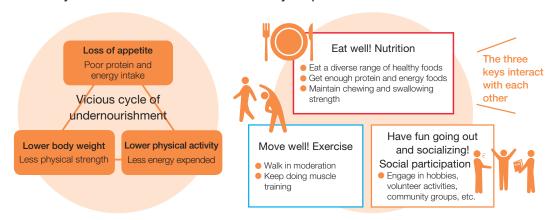
GRI203-2

#### Dealing with nutritional issues in seniors (Japan)

Seniors may not be able to eat adequately due to declining physical functions and loss of appetite as they age. Less food intake causes body weight to decrease and muscular and physical strength to deteriorate, which may then lead to lower physical activity, less appetite and a vicious cycle of undernourishment. To prevent this, Ajinomoto Co., Inc. leverages its protein and amino acid nutrition expertise, and strives to publicly disseminate nutritional knowledge to people with health problems. The Company will continue to partner with specialists, providing information for immediate use to healthcare providers, registered dietitians and pharmacists as guidance tools as well as conducting training to foster deeper understanding.

#### Vicious cycle of undernourishment

#### Three keys to prevent undernourishment



#### Elderly Dietary Improvement Project (Malaysia)

Ajinomoto (Malaysia) Berhad partnered with the International Medical University to promote healthy dietary intake that enhance the well-being of elderly people. Fifty-four elderly people participated in the program which enabled them to enjoy delicious and balanced meals with lower sodium intake through umami application. In addition, two cookbooks which contains 56 nutritionally-balanced and low sodium menus, each with 45% less sodium were created for the seniors' continuous usage.



#### Collaboration to support local health (Japan)

TOPIC

In collaboration with the local government and drugstores, Ajinomoto Co., Inc. is working to improve the nutrition of seniors. Using the Eat Well Check Sheet 10 developed internally, the Company analyzes the number of checks and responses to a questionnaire on dietary lifestyle, offers appropriate advice from registered dietitians based on the results, and suggests appropriate products to support the health of the elderly.



Eat Well Check Sheet 10

Ajicollab

### Distribute the latest food and health topics to nutrition experts (Japan)

Ajinomoto Co., Inc. released its food and health communication website "Ajicollab" for dietitians and registered dietitians in April 2019. The Company will further promote the dissemination and enlightenment of health and nutritional knowledge, by disseminating information on food and amino acids based on science in a timely manner.

#### Approach

#### **Functions and Technological Applications of Amino Acids**

Given that umami-producing glutamic acid is an amino acid, the Ajinomoto Group has expanded its business by developing leading-edge bioscience and fine chemical technologies through research centered on amino acids. By providing products and services that utilize the functions of amino acids with unique technological applications, the Group contributes to realize greater wellness for people all around the world.

#### Amino acids and health

Roughly 20% of the human body is composed of proteins. These proteins - more than 100,000 of them—are formed of long, uniquely assembled chains of just 20 kinds of amino acids. For this reason, amino acids serve critical, life-sustaining functions. They are the building blocks of muscle, skin, hair, and blood. They help protect and regulate the body as hormones, enzymes, and antibodies. And they also provide energy for movement.

Of the amino acids that compose proteins, nine cannot be synthesized within the body and must be obtained through food or other means. These "essential amino acids" all have the effect of stimulating muscle development, and leucine in particular promotes protein synthesis and limits protein breakdown by acting as a switch to signal muscle development. Evidence has shown that consuming amino acids high in leucine, even in small amounts, triggers muscle synthesis more than consuming protein itself.

Performance

GRI203-2

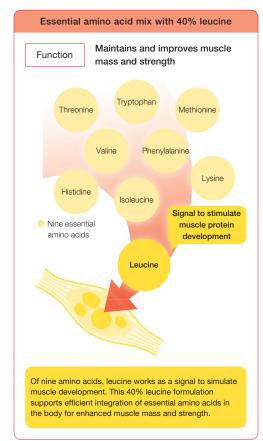
▶ Sustainability Data Book 2018 P30

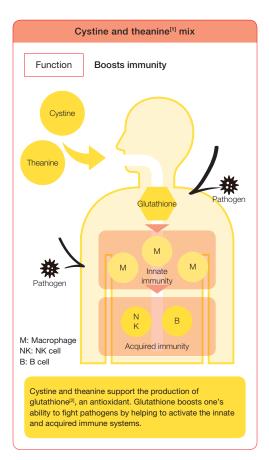
#### Evidence-based nutritional and health value propositions

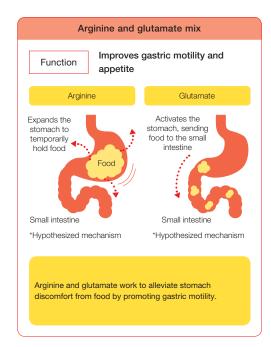
Based on world-class scientific expertise on amino acids, the Ajinomoto Group develops and markets products that support comfortable lifestyles for consumers, and also provides amino acid formulations and product design solutions to business customers. Adding various amino acid functions to food products broadens the health and nutritional value of amino acids by making it possible for consumers to conveniently obtain amino acids in their diet. The Group calls this B2B2C approach the downstream strategy (brand + inside strategy) and is implementing it in and outside Japan.

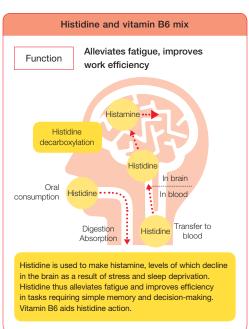
Based on this strategy, the Group offers to business customers Amino Acid Prime Mix, a new line of optimally formulated amino acid ingredients for food and beverage products.

#### Amino Acid Prime Mix ingredients









- [1] An amino acid found in tea leaves. A derivative of glutamic acid, theanine when consumed is broken down into glutamic acid and ethylamine in the body.
- [2] An important antioxidant for many living organisms, glutathione is formed by joining three amino acids, glutamic acid, cysteine, and glycine, in that order. The amino acid cystine alone increases glutathione levels, but adding the glutamic acid derivative theanine increases glutathione levels even more significantly.

GRI203-2

#### **TOPIC**

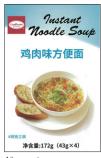
#### Improving QOL with medical food products leveraging amino acid functions

Driven by its founding desire to improve nutrition with delicious food, the Ajinomoto Group utilizes its expertise in amino acids and food to contribute to a better quality of life for people facing various health challenges.

Ajinomoto Cambrooke, Inc. (previously Cambrooke Therapeutics, Inc.), manufactures and markets medical food products for patients with amino acid metabolism disorders. Most medical foods offered to patients with metabolism disorders are lacking in palatability and variety. However, since 2017, when Ajinomoto Cambrooke Inc. became a Group subsidiary, the company has been offering a diverse lineup of more delicious and nutrientdense products by applying the Group's knowledge of the nutritional and physiological functions of amino acids as well as its "deliciousness technologies." In 2018, the company expanded operations from North America and

Since its founding in 2000, Ajinomoto Cambrooke Inc. has emphasized in-person communication between patients, their families and medical experts and has held seminars and other events for patients in the countries and regions where it operates. In fiscal 2018, the company held cooking classes for patients in four major cities in Australia, and around 120 people participated.

By leveraging Group strengths, the Group will continue to bring the joy of food to more patients and help improve QOL for them and their families.



Aiinomoto Cambrooke's medical foods for China



An example of menu made in cooking classes

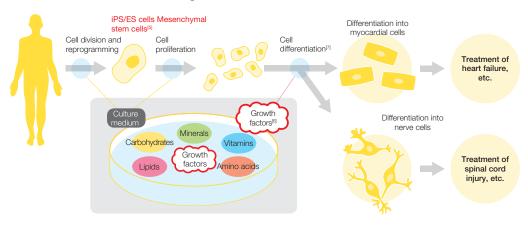
### Contribution to medicine

#### Making Regenerative Medicine[1] a Reality

#### Commercial cell culture medium for regenerative medicine[2]

Regenerative medicine is one of the most active fields of research worldwide as a radical treatment that may solve the problems associated with organ transplantation. The Ajinomoto Group is a supplier of pharmaceutical-grade amino acids, a key ingredient in cell culture media. In 2014, the Group successfully developed  $StemFit_{\tiny{\textcircled{\tiny B}}}$  AK03, an iPS $^{\tiny{\textcircled{\tiny [3]}}}$ /ES $^{\tiny{\textcircled{\tiny [4]}}}$  cell culture medium that is free of animal-derived ingredients, which was introduced to the market in 2016 as StemFit® AKO3N. With Ajinomoto Kohjin Bio Co., Ltd., a joint venture established with Kohjin Bio Co., Ltd. in 2018 for the contract manufacturing of clinical culture media used in regenerative medicine, the Group will continue to play an active role in regenerative medicine and drug development through the manufacturing and supply of cell culture media.

#### Role of cell culture medium in regenerative medicine



- [1] Medical treatment of dysfunctional, non-functional or defective tissues where artificially reproduced functional cells or tissues are transplanted to regenerate the tissues and their functions.
- [2] A nutrient solution that contains a balanced mixture of amino acids, carbohydrates, lipids, vitamins, minerals and growth factors required for cell growth.
- [3] Pluripotent stem cells generated from human body cells by adding a number of factors to reprogram them into pluripotency (ability to differentiate into different tissues and organ cells) and almost infinite proliferative capacity.
- [4] Pluripotent stem cells derived from the inner cell mass of a human blastocyst that is capable of differentiating into various tissue and organ cells that make up the body
- [5] A type of stem cells discovered in 1970 that exist in the body and have the capacity for self-proliferation and multipotency. Mesenchymal stem cells differentiate into mesenchymal cells such as bone, cardiac and other cells.
- [6] Proteins that promote the proliferation and differentiation of specific cells in human and animal bodies.
- [7] The conversion of iPS/ES cells into cells of different tissues and organs that make up the body.

#### TOPIC

#### Supplier of the Japan's first growth factors for clinical research to laboratories

In October 2018, Ajinomoto Co., Inc. obtained a confirmation letter from the Pharmaceuticals and Medical Devices Agency (PMDA), the Japanese drug regulatory and review agency under the Ministry of Health, Labour and Welfare, stating that its Recombinant human activin A, a growth factor indispensable in the cell differentiation

process in regenerative medicine, does not contain any raw materials to which the Standards for Biological Ingredients are applicable. Following this confirmation, the Company started supplying this growth factor, the first in Japan for clinical research use, to research institutions.

Lot : ACT 170001 0.1mg/mL For research use only Store at -80°C I repeated freeze-thaw

Performance

▶ Sustainability Data Book 2018 P31-32

GRI203-2

#### Performance

#### GRI203-2

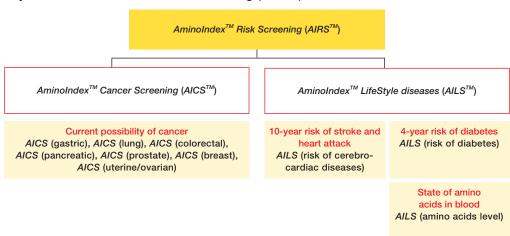
- Sustainability Data Book 2018 P33-34
- ▶ Information about AminoIndex™ (Japanese)

#### "AminoIndex Technology"

Ajinomoto Co., Inc. developed "AminoIndex Technology," a tool to assess the state of health and disease risks by statistically analyzing the changes in the balance of amino acid concentrations in blood brought on by diseases. In 2011, the Company launched AminoIndex<sup>TM</sup> Cancer Screening (A/CS™) as a commercial application of this technology. This was followed by AminoIndex™ LifeStyle diseases (AILS™), which assesses the risk of developing diabetes within four years, and the two were combined in 2017 into AminoIndex<sup>™</sup> Risk Screening (AIRS<sup>™</sup>). In April 2019, AILS<sup>™</sup> was expanded to include the assessment of the stroke and heart-attack risks within 10 years. This means that a single blood test can now assess the risk of developing the three major diseases: cancer, stroke and heart attack.

The Ajinomoto Group will continue researching and developing tests that can help the prevention and early diagnosis of different diseases to support customers in their pursuit of long, healthy lives.

#### Key features of AminoIndex<sup>™</sup> Risk Screening (AIRS<sup>™</sup>)



#### ▶ Press release

#### **TOPIC**

#### MEXT Ministrial Commendation for Science and Technology in Development Category<sup>[1]</sup>

Ajinomoto Co., Inc. was awarded the Prize for Science and Technology (Development Category) in the Commendation for Science and Technology by the Ministry of Education, Culture, Sports, Science and Technology of Japan for 2019 in recognition of its achievement in the development of a new method of disease risk testing using the plasma amino acid profile ("AminoIndex Technology").

[1] Prizes awarded to individuals who have made an outstanding achievement in scientific or technological research and development, with the aim of motivating those working in the field of science and technology and thereby raising the standard of science and technology in Japan. The Prize for Science and Technology (Development Category) is awarded to individuals who have undertaken a groundbreaking research, development or invention that contributes to the development of Japanese society, economy or people's lives and has been applied to practical use.

# Response to diversification of values

Approach

The Ajinomoto Group offers products tailored to each location, with understanding and respect for food culture and values of each country and region, as well as diversified preferences and food needs. The Group proposes well-balanced, nutritional menus from local ingredients and classic dishes, and also suggests ways to create a mealtime setting better. To address unique local nutrition issues and provide emotional and physical nourishment, the Group contributes to healthy, comfortable lifestyles by proposing a total package that combines information, products and services.

#### The joy of cooking together, eating together

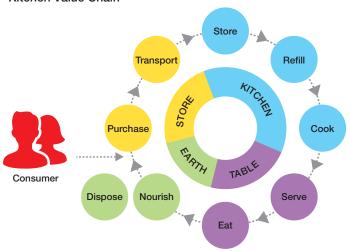
Eating habits are changing as lifestyles diversify with the rise of single-person and DINKs and DEWKs. Families have fewer opportunities to sit together at the dining table and more people are eating alone or, even when with others, eating personalized meals. Busyness is also leaving people less time to prepare or eat meals.

Meals are not only for getting nourishment, they are also an important place for communication. The Ajinomoto Group creates spare time for living through smart cooking, innovations that enable enjoyable and efficient meal preparation, and spreads the joy of eating together by connecting people and family through meal. By making it possible to prepare and enjoy meal together, the Group delivers health and well-being to people around the world.

#### Provision of value that anticipates lifestyle changes

The Ajinomoto Group interfaces with consumers in various touch points between product purchase and disposal, including stores, kitchens, and the dining table. The Group calls this series of connection points the "Kitchen Value Chain." To ensure that consumers are satisfied at each point, the Group develops products with a focus on such qualities as deliciousness, ease of preparation, and the usefulness and eco-friendliness of packaging materials, as evaluated from the standpoints of kansei engineering, ergonomics, and human psychology. Utilizing our unique consumer analysis and application capabilities, the Group seeks to provide enhanced consumer value that anticipates consumers' lifestyles as they become more diverse and personalized.

#### "Kitchen Value Chain"



Approach

GRI203-2

#### Better product accessibility

Delivering attractive, satisfying products at prices affordable to anyone, anywhere, anytime is crucial to marketing products globally.

For example, the smallest volume of umami seasoning AJI-NO-MOTO® is sold at a standard 5.5 grams for 10 naira (about US\$0.03) in Nigeria and 0.75 Egyptian pounds (about US\$0.04) in Egypt, a quantity and price that makes it easy to purchase and use. [1]

The Ajinomoto Group also builds its own distribution networks and delivers products to supermarkets, as well as to grocery stores in local markets, even in areas where distribution systems are less developed, such as rural parts of developing and emerging countries. Depending on the country or region, the Group adopts a cash payment model in which local staff sell actual product for cash. Visiting the market or stores directly enables closer communication with store owners and consumers, allowing the brand to grow deeper roots in the community.

#### Smallest packages of AJI-NO-MOTO®





Nigeria

Egypt

[1] Product prices in US dollars are based on conversion rates as of the end of June, 2019.

# Appropriate marketing and communications

#### **Responsible Communication with Consumers**

The Ajinomoto Group markets its products in more than 130 countries and regions. Each region experiences "deliciousness" differently and has its own customs related to preparing and eating food. Each also has particular ways of communicating that are considered appropriate, and communicating in accordance with this local culture is crucial to conveying the value of a product or service. Given this, the Ajinomoto Group Policies clearly state a commitment to engaging in responsible marketing communications as a two-way activity with customers.

Group companies in Japan post social media guidelines on their respective websites, thereby disclosing the rules with which employees must comply when using social media. The packages of food-related products marketed by the major Group companies in Japan indicate not only all legally required information but also voluntary information, such lists of allergens and explanations of raw materials potentially unfamiliar to customers.

#### Responsible marketing and advertising

Given the spread of digital media and the potential for closer two-way communication with consumers, the Ajinomoto Group states a commitment to practicing responsible marketing communications in its Group Shared Policy on Marketing Communications.

The policy acknowledges that extra caution is needed in marketing communications toward children. The Group pledges to be responsible by, for example, endeavoring not to exploit the inexperience or imagination of children and not to use language that can mislead children.

#### Incidents of non-compliance

In Japan, the Group was not subject of public announcements by the Japan Consumer Affairs Agency for violating the Act against Unjustifiable Premiums and Misleading Representations at any time in fiscal 2018.

#### Approach

#### GRI417-DMA

- ▶ Ajinomoto Group Policies (AGP)
- ▶ Product website (Japanese)

▶ Group Shared Marketing Communications

#### Performance

#### GRI417-3

▶ P15

## **Food Resources**

#### Maximize limited food resources and provide more value

Nature's bounty, as raw materials, are essential for making products. The Ajinomoto Group will sustainably procure agricultural, livestock and fishery resources, as well as follow manufacturing practices that make full use of raw materials without waste. The Group will also work together with consumers toward reducing food loss throughout society.





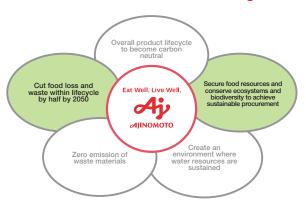
The Ajinomoto Group provides products and services that utilize nature's bounty such as agricultural, livestock, and fishery products around the world, and recognizes that its business activities considerably affect the global environment as it is affected by the environment. That is why the Group aims to pursue sustainable production and consumption when managing business, by efficiently using valuable resources and addressing environmental and social issues such as human rights and occupational safety in supply chains.

#### Ajinomoto Group Long-Term Environmental Vision: Environmental Targets

**Targets** 

GRI301-DMA GRI304-DMA GRI307-DMA GRI308-DMA

Together with communities and customers, the Ajinomoto Group contributes to the global environment through initiatives that are ahead of international targets, from manufacturing to consumption. The medium- to longterm environmental targets encompass the entire product lifecycle, and address cutting food loss and waste, improving security of food resources, and conserving the natural environment as well as initiatives in production (factories).



#### Cut food loss and waste within lifecycle by half by 2050

Food loss and waste (vs. FY2016)

FY2025

From accepting raw materials to delivery to customers

FY2050

Overall product lifecycle (from raw materials to use and disposal)

#### Key plans

- Use of raw materials in manufacturing process without waste
- Reduction of distribution and product returns by extending best-before dates, changing labels to month-year form, and changing delivery rules
- Reduction of waste during product use by customers
- Proposal of eco-friendly lifestyles to consumers for enjoying food without leftovers

Secure food resources and conserve ecosystems and biodiversity to achieve sustainable procurement

Ratio of factories

installing resourcesaving fermentation technologies

Ratio of factories installing resourcesaving fermentation technologies



#### Key plans

- Introduction of technologies that conserve raw materials and energy
- In-house production of raw materials for fermentation
- Biomass use

Ratio of sustainable procurement

Sustainable procurement

(%) - Palm oil - Paper 100 100 75 96 95 95 50 25 25 14 9 2016 2017 2018 2020 (FY)

#### Key plans

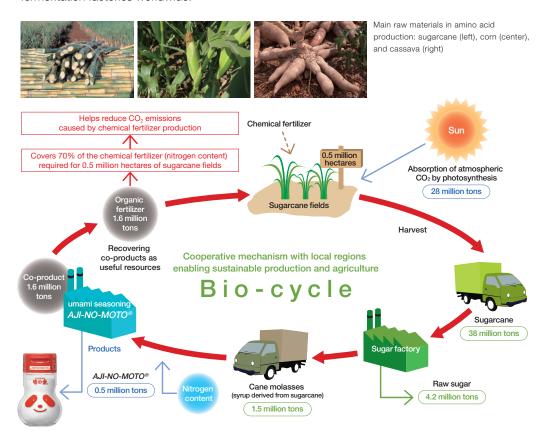
- Establishment of traceability
- Procurement of certified raw materials
- Creation of sustainable procurement standards and framework with suppliers

# Impact reduction in production of amino acids

#### Bio-cycles: A Contribution to Sustainable Agriculture

Approach

The Ajinomoto Group produces the amino acids through fermentation processes from crops that are easily available in each region. Nearly 100% of the nutritionally rich by-products (co-products) that remain after extracting amino acids in the fermentation process are then used as fertilizer and feed. The Group considers such recycling-based amino acid fermentation processes that procure sustainable agricultural production while enriching regional agriculture as "bio-cycles." These bio-cycles are a means of simultaneously contributing to reliable supplies of food resources and realizing sustainable agriculture. For this reason, the Group is introducing these cycles at its fermentation factories worldwide.



The chart assumes worldwide annual production of approximately 0.5 million tons of the umami seasoning AJI-NO-MOTO® by the Group using only sugarcane. The values of sugarcane grown and sugar production are commonly used global figures, and the values of resources used for producing AJI-NO-MOTO® are based on actual statistics from the Group.

#### If fermentation were not used to make amino acids...



- [1] Calculated based on the average extraction of glutamate of 2.24 grams per 100 grams of kombu kelp
- [2] Calculated based on the average extraction of glutamate of 0.14 grams per 100 grams of ripe tomatoes

Approach

GRI301-DMA

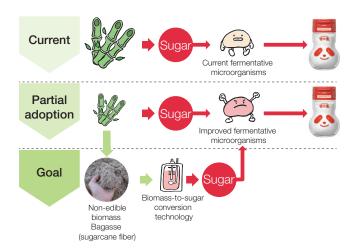
# Resource-saving Fermentation Technologies

Demand for the crops used in amino acid production is rising as they are important food resources and also used as biofuels and industrial materials. As a leading amino acid manufacturer, the Ajinomoto Group has a social responsibility to continuously developing lower-impact production methods.

Leveraging its proprietary leading-edge bioscience and fine chemical technologies, the Group has been actively working over the years to develop efficient "resource-saving fermentation technologies."

Two examples of resource-saving fermentation technologies are those that reduce raw materials and energy use to enhance fermentation productivity, and those that employ rice husks, wood chips, and other unused local biomass as energy sources. These technologies help secure food resources while reducing the use of raw materials, water use and carbon emissions. The Group also pursues development of technologies that make use of non-edible biomass such as bagasse (sugarcane fiber) and corn stalks without competing with food resources.

To accelerate R&D and further improve these technologies, the Group is partnering with various entities with cutting-edge technologies in Japan and abroad, including venture companies, universities, and research institutes.



# **Technology Roadmap**

Performance

Around 80% of amino acid production factories slated for introduction of resource-saving fermentation technologies have introduced raw materials and energy-reducing technologies as of the end of fiscal 2018. The Group will complete technology introduction of all target factories by fiscal 2025, beyond which it will pursue further technology development and deployment.

In addition, the Group will raise the ratio of renewable energy to 28% by fiscal 2020, by reducing CO<sub>2</sub> mainly through shifting to cogeneration systems<sup>[1]</sup> and biomass boilers and introducing greenhouse gas emissions trading.

[1] Systems that generate and supply electricity and steam simultaneously

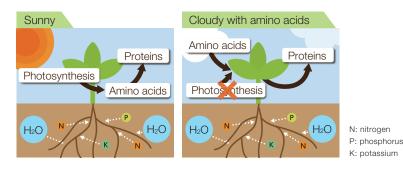
# Contribution to sustainable agriculture

# High Value-added Fertilizers Made with Co-products

Approach

Plants synthesize amino acids from absorbed nitrogen and sugars gained through photosynthesis, then use amino acids to synthesize proteins necessary for growth. Even under insufficient 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 been effectively utilizing the nutrient-rich co-products of amino acid production as organic-type fertilizer. By fortifying these co-products with suitable amounts of phosphoric acid and potassium, for example, the Group has developed fertilizers with higher added value. Continued experiments and researches have been revealing these amino acid enriched fertilizers to have an enhancing effect on root development, plant growth, and harvest yields.



#### High Value-added Fertilizers Used Around the World

Performance

#### Utilization of co-products in Brazil

AJINOMOTO DO BRASIL IND. E COM. DE ALIMENTOS LTDA. ("ABR") sells  $AJIFOL_{\it @}$  and other products made from fermentation co-products mainly to coffee and fruit producers. ABR's fertilizers have been used by farmers for more than a decade and are recognized for their effectiveness. More coffee farmers with sustainability goals have been taking steps to shift from chemical fertilizers to ABR's fertilizers at full scale.



## Utilization of co-products in Côte d'Ivoire

With Côte d'Ivoire's population expected to double by 2050, the Africa Rice Center<sup>[1]</sup>, an international research organization, is undertaking a project to increase the country's self-sufficiency in rice as a food staple. AJINOMOTO FOODS EUROPE S.A.S. (France) and AJINOMOTO AFRIQUE DE L'OUEST S.A. have been participating in this project in Côte d'Ivoire since 2017. Using test samples of factory co-products from France, their research has shown benefits for more efficient rice development without negative impacts on the soil. Through this project, they aim to contribute to food security and improved nutrition for local people.



[1] The Africa Rice Center (ARC) is a leading pan-African rice research organization committed to improving livelihoods in Africa through strong science and effective partnerships. ARC was created in 1971 by 11 African countries. Today its membership comprises 27 countries.

# Utilization of co-products in Thailand

In Thailand, the bio-cycle using co-product is evolving. High value-added fertilizers made with co-products are sold to contract farmers, whose cabbage is then purchased by the Ajinomoto Group and used as an ingredient in gyoza (Japanese-style dumplings), creating a win-win scenario. For the Group, it ensures cabbage traceability and a stable supply of high-quality, big cabbage. For the farmers, the improved productivity and stable harvests bring higher, reliable income, while the fertilizer helps maintain land fertility better than existing chemical fertilizers.



# Sustainable procurement of raw materials

# Approach

GRI201-2 GRI204-DMA GRI301-DMA GRI414-DMA

- ▶ Ajinomoto Group Palm Oil Guidelines
- ▶ Aiinomoto Group **Paper Procurement** Guidelines
- **RSPO**
- ▶ Participation in **CSPU**

#### **Identification of Critical Raw Materials**

The Ajinomoto Group identifies critical raw materials that are derived from agriculture, forestry, and fishing requiring more focused action. The identification process involves determining all the raw materials used in operations, which are then analyzed by internal divisions and external experts including NGOs. Assessment is based on an overall perspective that includes several factors such as dependency on all the materials used, the availability of alternative materials, and relevance to global environmental sustainability. Critical raw materials are reviewed annually to reflect changes in business, the global environment, and other factors.

Recognizing that deforestation has a substantial impact on climate change, biodiversity, and also to human rights issues, the Group has stepped up measures related to palm oil, paper, and other agriculture and forestry resources. The Group promotes to procure certified raw materials, ensure the partnership with various initiatives as well as to establish its own traceability systems and implementation of audits based on the Ajinomoto Group Palm Oil Procurement Guidelines and Paper Procurement Guidelines.

#### Raw materials critical to the Ajinomoto Group

Agriculture and forestry resources	Palm oil, an ingredient in processed foods and specialty chemicals     Paper, used as office paper and in containers and packaging for processed consumer foods     Sugar crops, used in fermentation process of amino acids     Coffee beans
Fisheries resources	· Skipjack, an ingredient in HON-DASHI® and in bonito flakes · Shrimp, an ingredient in frozen foods, etc.

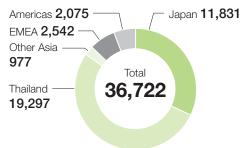
# Sustainable Palm Oil

#### Performance

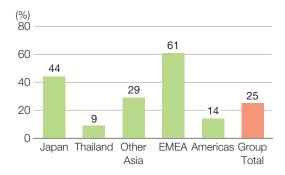
The Ajinomoto Group uses palm oil in a variety of products and applications, from processed foods such as cup soup, instant noodles, and coffee creamer, to specialty chemicals made in regions spanning Japan, Southeast Asia, Europe and South America. Since certain products use palm kernel oil, which is harder to procure in certified form, and certain regions have limited supplies of certified palm oil, the Group defines palm oil that is either certified by the Roundtable on Sustainable Palm Oil (RSPO) or that is traceable to sustainable sources as sustainable.

With a target to procure 100% sustainable palm oil by fiscal 2020, certified palm oil accounted for 25% of use in fiscal 2018. The use of palm oil with verified traceability is still being aggregated. In Thailand, where it is difficult to procure certified oil, the Group began tracing its own supply chain up to the palm oil mills in fiscal 2018.

# FY2018 palm oil procurement by the Ajinomoto Group (tons)



# FY2018 certified palm oil procurement ratio



Performance

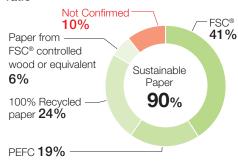
GRI204-DMA GRI301-2 GRI301-3

# **Promoting Use of Sustainable Paper**

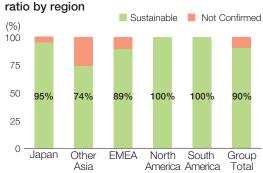
The Group is promoting procurement of paper containers and packaging based on its Paper Procurement Guidelines. The guidelines define paper that is "sustainable" as paper that is not derived from deforestation in areas of high conservation value and paper that is procured from providers that produce it through proper procedures in accordance with laws and regulations of the production areas and with international human rights standards. Sustainable paper includes paper certified by the Forest Stewardship Council® (FSC®) as well as recycled paper and paper made from FSC® Controlled Wood.

With a target to procure 100% sustainable paper by fiscal 2020, in fiscal 2018, sustainable paper use out of the total container and packaging paper use was 90% within the Group.

## FY2018 sustainable paper procurement ratio



# FY2018 sustainable paper procurement



# Sustainable Procurement of Coffee Beans

Approach

GRI204-DMA

Coffee beans are grown in areas of the world rich in biodiversity, often by small farms.

The Ajinomoto Group has endorsed the 4C Association, which aims to improve environmental conditions at coffee farms and better the lives of farm workers while encouraging sustainability in production and distribution, and is striving to procure coffee beans produced at farms that adhere to 4C's set standards.

Performance

In fiscal 2018, procurement rate of coffee beans produced at farms that adhere to 4C's set standards was approx. 40%.



## Performance

# Coffee Cultivation Test Using High Value-added Fertilizer

The Ajinomoto Group has been conducting test in different coffee-producing regions with the goal of using high value-added fertilizer made with fermentation co-products to grow coffee. Eventually, the coffee would be purchased and used to make Group products in a circular economy.

#### Activities in Colombia

The Group conducted a test using AJIFOL® foliar fertilizer to enhance resistance to coffee rust and other diseases. Having confirmed significant benefits, the project is moving to the stage of verifying its effectiveness on the level of gene expression.

#### **Activities in Vietnam**

The Group continued verification testing on plots using AJIFOL® and AMI-AMI® and gave training and technical guidance to local farmers. Fiscal 2019 plans include installing irrigation facilities and expanding the area of fertilizer application.

#### Activities in Indonesia

Tests aimed at yield improvement noted a deeper, improved coffee leaf color particularly in plots sprayed with  $AJIFOL_{\it ll}$ . The Group plans to continue this research.

#### **Activities in Brazil**

A two-year trial of applying AJIFOL® to increase coffee yield resulted in yields and bean size on par with conventional fertilizers, with no observable difference in appearance. Now that the test is complete, the Group is considering continued use in normal coffee cultivation.



#### Framework

GRI204-DMA GRI308-DMA GRI407-DMA GRI414-DMA

#### Performance

GRI204-DMA GRI407-DMA

▶ Group Shared Policy for **Suppliers** 

▶ P81

GRI204-DMA GRI408-DMA GRI408-1 GRI409-DMA GRI409-1 GRI411-DMA GRI412-DMA GRI412-1 GRI414-2

► Group Shared Policy on Human Rights

# **Supply Chain Management**

Ajinomoto Co., Inc. draws up the procurement policies for the whole Group. Group companies then create plans and strategies and implement based on such policies. The Ajinomoto Group Global Procurement Conference is held as needed to share procurement policies and best practices within the Group.

# **Supply Chain Initiatives**

The Ajinomoto Group seeks understanding and cooperation from suppliers for securing human rights compliance and social responsibility in the supply chain by communicating its sustainabilityrelated expectations of suppliers through the Group Shared Policy for Suppliers.

In addition, in May 2018, the Group joined Sedex, a collaborative platform for sharing responsible sourcing data on supply chains (where suppliers and buyers can disclose and view information related to business practices and sustainability). In fiscal 2018, the Group held explanatory meetings and issued written notices to primary suppliers in Japan in preparation for requesting that they join and share data through Sedex. The Group plans to evaluate and communicate with suppliers using Sedex from fiscal 2019 onward, and it will also collect information from suppliers that do not join by asking them to respond to a self-assessment questionnaire similar to that used by Sedex.

Participation in fiscal 2018 supplier information sessions: 340 suppliers, 548 people

# **Supplier Hotline**

The Ajinomoto Group established a supplier hotline in June 2018. The hotline complements those for Group executives and employees and have been used to receive reports from suppliers to facilitate the early detection and correction of the Ajinomoto Group executive and employee behaviors that are potentially in violation of the law or the Ajinomoto Group Policies (AGP). Ultimately, the hotline will also be used to detect human rights, environmental and other violations in the supply chain.

## **Human Rights Due Diligence**

The Ajinomoto Group is showing its aim for creating a mechanism for human rights due diligence and implementing it on an ongoing basis in the Group Shared Policy on Human Rights. Based on the policy, the Human Rights Advisory Committee, composed of both functional and business divisions related to human rights, is studying and raising awareness on global human rights issues, while also building a mechanism for managing human rights through human rights due diligence.

In fiscal 2018, the Group conducted a human rights impact assessment (third-party investigation and interviews with various stakeholders) on particularly labor-intensive shrimp and chicken processors in Thailand. The results found no serious issues in both shrimp and chicken processors.

#### Approach

#### GRI204-DMA

▶ Group Shared Policy on Better Mutual Relationship with

#### Performance

GRI204-DMA GRI416-DMA GRI416-1

▶ P55

#### **Animal Welfare**

Animal-derived ingredients such as meat, eggs, and extracts are essential to Ajinomoto Group food products. Meanwhile, interest in animal welfare (animal husbandry practices that seek to provide a healthy life by minimizing stress and satisfying behavioral needs during the animals' lifetime) in the raising of livestock is on the rise.

The Group has published a Group Shared Policy on Better Mutual Relationship with Animals and is working to promote animal welfare in its value chain.

# **Livestock Traceability Survey**

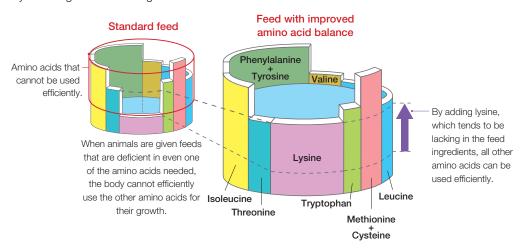
In fiscal 2018, Ajinomoto Co., Inc. shared the Group Shared Policy on Better Mutual Relationship with Animals with all primary suppliers in Japan, and began a traceability survey of its supply chain with 23 meat and meat extract suppliers in Japan. Information on the status of suppliers' compliance with country-of-origin regulations and guidelines and ability to trace product back to farms is being collected and used to identify issues and categorize risks. Ajinomoto Frozen Foods Co., Inc. is also preparing to conduct a similar survey.

From fiscal 2019 onward, the Group will implement the above-mentioned survey at Ajinomoto Frozen Foods Co., Inc, and also collect information on chicken eggs, meat, and other raw materials gaining increased interest from an animal welfare perspective. Overseas, the Group will keep track of the status of legal development and target raw materials, and plan to share policies among suppliers.

#### Feed-use Amino Acids as Solution to Animal Nutrition Issues

Proteins, indispensable compounds for all animals, consist of approximately 20 different amino acids, several of which cannot be synthesized internally in sufficient quantities. These amino acids can be supplemented through the animal's feed.

Adding feed-use amino acids can improve the essential amino acid profile of feeds that consist mainly of wheat and/or corn and thus are poorly balanced. The improved amino acid balance not only can increase feed efficiency and promote growth, but also can reduce environmental impact by reducing excreted nitrogen.



# Conservation of ecosystems and biodiversity

# **Biodiversity Approach**

The Ajinomoto Group expresses its approach to ecosystems and biodiversity in the Group Shared Policy on Environment and Ajinomoto Group Long-Term Environmental Vision, and works as a Group to achieve its goals based on these vision and policies.

▶ Group Shared **Environment** 

GRI304-DMA

Approach

#### Performance

▶ Joint Skipjack **Tagging Survey** 

# **Fishery**

Ajinomoto Co., Inc. is committed to conserving resources and working toward sustainable use, as a company that uses skipjack as an ingredient in its major flavor seasoning product, HON-DASHI®. Since 2009, the Company has conducted the joint skipjack tagging survey with the National Research Institute of Far Seas Fisheries (NRIFSF) in Japan. In 2015 the Company began a joint survey with Tokyo University of Marine Science and Technology and other universities, and in 2018 launched a consortium from the survey's parent organization.

In recent years, skipjack catches have fallen significantly in waters around Japan, resulting in difficult times for skipjack fishery. To contribute to sustainable regional development and the skipjack fishing industry which supports Japan's food culture, the Company has been actively sharing the knowledge of skipjack ecology gained from surveys with industry stakeholders.

In fiscal 2019, the Company will continue to advance the study of skipjack ecology, better resource management, and the establishment of international resource management rules.

### Fiscal 2018 survey results

- Wide-area survey using archival electronic tags Progress: Published paper on findings, including identification of three migration routes
- Coastal survey using ultrasonic waves Progress: Continued skipjack behavior survey using pinger tags

# Sustainable land use

# More Effective Land Use with Feed-use Amino Acids

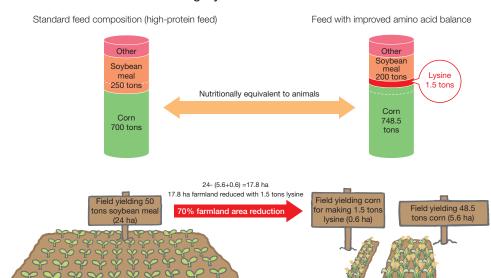
Approach

The effective use of farmland is needed more than ever as climate change has raised concerns over the loss of arable land and declining agricultural productivity.

Although soybean meal is generally used for livestock feed, 50 tons of soybean meal can be replaced with 48.5 tons of corn and 1.5 tons of lysine. Because significantly more corn can be grown per area of land than soy, replacing soybean meal with lysine can reduce the amount of farmland used to grow fodder crops.

In theory, the land-conserving impact of converting 50 tons of soybean meal to 48.5 tons of corn and 1.5 tons of lysine is roughly 18 hectares. Using lysine can thus prevent new land from being cleared for soybean cultivation or leave more existing farmland for human food production.

## Reduction of farmland area through lysine use



# Food loss and waste reduction target

Performance

GRI306-DMA GRI306-2 The Ajinomoto Group aims to reduce food loss and waste in fiscal 2016 over the entire product lifecycle, from raw materials to customers use and disposal, by half by 2050. As its first initiative, the Group is targeting reduction of food loss and waste in fiscal 2016 generated by the Group, from accepting raw materials until delivery to customers, by half by fiscal 2025.

In fiscal 2018, the Group posted a 28% increase to 33 kilo tons against the 10% reduction target. The major reasons for the increase are due to the disposal of discontinued products and more accurate aggregations at overseas Group company plants.

#### Target for food loss and waste reduction

	Res	sult		Target	
	FY2017	FY2018	FY2019	FY2020	FY2025
Reduction rate of food loss from receipt of raw materials through to customer delivery (vs. FY2016)	4% increase	28% increase	15%	20%	50%

The major food losses and wastes generated by the Group are as follows:

- 1. Raw materials and materials in process: Disposal due to product revisions, production item changes, expired use-by dates, production incidents, etc.
- Products: Inventory caused by expiration due to product revisions or production/sales management errors, product returns due to erroneous shipment, damaged goods at warehouse or at time of delivery, disposal of sample items
- 3. Loss from standard factory operations: Waste generated by standard operations, such as line cleaning for product switching and sampling inspection

# Reduction through Manufacturing, Distribution and Sales Collaboration

Food loss and waste in Japan is about 6.43 million tons annually (Ministry of Agriculture, Forestry and Fisheries of Japan [MAFF] estimate for fiscal 2016), which is around twice the amount of global food aid of about 3.2 million tons (2016 United Nations World Food Programme survey). Since 2011, Ajinomoto Co., Inc. has been collaborating with Japanese government and all manufacturing, distributing and sales sectors to study changing the best-before date label to month-year, extending best-before dates, and optimizing delivery dates.

Ajinomoto Co., Inc. and Ajinomoto AGF, Inc. extended best-before dates and completed the turnover from day-month-year to month-year labels for major products for home use in August 2018.

The Ajinomoto Group will continue to collaborate with government agencies and all manufacturing, distribution and sales sectors to further reduce food loss and waste throughout the supply chain.

#### Advantages of changing the best-before date label to month-year for the entire supply chain

- Reduction of number of lots to be managed
- Minimization of storage space
- Simplification of warehouse and store operations

#### Performance

# Unique Technology to Address Food Loss and Waste (Japan)

Food loss and waste from the food service industry and retail stores is turning into a major concern as eating out and home meal replacements (meals prepared outside the home and purchased for home consumption) become more commonplace.

Using enzyme technology and proprietary formula, Ajinomoto Co., Inc. offers the food service and home meal replacement industries Okome Fukkura Choriryo, which retains the texture of freshly cooked rice for a long period of time, and Kara-Age / Oniku Juicy Choriryo, which retains the flavor of deepfried chicken and other meat dishes even after cooling. The Company will continue to develop products to help reduce food loss and waste.





Okome Fukkura Choriryo

Kara-age / Oniku Juicy Choriryo

# Green living together with consumers

2.89 million tons annually (MAFF estimate for fiscal 2015). The Ajinomoto Group is working to

In Japan, food loss and waste from households accounts for around half of all food losses at about

reduce household food loss and waste by promoting the practice of eco-friendly eating (choosing eco-friendly products and enjoying food without wasting ingredients) through everyday dishes and

To help consumers to instantly recognize and select eco-friendly products whenever possible, the Group introduced its unique eco marks (Aji-na Eco and Hotto-suru Eco marks) in 2010. The Group has also promoted eco-friendly, delicious and smart ideas and recipes (Eco-Uma Recipe®)

Approach

- ▶ P59
- ▶ Aii-na Eco mark (Japanese)
- ► Eco-Uma Recipe<sub>∞</sub>

Environmental Learning Programs with Companies, Government, NPOs, **NGOs and Educational Institutions** 

In 2011, Ajinomoto Co., Inc., together with Kao Corporation and E-Square Inc., launched the Society for Sustainable Food and Life Styles and has since continued its research activities. As part of these efforts, the Society has partnered with Kawasaki City in Kanagawa Prefecture, where both Kao Corporation and Ajinomoto Co., Inc. manufacturing factories are located, to conduct the environmental learning program "Summer Challenge: Exploring the Earth's Future through Food and Daily Living" for the city's fifth graders and their parent since fiscal 2016.

The three-day immersion program incorporates ideas that help lead to eco-friendly practices at home, through tours of the city's environmental learning facilities and waste disposal facilities, factory tours of Kao Corporation and Ajinomoto Co., Inc., workshops for learning more about the SDGs and the environment, eco-friendly home cooking of curry, and a daily environmental journal homework for a month.



for everyday cooking at events and websites since 2009.

Performance

# **Global Sustainability**

# Reduce impact of business activities for global sustainability

The Ajinomoto Group is committed to reducing its environmental impact through business activities. The Group will continue to help create a sustainable circular economy through the purposeful actions of each individual.

















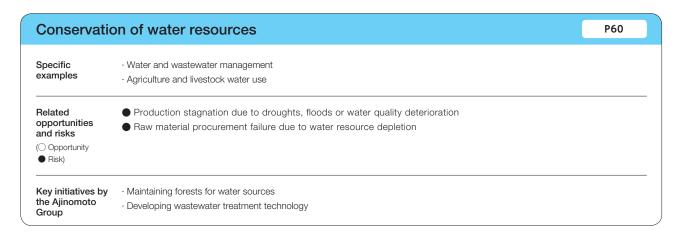


: Initiatives reported in the Ajinomoto Group Integrated Report 2019

#### Climate change adaptation and mitigation P53 Specific Greenhouse gas emissions (Scope 1, 2, and 3) · Fuel management examples · Energy management · Air quality Related O Collaboration with outside organizations on decarbonization opportunities Higher production costs due to delays in initiatives to eliminate carbon emissions or increased carbon tax burden and risks Procurement risk of sustainable raw materials (O Opportunity Damaged corporate value due to delayed response to climate change Risk) Key initiatives by · Long-term effort to turning the overall product lifecycle carbon neutral the Ajinomoto · Initiatives to reduce energy use during production and transportation Group · Shifting to renewable energy · Disclosing information in line with the Task Force on Climate-related Financial Disclosures (TCFD) (scenario analysis, etc.)

· Lowering environmental impact by feed-use amino acids (reduction of soil and water pollution)

#### Contribution to a circular economy P56 Specific · Waste reduction and 3Rs (Reduce, Reuse, Recycle) · Reduction of environmental impact from containers and packaging examples · Product packaging · Lifecycle impact of products and services · Waste and hazardous materials management Related O Development of environmentally-friendly materials opportunities Damaged corporate value due to delays in waste reduction or recycling efforts and risks ( Opportunity Risk) Key initiatives by · Supplying highly biodegradable amino acid-based detergent the Ajinomoto · Promoting the 3Rs of containers and packaging (reduction of plastic waste, etc.) Group · Using biodegradable plastic/plant-derived raw materials/certified paper · Promoting use of environmentally-friendly product labels



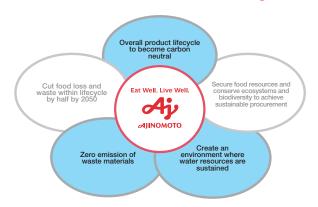
#### **Targets**

GRI302-DMA GRI303-DMA GRI305-DMA GRI306-DMA GRI307-DMA GRI308-DMA

The Ajinomoto Group business is built on top of a healthy global environment and rich ecosystems. In order to continue being an integral part of society, the Group needs to conduct business activities that help transform society into an environmentally-friendly, low-carbon, circular economy. The Group will continue contributing to global sustainability by determining of environmental impact across the entire lifecycle and initiatives to reduce such impact.

# Ajinomoto Group Long-Term Environmental Vision: Environmental Targets

Together with communities and customers, the Ajinomoto Group contributes to the global environment through initiatives that are ahead of international targets, from manufacturing to consumption. The medium- to long-term environmental targets encompass the overall product lifecycle to become carbon neutral, creation of an environment where water resources are sustained, and zero emissions of waste materials.



# Overall product lifecycle to become carbon neutral

Greenhouse gas emission volume vs. emission intensity (vs. FY2005)

#### Reduction rate of greenhouse gas emission volume vs. emission intensity[1] 100 33% 35% 33% 37% 38% 50% 75 50 25 2005 2015 2016 2017 2018

#### Key plans

- Continuous implementation of energy saving activities that have been ongoing for more than 10 vears
- Capacity increase and stable operation of own biomass boilers and cogeneration
- Promotion of renewable energy use

Renewable energy use

Renewable energy use ratio 60 45 2030 (FY) Target 2015 2016 2017 2020 Target

[1] Intensity is the amount of each factor of production (raw material, power, labor, etc.) needed to produce a certain amount of product

## Fluorocarbon elimination

Use of natural or new refrigerants below GWP 150

# FY2025

Fluorocarbon elimination at new facilities 100%

# FY2030

Extremely small volume of HFCs<sup>[2]</sup>

[2] Hydrofluorocarbons

# Key plans

To minimize HFCs possession by FY2030

- Introduction of natural refrigerants at Ajinomoto Frozen Foods Co., Inc., Ajinomoto Food Manufacturing Co., Ltd., AJINOMOTO BAKERY CO., LTD. and others
- Introduction of new refrigerants below GWP 150 at Ajinomoto Co., Inc., PT AJINOMOTO INDONESIA and others

#### Create an environment where water resources are sustained

reduction

Water usage vs. production volume unit (vs. FY2005)

#### Reduction rate of water usage vs. production volume unit



#### Key plans

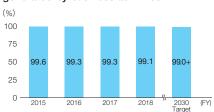
- Continuous implementation of activities to cut water use and discharge that are ongoing for more than 10 years
- Setting of quality standards for water discharge (BOD, TN) (direct discharge into public areas)

# Zero emission of waste materials

Maintain

Resource recovery ratio

## Resource recovery ratio of waste generated by business activities



#### Key plans

- Continuous efforts on reducing environmental impact that are ongoing for more than 10 years
- Resource recovery from waste materials, effective use of byproducts

## Vision for FY2030

zero





\* Arrow size represents volume of plastic.

## Key plans

- Reduction of plastic usage
- Development of packaging materials geared to recycling
- Contribution to establish recyclingbased social systems

# Material balance

#### Performance

GRI102-56

GRI301-1

GRI302-1

GRI302-2

GRI302-3

GRI302-4

GRI302-5

GRI305-1

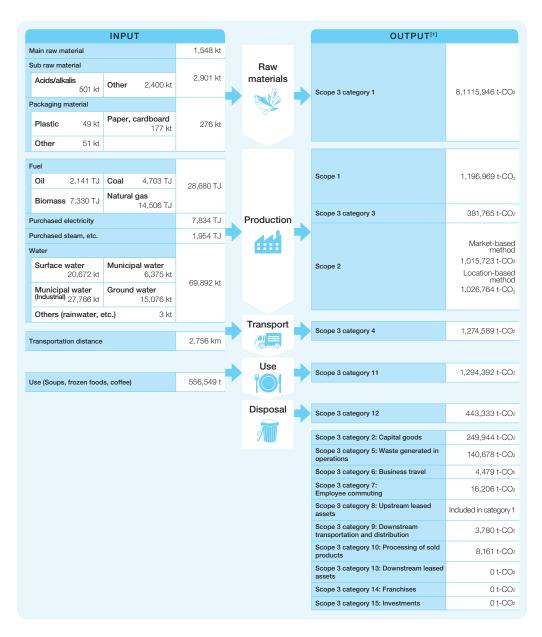
GRI305-2

GRI305-3 GRI305-4

▶ Environmental Data Assurance

Statement

▶ Environmental Data footprint



#### Data calculation

Scope of reporting: 123 major business that have a significant overall environmental impact within the Ajinomoto Group as defined in the consolidated financial accounting system

Reporting period: April 1, 2018 to March 31, 2019

The Ajinomoto Group refers to ISO 14064-1 and uses the latest CO<sub>2</sub> emission factor to calculate the CO<sub>2</sub> emissions in the above material balance chart. The calculated  $CO_2$  emissions are independently verified in accordance with ISO 14064-3 requirements by Lloyd's Register Quality Assurance Limited.

- [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.)

# Reduction of greenhouse gas emissions in the value chain

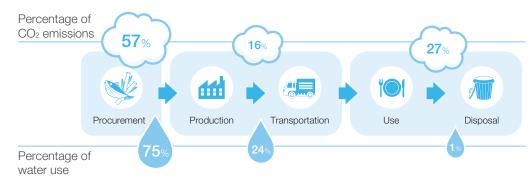
Performance

GRI302-1 GRI302-3 GRI302-4 GRI305-4

▶ Environmental

GRI305-5

From a lifecycle perspective, raw material procurement represents the most significant portion of the Ajinomoto Group's environmental impact.



The percentage of CO<sub>2</sub> emissions are based on CO<sub>2</sub> emissions of fiscal 2018 input and output balance shown in the Environmental Data. The percentage of water use is calculated by Trucost based on primary raw materials, amount used in production, and transportation and storage scenarios.

# Medium and Long-term Environmental Targets and Results

The Ajinomoto Group aims to reduce the greenhouse gas emission volume vs. emission intensity by 50% from fiscal 2005, the base year, and achieve 50% renewable energy use ratio by fiscal 2030. To achieve these targets, the Group set annual targets for fiscal 2018 to 2020 as shown below. Greenhouse gas emission volume vs. emission intensity was reduced by 33% in fiscal 2018 compared to the baseline year of fiscal 2005, falling short by three percentage points of the original target and a two-point decline from a year prior. The main factors were the interruption of lysine production in Brazil and an increase in greenhouse gas emissions due to the full-scale operation of coal boilers in Indonesia.

Renewable energy use reached 24% in fiscal 2018, surpassing the previous year and meeting

#### Target and result for greenhouse gas emission reduction

	FY2	018	FY2019	FY2020	FY2030
	Target	Result	Target	Target	Target
Reduction rate of greenhouse gas emission volume vs. emission intensity (vs. FY2005)	36%	33%	37%	38%	50%
Renewable energy use ratio	24%	24%	26%	28%	50%

# Reduction of greenhouse gas emissions

	FY2005 (Base year)	FY2014	FY2015	FY2016	FY2017	FY2018
Greenhouse gas emission (kilo tons) [1]	2,357	2,211	2,234	2,330	2,299	2,310
Greenhouse gas emission volume vs. emission intensity (per ton of product)	1.31	0.94	0.88	0.88	0.86	0.88
Reduction rate	_	28%	33%	33%	35%	33%
Reference value: Total amount of production (kilo tons)	1,800	2,347	2,532	2,657	2,684	2,627

<sup>[1]</sup> Calculated based on internal CO<sub>2</sub> emission factors for environmental management purposes.

# Impact Reduction through On-site Ammonia Production

The Ajinomoto Group uses purchased ammonia in amino acid fermentation processes. Currently, this ammonia is manufactured at large-scale, high-pressure plants and then shipped to factories that need it, a system that necessitates large quantities of energy.

To address this issue, in 2017 Ajinomoto Co., Inc., in partnership with Professor Hideo Hosono at Tokyo Institute of Technology, etc. established Tsubame BHB Co., Ltd. and is working toward practical application of an innovative ammonia production technology. Using a new catalyst invented by Prof. Hosono's team, the Company aims to build an on-site, volume-flexible production model and pursue commercialization in years 2021 to 2022.

# Management of Fluorocarbons

Performance

GRI302-1 GRI305-4 GRI305-5 GRI305-6

The Ajinomoto Group aims to completely switch from using fluorocarbons (HCFCs<sup>[1]</sup>, HFCs) as refrigerants in newly purchased chillers and such to using natural refrigerants or refrigerants with low GWP (Global Warming Potential) of less than 150 by fiscal 2025 and minimize ownership of HFCs by fiscal 2030. To achieve these targets, in fiscal 2018 the Group revised its fluorocarbon reduction long-term target, better clarifying applicable facilities and deadlines for new installations or replacements.

The Group's seven frozen food factories in Japan have converted 24 units to natural refrigerants as of the end of fiscal 2018 and plan to switch the remaining six units to non-fluorocarbon equipment by the end of fiscal 2020.

[1] Hydrochlorofluorocarbons. Manufacture of HCFCs, which are ozone-depleting substances, will be phased out in developed countries by 2020 and in developing countries by 2030.

### Number of freezers using fluorocarbons (frozen food factories in Japan)



#### Performance

GRI302-2 GRI302-3 GRI302-4

▶ Press release (Japanese)

Performance

GRI302-5

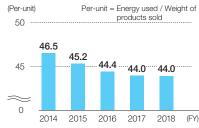
▶ P43

# **Initiatives in Transportation**

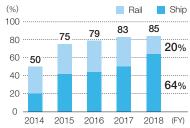
Japan's Energy Conservation Act obliges specified consignors to make effort to reduce per-unit energy use (crude oil equivalent) of their cargo logistics by at least 1% per year on average over five years and report the result to the government. This applies individually to Ajinomoto Co., Inc., Ajinomoto Frozen Foods Co., Inc., and Ajinomoto AGF, Inc. For the three companies combined, per-unit energy use declined 1.4% per year on average in the five years to fiscal 2018. In fiscal 2018 alone, the result was about the same as the previous year due mainly to the increase in perunit energy use by two manufacturing subsidiaries of Ajinomoto Frozen Foods Co., Inc. merged in July 2018.

The Ajinomoto Group has been pursuing modal shift<sup>[1]</sup> since 1995 in an effort to simultaneously enhance transport capacity and make logistics more environmentally friendly. In fiscal 2018, although railway use markedly decreased due to the division of some railways caused by torrential rains in western Japan, increased shipping use from Fukuoka to Mie and western Japan and joint trunk line use in Hokkaido through F-LINE have increased the modal shift percentage of Ajinomoto Co., Inc. for long-distance transport to 85% overall.

# Per-unit energy use in logistics[2]



#### Modal shift percentage of Ajinomoto Co., Inc. 500 km or more



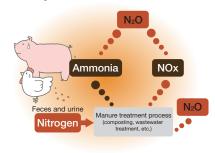
[1] Changing to modes of transport with lower environmental impact, including rail and ship transport. Railway container and ship transport produce one-eleventh and one-eighth of the CO2 emissions of trucking, respectively.

[2] Combined results of Ajinomoto Co., Inc., Ajinomoto Frozen Foods Co., Inc., and Ajinomoto AGF, Inc.

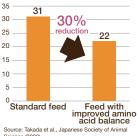
# Reducing Nitrogen Emissions by Livestock with Feed-use Amino Acids

Feeds with poor amino acid balance lead to an oversupply of unnecessary amino acids, which are not utilized by the animals and are excreted in large quantities as nitrogen compounds. During the waste treatment process, they turn into nitrous oxide (N2O), which increases environmental impact with approximately 300 times the global warming potential of CO<sub>2</sub>. Feed-use amino acids improve the balance of feeds, reduce excretion and reduce excreted nitrogen compounds by about 30%. Amino acids thus help to reduce the life-cycle CO<sub>2</sub> (LC-CO<sub>2</sub>) emissions of feeds while also helping to diminish odor caused by ammonia derived from nitrogen compounds as well as reduce soil, surface water and groundwater pollution.

# N<sub>2</sub>O cycle



#### Nitrogen emissions per pig (g/day)



# Reduction of waste across product lifecycles

Performance

GRI301-3 GRI306-2 The Ajinomoto Group is working to minimize waste to ensure optimal use of all resources. The Group is also committed to effectively utilizing waste and by-products, with the aim of recovering 99% or higher of it as resources.

In amino acid production, the Group seeks to improve production efficiency by recovering by-products as resources and introducing new technologies. In food production, it is also making a range of efforts, such as improving the precision of sales forecasts and conducting fine-tuned procurement, to minimize wasted raw materials and the amount of packaging materials used.

In fiscal 2018, generation and landfilling of hazardous waste increased from the previous year due to increased production volume and a resulting increase in biomass boiler residue. Generation and disposal of non-hazardous waste other than by-products both declined slightly from the previous year.

## Volume of waste and by-products and resource recovery ratio

tons

		FY2014	FY2015	FY2016	FY2017	FY2018
	rdous waste (waste acid, e alkali, waste oil, cinder)					
	Generation	60,304	60,431	59,217	59,162	69,991
	Recycling	59,719	59,457	58,890	58,862	68,422
	Incineration	35	14	54	24	40
	Landfill	550	959	274	276	1,529
Non-h	nazardous waste					
	By-products					
	Generation	2,295,432	2,435,544	2,337,284	2,395,249	2,194,566
	Composting	2,293,952	2,434,281	2,335,451	2,394,976	2,194,470
	Incineration	144	0	0	0	0
	Landfill	1,336	1,263	1,832	273	96
	Others					
	Generation	132,462	140,464	178,861	178,989	174,651
	Recycling	123,330	131,258	163,414	161,455	153,388
	Incineration	1,116	1,293	3,021	2,066	2,821
	Landfill	8,016	7,913	12,426	15,467	18,442
Total o	generation	2,488,199	2,636,439	2,575,361	2,633,400	2,439,208
Total r	recycling	2,477,001	2,624,997	2,557,755	2,615,293	2,416,280
Total v	waste	11,197	11,442	17,606	18,107	22,928
Resou	urce recovery ratio	99.5%	99.6%	99.3%	99.3%	99.1%

Approach

GRI301-3

▶ Integrated Report 2019 P59

# Container and Packaging Design for Environment

The Ajinomoto Group is advancing the container and packaging design for environment in accordance with the ISO 18600 series and JIS Z 0130 and strives to advance the 3Rs by minimizing the amount of packaging material used without detracting from its original functions and implementing ways to easily separate and sort by material for recycling. The Group also works to reduce the amount of generated food loss and waste by extending best-before dates using containers and packaging that better maintain product freshness and adopting single-serve packaging that leaves no food waste.

#### Approach to plastic packaging materials and goals

In recent years, the problem of plastic waste and microplastics in the ocean have become a pressing global issue. In November 2018, the Ajinomoto Group expressed its aim of achieving zero plastic waste by fiscal 2030 (The roadmap to 2030 will be announced together with the next medium-term management plan). The Group used approximately 70,000 tons of plastic in fiscal 2018, 40% of which are used in Japan and 60% overseas. While reducing the amount of plastic use, the Group will also work on the development of new materials and technologies that will turn plastics from waste into resources.

- Continuing to reduce plastic usage In addition to reducing the use of plastic in packaging, the Group considers the use of new alternative materials becoming available as technology develops.
- Creating recyclable materials & systems
  - (1) Develop packaging materials geared to recycling The Group develops mono-material plastic packaging and alternative recyclable packaging materials.
  - (2) Help establish recycling-oriented social systems The Group establishes recycling-oriented social systems, particularly in developing countries and regions where systems are still in the early stages.

# Inter-Group Efforts Toward Container and Packaging Design for Environment

Framework

The products of the Ajinomoto Group require many different kinds of containers and packaging. To let each Group company in Japan share their efforts to create container and packaging design for environment and receive feedbacks, the Group holds events such as the Ajinomoto Group Food Conference and the Packaging Designers' Liaison Meeting.

# Cooperation with Outside Organizations

Performance

The Ajinomoto Group cooperates with recycling councils of container and packaging and public organizations in Japan to encourage consumer awareness of the 3Rs.

- Examples
  - Participation in Eco-Products Exhibition
  - Containers and Packaging Reduction Declaration in the committee of the National Capital Region Nine Government Summit Council
  - Presentation of 3Rs best practices to Plastic Packaging Recycling Council
  - Presentation of 3Rs best practices to Paper Packaging Recycling Council
  - Participation in innovation exhibition by CLOMA<sup>[1]</sup>

[1] Clean Ocean Material Alliance

▶ Participation in Initiatives

Performance

GRI301-3

# **Environmental Assessment of Containers and Packaging**

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

Table 1: Environmental assessment checklist

	Objective	Check item
Compliance	Waste 3Rs	Compliance with environmental laws and regulations
	Food loss reduction	Prevention of product degradation and damage
	Risk	Prevention of usage of potentially hazardous materials
Compatibility	Waste 3Rs	Usage of material(s) compatible with 3Rs
with Group	Sustainable procurement	Usage of sustainable material(s)
environmental targets	Food loss reduction	Usage of material(s) that help reduce food loss
targoto	Greenhouse gas emissions reduction	Improvement of loading efficiency in transport
	Consumer awareness of green living	Display of environmental labels

Table 2: Eco-Index for containers and packaging

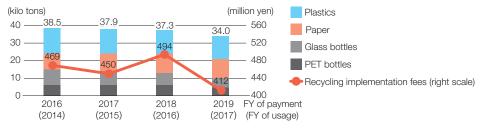
Objective	Assessment item (example)	Assessment standard (example)	Points
	Plastic container/packaging weight reduction	At least 450 kg reduced per year	+2
Waste 3Rs	Space per packaging volume	<15%	+1
	Compatibility with recycling systems	Easily recyclable materials used throughout	+1
Greenhouse gas	LC-CO2 emissions reduction	Reduced over conventional product	+1
emissions reduction	Transport efficiency	Loading efficiency ≥80%	+1
Sustainable procurement	Usage of eco-friendly materials	Usage of forest-certified paper	+1
Consumer awareness of green living	Environmental labeling	Display of the Aji-na Eco mark	+1
Food loss reduction	Food loss reduction	Extension of shelf life	+1
1 000 1055 Teduction	1 ood loss reduction	Adoption of single-serve packaging	+1

To comply with 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 2017, the three Group companies in Japan<sup>[1]</sup> used 34,000 tons of containers and packaging subject to recycling requirements, down to 91.4% of the previous year. Based on this usage, recycling fee payment for fiscal 2019 was 412 million yen, down to 83.4% of the previous year.

The use of plastic containers/packaging and PET bottles decreased to 94.8% and 89.2% over the previous year, respectively, due to the decrease in sales volume. The use of glass bottles was 72.4% over the previous year due to the end of sales of bottle products for gift. The decrease in recycling fee is due to decrease in the recycling contract unit cost of plastic containers/packaging and PET bottles that increased in the previous year (93.9% and 21.7% over the previous year, respectively) in addition to decrease in their usage.

[1] Total amount for three group companies in Japan (Ajinomoto Co., Inc., Ajinomoto Frozen Foods Co., Inc., Ajinomoto AGF, Inc.)

#### Amount of used household product containers and packaging and recycling fees



# Performance

GRI303-1

# Expanding the Supply of Highly Biodegradable Amino Acid-Based Surfactants

Ajinomoto Co., Inc. has provided amino acid-based personal care ingredients to more than 5,000 companies in 55 countries since it launched the world's first amino acid-based surfactant, made from glutamic acid in 1972.

Amino acid-based surfactants are environmentally friendly because of their high biodegradability, and they are also mild to skin. Due to growing concern about the global environment in recent years, the market for amino acid-based surfactants has rapidly expanded, and the Ajinomoto Group has been strengthening its supply system to meet the global demand.

Namely, the Group will construct a new plant for glutamic acid-derived Amisoft® (liquid) in Brazil, which is slated to start operating in 2020. In conjunction with this investment, a portion of *Amisoft*<sup>®</sup> (liquid) production in Japan will be transferred to Brazil, and the production facilities in Japan will be redirected to production of glycine-derived Amilite® (liquid). This will increase the production capacity of Amisoft® (liquid) by approximately 60%, and for Amilite® by approximately 30% (total of all product forms), and help resolve the supply shortages in amino acid-based surfactants.

# Ajinomoto Group Eco-labels: Aji-na Eco and Hotto-suru Eco

To respond to consumers' needs to purchase environmentally friendly products and to know whether a product is eco-friendly at a glance, the Ajinomoto Group has labeled products with its original Aji-na Eco and Hotto-suru Eco marks since 2010. The Group also strives to effectively communicate changes made to product packages that are difficult for consumers to notice, such as weight, thickness, size and materials used.

# Performance

GRI301-3 GRI417-1

▶ P48

▶ Aji-na Eco mark



Number of Aji-na Eco mark products 207

As of July 2019

#### What is Aji-na Eco?

Aji-na Eco is a term describing the smart and ecological products or information provided by the Group, and the logo mark expresses the image of our Earth green, the pleasure of eating, and a global environment made even better through food.



Number of Hotto-suru Eco mark products

As of July 2019

#### What is Hotto-suru Eco?

Hotto-suru Eco indicates Ajinomoto AGF, Inc. products with environmental features. The logo mark expresses the comfort felt when drinking one's favorite beverage, colored in Earth green. The Hotto-suru Eco label was introduced in 2015.

- Types of Aji-na Eco and Hotto-suru Eco marks
  - Plant-based plastic
  - Recycled plastic
  - Sustainable timber
  - Recycled paper
  - Reduced packaging
  - Refillable
  - No tray
  - Easy recycling and disposal
  - No box
  - Passive defrosting

# Conservation of water resources in production

Performance

GRI303-3 GRI303-4 GRI303-5

▶ Environmental Data

The Ajinomoto Group aims to reduce the rate of water usage vs. production volume unit by 80% from fiscal 2005, the base year, by fiscal 2030. The Group is targeting a 78% reduction from baseline for the three-year period from fiscal 2018 to 2020 to manage progress toward the fiscal 2030 target.

In fiscal 2018, the Group reduced water withdrawal by about 150 million tons. The Group also reduced the rate of water usage vs. production volume unit by about 78% compared to the fiscal 2005 baseline, thus achieving its target. Each production site has continued water-saving efforts from the previous fiscal year.

#### Target and result for conservation of water resources

	FY2	018	FY2019	FY2020	FY2030
	Target	Result	Target	Target	Target
Reduction rate of water usage vs. production volume unit	78%	78%	78%	78%	80%

#### Water use

kilo tons

	FY2005 (Base year)	FY2014	FY2015	FY2016	FY2017	FY2018
Total water withdrawal <sup>[1]</sup>	221,863	78,653	76,912	74,041	74,844	69,892
Fresh surface water	180,363	28,422	25,272	23,559	24,433	20,672
Brackish surface water/ seawater	0	0	0	0	0	0
Fresh groundwater- renewable	0	0	0	0	0	0
Fresh groundwater-non-renewable	-	16,293	16,972	15,859	16,371	15,076
Produced water	0	0	0	0	0	0
Municipal water (including industrial water)	41,500	33,938	34,668	34,623	34,041	34,144
Water usage vs. production volume unit (per ton of product)	123	34	30	28	28	27
Reduction rate	-	73%	75%	77%	77%	78%
Reference value: Production volume	1,800	2,347	2,532	2,657	2,684	2,627
Total water discharge	201,300	66,386	60,873	59,701	60,464	55,800
Fresh surface water	53,000	29,897	27,418	27,419	29,813	29,231
Brackish surface water/ seawater	0	0	0	0	0	0
Groundwater	0	0	0	0	0	0
Third-party destinations	4,300	9,224	10,171	9,909	9,827	9,540
Total water use recycled or reused	144,000	27,265	23,284	22,373	20,824	17,029
Proportion of water use recycled or reused	65%	35%	30%	30%	28%	24%
Total water use	20,563	12,267	16,039	14,340	14,380	14,092
BOD (tons)	550	304	268	269	294	312
Nitrogen (tons)	3,200	404	424	445	394	501

<sup>[1]</sup> Water withdrawals are disclosed based on volumes measured/invoiced in accordance with national or regional laws or converted from pump power use/pipe water speed. Water dischange volume and quality are both disclosed based on accumulated values measured in accordance with national or regional law.

# Performance

#### GRI303-1

► Forest of Blendy®: Conservation of forests and the water (Japanese)

# Forest conservation at water sources

Ajinomoto AGF, Inc., production bases, AGF Suzuka, Inc. and AGF Kanto, Inc., withdraw water from the Suzuka River and Arato River (a tributary of the Tone River). Their sources are conserved by forests located in the foothills of the Suzuka Mountains and the south foothills of Mount Akagi, respectively. The companies are continuously engaged in the Forest of Blendy® initiative aimed at conserving these forests.

By fiscal 2025, Ajinomoto AGF, Inc. aims to expand the area of these forests five-fold compared to their March 2017 size, and supply all water used in Blendy® bottled coffee and other production from Forest of Blendy® groundwater (recharge volume). As of the end of fiscal 2018, the two forests' contracted areas combined covered approximately 22 ha, about 4.2 times the original size. In fiscal 2019, the company plans to expand and enhance the forest maintenance activities.

## Planned expansion of Forest of Blendy®



# **Environmental Management**

#### Framework

GRI301-DMA GRI302-DMA GRI303-DMA GRI304-DMA GRI305-DMA GRI306-DMA GRI307-DMA GRI308-DMA

#### **Promotion Framework**

The Ajinomoto Group established the Environmental Committee under the Executive Committee to decide important environmental policies, prepare plans and conduct activity reviews.

#### Ajinomoto Group's environmental management system (EMS)



#### Status of ISO 14001 certification

As of March 2019, the Ajinomoto Group has acquired ISO 14001 certification at 49 out of 98 subject Group companies. Those not yet certified are advancing management based on the ISO 14001 approach. Note that the number of ISO 14001-certified Group companies decreased compared with the previous fiscal year-end due to corporate consolidation and other factors.

#### **Environmental assessments**

When the Ajinomoto Group launches new products and businesses, or changes the use of conventional raw materials or production processes, it assesses the environmental impact of business plans before they are conducted, and takes necessary measures to minimize future risks. At Ajinomoto Co., Inc., environmental assessments are performed by departments in charge in accordance with internal rules, and their results are reviewed from a Group-level perspective by the Environment, Safety & Plant Management Support Dept. Group companies also carry out their own assessments based on company rules and regulations.

#### Environmental assessment items

1. Legal compliance	
2. Seven types of typical pollution	Air pollution, water pollution, noise, odor, soil contamination, etc.
3. Global environmental issues	Saving energy, renewable energy use, fluorocarbons, distribution efficiency, etc.
4. Food loss and waste reduction	Extension of best-before dates, MMYY 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, responsibilities of waste generator, 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, PCB, asbestos, etc.
10. Effects of buildings	Right to sunlight, radio wave disturbance, etc.
11. Consumer awareness of green living	Environmental labeling

#### **Environmental audits**

The Ajinomoto Group conducts external audits for compliance with ISO 14001. In addition, audits for sites having issues are also conducted by the Environment, Safety & Plant Management Support Dept. based on the Environmental Audit Outline. There were no sites subject to environmental audits in fiscal 2018.

Performance

GRI306-3 GRI307-1

# Response to Environmental Laws and Accidents

The Ajinomoto Group has quickly addressed any legal violations or accidents related to the environment. In fiscal 2018, there were four violations of the Air Pollution Control Act of Japan, Effluent Standards, and other environmental laws, and proper corrective actions and legal measures based on administrative guidance have been performed. There were also seven accidents that affected the environment outside the worksite (two complaints related to offensive odor and herbicide spray, two fluorocarbon leaks, two diesel oil leaks, and one liquid product leak). None of these had serious environmental effects. The accidents were immediately reported to authorities and investigated for their causes to take necessary measures.

#### **Environmental Education**

#### Specialized education

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

In Japan, the Group provides ongoing education to the environmental officers, managers and members in each organization, as well as environmental assessment training for members of business and research departments developing new businesses and products. The Group also conducts environmental law seminars for staff in charge to stay up-to-date with the frequent revisions in environmental regulations and ensure compliance.

- Main programs in fiscal 2018
  - Two-day training course for internal environmental auditors: Twice, 41 participants
  - One-day training course for internal environmental auditors: Twice, 23 participants
  - Environmental law seminar: Five times, 119 participants

#### General education

In Japan, the Environment, Safety & Plant Management Support Dept. collaborates with human resources, general affairs, risk management and other departments to provide ongoing education tailored to each employee grade and ensure everyone understands the Group's environmental management.

- Main programs in fiscal 2018
  - Compliance training
  - Training for technology-related staff before posting overseas
  - Training for future overseas production engineers

Approach

GRI102-12 GRI201-2

► Integrated Report 2019 P58

# Endorsing the TCFD, Joining the TCFD Consortium

Ajinomoto Co., Inc. has endorsed the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) established by the Financial Stability Board<sup>[1]</sup>, and has announced its participation in the TCFD Consortium<sup>[2]</sup> launched in May 2019. Moving forward, the Ajinomoto Group will evaluate the risks and opportunities of climate change on business, and actively disclose relevant information in four areas: governance, strategy, risk management and metrics and targets, based on TCFD recommendations.

#### Information disclosure in four areas based on TCFD recommendations

Governance	The Management Risk Committee and Environmental Committee under the Executive Committee review the appropriate responses to the risks and opportunities related to climate change.  The Management Risk Committee identifies the risks and opportunities related to climate change and considers the appropriate responses to them. The Environmental Committee develops the environmental targets and plans and monitors performance in keeping with the environmental management system. These are all reported to the Executive Committee at least once a year, which are then reported to the Board of Directors and included in the corporate strategy.  The Board of Directors makes decisions on capital investments from an overall perspective, taking into account the environmental assessment results, including the impact of climate change.
Strategy	The Ajinomoto Group's business domains of products range from seasonings and coffee to frozen foods, and its business activities extend into Life Support and Healthcare. The geographic range of its operations spans the globe. Climate change can impact the Group's operations in many ways, such as a major natural disaster halting its business activities, affecting its ability to procure raw materials and fuel, and altering consumption of its products.  For production in the short, medium and long term, the Group reviews the physical risks of climate change such as droughts, floods, rising sea levels and changes in yield of major raw materials, as well as transition risks such as rising energy prices, tight supply and demand, and price increases due to competition for major raw materials with other food sources and biofuels.  From fiscal 2018, the Group included scenario analysis of the impacts of climate change on business and established a framework for a more quantitative assessment of the risks based on the TCFD recommendations.  As a result of the scenario analysis, the Group will review counterstrategies against the physical and transition risks identified above, such as switching to energy sources with low GHG emissions.
Risk management	In light of the circumstances surrounding the Group, including global politics, economics, social conditions and climate change, the Management Risk Committee determines the overall level of risks based on the impact on business and likelihood of occurrence, selects the significant risks Group-wide and considers strategies to address them.  Climate-related risks are regarded as part of Group-wide significant risks, and the impacts of physical risks and transition risks, such as legal risks and market risks, are evaluated based on published reports and expert advice.  The Committee's review and recommendations are reported to the Executive Committee and the Board of Directors at least once a year.
Metrics and targets	In its medium and long-term environmental targets, the Group aims to reduce GHG emission volume vs. emission intensity by 50% and water usage vs. production volume unit by 80% compared to fiscal 2005 by fiscal 2030.  In addition, CO <sub>2</sub> emissions and water consumption have been measured and disclosed since 1996.

<sup>[1]</sup> An international organization of representatives of central banks, financial supervisory agencies, and finance ministries.

<sup>[2]</sup> A consortium for investors and companies supporting the TCFD to jointly develop and use industry-specific scenario analysis and quantification techniques.

#### Performance

GRI201-2

► Integrated Report 2019 P58

# Summary of Scenario Analysis Conducted in Fiscal 2018

In fiscal 2018, the Ajinomoto Group conducted a scenario analysis of potential impact from the climate change risk until 2050 for Southeast Asia using the model of umami seasoning AJI-NO-MOTO<sup>®</sup>, one of the Group's major products, under the scenario of a 2°C rise in average global temperature in 2100. The analysis examined droughts, floods, rising sea levels and changes in yield of main raw materials as physical risks, as well as rising energy prices, tight supply and demand, and price increases due to competition for major raw materials with other food sources and biofuels as transition risks.

For physical risks, the Group had anticipated that main raw materials will be affected by the rising frequency of floods, droughts and pests, but the scenario analysis showed that the impact of the physical risks on profits is not large in Southeast Asia, where the main production plant of AJI-NO-MOTO® is located.

On the other hand, the analysis revealed that rising energy prices and carbon tax increases in case of a shift to a lower carbon economy as the impact of climate change worsens may have a significant impact on the production costs of AJI-NO-MOTO® and business profits. The Group aims to fast-track ongoing measures, such as the switch to renewable energy and low-GHG energy sources and the development of production technologies using non-edible raw materials to curb rising production costs of AJI-NO-MOTO® while contributing to global sustainability in case of rising raw material prices and carbon tax increases due to climate change.

# Create a corporate group that grows sustainably

The Ajinomoto Group will continue to grow as a company with sustained competitiveness by evolving into a global organization with a strong governance base, acquiring and developing diverse human resources for innovation, and providing work styles that bring out the potentials of each employee.

**(a)** Related SDGs : Initiatives reported in the Aijnomoto Group Integrated Report 2019 Diverse talent P68 · Accident and safety management · Compensation and benefits Specific · Employee engagement examples · Diversity and inclusion · Labor relations · Recruitment, development and retention · Employee health, safety, and well-being · Fair labor practices Related O Company growth by improving employee engagement opportunities O Creation of an innovative environment and risks Rising costs due to intense competition for human resources (○ Opportunity ● Risk) Key initiatives by Promoting PDCA cycle using the engagement survey · Promoting health management the Ajinomoto Reforming organizational culture to promote diversity · Human rights awareness training Group Training and promotion of female employees · Occupational safety and health management

#### Strong corporate governance P80 · Environment, social impacts on assets Specific · Compliance · IT management examples Competitive behavior · Systemic risk management and operations · Data security and customer privacy · Intellectual property protection · Succession planning · Regulatory capture and political · Management transparency · Political activities and contributions · Business ethics and transparency of payments influence · Human rights and community relations Related Enhancing corporate value Confusion in organizational management and reduced opportunities business profitability due to unstable political, economic, and Appropriate risk-taking and risks Decreased competitiveness due to inability to adapt to social conditions such as financial crises, trade issues, etc. (○ Opportunity ● Risk) Impact of intellectual property risks on business digital technology advances Decreased competitiveness due to vulnerabilities in IT Impact of sudden foreign exchange and interest rate management structure fluctuations on business Higher tax burden due to changes in tax and tax effect · Raising awareness of the Ajinomoto Group Policies among all · Selecting Group-wide significant risks and considering Key initiatives by the Ajinomoto Group employees appropriate responses Group Establishing whistleblower hotline · Managing intellectual property risk · Strengthening corporate governance system · Strengthening information security through the creation of Information Security Regulations

#### Preparation for intense global competition Specific · Business selection and focusing · Open innovation examples · Early creation of innovation · Enhancement of basic infrastructure O Business foundation reform through digital disruption Establishment of competitive advantage by forecasting Related future changes O Value creation from external collaboration opportunities Impact of digital disruption on main businesses and risks O Specialty creation through technological innovation (○ Opportunity ● Risk) Emergence of competitors in areas with low entry barriers Kev initiatives by Value chain restructuring (production system reorganization) · Competitive intelligence (medium- to long-term initiatives) the Ajinomoto Promoting digital transformation · Promoting open & linked innovation Group Rapidly commercializing research findings (R&D system ▶ https://www.ajinomoto.com/en/rd/open\_linked\_innovation/ reorganization)

Approach

Target

GRI401-DMA GRI404-DMA GRI405-DMA GRI405-1

▶ Personnel and Labor-Related Data The Ajinomoto Group will continue to create an environment where employees and the business grow in sync with sustained competitiveness. Through dialogues and collaboration with stakeholders, the Group will also work to enforce a strong and thorough corporate governance.

# Fiscal 2020 Targets for Human Resources and Work Styles

#### Creating large and diverse talent pool

# Ratio of locally hired overseas executives



## Ratio of female managers



#### Key plans

- Development of 300 next-generation global managers and highly specialized talents
- Increase in internal promotion and proactive hiring of mid-career female managers through updating HR policies, etc.
- Proactive hiring of mid-career specialists

#### Raising employee engagement

# Percentage of employees feeling highly engaged in their work [1]



#### Key plans

- Study and implementation of action plans to address issues revealed by the survey
- Improvement of employees' health and well-being
- [1] Percentage of employees that support the goals and targets of the company and feel engaged as they work toward the sustainable growth of the company

# Promoting advanced work styles for diverse lifestyles

#### Average annual working hours FY2016 Actual FY2017 Actual FY2018 Target FY2020-(Aiinomoto Co., Inc.) (same as on the left) (same as on the left) Group-wide target 1,842 hours 1,820 hours 1,916 hours 1,800 hours

# Human resource management

Approach

GRI401-DMA

The Ajinomoto Group pursues shared growth of individual employees and Group companies and innovation through human resource programs optimized at the Group level and by providing a work environment in which every employee feels engaged in their work and is motivated to apply and demonstrate their skills.

# **Management Framework**

Framework

The HR Committee established under the Executive Committee promotes matters related to human resource development to support the sound growth of the Ajinomoto Group.



## "Right Person for Right Position" across borders

The Ajinomoto Group is accelerating the development of next-generation business leaders and advanced specialists by utilizing its global human resource management system, a common platform for developing and promoting diverse talent across countries and regions to achive "Right Person for Right Position." This system is composed of position management and talent management to clarify key positions and talents.

The Group is now preparing a group common rule for international employee transfers. These efforts are aimed at creating a pool of diverse talents who can support the Group as a Genuine Global Specialty Company.

#### Global human resource management system

Position management (right position)  Clarifies and determines roles and responsibilities required in the organization to execute future business strategy.			
Job Grade	Apply job-based grading		
Appraisal	Apply behavior evaluation based on "Ajinomoto Group Way" and individual performance appraisal		
Compensation  Set up global compensation policies  1. Abide by relevant regulations in each country and region  2. Apply "pay for job" and "pay for performance"  3. Apply competitive compensation level based on local market level			
Talent management (right person) Assigns the right person to the right position based on the above positions and their requirements to promote talent development. Appoint excellent talent at early stages.			
Assigns the right person to the right			
Assigns the right person to the right			
Assigns the right person to the right development. Appoint excellent tale	nt at early stages.		
Assigns the right person to the right development. Appoint excellent tale	Organize HR committees on local and regional levels  Apply past year's individual performance and future leadership competencies		

#### Performance

#### GRI102-16

- ▶ Integrated Report 2019 P56

# Understanding Shared Value of the Ajinomoto Group and ASV

The Ajinomoto Group makes various efforts to ensure that all Group employees understand the "Ajinomoto Group Way," which sets out employees' shared values, and ASV, the Group's initiative to create social and economic value through business. The globally accessible Our ASV website introduces ASV best practices and various employee education programs, enabling the timely sharing of information among all employees. In 2018, an ASV Dialogue Workmat-interactive session using two mats and ASV Game Cards were created and are being used as training tools to deepen individual understanding of ASV and organizational efforts to advance ASV.

#### **Fair Labor Practices**

#### Approach

The Ajinomoto Group believes that employee growth contributes to company growth as well as society. To tie individual growth to company growth, each Group company works to provide workplaces, human resource and educational programs that support self-directed career development.

# Compensation and Benefits

#### Approach

▶ Personnel and Labor-Related Data

#### Framework

GRI102-41 GRI402-DMA GRI403-4

▶ Personnel and Labor-Related Data

# **Labor-Management Relations**

At Ajinomoto Co., Inc., all regular non-management employees (61.6% of all employees) are part of a labor union. Labor agreements require the Company to notify employees and their representatives before making any major changes that could substantially impact them (time requirements for notification are confidential).

The Ajinomoto Group strives on a global level to improve terms of employment, including

remuneration, within the context of each company's development.

Labor agreements also stipulate various requirements concerning safety and health, education and training, and medical checkups, and both management and employees work together to improve workplace safety and health standards. As per Japanese law, each workplace convenes a monthly safety and health committee, composed roughly half-and-half of managers and staff, to identify causes and solutions to occupational accidents and share information on the status of employees on sick leave, legal amendments, and more.

# **Engagement Survey and Organizational Culture Innovation**

#### Performance

▶ Integrated Report 2019 P54

In encouraging self-directed career development, the Ajinomoto Group places particular emphasis on individual employee engagement. The Group follows a PDCA cycle of quantitatively gauging employee engagement through a biennial Engagement Survey and uses the results to identify issues and take steps toward improvement.

# Raising employee engagement

	FY2017 Actual	FY2020 Target
Percentage of employees feeling highly engaged in their work [1]	79%	80%+

<sup>[1]</sup> Percentage of employees that support the goals and targets of the company and feel engaged as they work toward the sustainable growth of the company

#### Framework

#### GRI406-1

- ▶ P82
- Labor-Related Data

#### Approach

GRI405-DMA GRI406-DMA

# Hotline (Whistleblowing System)

The Ajinomoto Group has established a hotline as a whistleblower system that enables executive officers and employees, including part-time and temporary workers, to make reports or seek advice by phone, e-mail, fax, letter, or other means.

# Organizational Culture Innovation to Promote Diversity

Aiming to create a society and company where all employees are engaged and respect each other regardless of gender, generation, nationality or background, the Ajinomoto Group provides a system to support individual careers (work style diversity) and bring out the best in employees (career diversity), and encourages the growth of an inclusive organizational culture. The Group is advancing more substantial diversity initiatives in Japan, where diversity efforts are lagging behind other countries and regions.



The Group's diversity logo. The logo adopts the six rainbow colors used as a symbol by LGBT Allies (supporters) and expresses employees who are empowered and growing together in an environment of universal acceptance.

Persons

# **Diversity Promotion Framework**

Framework

GRI405-DMA

At Ajinomoto Co., Inc., a diversity task force led by the officer in charge of promoting diversity has planned and implemented cross-organizational initiatives, including certain Group companies. Since July 2019, the diversity promotion activities are implemented by human resources departments.

In addition, a HR development committee for women provides concrete support for women's career development and promotion planning.

## **Human Rights Awareness Training of Employees**

Performance

GRI406-DMA GRI412-2

▶ Aiinomoto Group Policies (AGP)

In each Group company, human rights awareness training is conducted to advance understanding of the Ajinomoto Group Policies (AGP), which prohibits any form of discrimination or harassment, and nurture talented people with a strong sense of human rights.

In Japan, worksite meetings are held every year to help employees, including part-time and temporary workers, identify and resolve issues in the workplace. The AGP questionnaire also includes topics focused on discrimination and harassment to aid with identifying and preventing harassment.

# **Diversity Performance in Fiscal 2018**

## Performance

GRI202-2 GRI405-1

Labor-Related Data

# Ratio of locally hired overseas executives

	FY2017 Actual	FY2018 Actual	FY2020 Target
Total overseas executives	178	169	_
Local executives	73	65	_
Local executive ratio	41%	38%	50%

#### Percentage of female managers (Group-wide)

	FY2017 Actual	FY2018 Actual	FY2020 Target
Percentage of female managers	22%	23%	20%

#### Main initiatives and external evaluation

- Women's empowerment
- Implemented mentor program for female managers at Ajinomoto Co., Inc.; 18 managers participated (officers become mentors for female senior managers, offering insights from outside their division).
- The Company held work-life balance seminars for employees and their partners who have or want children.
- AjiPanda<sub>®</sub> KIDS in-house nursery school was opened by the Company in March 2018; 15 children have attended thus far.
- Selected as a Nadeshiko Brand<sup>[1]</sup> for two consecutive years.



▶ Personnel and Labor-Related Data

▶ Public Awards and Feedback

- Empowerment of persons with disabilities
- The Group met its legally mandated employment rate across three companies: Ajinomoto Co., Inc., special-purpose subsidiary Ajinomoto Mirai Co., Ltd., and Group-accredited company Ajinomoto Communications, Inc. (as of June 2019)
- Continued to provide work and a rewarding workplace for persons with disabilities, especially intellectual disabilities, at Ajinomoto Mirai Co., Ltd.
- Made a speech-to-text app standard as a support tool for persons with hearing disabilities, enabling them to participate in meetings and work remotely.
- Organizational culture innovation
- The Company held a sales division diversity training.
- An e-learning course was held for all employees of 25 Group companies in Japan aimed at providing basic knowledge of LGBT; Some 9,200 employees participated.
- The Company held an unconscious bias [2] training for its HR Dept. to promote fair evaluations and equal opportunities and enhance psychological safety in the organization. It plans for all employees to take the training by end of fiscal 2020.
- Issued eight installments of Diversity News for sharing diversity initiatives in the Group.
- [1] A joint project of Japan's Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange (TSE), which annually selects outstanding TSE-listed companies that encourage women's empowerment in the workplace as attractive stocks to investors who emphasize improving corporate value in the medium- and long-term, thereby promoting company investment and its efforts
- [2] Prejudices or unsupported judgments unknowingly held by an individual. Everyone has them.

### Approach

#### **Work-style Innovation**

The Ajinomoto Group is actively promoting work-style innovation to accelerate diversity efforts in Japan. Ajinomoto Co., Inc. aims to become completely paperless for in-house processes and reform work styles across existing organizational and professional boundaries by fiscal 2020. By doing so, it aims to change work behavior, develop a "decide and act quickly" culture, and realize advanced work styles that create more seeds of innovation.

In terms of implementing the work-style innovation, each Group company is left to set its own key targets according to its individual business operation and workforce requirements. From fiscal 2018, the Group has held the Work-Style Innovation Promotion Conference to create synergies across the Group.

- Vision for advanced work styles
- Strive for balance between career and life fulfillment
- Include and engage diverse human resources across genders, nationalities, values, etc. and achieve productivity commensurate with a Genuine Global Specialty Company
- Innovate continuously

### **Work-style Innovation Initiatives**

#### Performance

In fiscal 2018, Ajinomoto Co., Inc. advanced the work style by introducing hot-desking. Based on certain progress made in work efficiency, going forward the Company will aim to raise work-style quality, shift to more creative work, and consolidate and standardize common internal functions.

#### Roadmap of Ajinomoto Co., Inc.

	FY2015 (actual)	FY2016 (actual)	FY2017 (actual)	FY2018 (actual)	FY2019
Minimum daily work hours	7 hrs. 35 min.	7 hrs. 35 min.	7 hrs. 15 min.	7 hrs. 15 min.	7 hrs. 15 min.
Average annual work hours	1,976 hrs.	1,916 hrs.	1,842 hrs.	1,820 hrs.	1,800 hrs. (target)
Productivity <sup>[1]</sup>	-	-	107.5%	109.8%	-

<sup>[1]</sup> Ratio of total sales per employee per hour (vs. FY2016)

#### Group companies in Japan

	FY2020- (target)
Average annual work hours	1,800 hrs.

#### TOPIC

▶ Public Awards and

#### FY2018 Japanese Ministry Award for Telecommuting

Ajinomoto Co., Inc. received Japan's highest honor in fiscal 2018 for organizations promoting work-life balance through a telecommuting program. The award was presented by the Ministry of Health, Labour and Welfare, which recognized the Company's work-style innovation initiatives as particularly outstanding.

# Career development support

Approach

GRI404-2

▶ Personnel and Labor-Related Data

The Ajinomoto Group helps employees plan and realize their own career development path because it believes maximizing employee career fulfillment is vital to sustainable corporate growth. The Group offers a range of training and career support programs to support individual growth.

#### Development Program for Global Leaders (The Ajinomoto Group Academy)

The Group launched the Ajinomoto Group Academy in fiscal 2018 as a program to systematically develop the next generation of business leaders and advanced specialists, as well as potential specific department leaders, who are the future global growth drivers.

#### Major programs of the Ajinomoto Group Academy

Training	Objectives	Participants	Schedule	Contents
Global Leaders Seminar (GLS)	Enhance further individual authentic leadership based on the Ajinomoto Group Vision through insight of the future with wider perspectives	General Managers who are current or future head of company or organizational unit Approx. 25 people	8 days/year	Learnings on leading edge, internal case study, panel discussion with top management, action learning (presentation to top management)
Future Leaders Seminar (FLS)	Establish authentic leadership and enhance own leadership influence to take the initiatives of the future direction	Managers who are expected to be future general managers Approx. 25 people	10 days/year	Learnings on leading edge, internal case study, developing self-awareness through coaching
Leadership & Literacy Seminar (LLS)	Develop high self- awareness and build backbone of self- development as a leader	Newly promoted managers or team leaders Approx. 25 people	10 days/year	Enhancement of leadership and self- awareness, career planning, deepening of understanding on ASV through internal and guest lectures, business literacy

#### **Goal-specific Human Resource Training Programs**

Ajinomoto Co., Inc. offers grade-specific and elective programs tailored to the employee's growth stage and goals so they can realize the career they envision for themselves.

#### HR development programs at Ajinomoto Co., Inc.

Grade-specific training programs Elective programs Learning the standard abilities needed for each role/year Further improvement of core abilities and business skills Training for managers ► Group training, Online training Training for non-managers Career support programs

Performance

In fiscal 2018, average hours of training per employee was 13 at Ajinomoto Co., Inc.

GRI404-1

Approach

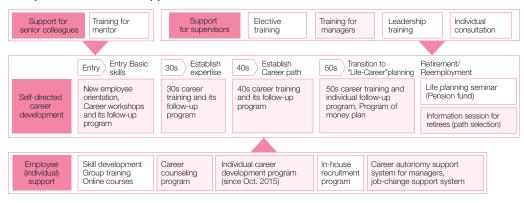
GRI404-2

#### Comprehensive career support

Ajinomoto Co., Inc. provides the support every employee needs to understand their personal strengths, values and characteristics, envision who they want to be (goals and vision), and take voluntary steps to grow and achieve. It offers increasing opportunities in and outside the Company for employees to contemplate their career development. In fiscal 2015, it introduced age groupspecific training so employees can review and plan at specific milestones. The Company helps especially employees beyond age 50 launch a second career and have more options after retirement. It is also working to expand its career counseling program.

For all staff and managers at the mandatory retirement age of 60, group companies in Japan provide a reemployment system to help them stay active after retirement.

#### Comprehensive career support structure



#### **Health and Productivity Management**

GRI403-DMA GRI403-3 GRI403-6

Approach

- 2019 P55
- ▶ Sustainabilitav Data Book 2018 P112

The Ajinomoto Group believes that employees' health and well-being is fundamental to improving employee engagement and simultaneous growth of employee and the company. The Group implements considerable effort in creating working environments that maintain and improve employees' health and well-being. The Ajinomoto Group Health and Well-Being Initiatives were compiled as part of this drive in May 2018.

The Group's vision for health and productivity management consists of two parts, company support for improving employee health and well-being, and individual self-care based on high awareness and knowledge, the two working together to maintain well-being and foster a healthminded culture.

# Vision Get healthy naturally by working at the Ajinomoto Group! Employee self-care Learn Gain health knowledge and learn about your own Act Think Change eating, exercise, Assess and sleep habits Learn, Think, Act for a healthy mind and body Company support

#### Framework

GRI403-DMA GRI403-3 GRI403-6

#### Performance

GRI403-DMA GRI403-3 GRI403-6

#### Health promotion framework

Ajinomoto Co., Inc.'s health policies are centered on the concept of self-care, which advocates health as a personal responsibility. This self-care is supported by a partnership between the Wellness Promotion Center, which has nine occupational physicians and 13 health staff members, the HR Department, and the Ajinomoto Health Insurance Society.

#### Health and productivity initiatives

#### Individual consultations

At Ajinomoto Co., Inc., individual consultations are the foundation for providing all necessary health support. Every employee that works in Japan is interviewed by medical staff at the Wellness Promotion Center at least once per year. Based on their medical examination and stress assessment results, they receive health guidance that is respectful of their individual values and lifestyle, while also making sure to catch signs of latent physical or mental health problems. Guidance and advice services are also available for employees who work long hours or overseas.

#### ■ The A-Health Solution

The A-Health Solution is a health program that supports the self-care of Ajinomoto Group employees through its focus on health visualization and lifestyle disease prevention. As part of the program, in August 2018 the Group introduced Karada kawaru Navi (Body change Navi), an app that visualizes an employee's health condition on four axes (food, exercise, sleep, and stress) for providing health guidance based on a more accurate picture of their lifestyle habits. In October 2018, the Group introduced My Health, a personal health management website which employees can use to monitor their checkup results, work data, and lifestyle data.

#### Smoking cessation program

The Ajinomoto Group fully supports employees working to guit smoking and also strives to minimize smoking risk and passive smoking. Ajinomoto Co., Inc. targets the percentage of nonsmokers to be 88% in fiscal 2020.

#### ■ Mental Health Recovery Program

Ajinomoto Co., Inc. has its own Mental Health Recovery Program. From the start of temporary health leave until after their return to work, employees on the program receive continual support in recognizing their personal values and sources of fulfillment and aspiring to a state where they can enjoy work by relating skillfully to stress. Targets are set according to the state (stage) of symptom recovery.

#### Inclusion in the 2019 Health & Productivity Stock Selection

Ajinomoto Co., Inc. was included in the 2019 Health & Productivity Stock Selection for the third consecutive year as a company strategically promoting employee health and productivity from a management perspective. The selection is made by the Japanese Ministry of Economy, Trade and Industry (METI) and Tokyo Stock Exchange. In the same year, the Company was also included in the "White 500" where METI certifies 500 companies actively working in employee health management through Certified Health and Productivity Management Organization Recognition Program.





#### Performance

▶ Public Awards and

# Occupational safety and health

#### Framework

GRI403-DMA GRI403-1 GRI403-4

▶ Group Shared Policy on Occupational Safety and Health

### Occupational Safety and Health Management

The Ajinomoto Group established the Occupational Safety and Health Committee under the Executive Committee to decide on important policies, develop plans, and conduct reviews of activities related to occupational safety and health. To foster understanding of the Group Shared Policy on Occupational Safety and Health, the Group formulated a guide and standards for occupational safety and health management in February 2019 and encourages its awareness and use at Group companies.

In addition, the Group established the Safety & Disaster Prevention Promotion Headquarters to promote and support the smooth implementation of matters concerning occupational accidents and disaster prevention. If it has been determined that an accident, disaster or other emergency which seriously impacts the Group's occupational safety and health has occurred or may possibly occur, the Headquarters is responsible for assessing the situation, making recommendations, providing guidance, as well as reporting to company executives and related divisions.

#### Occupational safety and health management system



#### ISO 45001 adoption

Performance

From January 2019, the Ajinomoto Group has required all business sites to obtain ISO 45001 certification and is now in the process of transitioning even those sites that have previously obtained OHSAS<sup>[1]</sup> and other certifications.

[1] Occupational Health and Safety Assessment Series (OHSAS): An international standard for occupational safety and health management.

#### Performance

GRI403-DMA GRI403-1 GRI403-2 GRI403-3 GRI403-7

#### Safety and health assessments, audits and inspections

The Ajinomoto Group conducts occupational safety and health assessments mainly at the starting stage of new product manufacturing as a way to prevent occupational accidents. In addition, the Group strives to prevent accidents, disasters or legal violations by carrying out internal audits at each company and business site based on the occupational safety and health management system.

Items	Description	FY2018 record
Safety and health assessment	Carried out to prevent occupational accidents, and mainly conducted at the start of new product manufacturing, when stepping up, changing manufacturing processes, developing new substances, and at the planning stages of constructing or demolishing buildings, structures, and equipment.	63 times
Safety audits and inspections	Internal audits are conducted at each company and site. In the event of a serious accident at a Group site, Ajinomoto Co., Inc. conducts on-site emergency safety audits to investigate the causes of the accident, determine corrective measures, and prevent recurrence. Some sites in Japan bring in third-party consultants or institutions to perform safety inspections.	4 times (AJINOMOTO BAKERY CO., LTD., PT AJINOMOTO INDONESIA, PTT Factory at AJINOMOTO CO., (THAILAND) LTD., and Amoy Food Ltd.)
Equipment inspection for safe and stable production	For factories, regular maintenance and legal inspections are conducted. At factories that operate 24 hours a day, production is periodically shut down completely to allow employees and specialists to inspect equipment for maintenance.	Conducted at each site
Occupational accident prevention at designated worksites	Worksites considered high-risk from a safety and health standpoint by the Chief of Safety & Disaster Prevention Promotion Headquarters (e.g., due to recurrence of accidents or injuries, or inadequate management functions) are designated and provided with safety enhancement guidance.	No designated worksites in FY2018

#### Occupational Safety and Health Activities

#### Fiscal 2018 key targets and performance

#### Performance

GRI403-DMA GRI403-7 GRI403-9 GRI403-10

> Labor Data

Key targets	Action plans
Prevent caught- in-machinery accidents	Tangible measures     (1) For new food processing and packaging equipment, request manufacturers to include safety measures at design and fabrication stages     (2) Consider and implement tangible measures for work tasks that require removing protective covers, etc.      Intangible measures     Education and other measures to reinforce fundamentals, such as stopping equipment for work tasks that require removing protective covers
Prevent falls and low back pain	Prevent comprehensively through work infrastructure, work methods, maintaining physical fitness, and education     Promote automation and use of assistive robots     Hold low back pain prevention seminars

#### Major accidents/incidents

-Related	
	Num
	Num
	Num

	FY2014	FY2015	FY2016	FY2017	FY2018
Number of serious accidents	16	26	16	23	16
Number of serious commuting accidents	25	18	9	19	13
Number of fatal accidents	0	1	0	0	0
Number of caught-in accidents*(Persons)	9 (6)	5 (3)	5 (1)	10 (8)	8 (3)
Number of accident victims*(Persons)	19 (5)	31 (5)	30 (3)	23 (4)	32 (4)
Number of low back pain incidents*(Persons)	_	_	_	7 (0)	15 (0)

<sup>\*</sup> Serious incidents in ( )

In fiscal 2018, the number of serious accidents across the whole Ajinomoto Group declined. The number of caught-in-machinery declined, however, critical fall accident cases of employees over 45 years old increased in Japan. The number of low back pain incidents increased although they did not lead to serious incidents.

Starting from fiscal 2019, the Group plans to implement measures to prevent falls and low back pain as well as traffic safety education and guidance that focus on factors specific to each site; measures to prevent caught-in-machinery accidents during equipment cleaning and maintenance and other incidental work; and measures that reinforce PDCA cycle operations by advancing ISO 45001 certification and adopting the occupational safety and health management guide.

#### Response to safety and health laws and accidents

In fiscal 2018, there were nine cases of legal violations at three Group companies (three sites) in Japan. All of these cases have been fully addressed upon receipt of corrective advice and no serious accidents have occurred related to these violations. The Group will continue to conduct assessments, safety audits and inspections for the safety and security of production activities.

#### **Employee education**

The Ajinomoto Group conducts a variety of occupational safety and health training tailored to the work role and tasks of employees. In addition, a skills map that classifies the skills and knowledge required of all occupational safety and health officers at each site was created and shared within the Group.

#### Training at Group companies in Japan in fiscal 2018

Persons, cumulative in ()

Name of training	Details	Recipients	Number of trainees
Occupational safety and health seminar for top management	Seminar for top management to acquire the necessary safety and health knowledge (e.g., responsibility to consider safety) and to learn how to promote safety and health in a company (one full-day course): Began in fiscal 2010	Managers	43 (468)
Training course for ISO 45001 internal auditors	Acquisition of the necessary knowledge and skills as ISO 45001 internal auditors to promote occupational safety and health through exercises (one one-day course, one two-day course): Began in fiscal 2018	Leadership positions	28 (28)
Basic seminar for the management of chemical substances	Training for supervisors of chemical substances/safety and health to improve their skills by reviewing basic information on chemicals management (regulatory changes, risk assessment, safety data sheets (SDS), GHS labeling) (one full-day course): Began in fiscal 2015	Chemicals supervisors	10 (98)
Fall and lower back pain prevention seminar	Training to consider the mechanisms and causes of falls and lower back pain, and study measures from equipment, work method and physical aspects that will lead to the management guiding, inspiring and practicing such measures in the workplace (one one-day course): Began in fiscal 2017	Management positions	26 (69)
Fall prevention seminar	Training to study the mechanisms of falls, raise awareness through survey and self-check, experience actual body-movement exercises, learn how to prevent fall accidents, consider equipment- and work method-related measures suited to each workplace, and study how to put them into practice (one one-day course): Began in fiscal 2018	Management positions / leadership positions	15 (15)

Performance

Performance

GRI403-5

# Performance

#### **Disaster Preparedness**

The Ajinomoto Group routinely collects information on natural disaster forecasting and damage prediction. It confirms the safety of buildings and production facilities and takes any steps needed, while also revising emergency drills.

In addition to regularly carrying out individual evacuation and fire-fighting drills at each Group company and site, the Group steadily promotes initiatives such as updates on the organizational structures, communication systems, and manuals.

The Group also partners with the local governments where each site is located. To be able to receive local residents and provide food in times of disaster, several sites have been considering or implementing agreements with the government.

# Risk management

#### Framework

#### **Risk Management Framework**

The Ajinomoto Group established the Management Risk Committee as an organization under the Executive Committee in order to identify and select corporate management risks and develop responses to these risks. The Management Risk Committee laid out the structure to assess and manage serious risks in a cross-organizational manner, including those related to climate change, social issues, and technological innovation, and at the same time allow for timely and appropriate response in the event of a crisis. In addition, the Committee encourages autonomous risk management at each organizational unit in the Group. The Committee also identifies and selects corporate management opportunities and evaluates their degree of impact.

#### Promotion framework

Ajinomoto Co., Inc. Executive Committee and Board of Directors

Recommendations

#### Management Risk Committee

Chair: Executive Committee member responsible for the Corporate Planning

Department

Vice-Chair: Officer nominated by the Chair

Members: General Managers of Corporate Planning, Finance & Accounting, Legal,

> Manufacturing Strategy, Information System Planning, General Affairs & Risk Management and Environment, Safety Plant Management Suport Departments

and Group Procurement Center

Secretariat: Corporate Planning and General Affairs & Risk Management Departments

# Compliance

#### Framework

GRI205-DMA GRI205-2 GRI307-DMA GRI419-DMA

▶ Ajinomoto Group Policies (AGP)

#### **Promotion Framework**

The Ajinomoto Group is seeking to strengthen its management base and enhance its corporate value by cultivating an open corporate culture and building strong crisis management structures through improved compliance awareness and a deep understanding of the Ajinomoto Group Policies (AGP).

Ajinomoto Co., Inc. established the Business Conduct Committee, which meets once every three months, to ensure that all personnel are well informed about the AGP, and verify that business activities comply. Major Group companies have also set up their own business conduct committees to boost AGP awareness and address their unique issues by country, region, and company.

#### Promotion framework



### Improvement of Compliance Awareness

#### Compliance education for employees

Performance

GRI205-2

The Ajinomoto Group conducted the following training and educational activities in fiscal 2018 to boost awareness and understanding of AGP and of the whistleblowing system.

- Compliance training (for Ajinomoto Group company managers in Japan. Six times a year, 407 participants)
- Educational posters (produced in 12 languages)
- Compliance education message (sent each time employees start up their computers)

#### Worksite meetings on the AGP

Members of the Business Conduct Committee have been holding worksite meetings on the AGP at Ajinomoto Co., Inc. to hear directly from employees about issues concerning compliance in the workplace. In fiscal 2018, 44 meetings were held (29 for regular employees, 15 for part-time and temporary employees) for 535 participants.

AGP worksite meeting summaries are shared with organizational heads and with every workplace, as well as posted on the intranet to inform all employees. Any compliance issues raised that warrant company-wide efforts are then discussed by the Business Conduct Committee and incorporated into measures to advance AGP and activities to promote compliance.

#### AGP awareness survey

Each November, Ajinomoto Co., Inc. and its Group companies in Japan ask all employees to answer an AGP awareness questionnaire to monitor awareness and understanding of the AGP and to get a clear grasp of any compliance issues in each company and at every worksite. In fiscal 2018, 13,367 employees responded, and the results are made available to all employees on the intranet. Companies cooperate closely with relevant worksites to address any noted compliance issues.

#### Functions of worksite meetings on the AGP and AGP awareness survey

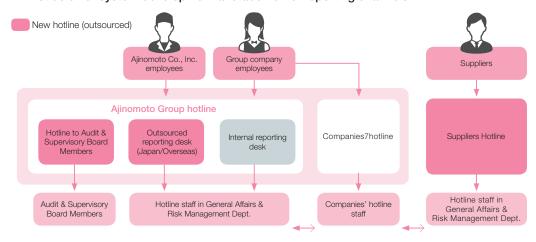


### Hotline: Strengthening the Whistleblowing System

The Ajinomoto Group has established the hotline as a whistleblower system that enables executive officers and employees, including part-time and temporary workers, to make reports or seek advice by phone, e-mail, fax, letter, or other means.

Using the guidelines to institute an internal reporting system based on the Whistleblower Protection Act, published by the Consumer Affairs Agency of Japan, the Group developed its services and multiplied reporting channels in fiscal 2018. In addition, the Group formulated the Group Shared Policy on Whistle-blowing to publicly disclose its policies on whistleblowing and standardize its rules and operations.

#### Whistleblower system development and addition of reporting channels



#### Number of hotline reports[1]

	Human rights, harassment	Hiring, working condition	Quality, environment	Irregularity	Social manners, ethics	Proper job performance	Others	Total
Fiscal 2017	28	14	1	2	10	13	3	71
Fiscal 2018	47	21	1	1	6	20	2	98

<sup>[1]</sup> Multiple issues were reported in some cases.

Performance

GRI205-2 GRI406-1

▶ Group Shared Policy on Whistleblowing

Labor-Related Data

# Prevention of corruption

#### Approach

GRI205-DMA GRI205-2 GRI206-DMA

▶ Group Shared Policy on Bribery Prevention

# **Basic Policy**

The Ajinomoto Group Policies (AGP) prescribes that healthy relationships should be maintained with politicians and government officials, and that giving favors to public officials or any person equivalent in Japan or in foreign countries, in the form of gifts, entertainment, money or other bribery in any manner is prohibited. The Group Shared Policy on Bribery Prevention includes the rules below, requiring officers and employees of Group companies to comply with the policy and related bribery prohibition laws of the countries and regions.

- Accurate account books and records of all corporate transactions must be kept in reasonable
- Attention must be paid to proper accounting of expenditures related to public officials etc.
- Compliance and execution of this policy must be monitored by audits.

#### **Education for Employees**

Performance

GRI205-2

The Group regularly holds training for officers and other employees involved in line management of Group companies in Japan on the proper relationship to have with public officials, including those of foreign countries, with 407 participants in fiscal 2018.

In addition, the Group conducts bribery prevention training courses for officers and managers of overseas Group companies. In fiscal 2018, around 730 participants joined the training courses held in Thailand, Malaysia and Indonesia, with local lawyers as instructors.

# Transparent, fair business practices

#### Approach

GRI204-DMA GRI205-DMA GRI205-2 GRI206-DMA

- ▶ Group Shared
- ▶ Group Shared **Policy for Suppliers**

#### Performance

GRI205-2

#### **Basic Policy**

Through the Ajinomoto Group Policies (AGP), the Group strives to ensure fair and transparent business transactions by requiring officers and employees to fully understand and comply with laws and regulations concerning competition in all countries and regions in which it operates. The Group has also developed guidelines for antitrust/competition laws of Japan, the United States and Europe. For procurement, the Group requests suppliers as business partners in the same supply chain for understanding on the purpose of the Group Shared Policy on Procurement, Group Shared Policy for Suppliers and relevant Guidelines, and not to engage in behavior that hinders fair, transparent and open competition.

#### **Education for Employees**

The Group regularly holds training on antitrust law for officers and other employees involved in line management of Group companies in Japan, with 407 participants in fiscal 2018.

In addition, the Group conducts antitrust law training for officers and managers of overseas Group companies. In fiscal 2018, around 730 participants joined the training held in Thailand, Malaysia and Indonesia, with local lawyers as instructors.

In these trainings, the Group highlights the prohibition on cartels, which have an especially large impact on fair competition.

# Appropriate competitive behavior

#### Framework

#### GRI206-DMA

▶ Group Shared Policy on Global

#### Framework for Global Tax Strategy

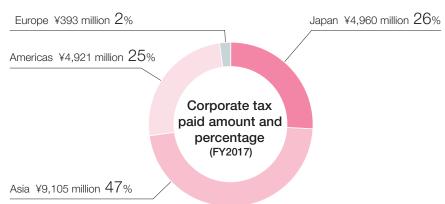
The Ajinomoto Group encourages Group companies to conduct business in compliance with the tax laws of their respective countries, while also seeking to minimize tax risks, for which it formulated a Group Shared Policy on Global Tax in April 2016.

To ensure robust operations in line with the policy, the Group strives to identify appropriate tax practices by collecting self-assessments from Group companies and meeting regularly with each

In April 2018, the Global Finance Dept. was established to strengthen tax strategy management for the entire Group. The department strives to streamline tax procedures by sharing tax payment and tax audit information from different countries across the Group.

#### Corporate Tax Paid by the Ajinomoto Group

#### Performance



# Proper use and management of intellectual property

#### Approach

- Group Shared Policy on Intellectual Property
- Property

#### **IP Initiatives**

The Ajinomoto Group established the Group Shared Policy on Intellectual Property in July 2018, which promotes the following initiatives to establish competitive advantage, generate profit, and grow globally.

- (1) Strategic and efficient acquisition of intellectual properties including know-how for technologies that form the core of businesses
- (2) Proactive incorporation of external technologies and cooperation, including through open innovation
- (3) Utilization and exercise of rights to the Group's proprietary technologies through means including licensing of in-house technologies and litigation
- (4) Protection of products and improvement of brand value using the trademark system and other
- (5) Minimization of infringement risk through respect for third-party IP rights and thorough surveys and clearance
- (6) Provision of survey and analytical data to Group business units and R&D departments
- (7) Cultivation of IP human resources and utilization of internal and external networks

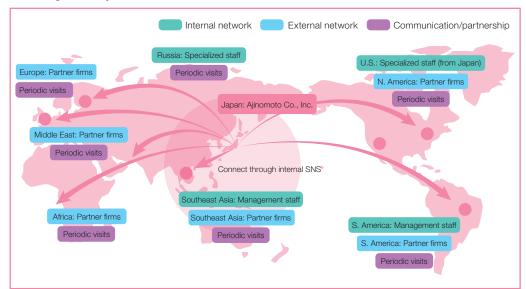
The Group takes a firm stance toward companies that infringe on its IP rights and strongly protects these rights by giving warnings and filing infringement lawsuits, among others. Also, the Information Systems Planning Dept. and Intellectual Property Dept. plan and execute defensive measures to protect trade secrets and, in collaboration with the Internal Auditing Dept., carry out overall internal control related to trade secret management and protection for the Group.

#### **IP Management Organization**

#### Framework

Ajinomoto Co., Inc. supervises IP (patents, designs, trademarks, etc.) for the entire Ajinomoto Group in line with "Instructions Regarding Licensing and Administration of Intellectual Property." An affiliated Intellectual Property Expert Co., Ltd., provides specialized services in the form of surveys, maintenance, and management of IP rights. The Group also has resident staff in the United States, specialized staff in Russia, and key persons designated at Group companies in Southeast Asia and South America, and works with patent law firms. The three bases in Japan, the United States, and Russia cooperate to secure strong patent rights, particularly in biotechnology.

#### IP management system



#### Impact of Ajinomoto Co. Inc. on Other Companies' Patents

Performance

Ajinomoto Co., Inc. topped the 2018 ranking of capability to prevent other food industry companies from obtaining patent rights, released by Patent Result Co., Ltd. (based in Tokyo). This ranking is a compilation of the number of a company's patents in each industry that were cited as reasons for rejection of another company's patent in its patent examination process in 2018. Companies with a large number of patents cited are considered as advanced companies with extensive prior art that blocks competitors from obtaining rights.

#### **Education for Employees**

The Ajinomoto Group regularly conducts trademark seminars to give Group employees basic knowledge on trademarks and the rules for displaying trademarks such as AJI-NO-MOTO®. They serve both to enhance employee appreciation of trademarks and to prevent the AJI-NO-MOTO® trademark from being used as a generic term. A total of 140 employees attended the seminar in fiscal 2018. In addition, Ajinomoto Co., Inc. conducted an e-learning program for all employees (approximately 3,500), of which about 3,100 participated, to disseminate the newly established "Regulations for Expressing Terms Containing "AJINOMOTO" and Trademarks."

# Cybersecurity & personal information management

### Approach

#### GRI418-DMA

▶ Group Shared Policy on Security

#### Framework

GRI418-DMA

#### **Basic Cybersecurity Policy**

The Ajinomoto Group defines cybersecurity as a significant risk. As such, the Group is extremely attentive to the handling of customer and confidential corporate information and has formulated the Group Shared Policy on Information Security and related Group-wide regulations, standards and quidelines.

In 2019, the Group plans to create and adopt Group-wide guidelines on local area networks (LANs) to address the risks of information leakage from IoT devices and external hacking.

#### Information Security Management System

Each organization of Ajinomoto Co., Inc. and Group companies have established systems for appropriate response to information security incidents and other emergency situations in which information flows all the way to the CEO.



#### Rigorous management of personal information

To securely manage customer data and other personal information, the Ajinomoto Group informs relevant organizations of clearly defined rules and procedures as part of its organizational business management.

At Ajinomoto Co., Inc., the Personal Information Management Guidelines under the Information Security Regulations specify rules and procedures for securely handling personal information. The guidelines are based on the ISO 27001 standard for information security management systems.

When operations are outsourced, the contractor's business and systems are assessed to ensure a similar high level of information security. The Company has been building a system for managing customer personal information more strictly on the collection of personal information for campaigns, consumer surveys, etc. The rules demand the selection of personal information managers under the jurisdiction of organizational managers, and clarify the persons responsible for or in charge of the collection, storage and deletion of personal information, as well as who might access or use the collected data.

Following revisions to the Personal Information Protection Law in Japan in May 2017, the Company has revised its internal processes and handling guidelines, and is regularly educating personal information managers in each organization. Regarding transfer of personal information among Group companies out from Europe, the Group complies with the requirements of the EU's General Data Protection Regulation (GDPR), which went into effect in May 2018.

#### **Information Security Initiatives**

Performance

GRI418-DMA

#### Main information security trainings in fiscal 2018

- Group training for line managers in business and sales divisions: Three times, 220 participants
- Group training for line managers in production and R&D divisions: Three times, 187 participants
- Group training for new hires: 87 participants
- Comprehension test on information handling via e-learning for all employees of Ajinomoto Co., Inc.: 3,560 participants (89.4%)

The Company also conducted training on targeted mail attacks for new employees.

#### Ongoing initiatives to prevent leakage of confidential information

In Japan, the Ajinomoto Group introduced an Al-driven user behavior detection system on standard PCs for thorough detection of fraud. After adoption in four companies including Ajinomoto Co., Inc., it is currently being expanded into other Group companies.

The Group builds a consistent vulnerability response strategy by conducting annual external security checks of each Group company's website.

#### Information security inspections

Ajinomoto Co., Inc. conducts annual information security inspections at all worksites. The inspections mainly focus on the basic elements of proper information handling, including management of IT equipment, confidential information, and personal information. The Company also conducts annual checks of external cloud service use and its management status.

# Relationship with local communities

Approach

▶ Group Shared Policy on Local Community

Performance

With the explicit commitment to contribute to community development stated in the Group Shared Policy on Local Community Enhancement, the Group works to resolve local issues in each community through business. The Group conducts dialogues and collaborates with communities, and gives suitable donations and support.

#### Collaboration through foundation

Through foundations in four countries, the Ajinomoto Group supports various activities in the fields of food and nutrition based on local needs.

Country	Name of foundation	URL		
The Ajinomoto Foundation		http://www.theajinomotofoundation.org		
Japan	Ajinomoto Foundation for Dietary Culture	https://www.syokubunka.or.jp/english/		
	Ajinomoto Scholarship Foundation http://ajischolarship.com (Japanese)			
Thailand	Ajinomoto Foundation	http://ajinomotofoundation.or.th (English and Thai)		
Peru	Fundación Ajinomoto para el Desarrollo de la Comunidad	http://www.ajinomoto.com.pe/actividad/fundacion-ajinomoto-contribuye-reducir-indices-de-anemia-infantil (Spanish)		
Brazil	Instituto Ajinomoto	https://www.ajinomoto.com.br/instituto-ajinomoto/ (Portuguese)		

#### Support for areas struck by natural disaster

The Ajinomoto Group provides support that meets each disaster area's particular needs in the fields of food and health.

Event	Recipient	Aid amount	Relief goods	Quantity
	Japan Platform	6 million yen	-	_
	Cash Grant for Japan Floods and Landslides 2018 (Japanese Red Cross Society)	4 million yen	-	_
July 2018 floods	Recipients designated by	_	Ajinomoto кк Okayu (shirogayu) 250 g	Approx. 31,000 packs
	Ehime, Hiroshima, and Okayama Prefectures	-	aminoVITAL <sub>®</sub> GOLD Jelly drink 135 g	10,000 packs
		_	AQUASOLITA <sub>®</sub> oral rehydration solution 500 ml	9,000 bottles
2018 Hokkaido	Hokkaido Disaster Donations Committee	3 million yen	-	-
Eastern Iburi earthquake	Japan Platform	2 million yen	-	-
	Recipients designated by Hokkaido Prefecture	_	Knorr <sub>®</sub> Soup DELI <sub>®</sub>	Approx. 5,400 packs



# Ajinomoto Group Sustainability Data Book 2019

#### Front Cover

The front cover reflects how the Ajinomoto Group is sustainably growing through ongoing innovation and investment in its six core businesses.

#### Inquiries

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### Global Communications Department

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# Ajinomoto Group Sustainability Data Book 2019 Appendix 1: Environmental Data

- Reduction of greenhouse gas emissions
- Conservation of water resources
- 3Rs of waste

#### Scope of the Environmental Data

The environmental data of this section covers Ajinomoto Co., Inc. and other group companies subject to the Ajinomoto Group Environmental Management as defined in the company's Environmental Regulations as of March 31, 2019. Performance statistics are for the 125 major business sites (3 reduced following site reorganization as well as factory dissolution and new construction), which substantially represent the environmental performance of the entire Ajinomoto Group under the consolidated financial accounting system.

# Reduction of greenhouse gas emissions

■ Total greenhouse gas emissions calculated using applicable IEA (International Energy Agency) CO₂ emission factors

factors						(tons
		FY2014	FY2015	FY2016	FY2017	FY2018
Scope 1 emissions		1,167,816	1,251,654	1,270,429	1,244,676	1,196,96
Japan		264,381	319,751	345,958	361,142	327,34
Asia/Africa	Asia/Africa		528,823	550,319	519,025	526,40
Europe		47,782	63,300	48,589	46,282	39,02
North America		170,837	188,438	204,301	228,284	219,33
South America		161,780	123,918	99,319	66,896	67,23
China		28,225	27,424	21,943	23,047	17,62
Scope 2 emissions (marke	t-based method)	1,143,380	1,101,529	1,121,770	1,072,248	1,015,72
Japan		138,555	138,341	143,670	136,505	141,95
Asia/Africa		415,330	427,826	415,967	441,259	427,38
Europe		259,453	176,291	210,988	182,140	184,2
North America		202,341	248,114	235,069	213,247	193,76
South America		74,185	66,905	62,139	60,420	40,3
China		53,516	44,052	53,937	38,677	28,0
cope 1,2 emissions		2,311,196	2,353,183	2,392,199	2,316,924	2,212,6
Japan		402,936	458,092	489,628	497,647	469,2
Asia/Africa		910,141	956,649	966,286	960,284	953,7
Europe		307,235	239,591	259,577	228,422	223,2
North America		373,178	436,552	439,370	441,531	413,1
South America		235,965	190,823	161,458	127,316	107,5
China		81,741	71,476	75,880	61,724	45,6
cope 1 emissions		-	-	1,270,429	1,244,676	1,196,96
	Production	-	-	-	-	974,64
Business activities	Transportation	-	-	-	-	25,9
business activities	Others (office, sales, R&D, etc.)	-	-	-	-	196,3
D	Food products	-	-	333,215	344,819	347,92
Business division	AminoScience	-	-	937,214	899,857	849,04
cope 2 emissions (market-based method)		-	-	1,121,769	1,072,248	1,015,7
	Production	-	-	-	-	821,3
Business activities	Transportation	-	-	-	-	
	Others (office, sales, R&D, etc.)	-	-	-	-	194,36
Business division	Food products	-	-	311,526	323,576	379,5
Dusiliess division	AminoScience	-	-	810,243	748,672	636,1

#### ■ Total greenhouse gas emissions calculated based on internal CO₂ emission factors

	FY2005 (Base Year)	FY2014	FY2015	FY2016	FY2017	FY2018
Greenhouse gas emissions (kilo tons)	2,357	2,211	2,234	2,330	2,299	2,310
Greenhouse gas emission volume vs. emission intensity (per ton of product)	1.31	0.94	0.88	0.88	0.86	0.88
Reduction rate	-	28%	33%	33%	35%	33%
Reference value: Total amount of production (kilo tons)	1,800	2,347	2,532	2,657	2,684	2,627

#### Ajinomoto Group products carbon footprint

Product	Production plant	CFP values <sup>[1]</sup> (per kg of product)	CFP values per serving <sup>[2]</sup>
(1) HON-DASHI®	Kawasaki Plant, Ajinomoto Food Manufacturing Co., Ltd.	14.08 kg-CO <sub>2</sub> e	-
(2) Ajinommoto кк Consommé (Granules)	Takatsu Plant, Ajinomoto Food Manufacturing Co., Ltd.	6.87 kg-CO₂e	-
(3) Knorr <sub>®</sub> Cup Soup Tsubu Tappuri Corn Cream	Takatsu Plant, Ajinomoto Food Manufacturing Co., Ltd.	7.08 kg-CO <sub>2</sub> e	-
(4) Ajinomoto кк Shirogayu 250 g	Takatsu Plant, Ajinomoto Food Manufacturing Co., Ltd.	0.81 kg-CO <sub>2</sub> e	-
(5) Cook Do <sub>®</sub> Hoikoro	Kawasaki Plant, Ajinomoto Food Manufacturing Co., Ltd.	2.95 kg-CO₂e	1.21 kg-CO₂e per serving (approx. 700 g)
(6) Cook Do <sub>®</sub> Kyo-no Oozara Butabara Daikon	Shizuoka Plant, Ajinomoto Food Manufacturing Co., Ltd.	2.31 kg-CO₂e	2.90 kg-CO₂e per serving (approx. 1 kg)
(7) Nabe Cube Toridashi Umashio	Kunneppu Plant, Ajinomoto Food Manufacturing Hokkaido Co., Ltd.	8.54 kg-CO <sub>2</sub> e	-
(8) Blendy <sub>®</sub> Stick Café au Lait (coffee mixes)	AGF Suzuka, Inc.	4.85 kg-CO₂e	-
(9) Lemon and Basil Fried Chicken (frozen foods)	Kyushu Plant, Ajinomoto Frozen Foods Co., Inc.	5.84 kg-CO₂e	-
(10) Yamaki Mentsuyu (400ml and 500ml)	Daini Plant and Minakami Plant, YAMAKI Co., Ltd.	2.02 kg-CO₂e	-
(11) Masako <sub>®</sub> Ayam (11g)	Mojokerto Factory, PT Ajinomoto Indonesia	2.49 kg-CO₂e	-
(12) Aji-ngon <sub>®</sub> Pork flavor seasoning (400g)	Long Thanh Factory, Ajinomoto Vietnam Co., Ltd.	2.68 kg-CO₂e	-
(13) Ros Dee <sub>®</sub> Pork (75g)	Nong Khae Factory, Ajinomoto Thailand Co., Ltd.	3.15 kg-CO₂e	-

<sup>[1]</sup> Carbon footprint (CFP) values in the report are calculated in accordance with PCR No. PA-CG-02 from the Japan Environmental Management Association for Industry. The calculation system and the results are backed by a third-party assurance statement from Lloyd's Register Quality Assurance Limited, based on the ISO/TS 14067 standard.

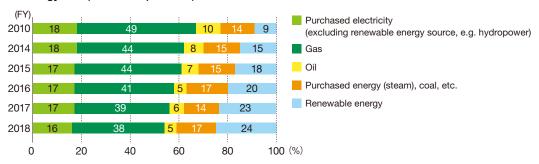
[2] CFP values of ingredients including vegetables and meat are included.

#### Energy input

	FY2014	FY2015	FY2016	FY2017	FY2018
Energy input (TJ) <sup>[3]</sup>	36,356	37,362	39,105	39,589	38,468
Energy input intensity of production (per tonne of product)	15.5	14.8	14.7	14.8	14.6

<sup>[3]</sup> TJ: terajoule, T (tera) =  $10^{12}$ . The joule conversion factors officially published in 2005 have been used.

#### Energy use (thermal equivalent)



#### Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions

nne)

	FY2018
NOx	9,421
SOx	10,701
Soot and dust	1,827
CFCs, HCFCs, HFCs	11

#### Conservation of water resources

Water use (kilo tons)

	FY2005 (Base Year)	FY2014	FY2015	FY2016	FY2017	FY2018
Total water withdrawal [1]	221,863	78,653	76,912	74,041	74,844	69,892
Fresh surface water	180,363	28,422	25,272	23,559	24,433	20,672
Brackish surface water/ seawater	0	0	0	0	0	0
Fresh groundwater-renewable	0	0	0	0	0	0
Fresh groundwater-non-renewable	-	16,293	16,972	15,859	16,371	15,076
Produced water	0	0	0	0	0	0
Municipal water (including industrial water)	41,500	33,938	34,668	34,623	34,041	34,144
Water usage vs. production volume unit (per ton of product)	123	34	30	28	28	27
Reduction rate	-	73%	75%	77%	77%	78%
Reference value: Production volume	1,800	2,347	2,532	2,657	2,684	2,627
Total water discharge	201,300	66,386	60,873	59,701	60,464	55,800
Fresh surface water	53,000	29,897	27,418	27,419	29,813	29,231
Brackish surface water/ seawater	0	0	0	0	0	0
Groundwater	0	0	0	0	0	0
Third-party destinations	4,300	9,224	10,171	9,909	9,827	9,540
Total water use recycled or reused	144,000	27,265	23,284	22,373	20,824	17,029
Proportion of water use recycled or reused	65%	35%	30%	30%	28%	24%
Total water use	20,563	12,267	16,039	14,340	14,380	14,092
BOD (tons)	550	304	268	269	294	312
Nitrogen (tons)	3,200	404	424	445	394	501

<sup>[1]</sup> Water withdrawals are disclosed based on volumes measured/invoiced in accordance with national or regional laws or converted from pump power use/pipe water speed. Water discharge volume and quality are both disclosed based on accumulated values measured in accordance with national or regional law.

#### 3Rs of waste

#### Volume of waste and by-products and resource recovery ratio

(tons)

		FY2014	FY2015	FY2016	FY2017	FY2018
azar	dous waste (waste acid, waste alkali, waste oil, cinder)					
G	eneration	60,304	60,431	59,217	59,162	69,991
Re	ecycling	59,719	59,457	58,890	58,862	68,422
In	cineration	35	14	54	24	40
La	andfill	550	959	274	276	1,529
n-h	azardous waste					
By	y-products					
	Generation	2,295,432	2,435,544	2,337,284	2,395,249	2,194,566
	Composting	2,293,952	2,434,281	2,335,451	2,394,976	2,194,470
	Incineration	144	0	0	0	(
	Landfill	1,336	1,263	1,832	273	90
Ot	thers					
	Generation	132,462	140,464	178,861	178,989	174,65°
	Recycling	123,330	131,258	163,414	161,455	153,38
	Incineration	1,116	1,293	3,021	2,066	2,82
	Landfill	8,016	7,913	12,426	15,467	18,442
tal	generation	2,488,199	2,636,439	2,575,361	2,633,400	2,439,208
tal ı	recycling	2,477,001	2,624,997	2,557,755	2,615,293	2,416,280
otal waste		11,197	11,442	17,606	18,107	22,928
esou	rce recovery ratio	99.5%	99.6%	99.3%	99.3%	99.1%

# Ajinomoto Group Sustainability Data Book 2019 Appendix 2: Personnel and Labor-Related Data

- Employee statistics
- Work-life balance (WLB) -related programs (Ajinomoto Co., Inc. only)
- Frequency of serious accidents and accidents with absence
- Number of hotline reports

#### Scope of the personnel and labor-related data

The personnel and labor-related data of this section covers Ajinomoto Co., Inc. and its consolidated subsidiaries (28 in Japan, 73 overseas) as of March 31, 2019.

#### **Definitions of terms**

Employees : Directly employed management, non-management and contract staff

Temporary staff: Directly employed contract and temporary staff, including part-time employees

Executive : Directors, auditors, advisors, executive officers or a higher position (excluding part-timers)

Management : Employees in the position of section manager, a position equivalent to section manager, or a

position higher than section manager (excluding executives)

# **Employee statistics**

### Number of Ajinomoto Group employees

(persons)

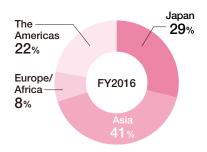
										(perso
			FY2016			FY2017			FY2018	
		Total	Male	Female	Total	Male	Female	Total	Male	Female
moto G	Group total	43,001	-	-	44,606	-	-	44,199	-	-
Er	nployees	32,734	23,607	9,127	34,452	24,550	9,902	34,504	24,467	10,0
	Management	4,488	3,626	862	4,921	3,861	1,060	4,911	3,804	1,1
	Non- management	28,170	19,931	8,239	29,460	20,639	8,821	29,521	20,607	8,9
	Contract staff	76	50	26	71	50	21	72	56	
Te	mporary staff	10,267	-	-	10,154	-	-	9,695	-	-
Japan		15,595	-	-	15,059	-	-	14,991	-	-
Er	nployees	9,450	7,281	2,169	9,213	6,999	2,214	9,219	6,913	2,3
	Management	2,278	2,118	160	2,221	2,056	165	2,203	2,024	1
	Non- management	7,096	5,113	1,983	6,921	4,893	2,028	6,944	4,833	2,1
	Contract staff	76	50	26	71	50	21	72	56	
Te	mporary staff	6,145	-	-	5,846	-	-	5,772	-	-
Asia		17,269	-	-	17,880	-	-	17,305	-	-
Er	nployees	13,571	9,404	4,167	14,105	9,772	4,333	13,819	9,730	4,0
	Management	1,153	820	333	1,532	981	551	1,597	1,008	5
	Non- management	12,418	8,584	3,834	12,573	8,791	3,782	12,222	8,722	3,5
Те	mporary staff	3,698	-	-	3,775	-	-	3,486	-	-
Europe	and Africa	2,887	-	-	3,899	-	-	3,972	-	-
Er	nployees	2,479	1,931	548	3,450	2,437	1,013	3,557	2,458	1,0
	Management	308	223	85	393	282	111	420	290	1
	Non- management	2,171	1,708	463	3,057	2,155	902	3,137	2,168	ç
Te	mporary staff	408	-	-	449	-	-	415	-	_
The An	nericas	7,250	-	-	7,768	-	-	7,931	-	_
Er	nployees	7,234	4,991	2,243	7,684	5,342	2,342	7,909	5,366	2,5
	Management	749	465	284	775	542	233	691	482	2
	Non- management	6,485	4,526	1,959	6,909	4,800	2,109	7,218	4,884	2,3
Te	mporary staff	16	-	-	84	-	-	22	-	-
	ijinomoto Co.,	3,898	2,623	1,275	3,896	2,614	1,282	3,928	2,638	1,2
Inc.	mployoos	0.450	0.440	1.010	0.464	0.400	1 005	0.404	0.444	4 /
Er	mployees Management	3,459	2,449 985	1,010 93	3,464	2,429 974	1,035 97	3,494	2,444 994	1,0
	Non-	1,078			1,071			1,098		
	management	2,305	1,414	891	2,322	1,405	917	2,324	1,394	
	Contract staff	76	50	26	71	50	21	72	56	
Te	mporary staff	439	174	265	432	185	247	434	194	2

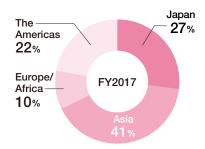
#### Ajinomoto Group employee ratio

Numbers in parentheses indicate male and female percentages.

			FY2016			FY2017			FY2018	
		Total	Male	Female	Total	Male	Female	Total	Male	Female
moto	Group total	100%	-	-	100%	-	-	100%	-	-
I	Employees	76%	(72%)	(28%)	77%	(71%)	(29%)	78%	(71%)	(29%
	Management	10%	(81%)	(19%)	11%	(78%)	(22%)	11%	(77%)	(23%
	Non- management	66%	(71%)	(29%)	66%	(70%)	(30%)	67%	(70%)	(30%
L	Contract staff	0%	(66%)	(34%)	0%	(70%)	(30%)	0%	(78%)	(22%
	Temporary staff	24%	-	-	23%	-	-	22%	-	-
Japa		100%	-	-	100%	-	-	100%	-	-
I	Employees	61%	(77%)	(23%)	61%	(76%)	(24%)	61%	(75%)	(25%
	Management	15%	(93%)	(7%)	15%	(93%)	(7%)	15%	(92%)	(8%
	Non- management	46%	(72%)	(28%)	46%	(71%)	(29%)	46%	(70%)	(30%
	Contract staff	0%	(66%)	(34%)	0%	(70%)	(30%)	0%	(78%)	(22%
	Temporary staff	39%	-	-	39%	-	-	39%	-	-
Asia		100%	-	-	100%	-	-	100%	-	-
I	Employees	79%	(69%)	(31%)	79%	(69%)	(31%)	80%	(70%)	(30%
	Management	7%	(71%)	(29%)	9%	(64%)	(36%)	9%	(63%)	(37%
	Non- management	72%	(69%)	(31%)	70%	(70%)	(30%)	71%	(71%)	(29%
	Temporary staff	21%	-	-	21%	-	-	20%	-	-
Euro	pe and Africa	100%	-	-	100%	-	-	100%	-	-
l	Employees	86%	(78%)	(22%)	88%	(71%)	(29%)	90%	(69%)	(31%
	Management	11%	(72%)	(28%)	10%	(72%)	(28%)	11%	(69%)	(31%
	Non- management	75%	(79%)	(21%)	78%	(70%)	(30%)	79%	(69%)	(31%
	Temporary staff	14%	-	-	12%	-	-	10%	-	-
The A	Americas	100%	-	-	100%	-	-	100%	-	-
ļ l	Employees	100%	(69%)	(31%)	99%	(70%)	(30%)	100%	(68%)	(32%
	Management	10%	(62%)	(38%)	10%	(70%)	(30%)	9%	(70%)	(30%
	Non- management	89%	(70%)	(30%)	89%	(69%)	(31%)	91%	(68%)	(32%
	Temporary staff	0%	-	-	1%	-	-	0%	-	-
Ref.: Inc.	Ajinomoto Co.,	100%	(67%)	(33%)	100%	(67%)	(33%)	100%	(67%)	(33%
	Employees	89%	(71%)	(29%)	89%	(70%)	(30%)	89%	(70%)	(30%
	Management	28%	(91%)	(9%)	27%	(91%)	(9%)	28%	(91%)	(9%
	Non- management	59%	(61%)	(39%)	60%	(61%)	(39%)	59%	(60%)	(40%
	Contract staff	2%	(66%)	(34%)	2%	(70%)	(30%)	2%	(78%)	(22%
-	Temporary staff	11%	(40%)	(60%)	11%	(43%)	(57%)	11%	(45%)	(55%

#### Group employees by region







# Ratio of locally hired overseas executives

(persons)

	FY2016	FY2017	FY2018
Total overseas executive	-	169	178
Local executives	-	65	73
Local executive ratio	50%	38%	41%

#### Number of new hires, retention rate

(persons)

					FY2016			FY2017		FY2018		
				Total	Male	Female	Total	Male	Female	Total	Male	Female
	Total number of new hires (new graduates + mid-career)		7,072	-	-	6,882	-	-	7,303	-	-	
	Japan		356	-	-	384	-	-	387	-	-	
	Asia	a		4,558	-	-	4,662	-	-	4,183	-	-
	Eur	ope a	and Africa	189	-	-	376	-	-	2,261	-	-
	The Americas	1,969	-	-	1,460	-	-	472	-	-		
	Ref	.: Ajir	nomoto Co., Inc.	107	75	32	119	66	53	124	71	53
		New	v graduates	64	42	22	85	45	40	87	49	38
		Mid-	-career	43	33	10	34	21	13	37	22	15
			Management	6	5	1	9	7	2	4	4	0
			Non-management	37	28	9	25	14	11	33	18	15
Rete	Retention rate (3years) for new grad		uates									
	Ajinomoto Co., Inc.		95.0%	93.5%	100.0%	95.7%	97.9%	90.9%	92.4%	91.5%	93.8%	

# Number of retirees, turnover, reemployment

(persons)

				FY2016			FY2017		FY2018		
			Total	Male	Female	Total	Male	Female	Total	Male	Female
Tota	l number o	of retirees	7,674	-	-	6,867	-	-	7,330	-	-
	Japan		422	-	-	352	-	-	361	-	-
		Retired	154	-	-	151	-	-	138	-	-
		Resigned for personal reasons	268	-	-	201	-	-	223	-	-
	Overseas	Resigned for personal reasons, etc.	7,252	-	-	6,515	-	-	6,969		-
	Ref.: Ajin	omoto Co., Inc.	118	89	29	99	82	17	116	86	30
		Retired	60	48	12	51	46	5	51	46	5
		Resigned for personal reasons	58	41	17	48	36	12	65	40	25
Turn	over <sup>[1]</sup>										
		Ajinomoto Co., Inc.	1.6%	1.6%	1.7%	1.2%	1.2%	1.1%	1.6%	1.3%	2.3%
Ree	mployed a	fter retirement[2]									
	Japan		164	-	-	145	-	-	111	-	-
	Ref.: Ajin	omoto Co., Inc.	35	-	-	28	-	-	28	-	-
		Under reemployment program	4	0	4	4	0	4	7	0	7
		Seniors (after retirement)	31	-	-	24	-	-	21	-	-
Ref.	: Number o	of employees regist	ered in reer	nployment	program (A	jinomoto C	o., Inc.)				
	Employee	es registered	52	2	50	47	3	44	46	4	42
		Newly registered	7	0	7	7	1	6	17	1	16

<sup>[1]</sup> Only includes employees resign for personal reasons [2] Japan only

#### Number of personnel with disabilities (Japan only)

		As of June 1, 2017	As of June 1, 2018	As of June 1, 2019
Emp	loyees	307.0	333.5	300.5
	Ajinomoto Co., Inc.	88.0	90.0	91.0
	Group companies <sup>[1]</sup>	219.0	243.5	209.5
Perc	centage of workforce rate	2.07%	2.21%	2.23%
	Ajinomoto Co., Inc.	1.91%	1.95%	2.06%
	Group companies <sup>[1]</sup>	2.14%	2.33%	2.31%

<sup>[1]</sup> For group companies in Japan, numbers refer to 17 companies with 45.5 or more regular workers, among the 27 consolidated subsidiaries in Japan, and a special-purpose subsidiary Ajinomoto Mirai Co., Ltd.

#### Age, years of employment, salary

		FY2016			FY2017			FY2018	
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Average age									
Ajinomoto Co., Inc.	43.0	43.7	40.9	43.1	44.0	41.1	43.6	44.4	41.5
Group companies in Japan	41.2	-	-	42.6	-	-	42.0	-	-
Overseas Group companies	36.6	-	-	36.7	-	-	33.5	-	-
Average years of employment									
Ajinomoto Co., Inc.	19.4	20.0	17.8	19.6	20.2	17.9	19.9	20.6	18.1
Group companies in Japan	13.9	-	-	13.2	-	-	12.8	-	-
Overseas Group companies	8.9	-	-	8.9	-	-	7.6	-	-
Average annual salary[2] (thousand	d yen)								
Ajinomoto Co., Inc.	9,525	-	-	9,458	-	-	9,823	-	-

<sup>[2]</sup> Average for employees (excluding contract staff)

#### Working hours (Ajinomoto Co., Inc. only)

	FY2016		FY2017			FY2018			
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Average annual working hours	1,916	-	-	1,842	-	-	1,820	-	-
Average paid leave days	17.0	-	-	16.6	-	-	16.3	-	-
Paid leave utilization rate	87.6%	-	-	86.2%	-	-	84.3%	-	-

### Education and training (Ajinomoto Co., Inc. only)

	FY2016	FY2017	FY2018
Annual expenditures for education and training	504	511	513

#### Freedom of Association (Ajinomoto Co., Inc. only)

	FY2016	FY2017	FY2018
Ratio of employees represented by an independent trade union	-	-	61.60%

# Work-life balance (WLB) -related programs (Ajinomoto Co., Inc. only)

Pr	ogram	Details				
Anywhere office		Allows employees to work on eligible tasks at home or at a satellite office up to 4 days per week when approved by the Company.				
Super flextime		Flextime system without setting core time, or a time zone in which working is required, aimed at supporting efficient fulfillment of work duties and improving WLB.				
Hourly paid leave sys	tem	Allows employees to take paid leave of up to 40 hours per year in hourly units.				
Child care leave syste	em	Allows employees with children who have not yet entered junior high school to take up to 10 days of childcare leave per fiscal year per child.				
Nursing care leave sy	stem	Allows employees to take leaves for 10 days per eligible family member (20 days if there are 2 or more eligible family members)				
Volunteer leave system	m	Allows employees to take volunteer leave of up to 8 days per fiscal year in case he or she is qualified for volunteer work by an NPO, social welfare foundation, or other organization.				
WLB leave system		Allows employees to take 3 consecutive days of leave separate from ordinary paid leav (once per year).				
Refreshment leave system		Allows employees to take rejuvenation leave of 9, 16, 30, and 16 days one time in the age ranges of 25–32, 33–40, 41–48, and 49–56, respectively.				
WLB short working	Short time work for childcare	Allows employees to take leave up to 2 hours and 30 minutes per day until the child enters the 4th grade of elementary school.				
hours system	Short time work for nursing care	Allows employees to take leave up to 2 hours and 30 minutes per day to provide car for certain family members until such care is no longer needed.				
Area application syste	em	Allows employees to request to work in a specific area due to childcare, family care, or other applicable reasons (global employees: no transfer, regional employees: transfer to area different from that when hired).				
	Temporary retirement for child care	Allows employees to take leave until the last day of April following the child's 1st birthday. A total of 15 days paid leave is provided.				
WLB temporary	Temporary retirement for nursing care	Allows employees to take leave up to 1 year to care for a spouse, parents, or family within the 2nd-degree of kinship whom the employee supports.				
retirement system	Temporary retirement for infertility treatment	Allows employees to take leave once in principle, up to 1 year, to receive advanced reproductive therapy.				
	Temporary retirement for accompanying spouse on job transfer	Allows employees to take leave once, for a period between 1 and 3 years, to accompany their spouse on a job transfer that requires the spouse to change residence.				
Re-employment syste	em	Allows employees to register for re-employment in the event that retirement was unavoidable due to childbirth and newborn care, family and child care, or relocation because of marriage or spouse's job transfer.				

#### Employee usage of WLB-related programs (Ajinomoto Co., Inc. only)

		FY2016			FY2017		FY2018		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
enting leave program									
Number of users									
Parenting leave	123	10	113	149	27	122	122	23	9
Number of employees with the right to take childcare leave	-	-	-	-	-	-	174	124	5
Part-time parenting and work	182	0	182	157	0	157	154	0	15
Childcare leave	39	3	36	25	2	23	18	1	-
Usage ratio						·			
Parenting leave	-	25.5%	100.0%	-	21.3%	100.0%	-	18.5%	100.0
Part-time parenting and work	-	-	-	-	-	-	-	-	-
Childcare leave	-	-	-	-	-	-	-	-	-
Average parenting leave usage days	-	27	332	-	16	288	-	27	3
Reinstatement rate	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0
Retention rate	-	-	-	-	-	-	-	100.0%	100.0
er WLB-related programs				'					
Number of users									
Nursing care leave	14	5	9	14	5	9	12	1	
Nursing care temporary retire- ment	0	0	0	1	0	1	3	1	
Part-time family care and work	1	0	1	1	0	1	-	-	-
Accumulated paid leave	104	41	63	85	32	53	79	22	
Volunteer leave	55	-	-	42	-	-	36	-	-
Rejuvenation leave	155	-	-	142	-	-	160	-	-

### Frequency of serious accidents and accidents with absence

#### Frequency of serious accidents and accidents with absence, and number of accident victims[1]

	FY2014	FY2015	FY2016	FY2017	FY2018
No. of people (with absence)	102	108	119	110	134
No. of people (serious)	24	26	16	23	16
Lost-time injury frequency rate	1.25	1.26	1.37	1.39	1.49
Lost-workday rate	0.027	0.097	0.054	0.021	0.018

<sup>[1]</sup> Data from Ajinomoto Foods North America, Inc. and Ajinomoto Istanbul Food Industry and Trade Ltd. Co. were added in fiscal 2017.

# ■ Major accidents / incidents<sup>[1]</sup>

		FY2014	FY2015	FY2016	FY2017	FY2018
	Japan	6 (4)	2 (1)	2 (1)	1 (1)	1 (0)
Number of caught-in accident victims People, serious accident victims in ()	Oerseas	3 (2)	3 (2)	3 (0)	9 (7)	7 (3)
, ,	Total	9 (6)	5 (3)	5 (1)	10 (8)	8 (3)
	Japan	6 (2)	18 (5)	24 (2)	14 (3)	19 (4)
Number of fall accident victims People, serious accident victims in ()	Oerseas	13 (3)	13 (0)	6 (1)	9 (1)	13 (0)
, ,	Total	19 (5)	31 (5)	30 (3)	23 (4)	32 (4)
	Japan	1 (0)	8 (0)	7 (0)	5 (0)	10 (0)
Number of low back pain incidents People, serious incidents in ( )	Oerseas	-	-	-	2 (0)	5 (0)
, , , , , , , , , , , , , , , , , , ,	Total	-	-	-	7 (0)	15 (0)
Number of serious accidents (excluding commuting acci-	Japan	8 (6)	13 (6)	8 (3)	6 (4)	9 (4)
dents)	Oerseas	8 (5)	13 (2)	8 (1)	17 (8)	7 (3)
caught-in and fall accidents in ( )	Total	16 (11)	26 (8)	16 (4)	23 (12)	16 (7)
	Japan	3	5	4	3	3
Number of serious commuting accidents	Oerseas	22	13	5	16	10
	Total	25	18	9	19	13
	Japan	0	1	0	0	0
Number of fatalities	Oerseas	0	0	0	0	0
	Total	0	1	0	0	0

<sup>[1]</sup> Data from Ajinomoto Foods North America, Inc. and Ajinomoto Istanbul Food Industry and Trade Ltd. Co. were added in fiscal 2017.

# Number of hotline reports

		FY2016	FY2017	FY2018
Nur	nber of hotline reports	69	71	98
	Human rights, harassment	33	28	47
	Hiring, working condition	14	14	21
	Quality, environment	1	1	1
	Irregularity	2	2	1
	Social manners, ethics	8	10	6
	Proper job performance	6	13	20
	Others	5	3	2