Eat Well, Live Well.

AJINOMOTO

Initiatives of the Ajinomoto Group to Achieve Decarbonization

November 15, 2023
The 20th Kawasaki International Eco-Business Forum

Toyosaki
Environment Group, Sustainability Development Department, Ajinomoto Co., Inc.

Purpose of Foundation and the Present

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“Creating good and affordable seasoning to improve the taste of plain food that is rich in nutrients”

- Wishing to improve nutrition for the Japanese people -

Discovered the “Umami” taste
in 1908
Dr. Kikunae Ikeda, Professor of the Imperial University of Tokyo

Discovered the “glutamine acid”, the taste component in kombu (kelp) broth, and named it **“umami”**

「美味しく食べて健康づくり」

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Founded
in 1909
Saburokusuke Suzuki II

Launched **“AJI-NO-MOTO®”**, the world’s first **umami seasoning** made from glutamine acid

Consistent initiative since its foundation to create social values and economic values through its business activities
= ASV (Ajinomoto Group Creating Shared Value)

Developing a wide range of businesses with amino acids

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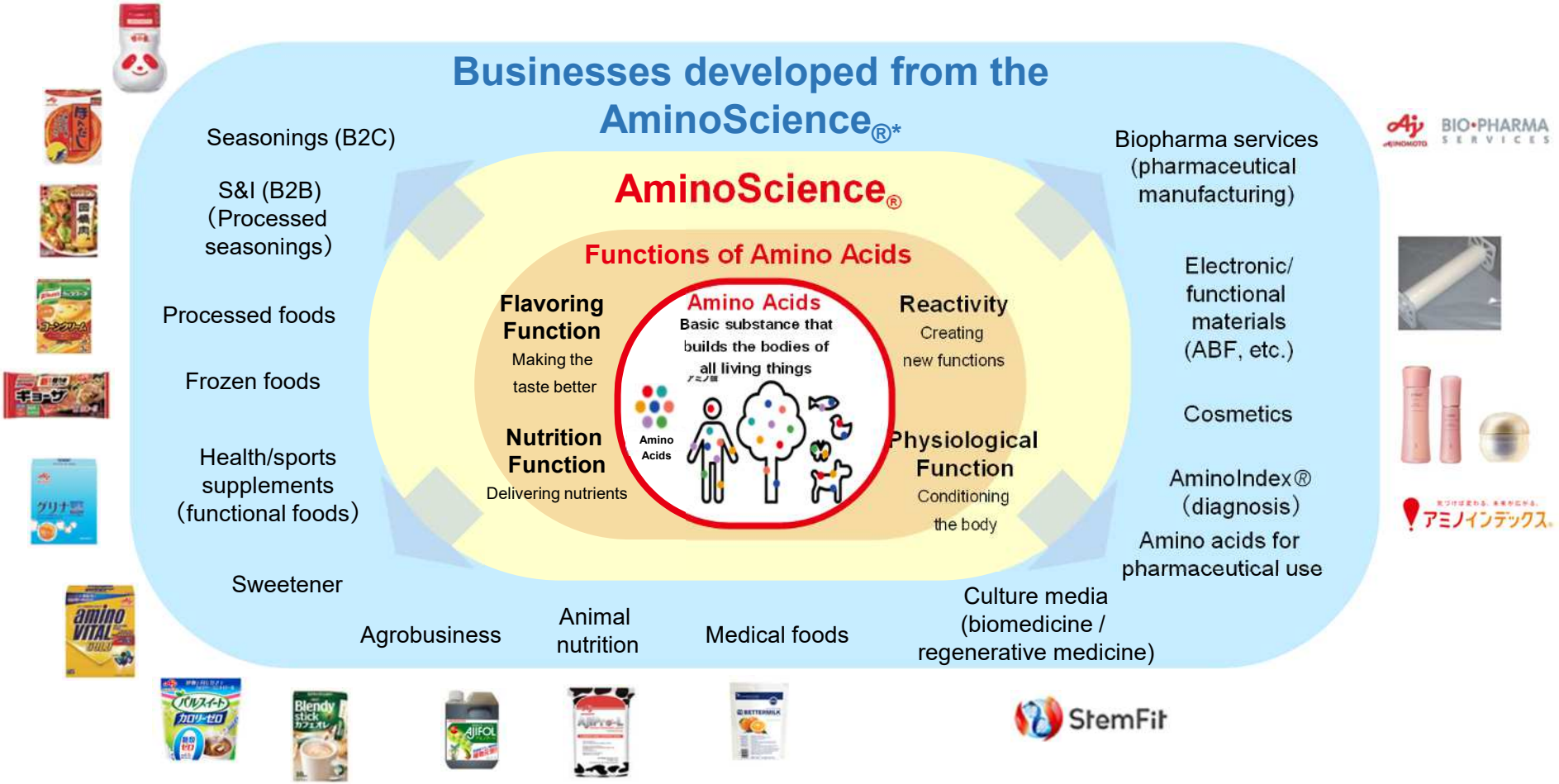
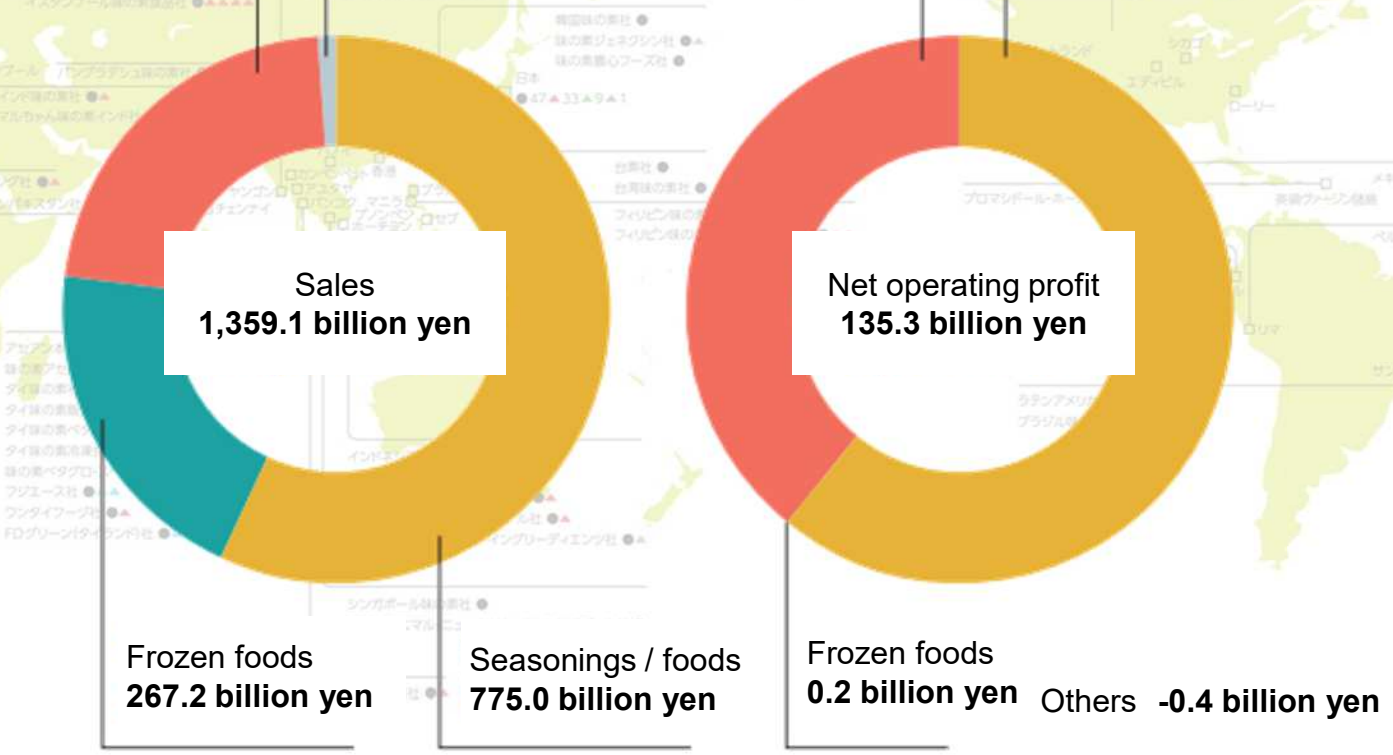


* A generic term for a wide variety of materials, functions, technologies, and services derived from research and implementation processes that are thoroughly focused on the functions of amino acids. It also refers to the Ajinomoto Group's unique scientific approach that links amino acids to solutions for social issues and contributions to well-being.

Extensive operations around the world

Business areas	Number of production factories	Number of employees
36 countries and regions	117 factories	34,615 employees



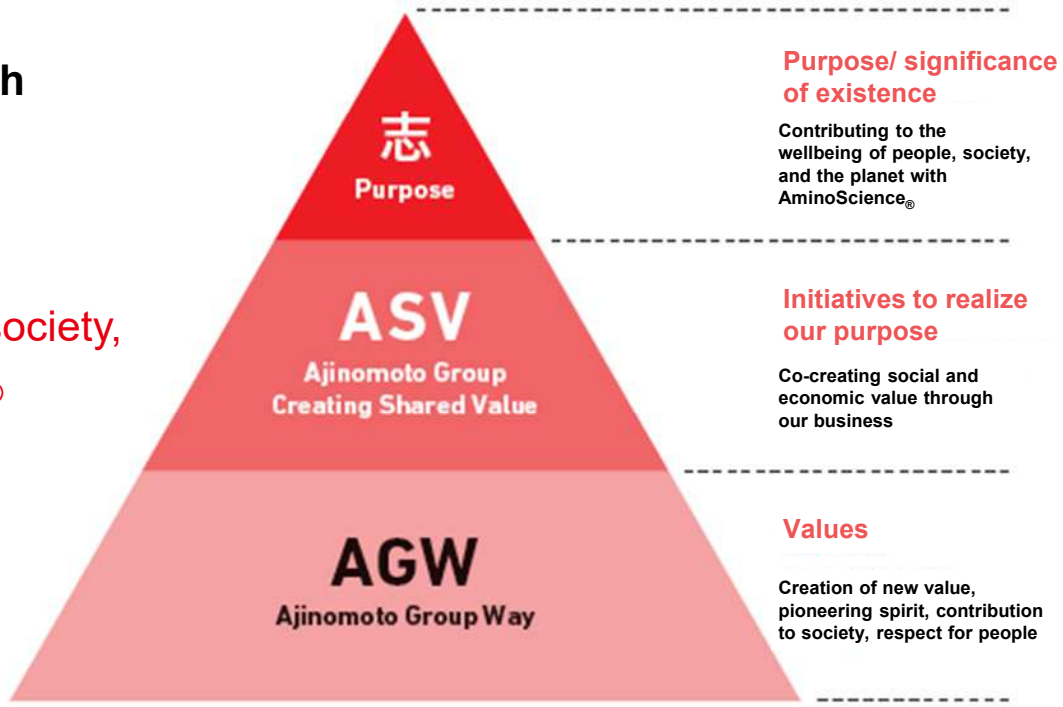
Purpose of the Ajinomoto Group

Solving food and health issues with the function of amino acids

Contributing to the wellbeing of people, society, and the planet with AminoScience®

Corporate slogan

Eat Well, Live Well.



Toward Realization of the 2030 Outcome

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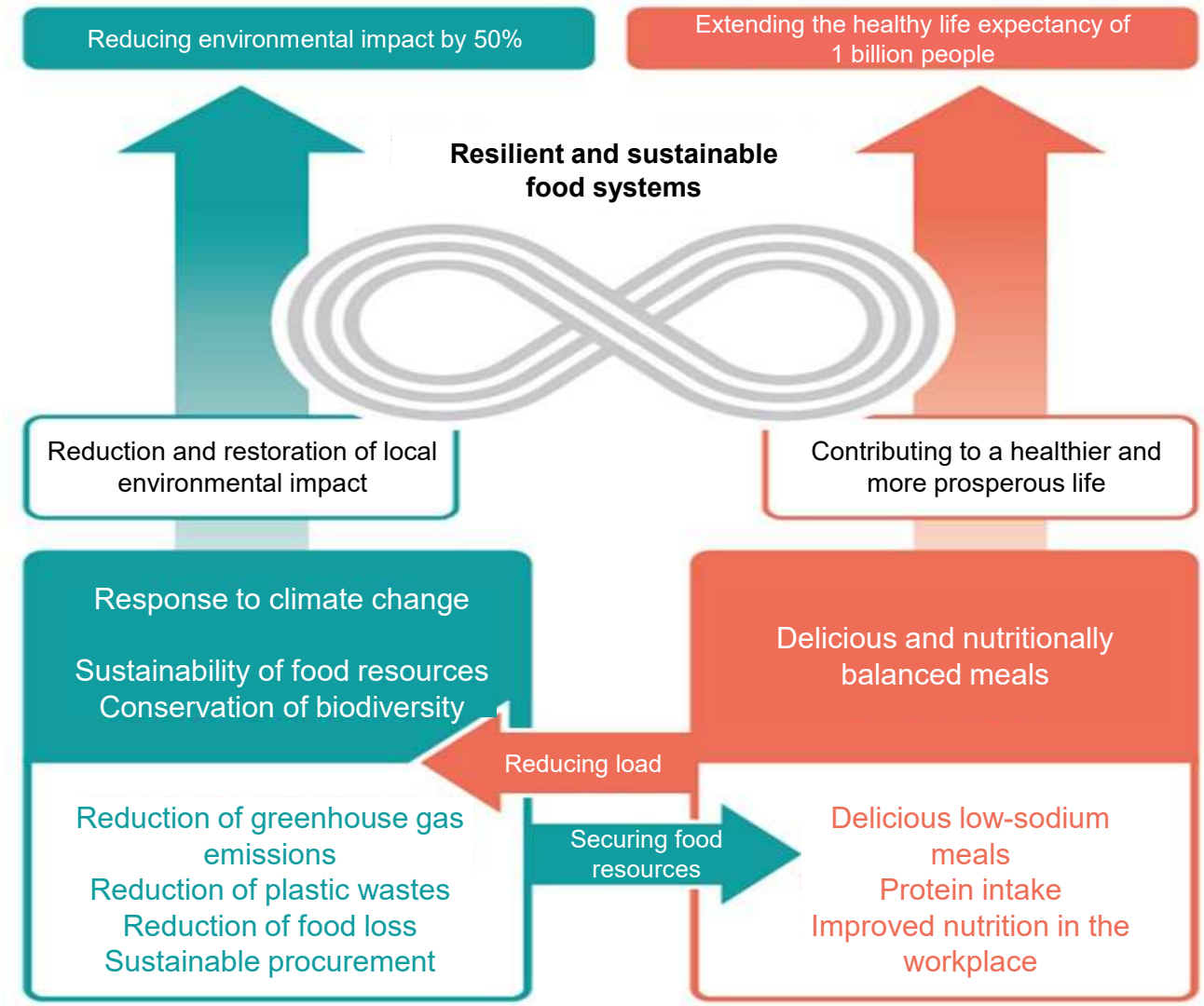
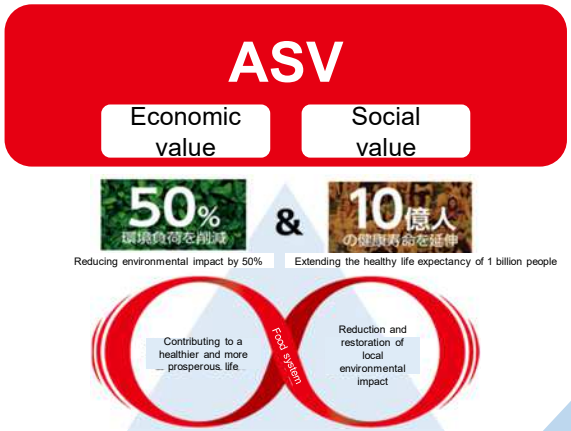
Contributing to the wellbeing of people, society, and the planet with AminoScience®



ASV Social Value (Environmental) Indicators

Issues		KPI	Target	FY22 (achievement)
Response to climate change	**Greenhouse gases**	**Whole Total of Scopes 1 and 2**	FY50: Net zero FY30: 50% reduction (compared to FY18)	- Reduced by 19%
		Scope 3 intensity	FY30: 24% reduction (compared to 2018)	Reduced by 3%
	Water risk	**Water consumption**	FY25: 80% reduction (compared to FY05)	Reduced by 78%
Realization of a recycling-oriented society	**Plastic wastes**		FY30: Zero	-
	Food loss	**From acceptance of raw materials to delivery to customers**	FY25: Reduction by 50% (compared to FY18)	Reduced by 39%
		Entire product lifecycle	FY50: Reduction by 50% (compared to FY18)	-
Achievement of sustainable procurement	**Deforestation Biodiversity Human rights Animal coexistence**	**Sustainable procurement ratio** Paper Palm oil Soybeans Coffee beans Beef, sugarcane	FY30: 100% for procurable procurement	98% 99% 34% 56% Started the risk assessment

Realization of ASV through Evolution of Sustainability Information Disclosure



Initiatives to realize the outcome

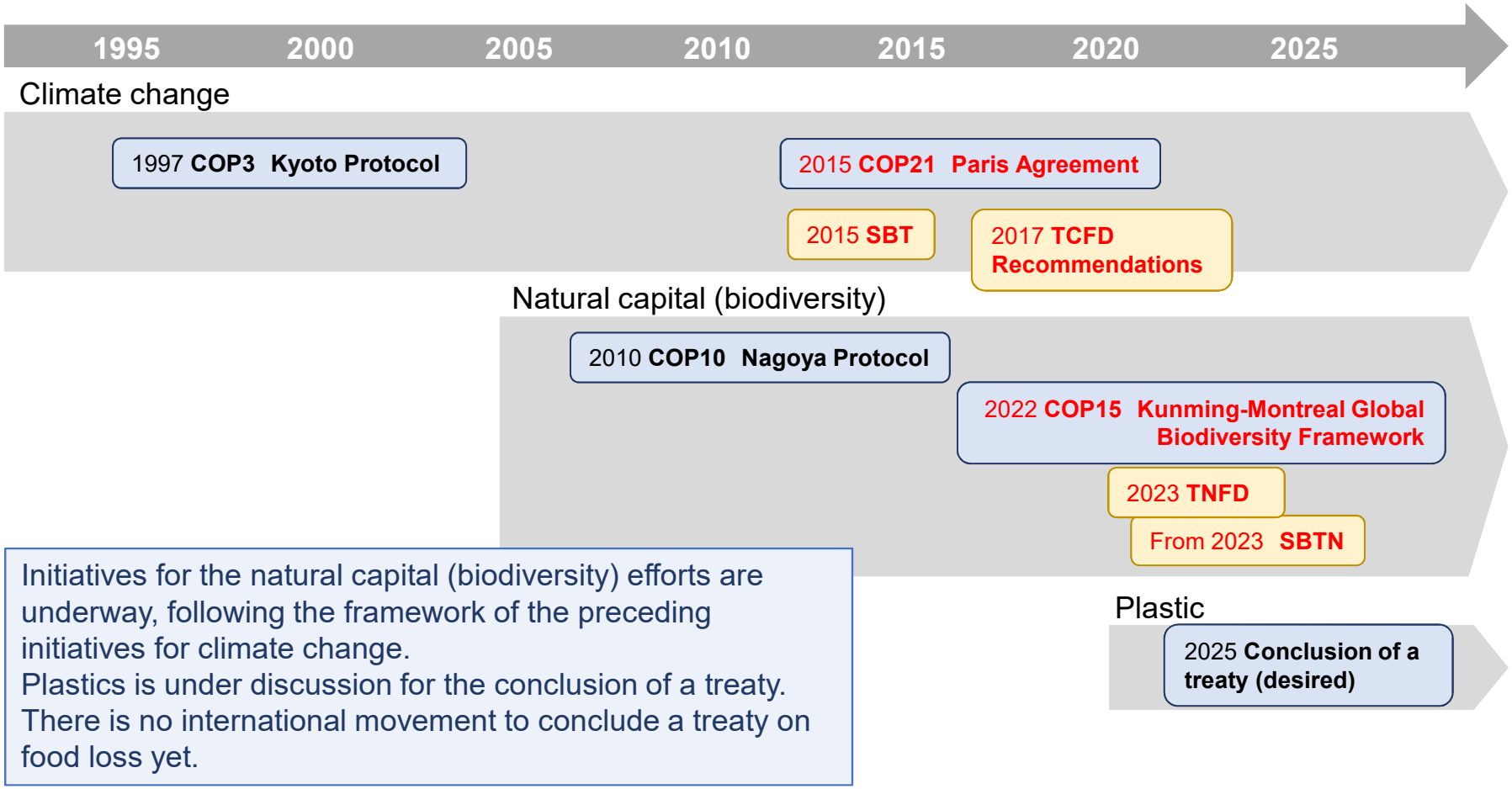
Accelerating the initiatives

Communication with stakeholders
- Information disclosure / engagement -

- Annual Securities Report
- Governance Report
- ASV Report (Integrated Report)
- Sustainability Report
- Briefing Sessions
- Actual Dialogue, etc.

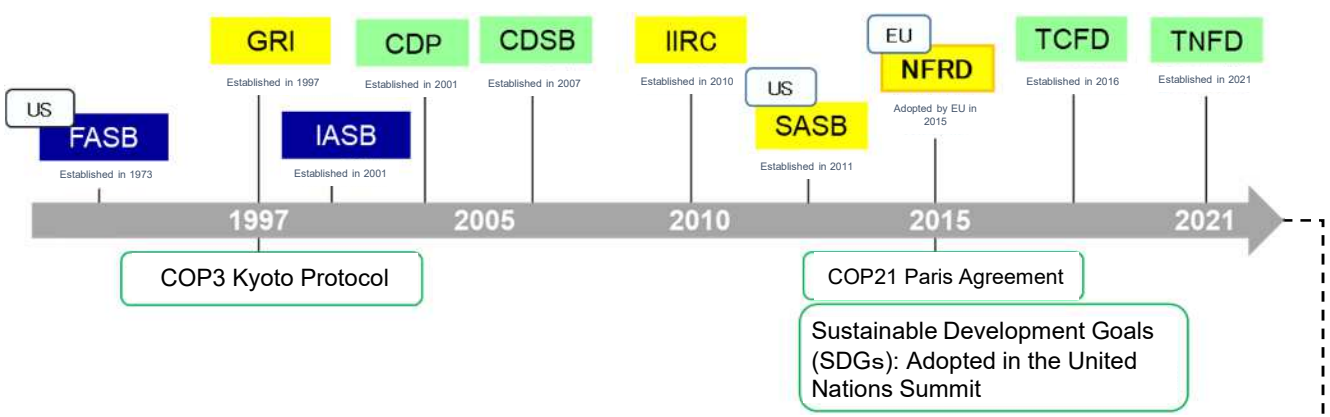
Sustainable finance

Key Environmental Issues and Establishment of Global Frameworks



Initiatives for the natural capital (biodiversity) efforts are underway, following the framework of the preceding initiatives for climate change.
Plastics is under discussion for the conclusion of a treaty.
There is no international movement to conclude a treaty on food loss yet.

Changes in the Global Sustainability Disclosure Framework



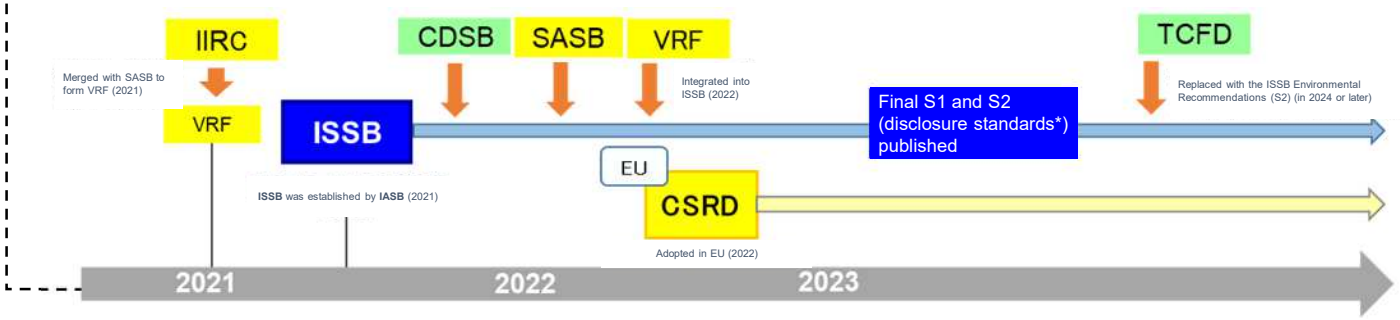
Accounting standards establishing body

General non-financial information

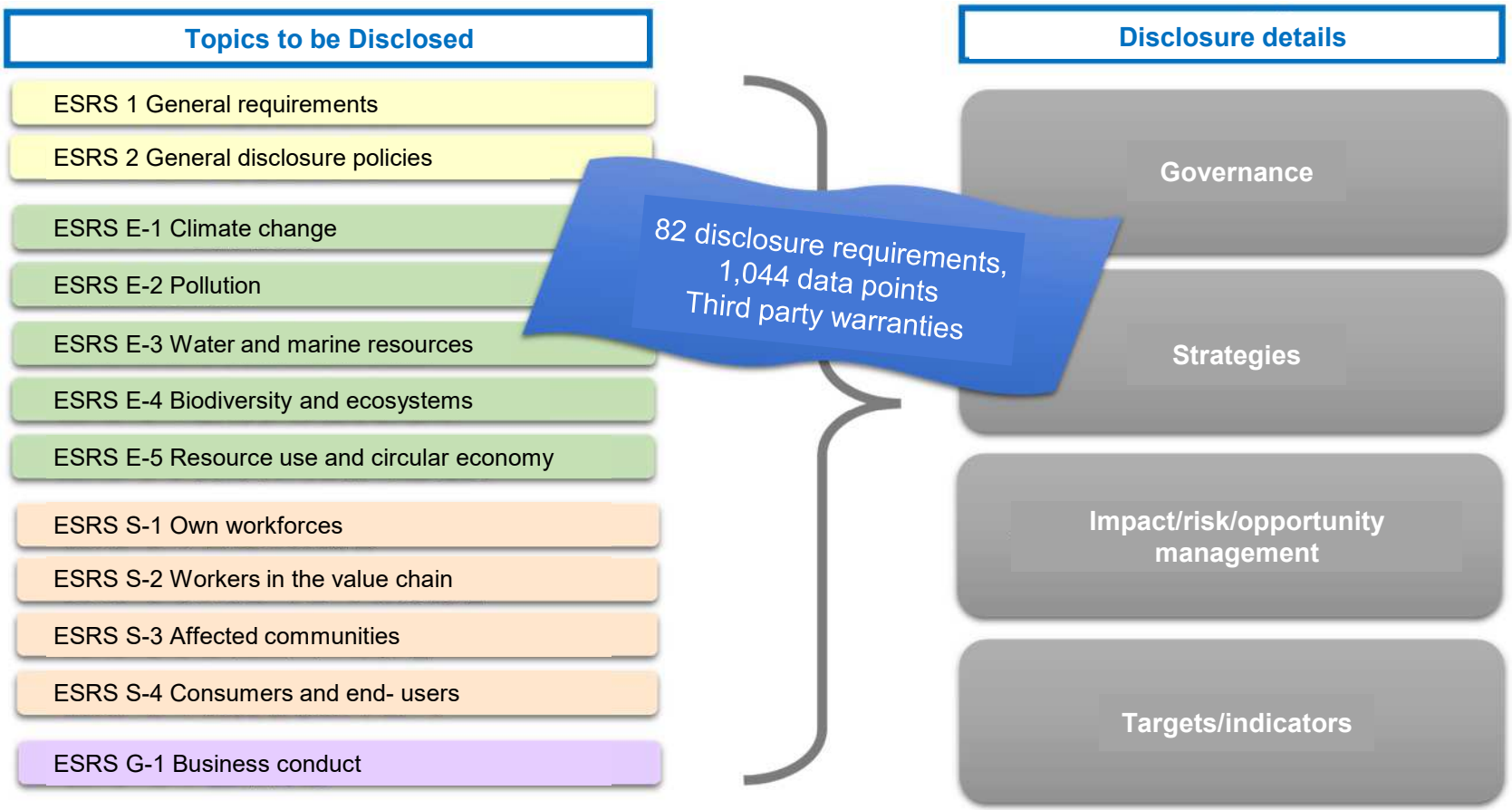
Climate change and other environment-related information

CSRD, established as a directive by the European Commission, and S1 and S2, prepared by the ISSB, a subordinate body of the IFRS Foundation, are being finalized as global disclosure rules.

There is a movement toward standard unification in recent years. Comparability of information is has been increased globally.



Breadth and Depth of Disclosure Information (Example of CSRD)



List of Sustainable Finance of the Ajinomoto Group

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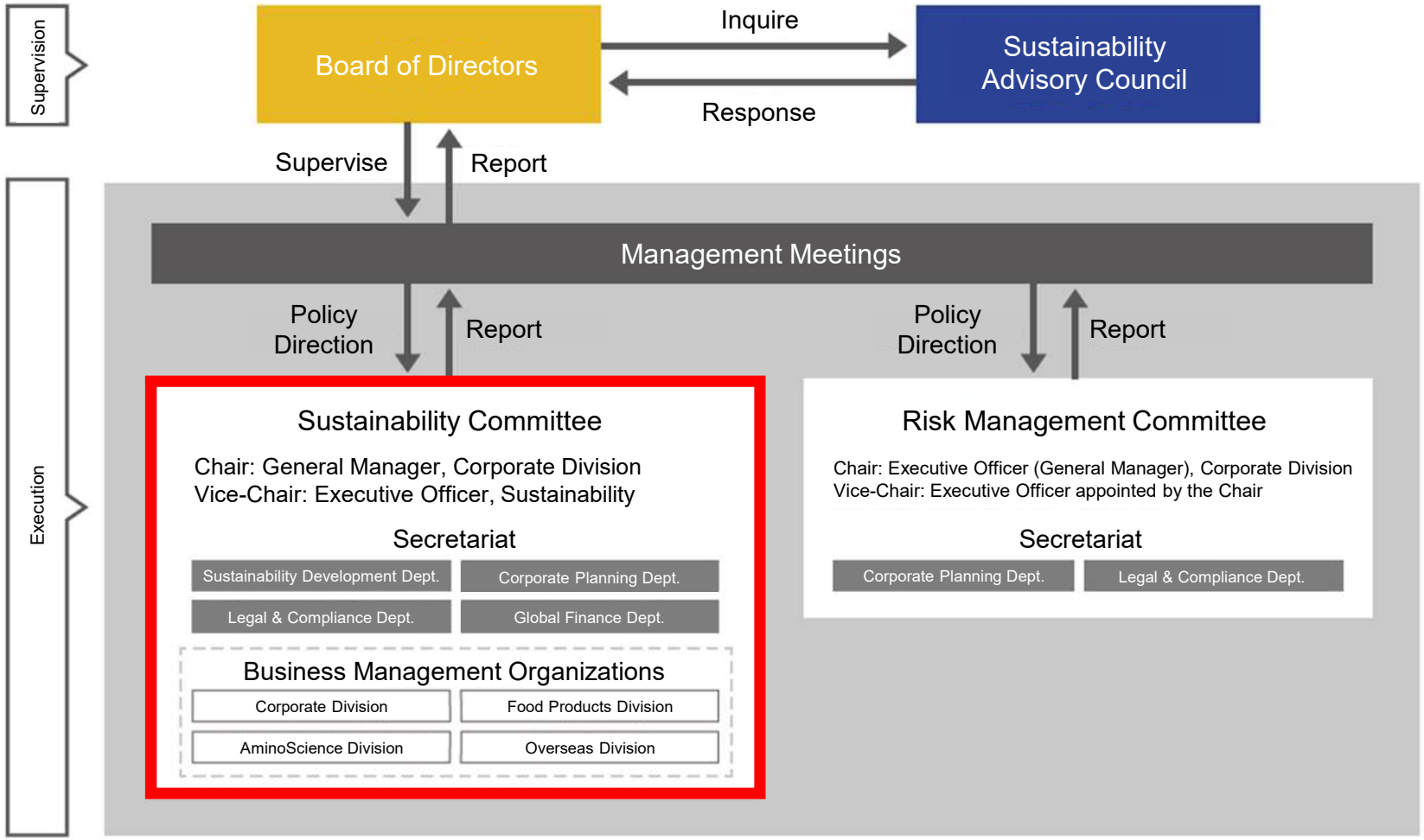
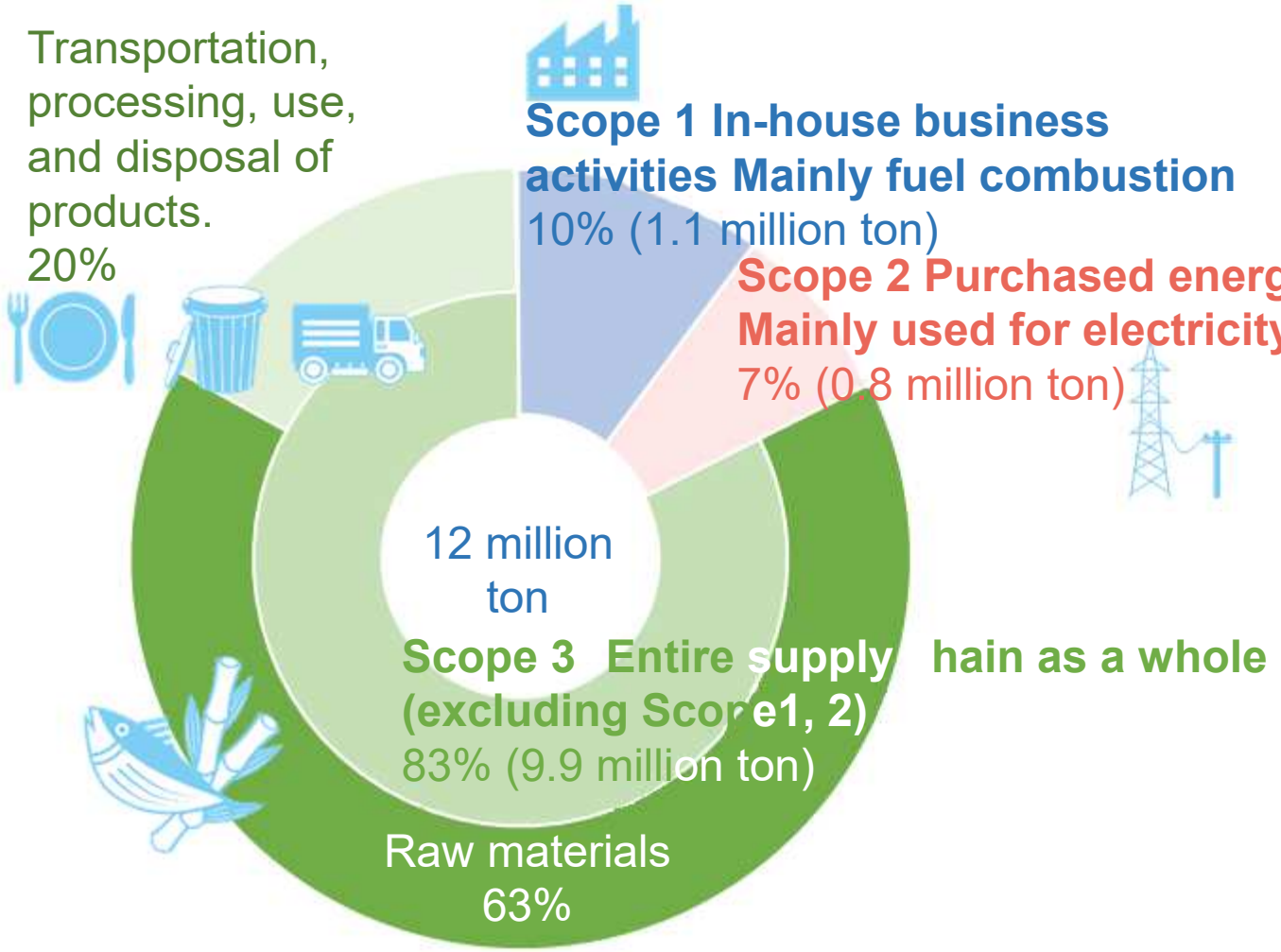
■ The Ajinomoto Group defined that “contributing to the wellbeing of people, society, and the planet with AminoScience®” was our “purpose” in the “Medium-Term ASV Initiatives 2030 Roadmap” announced in February, 2023.
■ We will actively use the sustainable finance in order to achieve two outcomes, “help extend the healthy life expectancy of 1 billion people” and ”reduce our environmental impact by 50%” by 2030, and further accelerate our initiatives to realize the sustainable society.
Our website: Sustainable Finance｜ESG / Sustainability｜the Ajinomoto Group (ajinomoto.co.jp)

Date of contract/ issue	Type	Type of sustainable finance	Subject of the framework creation	Amount	Term (Maturity)	Changes in the interest rate conditions	Target, KPI
Dec. 25, 2020	AJINOMOTO. (MALAYSIA) BERHAD	Sustainability Link Finance	Business institutions	100 MYR (Approx. 2.5 billion yen)	5 years	Yes	• **Target for reduction in the greenhouse gas emissions by 2025** • **ESG index maintenance**
Oct. 21, 2021	Corporate bonds	**Sustainability Bonds**	Business institutions	10 billion yen	7 years	No	• **Acquisition of shares in Nualtra Ltd.** • **Introduction of biomass cogeneration facilities at the Kamphaeng Phet Plant of AJINOMOTO CO., (THAILAND) LTD.** • **Investment in Tsubame BHB Co., Ltd.**
Jan. 31, 2022	Borrowings (Commitment line)	**Positive Impact Finance**	Financial institutions	30 billion yen	1 year	No	**Resource efficiency, safety, climate, waste, employment, health and hygiene Personality and human security, biodiversity and ecosystem services, water**
Dec. 14, 2022	Borrowings (Commitment line)	**Sustainability Linked Loan**	Business institutions	100 billion yen	3 years	Yes	**GHG emissions reduction rate of the Ajinomoto Group in Scope1 and Scope2**
Jun. 15, 2023	Corporate bonds	**Sustainability Linked Bonds**	Business institutions	10 billion yen	5 years	No (purchase of emission credits)	**KPI1: Absolute scope 1 and 2 GHG emissions reduction rate** **KPI2: Scope 3 GHG emissions reduction rate per volume unit**
				20 billion yen	10 years		

Structure for Sustainability Development



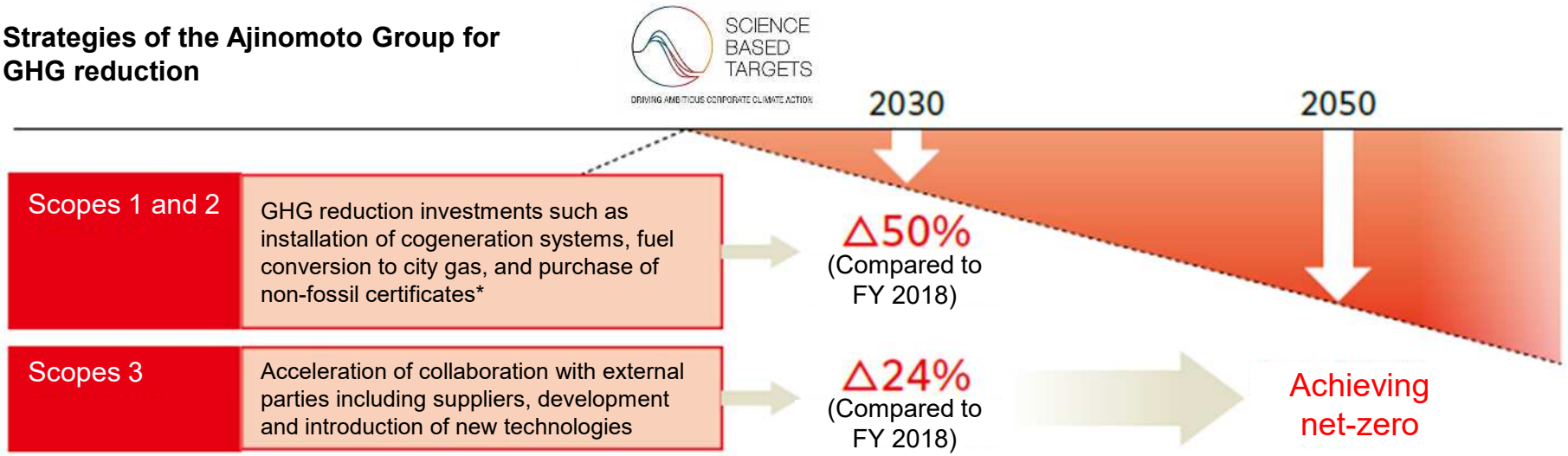
CO_2 Emissions from the Ajinomoto Group



Note: Figures are calculated based on SBTi's calculation standards (FY2018 results)

Greenhouse Gas Reduction Targets of the Ajinomoto Group

Strategies of the Ajinomoto Group for GHG reduction



RE 100 Achieving the goal of 100% renewable energy use by 2050

Efforts for Reducing Greenhouse Gas

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SCOPE 2
Purchased energy (electricity, steam, heat)

Purchased energy
Introduction of solar power generation, procurement of renewable electricity

Transportation
Modal shift, local production for local consumption, introduction of EVs
Disposal of packaging materials
Plastic recycling, resource recycling

SCOPE 3
Manufacturing and transportation of raw materials, commuting and business trips, etc.

SCOPE 3
Transportation, use, processing, and disposal of products

SCOPE 1
Own business activities

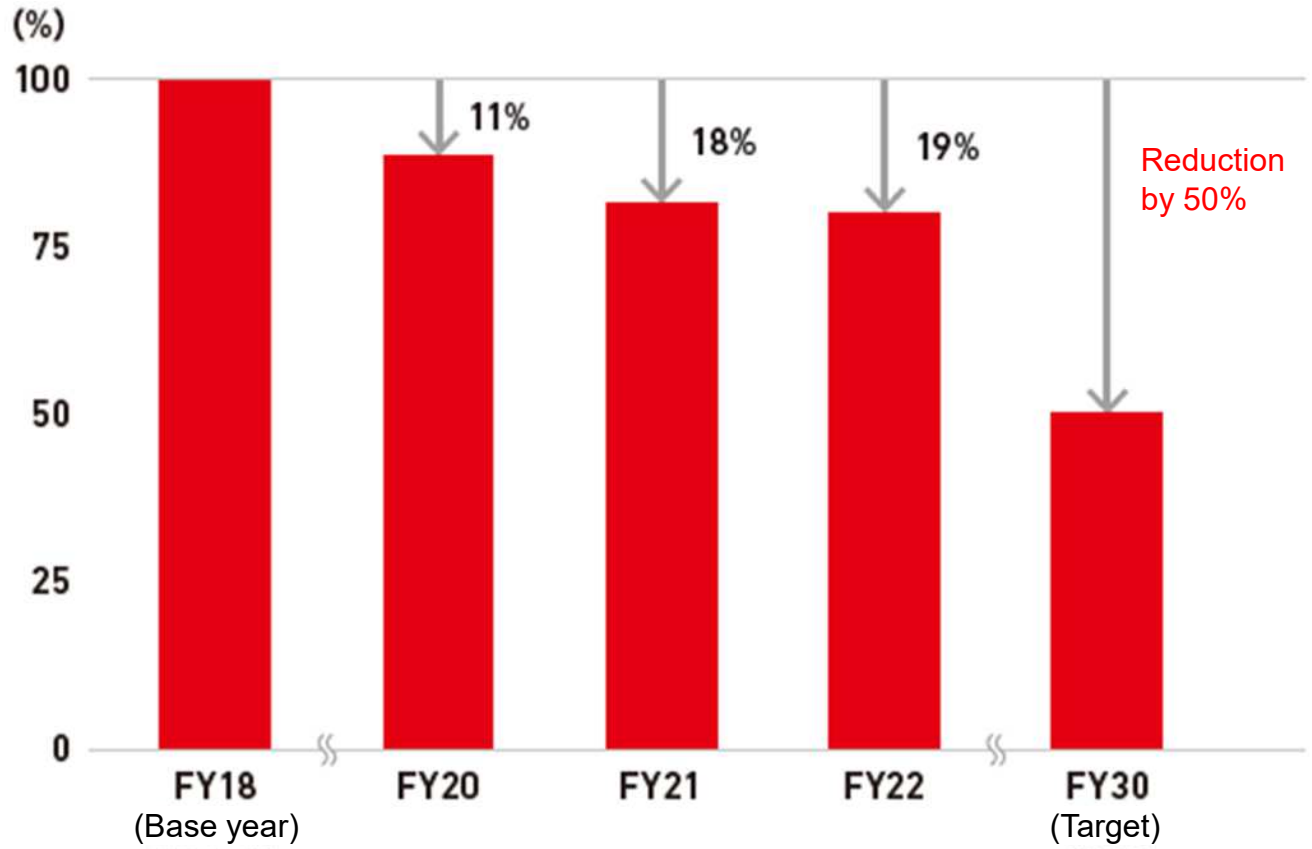
Raw materials
Waste reduction, yield improvement, bio-cycling

Manufacturing process
Fuel conversion, energy saving

Innovation
Innovation in amino acid production bio-cycle towards carbon neutrality

Greenhouse Gas Emissions Reduction Results

Scope1 and 2, Total, Compared to FY2018



Japan's First J-Credit Scheme Project using Amino Acids in Dairy Farming

Product/ Technology Division

"AjiPro®-L" amino acid lysine formulation for dairy cows

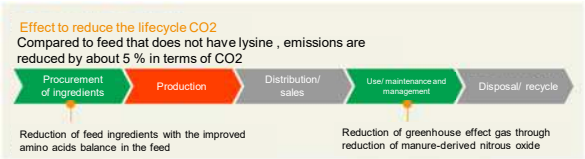
Ajinomoto Co., Inc. "Lysine", the feed-grade amino acid

Outline of Product / Technology

- Feed-grade amino acids that supplements the essential amino acid "Lysine," which is particularly prone to deficiencies, to enable more efficient intake of necessary nutrients
- Improving the balance of amino acids in livestock feed with lysine produced by applying our unique, state-of-the-art biotechnology. It allows livestock to intake necessary nutrients with less feed, resulting in less livestock manure and eventually contributing to a reduction in manure-derived nitrous oxide (310 times the greenhouse effect in terms of CO2)
- Significant contribution to greenhouse effect gas reduction (240,000 tons of extraterrestrial hindsight certified in FY2014 (in terms of CO2))

Effect to reduce the lifecycle CO2

- Compared to feed that does not have lysine , emissions are reduced by about 5 % in terms of CO2



Bio-cycles that Contribute to Sustainable Agriculture
Circular amino acid fermentation processing

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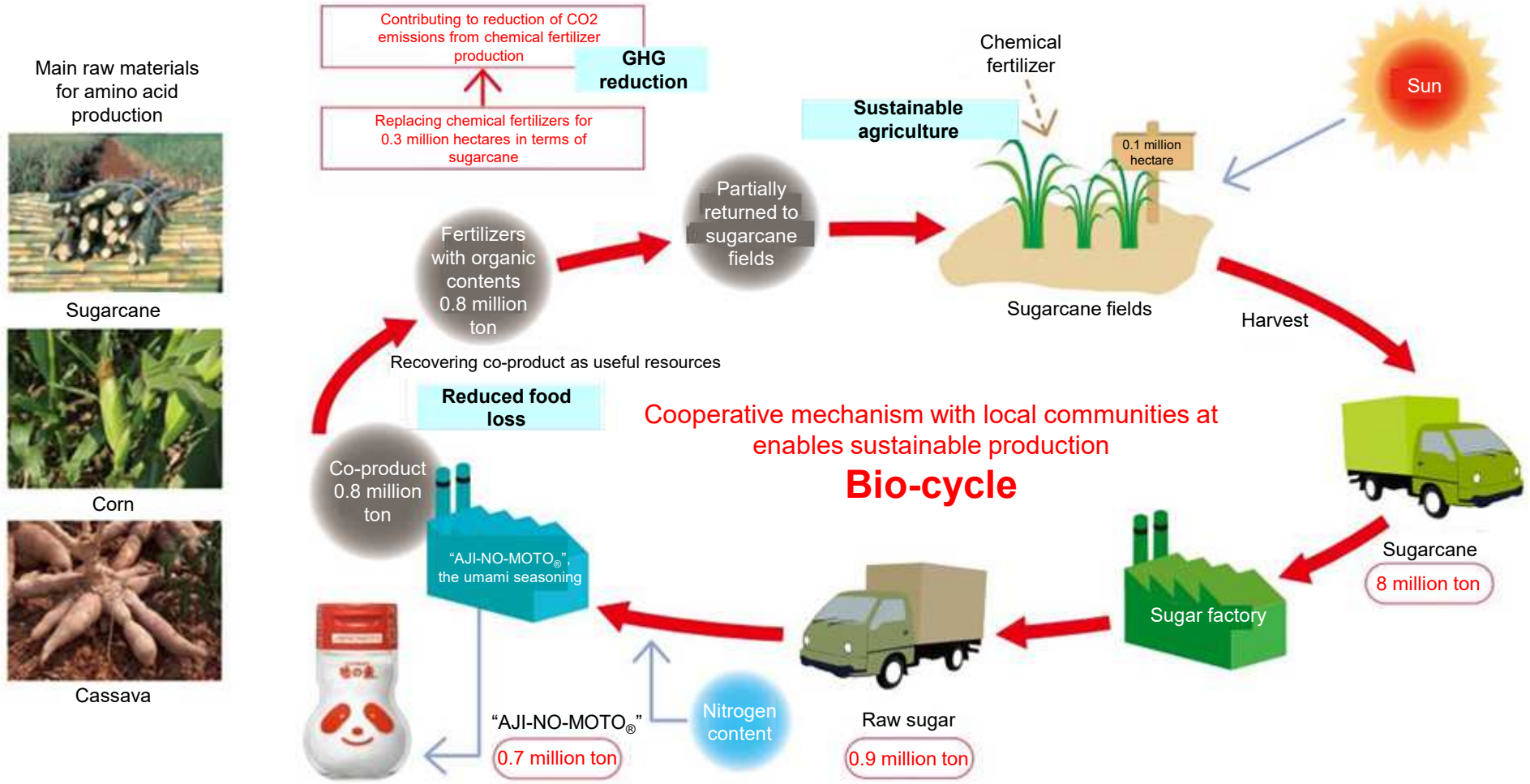
- Introducing the resource-circulating amino acid fermentation processing method (bio-cycle) for sustainable procurement of agricultural products while enriching local agriculture at fermentation plants around the world as a way to ensure stable food resource availability and contribute to sustainable agriculture



Initiatives in Thailand

Toward Building of Sustainable Food System
- Approach to Regenerative Agriculture in Thailand

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Building ecosystems among more than 40 institutions in industry, government and academia

Direct contribution to agriculture

Agricultural development with the fermentation technology
Supply of mosaic disease-free seedlings
Education on agricultural methods and crop diseases
Improving crop productivity and added value
Spraying / image analysis using drones
Microbial fertilizer
Soil analysis

Agricultural support

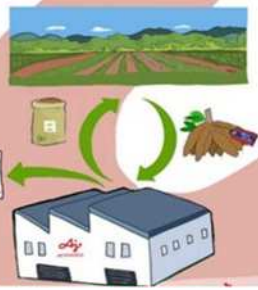
Improving efficiency of crop processing processes
Agricultural human resource development
Effective use of agricultural residual values
Weather insurance
Financial support
Agricultural application/ database
Collaboration with government, universities and research institutions

Support for farmers
Supporting production factory and independence of farmers by providing knowhow through soil analysis and study sessions

Domestically produced ingredients
Using domestically produced cassava (1 million ton), chickens and pork

Production with reduced environmental burden
Original production technologies to save ingredients / fuels
Challenges to half plastic wastes / food loss

Improved health/nutrition
Providing less salt/sugar products and nutritiously balanced menu while keeping delights of Thai cuisine



Cyclical use of resources
Reusing coproducts from production as fertilizers, feed, and soil amendment

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Consideration of On-site Production of Ammonia

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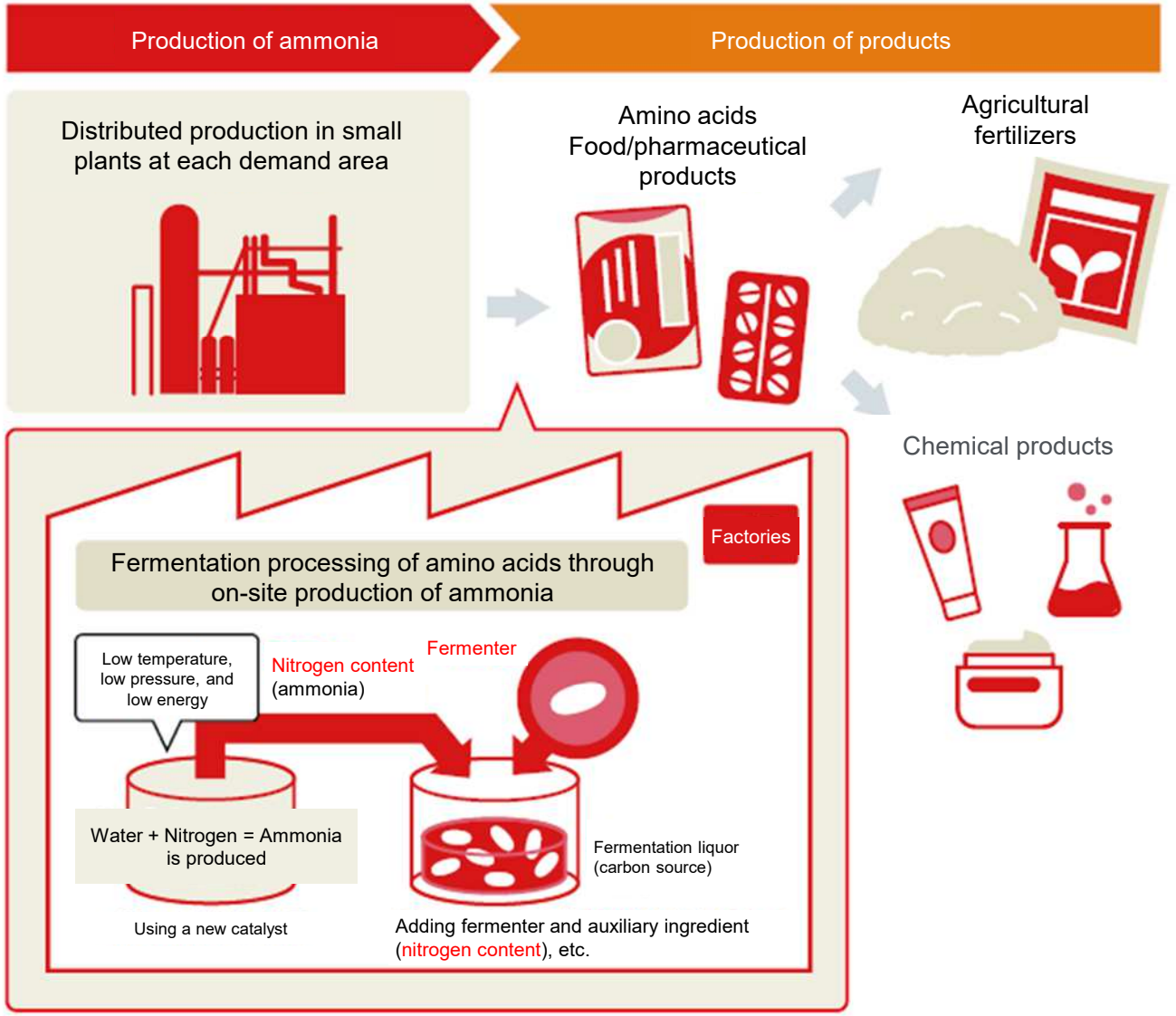
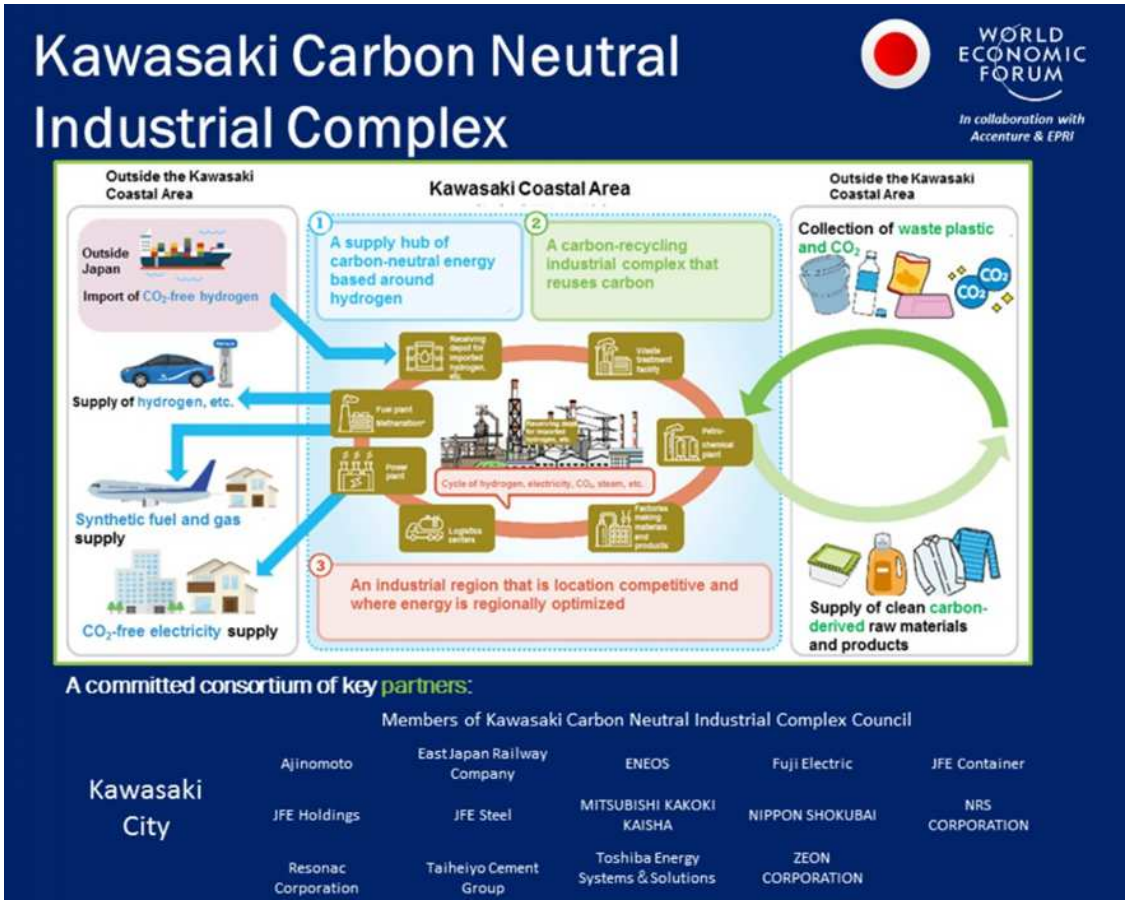
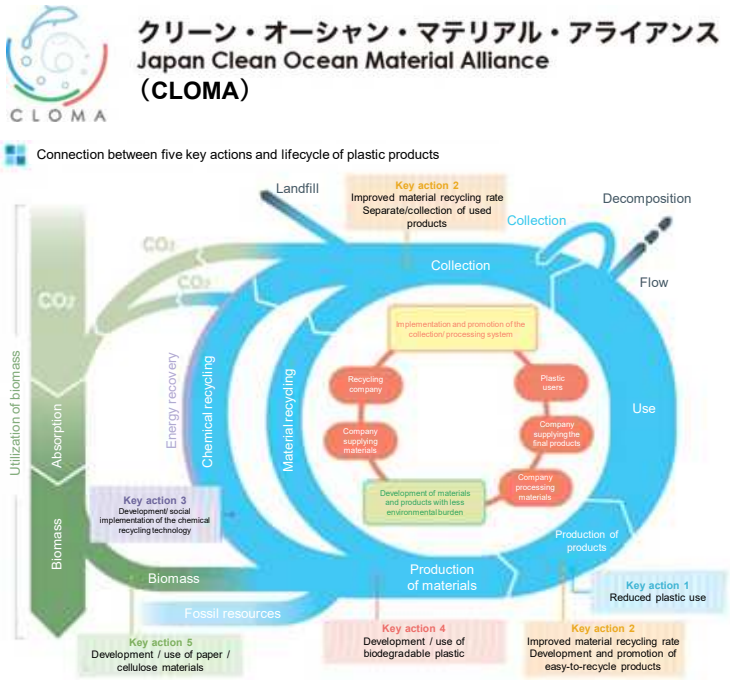
- Producing only the quantity demanded where it is needed
- Reducing storage cost
- Reducing transportation cost
- Reducing environmental burden from transportation
- Reducing environmental burden from energy consumption by using new catalyst
- Reducing the environmental burden by generating hydrogen, a raw material for ammonia, from renewable resources (woodchips)



Cooperation with Kawasaki City

Initiative for the net zero transition in the industry cluster, the Clean Ocean Material Alliance

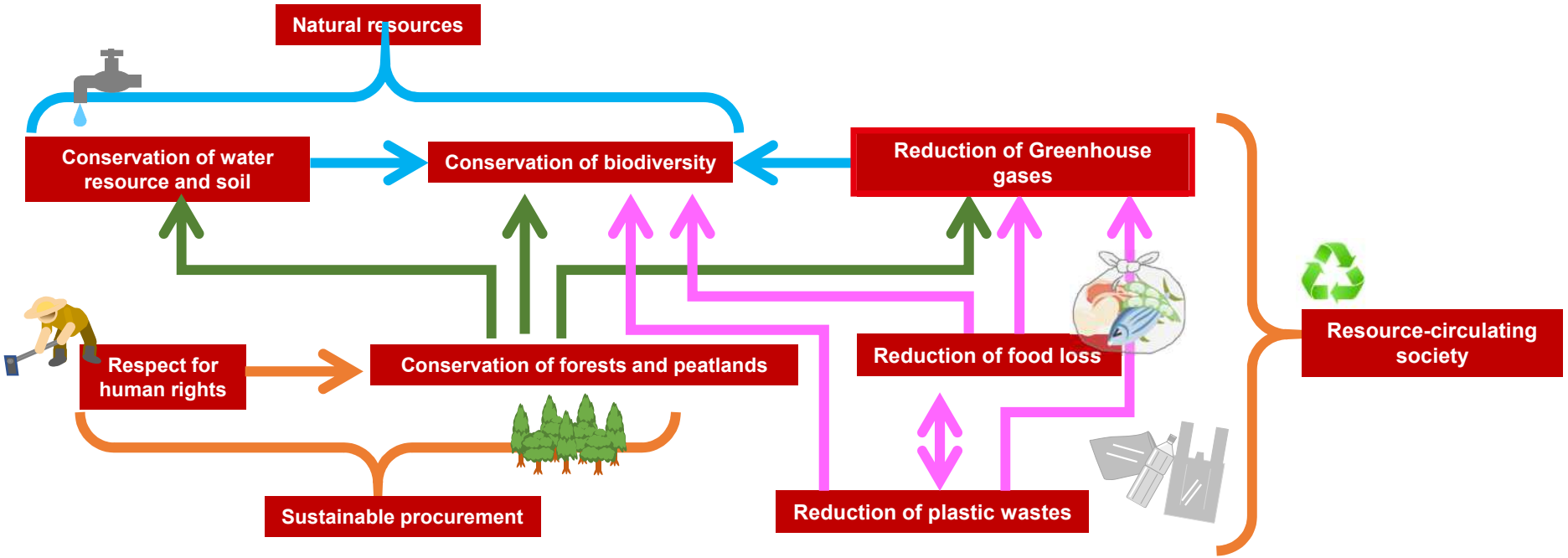




CLOMA is planning the PCR large-scale collection test

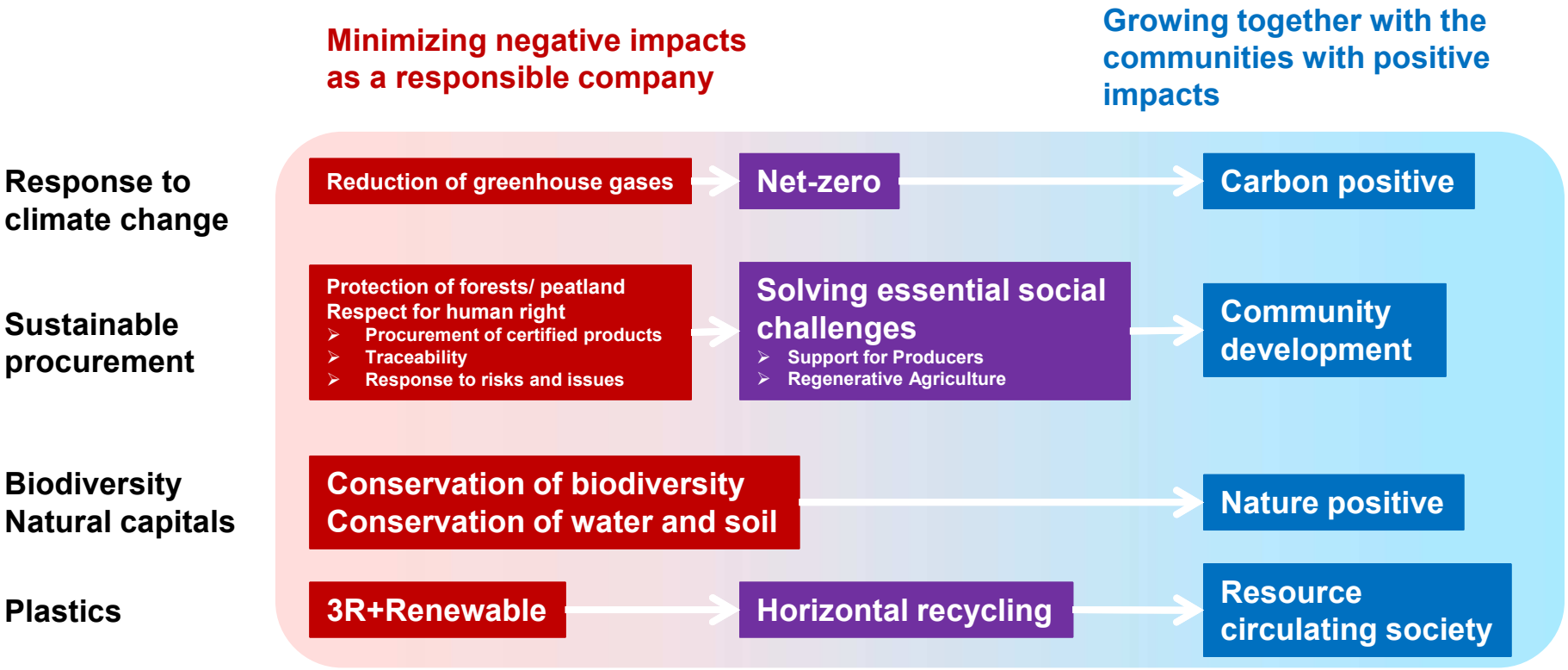
Holistic approach

Since respective issues in the sustainability environment are closely related, it is necessary to proceed in a holistic manner.



Toward Creation of Positive Impacts

The Ajinomoto Group is committed to evolving AminoScience® to create a positive impact and contribute to the creation of a society where we can grow together with the planet, communities, and Seikatsusha.



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