

## The Meiji Group's TCFD Initiatives

The Group's business is based on the abundant gifts of nature. We therefore believe that it is our responsibility to live in harmony with the global environment and nature. In recent years, however, the sustainability of the global environment has been in jeopardy. We recognize that climate change will have a significant medium- to long-term impact on our business activities and is an important management issue for the Group. International frameworks such as the Paris Agreement and the Sustainable Development Goals (SDGs) are also calling for increased efforts to address climate change. To contribute to these international efforts, we are implementing climate change initiatives to help achieve a decarbonized society.

Information on climate change is presented based on the framework of the Task Force on Climate-Related Financial Disclosures (TCFD).

### (1) Governance and Risk Management

The Group Sustainability Secretariat Committee, which is chaired by the Chief Sustainability Officer (CSO), meets monthly, and the Group is reinforcing its initiatives to address social issues, including climate change, so that we can carry out our sustainability strategies. In addition, the Group Sustainability Committee, which is chaired by the President and Representative Director of Meiji Holdings, meets twice each year to report on the overall progress of sustainability initiatives and deliberate on new measures. Climate change in particular is positioned as a key issue.

Regarding governance, the Group TCFD Committee (which was held five times in FY2023) analyzes risks and opportunities arising from climate change and deliberates on countermeasures. The results are discussed by the Executive Committee and reflected in management.

\* Information on director skills: (<https://www.meiji.com/global/investors/governance/officer.html>)

Risk management is carried out Group-wide so that we can properly address risks that will have a significant impact on corporate activities. Within risk management, we position climate change as a key management risk. Recognizing that climate change-related risks and opportunities change with the times, the Group TCFD Committee also conducts quantitative analysis and evaluations using scenario analysis in line with the TCFD recommendations and identifies high-priority major impacts. Based on this, the Committee investigates countermeasures aligned with risk management flows. The Meiji Holdings Risk Management Department also participates in the Group TCFD Committee and based on an understanding the effects of climate change pose major risks to the Group as a whole, we have established systems that can respond to those risks.



### (2) Strategy

The Meiji Group recognizes that climate change-related risks and opportunities constitute a significant management issue, and we have established materiality and key performance indicators including reducing CO<sub>2</sub> emissions and securing water resources based on the Meiji Group Sustainability 2026 Vision for the short to medium-term and the Meiji Green Engagement for 2050, the Group's long-term environmental vision, for the long term. We are undertaking initiatives to ensure that we can remain in harmony with nature into the future.

<Takeaways from FY2023 Achievements and Disclosures>

- Analyzed the Group's entire supply chain and re-calculated the financial impact using the latest parameters
- Analyzed medium- to long-term climate change -related risks and opportunities with the present, 2030 (medium term) and 2050 (long term) as base years and investigated countermeasures based on 1.5°C and 4.0°C scenarios
- Reinforced countermeasures based on transition plans, such as introducing solar power generating facilities, to achieve the Meiji Green Engagement for 2050
- Implemented specific measures for the countermeasures formulated in 2021
- Disclose examples of specific initiatives to address climate change-related business opportunities identified the previous time

1) Assessment of the Financial Impacts of Risks

To assess the financial impacts of climate change-related risks and opportunities that the Group is facing, we conducted scenario analysis. From the results of our analyses under two scenarios (1.5°C and 4°C scenarios), those with major and significant impacts are described below.

[Target scope of analysis]

Business segment	Food	Pharmaceutical
Scope of financial impact calculation	Meiji Group as a whole	
Target raw material	Major raw materials [Dairy, cocoa, palm oil, sugar, timber (paper)]	
Analysis base years	Current, 2030 (medium term) and 2050 (long term)	

[Summary of Analysis Results]

Impacts on the Group Under the 1.5°C Scenario (Transition Risks)

Change related to climate change	Major and specific impacts	Impact on the Group		
		Relevant supplier chain	Amount of impact (Unit: Billion yen)	
			2030	2050
Reinforcement of the government's environmental regulations	Increase in amount of carbon pricing burden	Manufacturing	4.4	10.0
		Sourcing Logistics	46.5*1	47.5*1
Expansion of investment in facilities for widespread renewable energy use	Increase in amount of electricity purchased	Manufacturing	10.5	-4.8

\*1. We believe that these impact amounts will be borne not by the Group alone, but by the entire supply chain.

Impacts on the Group Under the 4°C Scenario (Physical Risks)

Change related to climate change	Major and specific impacts	Impact on the Group		
		Relevant supplier chain	Amount of impact	
			2050	
Increase in severity and frequency of typhoons, torrential rains, etc.	Opportunity losses from flood damage	Manufacturing Logistics	Flooding risks at 15 domestic and overseas sites The annual increase in risk is 830 million yen <sup>2</sup>	
Change in growth environment of raw materials resulting from temperature rise and water risks	Increase in raw material sourcing costs	Sourcing	-	-

\*2 Starting in the current fiscal year, we calculated the financial impacts of flood damage based on the Guidance on Physical Risk Assessment under the TCFD Recommendations issued by the Ministry of Land, Infrastructure, Transport and Tourism. The annual increase in risk is the expected amount of future risk increases through 2050 converted to an annual amount. For details, see 4-degree Scenario, Opportunity Losses, Such as Site Shutdowns, Resulting from Flood Damage, on page 38 below.

[Analysis Method and Detailed Results]

□ Major Impacts and Specific Effects

<1.5°C scenario>

· Effect of introducing carbon pricing (the company)

We project a 4.4 billion yen cost increase in 2030, while reducing costs by 1.6 billion yen by implementing energy-saving and generation measures and purchasing renewable energy-derived electricity. We also project that in 2050, costs will decrease by 2.4 billion yen, based on our transition plan, which includes active introduction of new technologies and next-generation energy, among other measures. With current technology, however, it will be difficult to reduce CO<sub>2</sub> emissions to zero by 2050, and accordingly, we will need to purchase 5 billion yen in carbon credits, which is expected to increase costs by 10 billion yen.

Unit: billion yen

Detail of initiative	2030	2050
Amount of carbon pricing borne when no countermeasures are taken	6.0	7.4
Amount of carbon pricing reduced through countermeasure	-1.6	-2.4
Amount of carbon credit purchases	-	5.0
Total	4.4	10.0

· Effect of introducing carbon pricing (major raw material)

We project that the amounts of impact based on carbon prices in major raw material source countries will ultimately be an increase of 46.5 billion yen in 2030 and 47.5 billion yen in 2050 as a result of increases in prices for each raw material and the implementation of various responsive measures.

\* The amount of the impact from the introduction of the carbon pricing under the 1.5-degree scenario was calculated based on the NZE scenario carbon prices (for 2030 and 2050) announced in the World Energy Outlook (WEO) 2023 of the International Energy Agency (IEA).

· Effect on amounts for purchased electricity (the company)

We project a cost reduction of 4.4 billion yen in 2030 through energy-saving and energy-generation measures, but costs will increase as a result of rising electric power rates and premium prices for renewable energy-derived electricity, and we expect costs to increase by 10.5 billion yen. In the other hand, in 2050, we project a cost reduction of 4.8 billion yen due to electricity rates falling to current levels as a result of technological innovation and reduction in the amount of electricity consumed achieved through energy-saving and other measures.

Unit: billion yen

Detail of initiative	2030	2050
Amount of increase due to increase in electricity unit prices	14.0	0.1
Amount of reduction from energy-saving and energy-generation measures, etc.	-4.4	-6.4
Amount of increase from purchase of renewable energy-derived electricity	1.0	1.4
Total	10.5	-4.8

\* The amounts of impacts from purchased electricity are calculated based on information from the Net Zero 2050 Scenario of the Network of Central Banks and Supervisors for Greening the Financial System.

<4°C scenario>

- Opportunity losses, such as site shutdowns, resulting from flood damage

We estimated the financial impacts of flood damage based on the Guidance on Physical Risk Assessment under the TCFD Recommendations issued by the Ministry of Land, Infrastructure, Transport and Tourism. From the results of risk assessments of 51 production sites in Japan and overseas, we anticipate flood risks at 13 domestic and two overseas sites. We determined the financial impact by calculating the annual increase in risk in terms of the amount of loss due to asset damage and opportunity loss due to site shutdowns based on the estimated flood depth at each site and other factors. We estimate that in 2050, the aggregate annual increase in risk for 15 sites based on 100-year floods will be 830 million yen per year.

	Annual Increase in Risk (million yen)				
	Property Damage Amount	Site Shut-Down Loss Amount	Depreciable Asset Damage Amount	Inventory Asset Damage Amount	Total
<b>Japan</b>	<b>80</b>	<b>260</b>	<b>370</b>	<b>110</b>	<b>820</b>
<b>Overseas</b>	<b>10&gt;</b>	<b>10&gt;</b>	<b>10</b>	<b>10&gt;</b>	<b>10</b>
<b>Total</b>	<b>80</b>	<b>260</b>	<b>380</b>	<b>110</b>	<b>830</b>

- Impacts on sourcing of major raw materials

We expect that in raw material production regions too, unit prices for raw materials will increase in conjunction with reduced crop yields due to climate change-induced temperature rise and water risks. Below, we provide an overview of the results of our analysis of changes in yields and water risks in major raw material production regions.

Expected change in yields

- We expect reduced yields in cocoa bean and sugar source countries in the future.
- We expect the impact on dairy to remain within a few percentage decrease both in 2030 and 2050.

Expected water risks

- We expect flood risks to rise in most areas, and thus believe that we need to examine improvement measures upon confirming the flood risk of each production area.

\* The impacts on procurement of major raw materials under the 4°C scenario were calculated based on future yield predictions in the GAEZv4 database (RCP8.5) released by the FAO and a literature survey.

Agricultural products procured as raw materials closely related not only to climate change, but also to the conservation of natural capital and biodiversity. We used the LEAP approach of the Taskforce on Nature-related Financial Disclosures (TNFD) to analyze the degree of reliance and impact on nature for dairy products and cacao beans, important raw materials for the Group.

Analysis of Nature-Related Risks in Cocoa Bean and Dairy Product Production Regions

- Since cocoa bean and dairy product production relies heavily on nature, we investigated to ascertain the degree of reliance and status of impacts in key production sites.

<Cocoa>

We found that six items—land use conversion, atmospheric pollution, water pollution, soil pollution, curtailing soil erosion, and mitigation of the impact of natural disasters—are particularly important. Of these, there

were numerous sites with particularly high risks relating to land use conversion and atmospheric pollution.

- Number of sites with extremely high risks relating to land use conversion: 12
- Number of sites with extremely high risks relating to air pollution (slash-and-burn agriculture, etc.): 11

< Dairy products >

We found that five items—water stress threats, water pollution, maintenance of soil fertility, and use of ground and surface water—are particularly important. Of these, there were numerous sites with particularly high risks relating to water pollution.

- Number of sites with extremely high risks relating to water pollution: 26

In the future, we will take action to avoid reductions in yield of cocoa beans and dairy products while performing GAP analysis and so on in production regions.

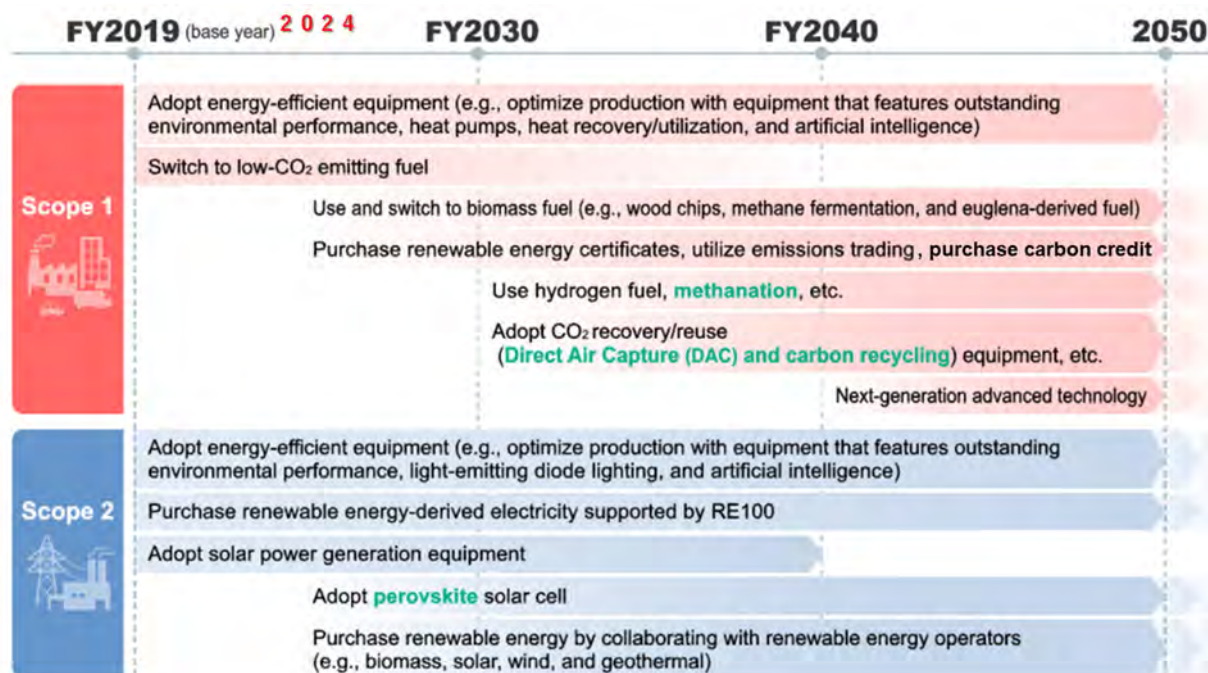
2) Risk Mitigation Measures

The Group is taking action to reduce GHG emissions based on the IEMA GHG management hierarchy.

- Eliminate:** Transition to business structures that do not emit greenhouse gases throughout the lifecycle across business models and the business portfolio
- Reduce:** Reduce energy use and GHG emissions by increasing the efficiency of manufacturing processes and transportation and taking other measures
- Substitute:** Switch to energy and procured materials with lower GHG emissions by using renewable energy, procuring low-carbon materials, and other means
- Compensate:** Compensate for GHG emissions that cannot be reduced using offsets such as purchases of carbon credits

• Initiatives to Reduce GHG Emissions at Company Sites

To reduce the Company's GHG emissions, in addition to our current initiatives including energy-saving and generation measures and purchase of renewable energy-derived electricity, we formulated a transition plan that incorporates the active introduction of new technology and next-generation energy. A summary is set forth below.

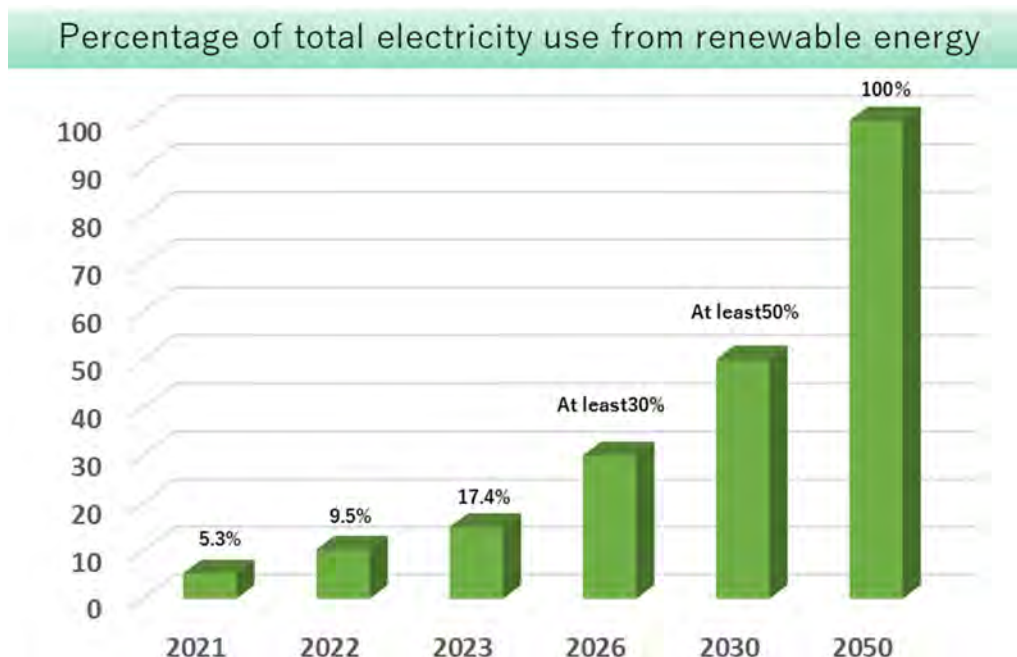


\* Scope 1: Direct GHG emissions by the reporting company itself (from fuel consumption and industrial processes)

Scope 2: Indirect GHG emissions from the use of electricity, heat, or steam supplied by others



The Group has implemented various measures, including the adoption of solar power generation equipment and energy-efficient equipment at our factories and other facilities, as well as the purchase of renewable energy-derived electricity supported by RE100. As a result of promoting these measures in line with the transition plan, in FY2023, renewable energy accounted for 17.4% of total electricity used. The Group is taking further action with a target of reaching 100% by 2050.



#### Example of a countermeasure: Use of Methane Biogas at the Tokachi Plant

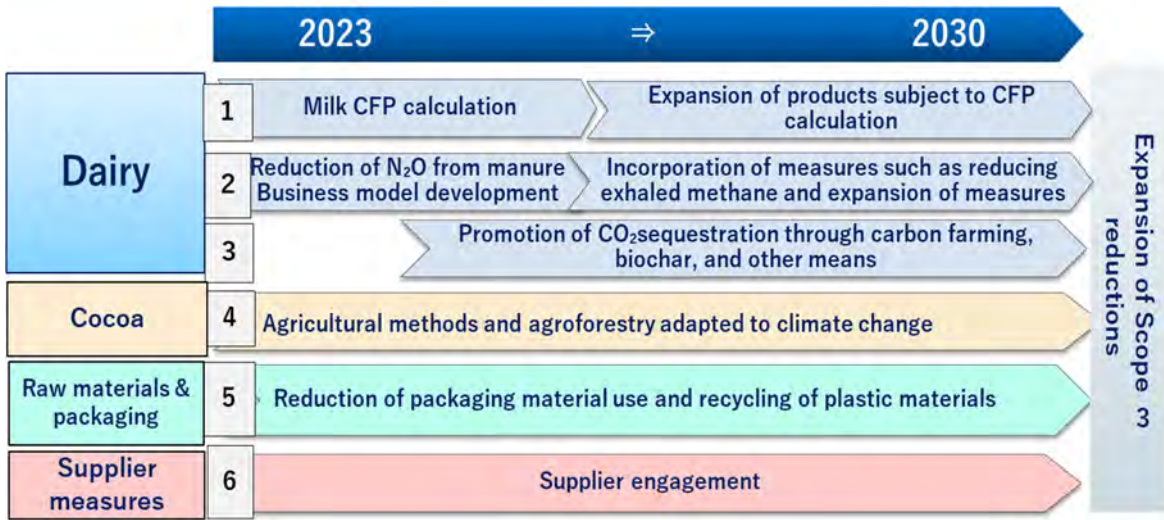
We introduced equipment capable of the methane fermentation treatment of whey residue and wastewater treatment at the Tokachi Plant. Operation began in 2024, and this equipment is expected to reduce annual industrial waste by 54% and CO<sub>2</sub> emissions by 5.9%.



#### • Measures to Reduce GHG Emissions in Supply Chains

In addition, we consider the reduction of not only CO<sub>2</sub> emissions but also GHG emissions in general, such as methane from the dairy industry, to be an important issue with respect to major raw materials. In order to reduce GHG emissions, we have established a transition plan for Scope 3, focusing on dairy. In order to effectively reduce GHG emissions, we began by calculating the carbon footprint (CFP) of milk to identify the processes with the highest GHG emissions throughout the lifecycle, and then developed and initiated measures to reduce emissions in those processes. In addition, we will consider measures for other raw materials and engage with suppliers to reduce their GHG emissions, thereby facilitating emissions reductions at suppliers and throughout the supply chain.

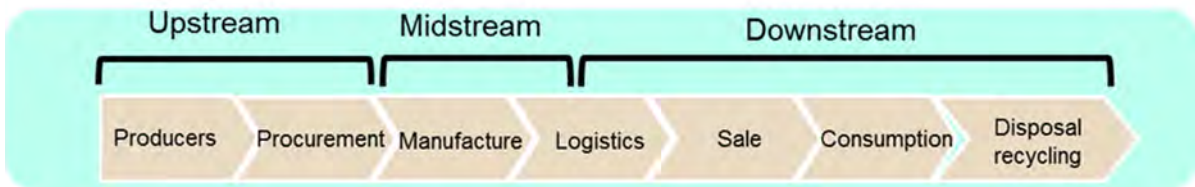
Below is an outline of the transition plan for Scope 3 Reduction.  
 Details of the corresponding measures for 1 to 6 in the figure are provided below.



\*Scope 3: Indirect emissions from the supply chain other than Scope 1 and Scope 2, generated in the supply chain in business activities from the procurement of raw materials including goods and services to manufacture, sale, use, and disposal.

Countermeasure 1: Expansion of the Raw Milk Carbon Footprint (CFP) Calculation

Based on actual data collected from multiple dairy farmers, we calculated GHG emissions for the entire lifecycle (from procurement of raw materials to manufacture, consumption, and disposal) for Meiji Organic Milk in 2022 and Meiji Oishii Gyunyu (produced at the Kyushu Plant). The results revealed that the upstream segment accounts for more than 90% of emissions, and therefore, we are taking action to reduce emissions in cooperation with producers.



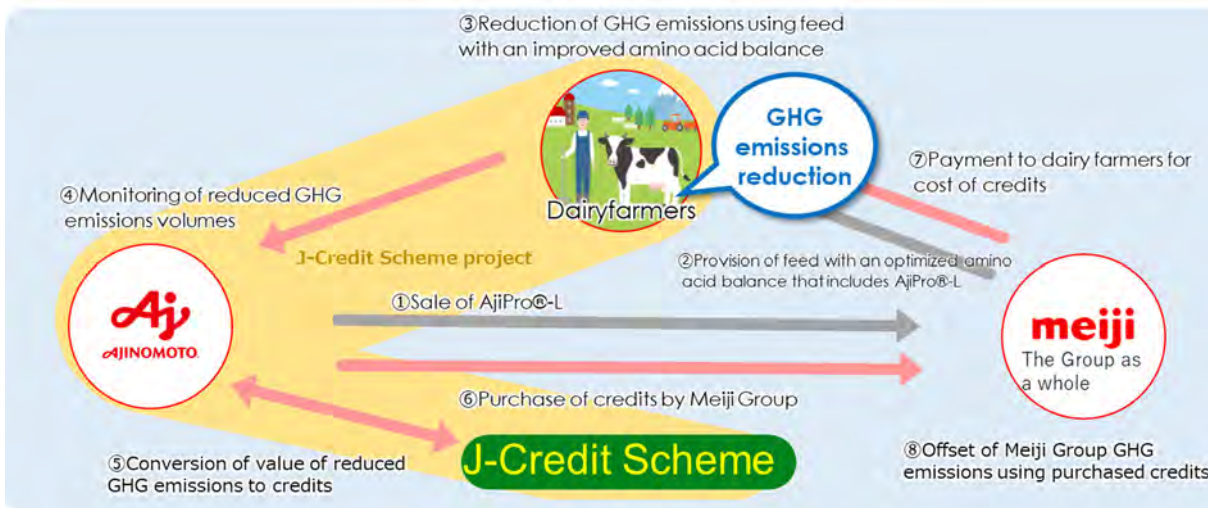
Product Name	Upstream (Raw material procurement)	Midstream (Production)	Downstream (Consumption and disposal)	Total (g-CO <sub>2</sub> )
Meiji Organic Milk	90.7%	5.9%	3.4%	100%
Meiji Oishii Gyunyu	91.0%	5.6%	3.4%	100%



### Countermeasure 2: Development and Expansion of a Business Model for Reducing N<sub>2</sub>O from Manure

Dairy farmers, Ajinomoto Co., Inc., and the Group played central roles in the creation of a business model.

We used AjiPro®-L, an Ajinomoto product, to curtail excess nitrogen in feed and thereby reduce N<sub>2</sub>O emissions from manure while maintaining milk production volume by improving the amino acid balance in the feed. Under the model we created, the dairy farmers and Ajinomoto use the J-Credit Scheme to convert the N<sub>2</sub>O reductions into credits, and by purchasing those credits, we are providing economic support to the dairy farmers. In the one year after operation started, there have been five cases, covering about 3,000 dairy cows, and we plan to expand this program further in the future.



### Countermeasure 3: Measures Relating to Carbon Farming

Carbon farming is an agricultural method that aims to reduce GHG emissions and improve the quality of farm soil by capturing atmospheric CO<sub>2</sub> in farm soil. In August 2023, we established the East Hokkaido Carbon Farming Research Group with dairy farmers and Betsukai town and measured the amount of CO<sub>2</sub> stored in the soil in Betsukai. Based on the results, we will conduct testing in the next fiscal year with the aim of establishing agricultural methods that can increase CO<sub>2</sub> storage, such as no-till cultivation, cover crops, and the effective use of compost.



### Countermeasure 4: Measures Relating to Cocoa

To respond to climate change, we are providing guidance on cultivation methods adapted to climate change and replanting deforested areas using a variety of crops through agroforestry to restore forests in Ghana. Also, product yields are expected to decline in conjunction with climate change, and to address this, we have invested in California Cultured Inc., a cocoa cell culturing startup, to promote sustainable cocoa procurement.



Cocoa cells about to become chocolate

#### Countermeasure 5: Plastic Resource Recycling Measures

Reducing the use of plastic made from oil, which is the main raw material in packaging material, leads to reductions in GHG emissions. In an effort to reduce petroleum-derived plastic, we are using biomass plastic for the caps and spouts of Meiji Oishii Gyunyu packaging. Also, we are reducing the use of plastics by switching to cardboard caps for Meiji Essel Super Cup Mini, reducing the weight of caps for Meiji Hokkaido Tokachi Rich Milk Yogurt, and implementing other measures.

#### Plastic Usage Targets and Trends

Year	FY2017 (Base Year)	FY2020 (Result)	FY2021 (Result)	FY2022 (Result)	FY2030 (Target)
Result (t)	30,807	27,265	25,878	25,155	21,567
Reduction (t)	-	3,542	4,929	5,652	9,240
Reduction rate (%)	-	11.5	16.0	18.5	30.0

#### Countermeasure 6: Supplier Engagement

Reductions of CO<sub>2</sub> emissions by suppliers are linked to reduction of the Company's Scope 3 emissions. We are sharing information on environmental load targets and results through engagement (dialogue) with suppliers of raw materials and confirming the status of environmental initiatives to promote solutions to social issues including reduction of GHG emissions.

Target Suppliers	Details of Engagement
<p><b>【FY2023 Results】</b></p> <ul style="list-style-type: none"> <li>Suppliers with high GHG emissions (13 companies)</li> </ul> <p><b>【FY2024 Plan】</b></p> <ul style="list-style-type: none"> <li>In addition to the above, we plan to add 10 more companies</li> </ul>	<p><b>【Requests】</b></p> <ul style="list-style-type: none"> <li>Calculate emissions for each raw material procured by the Meiji Group</li> <li>Calculate GHG emissions results and set reduction targets</li> </ul> <p><b>【Issues】</b></p> <ul style="list-style-type: none"> <li>Reflect emissions data received from suppliers in Scope 3</li> </ul>

#### Initiatives to Reduce Procurement Risks of Major Raw Materials

To reduce procurement risks relating to our major raw materials, we are optimizing source countries, regions, and suppliers and reinforcing procurement of certified raw materials. With respect to products, we are promoting the high added value of our products by strengthening the health and nutritional value, creating social value through sustainability, and taking other measures.

Category	Countermeasure	Specific Examples
product	Increase added-value of products (Reinforce health value and nutritional value)	<ul style="list-style-type: none"> <li>•Low-Carb GOOD LIFE MILK</li> <li>•Yogurt Containing One Serving's Worth of Green and Yellow Vegetables and Fruits</li> <li>•Marugoto Oats Milk</li> </ul>
	Increase added-value of products (Shift from the social value of sustainability to the economic value)	<ul style="list-style-type: none"> <li>•Agroforestry Milk Chocolate</li> <li>•Meiji Organic Milk</li> <li>•Products promoting Meiji Sustainable Cocoa Beans and RSPO-certified palm oil</li> </ul>
Raw material procurement	Optimize procurement countries and regions/suppliers	<ul style="list-style-type: none"> <li>•Gifu Plant (Meiji Seika Pharma) Develop production systems for bulk penicillin drugs (6-APA)</li> </ul>
	Strengthen procurement of certified raw materials	<ul style="list-style-type: none"> <li>•Meiji Sustainable Cocoa Beans</li> <li>•RSPO-certified palm oil</li> <li>•Procurement of certified soybeans and other products</li> </ul>

• Initiatives to reduce flood risks

We undertake the following initiatives as flood risk countermeasures.

- Conduct GAP analysis of risk assessment results in collaboration with local authorities at high-risk sites to understand the actual situation.
- Conduct detailed surveys of business sites with particularly high priority and investigate and implement physical countermeasures in anticipation of the flood area and flood depth. Example countermeasures are the installation of box walls (temporary water barriers) and waterproof walls.

(3) Creation of Business Opportunities

We believe that the direct impact of climate change will alter society and daily lives, thereby creating new needs and opportunities. The Meiji Group expects to obtain opportunities including those mentioned below by leveraging our current operating bases and adopting new resources.

The process up to the creation of opportunities is described below.

- Members of the Group TCFD Committee secretariat conduct individual hearings of organizations relating to investigation of opportunities.
- The Group TCFD Committee deliberates on the direction of opportunities.
- Opportunities are quantitatively organized from perspectives including the relationship with existing business, the possibility of responding using existing company assets, and feasibility.
- Business opportunities are identified by narrowing keys to gaining opportunities down to highly feasible ones.

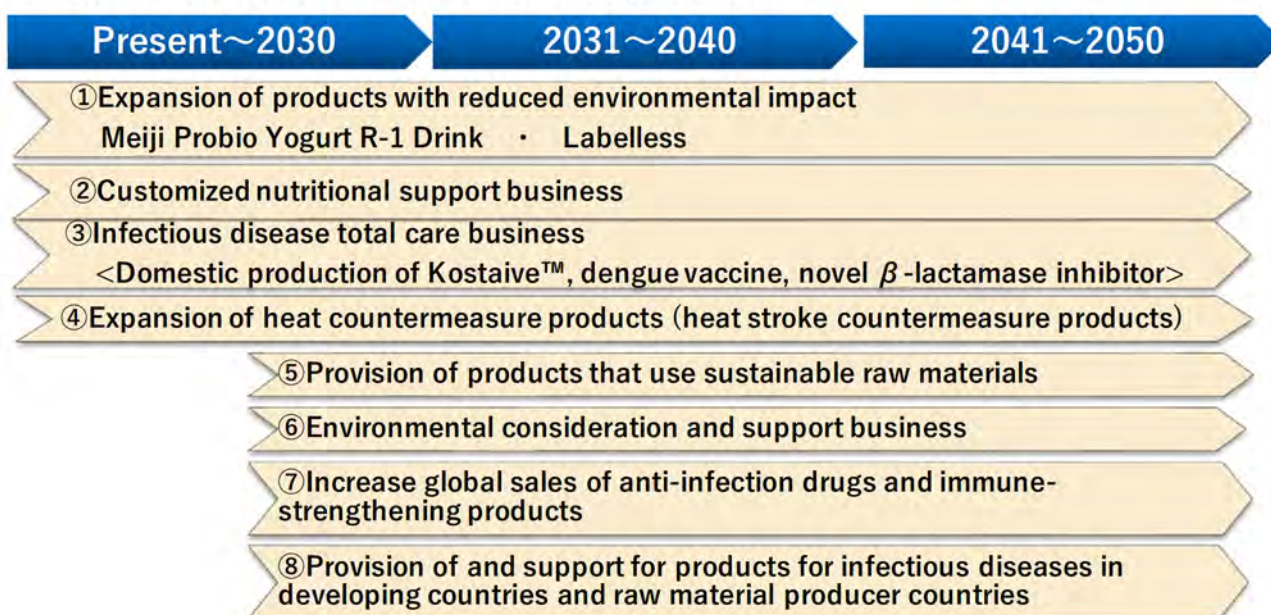
Going forward, the Group as a whole will explore the feasibility of each opportunity and take concrete action to achieve them.

Direct impact of climate change	Impact of climate change on society and daily life
<ul style="list-style-type: none"> <li>• Rise in average temperature</li> <li>• Intensification of disasters</li> <li>Changes in precipitation patterns</li> <li>• Harm to biodiversity</li> <li>• Reduction of crop yields</li> <li>• Rise in sea level</li> <li>• Permafrost thawing</li> <li>etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Changes in lifestyles resulting from temperature rise (e.g., self-restraint on going out and moving between locations, staying at home, thirst- quenching, heat stroke)</li> <li>• Rise in food and energy prices, changes in producer expenditures</li> <li>• Stricter GHG emission restrictions, manifestation of water risks (water shortages, deterioration of water quality)</li> <li>• Promotion of environmental load-reducing lifestyles (e.g., reduction of waste and discarded unsaleable products, energy-saving, and ethical consumption)</li> <li>• Permanent overwhelming on medical institutions and increased awareness of infectious disease prevention</li> <li>• Increased awareness of disaster countermeasures</li> <li>• Intensified malnutrition in developing countries</li> </ul>

Keys to gaining opportunities	Needs expected to grow	Opportunities for the Meiji Group
Responses to changes in lifestyles (e.g., staying at home)	<ul style="list-style-type: none"> <li>• Thirst-quenching and heat stroke countermeasures as a result of temperature rise</li> <li>• Products and systems to complete daily activities inside one's home</li> <li>• Maintenance of health through improved nutritional balance</li> </ul>	<ul style="list-style-type: none"> <li>• Expand heat countermeasure products</li> <li>• Customized nutrition- supporting businesses</li> </ul>
Responses to growing environmental awareness	<ul style="list-style-type: none"> <li>• Products with low environmental impact (e.g., vegetable-derived products, cell culture, circular agriculture)</li> <li>• Products and lifestyles that involve fewer discarded products and reduced energy use</li> <li>• Sustainable sourcing of raw materials</li> </ul>	<ul style="list-style-type: none"> <li>• Expand environmental impact-reducing products</li> <li>• Eco-friendly and environment-supporting businesses</li> <li>• Expand products that use sustainable raw materials</li> </ul>
Responses to emerging and re-emerging infectious diseases	<ul style="list-style-type: none"> <li>• Habituation of infectious disease prevention behaviors (e.g., gargling, hand-washing, mask-wearing, and boosting the immune system)</li> <li>• Self-medication for infectious diseases</li> <li>• Countermeasures against infectious diseases in developing countries</li> </ul>	<ul style="list-style-type: none"> <li>• Globally expand infectious disease drugs and products to boost the immune system</li> <li>• Business for comprehensive infectious disease treatment (e.g., natural immunity, acquired immunity, and pharmaceuticals)</li> <li>• Supply infectious disease products to developing countries and raw material- producing countries and provide support</li> </ul>

In addition, we prioritized these eight business opportunities along a time axis, from those that are currently being worked on to those we will work on in the medium to long term.

## <Timeline for Acquisition of Business Opportunities>



Business Opportunities ① and ⑤ “Expansion of Products with Reduced Environmental Impact” and “Provision of Products That Use Sustainable Raw Materials”

Creation of business opportunities by strengthening initiatives related to the Meiji Sustainable Products in-house certification system

We aim to create new value by actively working on sustainability in each process of the value chain (development, procurement, production, distribution, and consumption), and promoting Meiji Sustainable Products to customers as products that address social issues.

Business Opportunity	Sustainability Process Certification Standards	Primary Requirements
Opportunity ① Expansion of environmental impact-reducing products	Eco-friendly container packaging	Reduction of plastic consumption volume, use of recycled plastics and biomass materials Recycling-friendly design, etc.
Opportunity ⑤ Provision of products that use sustainable raw materials	Human rights-minded and eco-friendly procurement	Use of raw materials produced with certified raw materials and with eco-friendly agricultural methods

Business Opportunity ③ “Infectious Disease Total Care Business”

<Acquisition of New Modality>

The Meiji Group obtained approval to domestically manufacture and market Kostaive™, a COVID-19 vaccine, marking the world’s first authorization of a next-generation mRNA vaccine. Kostaive™ is expected to offer a strong immune response with lower mRNA doses, using novel sa-mRNA technologies. The Group will acquire advanced modality technologies and set up a technical foundation for developing new vaccines in the future.

### i. Development of a Novel Vaccine for Dengue

Global warming and changes in precipitation brought about by climate change are altering the habitats and living environments of pathogenic microbes. This is resulting in dengue outbreaks in increasingly wider areas. The dengue virus, the cause of dengue, is a type of mosquito-transmitted virus that triggers dengue fever, dengue hemorrhagic fever, and dengue shock syndrome in humans. Four dengue serotypes from 1 to 4 are involved in the spread of the disease among humans. The WHO reports dengue is prevalent in at least 100 tropical- and subtropical-region countries, and 3.9 billion people—roughly half of the world’s population—are at risk of infection, while 100–400 million people get infected every year. Some reports estimate that 390 million people become infected and 96 million develop the disease each year. Further, 500 thousand people need to be hospitalized and treated annually for worsening cases of dengue hemorrhagic fever. Many of them are children under the age of five, and approximately 2.5% lose their lives.

A single-dose administration of KD-382 has shown good immunogenicity and preventive effects against all four dengue virus serotypes in non-clinical studies. Phase I clinical studies in healthy Japanese adults have shown that KD-382 also demonstrates tolerability and good immunogenicity, and that a single-dose administration can induce neutralizing antibodies against all four serotypes. Given that children are at high risk of developing severe dengue cases, we are preparing to conduct Phase II clinical studies with the support of the Strategic of Biomedical Advanced Vaccine Research and Development for Preparedness and Response (SCARDA) to investigate KD-382's safety and immunogenicity in children. The vaccine is a promising new option for preventing dengue.

ii. Development of a Novel  $\beta$ -Lactamase Inhibitor for Combatting Antimicrobial Resistance (AMR)

The emergence and spread of drug-resistant bacteria is a worldwide threat, and Japan is taking countermeasures under its National Action Plan on Antimicrobial Resistance. A particular threat around the world is carbapenem-resistant Enterobacterales (CRE). These bacteria are resistant to carbapenem antibacterial drugs that are regarded as the "last resort" in the treatment of severe infections.

The novel  $\beta$ -lactamase inhibitor OP0595 (INN: nacubactam) that the Meiji Group created amid this situation is expected to demonstrate efficacy against drug-resistant bacteria in combination with existing antibiotics. We will contribute to the fight against AMR, a global issue known as a "silent pandemic."

(3) Metrics and Targets (Including Progress)

The Meiji Group established materiality and KPIs by formulating—and based on—the Meiji Group Sustainability 2026 Vision as well as our long-term environmental vision, the Meiji Green Engagement for 2050. The climate change KPI in a long-term environmental vision that aims to limit the increase of the world's average temperature to within the 1.5°C Paris Agreement target.

Responses for climate change-related risks and opportunities (e.g., activities to reduce environmental impacts and raw material sourcing) entail diverse action. We have established the following KPIs and regularly check their progress and work systematically to achieve them. We also evaluate these initiatives as part of the Meiji ROESG®\*1 indicators and reflect them in the remuneration of directors and corporate auditors.

<Expansion of ESG (Environmental, Social and Governance) Investing>

The Meiji Group has arranged for a 50 billion yen ESG investment in the 2026 Medium-Term Business Plan to promote the Scope 1, 2, and 3 transition plans and to steadily advance sustainability measures. The primary measures are described below.

- Initiatives to reduce GHG emissions in the dairy industry
- Domestic production of bulk penicillin drugs
- Introduction of solar power generation facilities
- Measures to achieve zero CFC (e.g., introduction of CFC-free turbo refrigerators)
- Measures to achieve zero plastic (e.g., introduction of facilities to reduce the weight of small plastic bottles)
- Reduction of water consumption volume (e.g., measures to save water by circulating rinse water on small plastic bottle lines)

<Review of the Internal Carbon Pricing System>

We changed the carbon price of the internal carbon pricing system from 5,000 yen to 15,000 yen per 1 t-CO<sub>2</sub> starting in FY2024, preparing to ensure a smooth transition after the full-scale introduction of carbon pricing.

<Issuance of Sustainability Bonds>

We issued sustainability bonds in 2021 to finance the capital required to achieve our Sustainability Vision.

\* See our "Sustainable Finance" website for sustainability-related financing.

(<https://www.meiji.com/global/sustainability/sustainable-finance.html>)

<KPIs associated with climate change-related risks and opportunities in the 2023 Medium-Term Business Plan>

Major impacts	Category	KPI		
		Short/Medium-term target	Long-term target	Progress in FYE 3/2024
Introduction of carbon pricing	CO <sub>2</sub> emission volume	Reduce company-wide CO <sub>2</sub> emissions (Scope 1 and 2) by at least 50% by FYE 3/2031 and at least 30% for Scope 3 (compared to FYE 3/2020)	Reduce company-wide CO <sub>2</sub> and other greenhouse gas emissions to net zero in the whole supplier chain by 2050	Scope 1 and 2: 19.6% Scope 3: 4.8% *2, 3
	Renewable energy usage	Expand renewable energy usage to make up at least 50% of total company-wide usage by FYE 3/2031	Achieve 100% share of renewable energy in total power usage at each site by 2050	17.4%
	Plastic usage	Reduce domestic plastic usage (e.g., packaging) by at least 25% by FYE 3/2031 (compared to FYE 3/2018)	Minimize use of new natural capital for packaging, utilizing recyclable resources	18.3% *2, 4
Water sourcing cost	Water consumption volume	Reduce company-wide water consumption volume per unit of sales by at least 15% by FYE 3/2031 (compared to FYE 3/2021)	Reduce company-wide water consumption volume per unit of sales by 50% by 2050, compared to FYE 3/2021	15.7% *2
Sustainable sourcing of major raw material	Cocoa	Increase procurement ratio of sustainable cocoa beans to 100% by FYE 3/2027	-	62.5%
	Palm oil	Switch 100% to RSPO- certified palm oil by FYE 3/2024	-	100.0%
	Timber (paper)	Switch to 100% eco-friendly paper by FYE 3/2024 (paper used in product container packaging)	-	100.0%
	Raw milk	Conduct MDA activities to provide management- related support to dairy farmers at least 400 times a year and at least 2,150 times in total by FYE 3/2024	-	522 times/year Cumulative total: 2,422

\*1 We consider it difficult to separately present the climate-related evaluation items of the Meiji ROESG®.

\*2 Described here are the reduction rates (%) compared to the base year. Figures are pre-third-party-certification calculations and are subject to change.

\*3 Scope 3 comprises indirect CO<sub>2</sub> emissions from the supply chain other than Scope 1 and Scope 2.

Data for the base year is calculated according to the method for FY2022; Scope 3 Category 1 is calculated based on the weight of purchased raw materials from FY2022. The amount of price of purchased raw materials was used to calculate Scope 3 Category 1 until FY2021.

Due to the addition of Meiji Food Materia Co., Ltd. and Meiji Feed Co., Ltd. to the scope of coverage from FY2023, KPI progress is calculated by including the performance figures for Scope 3 Categories 1, 4, and 9 of Meiji Food Materia Co., Ltd. and Meiji Feed Co., Ltd. in FY2019.

\*4 Plastic usage reduction results for FYE 3/2023.

The results of Meiji Group's FY2023 GHG emissions (Scope 1, 2, and 3) are disclosed on our website:  
<https://www.meiji.com/global/sustainability/caring-for-the-earth/climate-change.html>

<KPIs associated with climate change-related risks and opportunities in the 2026 Medium-Term Business Plan>

Medium- to long-term vision	Major initiatives	KPIs	Targets for FY2026
Establish a responsible supply chain by collaborating and cooperating with suppliers to engage in procurement activities that take into account social responsibilities, such as human rights and the environment, throughout the supply chain.	<ul style="list-style-type: none"> <li>Through Meiji Dairy Advisory (MDA), support the resolution of social issues such as human growth, human rights, animal welfare, and GHG emission reduction through human resource management at dairy farms</li> </ul>	<ul style="list-style-type: none"> <li>Number of farms participating in Meiji Dairy Advisory (MDA)</li> </ul>	Total of 100 or more
Establish traceability for each raw material, identify social issues related to human rights and the environment in the raw material production areas, and address these issues to achieve sustainable raw material procurement.	<ul style="list-style-type: none"> <li>&lt;Milk&gt; Promote initiatives aimed at reducing GHG emissions from dairy farming</li> </ul>	<ul style="list-style-type: none"> <li>&lt;Milk&gt; Number of dairy farms working to reduce GHG emissions</li> </ul>	Total of 30 or more
	<ul style="list-style-type: none"> <li>&lt;Cocoa&gt; Expand the procurement of Meiji Sustainable Cocoa Beans produced in areas where farmers are supported through Meiji Cocoa Support (MCS)</li> </ul>	<ul style="list-style-type: none"> <li>&lt;Cocoa&gt; Meiji Sustainable Cocoa Bean procurement ratio</li> </ul>	100%
	<ul style="list-style-type: none"> <li>&lt;Palm oil&gt; Promote the procurement of palm oil that is not involved in deforestation by incorporating forest monitoring to identify and verify deforestation risks along the supply chain</li> </ul>	<ul style="list-style-type: none"> <li>&lt;Palm oil&gt; Procurement rate for palm oil that is not involved in deforestation</li> </ul>	Set target in FYE March 2025
	<ul style="list-style-type: none"> <li>&lt;Paper&gt; Maintain 100% use of environmentally friendly paper for product containers and packaging, and switch to environmentally friendly paper for office supplies and standard publications</li> </ul>	<ul style="list-style-type: none"> <li>&lt;Paper&gt; Ratio of environmentally friendly paper used in the extended scope of applicability</li> <li>*Scope of applicability: Office supplies, standard publications</li> </ul>	100%

Medium- to long-term vision	Major initiatives	KPIs	FY2026 Target
Aim to achieve carbon neutrality by 2050 by reducing CO <sub>2</sub> emissions throughout the supply chain by strengthening energy saving and energy creation activities, utilizing renewable energy, and reducing GHG emissions in the dairy business.	<ul style="list-style-type: none"> <li>Reduce Scope 1 and 2 CO<sub>2</sub> emissions by strengthening energy saving and energy creation activities, utilizing carbon credits, etc.</li> </ul>	Scope 1, 2 emissions reduction rate (compared to FYE March 2020 as year of reference)	32% or higher
	<ul style="list-style-type: none"> <li>Reduce CO<sub>2</sub> emissions in Scope 3 by reducing GHG emissions in dairy farming, reducing the amount of packaging materials used, and strengthening collaborations with suppliers, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Scope 3 Emissions reduction rate (Compared to FYE March 2020 as year of reference)</li> <li>*Categories 1,4,9,12 (procurement/ logistics/ disposal)</li> </ul>	15% or higher
	<ul style="list-style-type: none"> <li>Promote the transition to renewable energy by expanding the adoption of solar power generation equipment and strengthening the use of electricity derived from renewable energy</li> </ul>	<ul style="list-style-type: none"> <li>Renewable energy ratio</li> <li>*Ratio: Percentage of total power consumption</li> </ul>	30% or higher



<p>Aim to move toward a circular economy by promoting activities that create added value while reducing resource input and consumption to maximize product value, minimize resource consumption, and constrain the generation of waste in addition to 3R (Reduce, Reuse, Recycle) + Renewable initiatives.</p>	<ul style="list-style-type: none"> <li>Promote the reduction of plastic containers and packaging while promoting R&amp;D for environmentally friendly materials</li> </ul>	<ul style="list-style-type: none"> <li>Rate of reduction for plastic use (total volume) (compared to FYE March 2018 as reference year)</li> </ul>	<p>25% or higher (Excluding overseas subsidiaries)</p>
<p>Achieve water neutrality by proactively engaging in water resource conservation activities such as water resource cultivation in addition to continuously reducing water usage.</p>	<ul style="list-style-type: none"> <li>Reduce water consumption through the efficient use of water and active adoption of water-saving equipment, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Water usage reduction rate (compared to FYE March 2021 as reference year) *Per unit of net sales</li> </ul>	<p>20% or higher</p>