# Approach to TCFD

As of June 27, 2023





## Disclosure Based on TCFD Recommendations

The Mitsubishi Shokuhin Group has defined its "Purpose" which it seems as the reason for its existence, as "Contributing to the realization of a sustainable society through the food business". The company also established its "Vision", the desired future state, as "Evolving into a next-generation food distributor (solving Key Sustainability Issues)".

Recognizing climate change as one of our Key Sustainability Issues, our Group has expressed its support for the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) recommendations. We will work to enhance our disclosures in line with TCFD guidelines and engage in dialogue with stakeholders in the future.

## Governance

In March 2021, we established the Sustainability Committee to promote company-wide efforts towards addressing sustainability issues through our business activities.

The Sustainability Committee, serving as an advisory body to the executive decision-making body entity, the Management Conference, is responsible for overseeing sustainability issues, including climate change.

We collaborate with the "Enterprise Risk Management Committee" to identify, manage climate-related risks, and develop and implement specific response strategies.

In June 2021, we appointed a Chief Sustainability Officer (CSO), who also serves as the President and Representative Director. The CSO, in consultation with the

 Governance Structure for Climate Change Issues



Sustainability Committee, reviews and deliberates on fundamental policies and important matters related to climate change, which are subsequently discussed and decided upon in the Management Conference. The discussions are also presented to the Board of Directors for consideration and are reported twice a year to ensure the board's monitoring and oversight.

■ 2022 Discussions and Reports at Board of Directors Meetings
/ Sustainability Committee Meetings

	Content of Deliberation and Reporting			
First	Response based on TCFD recommendations (endorsement, information			
Meeting	disclosure)			
	• Analysis results and future directions for the three selected analysis			
	themes by TCFD			

	<ol> <li>Measures for reducing CO<sub>2</sub> emissions Scope 1(*1) and Scope 2 (*2) within our group</li> <li>Consideration with upstream and downstream companies in the supply chain</li> <li>Direction for All-Hazard response at domestic facilities</li> </ol>
Second Meeting	<ul> <li>The preparation of a roadmap towards the 2030 target for CO<sub>2</sub> emission reductions</li> <li>Organization of specific measures to achieve the 2030 target (60% reduction compared to 2016)</li> <li>Initiating Scope 3 (*3) to reduce CO<sub>2</sub> emissions in the supply chain</li> <li>On incorporating the concept of Internal Carbon Pricing (ICP) (*4)</li> <li>Increase in frequency of BCP (*5) reviews to build a logistics system for recoverable alternative centers</li> </ul>

- \*1. Scope1: direct emissions from the reporting company's factories, offices, vehicles, etc.
- \*2. Scope2 : indirect energy-derived emissions from electric power and other energy consumed by the reporting company
- \*3. Scope3: Indirect emissions other than Scope 1 and 2 (emissions by other companies related to the activities of the business)
- \*4. Internal Carbon Pricing: A mechanism to promote low-carbon investment measures by companies based on the price of carbon estimated internally by the company
- \*5. B C P: Business Continuity Plan

# Strategy

#### (1) Identification of Risks and Opportunities

In our analysis for the fiscal year 2022, we identified climate-related risks and opportunities impacting our business by employing two scenarios, including the "1.5°C scenario." This scenario aims to limit the global temperature rise to below 1.5 degrees Celsius by the end of this century, aligning with the objective of achieving carbon neutrality by 2050. We extracted climate-related risks and opportunities within our operations and qualitatively assessed their financial impacts.

	Key Factors for Risks and Opportu- nities	Climate-Related Risks/Op- portunities	Risk/Time Until Opportunities Discovered	Financial Impact (Profit basis)
Tr	ansition Risks			
	Introducing/Increasing Carbon Pricing	Increase in operating costs due to introduction of carbon pricing	Medium-term	Medium
		Increase in purchase costs due to introduction of carbon pricing	Medium-term	Large
	Increase in Fuel Prices	Increase in transportation and storage costs due to higher fuel prices	Medium-term	Large
		Increase in purchase costs due to higher fuel prices	Medium-term	Medium

	Increase in Electricity Prices	Increase in transportation and storage costs due to changes in electricity prices	Medium-term	Medium
	Increase in purchase costs due to changes in electricity prices		Medium-term	Medium
	Lower Demand for Fossil Fuels	Increase in refrigerant costs due to change in demand for fossil resources	Medium-term	Small
Pł	nysical Risks			
	Increased Risk of Infectious Diseases Due to Rising Temperatures	Fewer opportunities for consumers to use food services due to increased risk of infectious diseases from rising temperatures	Medium-term	Small
	Increasing Frequency and Severity of Wind/Flood-Related	Damage to business sites due to frequent and severe wind and flood disasters	Short-term	Small
	Disasters	Decline in farm and field productivity due to frequent and severe wind and flood disasters	Short-term	Medium
		Supply chain disruption due to frequent and severe wind and flood disasters	Short-term	Small
0	pportunities			
	Progress Made with Joint Delivery and Modal Shift Initiatives	Lower transportation and storage costs due to the progress made with joint delivery and modal shift initiatives	Short-term	Large
	Progress with Devel- opment of Recycled Materials and Bio- mass-Related Technol- ogies	Increased sales of containers with low environmental impact/ packaging products due to progress with development of recycled material and biomass-related technologies	Short-term	Small

[Risk/Time until opportunities discovered] Short-term: no more than 3 years; Medium-term: over 3 years and no more than 10 years; Long-term: over 10 years

[Financial Impact] Small: no more than ¥1 billion; Medium: over ¥1 billion and no more than ¥5 billion; Large: over ¥5 billion

#### (2) Theme of Scenario Analysis and Setting for Climate Change Scenarios

We conducted an analysis of the future impacts of the following three themes, which were assessed as "highly important" based on the extraction and organization of climate-related risks and opportunities, considering their financial impact and relevance to our business strategy, in two temperature scenarios.

## ■ Scope and Themes of Scenario Analysis

Risk Classification	Scope	Analysis Themes
Transition Risks/Opportunities	Mitsubishi Shokuhin Domestic Group	① Impact on the Group's operating costs associated with the

	(excluding some subsidiaries)	introduction of carbon pricing
	Wholesale business of Mitsubishi Shokuhin	② Impact on purchase costs associated with the introduction of carbon pricing in the upstream companies of the supply chain
Physical Risk	All domestic Mitsubishi Shokuhin Group bases	③ Impact of an increase in weather- related disasters due to climate change on business locations

## ■ Scenarios Setups

	■ Sceriarios Secups				
	1.5℃ Scenarios	Current Scenarios			
Tran	sition Risks				
	External scenarios established  ■ NZE (*1)	External scenarios established  ● STEPS (*2)			
	<ul> <li>A strengthening policies and increasing investments in clean energy, advanced countries have achieved the commitment of net-zero greenhouse gas (GHG) emissions ahead of other nations. As a result, the global average temperature increase compared to the pre-industrial revolution is projected to be below 1.5°C by around 2100.</li> <li>A world in which countries are dependent on fossil fuels, and the price of fossil fuels is decline.</li> <li>A carbon price is imposed on corporate GHG emissions, with a price of 14,300 yen by 2030 and 27,500 yen by 2050.</li> </ul>	<ul> <li>A world in which the average global temperature increase compared to the pre-industrial levels is about 2.6℃ around 2100, based on emission routes in line with pathways aligned with the planes currently announced by each country.</li> <li>A world in which countries are dependent on fossil fuels, and the price of fossil fuels is increase.</li> <li>A carbon price is imposed on corporate GHG emissions, assumed to be 7,150 yen per ton of GHG emission in 2030 and 9,900 yen in 2050.</li> </ul>			
Phys	sical Risks				
	External scenarios established  ● RCP (*3) 2.6_SSP (*4) 1-2.6	External scenarios established  ● RCP8.5_SSP5-8.5			
	Assumed business environment  ■ Under sustainable development, climate policies are introduced to keep the temperature rise (median) to below 2°C compared to pre-industrial levels. Net-zero CO2 emissions are anticipated in the second half of the 21st century.	<ul> <li>Assumed business environment</li> <li>A high-reference scenario where there are no climate policies in place and development is reliant on fossil fuels.</li> </ul>			

- \*1. N Z E: Net Zero Emissions by 2050 Scenario
- \*2. S T E P S: Stated Policies Scenario
- \*3. R C P: Representative Concentration Pathways
- \*4. S S P: Shared Socioeconomic Pathways

#### ■ Main External Information Referred to in the Scenario Analysis

Information Provider	Reference Information
IEA (*5)	World Energy Outlook 2021
National Institute for Environ-	Embodied Energy and Emission Intensity Data for Japan
mental Studies	Using Input-Output Tables (2015)
Ministry of Land, Infrastructure,	Flood Hazard Map
Transport and Tourism	
WRI (*6)	Aqueduct Floods Hazard Maps, Inundation depth in me-
	ters for coastal and riverine floods
IPCC (*7)	AR6 Climate Change 2021: The Physical Science Basis

<sup>\*5.</sup> I E A: International Energy Agency

## (3) Scenario Analysis Results and Response Strategies

In response to the scenario analysis, our company group is taking steps to develop and implement a reduction roadmap for Scope 1 and Scope 2 emissions, aligning with the goal of achieving carbon neutrality by 2050. We are also actively engaging with stakeholders at various levels to assess Scope 3 emissions and build a resilient supply chain. Furthermore, we are promoting initiatives to enhance the effectiveness of "safe, secure, and stable food supply." This includes evaluating investment policies to reduce the flood risks at our business facilities in response to climate change and working towards establishing a flexible logistics system to address all hazards. By implementing these measures, we aim to contribute to the realization of carbon neutrality, mitigate climate-related risks, and strengthen our overall sustainability and resilience in the face of climate challenges.

# Analysis Theme①

Impact of Introducing Carbon Pricing on the Group's Operating Costs

#### (Analysis Assumptions)

- To predict the future impact of carbon pricing on our company group's operating costs, we conducted an analysis of the financial effects based on the carbon pricing imposed on Scope 1 and Scope 2 emissions.
- As of 2020, the impact was considered negligible and assumed to be zero.
- For the analysis, we assumed that the activity levels of our company in terms of emissions (factors influencing emission levels based on business activities) would remain the same as in 2020 for both 2030 and 2050.
- To assess the resilience of our business strategy, we also examined the extent to which our financial impact could be mitigated by addressing Scope 2 emissions through the procurement of renewable energy in the 1.5°C scenario. Please note that this analysis does not evaluate the impact of reduction activities related to Scope 1 emissions.

<sup>\*6.</sup> W R I: World Resources Institute

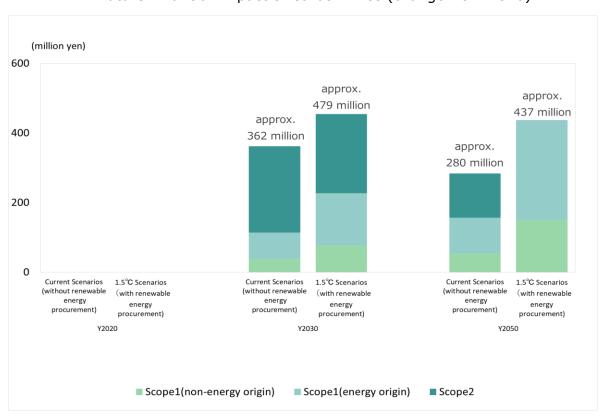
<sup>\*7.</sup> I P C C: The Intergovernmental Panel on Climate Change

#### [Analysis Results]

- By 2030, it was found that the financial impact of carbon pricing, compared to 2020, would increase by approximately 362 million yen in the current scenario without procuring renewable energy and approximately 479 million yen in the 1.5°C scenario, which includes the procurement of renewable energy.
- By 2050, it was found that the financial impact of carbon pricing, compared to 2020, would increase by approximately 280 million yen in the current scenario without procuring renewable energy and approximately 437 million yen in the 1.5°C scenario, which includes the procurement of renewable energy.
- By 2050, under the 1.5°C scenario, the emission coefficient of Japanese electricity is expected to turn negative due to the spread of CCUS\*, etc. Therefore, there will be no difference in the impact of the carbon price derived from Scope 2 emissions whether the company procures its own renewable energy or not. In addition, since the impact of the carbon price derived from Scope 1 emissions is expected to be larger than in 2030, we recognized that it will be more important to reduce the use of fossil fuels in vehicles and equipment.

\*CCUS: Carbon dioxide Capture, Utilization and Storage

## ■ Future Financial Impact of Carbon Price (change from 2020)

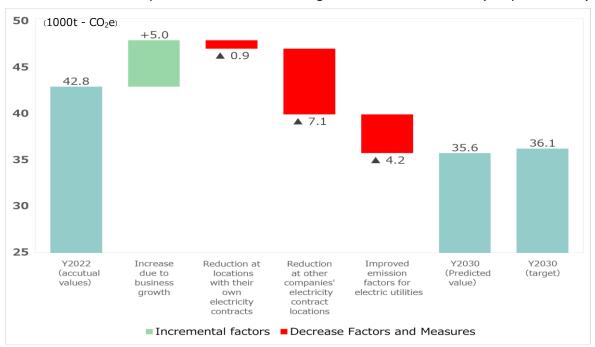


#### [Response Strategy]

Based on the quantitative analysis conducted, our company has developed a roadmap for GHG reduction in Scope 1 and Scope 2 emissions. In Scope 1, we have initiated efforts to reduce GHG emissions from fossil fuel sources, such as the introduction of introducing environmentally friendly vehicles (EV trucks) for testing purposes since 2022. As Scope 2 emissions constitute a significant portion of our company's GHG emissions, reduction measures related to electricity are crucial. Since the baseline year of 2016, we have been working on reducing GHG emissions by switching to environmentally friendly electricity with zero CO2 emission factors primarily at our own power-contracted facilities. Moving forward, we will uphold our commitment to environmentally friendly electricity contracts and expand our use of on-site solar power generation through on-site PPA\*. For facilities with electricity contracts from other companies (tenant occupancy, etc.), we will pursue energy savings through the introduction of LED lighting with motion sensors and explore the integration environmentally friendly electricity through comprehensive electricity contracts. We are also taking steps to prevent refrigerant leakage by maintaining refrigeration and cooling facilities properly and introducing leak detection devices. furthermore, we are conducting a trial implementation of internal carbon pricing, considering its scope of application and operational framework. For these initiatives, we anticipate cumulative investments and additional expenses totaling approximately 4 billion yen from the fiscal year 2023 to 2030. In the future, we will promote energy-saving activities, contemplate investments in facility and equipment replacement, and work towards achieving carbon neutrality by 2050 and building a decarbonized society through various other initiatives.

\*on-site PPA: A contract in which the operator installs solar panels without initial investment, and we pay the operator a fee based on the amount of electricity generated and used.

#### ■ Reduction Roadmap to Achieve FY2030 Targets for GHG Emissions (Scope 1 and 2)



Analysis Theme2

Impact on Procurement Costs Associated With the Introduction of Carbon Pricing in the Upstream Companies of the Supply Chain

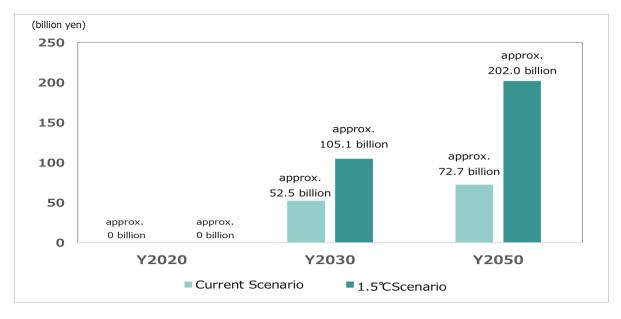
#### [Analysis Assumption]

- To forecast the impact of future carbon pricing on our product procurement costs, we conducted an analysis of the potential financial effects based on the carbon pricing imposed on upstream GHG emissions in our supply chain for the years 2030 and 2050.
- The financial impact in the year 2020 was considered negligible and hence assumed to be zero.
- Based on these assumptions, we conducted an analysis to assess the potential changes in our future financial impact for the years 2030 and 2050. Please note that the specific results of this analysis, including the estimated financial impact, are not provided in the given text.

## [Response Strategy]

- In the 1.5℃ Scenario, the impact equates to an increase of approximately 105.1 billion yen by 2030 and approximately 202.0 billion yen by 2050, compared to the year 2020. In the Current Scenario, the impact equates to an increase of approximately 52.5 billion yen by 2030 and approximately 72.7 billion yen by 2050, compared to the year 2020.
- In the 1.5℃ Scenario, the impact on our procurement costs corresponds to approximately a 4% increase compared to the 2020 procurement costs by 2030, and approximately a 9% increase by 2050. It is important to note that if our procurement volume or upstream GHG emissions in the supply chain increase in the future, the impact on procurement costs may become even greater.

#### ■ Future Financial Impact of Carbon Price (change from 2020)



## [Response Strategy]

In this quantitative analysis, even though the calculations are based on GHG emissions from 2020, we confirmed that the measures our group is already taking to reduce GHG emissions in the supply chain will effectively curb future increases in purchase costs. Our specific current initiatives include relaxing delivery requirements to improve supplier's delivery efficiency and introducing truck receipt and reservation system to reduce waiting times for trucks arriving at the warehouse. We have stated to conceptualize Scope3 with the aim of building a strong, sustainable supply chain and reducing GHG emissions, besides expanding our own initiatives, we are actively working to streamline the entire chain in collaboration with all levels of the company.

## Analysis Theme 3

Impact of Increased Weather-Related Disasters Due to Climate Change on Business Locations

#### [Analysis Assumption]

- To forecast the impact of climate change-related weather disasters on our company's operations, we conducted a scenario analysis for our domestic facilities within the company group (as of October 2021).
- In the analysis, we assessed the flood risk for each of our domestic facilities under the climate change scenarios of RCP2.6 (partially RCP4.5) and RCP8.5. We evaluated both the baseline flood risk as well as the projected risks for the mid-21st century and end of the 21st century. Moreover, we calculated the overall financial impact on the company resulting from climate change.

#### (Analysis Result)

- From the baseline assessment, we identified 53 facilities with a high risk of flood inundation and 14 facilities with a high risk of coastal flooding. These evaluations considered the potential impacts of floods and tidal surges.
- Moreover, we discovered that the number of facilities with a high risk is predicted to increase to 69 facilities by the end of the 21st century under RCP8.5 scenario. Similarly, the number of facilities with a high risk of coastal flooding is projected to increase to 21 facilities by the end of the 21st century under RCP8.5 scenario. These evaluations indicate heightened concerns of flood-related risks due to climate change.
- Subsequently, we carried out a quantitative evaluation of the financial impact of climate change on several facilities identified as having a high risk of flooding. In additionally, we estimated the overall financial impact for the entire company.
- Below, we present the estimated results of the overall financial impact for the entire company due to the increased risk of flooding associated with climate change, expressed as the multiplier of loss increase compared to the baseline.

Claymate	Multiplier for Increased Losses due to Flood Inundation		(Reference)	
change Scenario	Mid 21 <sup>st</sup> Century	End 21 <sup>st</sup> Century	Flood frequency*	
RCP2.6	approx.1.4 times	approx.1.4 times	at 2℃ rise	approx.2 times
RCP8.5	approx.1.8 times	approx.3.6 times	at 4℃ rise	approx.1.4 times

<sup>\*</sup>Source: Ministry of Land, Infrastructure, Transport and Tourism,

<sup>&</sup>quot;Flood Control Planning in Light of Climate Change" Proposal (revised April 2021)

## [Response Strategy]

As a corporate group that supports the food supply chain, we are committed to ensuring a "safe, secure, and stable food supply" even in the face of anticipated increases in climate-related disasters. To ensure this, we have been implementing Business Continuity Plans (BCPs) and enhancing our preparedness for all-hazard disasters. Our measures include installing emergency power generators, ensuring a fuel supply for transportation in case of fuel shortages, and establishing alternative centers for prompt response to shipment demands during emergencies. We have increased the frequency of reviewing our BCPs and have conducted comprehensive assessments that include climate change risks.

Moving forward, we aim to continue strengthening the resilience of our entire supply chain and further enhance the effectiveness of ensuring a "safe, secure, and stable food supply." We are dedicated to developing a robust framework that can address all-hazard situations and respond effectively to any challenges that may arise.

## Risk management

Our group has identified climate claim-related risks in terms of their impact and like-lihood through the Sustainability Committee, which scrutinizes and verifies initiatives related to sustainability management. For risks that significant impact our business or are highly relevant to our business strategy, we establish risk scenarios and conduct detailed analyses and assessments. Furthermore, we integrate significant climate change risks into our overall risk management process and evaluate and manage them alongside other business risks within the company's Risk Management Committee.

## **Indicators and Targets**

#### ■ Indicators and Targets Related to GHG Emissions

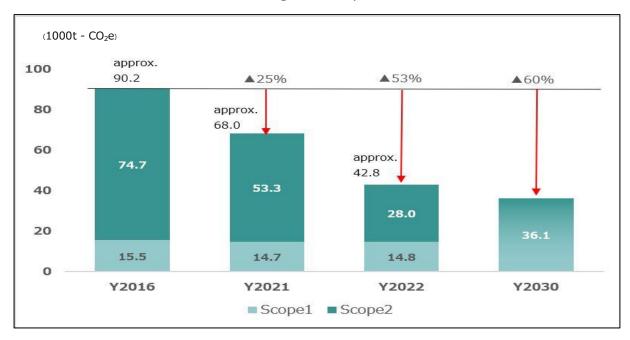
Our group has identified GHG emissions (Scope1 and Scope2) as key indicators for managing climate-related risks and opportunities. We have set a target to reduce our company's GHG emissions from our business operations by 60% by 2030, using 2016 as the baseline.

From the fiscal year 2021 to 2022, we made significant progress towards our 2030 target by transitioning all our electricity contract sites (125 sites) to environmentally friendly power contracts. This advancement has propelled us closer to achieving our goals for 2030.

indicator	Y2016	Y2021	Y2022	Y2030 (target)	
GHG emissions* [1000t - CO <sub>2</sub> e]	90.2	68.0	42.8	36.1	
Scope1	15.5	14.7	14.8	(60% reduction	
Scope2	74.7	53.3	28.0	compared to FY2016)	

<sup>\*</sup>GHG emissions: total of Scope1 and Scope2

## ■ Changes in Scope1 · 2



We regularly monitor and manage the progress of these indicators and targets to ensure our contribution towards achieving a decarbonized society. By doing so, we aim to make our efforts towards a carbon-neutral society more robust and impactful.