Disclosures based on the TCFD framework

TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

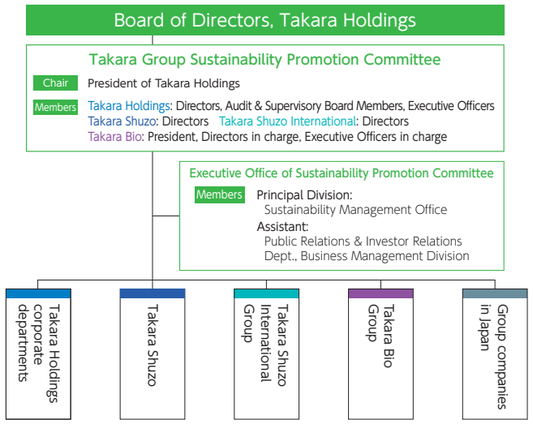
The Takara Group positions the harmonization of its business activities with global environmental preservation as one of its key challenges, and is actively implementing these initiatives. Recognizing that climate change is an important issue that has an impact on the sustainability of business, the Group supports the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and continues to assess and respond to risks and opportunities related to climate change in accordance with the TCFD framework, disclose relevant information, and engage in dialogue with stakeholders. The Group has also joined the TCFD Consortium, where companies and financial institutions which support the TCFD recommendations work together to move ahead with initiatives, and discuss effective information disclosure of companies and initiatives to lead to right investment decisions by financial institutions, etc.

Governance

The Takara Group has established the Takara Group Sustainability Promotion Committee chaired by the Representative Director and President of Takara Holdings, under the supervision of the Board of Directors. The committee assesses the risks and opportunities that climate change poses to business, formulates strategies, and discusses targets, etc. In addition, as a subordinate organization of the Takara Group Sustainability Promotion Committee, the Executive Office of Sustainability Promotion Committee has been established to deal with climate change issues. The Executive Office of Sustainability Promotion Committee sets out and implements specific activities for each Group company based on decisions made by the Takara Group Sustainability Promotion Committee.

These sustainability initiatives, including climate change issues, are reported to the Board of Directors by the Takara Group Sustainability Promotion Committee.

Governance Structure



Risk Management

The Takara Group identified risks and opportunities for Takara Shuzo Co., Ltd. and Takara Shuzo International Co., Ltd. (Overseas Alcoholic Beverages Business, Japanese Food Wholesale Business in overseas markets). As a process to identify them, we extracted potential risks and opportunities for transition risks and physical risks by referring to experts' opinions and published reports, and selected risks and opportunities that are expected to have a significant impact over the short-, medium-, and long-term period, taking into account the likelihood and magnitude of impact. The Takara Group Sustainability Promotion Committee reports to the Board of Directors on the details of identified risks and opportunities and the countermeasures.

Strategy and Scenario Analysis

In addition to Takara Shuzo Co., Ltd. in fiscal year 2021 and the Overseas Alcoholic Beverages Business of Takara Shuzo International Co., Ltd. in fiscal year 2022, the Takara Group expanded its scope to include Japanese Food Wholesale Business in overseas market of Takara Shuzo International Co., Ltd. in fiscal year 2023, and conducted a scenario analysis to understand the impact of climate change risks and opportunities on the business and consider countermeasures to be taken.

In this analysis, we referred to RCP 2.6 (below 2°C scenario) and RCP 8.5 (4°C scenario) based on AR5 of IPCC (Intergovernmental Panel on Climate Change) for physical risks, and APS scenario (below 2°C scenario), SDS scenario (below 2°C scenario), and NZE2050 scenario (1.5°C scenario) based on WEO of IEA (International Energy Agency) for transition risks to analyze and examine the impact of climate change.

Transition risk — As the temperature rise is limited to less than 2°C and strict environmental regulations are introduced to achieve carbon neutrality, the adoption of carbon tax will force up production costs, operating costs, storage costs, and the prices of containers and packaging materials, causing an impact on our business.

Physical risk — As the temperature rise will be about 4°C, damage due to storm surges and floods caused by sea level rise will have a significant impact on our operations. In addition, it has been found that the amount of yield of crops, which are raw materials, is greatly affected by rising temperatures.

Opportunities — We think that the reduction of operating costs through promotion of energy conservation efforts such as the introduction of energy-saving equipment as well as increased demand for ethical consumption and eco-friendly products will become business opportunities for us.

Going forward, we will continue to review risks and opportunities and give shape to measures to be taken, and reflect them in our medium- to long-term management strategies, thereby striving to improve the resilience of our strategies.

Target companies: Takara Shuzo Co., Ltd.
Takara Shuzo International Co., Ltd.
Overseas Alcoholic Beverages Business (Takara Sake USA Inc., Takara Shuzo Foods Co., Ltd., and The Tomatin Distillery Co. Ltd)
Japanese Food Wholesale Business in overseas markets (Mutual Trading Co., Inc., Tazaki Foods Limited, FOODEX S.A.S., Cominport Distribución S.L., and Nippon Food Supplies Company Pty Ltd)

* For disclosures based on the TCFD framework of Takara Bio Inc., please visit Takara Bio's website.

Business Risks and Opportunities due to Climate Change in Domestic Business and Overseas Alcoholic Beverages Business

Risk	Content	Period*1	Impact*2 (1.5°C Scenario)	Impact*2 (2.0°C Scenario)	Measures
Transition risk	Increase in production costs due to implementation of carbon tax	Medium-term	Medium	Medium	• Promoting initiatives to reduce CO_2 emissions and increasing the ratio of renewable energy • Promoting modal shifts (in Japan) • Promoting the use of renewable energy (installation of solar panels, etc.) • Converting company vehicles to EVs
Transition risk	Increase in costs of containers and packaging materials	Medium-term	Medium	Medium	• Switching to recycled containers and low-carbon alternative containers • Obtaining certification for paper and cardboards (e.g. FSC, PEFC) • Use of biomass materials for soft packaging materials and printing • Reducing weight of packaging materials (making bottles and cans lighter and abolishing labels and stickers)
Physical risk	River flooding (flood damage)	Long-term	4.0°C Scenario: Large		• Decentralization of production sites in Japan • Survey and examination of countermeasures for sites where large-scale flooding is expected • Consideration and formulation of BCP
Physical risk	Coastal flooding (flood damage)	Long-term			
Physical risk	Impact on crop yields (see below for details)				(See below for details)

*1 Medium-term until around 2030 Long-term until around 2050 *2 Impact on financial indicators Large 5% or more Medium 1–5% Small Less than 1%
Transition risk is the impact on consolidated operating income, and physical risk is the impact on consolidated net sales, consolidated property, plant and equipment, and consolidated inventories.

Opportunities	Content	Measures
Opportunities	Impact on cost of switching to energy-saving equipment	• Installing low-carbon equipment (converting the heavy oil boiler to a natural gas boiler) • Using a biomass boiler at Tomatin
Opportunities	Impact of energy conservation promotion on cost reduction	• Installing energy-saving equipment that reduces operating costs • Considering the promotion of the reuse of waste heat (use of heat pumps, etc.)
Opportunities	Increase in demand for eco-products (demand for ethical consumption)	• Product development consistent with ethical consumption (*Takara CRAFT*, *Sho Chiku Bai Nend*, etc.) • Initiatives for environmentally friendly products and certified products

Impact on crop yields

In addition to Takara Shuzo Co., Ltd., we have expanded our scope to include the Overseas Alcoholic Beverages Business of Takara Shuzo International Co., Ltd., and analyzed the impact of temperature rise on yields for four items that account for a large proportion of raw material use.

Global average temperature rise (°C) and changes in impact since pre-industrial times

Item	Major country of origin	2.0°C	4.0°C	Measures
Sugarcane (yield)	Brazil	︿	︿︿	• Continue stable procurement through cooperation with producers • Surveying and diversifying suppliers to reduce procurement risk • Survey and examination of raw materials compatible with climate change
Corn (yield)	United States	﹀﹀	﹀﹀	
Paddy rice (yield)	Japan	—	﹀﹀	
Paddy rice (yield)	China	︿	︿	
Paddy rice (yield)	United States	︿	︿	
Barley (yield)	UK	︿︿	—	

[Change in impact]–/+
30% or above ﹀﹀ / ︿︿
15% to less than 30% ﹀﹀ / ︿︿
Less than 15% ﹀ / ︿
No change —
No data —

Business Risks and Opportunities due to Climate Change in Japanese Food Wholesale Business in overseas markets

Risk	Content	Period*1	Impact*2 1.5°C Scenario	Impact*2 2.0°C Scenario	Measures
Transition risk	Increase in product procurement costs due to implementation of carbon tax	Medium-term	Small	Small	• Understanding carbon tax and carbon pricing trends • Studying and switching to products using sustainable containers and packaging materials
Transition risk	Increase in distribution and storage costs due to implementation of carbon tax	Medium-term	Small	Small	• Introducing EVs and electric trucks • Understanding renewable electricity trends in various countries • Promoting the use of renewable energy (installation of solar panels, etc.) • Considering and promoting energy conservation measures (Converting lighting to LEDs and those with automatic sensors, utilizing heat pumps for air conditioning, etc.)
Transition risk	Increase in storage costs due to rising electricity prices	Medium-term	—	Small	
Transition risk	Rise in procurement prices due to decline in raw material yield	Medium-term	Medium (Qualitative evaluation)		• Considering and selecting alternative suppliers • Studying and procuring alternative products
Physical risk	River flooding (flood damage)	Long-term	4.0°C Scenario Small		• Consideration and formulation of BCP (Countermeasures involving site facilities, inventory, distribution routes, delivery volume to customers, drills, etc.) • Consideration of site location and securing floor height of facilities, taking into account flood damage risk
Physical risk	Coastal flooding (flood damage)	Long-term			

*1 Medium-term until around 2030 Long-term until around 2050 *2 Impact on financial metrics Large 5% or more Medium Medium 1–5% Small Less than 1%
Transition risk is the impact on consolidated operating income, and physical risk is the impact on consolidated net sales, consolidated property, plant and equipment, and consolidated inventories. – Scenario data unavailable

Opportunities	Content	Measures
Opportunities	Increase in business due to switch to environmentally-friendly products and packages	• Selecting environmentally-friendly products and packages, and expanding their lineup • Building cooperative relationships with suppliers for procurement
Opportunities	Increase in demand for ethical consumption	• Strengthening lineup of plant-based "vegan products," etc. that serve as substitutes for beef and lead to curbing temperature rise • Providing information to customers regarding product features and certification acquisition

Indicators and Targets

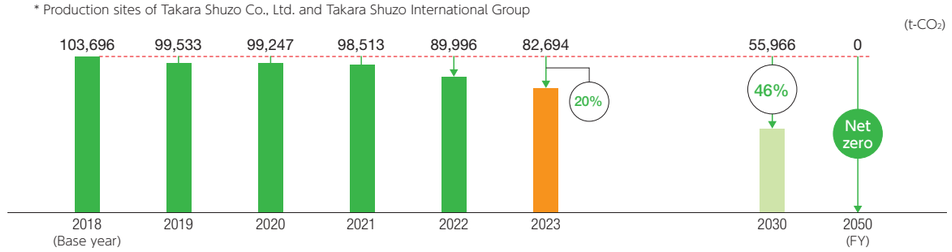
The Takara Group has set CO_2 emissions reduction targets in its Takara Group Sustainability Vision. Takara Shuzo Co., Ltd. and the Takara Shuzo International Group have set CO_2 emissions targets in Scope 1 and Scope 2 in total for their production sites.

Targets and Progress for FY2023

Year achieved	Scope	Indicators and targets	FY2023 results
2030	Takara Shuzo/Takara Shuzo International Group	Reduce CO_2 emissions at production sites by 46% compared with FY2018.	Compared to FY2018: 18% reduction CO_2 emissions: 85,112 (t-CO_2)
	Takara Bio Group	Reduce CO_2 emission intensity (CO_2 emissions per net sales) by 50% compared with FY2018.	Compared to FY2018: 11% reduction
	Takara Shuzo (Distribution)	Reduce CO_2 emission intensity (CO_2 emissions per sales volume) from shipping by 10% compared with FY2018.	Compared to FY2018: 18% reduction
2050	Entire Group	Net zero CO_2 emissions	—

Scope 1 and Scope 2 Total CO_2 Emissions of Takara Shuzo Co., Ltd. and Takara Shuzo International Group

* Production sites of Takara Shuzo Co., Ltd. and Takara Shuzo International Group



GHG Emissions of Takara Holdings Inc., Takara Shuzo Co., Ltd. and the Overseas Alcoholic Beverages Business of Takara Shuzo International Co., Ltd. in FY2023

Takara Holdings Inc., Takara Shuzo Co., Ltd. and the Overseas Alcoholic Beverages Business of Takara Shuzo International Co., Ltd. calculate greenhouse gas (GHG) emissions in Scope 1, Scope 2, and Scope 3. Going forward, we will work to grasp our Group-wide GHG emissions.

Unit: t-CO_2e

	FY2022	FY2023
Scope1+Scope2	92,176	84,541
Scope1	71,910	63,932
Scope2	20,265	20,609

Category			FY2022	FY2023	Calculation method
Scope3			841,071	793,180	
Upstream	Category 1	Purchased goods and services	629,826	587,638	Calculated for procured raw materials, containers, and packaging materials
	Category 2	Capital goods	10,700	16,156	Calculated for purchased facilities and instruments
	Category 3	Fuel- and energy-related activities not included in Scope 1 and 2	19,192	18,205	Calculated based on the amount of fuel and electricity used
	Category 4	Upstream transportation and distribution	108,371	101,730	Calculated for the logistics of procured raw materials, containers, and packaging materials
	Category 5	Waste generated in operations	2,954	3,390	Calculated for waste weight and disposal cost
	Category 6	Business travel	258	260	Calculated for employee business travels
	Category 7	Employee commuting	654	669	Calculated for employee commuting
	Category 8	Upstream leased assets	—	—	Not included in the calculation
Downstream	Category 9	Downstream transportation and distribution	11,136	10,982	Calculated for shipping logistics
	Category 10	Processing of sold products	—	—	Not included in the calculation
	Category 11	Use of sold products	—	—	Not included in the calculation
	Category 12	End-of-life treatment of sold products	51,690	49,057	Calculated for waste from products sold
	Category 13	Downstream leased assets	6,291	5,094	Calculated for instruments leased to outside parties
	Category 14	Franchises	—	—	Not included in the calculation
	Category 15	Investments	—	—	Not included in the calculation
Scope1+Scope2+Scope3			933,247	877,721	

Scope 1: Direct emissions of greenhouse gases by the business itself (fuel combustion, industrial processes)
Scope 2: Indirect emissions associated with the use of electricity, heat, and steam supplied by other companies
Scope 3: Indirect emissions other than Scope 1 and Scope 2 (emissions by other companies related to the activities of the business)
*Target companies of the Overseas Alcoholic Beverages Business of Takara Shuzo International Co., Ltd.: Takara Sake USA Inc., Takara Shuzo Foods Co., Ltd., and The Tomatin Distillery Co. Ltd
*GHG emission results are subject to change due to third-party verification, etc.