SMFL | Think beyond, Act now

FY2024 TCFD Report

Task Force on Climate-Related Financial Disclosures

March 2025

CONTENTS

01

Introduction

Introduction

Sumitomo Mitsui Finance and Leasing Company, Limited (SMFL) formulated its environmental policy in June 2017, explicitly stating its aims in contributing to the resolution of global environmental issues. In April 2020, as one element of Our Vision within the SMFL Way, we declared our intention to become a company “Chosen for its commitment to SDGs.” In addition, the SMFL Group has identified the “Environment” as materiality (key issues) and is promoting a variety of initiatives in its bid to help realize a decarbonized, circular economy.

In line with the recommendations put forward by the Task Force on Climate-Related Financial Disclosures (TCFD), the Group has conducted business impact assessments of projects that may be significantly impacted by climate change, identifying climate change risks and opportunities using multiple scenarios published by the International Energy Agency (IEA), including the “Sustainable Development Scenario (below 2°C scenario including 1.5°C)” and the “New Policy Scenario (4°C scenario).”

Moving forward, we plan to improve the accuracy of our analysis through various measures on an ongoing basis. This includes expanding the number of businesses subject to TCFD scenario analysis and quantifying risks and opportunities.

02

Governance

Sustainability Governance

The SMFL Group has established the SDGs Promotion Committee, chaired by the President, as a central body within its sustainability governance framework and commitment to SDGs.

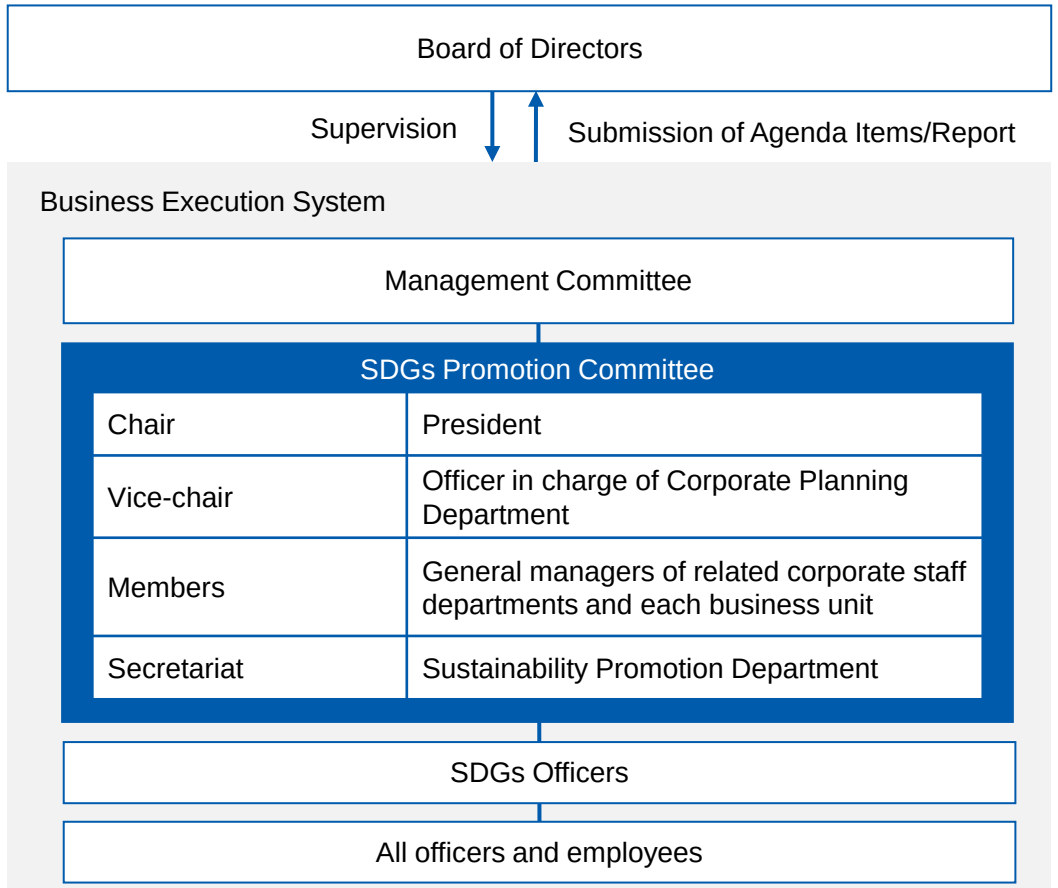
Supervision and Execution by the Board of Directors

- Sustainability matters are resolved and reported by the Management Committee after the deliberation by the SDGs Promotion Committee, under the supervision of the Board of Directors.
- Chaired by the President, the SDGs Promotion Committee's members include general managers of related corporate staff departments and business planning department of each business unit. Serving as the Committee's secretariat, the Sustainability Promotion Department formulates policies regarding SDGs management initiatives while deliberating on and promoting various measures across the organization. In principle, the Committee convenes twice a year.

The Role of SDGs Officers

- SDGs Officers are appointed in each department to spearhead the implementation of various sustainability initiatives necessary to promote SDGs management. Policies are communicated and disseminated to all officers and employees through SDGs Officers. SDGs Officers also act as instructors for study sessions related to the promotion of SDGs management in each department.

Sustainability Governance Organizational Structure



03

Strategy

Strategy

As the world transitions toward net zero greenhouse gas (GHG) emissions amid the steady advance of climate change, the SMFL Group is clarifying risks and opportunities through scenario analyses while working to reduce risks.

Climate-Related Risks and Opportunities

- Climate-related risks and opportunities include “physical risks and opportunities” that arise from the increase in natural disasters owing to climate change and “transition risks and opportunities” attributable to increasingly stringent laws and regulations as well as changes in the market associated with the shift to a decarbonized society.
- The SMFL Group has conducted scenario analyses to assess climate-related risks and opportunities in its businesses and considered measures to address the potential risks and opportunities that it may face.

Scenario Analyses

- The SMFL Group employs scenario analysis methods in accordance with the TCFD framework to forecast and analyze changes in the external environment in order to grasp the risks and opportunities that future climate change may pose to its business activities.
- In conducting analyses, the Group employs the two “1.5°C” and “4°C” climate change scenarios in accordance with the Paris Agreement goals.

Businesses Subject to Scenario Analysis

Identifying those businesses within its reportable segments which it believes are especially susceptible to climate change risks, the SMFL Group conducted scenario analyses for the “Environmental Energy,” “Real Estate,” and “Aircraft” businesses.
Within the analyses conducted, the scope of analysis is presented as follows.

Environmental Energy Business

- Renewable energy generation
- Decarbonization solutions

Real Estate Business

- Real estate rental and development

* The SMFL Group’s Kenedix Real Estate Fund Management, Inc. discloses information regarding its real estate management business on its website.

Aircraft Business

- Aircraft leasing （SMBC Aviation Capital FY2023）

4℃ Scenario

Acute Risks
Increase in weather-related disasters, including typhoons, floods, and wind damage

Increase in wind and flood damage

Damage to power generation facilities

Incidence of flood damage

Decrease in tenant income

Chronic Risks
Long-term shifts in climate patterns, including higher sea levels and an increase in average temperatures

Decrease in solar power generation efficiency

Decrease in income from electricity sales

Increase in the number of extremely hot days

Increase in costs due to longer construction periods

Industry structure dependent on two aircraft manufacturers

The entire industry at risk of the effects of climate change impact of weather-related disasters that current infrastructure is unable to withstand

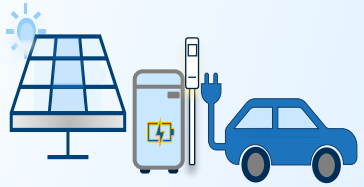
1.5℃ Scenario

Increase in the average temperature as of the end of the century limited to 1.5ºC compared with pre-industrial levels; significant advance toward decarbonization

Environmental Energy

Increase in demand for carbon-free electricity

Creation of new business opportunities, including the energy storage plant business



Increase in grid instability

Price competition due to an increase of various power sources

Real Estate

Introduction of new policies as well as laws and regulations aimed at reducing carbon emissions

Increase in real estate values with outstanding environmental performance, including low-carbon specifications

Risk of a deterioration in corporate brand value owing to an inadequate environmental response

Risk of losing a competitive market advantage due to delays in cutting-edge technology investment

Aircraft Leasing

Efforts to secure prompt access to sustainable aviation fuel (SAF)

Improvement in profitability and reduction in costs

Increase in pressure to decarbonize owing to the introduction of a carbon tax and the risk of an increase in airline company costs

Environmental Energy Business

Image of Society			Subject Business	Risks	Opportunities	Countermeasures
Transition Risks and Opportunities	Policies/Laws and Regulations	Changes in decarbonization- and renewable energy-related policies as well as laws and regulations (changes to the FIT, FIP, and other energy purchase programs)	Renewable energy generation	・Decrease in income and increase in costs in the power generation business due to changes in Japan's Act on Special Measures Concerning Procurement of Electricity from Renewable Energy Sources by Electricity Utilities	・Creation of new business opportunities, including the storage plant business in response to changes in the electricity market ・Increase in demand for carbon-free electricity on the back of increasingly stringent laws and regulations; acceleration of high value-added business	・Increase high value-added power generation business using the FIT program (shift to the FIP program/attached battery storage) ・Expand on-site PPA and off-site PPA initiatives that do not utilize the FIT program
			Decarbonization solutions	・Reduction and cutbacks in decarbonization investment owing to changes in subsidies and taxation systems in the decarbonization sector	・Increase in business opportunities for energy conservation equipment leasing and consulting through efforts to leverage subsidy and tax system expansion	・Strengthen decarbonization solutions and consulting through means other than the use of subsidies and tax systems; provide energy services other than solar power ・Increase awareness toward the results of subsidy and tax system use; expand subsidy leasing and consulting initiatives
	Market	Changes in the renewable energy generation business environment	Renewable energy generation	・Grid instability due to an increase in variable power sources ・Price competition due to an increase of various power sources ・Decrease in land suitable for the renewable energy generation business	・Expansion of the grid storage battery business that helps secure adjustment capabilities ・Improvement in carbon-free power source PPA competitiveness that can be supplied on a long-term fixed basis ・Creation of new business models to replace large-scale mega solar facilities	・Reduce electricity sales loss by managing output through the use of storage batteries and online control ・Refine electricity sales loss forecasts in line with the management of output; incorporate into business plans ・Expand the power grid battery business to help secure adjustment capabilities ・Strengthen the price-fixing period management of PPA contracts ・Expand variations of land suitable for the installation of renewable energy power generation facilities (float, abandoned farmland, farming, other) ・Expand on-site PPA variations
	Technology	Adaptation to new technologies	Renewable energy generation	・Obsolescence of existing facilities through measures aimed at increasing the efficiency of energy efficiency and other technological innovations ・Decrease in sale value at the time of asset sale	・Growth in the power generation business through value-up investments that utilize new technologies ・Creation of new business opportunities owing to the spread of next-generation fuels	・Invest in panels, storage batteries, etc. to increase power plant value ・Coordinate with partner companies; engage in new technology verification and other activities
			Decarbonization solutions		・Creation of business opportunities that utilize new technologies	・Consider commercializing new technologies in collaboration with partners
Physical Risks and Opportunities	Acute	Losses attributable to severe wind and flood damage	Renewable energy generation	・Opportunity loss on the sale of electricity due to the damage to power generation facilities caused by winds, floods, etc. ・Increase in associated costs, including restoration expenses and higher insurance premiums	・Increase in power generation business added-value through the implementation of natural disaster prevention measures	・Promote natural disaster prevention measures ・Strengthen natural disaster hazard checks at the time of business development ・Management risks through portfolio management of applicable hazard areas ・Manage optimal insurance policy terms and conditions based on the probability that a disaster will occur
	Chronic	Increase in average temperatures		・Decrease in sales owing to lower power generation volumes and a downturn in solar panel power generation efficiency caused by high temperatures	・Increase in energy efficiency on the back of improvements in solar radiation intensity and wind conditions ・Increase in electricity demand due to higher demand for air conditioning	・Consider the introduction of panels that employ new materials and technologies that are less susceptible to reductions in power generation efficiency even under high temperature conditions

Real Estate Business

Prevailing Social Conditions			Subject Business	Risks	Opportunities	Countermeasures
Transition Risks and Opportunities	Policies/Laws and Regulations	Response to new construction regulations	Real estate rental and development	• Introduction of new policies as well as laws and regulations (ZEB, ZEH, and other regulations) aimed at reducing carbon emissions; increase in real estate management and construction costs	• Reduction in the investment burden by utilizing energy-saving technologies as well as ZEB, ZEH, and other subsidy programs	• Work to improve profitability and offset the increase in costs by proactively introducing carbon neutral technologies, including carbon-free electricity, and enhancing the competitiveness of real estate held • Utilize subsidy programs for cutting-edge technologies
	Market	Changes in customer behavior		• Loss of value and downturn in the competitiveness of existing real estate (properties based on outdated building codes amid an increase in the need for high energy-efficient buildings) • Increase in calls by tenants for enhanced energy efficiency and environmentally friendly specifications necessitating the repair and redevelopment of existing properties	• Expectations of an increase in earnings on the back of a variety of factors, including increases in the value of real estate distinguished by its outstanding environmental performance, such as real estate that has acquired energy-efficient certification and low-carbon housing, rent per unit, and sales prices • Expectations toward efforts aimed at optimizing energy consumption, improving operational efficiency, and increasing tenant satisfaction on the back of the development of smart building that utilize renewable energy and IoT technologies	• Work to enhance the competitiveness of real estate held by proactively introducing carbon neutral technologies, including carbon-free electricity, and undertaking decarbonization investments, including the development of environmentally certified properties (example: activities at proprietary NEWNO brand buildings, etc.) • Work to improve the profitability of real estate held and offset the increase in costs by proactively introducing cutting-edge technologies • Utilize subsidy programs for cutting-edge technologies
	Technology	Adaptation to new technologies		• Reduction in management costs and loss of market advantage owing to delays in investing in and updating cutting-edge technologies amid ongoing progress in the development of high energy efficiency facilities and building materials	• Expectations of a reduction in costs and increase in property values owing to the introduction of cutting-edge technologies and efforts to increase operational and energy efficiency	• Optimize energy consumption through the introduction of cutting-edge technologies and increase tenant satisfaction by improving operational efficiency • Provide increased value through the introduction of cutting-edge technologies at an appropriate price
	Reputation	Impact on corporate brand		• Deterioration in corporate brand value and reliability owing to a poor ability to adequately address environmental concerns	• Increase in society's recognition of the SMFL Group's proactive efforts to leverage advances in technology and declining renewable energy costs to promote decarbonization	• Maintain and enhance the value of the corporate brand by proactively and externally communicating details of carbon neutral initiatives, including examples of the proprietary NEWNO building brand
Physical Risks and Opportunities	Acute	Losses attributable to severe natural disasters		• Decrease in asset values that reflect the wind and water damage to existing assets caused by such natural disasters as typhoons; restrictions on business activities and increase in restoration costs; increase in insurance premiums • Incidence of flood damage to real estate held; decrease in tenant income; non-payment of or decrease in rent	• Expectations that the SMFL Group will garner the trust of customers and tenants through the design and construction of robust buildings that take into consideration disaster risks as well as successful efforts to highlight safety features	• Develop and hold properties that are highly resilient to disasters through a variety of measures, including the introduction of cutting-edge technologies • Strengthen standard BCP measures, including disaster prevention drills, to minimize damage, and as a result, reduce costs at the time disasters occur
	Chronic	Increase in temperatures		• Increase in costs due to higher demand for air conditioning • Longer construction periods due to the upswing in work interruptions attributable to an increase in the number of extremely hot days; increase in construction costs due to longer construction periods		• Mitigate the increase in electricity costs by updating equipment, including efficient air conditioning systems, and introducing new technologies • Mitigate impacts by formulating appropriate construction plans, undertaking reviews on a timely and appropriate basis, and utilizing new materials and cutting-edge technologies

Kenedix Real Estate Fund Management, Inc. discloses information regarding its real estate management business on its website. For details, please refer to the TCFD disclosure of Kenedix Real Estate Fund Management, Inc.

Aircraft Business

Prevailing Social Conditions			Subject Business	Risks	Opportunities	Countermeasures
Transition Risks and Opportunities	Policies/Laws and Regulations	Climate-related regulation	Aircraft leasing	• Ambitious government climate change targets, carbon pricing and taxes, and increases in decarbonization pressures and costs for airlines, which in turn lead collectively to reduced earnings/revenue		• Emphasize value of new technology fleet • Deliver on intention to invest in SAF to assist customers with their decarbonization commitments
	Market	Financial lending restrictions		• Introduction of restrictions on access to finance with finance availability linked to carbon footprint / ESG impact of activities	• Preferential access to finance and cost of capital for lessors with Net Zero compatible fleets, decarbonization focused fleet investment strategies (Next Generation Aircrafts (NGAs), new technologies), engaging in decarbonization activities	• Seek opportunities for Sustainability-Linked Finance • Provide regular and transparent ESG disclosures to investors
		Changes in customer behavior		• Changing consumer trends and increased ESG awareness as consumers begin to consider the climate footprint of the products and services they use and purchase	• Access to SAF suppliers at a faster rate and potentially lower cost due to shareholders' ability to scale in this area • Increased customer demand (airline / consumer) for improved environmental impact of aircraft as customers become increasingly ESG conscious. • Development of carbon credit portfolio provides new market opportunities as airline sector seeks to meet offsetting requirements • Preferential access to finance and/or cost of capital for lessors with – Net Zero compatible fleets – decarbonization focused fleet investment strategies (NGAs / new technologies) – engaging in decarbonization activities	• Focus on fleet composition to deliver up to 80% new technology fleet by 31 March 2026, focused on young efficient narrowbody aircraft • Deliver on intention to invest in Sustainable Aviation Fuel ("SAF") and Next Generation Aircraft ("NGA"s) • Leverage strong OEM relationships to enter into purchase agreements on NGAs • Actively explore Shareholder and market collaboration opportunities around SAF • Continue to leverage opportunities with airlines and other customers
Physical Risks and Opportunities	Chronic	Aircraft manufacturer concentration risk		• Reliance on two aircraft manufacturers exposes the sector to climate related concentration risk with weather events more extreme than current infrastructure assets can withstand		• Ongoing collaboration with OEMs on mitigating risk at respective facilities

Original text: SMBC AVIATION CAPITAL Task-force on Climate-related Financial Disclosures

04

Risk Management

SMFL Group Risk Management System

After identifying the location and types of risks to be managed in line with strategic targets and business formats, the SMFL Group has established comprehensive risk management regulations with the aim of engaging in appropriate management in accordance with the characteristics of each risk.

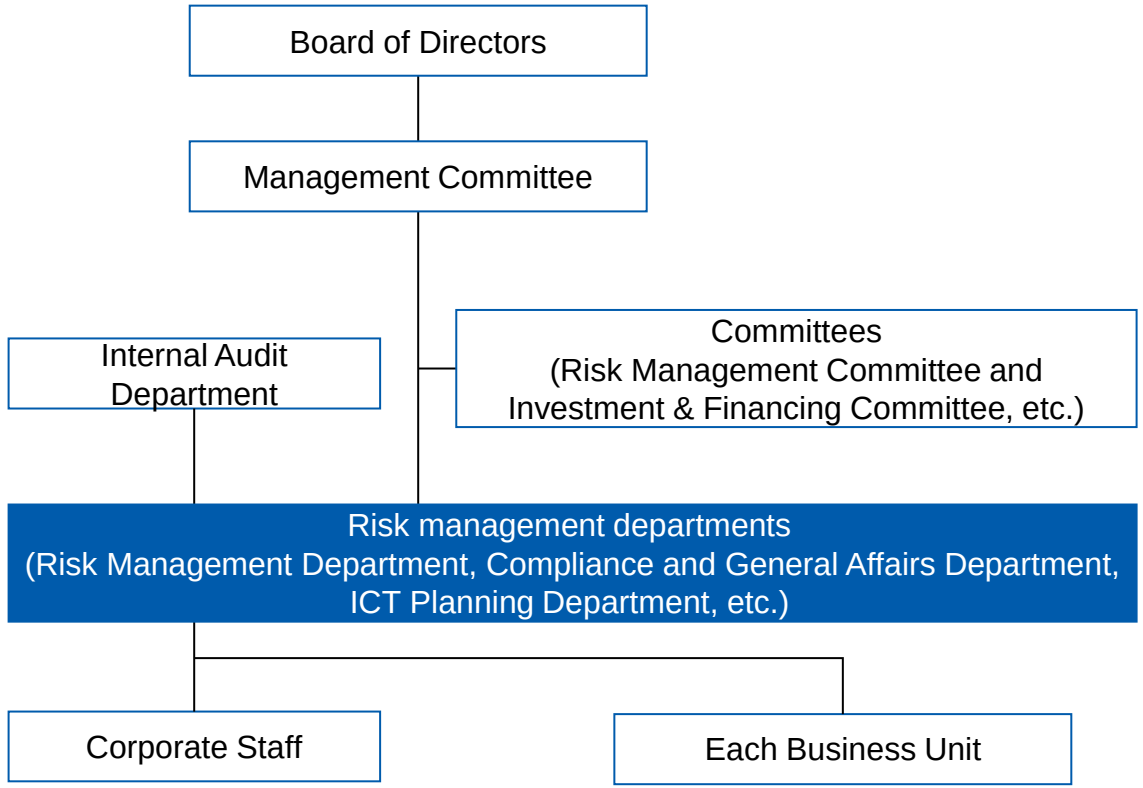
Process to Identify and Assess Risks

- Recognizing that climate change may impact its operating results and financial position, the SMFL Group manages sustainability-related risks through the following processes
- In anticipation of rapid shifts in the business environment, the SMFL Group is promoting the identification of risks through a Risk Register in order to enhance risk governance and strengthen each business units' risk ownership
- Business units communicate with risk management departments to identify potential business risks, and after evaluating these risks and verifying the appropriate control measures, build a system that reflect the findings in business strategies
- For new investments and loans in particular, steps are taken to establish ESG checklists to confirm the presence or otherwise of climate-related risks (physical, regulatory, and technological risks)

Process to Manage Risks

- The SMFL Group has introduced a Risk Appetite Framework (RAF) by department; steps are taken to clarify risk-taking and risk management posture through each department's RAF when sustainability risks are significant

Risk Management System



05

Metrics and Targets

SMFL Group GHG Emissions

- SMFL disclosed Scope 1, 2, and part of Scope3 emission data for the Group for the first time in 2024
- SMFL introduced Sustana, a cloud service for calculating GHG emissions provided by Sumitomo Mitsui Banking Corporation, in April 2024 in a bid to further improve the efficiency and precision of GHG collation operations for SMFL on a non-consolidated basis and Group companies in Japan and overseas
- In addition to activities aimed at calculating categories 1 and 2 of Scope 3 emissions, SMFL will also consider obtaining third-party assurances for Scope 1 and 2 emissions and strengthen collaboration with Group companies in Japan and overseas through various means, including measures taken on a non-consolidated basis in order to achieve targets set for FY2025 going forward

FY2023 SMFL Group GHG Emissions

Scope			Scope	GHG emissions (t-CO2)
Scope 1*			Consolidated	2,672
Scope 2**			Consolidated	2,501
Scope 3	Category 3	Energy-related activities	Consolidated	1,118
	Category 5	Waste from business operations	SMFL non-consolidated + domestic affiliates occupying the following offices (Tokyo Head Office, Osaka Head Office, Takebashi Office)	3
	Category 6	Employee travel	SMFL non-consolidated + SMFL MIRAI Partners Co., Ltd.	5,589
	Category 7	Employee commuting	SMFL non-consolidated + SMFL MIRAI Partners Co., Ltd.	719
	Category 12	Disposal of products sold	SMFL non-consolidated	29
	Category 13	Leased assets (downstream)	SMBC Aviation Capital Limited	16,241,114

* The SMFL Group uses the Calculation Methods and Emission Factors List for Calculation, Reporting and Disclosure Systems, as stipulated under Japan's Act on Promotion of Global Warming Countermeasures.
** The SMFL Group uses the List of Emission factors for Electric Power Operator based on Japan's Act on Promotion of Global Warming Countermeasures for Japan, and the IEA emission factors and other relevant data for overseas operations.

SMFL Group Medium- to Long-Term Environmental Targets (1), (2)

- The SMFL Group set medium- to long-term environmental targets for the reduction of its own GHG emission and business initiatives in April 2022
- In achieving these targets, the Group will proactively address climate change issues and contribute to the realization of a decarbonized, circular economy

SMFL Group Medium- to Long-Term Environmental Targets

Target (1) Net-zero greenhouse gas emissions by SMFL [Achieved in FY2022]

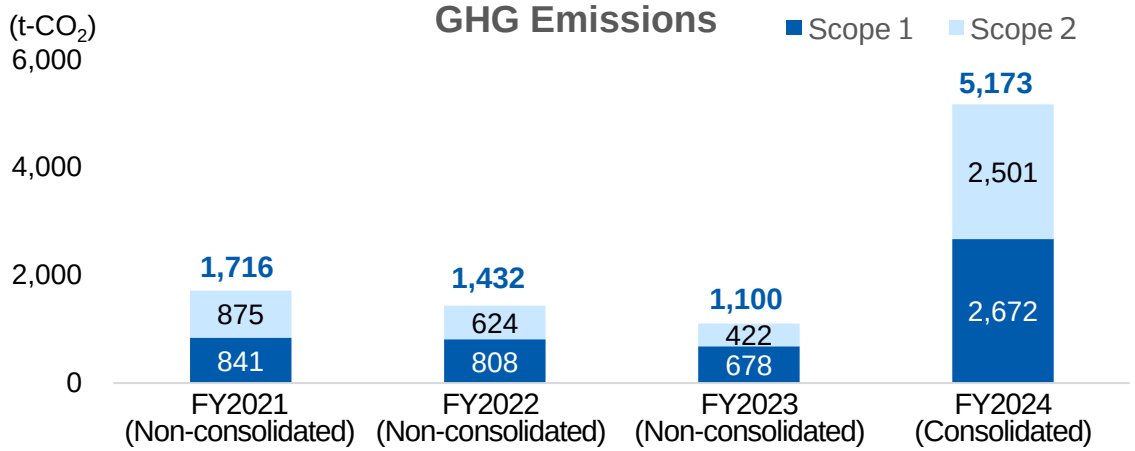
Achieve net zero Scope 1 and Scope 2 domestic GHG emissions on a non-consolidated basis by FY2023

Target (2) Net-zero greenhouse gas emissions by the SMFL Group

Achieve net zero Scope 1 and Scope 2 GHG emissions on a Group consolidated basis by FY2025

Scope1: Offset and achieve net zero emissions of GHGs that could not be reduced utilizing carbon credits

Scope 2 : While calculated on a market basis, adopting the Location Based Method (IEA emissions factors by country) when emissions factors are unknown for certain overseas locations



Figures are before the use of non-fossil certificates and J-credits.
(Achieved net zero emissions on an SMFL non-consolidated basis in FY2022 and FY2023).

<Key Reduction Initiatives>

1 Reduce the number of company vehicles and promote introduction of EVs

- Reduced the number of company vehicles by 24% compared with FY2021 by the end of FY2023
- Replaced existing vehicles with EVs and other environmentally friendly alternatives to reduce gasoline and diesel fuel consumption

2 Switch to renewable energy sources and utilize non-fossil certificates

- Switched to renewable energy sources for office electricity* and used the non-fossil certificates generated by solar power facilities owned by the SMFL Group to procure renewable energy sources with “additionality” features

* Tokyo Head Office (2022), Osaka Head Office (2023), Takebashi Office (2024)

SMFL Group Medium- to Long-Term Environmental Targets (3)

- Against the backdrop of growing customer interest in sustainability, the cumulative contract amount of sustainability-related business reached ¥492.6 billion over a four-year period
- Looking ahead, steps will be taken to accelerate various businesses to achieve targets

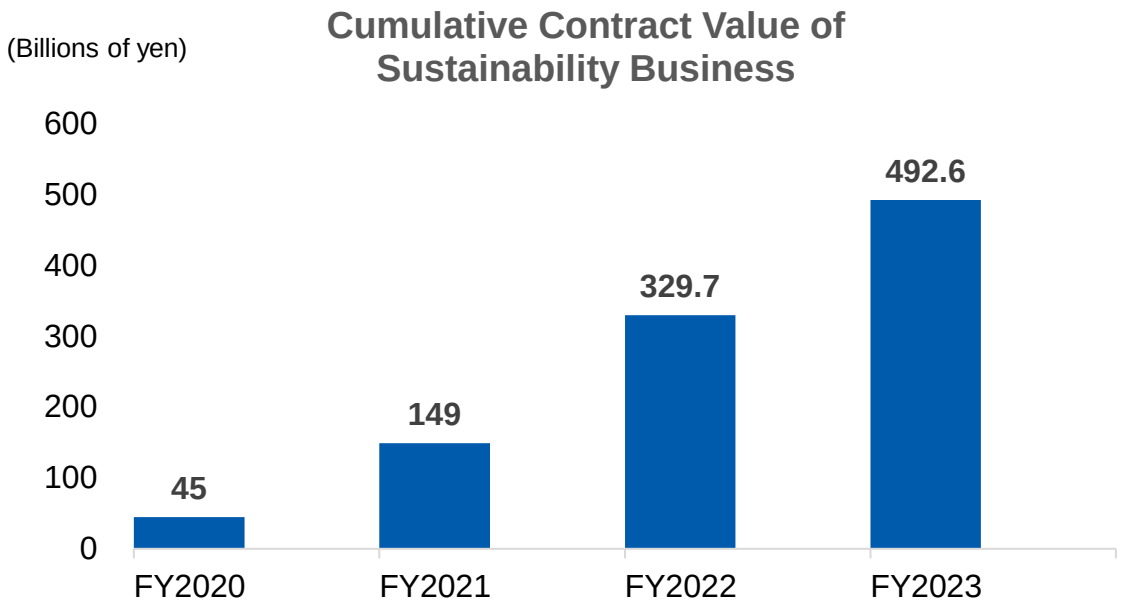
SMFL Group Medium- to Long-Term Environmental Targets

Target (3) Expand sustainability businesses

Cumulative contract amount from FY2020:

¥1 trillion cumulative total by FY2025

¥2 trillion cumulative total by FY2029



Main Transactions (FY2020-)

- Investment in and financing of renewable energy power generation businesses such as solar, wind, hydro and biomass
- SDGs Lease MIRAI 2030® (donation type)/(evaluation type) scheme, SDGs leases in collaboration with companies and government agencies
- Sustainability-linked leases and loans
- Environmentally certified real estate development and financing

Additional Main Transactions (FY2023-)

- Real estate version of SDGs leases