

MUFG TCFD Report 2022

Mitsubishi UFJ Financial Group





Contents

Highlights · · · · · · · · · · · · · · · · · · ·	· · 1	
Governance	- 8	
Strategy	12	
Risk Management	42	
Metrics and Targets	47	
Future Action Plan	56	
Responses to Climate Change Measures as an Asset Manager		

Publication information

Period Subject to Reporting

FY2021 (April 1, 2021 to March 31, 2022) (Includes some information from FY2022)

Definitions of Specific Terms Used in This Report

Mitsubishi UFJ Financial Group, Inc. and its subsidiaries and affiliates	: MUFG/The Group
MUFG Bank, Ltd.	: The Bank
Mitsubishi UFJ Trust and Banking Corporation	: The Trust Bank
Mitsubishi UFJ Securities Holdings Co., Ltd. and its subsidiaries	: The Securities
Mitsubishi UFJ Morgan Stanley Securities Co., Ltd.	: MUMSS
Mitsubishi UFJ NICOS Co., Ltd.	: NICOS



Disclosure Based on TCFD Recommendations

Highlights

In order to contribute to the achievement of a sustainable society, MUFG has identified climate change measures & environmental protection as one of its priority environmental and social issues.

Acutely aware of the importance of climate-related financial disclosure, MUFG has declared its support of relevant recommendations formulated by the Task Force on Climate-related Financial Disclosures (TCFD), a special taskforce established by the Financial Stability Board (FSB). In line with these recommendations for disclosure of climate change-related risks and opportunities in its Governance, Strategy, Risk Management, and Metrics and Targets, TCFD is pursuing the following.

Status of Response to TCFD Recommendations

Governance

Disclose the organization's governance around climate-related risks and opportunities.

- a. Describe the board's oversight of climate-related risks and opportunities.
- b. Describe management's role in assessing and managing climate-related risks and opportunities.
- Governance to deal with climate change the Board of Directors supervises climate change-related initiatives -
- Opportunities and risks related to the environment and society, including climate change, are regularly
 discussed by the Sustainability Committee under the Executive Committee. Depending on the theme, matters
 are also reviewed by the Credit & Investment Management Committee, Credit Committee, and Risk
 Management Committee also under the Executive Committee. The contents of the review by the committees
 are reported to the Executive Committee and then to the Board of Directors to be reviewed.
- The contents of the review by the Credit & Investment Management Committee and the Risk Management Committee are reported to the Board of Directors after being reviewed by the Risk Committee, which is composed mainly of outside directors.

• Established the MUFG Environmental Policy Statement, the action guideline for environmental considerations (May 2018)

• To be determined by the Board of Directors from May 2021: Clearly stated the commitment to proactively disclose information concerning the environment, including climate change

• Installed the Chief Sustainability Officer (CSuO) of the Group to strengthen our efforts to address environmental and social issues, including climate change, and to clarify our responsibilities (May 2020)



- Reflected ESG factors in the executive compensation system (after FY 2021)
- Started to review the performance-linked indicators for executive compensation from FY 2021 and reflected the degree of improvement found through the external ratings granted by five major ESG rating agencies to further advance sustainability management

Strategy

Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.

a. Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.

b. Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.

c. Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

- Disclosed the progress after releasing the MUFG Carbon Neutrality Declaration (April 2022)
- Declared the achievement of net-zero GHG emissions from our financed portfolio by 2050 and net-zero GHG emissions from our own operations by 2030 (May 2021)

[Main Initiatives to Achieve Carbon Neutrality]

1. Net Zero GHG Emissions from the Financed Portfolio

• Determined the power and oil & gas sectors as priority sectors. Measured actual results (2019) and set interim targets for 2030.

• Power: GHG emission intensity from 349gCO₂e/kWh to 156-192gCO₂e/kWh; Oil & Gas: Reduce absolute GHG emissions from 83MtCO₂e by 15-28%.

2. Decarbonization through Financial Services

• Providing diverse solutions to help them measure their own GHG emissions, set reduction plans, and implement carbon offsets. Proactively worked to establish rules and design markets.

- 3. Net Zero GHG Emissions from Own Operations
 - Made progress on measuring global group-wide GHG emissions

• Completed shift to 100% renewable energy for electricity procured domestically by the Bank, the Trust Bank, and the Securities HD. This will reduce Japan-based emissions by about 60% (about 30% of global emissions). In June 2022, NICOS and ACOM also completed the conversion of their Japan-based contracted electricity to renewable energy and completed the conversion of its Japan-based contracted electricity to renewable energy for all of MUFG's Japan-based consolidated subsidiaries.

Participation in initiatives and strengthening the system to support the realization of carbon neutrality
 Appointed as Chair of the Financing & Engagement Subcommittee of the Net- Zero Banking Alliance (NZBA), which is responsible for developing a framework for transition finance.

• Through discussions at the initiatives, we are gathering a wide range of information on global trends and the movements of global financial institutions to strengthen MUFG's initiatives.

• We have built a system led by the Carbon Neutral Project Team on a group and global basis to discuss and make decision through a steering committee in which the CEO and other key management members participate.



- 5. Decarbonization through Responsible Investment
 - Positioning climate change as a significant ESG issue and promoting engagement with investees.

• In November 2021, we joined the Net Zero Asset Managers initiative (NZAM) to accelerate our efforts. Set interim targets for 2030 by October 2022.

6. Other Efforts

• Krungsri announced their Carbon Neutrality Vision (Krungsri has committed to decarbonization of own emissions by 2030 and decarbonization of financial services by 2050.)

• Revision of the MUFG Environmental and Social Policy Framework. Tightened the Policy Framework, including prohibition of financing to new thermal coal mining projects for power generation.

- Enhancement of system for promoting sustainable business
- By bringing together MUFG's expertise in sustainability both in Japan and overseas, the Sustainable Business Division was established in July 2021 to support the sustainable growth of customers by providing various types of information and solutions from the standpoint of solving environmental and social issues.
- MUFG aims to support customer efforts to transform business models as well as the climate transition of whole industries toward carbon neutrality. To this end, we provide solutions designed to assist customers in their pursuit of transition and innovation aimed at promoting decarbonization. In the aspect of financing, we constantly endeavor to upgrade our sustainable financial products and services to support customers' decarbonization efforts.
- The Energy Transformation Strategy Project Team (EX Strategy PT) was established to examine how the entire financial sector can contribute to the energy transformation of our customers. Monthly meetings are held with about 300 employees from sales divisions to engage in dialog with customers, industry associations, and government agencies to develop strategies.
- We have built a system to consolidate useful information and business opportunities through the Global ESG Conference, held with ESG promotion officers located in Europe, the Americas, and Asia.
- Engagement activities based on the needs of customers
- Through the EX Strategy PT, we promote engagement based on the issues and needs of each customer.
- Engagement activities are conducted with approximately 550 Japanese and non-Japanese customers.
- Development and provision of decarbonization solutions based on the needs of customers
- This includes support for visualizing GHG emissions, support for strategy formulation through TCFD consulting services, support for investments and loans through financing, and the deployment of overseas carbon credits to Japanese companies.
- Risks and opportunities related to climate change
- As for risks related to climate change, based on TCFD recommendations, we have expanded the classification of risks, organized cases of transition risks and physical risks, and expanded disclosure.



[Examples of Transition and Physical Risks]

Risk categories	Examples of transition risk	Examples of physical risk	Time frame ^(note)
Credit risk	 Our corporate clients' business activities and financial positions may be negatively affected if they cannot deal with government policies, regulatory requirements, customer requests or evolving trends in technological development. 	• Extreme weather may cause direct damage to assets held by our corporate clients and/or have a negative spillover effect on their business activities and financial positions by indirectly impacting their supply chains.	Short-to long-term
Market risk	The transition to a decarbonized society may negatively impact certain business sectors, making the value of relevant securities held by MUFG and/or financial instruments deriving from them highly volatile.	 The impact of extreme weather may induce market turmoil and make the value of securities held by MUFG highly volatile. The value of securities held by MUFG may become volatile due to changes in market participants' medium- to long-term outlook on the impact of extreme weather and their expectations regarding countermeasures against the phenomenon. 	Short-to long-term
Liquidity risk	 If its credit ratings deteriorate due to such factors as delays in its response to transition risks, MUFG may face limitations on methods for funding from the market and thus growth in risks associated with fundraising. 	Corporate clients suffering damage from extreme weather may choose to withdraw their deposits or utilize commitment lines to secure funds for reconstruction, leading to a growing volume of cash outflows from MUFG.	Short-to long-term
Operational risk	 Spending on capital investment may grow due to the need for measures aimed at reducing CO₂ emissions and enhancing business continuity capabilities. 	Extreme weather may cause damage to MUFG's headquarters, branches and/or data centers and lead to the disruption of their operations.	Short-to long-term
Reputation risk	 If MUFG's plans and efforts to realize carbon neutrality are deemed inappropriate or insufficient by external stakeholders, it may suffer from reputational damage. MUFG may suffer from reputational damage and/or deterioration in its status as an employer due to the continuation of relationships with business partners who doesn't give enough consideration to environmental concerns or delays in its transition to decarbonization. 	 If MUFG's efforts to support customers and communities affected by extreme weather are deemed insufficient, it may suffer from reputational damage or a resulting disruption of operations. 	Short-to long-term
Strategic risk	 If MUFG fails to live up to its public commitment to support the transition to a decarbonized society, its capabilities for strategic execution may be negatively affected by a deterioration in its reputation. 	 MUFG may fail to meet the goals of its strategies and plans if it fails to properly factor in the direct impact of extreme weather in the course of long-term management planning. 	Medium-to long-term

(note) Short-term: less than one year; medium-term: one to five years; long-term: more than five years

• We are promoting sustainable finance as an opportunity related to climate change. The Group has set a total of 35 trillion yen (of which 18 trillion yen is for the environmental sector) from FY2019 to FY2030, and has achieved a total of 14.5 trillion yen in sustainable financing (of which 5.4 trillion yen was for the environmental sector) in FY2021.



Environment Disclosure Based on TCFD Recommendations Highlights

• Reinforcement of scenario analysis

[Transition risk]

In addition to current three sectors (energy, utilities, and automotive), steel, air and maritime transportation sectors were added to the analysis target. Analyses were conducted for NGFS^(note) scenarios as well as for International Energy Agency (IEA) scenarios.

Scenario	 Various scenarios, including the sustainable development scenario (the [less than] 2°C scenario) of the IEA and the 1.5°C scenario that the NGFS has released
Analytical method	 An integrated approach is adopted to assess the impact by combining the bottom-up approach at the individual company level and the top-down approach at the sector level. Using this approach, the impact on credit ratings in each scenario is analyzed along with the effect on the overall financial impact of the sector's credit portfolio.
Target sector	Energy, utilities, automotive, steel, air and maritime transportation sectors
Target period	Until 2050 using the end of March 2022 as the standard
Result of analysis	• Single-year basis: <u>1.5 billion yen to 28.5 billion yen (</u> Last time result: 1.5 billion yen to 23 billion yen)

(note) Network for Greening the Financial System

[Physical risk]

Analyses are conducted for floods that are notable for their frequency of occurrence and damage.

Scenario	• RCP 2.6 (the 2°C scenario) and 8.5 (4°C scenario) published by the Intergovernmental Panel on Climate Change (IPCC)
Analytical method	 Estimated damage in the event of a flood is analyzed, and an approach to measure its impact on the overall credit portfolio using the change in default probability that the occurrence of floods would have on the credit portfolio is adopted. In the calculation of financial impact, the period of the suspension of the business of the borrower and the loss of assets, among other aspects, are reflected.
Target of analysis	• Flood
Target period	• <u>Until 2100</u> using the <u>end of March 2022</u> as the standard (Last time period: Until 2050 using the end of March 2021 as the standard)
Result of analysis	Cumulative total: Approximately <u>115.5 billion yen</u> (Last time result: Approximately 38 billion yen)

Risk Management

Disclose how the organization identifies, assesses, and manages climate-related risks.

a. Describe the organization's processes for identifying and assessing climate-related risks.

b. Describe the organization's processes for managing climate-related risks.

c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.

- Approach to risk management for responding to climate change
- · Recognizing climate change-related risks as one of the most important risk categories, they are discussed by



the Credit & Investment Management Committee, Credit Committee, and Risk Management Committee under the Executive Committee. The contents of the discussions held by the Credit & Investment Management Committee and the Risk Management Committee are discussed by the Risk Committee, which consists mainly of outside directors, and then reported to the Board of Directors.

- Reflection in the Risk Appetite Statement
- From FY 2021, climate change-related risks have been added to the Risk Appetite Statement.
- Reflection in the top risk management
- · Climate change-related risks are positioned as one of the Top Risks.

• A management framework concerning risks related to climate change is constructed on a Group and global basis

To consider a management framework for supervising countermeasures against climate change risks, a
project team is established with the Group Chief Risk Officer (CRO) as the lead and with participation of the
CROs from the holding company, the Bank, Trust Bank and Securities, as well as regional CROs of the
holding company and Bank. Risk management is strengthened by tracking and sharing regulatory trends and
establishing risk management frameworks on a Group and global basis.

• Environmental and social considerations concerning finance have been practiced based on the MUFG Environmental and Social Policy Framework

• The policy became stricter for the palm oil and mining (coal) sectors, which are the sectors related to climate change, with revisions made for the oil and gas sector (April 2022).

Metrics and Targets

Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

a. Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.

b. Disclose Scope1, Scope2 and, if appropriate, Scope3 greenhouse gas (GHG) emissions and the related risks.

c. Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.

• Targets for reducing GHG emissions from the financed portfolio (MUFG's Scope 3 emissions)

- · Set and disclosed interim 2030 targets for power and oil & gas sectors (April 2022)
 - Power sector: 156-192gCO₂e/kWh (2030) 349gCO₂e/kWh (achievement in 2019)
 - Oil & gas sector: 15%-28% less than 2019 level (2030) 83MtCO₂e (achievement in 2019)
- Net Zero GHG Emissions from Own Operations (Scope1,2)
- Aggregation and disclosure of MUFG's GHG Emissions (preliminary figures) on a Group and global basis for FY2021 Total emission of Scope 1 and Scope 2 in FY2021 (preliminary figures) was 249,000 million tCO₂e.
- Completed the conversion of contracted electricity to renewable energy for all of MUFG's Japan-based consolidated subsidiaries by June 2022.



Environment Disclosure Based on TCFD Recommendations Highlights

- Sustainable finance
- The target amount of sustainable finance, which had been set at 20 trillion yen (of which 8 trillion yen is for the environmental sector) for the period fromFY2019 to FY2030, was revised upward to 35 trillion yen (of which 18 trillion yen is for the environmental sector) (April 2021). Cumulative results for FY2021 totaled 14.5 trillion yen (of which 5.4 trillion yen was for the environmental sector).
- Target for reducing CO₂ emissions through renewable energy project financing
- MUFG set a cumulative CO₂ reduction target of 70 million tCO₂ from FY2019 to FY2030 and disclosed its progress (May 2021). The achievement for FY2021 was 26.83 million tCO₂.
- Carbon-related assets (credit amounts)
- In addition to the previously disclosed energy and utilities sectors, the breakdown of other carbon-related assets (transportation, materials and buildings, agriculture, food and forest products) following the revision of the TCFD recommendations in October 2021 has been disclosed.
- Credits amounts related to coal-fired power generation (project finance)
- The loan balance reduction target to achieve a 50% reduction from FY 2019 in FY 2030 and zero by around FY 2040 is set and disclosed (October 2020). Project financing for FY 2021 was \$2.955 billion^(note).
 (note) Project financing for FY 2019 was \$3.580 billion.
- Credits amounts related to coal-fired power generation (corporate finance)
- Set and disclosed a target for reducing the outstanding balance to zero by FY 2040 (April 2022). Corporate financing at the end of FY 2021 was approximately 90 billion yen.

7

Governance



MUFG's Governance for Countering Climate Change -Board Oversight of Climate Change Initiatives-

MUFG's Governance Structure for Countering Climate Change

At MUFG, the Sustainability Committee, which operates under the Executive Committee, is charged with periodically deliberating policies on and determining the status of the Group's response to opportunities and risks arising from climate change and other environmental and social concerns.

MUFG has positioned climate change-related risk as one of the Top Risks that it must pay close attention to. Accordingly, these risks are discussed by the Credit & Investment Management Committee, the Credit Committee and the Risk Management Committee, all of which are under the direct supervision of the Executive Committee.

Conclusions reached by the above committees are reported to the Executive Committee–which is tasked with deliberating and making decisions on important matters regarding business execution–and, ultimately, reported to and discussed by the Board of Directors. In addition, matters discussed by the Credit & Investment Management Committee and the Risk Management Committee are also examined by the Risk Committee, which mainly consists of outside directors, and then reported to the Board of Directors. In these ways, the Board of Directors exercises supervision over MUFG's climate change-related initiatives.

Specifically, the Board of Directors handles issues requiring a groupwide perspective and, to this end, identifies important themes deserving intensive discussion, thereby managing these issues based on a PDCA cycle in accordance with an annual schedule.

Also, sustainability management is considered an important theme. The Board of Directors actively addresses matters related to this theme through dedicated sessions in addition to deliberations at regular Board meetings.



Installation of Chief Sustainability Officer

MUFG installed the Chief Sustainability Officer (CSuO) to strengthen our sustainability initiatives and to clarify responsibilities (May 2020).



Engagement and Utilize of External Advisors in the Environment and Social Fields

Since 2019, we have engaged external experts in the environmental and social fields as permanent external advisors. Opinions were exchanged between the experts and the members of the Board of Directors, allowing us to use their broad knowledge of ESG in our sustainability initiatives.

Rintaro Tamaki	President, Japan Center for International Finance
Junko Edahiro	Professor, Graduate School of Leadership and Innovation, Shizenkan University / President, Institute for Studies in Happiness, Economy and Society / Founder and President, e's Inc.

Implementation of advisor opinion exchange meeting (December 2021)

At the opinion exchange meeting held in December 2021, the Group CEO, Bank President, trust and securities companies Presidents, Group CSuO, and other relevant members participated in the meeting. They exchanged views on the measures required of financial institutions such as global trends in response to climate change, which is one of the most important issues, as well as discussions on Japanese policies, transition finance, and carbon pricing. In addition, discussions were held to exchange opinions in a wide range of fields related to sustainability, including discussions on the necessity of strengthening responses to natural capital and biodiversity conservation, and the importance of further promotion of human rights, and inclusion & diversity.

Study Sessions for Management

In order to invigorate internal discussions on sustainability, we invited experts in various fields to hold study sessions. In study sessions, the management team actively exchanges opinions with these experts. For information on study sessions for senior management held in FY2021, please refer to "Study Sessions for Senior Management" in Corporate Governance section.



Committees Related to Climate Change and Items Discussed and Reported

	Committee	Main Items Discussed by and Reported to the Board of Directors Related to Climate Change
Supervision	Board of Directors	 Release of the MUFG Carbon Neutrality Declaration Progress related to the MUFG Carbon Neutrality Declaration Engagement with customers, sustainable finance, setting of interim targets for financed portfolio, and reduction of in-house GHG emissions Status of activities in external initiatives (such as NZBA) Revision of the MUFG Environmental and Social Policy Framework Assessment by ESG rating agencies
-	Risk Committee	Recommendations for Board of Directors resolutions and reported items
	Compensation Committee	 Revision of the executive compensation system (inclusion of ESG-related items into performance evaluation items)
	Audit Committee	Monitors the status of ESG compliance
	Executive Committee	 Release of the MUFG Carbon Neutrality Declaration Progress related to the MUFG Carbon Neutrality Declaration Revision of the MUFG Environmental and Social Policy Framework Status of MUFG's sustainability management initiatives and address for future (Report on matters to be deliberated by the Sustainability Committee)
	Credit & Investment	Recognition of current conditions and issues
	Management	Direction of the management system for climate change-related risks
Exec	Risk Management Committee	 Monitoring of climate change-related risks, using enterprise risk management approach
utic		· Recognition of current conditions and issues related to climate change
ň	Credit Committee	 Report on the status and outlook of climate change-related risk management efforts
		Revision of credit policies related to climate change
	Sustainability Committee	 Progress related to the MUFG Carbon Neutrality Declaration Engagement with customers, sustainable finance, setting of interim targets for financed portfolio, and reduction of in-house GHG emissions Status of activities in external initiatives (such as NZBA) Revision of the MUFG Environmental and Social Policy Framework
		 Assessment by ESG rating agencies



A Heightened Metric for ESG-Related External Ratings is Installed as an Evaluation Index of the Executive Compensation System

MUFG has revised its executive compensation system to achieve the medium-term business plan and implement sustainability management, and has newly installed a heightened metric for ESG-related external ratings as a medium- to long-term performance-linked indicator for stock-based compensation.

The system is designed to reflect the degree of improvement found through the external ratings granted by five major ESG rating agencies^(note) for executive compensation. The intention is to align MUFG's corporate activities with the interests of its diverse stakeholders.

Type of compensation	Linkage with performance	Performance- based compensation range	Standards for payment Weight			Time of payment	Payment method	Proportion of Group CEO's compensation							
Annual base salary	Fixed	-	Paid ba Include Overse	ased es Di eas R	on positions, etc. ector Allowance, Committee and Chair Allowance, Housing Allow apresentative Allowance, etc.	Monthly	Cash	1							
	Non- performance- based	-	Base am	noun	by position		At the time of retirement of executives								
					Performance factor (medium- to long-term achievement evaluation)	<50%>		50% in shares 50% in cash							
Stock compensation	Medium- to long-term performance- based 0-150%	tedium- to Base ong-term 0–150% amour positic	dium-to ng-term 0-150%	Base amount by	×	Target attainment rate of indices below in MTBP (1) Consolidated ROE (2) Consolidated expenses reduction amount (excluding performance-linked expence) (3) Ratings granted by ESG rating agencies (2)	30% 15% 5%	At the end of the MTRP	Note: Subject to malus (confiscation) and clawback (restitution claim)	1					
			position	position		Performance factor (competitor comparison evaluation) 3	<50%>	MIL	olainiy						
														Comparison of year-on-year growth rate of indices below with competitors (1) Consolidated net operating profits (2) Profits attributable to owners of parent	25% 25%
Cash bonuses					Performance factor (quantitative evaluation factor applied to the Group CEO)	<60%>									
	Short-term performance- based 0-150% Base amount by position Rate of year-on-year change and target attainment rate of indices below (1) Consolidated net operating profits 20% (2) Profits attributable to owners of parent 20% (3) Consolidated ROE 20% (4) Consolidated ROE 20% (4) Consolidated ROE 20% (3) Consolidated ROE 20% (4) Consolidated ROE 20% (4) Consolidated ROE 10% Annually	0-150%	Base amount	x	Rate of year-on-year change and target attainment rate of indices below (1) Consolidated net operating profits (2) Profits attributable to owners of parent (3) Consolidated ROE (4) Consolidated expense amount	20% 10% 20% 10%	Annually	Cash	1						
		Improvement in customer-segment profitability Risks handling Enhancement of efforts on ESG, evolution of sustainability management TSR, etc.	<40%>												

(note) MSCI, FTSE Russell, Sustainalytics, S&P Dow Jones, CDP

- To incentivize efforts to improve MUFG's earnings power, capital efficiency and profit structure, each of which is considered a management issue requiring the utmost priority, the degree of achievement vis-à-vis target levels stipulated in the Medium-Term Business Plan (MTBP) regarding consolidated ROE and consolidated expense reduction (excluding performance-linked expense) is determined on an absolute evaluation basis.
- 2. In addition to incentivizing recipients to advance sustainability management, the degree of improvement in external ratings granted by the five major ESG rating agencies (MSCI, FTSE Russell, Sustainalytics, S&P Dow Jones and CDP) is determined on an absolute evaluation basis, with the aim of objectively assessing the recipient's contribution to MUFG's initiatives to address ESG issues in a variety of fields.
- **3.** Relative comparisons with competitors are made with Mizuho Financial Group and Sumitomo Mitsui Financial Group.
- **4.** ESG-related assessment items subject to qualitative evaluation include contribution to the resolution of environmental and social concerns, the promotion of inclusion & diversity and the strengthening and upgrading of MUFG's governance structure.



Strategy

The TCFD recommendations propose that climate change-related risks and opportunities be disclosed upon grasping impacts on business strategy and finances.

MUFG Environmental Policy Statement

Under the MUFG Way, which guides all of our activities, MUFG has established the MUFG Environmental Policy Statement as a specific action guideline for practicing environmental considerations.

The MUFG Environmental Policy Statement has been the matter to be determined in the Board of Directors since May 2021. The Policy Statement clearly states the company's commitment to MUFG Way MUFG Environmental Policy Statement MUFG Carbon Neutrality Declaration MUFG Environmental and Social Policy Framework

proactively disclose information on the environment, including climate change.

MUFG Carbon Neutrality Declaration

In April 2021, we defined our purpose as being "Committed to empowering a brighter future." Since then, we have been implementing our medium-term business plan, led by a heightened commitment to helping resolve environmental and social issues.

To better contribute to building a sustainable environment and society, MUFG has selected 10 priority environmental and social issues with an eye on better fulfilling society's expectations in areas where MUFG's strengths can be applied. One of the priorities we especially focus on is climate change measures and environmental protection.

We have always been proactive in addressing climate change and environmental protection issues. It included formulating the MUFG Environmental and Social Policy Framework for assessing and managing the risks associated with our business activities as well as setting sustainable finance targets. During this period, the movement to combat climate change gained tremendous global momentum, as can be seen, for example, by the Japanese government's Carbon Neutrality Declaration. MUFG has taken another step forward by announcing the MUFG Carbon Neutrality Declaration in May 2021. Guided by this declaration, MUFG is implementing groupwide environmental measures globally, aiming to achieve net zero GHG emissions from the financed portfolio by 2050 and net zero GHG emissions from our own operations by 2030.

In the MUFG Progress Report issued in April 2022, we reported on the progress of MUFG's carbon neutrality initiatives and the measures that we are taking. In addition to the results and targets, we also reported on our approach to achieving them and our thought process on which they are based. Through sharing the concept of MUFG's initiatives in detail, we hope to work together with wide range of stakeholders to achieve a sustainable environment and society.





Progress Since the Carbon Neutrality Declaration

Net Zero GHG Emissions from the Financed Portfolio

2030 Interim Targets

MUFG joined NZBA in June 2021 after announcing the Carbon Neutrality Declaration. NZBA members share a common goal: net zero financed portfolios by 2050. They are also required to set interim targets for 2030 or earlier using a science-based approach.

We are committed to helping achieve the goals of the Paris Agreement by achieving carbon neutrality by 2050, and at the same time, supporting a smooth transition to a decarbonized society through our financial services, and proactively contributing to creating a sustainable society by fostering a virtuous cycle between the environment and the economy. Today, we have set interim targets for 2030, aligned with the Paris Agreement. We recognize that the processes for achieving these targets vary depending on the characteristics of each region and business. We are also aware that our business is greatly affected by geopolitical risks and other factors, so we will share issues that we find through engagement (dialogue) with customers and support them to help resolve these issues.

Innovations which are still in the conceptual stage is another indispensable element for the world to achieve decarbonization. We believe that there is a gap between the real world and the goal that is yet to be materialized. Therefore, our aspiration is to further contribute to the changes where the world advances more towards decarbonization by developing research on new technologies for implementation.

To reflect our stance mentioned above, we have set ranged interim targets in order to work together with our stakeholders to achieve net zero GHG emissions by 2050.

Net zero GHG Emissions from the Financed Portfolio

Net zero GHG emissions from the financed portfolio means decarbonizing the sector portfolio by reducing the GHG (Scope3) generated through financing customers and projects. GHG emissions from the financed portfolio are defined as "financed emissions". This is the amount of GHG emissions attributed to each financial institution through financing each customer or project. MUFG uses the calculation model recommended by the PCAF. When calculating MUFG's attribution factor, while the PCAF guidelines recommend using outstanding amounts of loans and investments, MUFG uses outstanding credit amount which includes the undrawn amount of commitment in order to reflect our credit stance as a financial institution more accurately.



Environment

Disclosure Based on TCFD Recommendations Strateg

	Financed Emission	s by PCAF model	
Σ(Attribution Factor MUFG's credit share to debt + equity of each customer/project.	×	Emissions from each customer/project
<u> </u>	•		
	(outstanding loan + undrawn committment) • each customer/project		

Four Approaches to Setting the Interim Target

We have adopted the following four approaches to setting the interim target. Going forward, we will reflect the changes in the IEA (International Energy Agency) scenario and various guidelines, as well as the increase in the quality of data disclosed by our customers, as appropriate.

Science-based

Following the NZBA Guideline, MUFG will ensure that the interim target for 2030 is scientifically "well below 2°C, preferably to 1.5°C," as agreed in the Paris Agreement.

As a benchmark for 1.5°C, we will refer to scientific scenarios published by IEA and others.

• Data quality

We use the best available data to set targets. However, there are limits to the amount and quality of data currently available, so we will use the PCAF data quality score to check the quality of emissions data disclosed by MUFG.

When data is updated or new data is disclosed, improvements in accuracy and quality will be reflected. MUFG will also contribute to improving data accuracy by being highly transparent when disclosing information.

Highly standardized and transparent

MUFG believes that targets should be set from a global perspective using widely accepted and transparent methods. We participate in various initiatives, collecting insights and reflecting them in the targets we set. We will proceed with target setting, incorporating guidelines and rules developed by NZBA, PCAF, PACTA, and SBTi etc., as well as the outcomes of the global working groups which we participate in.

Sector-specific

Pathways and the methods to achieve carbon neutrality vary by sector, so for each sector we will take into consideration the characteristics of the business, the guidelines and the targets set by each customer. By taking this approach, MUFG will identify issues in each sector and support customers' efforts for achieving carbon neutrality.

Interim Target-setting Process

MUFG set current interim targets in accordance with the following process: (1) Identifying priority sectors, (2) Sector analysis, (3) Determine methodologies and measure GHG emissions, and (4) Set interim targets.

Identifying Priority Sectors

The NZBA Guidelines define nine carbon-intensive sectors that should be prioritized when setting targets: agriculture; aluminium; cement; coal; commercial & residential real estate; iron & steel; oil & gas; power



Environment

Disclosure Based on TCFD Recommendations Strategy

generation; and transport. Among these sectors, MUFG especially puts priority on the power and the oil & gas sectors for the following reasons.

- (1) CO_2 emissions from the power sector account for approximately 40% of global CO_2 emissions. The power sector is expected to take a leading role in promoting decarbonization across industries through electrification.
- (2) Oil & gas are widely consumed by industry and households, accounting for approximately 50% of global CO₂ emissions from fuels and therefore important for reducing GHG emissions from fossil fuels.
- (3) Both sectors have relatively large financed emissions in the MUFG portfolio.
- (4) Both sectors have relatively well-developed data and methodologies.



Global CO₂ emissions in 2019 (GtCO₂)

Source: IEA World Energy Outlook 2021

1. Agriculture, forestry, fisheries, etc.

2. CO₂ emissions from sources other than fossil fuel combustion (industrial processes, waste, etc.)

Sector Analysis

The Power Sector

In the transition stage to a decarbonized society, the demand for power is expected to increase due to economic growth in developing countries and the electrification of industry. So, the power sector will need to shift to renewable energy and low-carbon fuels, while ensuring a stable supply of energy (note).

The policies and initiatives of each country are important because the business model of this sector is local and therefore has particularly strong regional characteristics.

Electricity demand under the IEA 1.5°C scenario (IEA NZE scenario in which the increase in the global surface (note) temperature rise is limited to 1.5°C with a 50% or greater probability of success) is estimated to grow by 39% by 2030 and 166% by 2050 (compared with 2020).



Global electricity demand (TWh)

Source: IEA World Energy Outlook 2021 * The ratios of electricity to final energy consumption



The Oil & Gas Sector

For decarbonization, GHG emission reductions can be done through electrification of production processes, CCUS, etc. (i.e. Scope 1, 2 of the upstream business). On the other hand, a large amount of this sector's GHG emissions is due to cross-industrial consumption (Scope 3), indicating that decarbonization in the oil & gas sector cannot be achieved without industries and households transitioning away from fossil fuels.

The IEA figures suggest that currently there is a large gap between the demand (IEA APS scenario that is based on the commitments announced by each country) and the 1.5°C scenario. It is important to promote decarbonization in the demand sectors as well in order to close the gap between these two scenarios.



Global primary energy demand for Oil & Gas (EJ)

Source: IEA World Energy Outlook 2021

Target metric, Method and Setting Interim Target

The Power Sector

Setting Interim Target

∇ (GHG emissions intensity of each	\mathbf{v}	Loan amount to each customer/project		
2(customer/project (gCO2e/kWh)	X	MUFG total loan amount to power sector	/	
Target scope	Value chain: Power Emission scope: Sc	generation ope 1	businesses		
Asset scope	Loan amounts (inclu As of December 31, *More than 85% of the e	Loan amounts (including undrawn-committed amounts)* As of December 31, 2019 *More than 85% of the exposure is included in the calculation.			
Target metric	Emission intensity (g	Emission intensity (gCO2e/kwh)			
PCAF score	Average PCAF score	Average PCAF score 2.4 (score 1-2: 54%, score 3: 46%)			
Data sourco	Information disclose	Information disclosed by each customer, CDP, Bloomberg, etc.			

Following SBTi and PACTA, the value chain and emission scope which we cover is Scope1 of the power generation business, which accounts for the majority of GHG emissions in this sector.

The power sector is expected to take a leading role in driving cross-industry decarbonization. GHG emission intensity, a measure of emission efficiency, will be used as the metric because the power sector needs to support the increasing electricity demand while simultaneously moving ahead with clean energy conversion. The average PCAF score for the target portfolio that is included in the calculation is 2.4. In addition to information disclosed by customers, we use data sources, including CDP and Bloomberg, etc. for GHG emission data. In cases where GHG emission data is not available, we use production data obtained from these data sources as



well as emission intensity information obtained from IEA database, etc. to make estimates. Customers who do not have GHG emission data or production data are excluded from the calculation, yet we manage to cover more than 85% of our credit portfolio for this sector.

Going forward, we will expand our target coverage and improve data quality reflected in our PCAF score in line with enhanced data availability.

Interim Target



The interim target for 2030 is 156-192gCO₂e/kWh.

The power sector has a local business model with strong regional characteristics, and is expected to take a leading role in promoting each NDC with governments. We will achieve 192gCO₂e/kWh by supporting our customers to meet each country's NDCs, which are essential for achieving the Paris Agreement, and also by helping their initiatives for green, transition and innovation. 192gCO₂e/kWh is a level well below the IEA 2°C scenario in 2030.

In addition to the above, we aim for 156gCO₂e/kWh, which is consistent with the IEA 1.5°C scenario in 2030, by making further contributions to the promotion of renewable energy, etc. as a leading company in sustainable finance.

The Oil & Gas Sector

Setting Interim Target

Absolu	te GHG emissions calculation method in the Oil & Gas sector		
$\sum ($	IUFG's credit share against debt + GHG emissions from each customer/project GHG emissions from each customer/project Image: Customer/project		
Target scope	Value chain: Upstream production businesses (including integrated businesses heavily involved in upstream businesses Emission scope: Scope 1, 2, 3		
Asset scope	Loan amounts (including undrawn-committed amounts)* As of December 31, 2019 *More than 85% of the exposure is included in the calculation.		
Target metric	Absolute GHG emissions (MtCO2e)		
PCAF score	Average PCAF score 2.6 (score 1-2: 44%, score 3: 56%)		
Data source	Information disclosed by each customer, CDP, Bloomberg, etc.		

According to PACTA, upstream businesses of fossil fuel sectors are important as they have significant impact on other segments down the value chain. Therefore MUFG focuses on the upstream of the value chain, which have the largest environmental impact. The emission scope which we look into covers not only Scope1 and Scope2 but also Scope3, from which the majority of GHG emissions from this sector is generated.

We have chosen to use absolute GHG emissions as the target metric to directly capture fossil fuel burns (Scope3) which are the main cause of GHG emissions.

The average PCAF score for the target portfolio that is included in the calculation is 2.6. In addition to information

Disclosure Based on TCFD Recommendations Strategy

Environment



Environment

Disclosure Based on TCFD Recommendations Strategy

disclosed by customers, we use data sources, including CDP and Bloomberg, etc. for GHG emission data. In cases where GHG emission data is not available, we use production data obtained from these data sources as well as emission intensity information obtained from IEA database, etc. to make estimates. Customers who do not have GHG emission data or production data are excluded from the scope of calculation, yet we manage to cover more than 85% of our credit portfolio for this sector.

Going forward, we will expand our target coverage and improve data quality reflected in our PCAF score in line with enhanced data availability.

Interim Target



The interim target for 2030 is 15%-28% reduction from 2019.

We will achieve 15% reduction by engaging with our customers and supporting their efforts in reducing GHG emissions. 15% reduction is a level well below the IEA 2°C scenario in 2030.

We aim for 28% reduction which is consistent with the IEA 1.5°C scenario in 2030. However, to achieve this it is essential for both the oil & gas sector (supply-side) and the industries (demand-side) to simultaneously accelerate decarbonization. Therefore, we intend to achieve 28% reduction by making contribution to the world to further advance toward decarbonization.





Aligning with NZBA Guidelines

We have set the interim targets for the power sector and oil & gas sector in line with the NZBA Guidelines. MUFG will continue to follow NZBA Guidelines by reporting annual progress for the targets, reviewing the targets within five years, and setting new interim targets for other carbon-intensive sectors.

	Outline of the NZBA Guidelines	MUFG's action
	Set 2050 targets for alignment with the Paris Agreement	Announced target of net zero by 2050 in the MUFG Carbon Neutrality Declaration
Disclosure requirement	For carbon-intensive sectors, set interim targets for 2030 or earlier for several key sectors within 18 months of joining 'Agriculture; aluminum: comment; coal; commercial & residential real estate; iron & steel; oil & gas; power generation; and transport. (Banka may prioritize sub-sectors based on GHG emissions and financial exposure and/or data and methodology availability.)	Disclosed interim targets for 2030 for the power and the oil & gas sectors
	Set interim targets for 2030 or earlier for the majority of carbon-intensive sectors within 36 months of joining	We will set targets for the sectors other than power and the oil & gas sectors going forward
Scenarios	Use of widely accepted science-based decarbonization scenarios	Refer to the scenarios published by the IEA
Data used	The target base-year shall be no more than two full reporting years prior to the setting of the target. (If there are issues, such as economic conditions or data quality, then data older than two years is acceptable. In that case, explanations will be required.)	Used 2019 data "We use 2019 GHG emissions data as 2020 is impacted by Covid-19
Asset scope	Loans (on balance sheet) Investment (on balance sheet) remains a recommendation	Included corporate finance and project finance "Underwriting is not included, consistent with NZBA guidelines, PCAF is still in the process of developing guidelines.] "Proprietary trading and bans from partner banks account for less than 5% of the total, so they are not considered material and are not included.

Decarbonization through Financial Services

MUFG intends to be a financial institution that empowers a brighter future by supporting customers' decarbonization. We aim to start engagement (dialogues) with customers through the Energy TransformationStrategy Project Team and to support customers to become carbon neutral by developing and providing solutions based on the varied issues and needs of each customer.

Net Zero GHG from Own Operations

Initiatives for Net Zero GHG Emissions in Our Own Operations by 2030

MUFG aims to achieve net-zero GHG emissions^(note1) in our own operations by 2030. Since the Carbon Neutrality Declaration in May 2021, MUFG has reduced approximately 60% of domestic GHG emissions (which is approximately 30% of global GHG emissions).

In addition to our initiatives to reduce energy use through continued energy conservation, we will reduce our gasoline consumption by switching to electric vehicles (EVs) and promote the use of renewable energy sources for electricity to become net zero for GHG emissions by 2030. We will also work to establish and introduce raw green power^(note2) to directly contribute to an increase in renewable energy sources.

Overseas, while accumulating expertise from promoting domestic environmental initiatives and introducing renewable energy at our European business locations, we will accelerate implementing specific measures, taking into account the status of policies and systems to promote decarbonization in each country.

(note1) Scope 1 and Scope 2 in the GHG Protocol.

(note2) Green power, generated from renewable energy sources such as wind, solar, and biomass (biological resources), is sent directly from the power plant to the consumer. Customers can use green power directly as electricity for their own use, rather than "deemed" to do so.

Environment



GHG Emission Results

To achieve net-zero GHG emissions in our own operations by 2030, MUFG has measured and aggregated its own GHG emissions on a group and global basis since FY 2020.

In FY 2021, our own GHG emissions were approximately 249,000 tCO₂e (based on preliminary figures), which was a reduction of 94,000 tCO₂e (approximately 27%) from the previous year. In FY 2022, we have already reduced our domestic emissions by 33,000 tCO₂e, which is planned to be reflected in our FY 2022 emissions results.



By emissions type, direct GHG emissions (Scope 1) were 35,000 tCO₂e (14%) and indirect GHG emissions (Scope 2) were 214,000 tCO₂e (86%).

In FY 2021, the Bank obtained third-party verification for its own GHG emissions in Japan (non-consolidated basis). Going forward, we aim to obtain third-party verification for GHG emissions on the group and global basis.

		FY2021				FY2020			Compared to FY2020		
		Total	Domestic	Overseas	Total	Domestic	Overseas	Total	Domestic	Overseas	
MUFG Total		249	114	135	343	188	155	▲94	▲74	▲20	
5	Scope1	35	20	15	31	14	17	4	6	▲2	
	Gas/Heavy oil	27	17	10	24	10	14	3	7	▲4	
	Gasoline/Light oil	8	4	4	7	4	3	1	0	2	
5	Scope2	214	93	121	312	174	138	▲98	▲81	▲17	
	Electricity	206	86	120	304	167	137	▲98	▲81	▲17	
	Steam/ hot water, cold water	8	7	1	8	7	1	0	0	0	

[Unit: 1,000tCO2e]

Switching to Renewable Electricity

By November 2021, the Bank, the Trust Bank, and the Securities completed switching to 100% renewable energy for their own domestic electricity contracts. Since the release of the MUFG Carbon Neutrality Declaration in May 2021, we have reduced domestic emissions by approximately 60% (approximately 30% of global emissions). In addition, we have also completed switching to renewable electricity at some sites in Europe and Asia. In June 2022, NICOS and ACOM also completed switching to 100% renewable electricity. As a result, we were able achieve 100% renewable electricity among all of MUFG's consolidated subsidiaries in Japan for their own contracted electricity, ahead of our initial schedule.

Environment



Contribution to the Increase of Renewable Energy Sources in Japan

MUFG has entered a long-term PPA contract to purchase electricity from solar power generation facilities established by other companies and implemented self-consignment, whereby MUFG installs its own solar power generation facilities and consumes the electricity produced. Through these efforts, we have introduced what is referred to as "raw green power" for a portion of the electricity used at our business locations and data centers. At the same time, MUFG itself is involved in the construction of new power generation facilities and purchases renewable power generated from these under long-term contracts, which allows MUFG to directly contributes to the increase in the number of renewable power sources, which can be extended to across Japan.



Switching to Electric Vehicles (EVs) for Company Cars

In Japan, we are aiming to switch to 100% EVs by FY 2030. For this, we have developed detailed plans that take into account the expiration of existing car lease contracts and the surrounding EV charging environment.

Introduction of a GHG Emissions Management Platform on a Group and Global Basis

We have implemented a GHG emissions management platform at approximately 2,400 of our consolidated subsidiaries in more than 50 countries and regions around the world. This will enable automated aggregation of GHG emissions and streamline business flows, as well as further refine data and enhance data analysis.





Initiatives of Partner Banks

In alignments with "MUFG Carbon Neutrality Declaration" and the Carbon Neutrality Declaration made by governments of Thailand and Indonesia, Krungsri and Bank Danamon, our Partner Banks in Asia, have enacted their own measures to achieve a sustainable environmental and social objectives in their respective countries.

Krungsri's Carbon Neutrality Vision

In alignment with Thailand's declaration at COP26 to achieve Carbon Neutrality by 2050, Krungsri, as the second commercial bank in Thailand, has announced its pledge to decarbonization as follows.

- Decarbonization of own emissions by 2030
- Decarbonization of financial services by 2050
- · Phasing out exposure to coal-fired power plants within 2030
- Social and sustainable finance target of 50-100 billion baht^(note) by 2030
- (note) Approx. 160~330 billion yen

Krungsri, through collaborative efforts with MUFG, has been instrumental in promoting and advancing ESG finance market development in Thailand. In 2021 (January to December), the Bank ranked number one on the ESG debenture league table, commanding the market share of 29 percent.

Bank Danamon's Commitment to Sustainability

Bank Danamon recognizes the importance of incubating initiatives in realizing a sustainable environmental and social society, and is participating in Indonesia's pledge for decarbonization. Furthermore, Bank Danamon will accelerate its contributions as the Indonesian Presidency leads the G20 of 2022.

- Strengthen Management's Engagement.
- -Enhanced committee structure to be directly supervised by Management
- Sustainable Finance Portfolio^(note1) Target
 - -Established an aspirational target to increase the Sustainable Finance portfolio to 25% in the next five years
- Advanced Disclosure among Indonesia Peers
 - -Disclosure of carbon-related assets which aligns with MUFG's TCFD report

-Disclosed policies for Palm Oil sector such as requiring commitment to NDPE^(note2) and encouraging to obtain certification

- · Contribute to MUFG's target of achieving net zero GHG emissions on its own operations by 2030
- (note1) Aligned with local regulations
- (note2) NDPE: No Deforestation, No Peat and No Exploitation

Participation in Initiatives and Strengthening the System to Support the Realization of Carbon Neutrality

Contributing to Global Initiatives

MUFG has participated in initiatives to recognize our position from a global perspective and to reflect a highlystandardized and transparent methodologies when setting GHG emission targets for our financed portfolio. As a leading financial institution in Asia, we are committed to communicating our views.

GFANZ (Glasgow Financial Alliance for Net-Zero)

Through the GFANZ working groups, MUFG has been discussing net zero initiatives across financial sector as



well as recommendations from the financial industry to other industries. GFANZ plans to use these discussions to make policy recommendations to the G20 and COP27.

Net-Zero Banking Alliance (NZBA)

In June 2021, we became the first Japanese bank to join the NZBA and have been contributing as an Asian representative in the Steering Group. In December 2021, we were appointed Chair of the Financing & Engagement working group. MUFG leads the development of a global framework for transition finance.

Net Zero Asset Managers initiative (NZAM)

An asset management company initiative to achieve net zero GHG emissions by 2050, in line with international efforts to limit the global temperature increase to 1.5°C. MUFG will set an interim target for 2030 by October 2022 for the proportion of assets under management consistent with achieving net zero GHG emissions by 2050.



Asia Transition Finance Study Group (ATFSG)

ATFSG was launched under the Asia Energy Transition Initiative (AETI) with a focus on major financial institutions active in ASEAN countries. Leading by MUFG, this study group is discussing the common principles and standards, etc. necessary to have a realistic and gradual energy transition in Asia.

Collaboration with the University of Tokyo – Launching the ETI-CGC

In November 2021, the University of Tokyo and 13 major domestic companies launched the Energy Transition Initiative – Center for Global Commons (ETI–CGC) as an initiative to help with decarbonization. We advance discussions of pathways to achieve carbon neutrality in Japan.



Carbon Neutral Project Team and Committee

MUFG has established project teams on a group and global basis to discuss and make decisions through a steering committee in which the CEO and other key management members participate. In addition, the Sustainability Committee discusses climate change measures and reports to the Executive Committee and the Board of Directors.



Committee	Members	Items Discussed and Reported
Sustainability Committee	Chairperson: Group CSuO Other members: Group C-Suite (CEO, CSO, CFO, CRO), the Bank President, Trust and Securities companies Presidents, and Heads of Business Group	 Progress related to the MUFG Carbon Neutrality Declaration Engagement with customers, sustainable finance, setting of interim targets for investment and loan portfolio, and reduction of in-house GHG emissions Status of activities in external initiatives (such as NZBA) Revision of the MUFG Environmental and Social Policy Framework Assessments by ESG rating agencies
Steering Committee	Chair: Group CSuO Other members: Group C-Suite (CEO, CSO, CFO, CRO, CLO, CDO), the Bank President, Trust and Securities Presidents, and Heads of Business Group	 Progress and policies in each area of Carbon Neutral Project Team Total of three Steering Committee meetings were held in quarterly in FY 2021.
Executive Review Committee	Facilitator: Head of Corporate Planning Division Other members: Group CEO and Heads of Business Group. Participants are selected on a case-by-case basis.	 Discusses the measurement of and target setting for GHG emissions by sector, mainly sectors in the financed portfolio. Four Executive Review Committee meetings were held in FY 2021.



Roadmap for Achieving Carbon Neutrality - Transition Plan for a Decarbonized Society

To achieve carbon neutrality, we are working to achieve net zero GHG emissions in our financed portfolio, decarbonization through finance, and net zero emission from MUFG. We are working to achieve the targets set for 2030, 2040, and 2050.

Roadmap

		2019	2020	2021	2022		2030		2040		2050
	Net zero GHG emissions from the financed portfolio										Net zero
	Power sector (emission intensity)*1	349 gCO ₂ e/kWh					156-192 NEV gCO2e/kWh				
	Oil & gas sector (absolute GHG emission)*2	83 MtCO2e					Reduction rate 15-28%	N			
	Decarbonization through financial services										
	Sustainable finance (for the environment)*3	¥3.5tn ^{*4} (¥2.0tn)	¥8.0tn ^{*4} (¥3.7tn)	¥14.5tn (¥5.4tn)			¥35tn (¥18tn)				
	Credit balance targets for coal-fired power generation										
	Project finance (FY)	US\$3.58bn	US\$3.77bn	US\$2.95bn			50% reduction from fiscal 2019		Zero		
	Corporate finance (FY)		Approx. ¥120bn						Zero NEV	7	
		Shift to	100% renewable er	nergy for electricit	y procured domesti	cally					
	Net zero GHG emissions ^{*3} from own operations			The Bank, the Trust bank, the Securities	Complete for all domestically		Net zero				
*1	Seene 1 omissions from newer constratio	n husinossos					NEV	Ann	ourpood in April 1	2022	Roldface, Targete

*2 Scope 1, 2 and 3 emissions from upstream production businesses *3 Cumulative total balance of financing extended since fiscal 2019 *4 Figures have been restated due to changes in calculation methods

Climate Change-Related Opportunities

As a financial institution, MUFG recognizes that supporting climate change measures and the transition to a decarbonized society will lead to increased business opportunities.

MUFG announced a target of providing a cumulative 35 trillion yen in sustainable finance by 2030. We intend to commit 18 trillion yen of finance in the environmental field, including initiatives to counter climate change that will lead to the reduction of greenhouse gas emissions and the conservation of the global environment. We promote renewable energy through project finance, etc., issue MUFG Green Bonds, which ensure that the net proceeds are allocated to the Eligible Green Projects, provide commodities and services aimed at mitigating environmental loads, encourage the climate change countermeasure consulting business and so on. By doing so, we support the transition to a decarbonized society.



Expansion of Climate Change-Related Capital Investments and Financing Opportunities for Financial Institutions

Demand for Capital Investment is Expected to Rise as a Result of the Acceleration of Net Zero Initiatives in Various Industries

According to the IEA^(note), global decarbonization-related investment is expected to reach approximately USD 4 trillion annually from 2026 to 2030. The Ministry of Economy, Trade and Industry (METI) estimates that domestic investment in the energy, automobile, construction, and other sectors related to decarbonization will reach approximately 17 trillion yen in 2030 alone, and approximately 150 trillion yen over a 10-year period. In addition to Green Bonds and Green Loans issued to support capital investment plans, providing financing support towards industrial innovations necessary for energy transition is also a major business opportunity for financial institutions.

(note) October 2021 IEA Report "World Energy Outlook 2021"

Total	Approx.	Approx. 150 trillion yen over 10 years	
	17 trillion yen/year	Examples of Decarbonization investment	Amount of investments
Decarbonization of power sources /fuel transition	Approx. 5 trillion yen/year	 Renewable energy (through feed-in tariff (FIT) / feed-in premium (FIP) programs, etc.) Hydrogen/ammonia (investment in hydrogen and ammonia infrastructure development) Manufacures of batteries (in-vehicle/stationary) 	Approx. 2.0 trillion yen Approx. 0.3 trillion yen Approx. 0.6 trillion yen
Decarbonization of manufacturing processes	Approx. 2 trillion yen/year	 ✓ Energy efficiency improvement/decarbonization in manufacturing processes (next generation manufacturing process technology, carbon neutral power generation technology, etc.) ✓ Introduction of industrial heat pumps and co-generation systems 	Approx. 1.4 trillion yen Approx. 0.5 trillion yen
End use	Approx. 4 trillion yen/year	 ✓ Introduction of houses/buildings with high energy efficiency ✓ Introduction of next-generation automobiles 	Approx. 1.8 trillion yen Approx. 1.8 trillion yen
Infrastructure	Approx. 4 trillion yen/year	 Reinforcement of power systems (master planning) Development of infrastructure for electrified vehicles (charging stations, hydrogen stations) Measures to address digitalization (semiconductor manufacturing sites, establishment of data centers) 	Approx. 0.5 trillion yen Approx. 0.2 trillion yen Approx. 3.5 trillion yen
R&D	Approx. 2 trillion yen/year	 Carbon Recycling (CO₂ separation and capture, synthetic methane, synthetic fuel, SAF, etc.) Development of manufacturing processes conducive to carbon neutrality (hydrogen reduction steelmaking, etc.) Nuclear power (R&D of innovative reactors, etc.) Implementation of leading-edge CCS projects 	Approx. 0.5 trillion yen Approx. 0.1 trillion yen Approx. 0.1 trillion yen Approx. 0.6 trillion yen

Prepared by MUFG based on the document published by the Ministry of Economy, Trade and Industry

The Energy Transformation Strategy Project Team

In December 2021, the Japanese Corporate & Investment Banking Business Group launched the Energy Transformation Strategy Project Team (EX Strategy PT).

In order to support the customers' energy transformation, the team is exploring how the financial sector as a whole can contribute to customers, while engaging in dialogs with customers, industry associations, and government agencies. As an initiative, MUFG holds monthly meetings with about 300 employees from sales divisions under the theme of energy transformation and promotes each effort while improving our response to issues throughout the MUFG Group.

- Hold dialogs with customers, industry associations, and government agencies while supporting carbon neutrality for Japan as a whole
- · Provide added value across the entire value chain, from research functions to solution provision
- · Investigate what and how transition support should be for realistic solutions in Japan and Asia
- Leverage group companies' and global expertise, and cooperate with related departments such as the client coverage dept., the Solutions Unit (including the Sustainable Business Office), the Sustainability Office, etc. to support customers' business transitions



Environment

Disclosure Based on TCFD Recommendations Strategy



Propose ways for the financial sector to contribute to business transformation from energy perspective

Global Structure to Promote Sustainable Business on a Global Basis

MUFG provides solutions to assist our customers innovate and to make structural changes to their business model in order to solve environmental and social issues.

In July 2021, we established the Sustainable Business Division to further promote businesses that will help solve environmental and social issues as a Group. We established a global structure to gather intelligence and capture business opportunities through assigning ESG heads in each region – EMEA, Americas and APAC – who are responsible for promoting the provision of sustainable financing solution and customer engagement, and having active discussions through global forums such as the Global ESG Conference. In addition, by collecting information from various perspectives through international initiatives, we are promoting rulemaking, commercialization, and market creation globally to capture future business opportunities.



Customers

*1 Number of locations as of the end of March 2022; multiple branches or a branch and branch office in the same location are counted as a single location (Including partner banks and Adira Finance locations)

27



Environment Disclosure Based on TCFD Recommendations Strategy

Engagement Activities Based on the Needs of Customers

MUFG intends to be a financial institution that empowers a brighter future by supporting customers' decarbonization. We aim to start engagement (dialogues) with customers through the Energy Transformation Strategy Project Team and to support customers to become carbon neutral by developing and providing solutions based on the varied issues and needs of each customer.

Customer	Status of Implementation
Japan Airlines Co., Ltd	With its ESG strategy as a pillar of its management strategy, Japan Airlines aims to contribute to the realization of a sustainable society by addressing social issues through its business. MUFG has been in continuous discussion with Japan Airlines and supported its bond issuance by developing a framework in accordance with the Green Bond Principles of the International Capital Markets Association (ICMA) at by providing support for obtaining a second party opinion in order to promote the company's ESG strategy through fund raising. The purpose of the bond issuance is to diversify financing methods as the world's first transition bond in the aviation industry and to accelerate efforts toward net zero emissions by 2050 by allocating funds to investments, such as cutting-edge, fuel-efficient aircraft, which contributes to CO ₂ emission reduction. Going forward, MUFG will continue to help enhance Japan Airline's commitment to ESG management by supportin the issuance of bonds and continue working with the company to support its ongoing efforts and new challenges toward the transition to a decarbonized society.
Power Sector	MUFG coordinates dialogues between customers in the power sector and overseas institutional investors. As a financial institution, we encourage customers and investors to close the gap in their perceptions of their position, particularly the ideals and the reality of becoming carbon neutral. Most recently, we exchanged views on respective approaches to transitioning and contributed to building a foundation for formulating strategies.
	MUFG, including top management, regularly exchanges opinions with customers in the power sector regarding the external environment and awareness of problems, and we are working to gain a more multifaceted understanding of the position of customers through tours of power generation plants. To achieve the common goal of carbon neutralifier for both customers and MUFG, we will discuss how MUFG can best contribute to the formulation and implementation of customers' strategies, including the possibility of strategic investments and contributing human capital.
Oil & Gas Sector	MUFG supports its customers in the oil and gas sector by working as one solid group to formulate strategies to implement transitions for each company, such as the introduction of hydrogen, ammonia, and biomass. In addition, by participating in discussions with local governments and various councils, we will deepen our understanding of business conditions in the sector and support the promotion of individual projects, such as initiativ for decarbonization of industrial complexes.
	MUFG uses a wide range of engagement activities with customers in the oil & gas sector to help them achieve transitions, including exchanging opinions on the future of the industry as well as providing opportunities to discuss developments in new areas, such as forest management. We are also focusing on ways to deepen mutual understanding by providing suggestions gained from our participation in COP26 and information on the environmer which financial institutions are operating.
	MUFG not only provides project finance support for geothermal power projects to customers in the oil & gas sector, we also encourage customers to enter the renewable energy field by providing financial advisory services for equity investments in these projects. We are also one of the lead managers for issuing green bonds, and MUFG Group



Engagement example (Global Corporate) Customer Status of Implementation The company has a roadmap towards 2025 to achieve an increase in renewable energy capacity as well as reduction Company A (Indonesia, Power and of coal related power generation capacity within the power generation mix and has plans to tap into sustainability-Utility) linked financing. MUFG conducted a series of trainings and engagement sessions on topics relating to sustainable finance, transition finance, and ESG Risk Rating, to support the company's decarbonization goals. MUFG will continue to support the company's efforts towards decarbonization through continuous dialogue and financing support. Company B In Australia, an increase in renewable energy generation capacity and the development of power transmission (Oceania, Power and infrastructure are underway to decarbonize power sources. As part of this effort, the company, who operates a high-Utility) voltage power transmission infrastructure business, has launched a new power transmission line development project. MUFG contributed as a financial advisor for this project supporting the project by proposing financing solutions, providing ESG-related advice, and engaging with participating companies as well as public and private stakeholders. The company has committed to achieving net-zero emissions by 2050 and is in the process of setting interim targets Company C (Thailand, Oil and Gas) towards achieving their long term commitment towards net-zero. In addition to the management level discussion between MUFG executives in Singapore and the company CFO together with the management team on company's sustainability roadmap, MUFG's sector coverage team provided the client with an overview on how peers in the oil and gas sector are setting interim targets to support the company advance its decarbonization strategy. The company has recently joined regional CCUS (Carbon dioxide Capture Utilization and Storage) institutions and Company D (Indonesia, Oil and Gas signed joint study agreements to assess the potential for large-scale implementation of lower-emissions technologies, and renewable energy) including carbon capture and storage and hydrogen production. MUFG is supporting the company's decarbonization strategy through continuous dialogue including a series of trainings and engagement sessions on topics relating to sustainable finance, transition finance, ESG Risk Rating, and CCUS. Company E The company was considering participating in a CCS (Carbon dioxide Capture and Storage) project as its core (Oceania, Oil and Gas) strategy to prepare for carbon neutrality - in line with the Paris Agreement. However, CCS market is still immature and requires cooperation beyond public-private partnership to achieve practical application. MUFG teams in Japan and Australia jointly provided early stage financing advice as well as facilitated discussions between various stakeholders, which ultimately contributed to the company's progress in CCS opportunities and in energy transition. Company F (United MUFG has been actively promoting the market for fleet transition through regular exchanges with all relevant stakeholders (bus operators, lessors, public authorities, technical and legal advisors) in EMEA. This included a Kingdom, Transportation) workshop with representatives of the UK Department for Transport where MUFG presented its ideas and suggestions on how the UK government could further support the fleet transition in the UK. MUFG worked with one of the UK's leading electric bus lessor and battery storage provider to establish a ring-fenced secured funding platform to develop its electric vehicles and fleet infrastructure business. The funds will be utilized to finance 400+ new e-buses in the UK and Ireland. MUFG's extensive track record in Project and Structured Finance as well as strong fleet transition credentials led to our participation in this transaction. MUFG has contributed to help transitioning a substantial number of buses in the UK and Ireland to zero-emission buses and has supported the company to further expand its business in the fast developing fleet transitioning market. A UK utility company defined ESG as its core strategic priority to achieve its energy transition. MUFG has had on-Company G (United Kingdom going discussions with the company's management team to provide financing support. As a result, MUFG provided Power and Utility) financing support to the company by serving as its financial advisor for a CCS project, collaborating on an offshore wind power project, and providing support on ESG-linked loan and green bond issuance. Company H MUFG has been having regular conversations with a global energy company's senior management team to support (EMEA, Oil and Gas) the company's transition strategy. In addition to understanding the company's energy transition strategy, MUFG shared its views and made proposals tailored to the company's strategy by leveraging MUFG's strength in structured finance. This led to providing financial support to contribute to the acceleration of the company's energy transition Company I (Americas, MUFG provided educational and benchmarking materials with respect to ESG reporting and emissions commitments Power and Utility) and discussed with merits and considerations around different types of targets and has provided support to client towards their target announcement. MUFG also continues to be in discussions with the client on arranging corporate and project finance debt issuances for its transition capex and ongoing refinancing and liquidity needs.



Hosted an Engagement Seminar for Realization of a Carbon-Neutral Society

In April 2022, we held a seminar with the aim of promoting mutual understanding and fostering a sense of unity through engagement toward decarbonization with customers. More than 100 customer companies, mainly those in the electric power and oil and gas sectors, participated. Panelists included experts from the Institute of Energy Economics, Japan, the Ministry of Economy, Trade and Industry, and discussed the future direction of decarbonization based on the latest conditions and the expected role of financial institutions. We also explained the background of setting the interim targets announced in the MUFG Progress Report and the reasoning behind those numerical values. The valuable opinions and requests received from customers at the seminar will be used to provide solutions and deepen engagement in the future.



In order to resolve issues and meet needs identified through engagement with customers, we develop and provide a variety of solutions, including support for visualization of GHG emissions, support for strategy development through TCFD consulting services, support for investment and financing through the provision of financing, and deployment of overseas carbon credits to Japanese companies.







Initiatives by MUFG					
Collaboration with Tokio Marine & Nichido Fire Insurance Co., Ltd.	Collaboration with Japan Credit Rating Agency, Ltd. (JCR)				
Two financial institutions that focus on long-term engagement have joined forces to address TCFD disclosure issues for customers. These issues include climate change risk/opportunity analysis and formulating strategies. By leveraging the complementary strengths of these two institutions, we now provide consulting services with an eye to providing solutions.	We collaborate with JCR, an agency with an extensive track record in evaluations for sustainable finance, and developed a sustainable finance product that incentifies GHG emissions reductions by combining JCR's expertise with MUFG Bank's customer base, financial expertise and Zeroboard Inc.'s services.				
Positive Impact Finance	Transition Bond				
MUFG Bank began handling positive impact finance in FY 2021 as part of strengthening engagement. We provided our first positive impact finance to Mitsubishi Heavy Industries, Ltd., a key technology player in the decarbonization field (loan agreement amount: 2 billion yen).	Mitsubishi UFJ Morgan Stanley Securities provides support as the lead manager and structuring agent for the world's first transition bonds in the aviation industry issued by Japan Airlines Co., Ltd.				
Leading Practices Overseas	Collaboration with ENGIE SA				
 First large-scale offshore wind project finance deal in the US (total financing amount: approx. USD 2.3billion) – one of the largest renewable energy project finance deal closed in 2021. (Awarded 2021 PFI Global ESG Deal of the Year) First carbon credit backed supply chain finance in EMEA (total financing amount: approx. USD 640million) 	MUFG Bank reached an agreement with ENGIE SA, with over 10 years of experiences in low-carbon energy and services, to collaborate on solutions to help MUFG Bank's customers mitigate climate change by supporting their decarbonization strategies. Through this collaboration, we aim to establish a way to provide appropriate carbon credits supplied by ENGIE to our customers. We will also consider further business development and collaborations in renewable energy as well as in new fields such as hydrogen.				
Consulting Service for ESG Rating Evaluation	Popularization of Renewable Energy and Storage Batteries				
Mitsubishi UFJ Trust and Banking has started providing consultations to identify ESG issues and improving evaluations, based on ESG ratings such as FTSE. This supports engagement activities with investors and other stakeholders.	The Bank has invested in PowerX, Inc., a company that promotes the manufacture and sale of electricity accumulators and development and manufacture of electric freighters. While contributing to the development of the next generation of industries that will lead to the strengthening of the competitiveness of the Japanese economy, we provide new options to customers with PowerX's innovative approaches to renewable energy and electricity accumulators.				

FOCUS "Promoting Sustainable Businesses" (MUFG Report 2022 P58) (PDF / 8.16MB)



Pushing Ahead with Support for Innovation

Through participation in various councils in new fields such as hydrogen, ammonia, and CCUS, MUFG will expand its contribution to the decarbonization of its customers.

In order to support the realization of a sustainable society through a virtuous cycle of the environment and the economy, we will work with customers to support new businesses through financial services: from the R&D and demonstration stages with the aim of realizing innovative technologies, such as renewable energy, hydrogen, next-generation energy, carbon recycling, etc.

Support for Building Ammonia Supply Chains	Participation in the Global CCS Institute (GCCSI)	Introducing Fuel Cell Buses and Contributing to the Community through the Decarbonization Concept
Marubeni Corporation is working on a feasibility study for building a supply chain for clean fuel ammonia from Western Australia to Japan, to be implemented jointly with government agencies, power companies, and Australian companies. MUFG participates in financing to support for building ammonia supply chains.	MUFG is the first Asian private financial institution to participate in this international think tank, established with the aim of promoting the global use of carbon capture and storage (CCS) technology.	 MUFG's supports (donations) help to fund the introduction of fuel cell buses in Tokyo and Osaka, with a view to increasing demand and promoting the use of hydrogen. MUFG contributes, including donations, to local communities by helping to create sustainable businesses originating in Osaka, looking ahead to achieving carbon neutrality goals set by Osaka Prefecture, and presenting and promoting technology at expositions.



Sustainable Business Investment Strategy

Overview

The Sustainable Business Investment Strategy (hereinafter referred to as "Investment Strategy") is an investment strategy that incorporates environmental and social impacts into investment decisions in order to expand investments that combine economic efficiency with environmental and social impacts in the future. In making investment decisions, we also use internal carbon pricing^(note), a method that calculates value by multiplying the amount of CO₂ reduction by the future carbon price. With the support of PricewaterhouseCoopers Sustainability LLC, the Investment Strategy uses revenue-adjusted conversion of reduced carbon costs. The internal carbon pricing used in the Investment Strategy was USD40/tCO₂ (as of FY2021). In the future, we will consider investment based on the direction that international impact assessment methods are headed and status of development.

The methods and knowledge acquired through the Investment Strategy will also be applied to finance, advisory, etc., with the aim of contributing to solving customer issues.

(note)	This concept is used by organizations to independently price their own CO ₂ emissions and to reduce the carbon footprint
	of their corporate activities. It is used mainly by operating companies for investment decisions.

Investment (Fund Name)	Asset Manager	Investment Targets	Estimated Impact of Bank Investmen (Effect of CO ₂ Reduction)
Global Renewable Power Fund III)	BlackRock, Inc.	Ancillary facilities such as renewable energy, power storage, and distribution facilities	Approximately 20,000 tCO ₂ per year (based on Bank estimates)
Ares Climate Infrastructure Partners	Ares Management Corporation	Infrastructure and energy assets in the field of climate change countermeasures	Approximately 30,000 tCO ₂ per year (based on Bank estimates)
Climate Finance Partnership	BlackRock, Inc.	Renewable energy power generation, energy-saving facilities, storage and distribution facilities, electric power and ultra-low emission logistics mobility services	Approximately 17,000 tCO ₂ per year (based on Bank estimates)
MPower Partners Fund L.P.	MPower Partners GP	Domestic and overseas venture companies in the fields of healthcare/wellness care, fintech, next- generation work/education, next- generation consumer/retail, and the environment	_

Promotion and Popularization of Renewable Energy Use

Main Initiatives

Establishment of Z Energy Co., Ltd. for Renewable Energy Fund Creation

In September 2021, with eight partner companies, the Bank established Z Energy Co., Ltd.^(note)1 as a fund management company with the aim of building an independent renewable energy market, based on a concept that covers all facets of renewable energy from creation to consumption.

In March 2022, we established the first Carbon Neutral Fund operated by Z Energy Corporation, and have started investing in renewable energy power generation projects^(note2).

MUFG has established an impact assessment system with Z Energy as a practice of impact investment, and has been selected as a model project under the Ministry of the Environment's "2021 Green Finance Model Case Creation Project."

(note1) Press release (September 1, 2021):MUFG Establishes a Company with the Aim of Creating a Renewable Energy Fund

(note2) Press release (December 1, 2021):Investment in Carbon Neutral Fund 1 Investment Limited Partnership (in Japanese)

Renewable Energy Project Finance

MUFG is one of the world's top performers in the global project finance sector, as shown in the Lead Arrangers League Table related to renewable energy projects. In May 2021, MUFG set a target of reducing CO_2 emissions through project finance for renewable energy projects by a cumulative total of 70 million tons from FY 2019 to FY 2030. This is equivalent to the annual CO_2 emissions of about half of the households in Japan.

Reduction of CO $_2$ emissions from FY 2019 to FY 2021 was 26.83 million tCO $_2.$



Source: Bloomberg New Energy Finance ASSET FINANCE /Lead Arrangers LEAGUE TABLE

Establishment of a Solar Fund (Ecology Trust)

The Trust Bank has been offering solar funds every year since FY 2018 as an investment product.

The project has been well received by investors, who say that now they have a new investment option for solar power generation that produces a stable profit. The amount of the fund is 24.7 billion yen (cumulative since FY 2018), and the total amount of power generation is the electric energy usage of 18,000 households.

(US\$ M)

The Trust Bank has been actively investing in renewable energy with investment totaling 31 power plants, 318 MW, and 132.8 billion yen (excluding already established funds). The Trust Bank is also contributing to regional revitalization, by focusing on projects closely related to local businesses, governments, and residents.

Introduction of Renewable Energy Power from Off-site Solar Power Generation Facility

The Bank has signed an agreement with NTT Anode Energy Corporation for an off-site PPA service^(note1) that utilizes a new power generation facility. Through this service, the Bank has introduced electricity derived from renewable energy generated by the new solar power plant to 40 locations in eastern Japan since July 2022. The Bank is involved in the construction of a new 2,000 kW solar power generation facility, and will purchase electricity derived from renewable energy sources over the long term, and directly contribute to the increase in the number of expandable renewable power sources^(note2) in Japan.

(note1) PPA, or Power Purchase Agreement, is a service in which the power producers and electricity consumers execute a purchase agreement for renewable electricity at a price and period agreed in advance, and renewable electricity generated from renewable power sources installed off-site, not in demand areas, is supplied to consumers via ordinary power grids.

(note2) Contribution to the spread and expansion of new renewable energy through the introduction of renewable energy.

Launch of Solar Roof-top Lending Program

Krungsri (Bank of Ayudhya) launched the Solar Roof-top lending program for Retail and SME customers. This program will finance customers in installing solar panels on the roof-tops of their private and commercial residence, which will lead to energy savings and building of a clean energy community.

Participation in the "Fast-Growing Tree for Biomass Power Generation" Verification Project

The Trust Bank has started a verification project with Maniwa City in Okayama Prefecture and the Maniwa Forest Association to diversify the route to secure stable fuel for biomass power generation by planting fast-growing trees on unused land such as abandoned farmland.







"Fast-Growing Tree for Biomass Power Generation" is a project that aims to make forests, an important asset that absorbs CO₂, a sustainable resource for Japan, aiming to become carbon neutral by 2050, and to revitalize forestry and other forest businesses.

Together with the Maniwa Forest Association and Maniwa City, which has been selected as a leading area for decarbonization, we will promote a verification project using willows, a fast-growing tree that grows naturally in Maniwa City, with the aim of further expanding the use of biomass power generation, to contribute to the securing of raw materials for wood chips, a fuel source.

Provision of the World's First Limited-Recourse Financing for France's First Floating Offshore Wind Project

In November 2021, MUFG took part in the financing for the first floating offshore windfarm constructed in France.

Floating offshore wind is considered a key pillar in the energy transition regime under the Paris Agreement. In this project, the Tension-leg platform (TLP)^(note) technology is utilized for its floaters, which is the first in the world. The pilot project will enable the confirmation of industrial principles and the improvement of scientific, technical and environmental knowledge.

MUFG acted as Mandated Lead Arranger and Hedge Provider on the deal, and the total investment amounted to EUR 300m. This landmark transaction also represents the first floating offshore wind farm to have successfully closed a limited-recourse financing worldwide.

MUFG has a strong desire to build on the expertise to support clients globally and particularly in France, Norway, Japan, South Korea and the US, which have been identified as key markets where floating wind is expected to be deployed.

(note) Tension Leg Platform

Products and Services that Support the Promotion of Our Customers' Sustainability

MUFG supports the promotion of sustainability through the provision of products and services to customers who aim to address climate change and other environmental concerns.

Main Products and Services

Green Bonds

The Securities is a leading Green Bonds underwriter since the inception of the market. Since FY2019, we have been a member of the Climate Bonds Partners Program operated by the Climate Bonds Initiative^(note1) who is one of the most important partner for us in this area. In addition, MUFG has been selected as a member of the 2021/2022 ICMA^(note2) Advisory Council of the Green Bond Principles and Social Bond Principles^(note3) and also involved in several working groups, contributing to the development and improvement of the related Principles and Guidelines.

- (note1) The Climate Bonds Initiative is an international organization based in London that works to promote investment in the projects and assets needed for a rapid transition to a low-carbon, climate durable economy. The Climate Bonds Parteners Programme supports investor and stakeholder activities and educational projects to grow sustainable green bond markets that contribute to climate change response and low carbon investment.
- (note2) ICMA (International Capital Market Association) is a non-profit organization that develops rules and principles for the development of international capital markets. It consists of more than 600 members (as of July 2022) including issuers, securities dealers, banks, investors, and central banks.
- (note3) An advisory body to the Executive Committee who is the governing body of Green Bond Principles, etc., established to increase its market awareness and outreach.

MUFG structured and executed a USD 334.5million Green Project Bond for solar power projects issued by Scatec ASA, a leading renewable energy solutions provider worldwide based in Norway. The financing will support the six operating fields in Egypt's Benban Solar Park, the fourth largest photovoltaic solar power plant in the world and the largest on the African continent.

Green Loans and Green Private Placement Bonds

The Bank provides green loans and green private placement bonds as a means for customers to raise funds to be used for green projects. This product will be used only for projects with environmental improvement effects (green projects).

In July 2022, we signed Japan's first Green Loan for a biogas power generation business using cow dung as a raw material.

Sustainability Bonds

The proceeds from bond issuance are allocated only to the projects that will contribute to solving global environmental and social issues. Please click here for information on bond underwriting results of the Securities. (in Japanese)

Sustainability-linked Bonds

The bonds whose financial/structural characteristics may vary depending on whether the Sustainability Performance Targets (SPTs) predetermined by an issuer are achieved.

Please click here for information on bond underwriting results of the Securities. (in Japanese)

Sustainability-linked Loans

The Bank uses sustainability-linked loan (SLL) products to support customers' ESG initiatives. An SSL is a loan product that sets sustainability performance



targets (SPTs) in line with customers' ESG strategies, and the terms of borrowing fluctuate according to the achievement of those targets. In March 2022, we established an SLL as an arranger for Obayashi Corporation, which sets the CO_2 emission reduction rate target of 1.5°C for Scope 1 and 2 and well below 2°C for Scope 3.

Transition Bonds/Transition-linked Bonds

The Securities acted as lead arranger and/or structuring agent^(note) for Transition Bonds (Use-of Proceeds instruments) and Transition-Linked Bonds (Sustainability-Linked instruments) issued by the companies with medium- to long-term transition strategies which is Paris-aligned. They are a leading company in this field, serving as a structuring agent in five out of the nine public offering of Transition/Transition-Linked Bonds (including those planned) that were selected as model case of the Transition Finance Model Project of the Ministry of Economy, Trade and Industry (METI). We will further promote our underwriting activity of the bonds with ESG themes including decarbonization for the sake of business and economic growth in harmonization with social and environmental benefits and continue our contribution to the realization of a sustainable society.

(note) A company who supports the issuance of Transition Bonds/Transition-Linked Bonds through the structuring works such as a formulation of a framework.

Track Recordas a Structuring Agent (as of July 2022)

Month of Issue	Issuer	Label	Issued Amount
July 2021	Nippon Yusen Kabushiki Kaisha (NYK Line)	Transition	20 billion yen
February 2022	Japan Airlines Co., Ltd.	Transition	10 billion yen
May 2022	JERA Co., Inc.	Transition	20 billion yen
June 2022	ENEOS Holdings, Inc.	Transition-linked	100 billion yen
July 2022	The Idemitsu Kosan Co, Ltd.	Transition	20 billion yen

Positive Impact Financing

The Bank offers positive impact financing, which uses impact assessments based on a framework developed jointly with Mitsubishi UFJ Research and Consulting. Positive impact financing is intended to "adequately identify and mitigate potential negative impacts in one of the three dimensions of sustainable development (environmental, social and economic), and to provide a positive contribution in at least one of them." It comprehensively evaluates and monitors the environmental, social, and economic impacts of customers' business activities, and supports their ESG management financially.

Energy Conservation Support Loan (With 1% Interest Subsidy)

This product makes use of the Ministry of Economy, Trade and Industry's subsidy program for the promotion of upgrading facilities to improve energy efficiency. Under this program, the borrower can receive a maximum 1% subsidy for up to 10 years for the interest on loans made for the installation of energyefficient equipment.

ESG Management Support Loan/Private Placement Bonds

The Bank offers the ESG management support loan/ private placement bonds, which is an ESG assessment based financing product that supports and assists customers' ESG efforts. The ESG assessment of this product is performed by Mitsubishi UFJ Research and Consulting of the MUFG Group as the service provider and the Japan Credit Rating Agency, which has a track record of certifying green finance, as a support company. The ESG efforts of a customer are assessed and scored based on an independent checklist, and feedback is provided on various issues in order to support the sustainable growth of the customer.

Loans for Supporting the Promotion of Decarbonization

The Bank provides Loans for Supporting the Promotion of Decarbonization, financial products designed to aid/support ESG initiatives. For these loans, the "Decarbonization Support Program" tool developed with Mitsubishi UFJ Research and Consulting, a member of MUFG, is utilized to assesses customers' efforts to promote decarbonization, and the program provides solutions for promoting decarbonization initiatives.

ESG Evaluation loans for J-REIT

The Bank offers the loan product, "ESG Evaluation loans for J-REIT" using "MUFG ESG Evaluation for J-REIT supported by JCR"^(note) which is provided by Mitsubishi UFJ Research and Consulting. The entire loan or portions directed towards J-REITs which have received the top three ratings of MURC's ESG evaluation may be preferentially allocated for the usage of the proceeds of the MUFG Green Bonds only if loans to Eligible Green Projects. Through the loan products related to ESG, we are not only able to support the customers' funding methods, but also support customers' business challenges and offer solutions as well.

(note) Mitsubishi UFJ Research and Consulting offers evaluation and ratings to J-REITs which aspire and conduct ESG management. The ESG evaluation methodology provided by MURC supports J-REITs in recognizing its current conditions and challenges regarding ESG activities.



Green Deposit

Managed by the Bank, Green Deposit is a foreign currency time deposit that is procured only for the purpose of funding projects that contribute to improvement of environmental issues. In addition to Japan, we also offer Green Deposit in the United States, Australia, China and Hong Kong. Other overseas bases are also planning to gradually start offering the product.

Green Deposit

ESG Investment

Investments that take into account ESG factors are expected to support companies and various organizations

working to achieve a sustainable society and improve their long-term returns; thus, there is a growing interest in it, especially among institutional investors, such as public pension funds.

MUFG's treasury business diversifies the investment target to government bonds, foreign bonds, stocks, and corporate bonds, as well as green bonds and other types of investments. In order to strengthen MUFG's financial earnings and contribute to sustainable economic growth through ESG investments, MUFG is going to promote ESG investments by finding the right balance between risks and returns.

Climate Change Risks - Transition Risks and Physical Risks-

There are two kinds of climate change-related risk. First, there are risks arising in the course of the transition to a decarbonized society, such as stricter regulation and the introduction of decarbonizing technologies (transition risks), and second, there are risks arising from physical damage due to the growing occurrences of climate change-induced natural disasters and abnormal weather (physical risks).

Financial institutions are required to address both risks, which may directly impact their own business activities and indirectly affected due to impacts on clients.

Based on the suggestions of the TCFD, MUFG has summarized the examples of physical and transition risks for each of the major risk categories. The timelines (short, medium, and long term) are also organized by risk category.

In addition, to prepare for the risk of damage to our employees and assets due to an increase in natural disasters and extreme weather events, we conduct various drills and formulate a business continuity plan (BCP) to ensure business continuity.

Examples of transition risks				
Policies, laws and regulations	 Increase in the cost due to GHG emissions by the introduction of a carbon tax Strengthened obligation to report emissions Regulations on existing products and services Subject of lawsuits 			
Technology	 Switch to existing products and services with lower GHG emissions Setback in the investment in new technologies Cost of transition to low emission technologies 			
Market	 Changes in customer behavior Uncertainty in market signals Raw material price hike 			
Reputation	 Changes in consumer preferences Narrowing of sectors Increased stakeholder interest and negative feedback to stakeholders 			



Examples of physical risks				
Acute	Increased severity of extreme weather events, such as typhoons and floods			
Chronic	 Changes in precipitation patterns and extreme fluctuations in weather patterns Increase of average temperature Sea level rise 			

Examples of Impacts of Transition Risks and Physical Risks

MUFG has organized examples of impacts (examples of potential risks) of climate change on each of the major risk categories of the physical and transition risks.

Risks are classified mainly around the following six categories. In the future, the classification of the risks and examples will be reviewed in response to changes in the environment.



Example of Transition and Physical Risks

Risk categories	Examples of transition risk	Examples of physical risk	Time frame ^(note)
Credit risk	 Our corporate clients' business activities and financial positions may be negatively affected if they cannot deal with government policies, regulatory requirements, customer requests or evolving trends in technological development. 	• Extreme weather may cause direct damage to assets held by our corporate clients and/or have a negative spillover effect on their business activities and financial positions by indirectly impacting their supply chains.	Short-to long-term
Market risk	 The transition to a decarbonized society may negatively impact certain business sectors, making the value of relevant securities held by MUFG and/or financial instruments deriving from them highly volatile. 	 The impact of extreme weather may induce market turmoil and make the value of securities held by MUFG highly volatile. The value of securities held by MUFG may become volatile due to changes in market participants' medium- to long-term outlook on the impact of extreme weather and their expectations regarding countermeasures against the phenomenon. 	Short-to long-term
Liquidity risk	 If its credit ratings deteriorate due to such factors as delays in its response to transition risks, MUFG may face limitations on methods for funding from the market and thus growth in risks associated with fundraising. 	 Corporate clients suffering damage from extreme weather may choose to withdraw their deposits or utilize commitment lines to secure funds for reconstruction, leading to a growing volume of cash outflows from MUFG. 	Short-to long-term
Operational risk	 Spending on capital investment may grow due to the need for measures aimed at reducing CO₂ emissions and enhancing business continuity capabilities. 	• Extreme weather may cause damage to MUFG's headquarters, branches and/or data centers and lead to the disruption of their operations.	Short-to long-term
Reputation risk	 If MUFG's plans and efforts to realize carbon neutrality are deemed inappropriate or insufficient by external stakeholders, it may suffer from reputational damage. MUFG may suffer from reputational damage and/or deterioration in its status as an employer due to the continuation of relationships with business partners who doesn't give enough consideration to environmental concerns or delays in its transition to decarbonization. 	 If MUFG's efforts to support customers and communities affected by extreme weather are deemed insufficient, it may suffer from reputational damage or a resulting disruption of operations. 	Short-to long-term
Strategic risk	 If MUFG fails to live up to its public commitment to support the transition to a decarbonized society, its capabilities for strategic execution may be negatively affected by a deterioration in its reputation. 	 MUFG may fail to meet the goals of its strategies and plans if it fails to properly factor in the direct impact of extreme weather in the course of long-term management planning. 	Medium-to long-term

(note) Short-term: less than one year; medium-term: one to five years; long-term: more than five years

Scenario Analysis

The TCFD recommendations recommend conductingscenario analysis using multiple scenarios todemonstrate the flexibility and resilience of companies'plans and strategies to risks related to climate change. Since the summer of 2019, MUFG has been aparticipant in the pilot project led by the United NationsEnvironment Programme Finance Initiative (UNEPFI) with the objective of discussing and developingmethods for climate change-related financialinformation disclosure for the banking industry. Based on the results of the pilot project, we conducted an analysis of transition risks up to the year 2050 and physical risks up to the year 2100. In addition to the results of the above-mentioned pilot project, the scenario analysis reflects the results of verification by external experts.



Transition Risk

[Main changes]

In addition to current three sectors (energy, utilities and automotive), we added the steel, air and maritime transportation to analysis targets.

	Last time	This time
Target sector	Energy (Japan, overseas) Utilities (Japan, overseas) Automotive (Japan, overseas)	Energy (Japan, overseas) Utilities (Japan, overseas) Automotive (Japan, overseas) Steel (Japan, overseas) Air (Japan, overseas) Maritime (Japan, overseas)

[Results]

Based on the results of the UNEP FI pilot project, a comprehensive approach was adopted for the measurement method, combining the bottom-up method at the individual company level and the top-down method at the sector level to assess the impact.

In addition to the sustainable development scenario (the [well below] 2°C scenario) released by the IEA, the NGFS scenario was used as an assumption. Then, in addition to the (well below) 2°C scenario, the 1.5°C scenario was analyzed on the impact on the credit ratings under each scenario, as well as analyzing the financial impact on an applicable sector's overall credit portfolio.

Scenario	Various scenarios, including the sustainable development scenario (the [less than] 2°C scenario) of the IEA and the 1.5°C scenario that the NGFS has released
Analytical method	 An integrated approach is adopted to assess the impact by combining the bottom-up approach at the individual company level and the top-down approach at the sector level. Using this approach, the impact on credit ratings in each scenario is analyzed along with the effect on the overall financial impact of the sector's credit portfolio.
Target sector	Energy, utilities, automotive, steel, air, and maritime sectors
Target period	Until 2050 using the end of March 2022 as the standard
Result of analysis	Single-year basis: 1.5 billion yen to 28.5 billion yen

[Measures to reduce future migration risks]

These analysis results have reaffirmed the importance of making the transition toward decarbonization throughout society, and we believe that transition efforts in GHG-intensive industries are particularly important to achieving a carbon neutral and decarbonized society by 2050. As stated in the MUFG Carbon Neutral Declaration, MUFG is committed to actively supporting customers' transition efforts to achieve decarbonization through finance. Through engagement with customers, MUFG will confirm their transition strategies and implementation status as well as support their efforts toward decarbonization through sustainable finance, visualization of GHG emissions, and support strategy formulation. Through active discussions with regulators, various policy committees, and external experts, MUFG will also strive to keep abreast of domestic and international sustainability trends and trends toward decarbonization at individual companies, and will promote activities to gain international recognition for region-specific circumstances based on such information. In addition, by actively participating in discussions on external initiatives including participation in the Financing and Engagement Working Group of NZBA, which is chaired by MUFG, we will lead the creation of an international framework for a fair transition.

Environment



Physical Risk

[Main changes]

Targeting flood damage, which has been particularly prominent in recent years both in terms of frequency of occurrence and damage, the analysis was conducted by extending the period of coverage to 2100 based on the scenarios published by the Intergovernmental Panel on Climate Change (IPCC).

	Last time	This time
Calculation period	Until 2050	Until 2100

[Results]

Among the risks associated with physical damage caused by climate change, we adopted an approach to measure the impact on the overall credit portfolio using the default probability of a borrower that has changed because of the occurrence of floods, which have been particularly prominent in Japan and other countries in recent years in terms of both frequency of occurrence and damage level.

The climate scenarios are based on the RCP2.6 (2°C scenario) and RCP8.5 (4°C scenario) scenarios from the Coupled Model Intercomparison Project 5 (CMIP5) released by the Intergovernmental Panel on Climate Change (IPCC). The RCP8.5 scenario, which expects floods to be more frequent and larger in magnitude, was analyzed to estimate the damage caused by floods using data^(note) provided by various organizations.

In calculating financial impacts, in consideration of discussions conducted within the UNEP FI pilot project, we have reflected business suspension periods, loss arising in held assets and so on.

(note) Source: Hirabayashi Y, Mahendran R, Koirala S, Konoshima L, Yamazaki D, Watanabe S, Kim H and Kanae S (2013) Global flood risk under climate change. Nat Clim Chang., 3(9), 816- 821. doi: 10.1038/nclimate1911

Scenario	• RCP 2.6 (the 2°C scenario) and 8.5 (4°C scenario) published by the Intergovernmental Panel on Climate Change (IPCC)
Analytical method	 Estimated damage in the event of a flood is analyzed, and an approach to measure its impact on the overall credit portfolio using the change in default probability that the occurrence of floods would have on the credit portfolio is adopted. In the calculation of financial impact, the period of the suspension of the business of the borrower and the loss of assets, among other aspects, are reflected.
Target of analysis	• Flood
Target period	Until 2100 using the end of March 2022 as the standard
Result of analysis	Cumulative total: Approximately 115.5 billion yen



Reflection in the Risk Appetite Framework

From FY 2021, the risks related to climate change have been newly added to the Risk Appetite Statement. We aim to establish, maintain, and further develop a framework for appropriately managing risks related to climate change.

Outline of the Risk Appetite Framework

The Risk Appetite Framework is a framework for clarifying the risk appetite (the type and amount of risk to be undertaken) to achieve MUFG's business strategy and financial plan and for conducting business management and risk management.



Climate Change-Related Risk in Enterprise Risk Management - Top Risk Management-

In the "Top Risk Management" approach that MUFG primarily adopts for enterprise risk management, we consider the risks arising from climate change as one of the Top Risks.

We also recognize that climate change-related risks are likely to become apparent and worsen in the medium to long term.

In MUFG and its core subsidiaries, management is regularly engaged in discussions regarding the Top Risks to gain a further understanding of the risk recognition, and to develop appropriate risk control countermeasures.

Top Risk Management

MUFG defines a risk event as a loss that could be brought on to the Group as a result of the materialization of various risk scenarios and determines the importance level based on the impact and probability of the event. Risk events that should be paid most attention to over the next year are identified as Top risks.



Risks Relating to Climate Changes

Risk scenarios	Risk countermeasures
 If our efforts to address climate change-related risks or to make appropriate disclosure are deemed insufficient, our corporate value may be impaired. Our credit portfolio may be adversely affected by the negative impact of climate change on our borrowers and transaction counterparties. 	 Promote various measures in line with the Carbon Neutrality Declaration while disclosing relevant information and enhancing scenario analysis based on recommendations from the TCFD. Formulate interim targets consistent with the Paris Agreement regarding the volume of GHG emissions in addition to updating our Environmental and Social Policy Framework and strengthening engagement with corporate clients.

Construction of a Management Framework to Address Change on a Group and Global Basis

MUFG has established a project team on a group and global basis to strengthen the response to risks related to climate change. The team will implement appropriate measures by identifying and sharing information on regulatory trends etc. and by establishing a framework for risk management on a group and global basis.

To consider a management framework for risks related to climate change, a project team is established with the Group Chief Risk Officer (CRO) as the lead and with participation of the CROs from the Bank, Trust Bank and Securities, as well as regional CROs.

Main Items to be Considered and Provided a Response

Establishment of a framework for customer transition support as a method of classifying and analyzing risks related to climate change, clarifying risk appetite, and reflecting risk in the credit process.
Organization of risk recognition related to transition risks and physical risks through case studies

Environmental and Social Risk Management in Finance

We implemented MUFG Environmental and Social Policy Framework to manage environmental and social risks associated with our financing^(note). Concerning coal-fired power generation, mining (coal), oil and gas, and other specific sectors in which concerns are raised over environmental and social impacts, including climate change, we have established our finance policy and a due diligence process to identify and assess the environmental and social risks or impacts associated with transactions has been introduced.

(note) Credit, bond and equity underwriting for corporate clients of MUFG's main subsidiaries, the Bank, the Trust Bank and the Securities HD.



MUFG Environmental and Social Policy Framework

	MUFG Way and	Code of Conduct
MUFG Env	vironmental Policy Statement	MUFG Human Rights Policy Statement
	MUFG Environmental and	Social Policy Framework
Framework ena	ble the appropriate identification a	nd management of environmental and social risks
Prohibited Transactions	5	
 Illegal transactions an Transactions which vid Transactions that negative 	d transactions for illegal purposes blate public order and good morals atively impact wetlands designated	 Transactions violating the Convention on International Trade in Endangered Species of Wild Fauna and Flora (Washington Convention) Transactions involving the use of child labor or forced labor
 Transactions that negative World Heritage Sites 	nvention atively impact UNESCO designated	Cluster Munitions and Inhumane Weapons Manufacturing
Transactions of High Ca	aution	
Cross-sector guidelines	 Impact on Indigenous Peoples (Land expropriation leading to in Impact on High Conservation Values (Communities voluntary resettlement alue areas
Sector specific guidelines	 Coal Fired Power Generation Set Mining sector (coal) Oil and Gas sector (Oil Sand, Development of the Arct and gas, Oil and Gas Pipelines) 	ector Earge Hydropower Sector Forestry sector Palm oil sector

The Process of Identifying and Assessing the Environmental and Social Risks or Impacts of a Business to be Financed



Policies on the Sectors Related to the Environment, Including Climate Change

Since its establishment in May 2018, the MUFG Environmental and Social Policy Framework has been periodically reviewed in response to changes in business activities and the business environment. The most recent revision, made in April 2022, strengthened and revised policies for the climate-related sectors (palm oil, mining (coal), and oil and gas sectors).



Environment-Related Policies in the MUFG Environmental and Social Policy Framework



Response to Climate Change-Related Risks Based on the Equator Principles

The Equator Principles is an international framework developed to identify, assess, and manage potential environmental and social risks and impacts of large-scale projects, including infrastructure and natural resource development. The Bank conducts environmental and social risk assessment based on the Principles prior to the loan decision.

Regarding climate change risks, in addition to examining technically and economically feasible options that contribute to reducing GHG emissions, the Bank evaluates status of project developers' measures to identify and manage physical and transition risks in line with the TCFD recommendations.

The Equator Principles

Climate Change-Related Responses Required under the Equator Principles

Applicable projects	Responses required under the Equator Principles
Among the risk categories used in the Equator Principles, all Category A projects, and as appropriate, Category $B^{(note)}\text{projects}$	 Identification of physical risks and measures to manage those risks
Projects with GHG emissions (Scope 1 and Scope 2), during its operational phase, of more than 100,000 tonnes of carbon dioxide equivalent per year	 Alternatives Analysis Assessment of transition risks Annual public reporting of GHG emission levels

(note) Category A refers to projects with potential signif-icant adverse environmental and social risks and/or impacts that are diverse, irreversible, or unprecedented. Category B refers to projects with potential limited environmental and social risks and/or impacts that are few in number, generally site-specif-ic, largely reversible and readily addressed through mitigation measures.



Example of Climate Change Risk Assessment

In the environmental and social risk assessment prior to the loan decision, the Bank evaluates the project proponent's countermeasures on climate change and confirms that they meet the requirements for climate change risk assessment in accordance with the Equator Principles. The followings are examples of physical and transition risk assessments of individual projects in which banks conducted environmental and social risk assessments.

Physical Risk (offshore wind project)

The project was evaluated using the climate change prediction scenarios published by the United Nations Intergovernmental Panel on Climate Change (IPCC). Strong winds caused by typhoons and flooding caused by rising sea levels were identified as the main physical risks, and it was confirmed that the design of the facilities has been implemented to deal with these risks.

Physical risks identified

- Acute risks:
- Strong winds, floods, and storm surges caused by typhoons Chronic risks:
- Inundation and coastal erosion associated with rising sea levels

Major actions taken by the project proponent

- Use of turbines designed to sustain high-speed wind conditions
 Elevation of onshore facilities (such as substations) to avoid
- impacts by storm surges and inundation
- Construction of onshore facilities away from the coastline to
 avoid impacts by coastal erosion

Transition Risk (Gas and Diesel Combined Thermal Power Generation Project)

The project aims to replace an aged power plant with a state-of-the-art thermal power plant in order to support electricity demand on remote islands. Policy and regulatory risks were identified as the primary transition risks, and it was confirmed that the project will be consistent with the country's carbon neutrality goals and contributes to its energy transition.

Transition risks identified

- · Policy and regulatory risks
- Increased operational costs associated with the introduction of carbon pricing and disclosure of GHG emissions

Major actions taken by the project proponent

- Adoption of the latest low carbon emission technologies
 Implementation of cash flow plan that anticipates an increase in
- operating costs



Metrics and Targets

Key Metrics and Targets

Primary Initiative Items	Metrics	Targets	Results
Net Zero GHG from the Financed Portfolio	Scope3 (Emissions through financed portfolio)	Net zero by 2050	-
	Power sector: Emission intensity (gCO ₂ e/kwh)	Reduce the CO ₂ emissions intensity to the range of 156 to 192gCO ₂ e/kWh by 2030 349gCO ₂ e/kWh (2019)	_
	Oil & Gas Sector: Absolute GHG emissions (MtCO ₂ e)	Reduce the absolute volume of CO ₂ emissions by 15% to 28% by the end of 2030 from the 2019 level 83MtCO ₂ e (2019)	_
Net Zero GHG from Own Operations	Scope 1 and 2 emissions	Net zero by 2030	(FY 2020) 343 thousand tCO ₂ (FY 2021 based on preliminary figures) 249 thousand tCO ₂
Decarbonization through Financial Services	Sustainable Finance Target and Progress	Cumulative total of 35 trillion yen (including 18 trillion yen in the environmental sector) by FY 2030	Cumulative total of 14.5 trillion yen (including 5.4 trillion yen in the environmental sector) by FY 2021
	Setting Targets for Reducing CO ₂ Emissions Through Renewable Energy Project Financing	Reduction by 70 million tons (cumulative total from FY 2019 to FY 2030)	Reduction by 26.83 million tons (cumulative total from FY 2019 to FY 2021)
	Credit amounts related to coal-fired power generation project finance	Reduce the balance 50% by the end of FY 2030 from the FY 2019 level and reduce it to zero by FY 2040	US\$2,955 million (note1,2) (as of the end of FY 2021)
	Corporate finance for coal-fired power generation	Reduce the balance of such financing to zero by FY 2040	Approx. ¥90.0 billion (note2,3) (as of the end of FY 2021)

(note1) As of the end of FY2019: US\$3,580 million

(note2) Does not include projects that contribute to the transition to a decarbonized society in accordance with the MUFG Environmental and Social Policy Framework

(note3) As of the end of FY2020: Approx. ¥120.0 billion



Environment Disclosure Based on TCFD Recommendations Metrics and Targets

Other disclosure items:

- Carbon-related assets (credit amounts)
- CO_2 emission intensity of project finance for power generation business
- Basic Unit of Electricity Use

Net Zero GHG Emissions from the Financed Portfolio (MUFG's Scope 3 Emissions)

Metric	Power sector: Emission intensity (gCO ₂ e/kwh) Oil & Gas Sector: Absolute GHG emissions (MtCO ₂ e)
Target	Net zero GHG emissions from our financed portfolio by 2050 Power Sector: 156-192gCO2e/kWh (2030), 349gCO2e/kWh (2019) Oil & Gas Sector: Base year 2019 Reduction rate 15%-28% (2030), 83MtCO2e (2019)

Net Zero GHG Emissions from Own Operations (Scope 1 and 2 emissions from MUFG)

Global Group-Wide

Metric	Scope 1 and Scope 2 Emissions
Target	Achieve net-zero GHG emissions from MUFG in our own operations by 2030
Results	FY 2020: Scope 1 and Scope 2 emissions totaled to 343,000 tCO ₂ e. FY 2021: Scope 1 and Scope 2 emissions (preliminary figures) totaled to 249,000 tCO ₂ e.

Please see Strategy for details.

5 Companies in Japan

Results	FY 2021: Scope 1: 13,567 tCO ₂ , Scope 2: 94,185 tCO ₂ ^(note1,2)
	FY 2021: The Bank, the Trust Bank, and the Securities
	(In June 2022, all of MUFG's domestic consolidated subsidiaries, including NICOS and ACOM, have completed the conversion to 100%
	renewable energy for their contracted electricity.)



	計測項	目/Item	単位/Unit	FY2017	FY2018	FY2019	FY2020	FY2021
	Scope1	直接的なCO ₂ 排出量 Direct CO ₂ emissions	t-CO ₂	11,836	10,795	9,963	9,560	13,567
CO₂排出量 CO₂ emission	Scope2	間接的なCO ₂ 排出量 Indirect CO ₂ emissions (電力:マーケット基準 Electricity:market-based)	t-CO ₂	202,004	186,870	184,020	162,159	94,185
		間接的なCO ₂ 排出量 Indirect CO ₂ emissions (電力:ロケーション基準 Electricity: location-based)	t-CO ₂	-	3		-	167,614
	Scope3	その他関連のある 間接的な CO_2 排出量 Other indirect CO_2 Emissions	t-CO ₂	10,598	10,309	7,959	3,526	74
	CDMクレジット等によるオフセット Offsets using CDM credits		t-CO ₂	0	0	0	0	0
	合計 Total	電力:マーケット基準 Electricity: market-based	t-CO ₂	224,439	207,973	201,942	175,244	107,825
		電力:ロケーション基準 Electricity: location-based	t-CO ₂	-	-		_	181,254
CO ₂ 排出原単位(床面積あた りCO ₂ 排出量)		電力 : マーケット基準 Electricity : market-based	t-CO ₂ /1,000m ²	103	96	93	84	52
(CO ₂ emission floor space)	ns per unit of	電力 : ロケーション基準 Electricity: location-based	t-CO ₂ /1,000m ²	-	-	_	-	88
電力使用量原単位(床面積あたり電気使用量) Basic unit of electricity use		kWh/m²	183	175	182	177	173	

CO_排出量推移/Changes in CO₂ Emission

(note1) Scope of aggregation: MUFG, MUFG Bank, Mitsubishi UFJ Trust and Banking, Mitsubishi UFJ Morgan Stanley Securities, and Mitsubishi UFJ NICOS.

(note2) Electricity is calculated based on market standards.

Sustainable Finance Target and Progress

Metric	Cumulative execution amount of sustainable finance
Target	Cumulative total of 35 trillion yen (including 18 trillion yen in the environmental sector) by FY2030

We have set our accumulated sustainable finance amount as of fiscal year 2030 as a sustainable finance target for solving environmental and social issues.

Our accumulated sustainable finance amount as of fiscal year 2020 was ¥7.9 trillion (of which, ¥3.6 trillion is environmental area), and was proceeding steadily towards this target. In April 2021, we raised our target from ¥20 trillion to ¥35 trillion.

In FY2021, the figure was 6.5 trillion yen (of which 1.8 trillion yen is for the environmental sector), an increase of 1.9 trillion yen year-on-year (0.1 trillion yen increase for the environmental sector). This is mainly due to the strong performance of SLL in other sectors, mainly overseas.

	Category	FY2019 results	FY2020 results	FY2021 results	Cumulative	FY2030 goals
Environmental	Project finances, etc. for renewable energy and environment-related businesses	0.5	0.6	0.6		18.0
	Underwriting and sales of Green Bonds.	0.5	0.5	0.5	5.4	
	Corporate loan origination for businesses contributing to climate change mitigation and adaptation, etc.	0.2	0.3	0.3		
	Financial advisory for businesses that contribute to climate change mitigation and adaptation	0.8	0.3	0.3		
	Others	0.0	0.0	0.2		
Social	Finance for social infrastructure development and regional vitalization, etc.	1.0	1.3	1.6	3.9	17.0
Others	Finance for solutions of various environmental and social issues.	0.6	1.4	3.2	5.2	17.0
Total		3.5	4.4	6.5	14.5	35.0

Progress in Sustainable Finance Goals

(note) Totals may not add up due to rounding.

Definition of Sustainable Finance

The term "Sustainable Finance" refers to the provision of finance for the following businesses (including loans, equity investment in funds, arrangement of project finance and syndicated loans, underwriting of equities and bonds, and financial advisory services) with reference to the relevant external standards (e.g. the Green Loan Principles, Green Bond Principles, and Social Bond Principles).

Environmental Area

• Businesses contributing to the adaptation to and moderation of climate change, including renewable energy, energy efficiency improvement, and green buildings (e.g. arrangement of loans and project finance for renewable energy projects, underwriting and distribution of green bonds).

Social Area

- · Businesses contributing to the development of startups, job creation, and poverty alleviation
- · Businesses contributing to the energizing of local communities and regional revitalization
- Fundamental service businesses, including those involved in basic infrastructure such as public transport, waterworks, and airports, and essential services such as hospitals, schools and police. (e.g. Emerging Industrial Technology Support Program, loans for regional revitalization projects such as MUFG Regional Revitalization Fund, arrangement of loans and project finance for public infrastructure, underwriting and distribution of social bonds).



Setting Targets for Reducing CO₂ Emissions Through Renewable Energy Project Finance

Metric	The amount of CO ₂ to be reduced through renewable energy project finance
Target	Reduction by 70 million tons (cumulative total from FY2019 to FY2030)
Results	Reduction by 26.83 million tons (cumulative total from FY2019 to FY2021)

As part of the effort to quantitatively identify and disclose the environmental impact of our financing, we have set a target to reduce CO_2 emissions by a cumulative total of 70 million tons^(note1) between FY2019 and FY2030 through project financing for renewable energy projects. This is equivalent to the annual CO_2 emissions from about half the households in Japan^(note2).

In FY 2021, we achieved an emission reduction of 10.68 million tCO_2 mainly due to the accumulation of financing for wind power plants and large-scale financing for solar power plants.

- (note1) Cumulative total of CO₂ reduction effect for one year, calculated from the amount of electricity generated by renewable energy projects underwritten in each fiscal year, facility utilization rates, and emission factors. The values take into account MUFG's contribution in the underwriting phase.
- (note2) Prepared by MUFG based on a survey by the Ministry of the Environment entitled Statistical Survey of CO₂ Emissions from the Household Sector (Household CO₂ Statistics)



Status of Carbon Related Assets (Credit Amounts)

Metric Carbon-related assets (credit amounts)

Based on the TCFD's recommendations, the status of credit balance^(note1) for carbon-related assets is newly disclosed in order to quantify the risks related to climate change.

The total amount at the end of FY 2021 is 60.9 trillion yen^(note2) (Energy: 8.2 trillion yen, Utilities: 8.3 trillion yen, Transportation: 12.2 trillion yen, Materials and Buildings: 27.8 trillion yen, Agriculture, Food, and Forest products: 4.4 trillion yen).

Environment



	Ccredit amounts* at the	Ratio
Energy	8.2	5.1%
Oil & gas	7.8	4.8%
Coal	0.3	0.2%
Utilities	8.3	5.1%
Electricity	6.8	4.2%
Coal-fired power	1.2	0.7%
Gas-fired power, power transmission and distribution, etc.	5.6	3.5%
Gas supply etc.	1.5	0.9%
Transport	12.2	7.6%
Air cargo	0.7	0.4%
Passenger cargo	0.9	0.6%
Marine transport	1.6	1.0%
Rail transport	1.7	1.1%
Truck service	2.0	1.2%
Automobile and parts	5.3	3.3%
Material and building	27.8	17.2%
Metals and mining	4.1	2.5%
Chemical	4.6	2.9%
Building materials	0.6	0.4%
Capital goods	6.8	4.2%
Real estate management and development	11.7	7.3%
Agriculture, foods, forestry products	4.4	2.7%
Beverage	1.0	0.6%
Agriculture	0.3	0.2%
Processed food, meet	2.2	1.4%
Paper/Forestry products	0.9	0.6%
Carbon-related assets	60.9	37.8%
All sector total	161.3	100.0%

(note1) Total of loans, trade finance, letter of credit & guarantees and undrawn commitment facility, etc.

- (note2) Based on the revision of the TCFD Recommendations in October 2021, the scope has been expanded to include transportation, materials and buildings, and agriculture, food, and forest products, in addition to conventional energy and utilities. Credit to renewable power generation is exclude from credit amount related to the utility sector . The total includes partner banks (MUFG Union Bank, Krungsri (Bank of Ayudhya), and Bank Danamon). Sector classification based on the primary business (largest sales) of the borrower.
- (note3) Excluding interbank transactions, credit to government agencies and central banks, etc.



Credit Amounts Related to Coal-Fired Power Generation - Project Finance-

Metric	Credit amount related to coal-fired power generation —Project finance (balance of lending)
Target	Reduce the balance by 50% by the end of FY 2030 from the FY 2019 level and reduce it to zero by FY 2040 $^{(note)}$
Results	US\$2,955 million (as of the end of FY 2021)

It is outlined in the MUFG Environmental and Social Policy Framework not to provide financing to new coal-fired power generation projects in principle. MUFG have set a target of reducing the balance of financing to coal-fired power generation projects by 50% from FY2019 by FY2030, and reducing it to zero by FY2040.

Actual results at the end of the current fiscal year decreased by \$819 million compared to the end of the previous fiscal year mainly due to repayment of individual projects (including contract repayments) and decrease in valuation of the yen-denominated balance caused by the depreciation of the yen.



(note) Projects that contribute to the transition toward a decarbonized society are exceptional following the MUFG Environmental and Social Policy Framework.



Credit Related to Coal-fired Power Generation - Corporate Finance -

Metric	Corporate finance for coal-fired power generation 〈credit amounts〉
Target	Reduce the credit balance to zero by FY2040 ^(note)
Results	Approx. 90 billion yen (as of the end of FY2021)

In April 2022, we set a target to reduce to zero the balance of financing to coal-fired power generation projects by FY2040 .

We will continue to promote investments and loans for green, transition, and innovation through engagement (dialogue) aimed to help customers decarbonize who are operating coal-fired thermal power generation.



⁽note) Projects that contribute to the transition toward a decarbonized society are exceptional following the MUFG Environmental and Social Policy Framework.

Environmental Impacts of Project Financing for Power Sector Projects



The purpose of this calculation is to measure the environmental impact of project finance for power sector projects. The scope includes fossil fuel (coal, oil, and gas) thermal power generation and renewable energy projects.

(note) The intensity at the end of each fiscal year is calculated only from the project finance implemented in the relevant fiscal year.



End of FY 2017	End of FY 2018	End of FY 2019	End of FY 2020	End of FY 2021
0.410	0.368	0.385	0.242	0.231

Basic Unit of Electricity Use

Metric	Basic unit of electricity use (electricity/ total floor space)
Target	Reductions by 10.5% and 19.0% of the 2009 level by FY2020 and FY2030 respectively
Results	FY2021: Reductions by 20.0% of the 2009 level

As part of its efforts to reduce environmental impacts, the Bank has set targets for FY2020 and FY2030 to reduce the energy intensity index.

In FY2021, we achieved our target for FY2030 with 20.0% less energy consumption comparing to FY2009. For the FY2030 target, we will continue to promote further reduction of environmental impact by setting higher targets and expanding the scope of the target within the Group.

Climate Alignment of Ship Finance Portfolio on an Annual Basis - the Poseidon Principles-

In March 2021, the Bank signed and has participated in the Poseidon Principles.

The Principles aim to contribute financially to the maritime industry's endeavor to tackle climate change in order to achieve the GHG emission reduction targets set by the International Maritime Organization (IMO) and its strategic goal.

For FY2022, as a signatory, the Bank will calculate the overall climate alignment of a shipping finance portfolio based on annual CO_2 emissions data for each vessel as of December 31, 2021 and submit the result to the Poseidon Principles Association. The Bank will publish the result after the Association publishes the results of signatories. After the first disclosure, the Bank will publish the result annually.

Assets, Operations, etc. that are Impacted by Transition Risks and Physical Risks

For assets and businesses that are impacted by transition risks and physical risks, MUFG conducts scenario analysis for those risks. Please refer to the **Strategy** page for more details.

Executive Compensation Commensurate with Climate Change Response

Please refer to the Governance page for more details on executive compensation commensurate with climate change measures.



Future Action Plan

MUFG will continue its efforts to achieve net-zero GHG emissions from its investment and financing portfolio by 2050, as committed in the MUFG Carbon Neutrality Declaration, and will lead the way in addressing climate change, one of the most serious issues that the world faces.

Furthermore, based on the TCFD recommendations, MUFG will continue to address risks and opportunities related to climate change under the supervision of the Board of Directors and disclose the status of such efforts in a timely, appropriate, and proactive manner.

Action Plan for Initiatives to Address Climate Change

Recommended disclosure items	Action Plan (during FY2022)			
Governance	 The Sustainability Committee deliberates the status of initiatives to address climate change, issues, information disclosure, etc., based on the TCFD recommendations, and then reports to the Executive Committee, which in turn reports to the Board of Directors where the matters are reviewed. Educational sessions for outside directors on initiatives aimed at achieving carbon neutrality. Study sessions for management who evaluates and manages risks and opportunities related to climate change, on responses to social issues such as biodiversity and human rights, as well as on responses to climate change. 			
Strategy	 Materialization and promotion of the MUFG Carbon Neutrality Declaration. Additional disclosure of sector-specific interim targets for 2030 toward net zero of financed portfolios by 2050. Roadmap toward net zero emissions by 2030. Deeper engagement and provision of a variety of solutions based on engagement. Expansion of sectors for scenario analysis. 			
Risk management	 Continuous revision of the finance policy (MUFG Environmental and Social Policy Framework). Continuous studies on the establishment, maintenance, and management of climate change-related risk management systems, and ways to reflect them in the credit process. 			
Metrics and Targets	 Additional disclosure of interim targets by sector for Scope 3 (GHG emissions produced through financing). For Scope 1 and 2 (GHG emissions produced by the MUFG Group), global emissions aggregation and disclosure, and implementation of GHG reduction measures such as switching to renewable energy. 			



Responses to Climate Change Measures as an Asset Manager

Responses to TCFD as an Asset Manager

Asset management companies under the MUFG umbrella are endorsing TCFD as asset managers and working to analyze the status of the investees' response to climate change and assess their impact through the management of the portfolios they manage under contract.

The Trust Bank disclosed information about the management of the portfolios it manages in line with the TCFD's recommendations for disclosure under Governance, Strategy, Risk Management, and Metrics and Targets regarding climate-related risks and opportunities. By proactively disclosing climate change-related information, we will help our clients understand the status of their portfolios and encourage the companies in which we invest to take action on climate change.

Greenhouse Gas Emissions-Related Indicators for the Portfolio

MUFG calculates and evaluates greenhouse gas emission-related indicators (total greenhouse gas emissions, carbon footprint, and weighted average carbon emission factors) for measuring and managing climate change related risks and opportunities in our portfolios of equities and bonds.

Indicators related to greenhouse gas emission are calculated using a data collection and analysis method via Institutional Shareholder Services (ISS). The analysis of total annual GHG emissions (Scope1 and Scope2) for all investees, including MUFG AM^(note) and First Sentier Investors, confirms that the total annual GHG emissions will be 22.4 million t-CO₂e (as of March 31, 2022).

(note) The Trust and its subsidiaries, Mitsubishi UFJ International Investment Trust, M.U. Investment Management, Inc. Mitsubishi UFJ Asset Management (UK) Ltd.

Total carbon emissions (Scope 1 to 2, million t-CO ₂ e)	Carbon footprint (t-CO ₂ e/million USD)	Weighted average carbon intensity (t-CO ₂ e/million USD)
22,442	61.63	148.98

Indicators Related to the Amount of Greenhouse Gas Emissions

- Total carbon emissions: Total amount of greenhouse emissions related to the portfolio
- · Carbon footprint: Total greenhouse gas emissions divided by the market value of the portfolio
- Weighted average carbon intensity (WACI): Weighted average of emissions per unit of sales of the investee company according to the composition of the portfolio



Understanding of Climate Change Risks through Analysis

Scenario Analysis

MUFG used ISS's analysis method by Sustainable Development Scenario (SDS)^(note1) based on the Paris Agreement (to keep the temperature rise well below 2°C and continue efforts to limit it to 1.5°C) announced by the IEA^(note2) in 2019 to forecast future trends in total greenhouse gas emissions reductions up to 2050 in the investee companies in the portfolio targeting equities and bonds^(note3).

As a result of the analysis, MUFG has projected the transition of total greenhouse gas emissions for a single portfolio of assets, and the companies in our portfolio currently account for approximately 60% of allowable greenhouse gas emissions and are expected to exceed the SDS by 2038. MUFG believes that, based on the results of its analysis, it is important to encourage portfolio companies to limit the risk of transition in the medium to long term.

- (note1) IEA: International Energy Agency
- (note2) SDS (Sustainable Development Scenario): A scenario in which global warming policies and investments are implemented to achieve the Paris Agreement, and progress is made toward achieving the SDGs and other sustainable development goals.
- (note3) The analysis covers all industries except fossil fuel producers: Scope1- 2, fossil fuel producers: Scope3, electricity: Scope1



Portfolio greenhouse gas Emission Pathway

Initiatives for Responding to Climate Change as an Asset Management Company

MUFG recognizes the risk that climate change will cause a significant impact on society and the economy, which in turn will damage the value of our clients' portfolios. On the other hand, we believe that the impact of climate change can serve as a major business opportunity if investee companies respond proactively. As an asset management company, we strive to improve our investment capabilities in light of the risks and opportunities that climate change brings to our portfolio. Meanwhile, we believe that we can contribute to the resolution of climate change issues by encouraging appropriate responses through discussions with investee companies and collaboration with other stakeholders.



Positioning Climate Change as a Material ESG Issue

In a materiality matrix, ESG issues on asset management are mapped from the perspective of materiality in terms of society and MUFG Asset Management. In this context, climate change has been positioned as one of the most significant issues. (We are the first Japanese asset management company to adopt a materiality matrix) Addressing climate change is essential for improving investment value. We will contribute to the smooth transition to a decarbonized society through engagement, etc. with our investees.



Materiality matrix

MUFG-AM is addressing climate change issues with a focus on the following four areas:

Engagement/Exercise of Voting Rights

It must be said that funding and recovery from investment alone will only have limited effect on GHG reduction in the real world. Through engagement (purposeful discussion with investees) and the exercise of voting rights, MUFG encourages individual investee companies to reduce their GHG emissions. We believe that this will lead to a smooth resolution of climate change issues and to a sustainable increase in investment value. MUFG engages in ESG issues from a perspective of sustainable value enhancement of investment. We also participate in Climate Action 100+ (CA100+), a global investor initiative. CA100+ interacts with approximately 160 companies that emit large amounts of GHG to promote efforts to reduce emissions. As one of the lead investors, we lead engagement with target Japanese companies.

Managing Financial Products as a Response to Climate Change

In principle, MUFG-AM has been devising ways to incorporate ESG perspectives into their investment process for all assets under management related to entrusted assets. With regard to the investment products that focus on addressing climate change issues, we provide investment products such as low-carbon index-linked passive management and active management that focus on sustainable energy to meet the needs of our customers.

Products offered (examples)

- MAXIS Carbon Efficient Japan Equity ETF
- · iSTOXX MUTB Japan Low Carbon Risk 30 Index linked investment
- Green Technology Equity Fund (active/outsourced)
- Sustainable Energy Fund (active/outsourced)



Collaboration with Initiatives

The Net Zero Asset Managers (NZAM) initiative is a global initiative led by asset managers committed to solving climate change issues. NZAM aims to achieve net-zero GHG emissions from its investees by 2050, in order to achieve the goal agreed in the Paris Agreement (to keep the global average temperature rise below 2°C, compared to pre-Industrial Revolution and to keep it at 1.5°C). MUFG AM has been an active member since November 2021. Investment managers participating in NZAM are required to: A. cooperate with asset owners to support decarbonization; B. establish intermediate targets to achieve net zero emissions; and C. review interim targets every five years. Interim targets are scheduled to be announced in October 2022.



in line with international efforts to limit the global temperature increase to 1.5°C. MUFG will set an interim target for 2030 by October 2022 for the proportion of assets under management consistent with achieving net zero GHG emissions by 2050.

Surveys, Research, and Dissemination of Information on Sustainable Investment

In May 2021, MUFG and its asset management company, First Sentier Investors, jointly established the MUFG First Sentier Sustainable Investment Institute. The Institute communicates neutral and practical research information to institutional investors around the world with the aim of promoting sustainable investment, developing global capital markets, and solving ESG issues and contributing to the uproar of a sustainable and better world.

