



# **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)







- Invited and utilized two external advisors for the environmental and social fields (2019)
- 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 349gCO<sub>2</sub>e/kWh to 156-192gCO<sub>2</sub>e/kWh; Oil & Gas: Reduce absolute GHG emissions from 83MtCO<sub>2</sub>e 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.
- 4. 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 <sup>(note)</sup>	
Credit risk	<ul> <li>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.</li> </ul>	• 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	<ul> <li>Spending on capital investment may grow due to the need for measures aimed at reducing CO<sub>2</sub> emissions and enhancing business continuity capabilities.</li> </ul>	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 operations.		Short-to long-term	
Strategic risk  • If MUFG fails to live up to its public common to support the transition to a decarbonized society, its capabilities for strategic execution be negatively affected by a deterioration in 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	

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.







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<sup>(note)</sup> 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	<ul> <li>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.</li> </ul>
Target sector	Energy, utilities, automotive, <u>steel, air and maritime transportation sectors</u>
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 (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	<ul> <li>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.</li> <li>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.</li> </ul>
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 115.5 billion yen (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: 156-192gCO<sub>2</sub>e/kWh (2030) 349gCO<sub>2</sub>e/kWh (achievement in 2019)
  - Oil & gas sector: 15%-28% less than 2019 level (2030)
     83MtCO<sub>2</sub>e (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.





#### 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 from FY2019 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 CO<sub>2</sub> emissions through renewable energy project financing
- MUFG set a cumulative CO<sub>2</sub> reduction target of 70 million tCO<sub>2</sub> from FY2019 to FY2030 and disclosed its progress (May 2021). The achievement for FY2021 was 26.83 million tCO<sub>2</sub>.
- 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<sup>(note)</sup>. 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.

# Governance

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

# MUFG's Governance Structure for Countering Climate Change

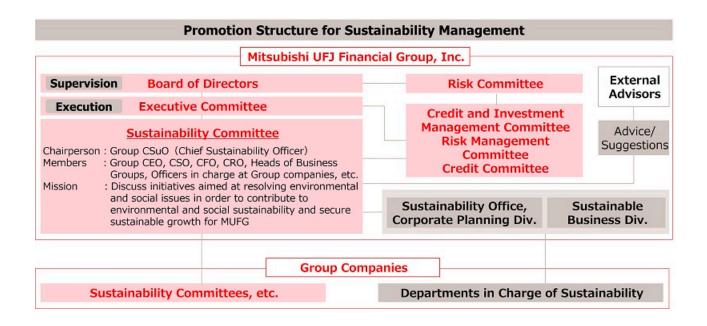
At MUFG, the Sustainability Committee, which operates under the Executive Committee, is charged with periodically deliberating policies on and determining the status of the Group's response to opportunities and risks arising from climate change and other environmental and social concerns.

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	<ul> <li>Release of the MUFG Carbon Neutrality Declaration</li> <li>Progress related to the MUFG Carbon Neutrality Declaration</li> <li>Engagement with customers, sustainable finance, setting of interim targets for financed portfolio, and reduction of in-house GHG emissions</li> <li>Status of activities in external initiatives (such as NZBA)</li> <li>Revision of the MUFG Environmental and Social Policy Framework</li> <li>Assessment by ESG rating agencies</li> </ul>
9	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	<ul> <li>Release of the MUFG Carbon Neutrality Declaration</li> <li>Progress related to the MUFG Carbon Neutrality Declaration</li> <li>Revision of the MUFG Environmental and Social Policy Framework</li> <li>Status of MUFG's sustainability management initiatives and address for future         (Report on matters to be deliberated by the Sustainability Committee)     </li> </ul>
	Credit & Investment Management	Recognition of current conditions and issues     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
Execution	Credit Committee	<ul> <li>Recognition of current conditions and issues related to climate change</li> <li>Report on the status and outlook of climate change-related risk management efforts</li> <li>Revision of credit policies related to climate change</li> </ul>
	Sustainability Committee	<ul> <li>Progress related to the MUFG Carbon Neutrality Declaration</li> <li>Engagement with customers, sustainable finance, setting of interim targets for financed portfolio, and reduction of in-house GHG emissions</li> <li>Status of activities in external initiatives (such as NZBA)</li> <li>Revision of the MUFG Environmental and Social Policy Framework</li> <li>Assessment by ESG rating agencies</li> </ul>



# 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<sup>(note)</sup> for executive compensation. The intention is to align MUFG's corporate activities withthe interests of its diverse stakeholders.

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

Type of compensation	Linkage with performance	Performance- based compensation range		Standards for payment Weight				Payment method	Proportion of Group CEO's compensation
Annual base salary	Fixed	-	<ul> <li>Include</li> </ul>	Paid based on positions, etc.     Includes Director Allowance, Committee and Chair Allowance, Housing Allowance, Overseas Representative Allowance, etc.		Monthly	Cash	1	
	Non- performance- based	-	Base am	oun	t by position		At the time of retirement of executives		
Stock compensation	Medium- to long-term performance- based	0-150%	Base amount by position	×	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  Performance factor (competitor comparison evaluation)  Comparison of year-on-year growth rate of indices below with competitors (1) Consolidated net operating profits  2	50%> 0% 5% 5% 50%>	At the end of the MTBP	50% in shares 50% in cash Note: Subject to malus (confiscation) and clawback (restitution claim)	1
Cash bonuses	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 (2) Profits attributable to owners of parent (3) Consolidated ROE (4) Consolidated expense amount  Status of individual execution of duties (qualitative evaluation factor applied to Group CEO)	20% 10% 20% 10%	Annually	Cash	1

- 1. 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 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**

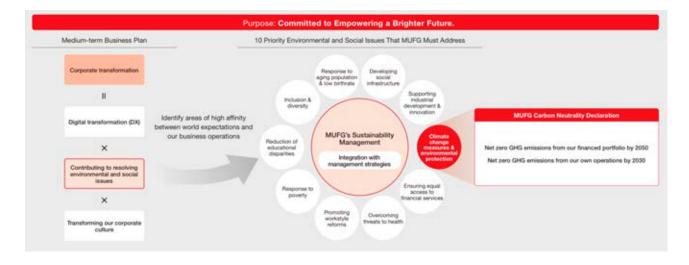
In April 2021, we defined our purpose as being "Committed to empowering a brighter future." Since then, we have been implementing our medium-term business plan, led by a heightened commitment to helping resolve environmental and social issues.

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.

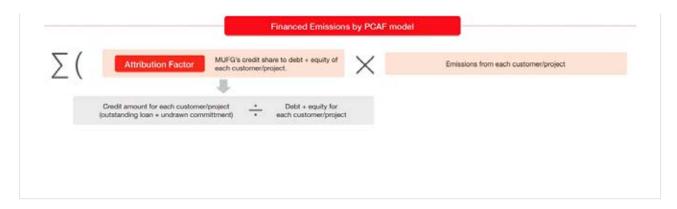
To reflect our stance mentioned above, we have set ranged interim targets in order to work together with our stakeholders to achieve net zero GHG emissions by 2050.

#### 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.



## 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



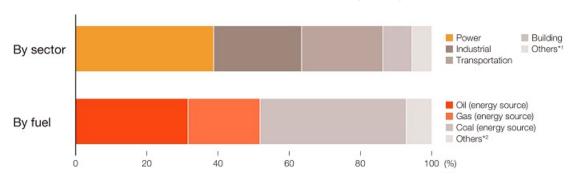




generation; and transport. Among these sectors, MUFG especially puts priority on the power and the oil & gas sectors for the following reasons.

- (1) CO<sub>2</sub> emissions from the power sector account for approximately 40% of global CO<sub>2</sub> 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 CO<sub>2</sub> 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 CO<sub>2</sub> emissions in 2019 (GtCO<sub>2</sub>)



Source: IEA World Energy Outlook 2021

- 1. Agriculture, forestry, fisheries, etc.
- 2. CO<sub>2</sub> emissions from sources other than fossil fuel combustion (industrial processes, waste, etc.)

## **Sector Analysis**

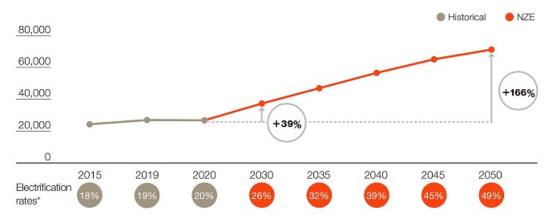
#### The Power Sector

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 <sup>(note)</sup>.

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.

(note) Electricity demand under the IEA 1.5°C scenario (IEA NZE scenario in which the increase in the global surface 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

<sup>\*</sup> The ratios of electricity to final energy consumption

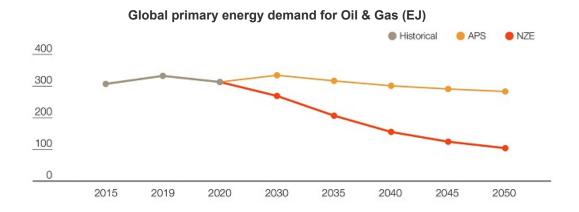




#### The Oil & Gas Sector

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.

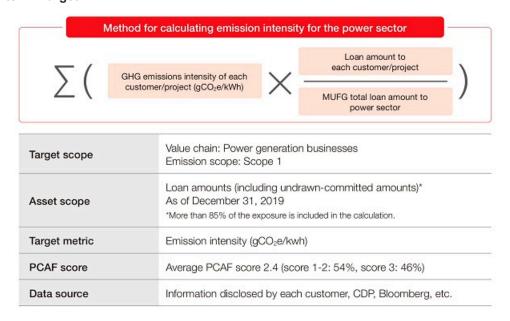


Source: IEA World Energy Outlook 2021

## **Target metric, Method and Setting Interim Target**

#### **The Power Sector**

· Setting Interim Target



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



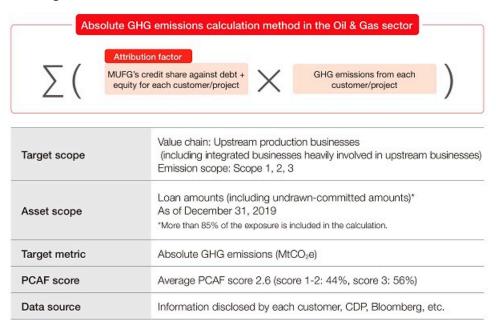
The interim target for 2030 is 156-192gCO<sub>2</sub>e/kWh.

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 192gCO<sub>2</sub>e/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. 192gCO<sub>2</sub>e/kWh is a level well below the IEA 2°C scenario in 2030.

In addition to the above, we aim for 156gCO<sub>2</sub>e/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



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



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.

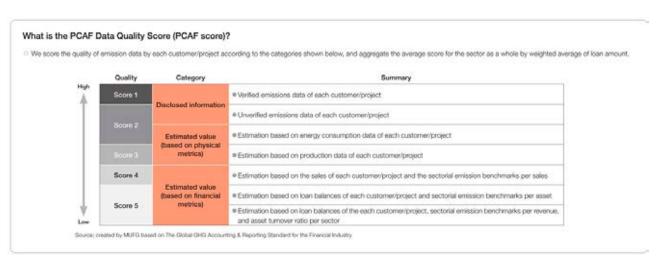
#### · Interim Target



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; coment; cost; commercial & residential real estate; fron & steet oil & gas;  power generation; and transport. (Banks 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 loans from partner barks 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<sup>(note1)</sup> 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<sup>(note2)</sup> 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.

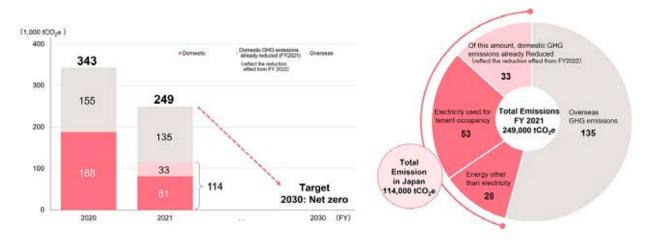




#### **GHG Emission Results**

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 tCO $_2$ e (based on preliminary figures), which was a reduction of 94,000 tCO $_2$ e (approximately 27%) from the previous year. In FY 2022, we have already reduced our domestic emissions by 33,000 tCO $_2$ e, which is planned to be reflected in our FY 2022 emissions results.



By emissions type, direct GHG emissions (Scope 1) were 35,000 tCO<sub>2</sub>e (14%) and indirect GHG emissions (Scope 2) were 214,000 tCO<sub>2</sub>e (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.

[Unit: 1,000tCO2e]

		FY2021			FY2020		Cor	mpared to F	Y2020
	Total	Domestic	Overseas	Total	Domestic	Overseas	Total	Domestic	Overseas
MUFG Total	249	114	135	343	188	155	▲94	▲74	▲20
Scope1	35	20	15	31	14	17	4	6	▲2
Gas/Heavy oil	27	17	10	24	10	14	3	7	<b>A</b> 4
Gasoline/Light oil	8	4	4	7	4	3	1	0	2
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	(

#### Switching to Renewable Electricity

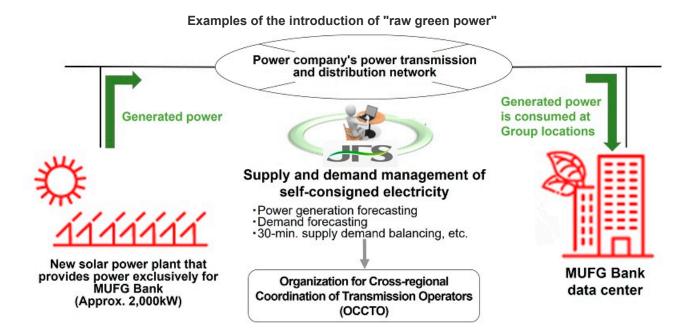
By November 2021, the Bank, the Trust Bank, and the Securities completed switching to 100% renewable energy for their own domestic electricity contracts. Since the release of the MUFG Carbon Neutrality Declaration in May 2021, we have reduced domestic emissions by approximately 60% (approximately 30% 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.





# 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.



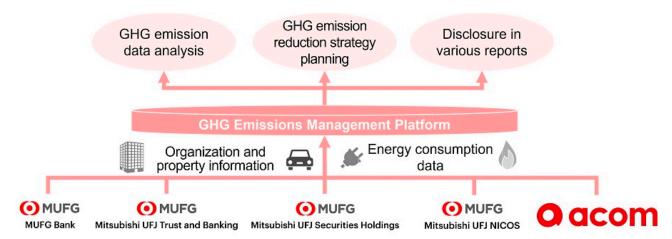
#### Switching to Electric Vehicles (EVs) for Company Cars

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.

#### **GHG Emissions Management Platform**





## 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<sup>(note)</sup> 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<sup>(note2)</sup> 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 highly-standardized 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



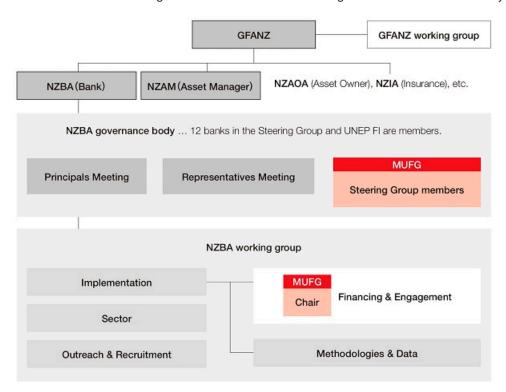
well as recommendations from the financial industry to other industries. GFANZ plans to use these discussions to make policy recommendations to the G20 and COP27.

## 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.

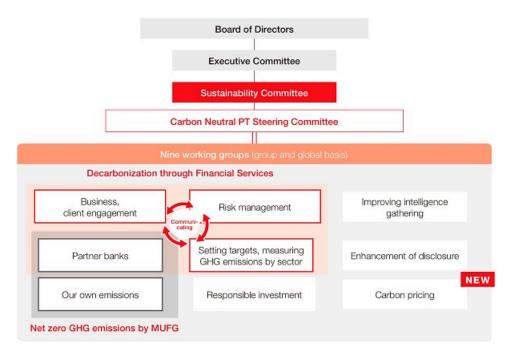
#### Collaboration with the University of Tokyo - Launching the ETI-CGC

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



<sup>\*1</sup> Scope 1 emissions from power generation businesses

# **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.

<sup>\*2</sup> 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

# 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<sup>(note)</sup>, 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. 17 trillion yen/year	Approx. 150 trillion yen over 10 years  Examples of Decarbonization investment	Amount of investments
Decarbonization of power sources /fuel transition	Approx. 5 trillion yen/year	<ul> <li>Renewable energy (through feed-in tariff (FIT) / feed-in premium (FIP) programs, etc.)</li> <li>Hydrogen/ammonia (investment in hydrogen and ammonia infrastructure development)</li> <li>Manufacures of batteries (in-vehicle/stationary)</li> </ul>	Approx. 2.0 trillion yen Approx. 0.3 trillion yen Approx. 0.6 trillion yen
Decarbonization of manufacturing processes	Approx. 2 trillion yen/year	<ul> <li>✓ Energy efficiency improvement/decarbonization in manufacturing processes (next generation manufacturing process technology, carbon neutral power generation technology, etc.)</li> <li>✓ Introduction of industrial heat pumps and co-generation systems</li> </ul>	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	<ul> <li>Carbon Recycling (CO<sub>2</sub> separation and capture, synthetic methane, synthetic fuel, SAF, etc.)</li> <li>Development of manufacturing processes conducive to carbon neutrality (hydrogen reduction steelmaking, etc.)</li> <li>Nuclear power (R&amp;D of innovative reactors, etc.)</li> <li>Implementation of leading-edge CCS projects</li> </ul>	Approx. 0.5 trillion yen Approx. 0.1 trillion yen Approx. 0.1 trillion yen Approx. 0.6 trillion yen

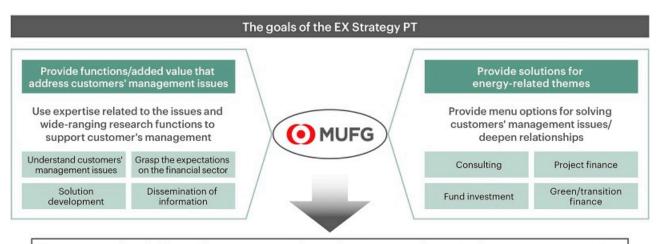
Prepared by MUFG based on the document published by the Ministry of Economy, Trade and Industry

# 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

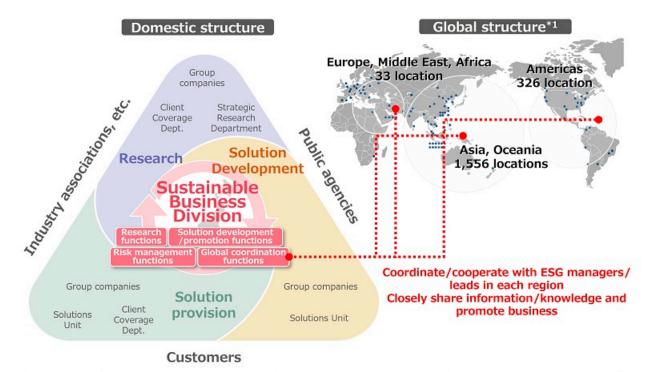


Propose ways for the financial sector to contribute to business transformation from energy perspective

#### 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.



<sup>\*1</sup> 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)







# **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.

# **Engagement example (Japanese Corporate)**



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) and by providing support for obtaining a second party opinion in order to promote the company's ESG strategy through its 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 <sub>2</sub> emission reduction.  Going forward, MUFG will continue to help enhance Japan Airline's commitment to ESG management by supporting 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 neutrality 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 initiatives 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 environment in which financial institutions are operating.				
	MUFG not only provides project finance support for geothermal power projects to customers in the oil & gas sector, but 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 companies are working together to help customers make successful transitions.				







# Engagement example (Global Corporate)



Customer	Status of Implementation
Company A (Indonesia, Power and Utility)	The company has a roadmap towards 2025 to achieve an increase in renewable energy capacity as well as reduction of coal related power generation capacity within the power generation mix and has plans to tap into sustainability-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 (Oceania, Power and Utility)	In Australia, an increase in renewable energy generation capacity and the development of power transmission infrastructure are underway to decarbonize power sources. As part of this effort, the company, who operates a high-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.
Company C (Thailand, Oil and Gas)	The company has committed to achieving net-zero emissions by 2050 and is in the process of setting interim targets 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.
Company D (Indonesia, Oil and Gas and renewable energy)	The company has recently joined regional CCUS (Carbon dioxide Capture Utilization and Storage) institutions and signed joint study agreements to assess the potential for large-scale implementation of lower-emissions technologies, 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 (Oceania, Oil and Gas)	The company was considering participating in a CCS (Carbon dioxide Capture and Storage) project as its core 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 Kingdom, Transportation)	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 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.
Company G (United Kingdom, Power and Utility)	A UK utility company defined ESG as its core strategic priority to achieve its energy transition. MUFG has had ongoing discussions with the company's management team to provide financing support. As a result, MUFG provided 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 (EMEA, Oil and Gas)	MUFG has been having regular conversations with a global energy company's senior management team to support the company's transition strategy. In addition to understanding the company's energy transition strategy, MUFG share 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, Power and Utility)	MUFG provided educational and benchmarking materials with respect to ESG reporting and emissions commitments 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





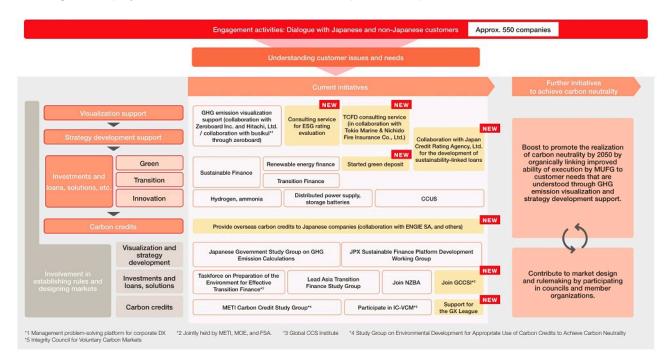
# Hosted an Engagement Seminar for Realization of a Carbon-Neutral Society

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.



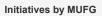
# **Development and Provision of Decarbonized Solutions Based on Customer Needs**

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.











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

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 CO<sub>2</sub> 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.

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

#### Investments Based on Sustainable Business Investment Strategy



Investment (Fund Name)	Asset Manager	Investment Targets	Estimated Impact of Bank Investment (Effect of CO <sub>2</sub> Reduction)
Global Renewable Power Fund III )	BlackRock, Inc.	Ancillary facilities such as renewable energy, power storage, and distribution facilities	Approximately 20,000 tCO <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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.

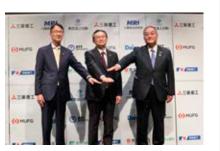
In March 2022, we established the first Carbon Neutral Fund operated by Z Energy Corporation, and have started investing in renewable energy power generation projects<sup>(note2)</sup>.

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 

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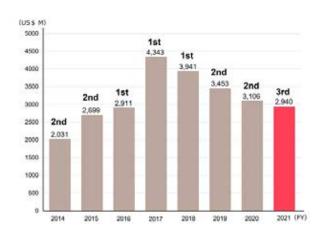
(note2) Press release (December 1, 2021):Investment in Carbon Neutral Fund 1 Investment Limited Partnership (in Japanese)



#### 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  $\text{CO}_2$  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  $\text{CO}_2$  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.

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<sup>(note1)</sup> 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<sup>(note2)</sup> 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 CO<sub>2</sub>, 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)<sup>(note)</sup> 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<sup>(note1)</sup> 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<sup>(note2)</sup> Advisory Council of the Green Bond Principles and Social Bond Principles<sup>(note3)</sup> 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 CO2 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)

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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

(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	<ul> <li>Increase in the cost due to GHG emissions by the introduction of a carbon tax</li> <li>Strengthened obligation to report emissions</li> <li>Regulations on existing products and services Subject of lawsuits</li> </ul>
Technology	<ul> <li>Switch to existing products and services with lower GHG emissions</li> <li>Setback in the investment in new technologies</li> <li>Cost of transition to low emission technologies</li> </ul>
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 <sup>(note)</sup>
Credit risk	<ul> <li>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.</li> </ul>	<ul> <li>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.</li> </ul>	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	<ul> <li>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.</li> </ul>	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	<ul> <li>Spending on capital investment may grow due to the need for measures aimed at reducing CO<sub>2</sub> emissions and enhancing business continuity capabilities.</li> </ul>	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	<ul> <li>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.</li> </ul>
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.



#### **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<sup>(note)</sup> 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.

Source: Hirabayashi Y, Mahendran R, Koirala S, Konoshima L, Yamazaki D, Watanabe S, Kim H and Kanae S (2013) (note) 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	<ul> <li>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.</li> <li>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.</li> </ul>
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



# **Risk Management**

#### **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**

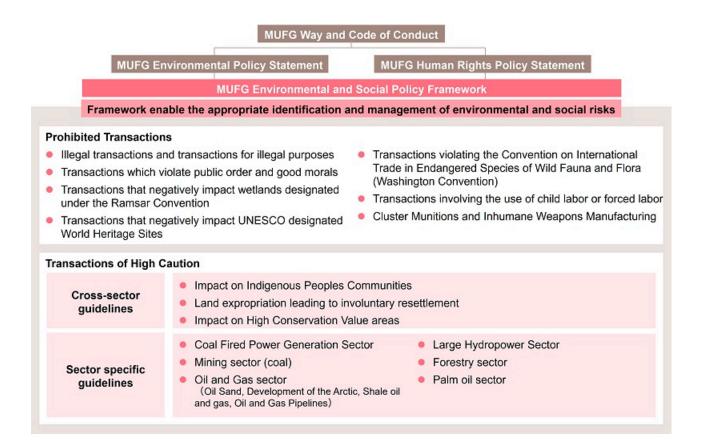
We implemented MUFG Environmental and Social Policy Framework to manage environmental and social risks associated with our financing<sup>(note)</sup>. Concerning coal-fired power generation, mining (coal), oil and gas, and other specific sectors in which concerns are raised over environmental and social 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.

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

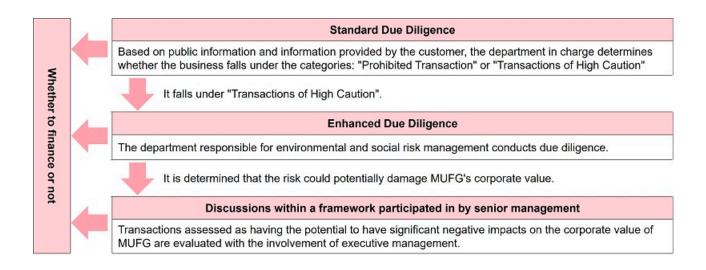




#### **MUFG Environmental and Social Policy Framework**



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



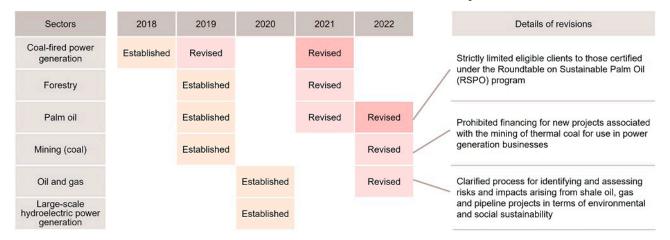
#### Policies on the Sectors Related to the Environment, Including Climate Change

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 <sup>(note)</sup> 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-ricant 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-specific, 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
- $\boldsymbol{\cdot}$  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
- $\boldsymbol{\cdot}$  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 <sub>2</sub> e/kwh)	Reduce the CO <sub>2</sub> emissions intensity to the range of 156 to 192gCO <sub>2</sub> e/kWh by 2030 349gCO <sub>2</sub> e/kWh (2019)	_
	Oil & Gas Sector: Absolute GHG emissions (MtCO <sub>2</sub> e)	Reduce the absolute volume of CO <sub>2</sub> emissions by 15% to 28% by the end of 2030 from the 2019 level  83MtCO <sub>2</sub> e (2019)	_
Net Zero GHG from Own Operations	Scope 1 and 2 emissions	Net zero by 2030	(FY 2020) 343 thousand tCO <sub>2</sub> (FY 2021 based on preliminary figures) 249 thousand tCO <sub>2</sub>
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 <sub>2</sub> 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)

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

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

<sup>(</sup>note3) As of the end of FY2020: Approx. ¥120.0 billion





#### Other disclosure items:

- · Carbon-related assets (credit amounts)
- CO<sub>2</sub> 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 <sub>2</sub> e/kwh) Oil & Gas Sector: Absolute GHG emissions (MtCO <sub>2</sub> 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 <sub>2</sub> e. FY 2021: Scope 1 and Scope 2 emissions (preliminary figures) totaled to 249,000 tCO <sub>2</sub> e.

Please see Strategy for details.

#### 5 Companies in Japan

Results	FY 2021: Scope 1: 13,567 tCO <sub>2</sub> , Scope 2: 94,185 tCO <sub>2</sub> <sup>(note1,2)</sup> 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.)
Results	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%



#### CO2排出量推移/Changes in CO2 Emission

	計測項目/Item		単位/Unit	FY2017	FY2018	FY2019	FY2020	FY2021
	Scope1	直接的なCO <sub>2</sub> 排出量 Direct CO <sub>2</sub> emissions	t-CO <sub>2</sub>	11,836	10,795	9,963	9,560	13,567
		間接的なCO <sub>2</sub> 排出量 Indirect CO <sub>2</sub> emissions (電力:マーケット基準 Electricity: market-based)	t-CO <sub>2</sub>	202,004	186,870	184,020	162,159	94,185
CO₂排出量	Scope2	間接的なCO <sub>2</sub> 排出量 Indirect CO <sub>2</sub> emissions (電力:ロケーション基準 Electricity: location-based)	t-CO <sub>2</sub>	-	-		_	167,614
CO <sub>2</sub> emission	Scope3	その他関連のある 間接的なCO <sub>2</sub> 排出量 Other indirect CO <sub>2</sub> Emissions	t-CO <sub>2</sub>	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 <sub>2</sub>	0	0	0	0	0
	合計	電力:マーケット基準 Electricity: market-based	t-CO <sub>2</sub>	224,439	207,973	201,942	175,244	107,825
	Total	電力:ロケーション基準 Electricity: location-based	t-CO <sub>2</sub>	-	-	-	-	181,254
りCO <sub>2</sub> 排出量)	立(床面積あた CO <sub>2</sub> emission	電力:マーケット基準 Electricity: market-based	t-CO <sub>2</sub> /1,000m <sup>2</sup>	103	96	93	84	52
	ns per unit of	電力:ロケーション基準 Electricity: location-based	t-CO <sub>2</sub> /1,000m <sup>2</sup>	-	-	_	_	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	

(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.





#### **Progress in Sustainable Finance Goals**

[Unit: trillion yen]

	FY2019 results	FY2020 results	FY2021 results	Cumulative	FY2030 goals	
	Project finances, etc. for renewable energy and environment-related businesses	0.5	0.6	0.6	5.4	18.0
	Underwriting and sales of Green Bonds.	0.5	0.5	0.5		
Environmental	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	
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

(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).



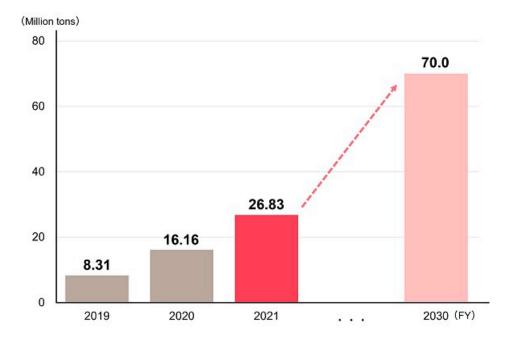
#### Setting Targets for Reducing CO2 Emissions Through Renewable Energy Project **Finance**

Metric	The amount of CO <sub>2</sub> 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<sub>2</sub> emissions by a cumulative total of 70 million tons<sup>(note1)</sup> between FY2019 and FY2030 through project financing for renewable energy projects. This is equivalent to the annual CO<sub>2</sub> emissions from about half the households in Japan<sup>(note2)</sup>.

In FY 2021, we achieved an emission reduction of 10.68 million tCO2 mainly due to the accumulation of financing for wind power plants and large-scale financing for solar power plants.

- (note1) Cumulative total of CO<sub>2</sub> 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 CO<sub>2</sub> Statistics)



#### Status of Carbon Related Assets (Credit Amounts)

Metric	Carbon-related assets (credit amounts)
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Based on the TCFD's recommendations, the status of credit balance<sup>(note1)</sup> 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).



#### Carbon-related assets (credit amounts)

[Unit: trillion yen]

	[Unit: trillion ye				
	Ccredit amounts* at the end of FY2021	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.

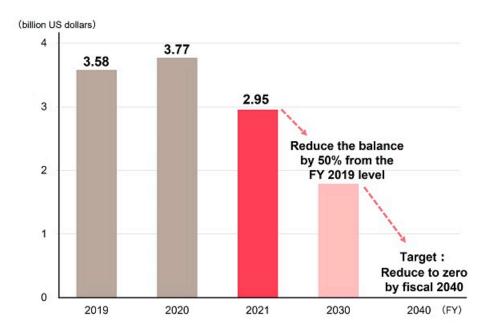




#### Credit Amounts Related to Coal-Fired Power Generation - Project Finance-

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 <sup>(note)</sup>			
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.



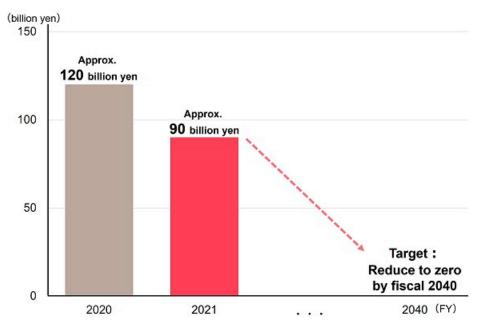


#### Credit Related to Coal-fired Power Generation - Corporate Finance -

Metric	Corporate finance for coal-fired power generation 〈credit amounts〉				
Target	et Reduce the credit balance to zero by FY2040 <sup>(note)</sup>				
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**

Metric	CO <sub>2</sub> emission intensity of project finance for power sector projects <sup>(note)</sup>
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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.





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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	<ul> <li>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.</li> <li>Educational sessions for outside directors on initiatives aimed at achieving carbon neutrality.</li> <li>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.</li> </ul>
Strategy	<ul> <li>Materialization and promotion of the MUFG Carbon Neutrality Declaration.</li> <li>Additional disclosure of sector-specific interim targets for 2030 toward net zero of financed portfolios by 2050.</li> <li>Roadmap toward net zero emissions by 2030.</li> <li>Deeper engagement and provision of a variety of solutions based on engagement.</li> <li>Expansion of sectors for scenario analysis.</li> </ul>
Risk management	<ul> <li>Continuous revision of the finance policy (MUFG Environmental and Social Policy Framework).</li> <li>Continuous studies on the establishment, maintenance, and management of climate change-related risk management systems, and ways to reflect them in the credit process.</li> </ul>
Metrics and Targets	<ul> <li>Additional disclosure of interim targets by sector for Scope 3 (GHG emissions produced through financing).</li> <li>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.</li> </ul>





# 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-CO<sub>2</sub>e (as of March 31, 2022).

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 <sub>2</sub> e)	Carbon footprint (t-CO <sub>2</sub> e/million USD)	Weighted average carbon intensity (t-CO <sub>2</sub> 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





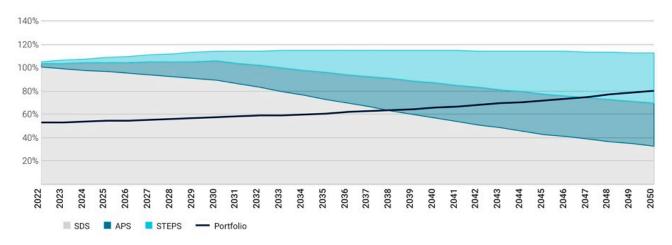
#### Scenario Analysis

MUFG used ISS's analysis method by Sustainable Development Scenario (SDS)<sup>(note1)</sup> 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<sup>(note2)</sup> 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<sup>(note3)</sup>.

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.

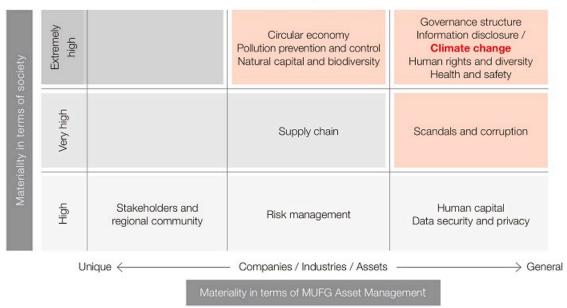




#### Positioning Climate Change as a Material ESG Issue

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.



#### 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.







# **The Equator Principles**

MUFG Bank supports its clients' environmental and social risk management and contributes toward a sustainable world by adoption of and adherence to the Equator Principles, a risk management framework for determining, assessing and managing environmental and social risks and impacts for large-scale projects.

# **Environmental and social impact assessment and risk** management through the Equator Principles

MUFG Bank (the Bank) recognizes that large-scale infrastructure and natural resources development projects may have adverse impacts on local environment and surrounding communities.

The Bank, as a financier and/or a financial advisor, works in partnership with its clients to determine, assess and manage environmental and social risks and impacts related to the projects.

The Bank adopted the Equator Principles in 2005 to ensure that the projects it finances and advises on are developed in a socially responsible manner and establish good environmental management practices to minimize, mitigate, and/or offset environmental and social risks and impacts.

The Bank supports its clients' environmental and social risk management and contributes toward a sustainable world through implementation of the Equator Principles, a risk management framework for determining, assessing and managing environmental and social risks and impacts for large-scale projects.

#### **About the Equator Principles**



The Equator Principles is a financial industry benchmark for determining, assessing and managing environmental and social risk and impacts in projects, which is intended to serve as a common baseline and framework for all the financial institutions adopting the Equator Principles (EPFIs). EPFIs ensure that the projects they finance and advise on are developed in a manner that is socially responsible and reflects sound environmental management practices.

There are 134 EPFIs globally as of June 30th, 2022.

The most recent (fourth ) version of Equator Principle was adopted officially in November 2019, and the Bank will start applying the fourth version of the Equator Principles to transactions which are mandated on or after July 1, 2020. The scope includes Project Finance, Project Finance Advisory Services, Project-related Corporate Loans, Bridge Loans, Project-Related Refinance and Project-Related Acquisition Finance.

EPFIs commit to implementing the Equator Principles in their internal environmental and social policies, procedures, and standards for financing projects. EPFIs will not provide loans to projects where the client will not, or is unable to, comply with the Equator Principles.

(Please refer to The Equator Principles Association's official website □ for more details on the Equator Principles.)







#### **Environmental and Social Risk Assessment**



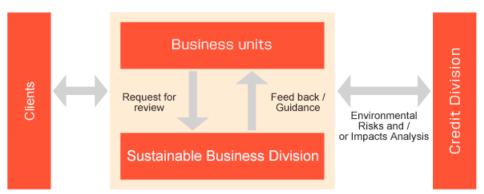
MUFG Bank confirms that environmental and social considerations have been taken into account by clients according to "Implementation Guidelines for the Equator Principles".

Implementation Guidelines for the Equator Principles (PDF / 369KB)

# Confirmation of Environmental and Social Considerations by Sustainable Business Division

At MUFG Bank, Sustainable Business Division is responsible for review and approval of project environmental and social considerations and other relevant activities.

Environmental and Social Risk and Impact review structure>



#### **Process for Confirmation of Environmental and Social Considerations**

Principle 1 of The Equator Principles requires EPFIs to categorize projects proposed for financing based on the magnitude of their potential environmental and social risks and impacts. Clients are required to comply with environmental and social requirements in accordance with the assigned categories.

Principle 1	Definition of the Categories
Category A	Projects with potential significant adverse environmental and social risks and/or impacts that are diverse, irreversible or unprecedented
Category B	Projects with potential limited adverse environmental and social risks and/or impacts that are few in number, generally site-specific, largely reversible and readily addressed through mitigation measures
Category C	Projects with minimal or no adverse environmental and social risks and/or impacts

For example, a Category A project requires us to confirm whether the client complies with all the requirements stipulated in Equator Principles 2 through 10.





e.g. Requirements for Category A projects		
Principle 2 (*1)	Conduct an Environmental and Social Assessment, as appropriate, which includes assessments of potential adverse Human Rights impacts and climate change risks	
Principle 3 (*2)	Confirmation of the compliance status of applicable environmental and social standards	
Principle 4	Develop or maintain an Environmental and Social Management System(ESMS)	
	Prepare an Environmental and Social Management Plan (ESMP) and, where necessary, an Equator Principles Action Plan(EPAP)	
Principle 5 <sup>(*3)</sup>	Demonstrate effective stakeholder engagement with affected communities, workers and, where relevant, other stakeholders	
Principle 6	Establish a grievance mechanism designed to receive and facilitate resolution of concerns and grievances from Affected Communities	
Principle 7	Engage an Independent Environmental and Social Consultant to carry out an independent review of the Assessment Documentation	
Principle 8	Incorporate covenants linked to compliance with the Equator Principles	
Principle 9	Engage an Independent Environmental and Social Consultant to verify monitoring information to ensure ongoing monitoring and reporting after Financial Close and over the life of the loan	
Principle 10	Disclose online, at a minimum, a summary of the ESIA that includes a summary of human rights and climate change risks and impacts when relevant	
	Publicly report GHG emission levels (combined Scope 1 and Scope 2 Emissions, and, if appropriate, the GHG efficiency ratio) during the operational phase for projects emitting over 100,000 tonnes of CO2 equivalent annually Encourage clients to share commercially non-sensitive project-specific biodiversity data with the Global Biodiversity Information Facility (GBIF) and other relevant national and global data repositories	

(\*1)

Principle 2 of the Equator Principles requires that a client refer to the United Nations Guiding Principles on Business and Human Rights (UNGPs) when assessing human rights risks and impacts. Also, the Climate Change Risk Assessment is aligned with Climate Physical Risk and Climate Transition Risk categories of the Financial Stability Board Task Force on Climate-related Financial Disclosures (TCFD).

A Climate Change Risk Assessment is required:

- For all Category A and, as appropriate, Category B Projects4, and will include consideration of relevant physical risks.
- For all Projects, when combined Scope 1 and Scope 2 Emissions are expected to be more than 100,000 tonnes of CO2 equivalent annually. Consideration must be given to relevant Climate Transition Risks and an alternatives analysis completed which evaluates lower Greenhouse Gas (GHG) intensive alternatives.

(\*2)

Principle 3 of the Equator Principles introduces two groups of project host countries: "Designated Countries" and "Non-Designated Countries". The applicable environmental and social standards differ according to the group the project host country belongs to.

· For Designated Countries, the assessment process evaluates compliance with relevant host country laws,





regulations, and permits that pertain to environmental and social issues. In addition to the host country laws, EPFIs may evaluate the specific risks of the project to determine whether one or more of the IFC Performance Standards on Environmental and Social Sustainability (Performance Standards) could be used as guidance to address those risks.

For Non-Designated Countries, besides evaluation of compliance with relevant host country laws, regulations, and
permits that pertain to environmental and social issues, the assessment process evaluates compliance with the then
applicable IFC Performance Standards and the World Bank Group Environmental, Health, and Safety Guidelines
(EHS Guidelines).

(\*3)

Principle 5 of the Equator Principles requires projects with the special circumstances defined in IFC Performance Standard 7 paragraphs 13-17 to engage a qualified independent consultant to evaluate the consultation process with Indigenous Peoples, and the outcomes of that process, against the requirements of host country laws and IFC Performance Standard 7.

Special circumstances defined in the IFC Performance Standard are;

- Projects with impacts on lands and natural resources subject to traditional ownership or under the customary use of Indigenous Peoples,
- Projects requiring the relocation of Indigenous Peoples from lands and natural resources subject to traditional ownership or under customary use,
- · Projects with significant impacts on critical cultural heritage essential to the identity of Indigenous Peoples, or
- · Projects using their cultural heritage for commercial purposes.

Please refer to IFC website for information on the IFC Performance Standards and the World Bank EHS Guidelines.

- IFC Performance Standards
- The World Bank EHS Guidelines □

#### Site Visits

Sustainable Business Division conducts site visits, as appropriate, to gain firsthand knowledge that informs our assessment of social and environmental aspects of projects located throughout the world.



Example 1: Site Visit



Example 2: Site Visit

#### **Financial Advisory Service Support**

When MUFG Bank provides financial advisory services to clients seeking project finance, Sustainable Business Division works with clients, as appropriate, on the application of EP requirements from an early stage of the deal.





#### **Education and Training**

MUFG Bank conducts training for its employees with the objective of deepening their understanding of environmental and social considerations and promoting the philosophy and practices of EP.

The training is primarily targeted at employees in charge of project finance and credit. The Bank also utilizes internal communication measures to promote better understanding of social and environmental considerations by all employees.

The Bank also provides training for customers at their request.



**Education and Training** 

# **Environmental and Social Consideration and Categorization Report**

MUFG Bank (the "Bank") discloses the numbers of the project finance transactions and the project-related corporate loans that achieved financial close during each fiscal year, and the number of the project finance advisory services where the Bank was mandated during the same period around September-end every year in "Environmental and social consideration and categorization report" in accordance with the Equator Principles and the Bank's Implementation Guidelines for the Equator Principles.

The Bank categorizes the projects proposed for financing based on the magnitude of their potential environmental and social risks and impacts in accordance with the Bank's Implementation Guidelines for the Equator Principles, referring to the International Finance Corporation (IFC)'s Performance Standards and World Bank Group Environmental, Health, and Safety Guidelines. Especially when assigning Category A to a project, the Bank categorizes the project in accordance with the definition of a Category A project in the Equator Principles referring as appropriate to other guidelines including OECD's Common Approaches and relevant public institution's guidelines.

Environmental and Social Consideration and Categorization Report and Assurance Report FY2020 (PDF / 2.34MB)

Selected information assured by Deloitte Tohmatsu Sustainability Co., Ltd. is marked with ( v ).

Environmental and Social Consideration and Categorization Report and Assurance Report FY2021 (PDF / 2.45MB)

Selected information assured by Deloitte Tohmatsu Sustainability Co., Ltd. is marked with ( ).

#### **Glossary of Terms**







# **Natural Capital and Biodiversity**

▼ Natural capital and Biodiversity

▼ Main Initiatives

# **Natural Capital and Biodiversity**

Natural capital is a stock, composed of animals, plants, water, soil, and air, which provides various merits, including water, food, and minerals to businesses and society through ecosystem services such as water purification as well as climate control.

Biodiversity is the diversity of animals and plants that are part of natural capital, functioning to maintain the natural capital in a healthy and stable state through recovery from natural disasters such as floods and droughts, support for the carbon cycle, the water cycle and soil formation.



(Source: NATURAL CAPITAL PROTOCOL P.12)

### **Main Initiatives**

#### MUFG Environmental Policy Statement, MUFG Environmental and Social Policy **Framework**

In MUFG Environmental Policy Statement and the MUFG Environmental and Social Policy Framework, MUFG has established the following policies:





#### **MUFG Environmental Policy Statement**

(extract) [Maintenance and protection of the biodiversity which supports our society is the foundation for the realization of a sustainable society. MUFG supports businesses that protect biodiversity through the provision of products and services. Each group company also takes appropriate measures to prevent negative impacts on biodiversity associated with our products and services.]

#### MUFG Environmental and Social Policy Framework

In light of the nature and severity of environmental and social risks or impacts, businesses that have a negative impact on Ramsar-designated wetlands, businesses that have a negative impact on UNESCO World Heritage sites, and businesses that violate the Convention on International Trade in Endangered Species of Wild fauna and Flora (Washington Convention) are defined as "Prohibited Transactions", In addition, as "Transactions of High Caution", we have identified businesses that have a negative impact on areas with high conservation value and sectors such as mining (coal), oil and gas, large-scale hydroelectric power generation, forestry, and palm oil. When considering financing, we check the implementation status of environmental and social considerations by our customers, including their impact on the ecosystem and how they are responding.

#### **Initiatives**

#### Endorsement of Taskforce on Nature-related Financial Disclosures (TNFD) Forum

The TNFD is an international initiative launched in June 2021 by the United Nations Environment Programme Finance Initiative (UNEP FI), the United Nations Development Programme (UNDP), the World Wide Fund for Nature (WWF) and Global Canopy. TNFD aims to shift global financial flows toward nature-positive outcomes through disclosure of nature-related information by companies. The TNFD Forum is a stakeholder organization to provides information and technical support related to TNFD.

In February 2022, MUFG joined the TNFD Forum to promote initiatives for natural capital and biodiversity across the Group. We also participated in a meeting of the TNFD Consultation Group of Japan established in June 2022. In addition, referring to the LEAP approach<sup>(note)</sup> presented in the framework beta version, we have started to analyze natural capital risks together with Mitsubishi UFJ Research and Consulting, a member of the forum. As a member of the forum, we will continue to actively participate in discussions to further contribute to the realization of a sustainable environment and society.

LEAP approach: An approach proposed as a practical risk assessment method for natural capital and consists of four steps: Locate the contact point between the company and nature, Evaluate the impact and dependence on nature, Assess the risks and opportunities related to nature, and Prepare business strategies and disclosures according to those risks and opportunities.





#### 30by30 Alliance for Biodiversity

The Alliance was established in April 2022 as a coalition of the willing to implement the various measures incorporated in the 30by30 Roadmap formulated by the Ministry of the Environment.

Alliance participants make efforts to directly secure conservation areas or support conservation activities towards achieving the 30by30 target and disseminate the progress of such efforts.

MUFG supports the purpose of the Alliance and has been participating in it since its launch.



#### **Declaration of Biodiversity by Keidanren**

MUFG endorses the Declaration of Biodiversity by Keidanren and Action Policy, as revised in October 2018. The Declaration of Biodiversity by Keidanren and Action Policy aim to realize a sustainable society through the creation of a society in harmony with nature. We are calling for the integration of business activities and environmental measures, which encompass a wide range of environmental activities, such as biodiversity conservation. MUFG will promote initiatives based on this concept.



# **Activities for Protecting Natural Capital and Biodiversity**

#### **MUFG Pledges Support to Promote Cyclic Utilization of Forests**

In recent years, the abandonment of artificial forests planted for timber production has become a serious social issue. There is a growing need to promote the cyclic utilization of forest resources, in which trees are planted, grown, harvested, used and planted again. MUFG has so far undertaken a number of tree-planting projects aimed at preserving and passing on the rich blessings of forests to the next generation. Our support for this research institute engaged in promoting cyclic utilization of forest resources is motivated by the same aim.

A specified nonprofit organization that started as a volunteer organization in 2003. The Institute mainly works on forest creation and conservation, promoting the utilization of wood by companies (providing environmental and social contribution programs for employee participation), and field experience activities for mothers and children.











#### Peter Rabbit™ Forest for the Future

In March 2022, the Trust Bank entered a forest development agreement with Fujikawaguchiko Town (Yamanashi Prefecture), Kodachi Property District Management Association, and Fuji-Hokuroku Forest Association, and named a 1.67 ha mountain forest in Kodachi (Fujikawaguchiko Town, Minamitsuru County, Yamanashi Prefecture) "Peter Rabbit™ Forest for the Future," starting a new initiative for biodiversity conservation through forest and water resource conservation.

In May 2009, we entered a similar agreement for forest conservation in Nagatoro Town, Saitama Prefecture. Now, we are engaged in work to cultivate new forests.

Forests play a variety of roles, including conservation of land, conservation of ecosystems, and prevention of global warming. In particular, forests in water source areas play an important role in the stable supply of safe and high-quality water by performing so-called water source rearing functions such as storing water resources and purifying water quality.

We believe that it is important for all officers and employees to continue to care for forests and maintain healthy forests.



#### **ACOM** no Mori (ACOM's Forest)

ACOM conducts forest conservation activities in Kanagawa and Osaka prefectures, where the company's contact centers are located, in order to contribute to environmental conservation and to foster an awareness of employee participation in social contribution and an interest in the environment.



#### **Mangrove Reforestation Activity**

Mangrove forests are priceless resources of marine and coastal ecosystems, and indispensable for the economic, social, and environmental sustainability. Planting mangrove trees will not only help build natural barriers against soil erosion, but also create nature study areas with great biodiversity worth conserving. Krungsri has been organized in collaboration with government agencies and provincial administrative authorities to continuously promote this reforestation activity since 2012. Bank Danamon has been actively engaged in mangrove reforestation activities as well, planting seeds in collaboration with local companies and authorities of Indonesia.

Krungsri: Mangrove Reforestation Activity

Bank Danamon: 2022 Danamon Peduli Environmental Care activity











#### Contribution to the Preservation and Succession of Important Natural Value in Urban Areas

Located in Nishitokyo City, Tokyo, MUFG Park is a facility with abundant nature, sports facilities including tennis courts, and a community library (scheduled to open in 2023).

With a total area of approximately six hectares, MUFG Park also contributes to the preservation and succession of important natural value in an urban area.



#### **Eco-friendly Mitsubishi UFJ Card**

Mitsubishi UFJ NICOS issues environmentally friendly Mitsubishi UFJ Cards (with some exceptions) from signing up to issuing cards, bill statements, and point rewards. In addition to the use of PET-G materials for credit cards which do not emit chlorine when incinerated and application forms made of forest conservation paper, we offer a donation program, as a part of point reward program, to environmental conservation organizations engaged in forest maintenance and reforestation projects in Japan.

#### Preventing Extinction of Japanese Cranes, a National Natural Treasure of Japan

We engaged in activities to protect Japanese cranes, a national natural treasure of Japan and endangered species in Hokkaido as part of the MUFG SOUL (note).

Activities included participation in local preservation activities, donating equipment used to videos to raise awareness at schools and local communities in Hokkaido and raising awareness at branches through posters that showcase the activity.

(note) MUFG SOUL - Turning passion into power for society -MUFG provides funding for ideas for solving social issues that are planned by employees. In fiscal 2021, more than 300 plans and ideas were gathered from employees, including support for children's cafeterias, which provide free or inexpensive meals to children, and orphanages, and contributions to community revitalization, and a total of more than 3,000 people participated in social contribution activities (100 million yen in total). We will continue to contribute to the resolution of a wider range of social issues by addressing issues from the perspective of our employees.









#### **Satoyama Environmental Conservation Project**

As part of MUFG Soul activities, MUFG donated the cost of purchasing equipment for satoyama (village-vicinity mountains) maintenance to the Tonda Forest Conservation Society, an NGO that engages in Satoyama environmental conservation activities, and conducted the following activities. [Major activities]

- Nature observation events (local citizens and children participated)
- Environmental conservation activities for *satoyama* (forest thinning, promenade maintenance, etc.)
- · Workshops on SDGs and environmental issues









# Reducing the Environmental Impacts of Our Business Activities

To reduce greenhouse gas (GHG) emissions and mitigate global warming, MUFG actively seeks to reduce environmental burdens related to our business activities.

# **Reducing Our Environmental Impacts of Business Activities**

To reduce greenhouse gas (GHG) emissions and mitigate global warming, MUFG actively seeks reductions in CO<sub>2</sub> emissions from business activities and employee travel.

#### **ESG Data**

### **Environmental Accounting Information for Our Offices**

MUFG announces the results of environmental accounting from FY 2009, as part of environmentally conscious business activities, for the quantitative management of environmental efforts.

#### **Net Zero GHG from Own Operations**

MUFG aims to achieve net-zero GHG emissions<sup>(note1)</sup> in its own operations by 2030. 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<sup>(note2)</sup> 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) Scope1 and Scope2 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.

Disclosure Based on TCFD Recommendations





#### MUFG Bank (the Bank)

In accordance with laws and ordinances, each building is being equipped with energy-saving air-conditioning and lighting equipment, in our effort to reduce greenhouse gas emissions. Moreover, for buildings located in Tokyo, in accordance with Tokyo Metropolitan Government environmental protection laws, the Bank has obtained a third party inspection rating for greenhouse gas emissions, and has published its Plan for Global Warming Countermeasures.

- · (HQ) Plan for Global Warming Countermeasures (Japanese) (PDF / 571KB)
- (Tama Business Center) Plan for Global Warming Countermeasures (Japanese) (PDF / 1.11MB)
- · (Ikejiri Building) Plan for Global Warming Countermeasures (Japanese) (PDF / 823KB)

#### Mitsubishi UFJ Trust and Banking (the Trust Bank)

The Trust Bank is reducing energy consumption by installing energy-efficient lighting equipment and updating HVAC (heating, ventilation, and air-conditioning) equipment and transformer equipment at its main buildings and branches. The Trust Bank is also saving energy by increasing monitoring of energy consumption at some of its main buildings.

#### Mitsubishi UFJ Morgan Stanley Securities (the Securities Business)

With the Mejirodai Building having been designed and constructed to facilitate a high level of energy conservation, the Securities Business is putting efficient energy management into practice here, with a focus on the Tokyo Metropolitan Government's GHG reduction ordinance. In addition, the Securities Business is working to reduce the amount of energy used at each building it occupies.

#### Mitsubishi UFJ NICOS (NICOS)

At NICOS's Head Office in the Akihabara UDX Building, NICOS utilizes a "universal plan" office layout that places no pillars or dividers in a space of 140 square meters. This layout works to improve efficiency for air conditioning and lighting systems. NICOS also engages in other initiatives to conserve energy such as replacing existing lighting and office equipment with more energy-efficient ones.





# **Efforts to Establish Recycling-Based Society**

#### **Efforts to Reduce Plastic Waste**

We recognize that regulations on single use plastics are being strengthened worldwide in light of growing international awarenes s of resource recycling, the worsening waste problem, and the conservation of marine and oceanic resources. With this recognition, MUFG is tackling the following issues.

- 1. Sorting and collection of used PET bottles
- 2. Implementation of cleanup and other activities as part of the community contribution activities at sales offices and other locations
- 3. Based on the target of a waste recycling rate of 90% or higher, implementation of efficient use of resources and reduce waste (FY2021 performance for the main building: 91.6%)
- 4. Provide information and support for initiatives led by plastic related customers using references describing trends and impacts of plastic regulations and business strategies based on the plastic regulations

#### **Efforts to Reduce Waste**

#### **MUFG Bank**

The Bank has set medium- to long-term targets for reducing waste and is working to achieve them.

Medium to long term plan	Establish a recycling rate of at least 90%.
FY2022 targets	Achieve a waste recycling rate of at least 90% at the headquarters buildings in Tokyo, Nagoya and Osaka.
FY2021 results	Head Office Tokyo Marunouchi Building: 91.6% Head Office Nagoya Building: 61.5% Head Office Osaka Building: 53.2%

#### Mitsubishi UFJ Trust and Banking

Mitsubishi UFJ Trust and Banking (in Japanese)

#### Mitsubishi UFJ Morgan Stanley Securities





#### Krungsri (Bank of Ayudhya)

In 2018, Krungsri (Bank of Ayudhya) initiated the "Krungsri Zero Waste" project. This project aims to raise employee awareness of waste problems and promote efficient waste management for recycling and reducing landfill waste.

As part of this initiative, Krungsri organized activities to encourage 'zero waste' practice among employees such as waste management training sessions, campaigns for proper waste sorting, and campaigns against single-use plastics to reduce pollution and environmental problems stemming from plastic waste.

Another influential activity is Krungsri's aims to achieve zero Refuse-Derived Fuel within 2022. By transforming certain non-recyclable wastes to fuel, the amount of waste which goes to landfill can be decreased further and will lead in realizing an effective and long-term solution to waste issues.

#### **Protection of Resources**

#### **Water Resources**

#### Krungsri (Bank of Ayudhya)

Krungsri established their 'Policy for Environment, Resource, Occupational Health, and Safety' to promote and support the environmental management and resource efficiency. The policy presents a guideline to determine the environmental protection and resource conservation measures, including those related to water consumption as below:

- · Communicate and campaign about correct and efficient water consumption
- Stipulate appropriate water consumption time (e.g., watering plants, cleaning space in front of the building, etc.)
- · Use water-saving and environmentally friendly sanitary wares
- Stipulate measures on wastewater reuse (e.g., wastewater treatment per stipulated standards and wastewater reuse for some activities)
- · Log monthly water consumption

#### **Paper Resources**

#### **MUFG Bank**

In fiscal 2021, 100% of the total amount of paper purchased at the Bank headquarters and head office (including business store branches) as well as at system and administrative centers was recycled paper<sup>(note)</sup>.

(note) Recycled paper: Paper with a recycled pulp content of at least 70%.

# Krungsri (Bank of Ayudhya): Bringing old calendars back to life as Braille-printed materials

Since 2017, Krungsri (Bank of Ayudhya) has been actively involved in making good use of old desk calendars, by collecting and delivering them to agencies to produce Braille-printed instructional materials for the blind.

In 2021, Krungsri collected 9,680 calendars from employees and delivered them to the Foundation for the Blind in Thailand.