



**MUFG
TCFD Report
2023**

Editorial Policy

Report Editorial Policy

The Sustainability Report and this report are a PDF version of Mitsubishi UFJ Financial Group's (MUFG) website (Sustainability) to provide stakeholders with a summary of MUFG's sustainability initiatives. This report is designed to provide stakeholders with a better understanding of MUFG's sustainability initiatives aimed at realizing a sustainable environment and society and sustainable growth. We also aim to continuously expand our information disclosure. Please refer to our website, along with the MUFG Report 2023 (JGAAP) for more information on our sustainable value creation mechanism and financial data.

Publication information

Period Subject to Reporting

FY2022
(April 1, 2022 to March 31, 2023)
Includes some information from
FY2023

Definitions of Specific Terms Used in This Report

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

Disclaimer

This report contains forward-looking statements with regard to the expectations, forecasts, targets and plans of Mitsubishi UFJ Financial Group, Inc. and its subsidiaries and affiliates. These forward-looking statements are based on information currently available to the Group and are stated in this document on the basis of the outlook at the time that this document was produced. In producing these forward-looking statements, certain assumptions (premises) have been utilized that are subjective and may prove to be incorrect. Should any underlying assumption prove to be incorrect, actual results in the future may vary materially from some of the forward-looking statements in this document. The Group has no obligation or intent to update any forward-looking statements contained in this document. In addition, information on companies and other entities outside the Group that is included in this document has been obtained from publicly available information and other sources. The accuracy and appropriateness of that information has not been verified by the Group and cannot be guaranteed.

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Disclosure Based on TCFD Recommendations

Highlights

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. One of the priorities we especially focus on is climate change measures and environmental protection. MUFG has taken another step forward by announcing the MUFG Carbon Neutrality Declaration in May 2021. Guided by this declaration, MUFG is implementing group-wide environmental measures globally, aiming to achieve net zero GHG^(note) emissions from the financed portfolio by 2050 and net zero GHG emissions from our own operations by 2030.

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.

(note) Green House Gas

Status of Response to the 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.

- Set up new Chief Sustainability Officer (CSuO) role for the Group in 2020 to strengthen our efforts to address environmental and social issues, including climate change, and to clarify responsibilities. Appointed full-time Group CSuO in October 2022.

- Invited two external experts in environmental and social fields as permanent external advisors since 2019. Changed to a three-person system in October 2022.

- Reflected ESG factors in the executive compensation system.
 - 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.
 - For bonus-related qualitative evaluations of performance of duties by the president and other relevant officers, set targets related to contribution to the resolution of environmental and social issues, the promotion of inclusion & diversity, and the strengthening and upgrading of MUFG's governance structure. In FY2023, added targets related to human rights, biodiversity, and human capital.

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.

- MUFG Carbon Neutrality Declaration
 - Declared the achievement of net-zero GHG emissions from our finance portfolio by 2050 and net-zero GHG emissions from our own operations by 2030 (May 2021)

- During FY2023, develop a transition plan in line with the GFANZ guidance framework released in November 2022

- Initiatives Aimed at Net-Zero Emissions in the Financed Portfolio
 - Set an interim target for 2030 to reduce emission intensity in the power sector from 328gCO₂e/kWh (2019) to 156-192gCO₂e/kWh. Results for 2021 were 299gCO₂e/kWh, a reduction of about 9% from FY2019.
 - Set an interim target for 2030 to reduce absolute emissions in the oil and gas sector by 15%-28% from 84MtCO₂e (2019). Results for 2021 were 76MtCO₂e, a reduction of about 9% from FY2019.
 - Within the real estate sector, set interim targets for 2030 to reduce emission intensity in commercial real estate from 65kgCO₂e/m² (2020) to 44-47kgCO₂e/m², and reduce emission intensity in residential real estate from 27kgCO₂e/m² (2020) to 23kgCO₂e/m².

- Set an interim target for 2030 to reduce absolute emissions in the steel sector by 22% from 22MtCO_{2e} (2019).
- Set an interim target for 2030 to reduce the PCA ^(note) score in the shipping sector to 0% or lower.

(note) A consistency metric that indicates the difference from the required level across the financed portfolio for shipping. It is calculated from the Vessel Climate Alignment (VCA) of individual vessels to which finance is provided, weighted for percentage within the loan portfolio.

● Climate Change-Related Opportunities

- Approach to the achievement of carbon neutrality

1. Policy proposals in cooperation with industry and government agencies

- Lead discussions on the formulation of guidelines for transition finance in the Net-Zero Banking Alliance (NZBA) and Asia Transition Finance Study Group (ATFSG).
- Participated in the five working groups of the Glasgow Financial Alliance for Net Zero (GFANZ). In June 2023, appointed Masamichi Kono, Senior Advisor of MUFG Bank, Former Deputy Secretary General of the OECD, was appointed as GFANZ Japan Advisor.
- Participated by MUFG Asset Management (hereafter "MUFG AM") in the Net Zero Asset Managers (NZAM) initiative in November 2021. In October 2022, set an interim target for 2030 covering 55% of assets under management, to reduce GHG emissions per unit of economic intensity (absolute emissions amount (tCO_{2e}) / balance of assets under management) by 50% compared to 2019 level.
- In October 2022, we published the MUFG Transition Whitepaper 2022 to communicate the importance of recognizing different regional characteristics, interdependency among industries, and individual efforts in maximizing renewable energy to achieve carbon neutrality in Japan. As the next phase, In September 2023, we published the MUFG Transition Whitepaper 2023, to present the list of technologies in supply chains that are important in advancing the path to carbon neutrality in Japan's "electricity and heat" segment. MUFG will also steer its activities towards clarifying Japan's transition plan to seek for new opportunities ahead of us.

2. Strengthening of ability to offer solutions that support decarbonization by customers in line with government policies and strategies

- Set sustainable finance targets with a cumulative execution amount of ¥35 trillion (including ¥18 trillion in the environmental area) from FY2019 to FY2030. The cumulative execution amount through FY2022 is ¥24.5 trillion (including ¥8.9 trillion in the environmental area) and is steadily growing.
- Actively support transition finance with a focus on transition bonds and loans.
- Develop and provide solutions aimed at carbon neutrality and originating with customer needs, including support for GHG emissions visualization, TCFD consulting services, and carbon credits.

3. Leverage relationships with customers, local governments, and industry organizations to grasp new needs and issues

- Advance carbon neutrality through cooperation with regions such as Hokkaido and Osaka.
- Study the creation of a blended finance scheme in collaboration with NEXI to tackle climate change issues with the Asia Zero Emission Community (AZEC) in mind.
- Regularly aggregate and share knowledge among relevant officers and lower levels, and launch the GX Strategy PT as a venue for communicating information that contributes to concrete business creation and promotion of GX investment and financing.
- To reinforce expertise of relationship managers at branches and enhance capabilities for engagement, The Bank has assigned "Sustainable Business Promotion Leaders" (hereinafter "Promotion Leaders") at corporate sales branches nationwide.

- In 2021, assigned ESG Heads and ESG specialist managers to regions (Europe, Americas, and Asia) to strengthen ESG teams in the regions. Also built a system to consolidate intelligence and business opportunities by bringing together top management from regions at the Global ESG Conference.
- At partner banks (Krungsri and Danamon), promote initiatives to achieve a sustainable environment and society through sustainable finance, etc.
- In May 2023, together with Mitsubishi Corporation and Pavilion Private Equity Co., Ltd., the Bank established Marunouchi Climate Tech Growth Fund L.P. The Fund has Marunouchi Innovation Partners Co., Ltd. as its general partner, and will invest mainly in climate-tech-related startups for growth.
- Climate Change Risks
 - Organize cases of impact (cases of potential risks) for each category of major transition risks and physical risks arising from climate change.
 - Conduct a scenario analysis of transition risks through 2050 and physical risks through 2100.

[Transition Risks]

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 scenarios as well as for International Energy Agency (IEA) scenarios.

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

[Physical Risks]

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 style="list-style-type: none"> • Estimated damage in the event of a flood is analyzed, and an approach to measure its impact on the overall credit portfolio using the change in default probability that the occurrence of floods would have on the credit portfolio is adopted. • In the calculation of financial impact, the period of the suspension of the business of the borrower and the loss of assets, among other aspects, are reflected. |
| Target sector | • Flood |
| Target period | • Until 2100 using the end of March 2022 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 |

- Net Zero GHG Emissions from Own Operations
 - Formulate a roadmap for net-zero emissions by 2030 and set interim targets for reduction of domestic GHG emissions by two-thirds in FY2025 compared to FY2020 level and reduction of group and global GHG emissions by 50% in FY2026 compared to FY2020 level.
 - Perform first-time calculation of Scope 3 (Categories 1-14) GHG emissions from MUFG, the Bank, the Trust Bank, the Securities, NICOS, and ACOM, the Group's six major companies in Japan.

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.
- We have developed a qualitative framework to evaluate client transitions and started a trial run of the framework in FY2022
- Environmental and social considerations concerning finance have been practiced based on the MUFG Environmental and Social Policy Framework
 - Revised policies concerning the climate change-related sectors of forests, palm oil, and coal mining (2023).

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.

● GHG Emission Reduction Targets from the Financed Portfolio (MUFG, Scope3)

| Sector | Interim target for 2030 | Emissions at the time of target setting | Results |
|--------------------|--|---|---|
| Power sector | 156-192gCO ₂ e/kwh (Emission intensity) | 328gCO ₂ e/kwh (2019) | 299gCO ₂ e/kwh (2021 results) |
| Oil and gas sector | 15-28% reduction compared with 2019 level (Absolute GHG emissions) | 84MtCO ₂ e (2019) | 76MtCO ₂ e (2021 results) |
| Real estate sector | Commercial: 44-47kgCO ₂ e/m ² Residential: 23kgCO ₂ e/m ² (Emission intensity) | Commercial: 65kgCO ₂ e/m ² Residential: 27kgCO ₂ e/m ² (2020) | — |
| Steel sector | 22% reduction compared with 2019 level (Absolute GHG emissions) | 22MtCO ₂ e (2019) | — |
| Shipping sector | PCA≤0% | PCA+0.6% (2021) | — |

● Net Zero GHG Emissions from Own Operations (MUFG, Scope1 and 2)

- Aggregation of MUFG's GHG Emissions on a Group and global basis for FY2022. Total emission of Scope 1 and Scope 2 in FY2022 was 189,000 tCO₂.
- On June 2022, MUFG achieved a switch to 100% renewable power sources for in-house contracted electric power at all consolidated subsidiaries in Japan.

● Sustainable Finance

- The target amount of sustainable finance has been set at 35 trillion yen (of which 18 trillion yen is for the environmental sector) for the period from FY2019 to FY2030. We steadily accumulated results of ¥24.5 trillion (including ¥8.9 trillion in the environmental area) through the end of FY2022, and are also studying a review of our targets.
- Targets for reducing CO₂ emissions through renewable energy project financing
 - MUFG set a cumulative CO₂ reduction target of 70 million tCO₂ from FY2019 to FY2030, and disclosed its progress. The achievement through FY2022 was 36.63 million tons.
- 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 at the end of FY2022 was \$2,581million.

- 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 FY2022 was approximately ¥80 billion yen.
- Measurement of financed emissions through Scope 1-3, by sector recommended for disclosure by TCFD recommendations
- 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.

Governance

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

MUFG's Governance Structure for Countering Climate Change

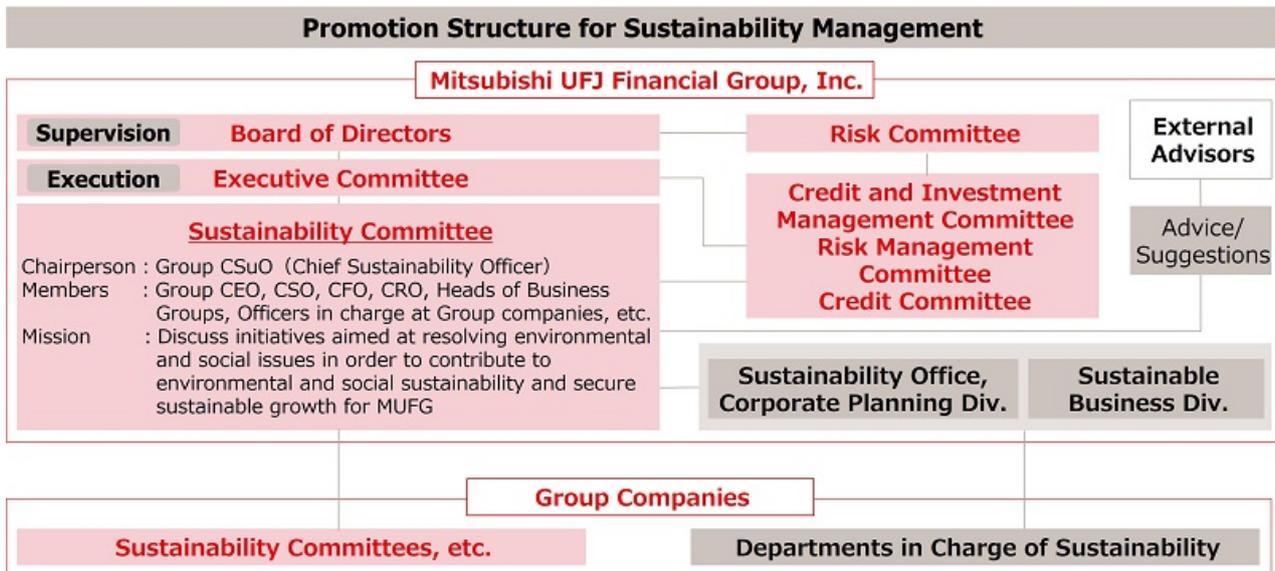
At MUFG, the Sustainability Committee, which operates under the Executive Committee, is charged with periodically deliberating policies on and determining the status of the Group's response to opportunities and risks arising from climate change and other environmental and social concerns.

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.



Committees Related to Climate Change and Items Discussed and Reported

| Committee | | Major Climate Change-Related Items for Deliberation and Reporting from FY2022 Onward |
|-------------|--|--|
| Supervision | Board of Directors | <ul style="list-style-type: none"> • State of progress related to the Carbon Neutrality Declaration <ul style="list-style-type: none"> ▸ Progress of sustainable business ▸ Setting interim targets for financed portfolio (real estate, steel, and shipping sectors) ▸ Setting interim targets in the asset management domain ▸ Progress of results in sectors with disclosed interim targets (power, oil and gas sectors) ▸ Reduction of in-house GHG emissions, etc. • Revision of MUFG Environmental and Social Policy Framework • Evaluation by ESG rating agencies • Response to shareholder proposals |
| | Risk Committee | <ul style="list-style-type: none"> • Recommendations for Board of Directors resolutions and reported items |
| | Compensation Committee | <ul style="list-style-type: none"> • Revision of the executive compensation system (inclusion of ESG-related items into performance evaluation items) |
| | Audit Committee | <ul style="list-style-type: none"> • Monitoring, supervising, and recommending towards our ESG responses |
| Execution | Executive Committee | <ul style="list-style-type: none"> • Progress related to the MUFG Carbon Neutrality Declaration • Revision of the MUFG Environmental and Social Policy Framework • Status of MUFG's sustainability management initiatives and address for future (Report on matters to be deliberated by the Sustainability Committee) |
| | Credit & Investment Management Committee | <ul style="list-style-type: none"> • Recognition of current conditions and issues • Direction of the management system for climate change-related risks |
| | Risk Management Committee | <ul style="list-style-type: none"> • Monitoring the status of climate change-related risks using the Risk Appetite Framework and integrated risk management methods • Reporting on risks arising from climate change, as one of the Top Risks |
| | Credit Committee | <ul style="list-style-type: none"> • Recognition of current conditions and issues related to climate change • The status and direction of climate change-related risk management efforts • Revision of credit policies related to climate change |
| | Sustainability Committee | <ul style="list-style-type: none"> • Progress toward the Carbon Neutrality Declaration <ul style="list-style-type: none"> ▸ Progress of sustainable business ▸ Setting of interim targets for financed portfolio (real estate, steel, and shipping sectors) ▸ Progress of results in disclosed sectors (power, oil and gas sectors) ▸ Reduction of in-house GHG emissions, etc. • Revision of the MUFG Environmental and Social Policy Framework • Assessment by ESG rating agencies |

We regularly hold discussions on climate change response and other sustainability management topics with outside directors, and use these discussions to deepen sustainability initiatives.

< Key comments from outside directors >

- Our initiatives since our MUFG Carbon Neutrality Declaration have made great progress. I continue to expect responsive, prompt, and apt actions.
- It is important to consider sustainability from a long-term perspective, with awareness of not only current stakeholders but future ones as well.
- It is vital that we act with an awareness of the gap with Global Systemically Important Banks (G-SIBs).

Engagement and Utilization of External Advisors in the Environmental and Social Fields

We regularly hold meetings for exchanges of ideas between external advisors and members of the Board of Directors to leverage expert knowledge from outside the group in our sustainability initiatives. At such a meeting held in December 2022, the group CEO, bank president, trust and securities companies presidents, group CSO, group CSuO, and other relevant members actively exchanged ideas spanning wide-ranging areas, including the latest trends in the most important issue of climate change response, discussions at COP27, the increasingly important topics of biodiversity and initiatives toward human capital and respect for human rights.

< External Advisors >

| | |
|-----------------------|--|
| 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. |
| Kenji Fuma | CEO, Neural Inc. |

< Key Comments from External Advisors >

- Climate change, biodiversity, human rights, and so on are complex issues and often involve trade-off relationships. How we should move forward overall is a matter called into question.
- The trend in Europe is statutory disclosure requirements for transition plans. Similarly, the U.S. is moving toward mandating disclosure of transition plans. I think this trend will soon come to Japan as well.
- As there are no longer companies that fail to recognize the importance of decarbonization, what will be important as the next step in engagement is how we support individual companies' strategies.

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

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

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

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

| Type of compensation | Linkage with performance | Performance-based compensation range | Standards for payment | | Time of payment | Payment method | Proportion of Group CEO's compensation | |
|----------------------|--|---|---|--|---|------------------------|--|--|
| | | | | Weight | | | | |
| Annual base salary | Fixed | — | <ul style="list-style-type: none"> • Paid based on positions, etc. • Includes Director Allowance, Committee and Chair Allowance, Housing Allowance, Overseas Representative Allowance, etc. | | Monthly | Cash | 1 | |
| Stock compensation | Non-performance-based | — | Base amount by position | | At the time of retirement of executives | | 1 | |
| | Medium- to long-term performance-based | 0-150% | Base amount by position | Performance factor (medium- to long-term achievement evaluation) | <50%> | At the end of the MTBP | | 50% in shares 50% in cash Note: Subject to malus (confiscation) and clawback (restitution claim) |
| | | | | Target attainment rate of indices below in MTBP | | | | |
| | | | | (1) Consolidated ROE 30% (2) Consolidated expenses reduction amount (excluding performance-linked expense) 15% (3) Ratings granted by ESG rating agencies 5% | | | | |
| | | Performance factor (competitor comparison evaluation) ③ | <50%> | | | | | |
| | | Comparison of year-on-year growth rate of indices below with competitors | | | | | | |
| | | (1) Consolidated net operating profits 25% (2) Profits attributable to owners of parent 25% | | | | | | |
| Cash bonuses | Short-term performance-based | 0-150% | Base amount by position | Performance factor (quantitative evaluation factor applied to the Group CEO) | <60%> | Annually | Cash | |
| | | | | Rate of year-on-year change and target attainment rate of indices below | | | | |
| | | | | (1) Consolidated net operating profits 20% (2) Profits attributable to owners of parent 10% (3) Consolidated ROE 20% (4) Consolidated expense amount 10% | | | | |
| | | | | Status of individual execution of duties (qualitative evaluation factor applied to Group CEO) | | | | |
| | | <ul style="list-style-type: none"> • Improvement in customer-segment profitability • Risks handling • Enhancement of efforts on ESG, evolution of sustainability management ④ • TSR, etc. | <40%> | | | | | |

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. In bonus-related qualitative evaluations of performance of duties by the president and other relevant officers, we have set targets related to contribution to the resolution of environmental and social concerns, the promotion of inclusion & diversity, and the strengthening and upgrading of MUFG's governance structure. In fiscal 2023, we further added targets related to human rights, biodiversity, and human capital.

Skill Matrix of Directors

Our Board of Directors is composed of 15 directors who bring a well-rounded mix of diverse knowledge and expertise. Eight of the members, a majority, are outside directors. As shown in the Skill Matrix, directors possess deep knowledge of MUFG's business and have been selected for their expertise in finance, financial accounting, legal compliance, and other areas.

The Board of Directors overall also has members with experience in the global development of our business and experience in sustainability, IT, and digital technologies, allowing them to lead the solving of social issues such as digital shift and climate change issues.

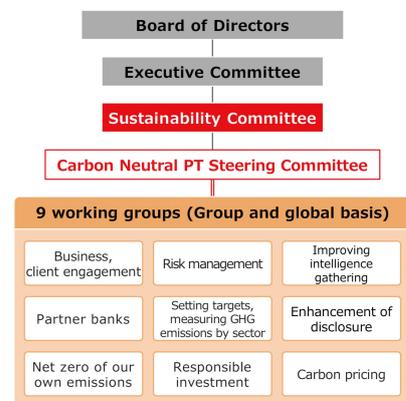
List of Directors

| | Name | Gender | Current position at MUFG and committee-related duties ¹⁾ | | | | Knowledge, expertise and experience | | | | | | | | |
|--------------------|-------------------|--------|---|------------------------|-----------------|----------------|--|---------|----------------------|---------------|--------|------------|----------------|---|---|
| | | | Nominating and Governance Committee | Compensation Committee | Audit Committee | Risk Committee | Corporate management | Finance | Finance & accounting | Legal affairs | Global | IT/digital | Sustainability | | |
| Outside directors | Mariko Fujii | Female | ○ | ○ | | ◎ | | ● | | ● | | | | | |
| | Keiko Honda | Female | | | ○ | | | ● | | ● | | ● | | | |
| | Kaoru Kato | Male | ○ | ○ | ○ | | ● | | | | ● | ● | | | |
| | Satoko Kuwabara | Female | ○ | ◎ | | | | | ● | ● | | ● | | | |
| | Hirofumi Nomoto | Male | ◎ | ○ | | | ● | | | | ● | ● | | | |
| | David Sneider | Male | | | | ○ | | | ● | ● | | | | | |
| | Koichi Tsuji | Male | | | ◎ | | | | ● | ● | | | | | |
| | Tarisa Watanagase | Female | | | | ○ | | ● | | ● | | | | | |
| Internal directors | Kenichi Miyanaga | Male | | | ○ | | Internal directors shall have extensive knowledge of MUFG Group's business and the ability to appropriately perform management of MUFG Group | | | | ● | | | | |
| | Ryoichi Shinke | Male | | | ○ | | | | | | ● | | | | |
| | Kanetsugu Mike | Male | | | | | | | | | ● | ● | ● | ● | ● |
| | Hironori Kamezawa | Male | ○ | ○ | | | | | | | ● | ● | ● | ● | ● |
| | Iwao Nagashima | Male | | | | | | | | | ● | | | | ● |
| | Junichi Hanzawa | Male | | | | | | | | | | | | | ● |
| | Makoto Kobayashi | Male | | | | | | | | | ● | | | | ● |

¹⁾ ◎: Chairperson of the Committee, ○: Committee member

Carbon Neutrality Project Team and Committee

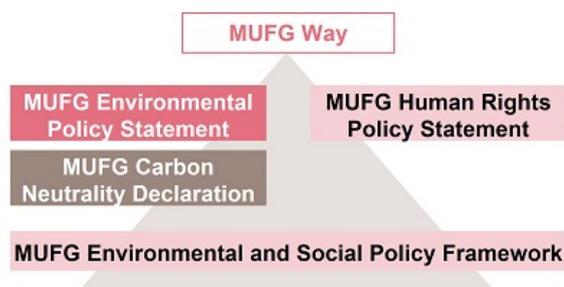
We have launched a global and group-wide project team to discuss strategies and policies, and to engage in agile decision-making through steering committee and review meetings with participation by the CEO and other key management members. This takes place under the supervision of the Board of Directors. In FY2022, a total of eight thematic review meetings for management were held, along with two steering committee meetings.



MUFG Environmental Policy

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.

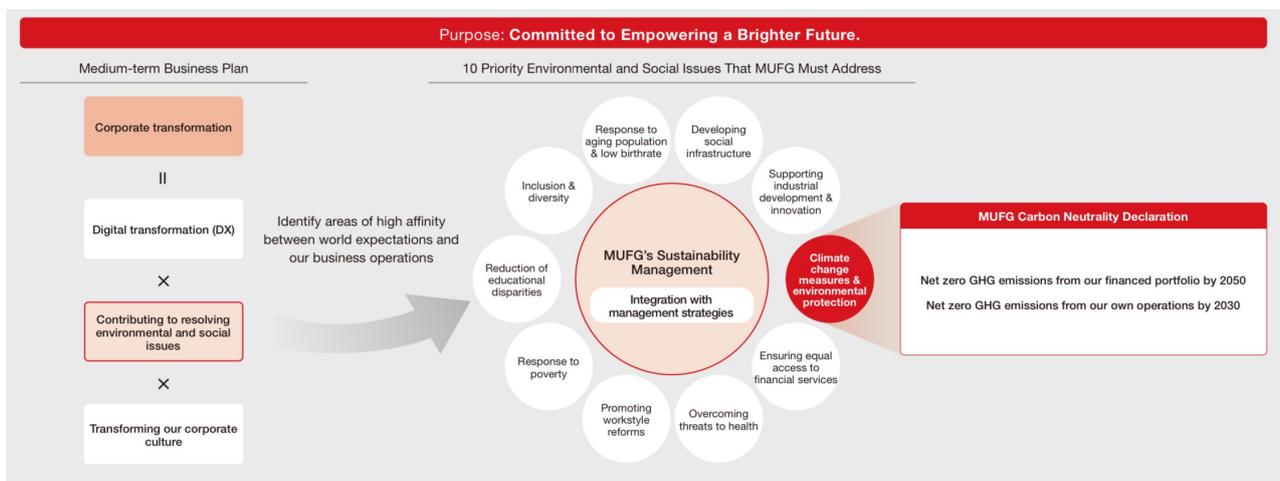
The MUFG Environmental Policy Statement has been the matter to be determined in the Board of Directors since May 2021. The Policy Statement clearly states the company's commitment to proactively disclose information on the environment, including climate change.



Strategy

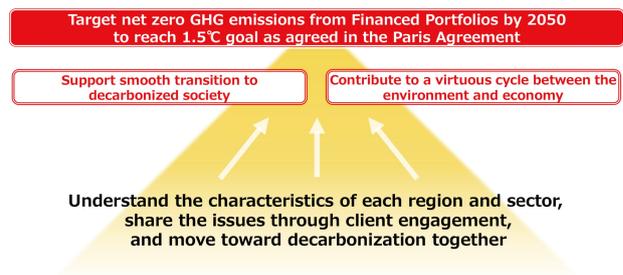
MUFG Carbon Neutrality Declaration

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. MUFG has taken another step forward by announcing the MUFG Carbon Neutrality Declaration in May 2021. Guided by this declaration, MUFG is implementing group-wide 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.



Approach to Achieving Carbon Neutrality

MUFG aims to achieve its priority goals of net-zero emissions and achievement of the 1.5°C target in 2050 by supporting a smooth transition to a decarbonized society and contributing to a virtuous cycle for the environment and the economy. To achieve these goals, we believe that not only net-zero emissions from our own group but also decarbonization by customers will be indispensable. We further believe that it is important that we share information on issues with customers through engagement and take steps together toward decarbonization, under an accurate understanding of regional and business characteristics.



Roadmap for Achieving Carbon Neutrality

In order to achieve carbon neutrality, we are advancing initiatives toward net-zero GHG emissions in our financed portfolio, decarbonization through financing, and net-zero emissions from our own operations, as we take action to meet our targets for 2030, 2040, and 2050.

< Key Progress in FY2022 >

| | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | ... | 2030 interim target | ... | 2040 | ... | 2050 |
|---|---|-------------|------------|------------|------|------|--|---|-----|------|-----|---|
| Net Zero Emissions from the Financed Portfolio | | | | | | | | | | | | |
| Power (emission intensity, gCO ₂ e/kWh) | 328 | 307 | 299 | | | | | 156-192gCO ₂ e/kWh | | | | |
| Oil & gas (emission reduction rate, MtCO ₂ e) | 84 | 81 | 76 | | | | | (15%)-(28%) | | | | |
| Real estate (emission intensity, gCO ₂ e/m ²) | | | | | | | | | | | | |
| Commercial real estate | | 65 | | | | | | 44-47kgCO ₂ e/m ² | | | | |
| Residential real estate | | 27 | | | | | | 23kgCO ₂ e/m ² | | | | |
| Steel (emission reduction rate, MtCO ₂ e) | 22 | | | | | | | (22%) | | | | |
| Shipping (PCA ¹) | | | 0.6 | | | | | PCA≤0 | | | | |
| Decarbonization through financial services | | | | | | | | | | | | |
| Sustainable finance (trillions of yen) | 3.7 | 7.9 | 14.5 | 24.6 | | | | ¥35 trillion | | | | |
| Credit balance targets for coal-fired power generation (FY) | | | | | | | | | | | | |
| Project finance (billions of U.S. dollar) | 3.58 | 3.77 | 2.95 | 2.58 | | | | 50% reduction from fiscal 2019 | | Zero | | |
| Corporate finance (billions of yen) | | Approx. 120 | Approx. 90 | Approx. 80 | | | | | | Zero | | |
| Net zero GHG emissions from own operations | | | | | | | Fiscal 2025 Domestic emission volume Reduce by 2/3 | Fiscal 2026 50% reduction on a groupwide, global basis | | | | Net zero |
| Decarbonization initiatives as an asset manager | | | | | | | | | | | | Reduce GHG emissions per economic intensity by 50% from 2019 for 55% of assets under management (Target 55% of assets under management) |
| Targets for the reduction of CO ₂ emissions through renewable energy project finance | | | | | | | | Cumulative total of 36.63 million tons | | | | Cumulative total from fiscal 2019 to 2030: 70 million tons |
| Carbon-related assets (credit amounts ²) | Results: A total of ¥60.2 ⁴ trillion (energy: ¥8.2 trillion; utility: ¥9.1 trillion; transportation: ¥12.0 trillion; materials & buildings: ¥26.8 trillion; agriculture, food & forestry products: ¥4.1 trillion) (As of fiscal 2022 end) | | | | | | | | | | | |
| Executive compensation linked with degree of success in climate change action | In fiscal 2021, we updated indicators for determining executive compensation, adopting a new indicator determined by the degree of improvement in external ratings granted by ESG rating agencies. Specifically, this new indicator is set to be used as part of the assessment of the level of achievement vis-à-vis targets under the Medium-Term Business Plan (MTBP). Achievement will be assessed on an absolute evaluation basis in light of ratings granted by five major agencies ⁵ and reflected in compensation as a portion of stock, representing 5% of the total evaluation weighting, to be granted based on medium- to long-term performance. | | | | | | | | | | | |

*1 A measure of consistency that indicates the difference from the required level across the portfolio. Calculates the Vessel Climate Alignment (VCA) of individual vessels providing financing as a weighted average of the percentages in the loan portfolio *2 Cumulative annual CO₂ reduction effect from renewable energy projects MUFG has provided with finance in each fiscal year, calculated based on generation capacity, capacity factor and emission factor. The value is calculated after taking into account the share of MUFG's loan arrangement or underwriting amount. *3 Sum of loans, forex, acceptances and guarantees, unused commitment lines, etc. *4 In accordance with the revised TCFD recommendations of October 2021, the data were compiled for 4 non-financial groups (energy, transportation, materials and buildings, agriculture, food and forest products). Excludes credits for renewable power belonging to the utility sector. The results include partner banks (Bank of Ayudhya (Krungsri) and Bank Danamon Indonesia). Sector classification is based on the customer's core business (largest sales/power mix) *5. MSCI, FTSE Russell, Sustainalytics, S&P Dow Jones, CDP

Formulation of a Transition Plan

In FY2023, we plan to develop and release a transition plan in line with the Glasgow Financial Alliance for Net Zero (GFANZ) guidance framework released in November 2022. In addition to our existing activities, we will accelerate initiatives involving risk management, engagement, and human resource development.



| | |
|---------------------------|---|
| Future initiatives | <ul style="list-style-type: none"> • Accelerate the following initiatives. Organize the overall in the GFANZ guidance framework and announce it ①Risk management: In addition to the qualitative framework^(note), planning to incorporate risk quantification and management models ②Engagement: Planning to strengthen the structure for integrated management of business risk and incorporating escalation policies, etc. ③Human resource development: Strengthen ability and skill development at each level. Accelerate culture-building toward net-zero |
|---------------------------|---|

(note) A framework to check customers' progress toward transition. For progress evaluation, transition strategy, execution capability and feasibility, governance, etc. will be checked.

Net Zero GHG Emissions in Our 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.

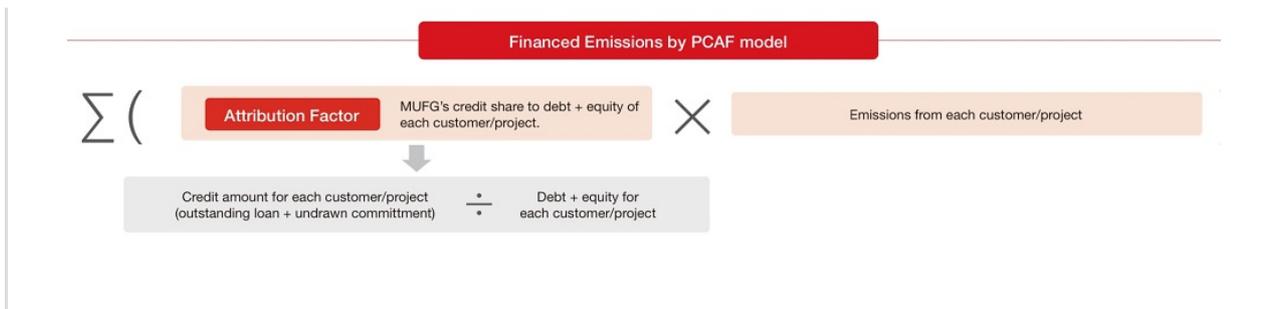
Innovations which are still in the conceptual stage is another indispensable element for the world to achieve decarbonization. We believe that there is a gap between the real world and the goal that is yet to be materialized. Therefore, our aspiration is to further contribute to the changes where the 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 Interim Targets

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) Identify priority sectors, (2) Perform sector analysis, (3) Determine methodologies and measure GHG emissions, and (4) Set interim targets.



Initiatives by Sector

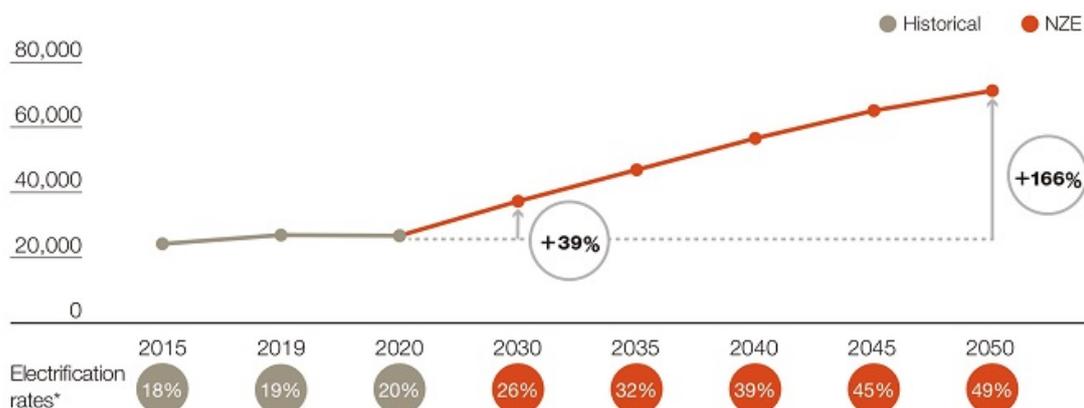
■ Power sector

Characteristics of the Sector

In the transition stage to a decarbonized society, the demand for power is expected to increase due to economic growth in developing countries and the electrification of industry. So, the power sector will need to shift to renewable energy and low-carbon fuels, while ensuring a stable supply of energy^(note). The policies and initiatives of each country are important because the business model of this sector is local and therefore has particularly strong regional characteristics.

(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 * The ratios of electricity to final energy consumption

Business Opportunities and Risk Management

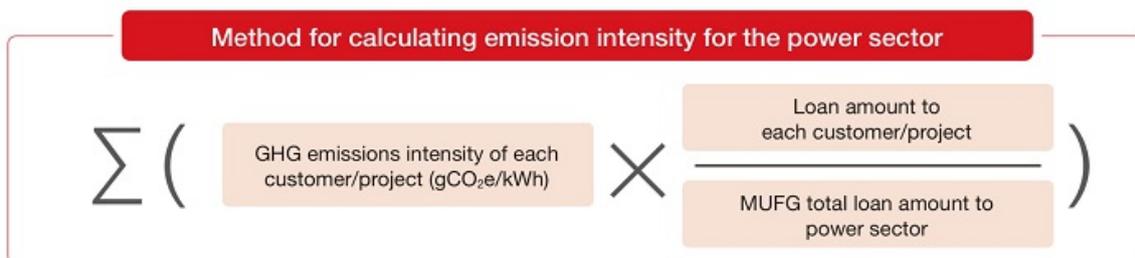
In the power sector, MUFG is taking action to implement appropriate risk management, capture business opportunities, and provide support for the transition to a decarbonized society.

| Envisioned Business Opportunities | Risk Management |
|---|--|
| <ul style="list-style-type: none"> • Investment in renewable energy (short, medium, long): Capital investment aimed at expanding renewable energy. Approximately four times the renewable energy capacity as of 2021 in Japan and overseas is required to achieve the 1.5°C scenario in 2030. • Investment in transmission and distribution network (short, medium, long): Technology development and capital investment for flexible power supply through grid enhancement, energy storage systems, etc. • Investment in innovative technologies (medium, long): Fund raising for R&D, demonstration projects, and practical application of decarbonized thermal power (hydrogen power generation, etc.), next-generation nuclear reactors, next-generation solar power, long duration energy storage technology (LDES), etc. • Investment in ammonia/hydrogen energy and CCUS (short, medium, long) | <ul style="list-style-type: none"> • Reduction of GHGs from financed portfolio Interim target setting, performance management • Management of transition risks Understanding and confirming transition strategies through engagement • Reduction of environmental and social risks based on Environmental and Social (ES) policy Prohibition of investment and financing in new and expanded coal-fired power generation • Setting finance targets for coal-fired power generation |

Setting of Interim Targets for Net-Zero Emissions in the Financed Portfolio



Calculation methodology for emission intensity in the power sector



| | |
|----------------------|--|
| Target scope | Value chain: Power generation businesses Emission scope: Scope 1 |
| Asset scope | Loan amounts (including undrawn-committed amounts) ^(note) (note) More than 85% of the exposure is included in the calculation. |
| Target metric | Emission intensity (gCO ₂ e/kwh) |
| Data source | Information disclosed by each customer, CDP, Bloomberg, etc. |

(Target scope)

Following SBTi and PACTA, the value chain and emission scope which we cover is Scope 1 of the power generation business, which accounts for the majority of GHG emissions in this sector.

(Target metric)

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.

Interim target setting



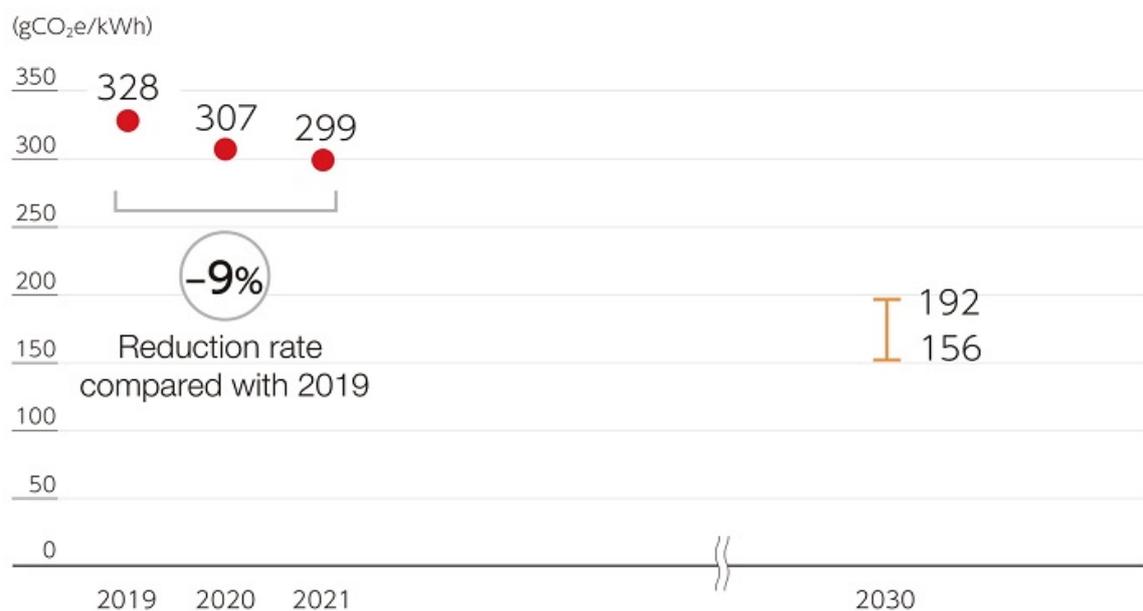
The interim target for 2030 is 156-192gCO₂e/kWh.

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

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

(note) Nationally Determined Contribution. This report, submitted by over 190 countries, shows how much each country will contribute to reducing GHGs under the Paris Agreement. An update to the report is required every five years

Results over time



As of March 2022, the emission intensity of the power sector was 299gCO₂e/kWh, a decrease of about 9% from 328gCO₂e/kWh in the base year of 2019. This is due to the progress in decarbonization of our customers.

MUFG will support our customers' initiatives for green, transition, and innovation to achieve the 2030 target, and will contribute to the promotion of renewable energy etc. as a leading company in sustainable finance.

Initiatives toward Carbon Neutrality



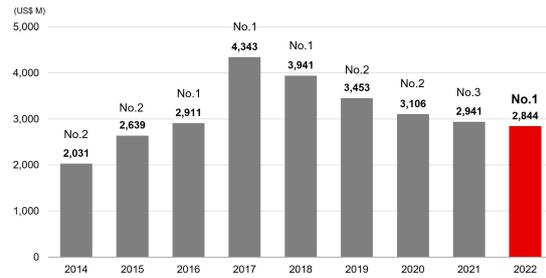
| Target for implementation | Outline of initiatives |
|---------------------------------------|--|
| Initiatives toward Japanese companies | <p>In December 2022, we established a new Power Project Team (PT) focused on the power sector, a key sector in achieving carbon neutrality in Japan. The PT is working to strengthen relationships with power utilities and industry associations by holding bi-weekly internal sessions with invited external experts to deepen understanding of related policy trends and complex power system structures. Participating members include head of branches which are in charge of electric power utilities nationwide as well as management from relevant divisions at the bank headquarters. The sessions are aimed at strengthening customer approach through management-level discussions. Activities are aimed at not only reinforcing knowledge but also strengthening cooperation among power sector sales managers, with sales managers from around country gathering to tour customers' nuclear power-related facilities, power plants, and other facilities.</p> <p>MUFG continuously coordinates dialogue between customers and overseas institutional investors to aid in eliminating the gap between these parties regarding the recognition of ideals and reality in the achievement of carbon neutrality. Through interviews with overseas investors, we recently shared analyses of the impacts on corporate value of customers' ESG responses, and conducted exchanges of ideas on approaches to respective transition, thereby contributing to the building of a foundation for customers' future strategy formulation.</p> <p>MUFG conducts in-bank study sessions with invited experts to enhance industry knowledge, and continuously works toward a multi-faceted understanding of customers' external environments and awareness of issues, through means including tours of power generation facilities and regular exchanges of ideas with top management and other parties in customer organizations. Through such activities, we discuss optimal ways by which MUFG can contribute to customers' formulation and implementation of strategies without being bound by conventional frameworks, including the possibility of strategic investment and provision of human capital to achieve the shared goals of customers and MUFG.</p> |
| Company A (EMEA) | <p>MUFG leveraged its strong relationship with a listed UK company with renewable electricity generation and electricity network businesses and conducted continuous dialogue with its Treasury and Sustainability teams. Through client engagement, MUFG was appointed as a Sole Sustainability Coordinator in two Sustainability-linked loans – one for transmission and one for distribution - and advised the client based on their unique ESG footprint and strategy for the two business entities.</p> |
| Company B Group (APAC) | <p>Group Company B has set their 2050 net zero goal and has also set mid and long-term GHG emission reduction targets for their key and emerging businesses to meet the group's net zero ambitions. Through consistent outreach by a combination of MUFG's front RMs, Product Office, Sector Coverage teams, MUFG engaged the parent holding company and their subsidiaries in power and telecom sectors and established the parent holding company's debut SLL and green loan for their overseas renewable energy projects.</p> |
| Company C (Americas) | <p>MUFG acted as a lead arranger in JICA PSIF (JICA Private Sector Investment Finance) facility and provided financing towards capex for improvement and development of a power grid in low-income region in Brazil. The financing will support innovative solution for power distribution namely improvements in energy efficiency, increase power distribution capacity and reducing losses.</p> |

Promotion of Renewable Energy Business-Related Financing

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 CO₂ 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 CO₂ emissions of about half of the households in Japan.

Through FY2022, we have reduced CO₂ emissions by a cumulative 36.63 million tons.



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

Initiatives toward Renewable Energy Project Financing

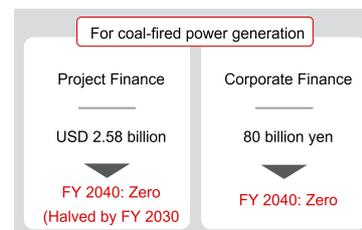
< Examples >

| Country | Target of support | Project overview |
|-----------------|--|--|
| Japan | Offshore wind power generation | MUFG supports all the offshore wind power projects in Japan, including the Akita Offshore Wind project. |
| Japan | Solar power generation | Achieved financial close for the first distributed solar generation project based on Corporate PPA structure in Japan. |
| U.S. | Transmission lines | Project finance for underground and underwater transmission line projects, increasing renewable power transmission capacity in New York metropolitan area. |
| Portugal, Spain | Solar and wind power generation | Refinancing of the largest platform of onshore wind and solar PV in Iberia cementing MUFG's presence in the region. |
| India | Solar and wind power generation, storage batteries | The first hybrid renewable round-the-clock battery-enabled project in India. Complemented with storage capacity, the project will be able to provide electricity for 24 hours. |
| Australia | Wind power generation | MUFG provides project finance to support the acquisition of operational wind farms with one of the largest renewable energy developers in Australia. |

Corporate finance targets for coal-fired power

For credit related to coal-fired thermal power generation, we have set a target to reduce to zero^(note) 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 excluded following the MUFG Environmental and Social Policy Framework.

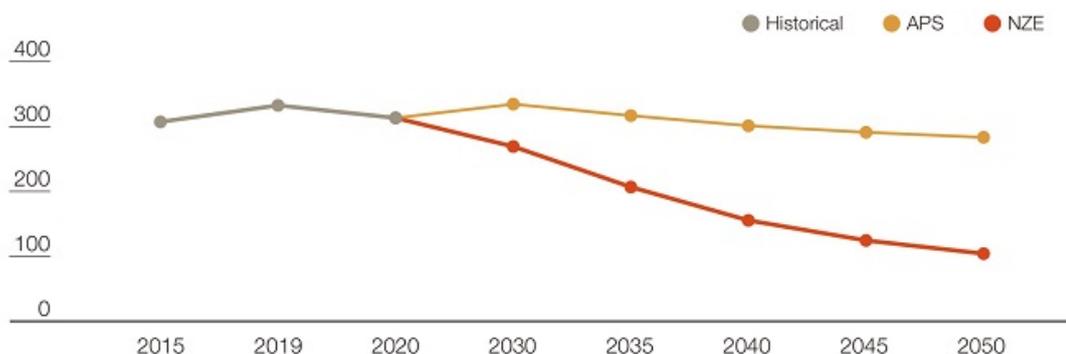


■ Oil and gas sector

Characteristics of the Sector

For decarbonization, GHG emission reductions can be done through electrification of production processes, CCUS, etc. (i.e. Scope 1, 2 of the upstream business). On the other hand, a large amount of this sector's GHG emissions is due to cross-industrial consumption (Scope 3), indicating that decarbonization in the oil & gas sector cannot be achieved without industries and households transitioning away from fossil fuels. The IEA figures suggest that currently there is a large gap between the demand (IEA APS scenario that is based on the commitments announced by each country) and the 1.5°C scenario. It is important to promote decarbonization in the demand sectors as well in order to close the gap between these two scenarios.

Global primary energy demand for Oil & Gas (EJ)



Source: IEA World Energy Outlook 2021

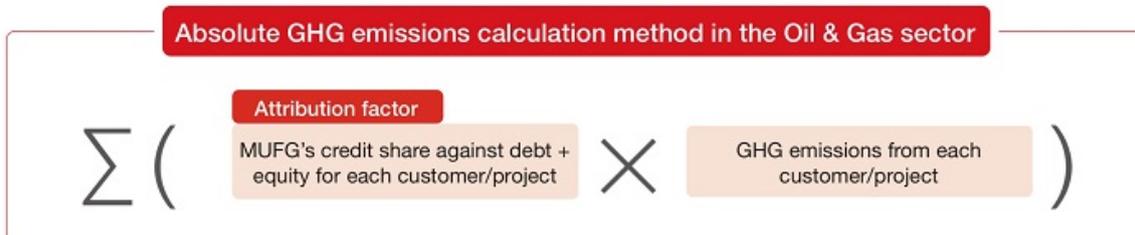
Business Opportunities and Risk Management

In the oil and gas sector, MUFG is taking action to implement appropriate risk management, capture business opportunities, and provide support for the transition to a decarbonized society.

| Envisioned Business Opportunities | Risk Management |
|--|--|
| <ul style="list-style-type: none"> • Transition to decarbonization business (short, medium, long): M&A and capital investment for new entry and/or expansion into renewable energy generation, bio/synthetic fuel business, etc., and for conversion from gasoline stations to EV and hydrogen station businesses, etc. • Investment and supply chain development for decarbonized fuels, etc. (short, medium, long): Funding for R&D, demonstration projects, and practical application of hydrogen, ammonia, synthetic fuels, etc., and fund raising associated with supply chain development • Investment in decarbonization of fossil fuel businesses (short, medium, long): Investment in upgrading existing equipment, electrification, adoption of CCUS, etc. | <ul style="list-style-type: none"> • Reduction of GHGs from financed portfolio Interim target setting, performance management • Management of transition risks Understanding and confirming transition strategies through engagement • Reduction of environmental and social risks based on ES policy Confirmation of environmental and social consideration for oil sands, Arctic development, shale oil and gas, and pipelines |

Setting of Interim Targets for Net-Zero Emissions in the Financed Portfolio

Calculation methodology of absolute emissions in the oil and gas sector



| | |
|----------------------|--|
| Target scope | Value chain: Upstream production businesses (including integrated businesses heavily involved in upstream businesses) Emission scope: Scope 1, 2, 3 |
| Asset scope | Loan amounts (including undrawn-committed amounts) ^(note) (note) More than 85% of the exposure is included in the calculation. |
| Target metric | Absolute GHG emissions (MtCO ₂ e) |
| Data source | Information disclosed by each customer, CDP, Bloomberg, etc. |

(Target Scope)

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 Scope 1 and Scope 2 but also Scope 3, from which the majority of GHG emissions from this sector is generated.

(Target metric)

We have chosen to use absolute GHG emissions as the target metric to directly capture fossil fuel burns (Scope 3) which are the main cause of GHG emissions.

Interim target setting

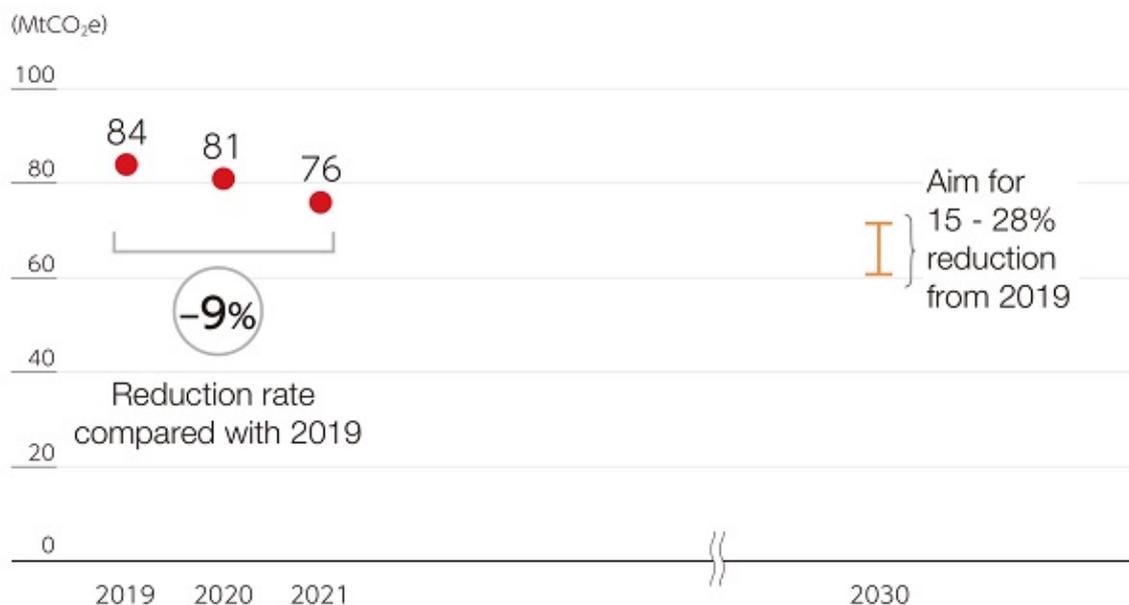


The interim target for 2030 is 15%-28% reduction from 2019.

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.

Results over time



As of March 2022, the oil & gas sector's absolute GHG emissions were 76MtCO₂e, a decrease of about 9% from 84MtCO₂e in the base year of 2019. This is due to progress made in repayment of loans upon due date. However, subsequent changes in the external environment due to the situation in Ukraine etc. may affect future results. MUFG will support customers' efforts to reduce GHG emissions through engagement to achieve the 2030 target. We also believe that it is essential for both oil & gas sector (supply-side) and the industries (demand-side) to simultaneously accelerate decarbonization. Therefore, we will contribute to the world to further advance toward decarbonization.

Initiatives toward Carbon Neutrality

| Target for implementation | Outline of initiatives |
|-------------------------------------|--|
| Initiatives with Japanese companies | The MUFG group works as a unified whole to support customers in the oil and gas sectors in formulating strategies for companies' transitions, including the introduction of hydrogen, ammonia, biofuels, and synthetic fuels. While providing customers with analyses of the impacts of ESG response on corporate value and analyses of trends in information disclosure, we provide support for individual projects by working to grasp trends and the business environment in the sector through discussions with customers and by working towards the decarbonization of refinery complexes overall through participation in discussions with local governments and councils. |
| | MUFG supports individual projects aimed at achieving transitions, based on customer engagement deepened through the MUFG Transition White Paper issued in October 2022. MUFG served as an arranger to undertake a major gas company's first transition loan project using the syndication method. |
| Company D (EMEA) | MUFG has proactively been engaging with a leading O&G firm around its transition strategy and discussing the role of ESG in accessing financing in the future. This has led to multiple discussions and engagement with a number of stakeholders – such as senior members of finance and sustainability teams - around the Company. Through these efforts, MUFG is providing long-term support to the client to help our client realize carbon neutrality. |
| Company E (APAC) | To support clean energy transition in Indonesia, MUFG has established engagements with the client on multiple fronts. MUFG has supported the client promote their energy transition through providing financing towards renewable energy projects, participating in a syndicated loan for solar energy projects and acting as a Joint Bookrunner for a green bond issued for geothermal energy projects. |

■ Real estate sector

Characteristics of the Sector

The real estate sector is a carbon intensive sector that accounts for 8% of global GHG emissions, and 75% of the emissions in this sector come from building utilization. Therefore, the key to decarbonizing the real estate sector is to improve building energy efficiency, install renewable energy equipment, promote electrification, and improve the emission factor for electricity used in buildings.

In particular, the real estate sector has strong regional characteristics influenced by the location of properties including climate conditions, as well as the degree of electrification and energy mix in each country. MUFG's portfolio is focused largely on Japan, thus it is important for MUFG to support the initiatives in the Japanese real estate sector and the policies of the Japanese government.

Business Opportunities and Risk Management



In the real estate sector, MUFG is taking action to implement appropriate risk management, capture business opportunities, and provide support for the transition to a decarbonized society.

| Envisioned Business Opportunities | Risk Management |
|--|--|
| <ul style="list-style-type: none"> • Renovation of existing buildings (short, medium, long): Demand for loans to improve thermal insulation performance through renovation of existing buildings • Construction of decarbonized buildings (short, medium, long): Demand for loans for new ZEH^(note) housing construction, etc. • Decarbonized urban development (short, medium, long): Investment in decarbonized urban development that integrates housing, buildings, and transportation systems • Technology and supply chain development for decarbonized building materials, etc. (medium, long): Fund raising associated with the construction of supply chains for decarbonized concrete, etc. | <ul style="list-style-type: none"> • Reduction of GHGs from financed portfolio Interim target setting, performance management • Management of transition risks Understanding and confirming transition strategies through engagement |

(note) Net Zero Energy House. Housing equipped with substantial outer insulation and high-efficiency energy-saving equipment, consuming net-zero or negative annual primary energy consumption due to renewable energy, etc.

Setting of Interim Targets for Net-Zero Emissions in the Financed Portfolio



Calculation methodology for emissions intensity in the real estate sector

| | |
|----------------------|---|
| Target scope | Value Chain: Building utilisation Emission Scope: Scope 1, 2 and 3-13 ^(note) of developers, REITs and SPVs, Scope 1 and 2 of mortgage borrowers (note) Emissions from assets leased to others |
| Asset scope | Loan amounts (including undrawn-committed amounts) ^(note) (note) More than 70% of the exposure is included in the calculation. (For residential real estates, the most recent loan amounts are used due to date availability) |
| Target metric | Emission intensity (kgCO ₂ e/m ²) |
| Data source | Information disclosed by each customer and statistics from various external sources |

(Target scope)

Following NZBA and SBTi, we scope in the emissions from building utilization, which account for almost 80% of the emissions from this sector. For commercial real estate, these are emissions from

the use (including leasing) of properties (i.e. Scope 1, 2, and 3-13) owned by corporate customers such as real estate developers, REITs, SPVs^(note), etc. For residential real estate, these are emissions from the use of properties (i.e. Scope 1 and 2) that are collateralized to secure mortgage loans (including apartment loans).

(note) Special purpose vehicles for real estate securitization

(Target metric)

Real estate plays an indispensable role in our daily lives and economic activities. Since it is necessary to support the increase in demand associated with economic growth whilst promoting decarbonization, we chose emission intensity (kgCO₂e/m²) as the target metric for both commercial and residential real estate.

Interim target setting



< Commercial Real Estate >

The 2030 interim target (emission intensity) is 44-47kgCO₂e/m².

We will achieve 47kgCO₂e/m² by engaging with our clients to meet their own emissions targets.

47kgCO₂e/m² is well below 2°C level of the CRREM^(note) scenario for 2030. In addition, by further contribution to the decarbonization of the emissions from tenancy as well as the power sector, we aim to achieve 44kgCO₂e/m² to reach 1.5°C level of the CRREM scenario for 2030.

(note) An initiative that calculates and provides scenario benchmark values for 2°C and 1.5°C by building types and regions covering 28 countries across Europe, Americas, and APAC including Japan.

< Residential Real Estate >

The 2030 interim target (emission intensity) is 23kgCO₂e/m².

In addition to providing support for energy efficiency and renewable energy solutions for existing collateralized buildings whilst pursuing decarbonization of the power sector, we expect to increase the volume of our ZEH transactions in line with predicted growth of ZEH in the market. Through these measures, we aim to achieve 23kgCO₂e/m² to reach 1.5 level of CRREM scenario for 2030.

Initiatives toward Carbon Neutrality

| Target for implementation | Outline of initiatives |
|------------------------------------|--|
| Hoshino Resorts REIT, Inc. | This corporation has established its own green finance policy framework through which it addresses environmental conservation, climate change, and energy usage. MUFG provided support for green loans to fund green projects including Hoshinoya Karuizawa, which reduces its environmental load through the use of hydroelectric power generation and geothermal heat. |
| MUFG Private REIT, Inc. | This corporation is strengthening its initiatives aimed at real estate sustainability as a form of Responsible Property Investing, and engages in actions including participation in GRESB ^(note) evaluation. MUFG provided support to the corporation through the first Sustainability Lined Loan for a private REIT. The loan was set using a high 4-star evaluation in the GRESB rating as a sustainability performance target (SPT). <small>(note) An annual benchmark evaluation that measures environmental, social, and governance (ESG) consideration by real estate companies and funds. Also, the name of the organization that operates the evaluation.</small> |
| MITSUBISHI ESTATE CO., LTD. | MUFG is backing up the carbon neutrality initiatives of this company, which has announced its "Net Zero Declaration for 2050." MUFG supported the issuance of Sustainability Linked Bonds through securities with SPTs of "achievement of 100% electric power derived from renewable energy sources in FY2025" and "achievement of 70% or greater reduction in total Scope 1 and 2 GHG emissions and 50% or greater reduction in Scope 3 emissions in FY2030 (compared with FY2019 levels)". The Bank supported a Sustainability Linked Loan with the SPT of "achievement of 100% electric power derived from renewable energy sources in FY2025." The SPTs in Mitsubishi Estate's Sustainability Linked Finance Framework (as of March 2023) are in line with the Net-Zero Standard announced by SBTi in October 2021. |
| Tokyu Fudosan Holdings Corporation | Tokyu Fudosan Holdings Corporation, the Trust Bank, and the Bank have formed the first green finance-certified money trust for individuals in Japan. The green finance-certified money trust for individuals is the first such initiative in Japan ^(note) . The loan claims executed by the Bank for the company are transferred to the Trust Bank, which then sells trust beneficiary rights from the money trust managed by the Trust Bank using loan claims to individual customers. The use of funds from the loan claims is limited to construction funds for condominium brands that proactively address the environment. Through this product, we are working to meet the financial management needs of individual customers as well as to solve ESG issues. <small>(note) According to research by the Mitsubishi UFJ Trust and Banking Corporation. As of February 8, 2023.</small> |
| Company F (APAC) | MUFG took a lead in advising the client, one of the leading property developers in Hong Kong, to incorporate sustainability-linked loan format into the Facility. MUFG was mandated as one of the three sustainability advisors and led one of the largest sustainability-linked loan deals for the real estate sector in Hong Kong. |

■ Steel sector

Characteristics of the Steel Sector

The steel sector is a carbon intensive sector that accounts for 7% of global GHG emissions, and 77% of the emissions in this sector come from steel production. Decarbonization of the steel sector will be driven by decrease in blast furnace production and increase in scrap reuse, the development of low-carbon manufacturing technologies, and the implementation of CCUS to collect non-reducible carbon.

As the Japanese steel sector is expected to play a central role in responding to the increasing demand for high-quality steel, it will be necessary to confront the long-term challenge of developing technologies such as hydrogen reduction in blast furnaces, 100% hydrogen direct reduction processes, and large electric furnaces. With about 90% of MUFG's steel portfolio being comprised of major Japanese companies, we are committed to supporting them with these efforts toward decarbonization.

Business Opportunities and Risk Management

In the steel sector, MUFG is taking action to implement appropriate risk management, capture business opportunities, and provide support for the transition to a decarbonized society.

| Envisioned Business Opportunities | Risk Management |
|---|--|
| <ul style="list-style-type: none"> • Development of decarbonized steelmaking technology (short, medium, long): Fund raising associated with R&D, demonstration projects, and practical application of hydrogen utilization in blast furnaces, hydrogen direct reduction, utilization of electric furnaces, etc. • Procurement of decarbonized fuels, etc. and supply chain development (short, medium, long): Fund raising associated with the development of supply chains for hydrogen, CCUS, etc. • Business diversification (short, medium, long): M&A and capital investment for new entry and expansion | <ul style="list-style-type: none"> • Reduction of GHGs from financed portfolio Interim target setting, performance management • Management of transition risks Understanding and confirming transition strategies through engagement |

Setting of Interim Targets for Net-Zero Emissions in the Financed Portfolio

Calculation methodology of absolute emissions in the steel sector

| | |
|----------------------|--|
| Target scope | Value chain: Steel production Emission Scope: Scope 1 and 2 of steel manufacturers |
| Asset scope | Loan amounts (including undrawn-committed amounts) ^(note) (note) Around 90% of the exposure is included in the calculation |
| Target metric | Absolute GHG emissions (MtCO ₂ e) |
| Data source | Information disclosed by each customer, CDP, Bloomberg, etc. |

(Target Scope)

Following SBTi and PACTA, we scope in the emissions from steel production, which accounts for almost 80% of the emissions from this sector (i.e. Scope 1 and 2 of steel manufacturers).



(Measurement Metrics)

We have chosen to use absolute GHG emissions as the target metric as this is the metric used by the majority of the customers in our portfolio, thereby enabling us to directly follow the progress of customers in reducing their GHG emissions. We used 2019 as the baseline year for this sector, as emissions fell significantly in 2020 as a result of cutbacks in steel production due to the significant impact of COVID-19.

Interim target setting



The interim target (absolute emissions) for 2030 is 22% reduction from 2019. Whilst major Japanese companies account for around 90% of our portfolio, the IEA scenario does not provide a country-specific scenario, making it difficult for us to directly confirm alignment with the 1.5°C level. However, each customer has already announced their declaration for 2050 carbon neutrality with ambitious targets to achieve, and MUFG's interim target is in line with these customers' reduction targets. MUFG will continue to support our customers in their efforts and challenges to achieve their targets towards decarbonization.

Initiatives toward Carbon Neutrality

| Target for implementation | Outline of initiatives |
|---------------------------------------|--|
| Initiatives toward Japanese companies | MUFG engages in regular exchanges of ideas at the management level with customers in the steel sector to discuss characteristics of the Japanese manufacturing and steel-making industries, issues in innovative technology development, and trends in the external environment. We work to understand the circumstances of customers from more diverse perspectives through study tours of steel mills and peripheral technologies. Based on this, we conduct ongoing dialogue to support customers in achieving transitions. |

| Target for implementation | Outline of initiatives |
|---------------------------|--|
| Company G (APAC) | MUFG supports the company in its decarbonization journey across various business verticals. MUFG conducted a series of engagement sessions and assisted the power and steel business to identify Eligible Green Projects to be financed using Sustainable Finance debt instruments as part of the company's aspiration towards net-zero by 2045. |

■ Shipping sector

Characteristics of the Shipping Sector

The shipping sector is a carbon intensive sector that accounts for 2% of global GHG emissions, and 98% of emissions in this sector come from shipping operations (i.e. fuel consumption). Therefore, the key to decarbonization is to switch to LNG fuel and implement measures to save energy and improve operational efficiency during transition period, and ultimately introduce zero-emission fuel vessels (i.e. hydrogen/ammonia/methanol, biofuels, etc.).

Whilst available type of fuel is limited by the type and size of vessels, each vessel is used for specific purposes, and it is not easy to substitute one vessel type with another. Therefore, it is important to consider operational efficiency and smooth decarbonization pathways for each type of vessel, and new fuel development and early implementation of technological innovation is the shipping sector's next challenge.

MUFG joined the Poseidon Principles in March 2021. Under this framework, MUFG has been disclosing its ship finance portfolio climate alignment starting from 2022 using the data of 2021.

< Poseidon Principles >

A framework for calculating, assessing and disclosing the climate alignment score of ship finance portfolios in order to achieve the International Maritime Organization's (IMO) GHG emission reduction targets. The degree to which the annual average carbon intensity for each vessel in the financial institutions' portfolio deviates from its respective trajectory based on the scenarios referenced by the Poseidon Principles will be assessed using the Vessel Climate Alignment (VCA) and the Portfolio Climate Alignment (PCA).

Business Opportunities and Risk Management



In the shipping sector, MUFG is taking action to implement appropriate risk management, capture business opportunities, and provide support for the transition to a decarbonized society.

| Envisioned Business Opportunities | Risk Management |
|--|--|
| <ul style="list-style-type: none"> • Support for decarbonization in shipping (short, medium, long): Fund raising associated with R&D, demonstration projects, and practical application of energy conservation in existing vessels, streamlining of operations, and zero-emission fuel-ships (hydrogen, ammonia, methanol, bio-fuels, etc.) • Investment in shipping that contributes to decarbonization (short, medium, long): Investment in shipping that supports decarbonization of CO₂ transport vessels engaged in the CCS/CCUS business, vessels related to the offshore wind power business, etc. | <ul style="list-style-type: none"> • Reduction of GHGs from financed portfolio Setting of PCA targets and confirmation of results • Management of transition risks Understanding and confirming transition strategies of shipping companies through engagement |

Setting of Interim Targets for Net-Zero Emissions in the Financed Portfolio



Assumptions for PCA calculation in the shipping sector

| | |
|----------------------|--|
| Target scope | Value chain: Operation (fuel consumption) Emission Scope: Scope 1 (TTW ^(note)) of shipping operators (note) Tank to Wake: CO ₂ emissions from the ship's fuel tank to the exhaust |
| Asset scope | Ship finance tied to vessels under purview of IMO ^(note) (note) Emissions data reporting rate (as of December 2021): 71.4% |
| Target metric | Portfolio Climate Alignment (PCA) |
| Data source | Information disclosed by each customer (IMO Data Collection System (IMO DCS) data) |

(Target Scope)

In line with the guidance from Poseidon Principles, we scope in the emissions from operation, which accounts for more than 90% of emissions from this sector (i.e. Scope 1 of shipping operators).



Measurement Metrics

Following the Poseidon Principles, we are utilizing emission intensity-based PCA as our target metric.

PCA score for 2021 was +0.6%, which means a deviation of +0.6% from the Poseidon Principles reference scenario (i.e. IMO scenario aiming for 50% GHG reduction by 2050 from 2008^(note)).

(note) IMO target at the time of PCA calculation in 2021

Interim target setting



We have set the 2030 interim target (PCA) as 0% or less. This means that the intensity of vessels financed by MUFG, at the portfolio level, will be consistent with the IMO scenario which aims to reduce the total GHG emissions by 50% from 2008 baseline (by 2050).

MUFG aims to achieve this goal by proactively supporting decarbonizing initiatives promoted in the shipping sector, such as implementing measures to save energy and improve operational efficiency, promoting the use of biofuels, developing hydrogen and ammonia vessels, and switching to LNG fuel during transition period.

In July 2023, IMO adopted a revision to its scenario that aims for net-zero total GHG emissions by or around 2050, compared to 2008 level. In response to this, the Poseidon Principles have already announced development of a framework consistent with the revised IMO scenario. MUFG will update its scenarios in line with action by the Poseidon Principles.

Initiatives toward Carbon Neutrality



| Content of Initiatives | Outline of initiatives |
|---|--|
| Engagement | In December 2022, MUFG released a PCA score based on the Poseidon Principles. The PCA shows the degree to which CO ₂ emissions based on fuel consumption from financed ships deviate from the GHGs reduction scenario set by the Poseidon Principles. Based on the scores, MUFG discussed with customers on initiatives for decarbonization. We will continue using knowledge gained from Poseidon Principles initiatives in discussions with customers and support the decarbonization in financial terms. |
| Financing support for existing technologies | MUFG provides financing for vessels that effectively reduce GHGs to achieve decarbonization in the shipping sector. As an example, LPG and LNG, typical marine fuels during the transition period, reduce sulfur oxides (SO _x) by 95% to 100% and CO ₂ by 20% to 30% or more compared to conventional marine fuels. Through financing for LPG dual-fuel large gas carriers, LNG dual-fuel LNG carriers, car carrier ships, and container carrier ships, MUFG supports decarbonization in the shipping sector. |

| Content of Initiatives | Outline of initiatives |
|--|---|
| Financing support for new technologies | In the area of zero-emission-fuel ships, advancements are being made in the development of engines, construction of supply chain networks for zero-emission fuels, and expansion of bunkering facilities. Recognizing that the proliferation of these ships holds a key to decarbonization, MUFG is studying financing for ammonia dual-fuel ships and methanol dual-fuel ships. We will continue researching industry trends and holding discussions with customers as we study support for zero-emission-fuel ships, CO ₂ transport ships, and other forms of shipping that are expected to require the development of new technologies. |

Opportunities Related to Climate Change

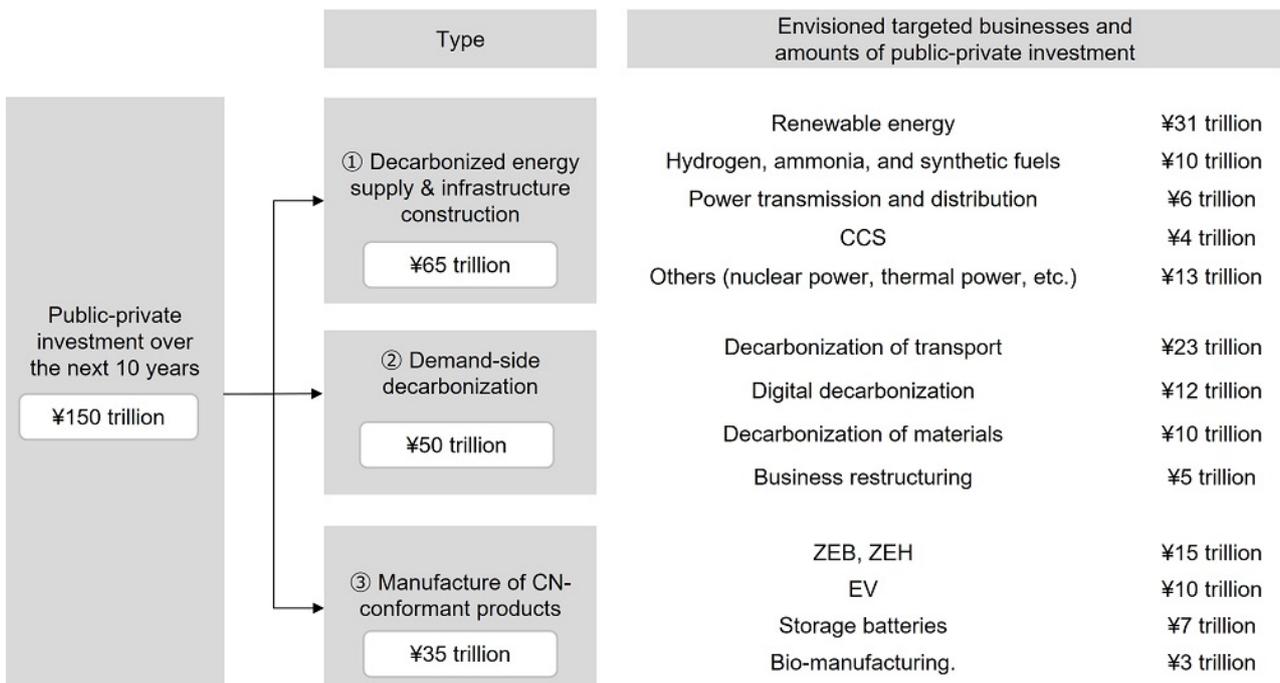
Capital Investment Expansion and Financing Opportunities

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

According to the IEA^(note), global decarbonization-related investment is expected to reach approximately USD 4 trillion annually from 2026 to 2030. In addition, the Ministry of Economy, Trade and Industry estimates decarbonization-related public and private investment of approximately ¥150 trillion in Japan over the next 10 years in sectors including energy, automobiles, and construction, within which it forecasts ¥20 trillion in government-funded support through GX Economy Transition Bonds.

In addition to Green Bonds and Green Loans to underpin investment plans, support for transition innovation in industries will also become a significant business opportunity for financial institutions.

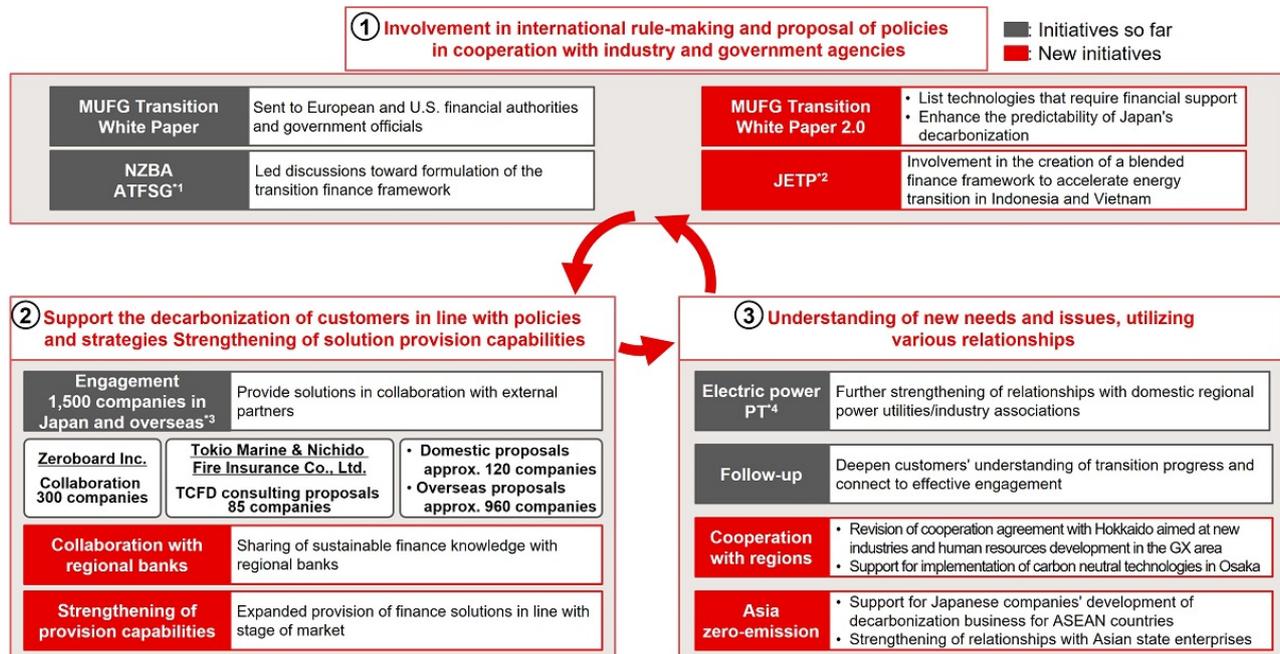
(note) October 2021 IEA Report, "World Energy Outlook 2021"



Source: Prepared by MUFG from materials released by the Ministry of Economy, Trade and Industry

MUFG's Approach to Carbon Neutralization

While making policy recommendations in cooperation with industry and government agencies, MUFG will grasp new needs and issues through the provision of solutions. We will strengthen relationships with customers, local governments, and industry associations as we provide industry and government agencies with feedback on new needs and issues, working responsibly with these parties to achieve carbon neutrality for customers.



(note1) Asia Transition Finance Study Group: An initiative led by private-sector financial institutions, launched to promote transition financing in Asia with a focus on major financial institutions operating in ASEAN countries under the Asia Energy Transition Initiative (AETI)

(note2) Just Energy Transition Partnership: A partnership led by the G7 to accelerate the early retirement of emission-intensive infrastructure and support investment in renewable energy generation and relevant infrastructure

(note3) Including: Introduced 300 companies to Zeroboard Inc. (100 companies registered as partners of Zeroboard); Proposed TCFD consulting services (collaborating with Tokio Marine & Nichido Fire Insurance Co.,Ltd) to 85 companies and signed contracts with 11 companies; Domestic discussions and proposals for introducing new ESG financing (approx. 120 companies); Overseas discussions and proposals for transition strategy and short / mid-to-long term financing needs (approx. 960 companies)

(note4) Project Team

Involvement in Discussions to Develop International Frameworks in Cooperation with Policy Makers and Industry

Through participation in climate change-related initiatives, MUFG is actively involved in discussions to develop international frameworks. Given that no pathway toward carbon neutrality will be identical among Europe, the U.S., Japan, and Asia, we advocate on behalf of a leading financial institution based in Asia.

■ Net-Zero Banking Alliance (NZBA)

NZBA is an international industry-led initiative, convened by the United Nations Environment Programme Finance Initiative (UNEP FI) with banks committing to aligning their lending/investment portfolios with net-zero GHG emissions by 2050. MUFG became the first Japanese bank to participate in NZBA in June 2021 and became one of the NZBA Steering Group member representing Asia. Also, as the Chair of the NZBA Transition Finance Working Group (formerly known as the "Financing & Engagement" Working Group), we led discussions to develop the NZBA Transition Finance Guide (published in October 2022). The Guide provides NZBA member banks with principles to use as a reference for their approach to transition finance and proposes policy measures to expand transition finance. In 2023, we are still chairing the WG and lead discussions to develop frameworks to further mainstream transition finance.



■ Asia Transition Finance Study Group (ATFSG)

Led by private-sector financial institutions, this initiative was launched to promote transition finance in Asia with a focus on major financial institutions operating in ASEAN countries under the Asia Energy Transition Initiative (AETI).

MUFG has led discussions with more than 30 participating financial institutions, based on which the ATFSG has compiled practical guidelines to be used by financial institutions when they consider transition finance along with the ATFSG activity report and a list of recommendations for support from governments and other stakeholders. These documents were then publicized at the Asia Green Growth Partnership Ministerial Meeting (AGGPM) hosted by the Ministry of Economy, Trade and Industry in September 2022.



■ Net Zero Asset Managers initiative (NZAM)

Centered on asset management firms, this initiative aims for net-zero GHG emissions by 2050, a target consistent with international initiatives to restrict temperature rise to 1.5°C. MUFG AM has participated since November 2021, and in October 2022 set an interim target for 2030 covering 55% of assets under management, to reduce GHG emissions per unit of economic intensity (absolute emissions amount (tCO₂e) / balance of the assets under management) by 50% compared to 2019 level.

■ GFANZ (Glasgow Financial Alliance for Net Zero)

GFANZ is the largest pan-financial sector initiative in the world, bringing together independent, sector-specific Alliances such as NZBA and Net Zero Asset Managers initiative (NZAM). MUFG is the only Japanese bank participating in all five GFANZ workstreams (re)structured in 2023, where we have actively contributed to discussions to promote the various net-zero initiatives in GFANZ.

The GFANZ Japan Country Chapter was launched in June 2023 as the first GFANZ Country Chapter. Masamichi Kono, Senior Advisor of MUFG Bank, Former Deputy Secretary General of the OECD, was appointed as GFANZ

Japan Advisor. MUFG will contribute to discussions in GFANZ Japan and two-way communication between GFANZ Global and GFANZ Japan.

■ JETP (Just Energy Transition Partnership)

JETP is the G7-led partnership to accelerate the early retirement of high-emitting infrastructure and expansion of renewable energy and related infrastructure. MUFG is the only Japanese bank participating in both JETP Indonesia and Vietnam. We will consider structuring and investing in the projects with leveraging the frameworks such as blended finance to support the energy transition of Indonesia and Vietnam.

■ MUFG Transition Whitepaper 2022

In October 2022, we published the MUFG Transition Whitepaper 2022 to communicate the importance of recognizing different regional characteristics, interdependency among industries, and individual efforts in maximizing renewable energy to achieve carbon neutrality in Japan.



2022

| | |
|---------|--|
| Apr-Jul | Discussions with Whitepaper partner companies |
| Aug | MUFG forum |
| Aug-Sep | Dialogue with European and U.S. government authorities |
| Oct | MUFG Transition Whitepaper 1.0 publication |
| Nov | COP27 publication |



Key Takeaways

1 Regional characteristics

- Different starting point and direction for Carbon Neutrality depends on the region characteristics
- Regional analysis based on sources of emissions, connectivity, energy security and social/political factors

2 Inter-industry relations(Interdependency)

- Individual approach by sector may not be effective for Carbon Neutrality
- Identify effective levers considering interdependency which industries have closely, horizontally and vertically
- In Japan, Carbon Neutrality of power and heat is an important lever

3 Japanese Managed Phase Out with maximizing renewable power introduction

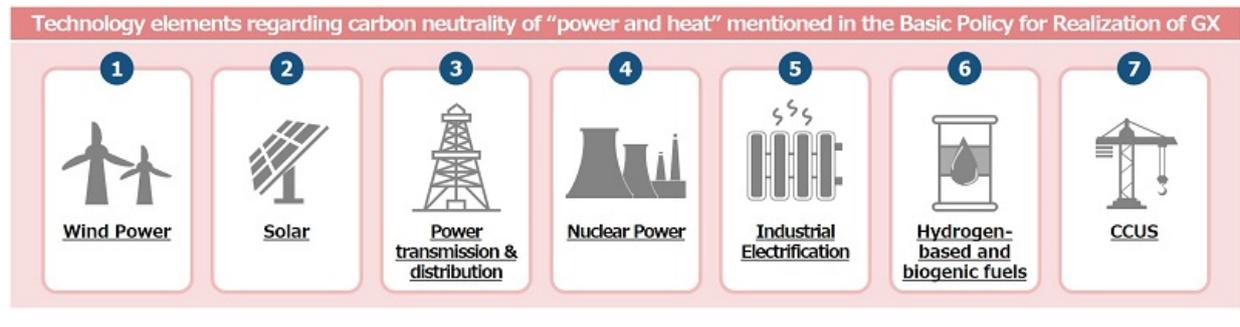
- Targeting early shut down of inefficient plants, co-combustion for high-efficient thermal plants in the short-term, and mono-combustion in the mid-to-long term
- While maximizing the use of domestic renewable energy, use imported green hydrogen and ammonia derived from overseas renewable power in various industries

In September 2023, we published the MUFG Transition Whitepaper 2023, to present the list of technologies in supply chains that are important in advancing the path to carbon neutrality in Japan's "electricity and heat" segment. MUFG will also steer its activities towards clarifying Japan's transition plan to seek for new opportunities ahead of us.

< Transition Whitepaper 2023 >

- Published in September 2023, the Whitepaper 2023 was developed in collaboration with partner companies and government authorities.
- Based on policy analysis in Europe, the US, China, and ASEAN, the Whitepaper 2023 presents the list of technologies and supply chains that will play important levers in advancing the path to carbon neutrality in Japan's "electricity and heat" segment. The Whitepaper also highlights the need to extend financial support covering broader spectrum. We incorporated detailed information on various technologies explaining about their backgrounds, roles in the Japanese policy, and current development status.
- By summarizing the initiatives of the Japanese government and leading companies in English, the Whitepaper 2023 aims to improve global stakeholders' understanding of Japan's transition plan and financing

opportunities entailed. Among the technologies outlined in the Japan's Basic Policy for Realizing GX, the Whitepaper highlights seven technologies related to carbon neutrality in “electricity and heat”.



■ COP27

MUFG hosted a side event at the Japan Pavilion as the first Japanese financial institution. Public sector representatives such as the World Bank, OECD, private financial institutions (BlackRock, HSBC), and academia (London School of Economics) joined the event. Panelists from Asia and Africa also participated and provided the regional perspectives. We discussed challenges and opportunities related to “just and orderly transition” (Event title: Financing a just and orderly transition ~ Filling the gaps to pave the way to a credible transition path).



■ Contributions to initiatives in Japan and internationally, etc.

MUFG is actively involved in discussions to realize carbon neutrality through participating in various Japanese and international initiatives and committees hosted by the public sector, such as governments. Major initiatives include:

| Name of Initiative | MUFG's Role | Operating body |
|--|-------------------|---|
| ESG Finance High Level Panel | Committee members | Ministry of the Environment |
| Expert Panel on Sustainable Finance | Members | Financial Services Agency |
| Sustainability Standards Board of Japan | Committee members | Financial Accounting Standards Foundation |
| TCFD Consortium Planning Committee | Committee members | Ministry of Economy, Trade and Industry; Financial Services Agency; Ministry of the Environment; etc. (observers) |
| Working Group on Financial Institutions' Efforts towards the Decarbonization of the Economy | Members | Financial Services Agency |
| Central Environment Council, Global Environment Committee, Comprehensive Policy Subcommittee, Carbon-Neutral Economic and Social Transformation Subcommittee | Committee members | Ministry of the Environment |
| Taskforce on Preparation of the Environment for Transition Finance | Committee members | Ministry of Economy, Trade and Industry; Ministry of the Environment; Financial Services Agency |
| Study Group on Financing from the Public Sector to Help Corporate Initiatives for GX (Green Transformation) in Industries | Committee members | Ministry of Economy, Trade and Industry |

| Name of Initiative | MUFG's Role | Operating body |
|--|-----------------------|---|
| GX League | Members | Ministry of Economy, Trade and Industry |
| GSG The Japan National Advisory Board | Committee members | Social Innovation and Investment Foundation |
| National Movement for New and Prosperous Lifestyles toward Decarbonization | Members | Ministry of the Environment |
| Monetary Authority of Singapore (MAS) Sustainable Finance Advisory Panel | Member | MAS |
| PRB2030 Core Group | Members | UNEP-FI |
| NZBA Steering Group | Member | UNEP-FI |
| NZBA Transition Finance Work Track | Chair | UNEP-FI |
| GFANZ Asia-Pacific Network | Advisory Board Member | GFANZ |

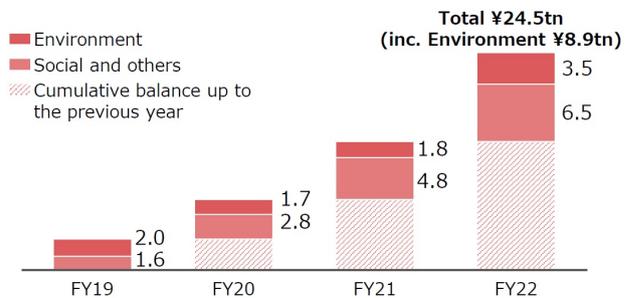
(Excerpts of major items, including past items)

Strengthening Capabilities to Provide Solutions that Support Client Decarbonization in Line with Government Policies and Strategies

■ Sustainable Finance Targets

We have set a cumulative sustainable finance target for the period of FY2019 and FY2030 to address environmental and social issues. We steadily accumulated results of ¥24.5 trillion (including ¥8.9 trillion in the environmental area) through the end of FY2022 and are planning to revise our sustainable finance targets for FY2030.

In the environmental field, including response to climate change, we aim to deliver ¥18 trillion in financing for projects connected to the reduction of GHG emissions and preservation of the global environment. We will support a transition to a decarbonized society through the underwriting of MUFG Green Bonds for which proceeds from issuance are allocated to finance qualified Green Projects, provision of products and services aimed at reducing environmental impacts, and the promotion of renewable energy through project finance.



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).

< Breakdown of Sustainable Finance Targets and Results >

[Unit: trillion yen]

| Category | | FY2019 results | FY2020 results | FY2021 results | FY2022 results | Cumulative | FY2030 goals |
|---------------|--|----------------|----------------|----------------|----------------|-------------|--------------|
| Environmental | Project finances, etc. for renewable energy and environment-related businesses | 0.5 | 0.6 | 0.6 | 0.7 | 8.9 | 18.0 |
| | Underwriting and sales of Green Bonds. | 0.5 | 0.5 | 0.5 | 0.6 | | |
| | Corporate loan origination for businesses contributing to climate change mitigation and adaptation, etc. | 0.2 | 0.3 | 0.3 | 1.0 | | |
| | Financial advisory for businesses that contribute to climate change mitigation and adaptation | 0.8 | 0.3 | 0.3 | 0.1 | | |
| | Others | 0.0 | 0.0 | 0.2 | 1.0 | | |
| Social | Finance for social infrastructure development and regional vitalization, etc. | 1.0 | 1.3 | 1.6 | 2.5 | 6.4 | 17.0 |
| Others | Finance for solutions of various environmental and social issues. | 0.6 | 1.4 | 3.2 | 4.0 | 9.2 | |
| Total | | 3.5 | 4.4 | 6.5 | 10.0 | 24.5 | 35.0 |

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

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

Main Products and Services

Green Bonds

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

(note1) The Climate Bonds Initiative is an international organization based in London that works to promote investment in the projects and assets needed for a rapid transition to a low-carbon, climate durable economy. The Climate Bonds Partners 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.

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).

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.

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.

| Month implemented | Financing recipient | Amount |
|-------------------|------------------------------------|----------------|
| September 2022 | Tokyo Century Corporation | ¥81.5 billion |
| March 2023 | Tokyu Fudosan Holdings Corporation | ¥34.5 billion |
| March 2023 | SBS Holdings, Inc. | ¥18.0 billion |
| March 2023 | Fuyo General Lease Co., Ltd. | ¥44.25 billion |

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 energy-efficient equipment.

ESG Management Support Loan/Private Placement Bond

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

Loans for Supporting the Promotion of Decarbonization

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

customers' efforts to promote decarbonization, and the program provides solutions for promoting decarbonization initiatives.

ESG Evaluation loans for J-REIT

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

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

[ESG evaluation for MUFG JREIT, supported by JCR \(in Japanese\)](#) 

■ Transition Finance

MUFG supports clients' transitions with the understanding that transition finance is vital in achieving carbon neutrality in 2050.

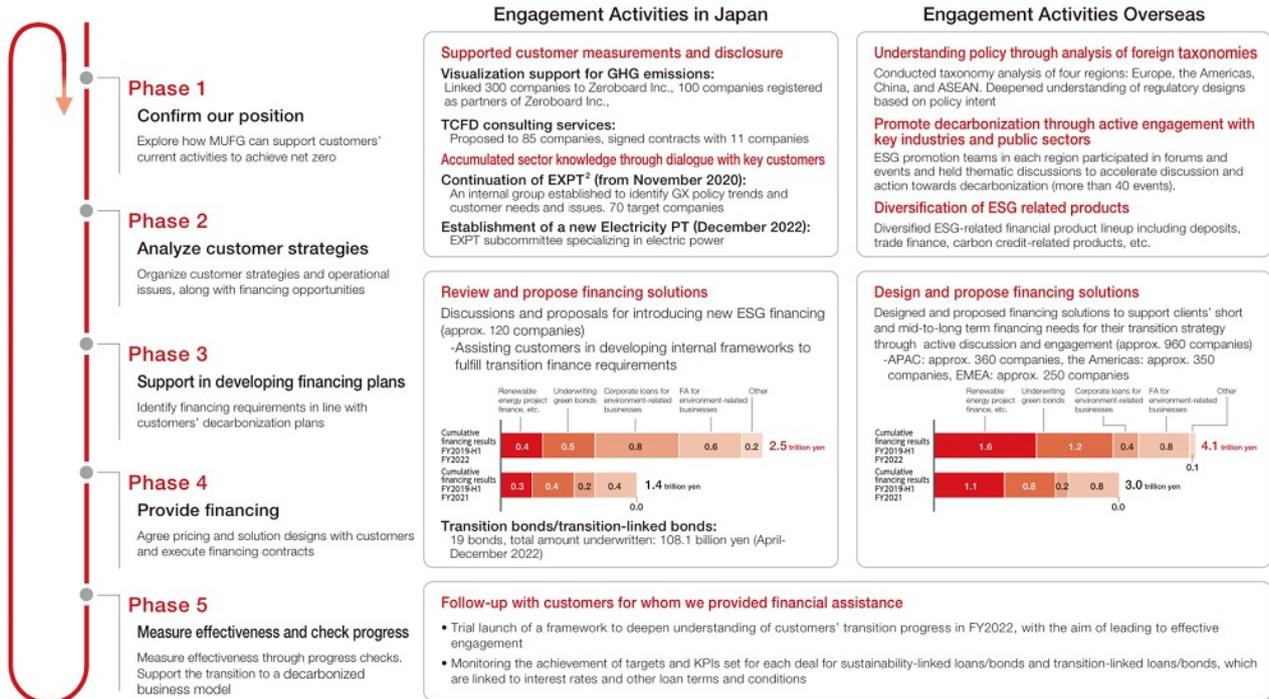
Main Transition Finance Projects

| Month implemented | Support recipient | Content of Initiatives |
|-------------------|-----------------------------------|--|
| September 2022 | Mitsubishi Heavy Industries, Ltd. | Transition bond issue: ¥10.0 billion |
| December 2022 | TOKYO GAS CO., LTD | Transition bond (hybrid) issue: ¥19.8 billion |
| January 2023 | Kirin Holdings Company, Limited | Formation of transition linked loan: ¥50.0 billion |
| March 2023 | Japan Airlines Co., Ltd. | Formation of transition linked loan: approx. ¥26.5 billion |
| March 2023 | Mitsui O.S.K. Lines, Ltd. | Formation of transition linked loan: US\$500 million |
| January 2023 | Osaka Gas Co., Ltd. | Formation of transition loan: ¥15.0 billion |
| May 2023 | | Transition bond (hybrid): ¥35.0 billion |

■ Development and Provision of Solutions for Carbon Neutrality Based on the Needs of Customers

With an aim to address issues and needs identified through customer engagement, we develop and provide a diverse range of solutions, including those designed to help visualize the volume of GHG emissions, strategy formulation assistance through TCFD disclosure-related consulting services, investment and financing assistance, and the introduction of overseas carbon credit to Japanese corporations.

< Engagement Activities to Assist Decarbonization Efforts of Customers. According to Bank-client engagement model introduced by UNEP FI.^{*1} >



1. Source: Leadership Strategies for Client Engagement: Advancing climate-related assessments
2. Energy Transformation Strategy Project Team

Initiatives by MUFG

| Collaboration with Zeroboard/Visualization of GHGs | Development of TCFD consulting services |
|--|---|
| <ul style="list-style-type: none"> We signed a business partnership agreement in FY2021 with Zeroboard Inc., which provides the "zeroboard" cloud-based enterprise GHG emission calculation service and invested in the company in February 2023. We have introduced over 300 customers to the service, which we use as an engagement tool for a wide range of customers of all sizes. In March 2023, we worked with Nagase & Co., Ltd. to formulate a sustainability linked loan framework to promote the calculation and reduction of supply chain GHG emissions, the first-of-its-kind in Japan. This was adopted as a model case green financing by the Ministry of the Environment. | <ul style="list-style-type: none"> We began rolling out TCFD consulting services with Tokio Marine & Nichido Fire Insurance Co., Ltd., extending proposals to 85 companies and concluding 11 contracts (FY2022). As part of our efforts to enhance support for disclosure, we signed a business partnership agreement with Tokio Marine & Nichido Fire Insurance and Codo Advisory, Inc. to provide services aimed at supporting the formulation of decarbonization transition strategies. In FY2023, we will further enhance and advance the full-scale development of TCFD consulting services. |

| Investment in forest funds | Collaboration with ENGIE SA |
|---|---|
| <ul style="list-style-type: none"> We invested in Imprint Nature-Based Opportunities and Manulife Forest Climate Fund, which are global forest investment funds. Through the purchase and sale of carbon credits (CCs) received from investment in the above funds, we contribute to the creation and development of the CC market in Japan and to invigorate the global CC market. <div style="text-align: center;"> <div style="display: flex; justify-content: space-around; margin-bottom: 5px;"> Supporting forestry business Activating CC market </div>  </div> | <ul style="list-style-type: none"> We are collaborating with France-based ENGIE SA, a company that has over 10 years of experience in renewable energy and low-carbon solutions and the ability to create and provide high-quality CCs. Through discussions on market trends and other topics with customers, we will propose appropriate CCs and support their carbon neutrality strategies. |
| Collaboration with Z Energy Co., Ltd. | Financial advisory on acquisition of offshore wind power generator |
| <ul style="list-style-type: none"> Z Energy began managing the Carbon Neutral Fund 1 Investment Limited Partnership. This has steadily accumulated renewable assets, with over 80% of total fund commitments confirmed. They have begun preparation for the formation of Fund 2. Through project introduction, financing support and other specific collaboration with Z Energy, MUFG provides solutions that meet customers' diversifying needs. | <ul style="list-style-type: none"> In March 2023, JERA signed an agreement to acquire 100% of the shares of Parkwind, a Belgian leading offshore wind power generator, for EUR1.55 billion. MUMSS acted as JERA's sole financial advisor and provided global industry expertise to support the acquisition. |
| Investment in Centennial Solar Inc. | Rooftop solar power generation for self-consumption |
| <ul style="list-style-type: none"> The Trust Bank has invested in Centennial Solar Inc., a company that consolidates small and medium-sized solar power plants facing disposal or abandonment due to aging or other causes and develops services using digital technology for proper management and operation of the plants. In addition to promoting the stabilization, local production, and local consumption of regional power, the company aims for sales as a "locally circulating investment product" through debt liquidation, etc. | <ul style="list-style-type: none"> As part of customers' decarbonization strategies and as a measure against soaring electricity costs, we have begun discussions aimed at the deployment of solar power systems for self-consumption. We conduct discussions primarily with operators of multiple stores in the retail sector, introduce renewable energy business operators and solar panel manufacturers based on client needs, and support financing when fund raising. |

■ 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 carbon neutrality for customers.

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

Content of Initiatives



| |
|---|
| Financing for large-scale green hydrogen and ammonia project |
| <ul style="list-style-type: none"> • We were appointed the project financing MLA and Intercreditor Agent for the world's first large-scale green hydrogen and ammonia production facility in the city of NEOM in Saudi Arabia. We are participating as a Top Tier Lender in the world's largest green ammonia project to date. |
| Participation in the Global CCS Institute (GCCSI) |
| <ul style="list-style-type: none"> • 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. |
| Regional contribution through the adoption of fuel cell-powered buses and the implementation of carbon neutral technology |
| <ul style="list-style-type: none"> • MUFG's supports (donations) help to fund the introduction of fuel cell buses in Tokyo, Nagoya 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. |
| Participation in ACT FOR SKY |
| <ul style="list-style-type: none"> • This voluntary organization of cooperating companies takes action under an "all-Japan" system that transcends industry boundaries, to accelerate the commercialization, proliferation, and expansion of sustainable aviation fuel (SAF) produced in Japan. We participate as a SKY member supporting the construction of the SAF supply chain, collaborating with ACT members that have direct business involvement in domestically produced SAF. |

■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, Hong Kong, Singapore and the United Kingdom. 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.

Using Relationships with Customers, Local Governments, and Industry Organizations to Grasp New Needs and Issues

■ Support for the Implementation of Carbon Neutrality Technologies in Japan and the Creation and Development of New Industries

Accelerating Japan's carbon neutrality will require enhancing the credibility of Japan's initiatives, attracting investment from within and outside the country, and implementing effective technologies and supply chains for Japan's carbon neutrality at an early stage.

Although Hokkaido faces social issues such as population decline, it has the greatest potential for introducing renewable energy in Japan and is the regions with one of the highest potentials for the implementation of effective technologies to achieve carbon neutrality, as described in MUFG Transition White Paper 2.0.

In 2022, we hosted "MUFG Hokkaido Oshigoto Audition," a contest for municipalities-led projects with a purpose of solving social issues in Hokkaido to apply for donations to fund the project. In the process of project screening and publicizing projects from municipalities by using social media, we acted in collaboration with Boku to Watashi and. Inc, a company engaged in next-generation marketing.

To highlight the potentials for carbon neutrality in Hokkaido and motivate investment in Hokkaido, we published the "Hokkaido Carbon Neutrality Report" in Japanese and English in May 2023. At the same time, we entered into a partnership agreement in the GX area with the Hokkaido Government, which is advancing "Zero Carbon Hokkaido" measures. We will work with Hokkaido to build a model case that achieves both a carbon neutrality and revitalization of the local economy by developing new industries in the region and creating a human resource development framework through donations to a new GX promotion fund set up by Hokkaido.

In June 2023, we participated in the new "Team Sapporo-Hokkaido", a consortium consisting of industry-academia-government-finance organizations, to accelerate GX initiatives in Hokkaido by attracting GX-related projects, human resources, and funds from around the world. This is a model case of a promotion council bringing together local government, regional companies, financial institutions, and other parties to encourage local GX investment and financing.

[Hokkaido Carbon Neutrality Report \(in Japanese\) \(PDF / 4.01MB\)](#) 

In FY2022, we made a donation to a subsidy framework run by Osaka prefecture. The framework subsidizes a portion of necessary expenses for business operators that will develop or demonstrate carbon neutrality technologies for the Osaka-Kansai Expo 2025 and for a decarbonized society. In FY2023, the budget for the subsidy was increased to support business expansion associated with transition from development stage to the demonstration stage and to enhance support for new businesses. MUFG therefore made additional donations to the framework, as it had in the previous year. We will support the creation and promotion of energy businesses based in Osaka, raise recognition of efforts initiated from Osaka for carbon neutrality, and the further implementation of technologies for carbon neutrality.



MUFG will continue to work with its varied stakeholders to support the implementation of carbon neutrality technology in Japan and the creation and development of new industries and will undertake construction of sustainable social models that contribute to the vitalization of local economies.

■ Blended Finance – Exploring the Establishment of a Public-Private Partnership Debt Fund to Promote Decarbonization in Asia

The Bank signed an agreement with Nippon Export and Investment Insurance (NEXI) on blended finance at the ASEAN-Japan Business Week event with the aim to support decarbonization in Asia.

Blended finance is a financing method that combines public and private funding and is viewed as an effective means of support initiatives aiming to resolve challenges emerging countries are facing.

Under the agreement, NEXI and the Bank will explore the establishment of a blended finance scheme to tackle climate change issues in line with the Asian Zero Emission Community (AZEC)'s objectives.

At the event, Minister of Economy, Trade and Industry Yasutoshi Nishimura said, "We want to advance a carbon-neutral society together with ASEAN. We will do so through the AZEC concept and other means, and through specific projects such as the introduction of renewable energy, construction of a hydrogen-ammonia supply chain, and decarbonization on the demand side including factories and industrial parks."

The Asia Energy Transition Initiative (AETI) put forth by the Japanese government is studying ways to provide comprehensive support towards Asia's decarbonization, such as launching the Asia Transition Finance Study Group (ATFSG) which consists of major financial institutions in ASEAN countries. As a member of the ATFSG Secretariat, MUFG has led discussions with financial institutions and government agencies and has worked on the formulation of international guidelines.

The initiatives outlined in the agreement aligns with the goals of the Japanese government led AZEC and AETI. We will further contribute to the sustainable development of Asia and support the region's step-by-step approach to achieve energy transition by providing financing and utilizing our risk management capabilities towards resolving environmental and social issues alongside leveraging our knowledge and expertise gained through ATFSG.



■ System for Promoting Engagement

• Green Transformation Strategy Project Team (GXPT)

In November 2020, the Bank launched the Energy Transformation (EX) Strategy Project Team (PT) to develop the climate change-related business. Since then, the Bank has striven to strengthen its capabilities to engage with customers pursuing carbon neutrality, understand their needs and provide them with high-quality products and services by periodically holding meetings at EXPT with relevant executives and managements to consolidate and share internal insights.

Meanwhile, in February 2023, the Cabinet approved on the Basic Policy for the Realization of Green Transformation (GX), announcing national strategies to realize investment in GX through the mobilizing more than ¥ 150 trillion funding from both government and private sources. Against this backdrop in April 2023 the Bank rebranded the EX Strategy PT as the GX Strategy PT, updating its role to facilitate the creation of tangible business and the delivery of information required to GX-related investment and financing. This PT currently

consists of around 500 members, including relationship managers in both Japan and overseas. individuals from Product Offices (POs), credit division and corporate planning departments.

- Support movements toward carbon neutrality throughout Japan by conducting dialogue with customers, industry organizations. and government agencies
- Provide added value throughout the value chain, from research functions to solution proposals
- Explore visions for transition support aligned with reality in Japan and Asia
- Leverage group companies' and global knowledge to support customers' business transitions through collaboration among sales departments, the Solutions Unit (including the Sustainable Business Department), Sustainability Office, and other related departments

• **Assignment of Sustainable Business Promotion Leaders**

The Bank has assigned "Sustainable Business Promotion Leaders" (hereinafter "Promotion Leaders") at corporate sales branches nationwide. Information on sustainable business collected at headquarters as well as in-house tools for sustainable business, are propagated throughout Japan by the Promotion Leaders who serve as hubs connecting headquarters and branches.

In FY 2022 the Promotion Leaders periodically organized, study sessions on sustainable finance and other solutions in collaboration with headquarters to reinforce expertise of relationship managers at branches and enhance capabilities for engagement.

• **Organizational Structure to Promote Global Sustainable Business**

MUFG provides solutions, with the aim to resolve environmental and social issues, for our clients to support necessary structural transformation and innovation. Since assigning ESG Heads and ESG specialists in the three regions (Europe, the Americas, and Asia) in 2021, MUFG has continued to strengthen its ESG teams in each region. Some team members, including overseas members, are seconded to Sustainable Business Division established in FY2021 and work across the organization to promote sustainable business and customer engagement in line with MUFG's sustainable management and carbon neutrality policies. Through Global ESG Conference and other means, MUFG is building a structure to consolidate intelligence and capture business opportunities based on promoting engagement and providing solutions to our customers both in Japan and overseas. Additionally, through participating in international initiatives, MUFG has access to various information and also contribute to rule-making process, business commercialization and market creation in order to capture future business opportunities and promote these initiatives globally.

Initiatives by Partner Banks

In response to the MUFG Carbon Neutrality Declaration and carbon neutrality declarations by the governments of Thailand and Indonesia, our Asian partner banks Krungsri (Bank of Ayudhya) and Bank Danamon are also advancing initiatives to achieve a sustainable environment and society in their respective countries.

■ **Initiatives by Krungsri**

Krungsri has been enacting measures to realize the commitments proclaimed in the Carbon Neutral Vision announced in 2021.

Support for Decarbonization by Customers

- **Sustainable finance target by 2030**

Krungsri has committed to growing the Social and Sustainable Finance portfolio by 50 - 100 billion baht by 2030, compared to 2021. As of 2022, their social and sustainable finance portfolio increased by 44,204 million baht, reaching a total 154,594 million baht, and are steadily progressing to realize their target.

- **Support for Green Bond issuance by Export-Import Bank of Thailand**

Krungsri supported Export-Import Bank of Thailand in issuing Green Bonds totaling THB 5 billion, through the role of Green structuring advisor/ Bookrunner/ Lead manager. The use of proceeds from the bond issuance is to finance and refinance funds for the renewable energy loan portfolio of the Export-Import Bank of Thailand.

- **Support for Installation of Rooftop Solar Panels**

The Solar Roof Lending Program was launched in 2022, which provides financial support to customers in installing solar panels in their factories, offices, and homes to promote decarbonization in a wide range of customer segments.

- **Support for Visualization of Customers' Emissions**

In partnership with Zeroboard Inc., a Japanese startup versed in the calculation and visualization of GHG emissions, Krungsri is aiding decarbonization by customers not only through support for the real economy to achieve a low-carbon society but also by promoting GHG emission management solutions for enterprise customers.

Staged Phase-out of Investment and Financing for Coal-fired Power Plants

Krungsri plans a staged phase-out of investment and financing for coal-fired power plants within 2030. By making financial services more environmentally friendly, Krungsri is supporting Thailand's transition to a low-carbon economy.

Decarbonization of GHG Emissions from Own Operations by 2030

Krungsri's Race to Net Zero Action Plan was established, which entails digital transformation, efficient resource management, and greater use of renewable energy as the key pillars to decreasing GHG of own emissions.

■ Initiatives by Bank Danamon

Bank Danamon has been promoting initiatives to realize a sustainable environmental and social society.

Support for Decarbonization by Customers

- **Setting of Sustainable Finance^(note1) Targets**

Bank Danamon established a target to increase their Sustainable Finance (SF) loan portfolio ratio^(note2) to 25% by 2027. In 2022, the SF loan portfolio ratio has increased to 21%, and are steadily progressing to realize their target.

• **Sustainability-Linked Loans with the KPI of CO₂**

Reduction through Alternative Fuels Bank Danamon supported local cement companies through participation in syndicated sustainability-linked loans totaling IDR 2.74 trillion. As a KPI, the loans used reduction of CO₂ emissions through the replacement of coal by refuse derived fuel.

Contribution to the Achievement of Net-Zero GHG Emissions from Own Operations at MUFG by 2030

Installed solar panels in branches to promote decarbonization of own emissions.

Enhancement of Environmental and Social Policies and Guidelines

Expanded Bank Danamon’s Environmental and Social Policy Framework in alignment with MUFG through prohibition of financing directly related to coal-fired power generation projects^(note3), and addition of Oil and Gas Sectoral Guideline.

(note1) Aligned with local regulations

(note2) Ratio of Sustainable Finance in the overall portfolio

(note3) Excluding projects equipped with environmentally friendly technologies

Investments Aimed at Solving Environmental and Social Issues

■ **Sustainable Business Investment Strategy**

Under our Sustainable Business Investment Strategy (hereinafter “the Investment Strategy”), we invest in funds that contribute to solving environmental and social issues. Through the Investment Strategy, we seek to acquire knowledge and explore new business opportunities. In addition, we aim to solve issues through our fund investment activities by creating positive impacts and innovation, and nurturing of new industries. The internal carbon pricing^(note) used in our investment decisions was US\$40/tCO₂ (as of FY2022). Going forward, we will assess investment opportunities based on the international impact measurement methods while considering their updates in a timely manner.

(note) This concept is used by organizations to independently price their own CO₂ emissions and to reduce the carbon footprint of their corporate activities. It is used mainly by business corporations for investment decisions.

• **Investment Projects Based on the Sustainable Business Investment Strategy**

| Investment (fund name) | Asset manager | Target of investment |
|--|--------------------|--|
| MPower Partners Fund L.P. | MPower KK | Domestic and overseas venture companies in the fields of healthcare/wellness care, fintech, next-generation work styles/education, next-generation consumers/retail, and the environment |
| Carbon Neutral Fund 1 Investment Limited Partnership | Z Energy Co., Ltd. | Renewable energy generation business in Japan |

• Establishment of a Growth Investments Fund in Climate Tech-related Startups (Marunouchi Climate Tech Growth Fund L.P.)

In May 2023, together with Mitsubishi Corporation and Pavilion Private Equity Co., Ltd., the Bank established Marunouchi Climate Tech Growth Fund L.P. (hereinafter "the Fund"). The Fund has Marunouchi Innovation Partners Co., Ltd. as its general partner, and will invest mainly in climate-tech-related startups for growth^(note). Formed with a US\$400 million commitment by investors, the Fund plans to engage in further investor recruitment to eventually expand to a scale of US\$800 to 1,000 million.

In the area of climate tech, the development of advanced technologies and proliferation of solutions are essential in achieving a carbon neutral society, and high demand for funding is expected in the medium to long term.

Through growth investments in climate tech-related startups by the Fund, the Bank will promote commercialization and scaling up for these companies' advanced technologies and the penetration of their technologies into society, enhancing the corporate value of investee companies while providing support for the achievement of a carbon-neutral society.

(note) [Press release of May 2, 2023: About the Establishment of Marunouchi Climate Tech Growth Fund L.P.](#) 

• Investment in PowerX

The Bank has invested in startup company PowerX, Inc. to support the spread of natural energy and the evolution of power storage and transmission technologies. Through the investment, we are contributing to the development of the next generation of industries that will strengthen the competitiveness of Japan's economy, delivering new options to customers aimed at the proliferation of renewable energy and storage batteries and promoting initiatives aimed at carbon neutrality.

Column: Natural Capital and Biodiversity

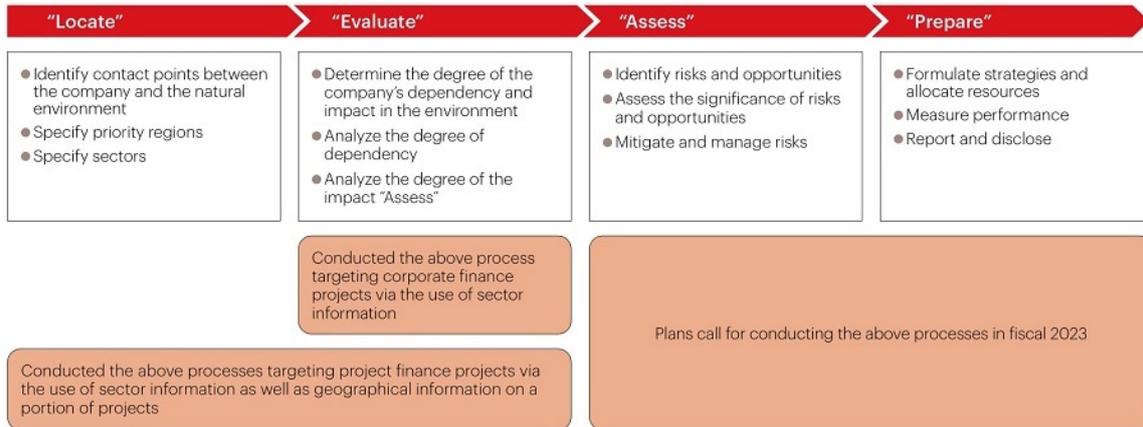

■ Fundamental Concept

Composed of animals, plants, water, soil, air, and more, natural capital is a stock that provides benefits including water, food, and minerals to businesses and society through ecosystem services such as water purification and climate control. Financial institutions face investment and financing risks caused by loss of natural capital and biodiversity. As companies' responses to the conservation of these can also create business opportunities for financial institutions, we believe that properly evaluating the risks and opportunities is important.

■ Initiatives toward TNFD

TNFD is an international initiative launched in June 2021 by the United Nations Environment Programme Financial Initiative (UNEP FI), the United Nations Development Programme (UNDP), the World Wildlife Fund (WWF), and Global Canopy. 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. 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.

Analysis Process Utilizing the LEAP Approach



With reference to the LEAP approach presented in the beta version of the TNFD framework, we have begun analyzing risks related to natural capital. Specifically, we use the ENCORE risk analysis tool to analyze our degree of dependence and our impacts on nature.

Investment in a Startup that Operates a Closed Recirculating Land-Based Aquaculture System

MUFG has invested in FRD Japan Co., Ltd., a startup company that seeks to establish sustainable means of seafood production and a world in which delicious fish is readily available. The company's proprietary closed recirculating land-based aquaculture system contributes to the protection of water resources and marine ecosystems. It further greatly reduces the cost of water temperature control during water intake and the risk of invasion by fish pathogens through closed recirculation of aquaculture water, while maintaining water quality. Through the investment, MUFG will support efforts to establish sustainable seafood production methods, improve food self-sufficiency, control marine pollution, and protect water resources and marine ecosystems.

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 style="list-style-type: none"> • Increase in the cost due to GHG emissions by the introduction of a carbon tax • Strengthened obligation to report emissions • Regulations on existing products and services • Subject of lawsuits |
| Technology | <ul style="list-style-type: none"> • Switch to existing products and services with lower GHG emissions • Setback in the investment in new technologies • Cost of transition to low emission technologies |
| Market | <ul style="list-style-type: none"> • Changes in customer behavior • Uncertainty in market signals • Raw material price hike |
| Reputation | <ul style="list-style-type: none"> • Changes in consumer preferences • Narrowing of sectors • Increased stakeholder interest and negative feedback to stakeholders |

| Examples of physical risks | |
|----------------------------|---|
| Acute | <ul style="list-style-type: none"> • Increased severity of extreme weather events, such as typhoons and floods |
| Chronic | <ul style="list-style-type: none"> • Changes in precipitation patterns and extreme fluctuations in weather patterns • Increase of average temperature • Sea level rise |

Examples of Impacts of Transition Risks and Physical Risks

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

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

■ Example of Transition and Physical Risks

| Risk categories | Examples of transition risk | Examples of physical risk | Time frame ^(note) |
|-----------------|---|--|------------------------------|
| Credit risk | <ul style="list-style-type: none"> • 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. | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • 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. | <ul style="list-style-type: none"> • 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 style="list-style-type: none"> • 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. | <ul style="list-style-type: none"> • 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 |

| Risk categories | Examples of transition risk | Examples of physical risk | Time frame ^(note) |
|------------------|---|---|------------------------------|
| Operational risk | <ul style="list-style-type: none"> Spending on capital investment may grow due to the need for measures aimed at reducing CO₂ emissions and enhancing business continuity capabilities. | <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> 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. | <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> 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. | <ul style="list-style-type: none"> 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 conducting scenario analysis using multiple scenarios to demonstrate the flexibility and resilience of companies' plans and strategies to risks related to climate change.

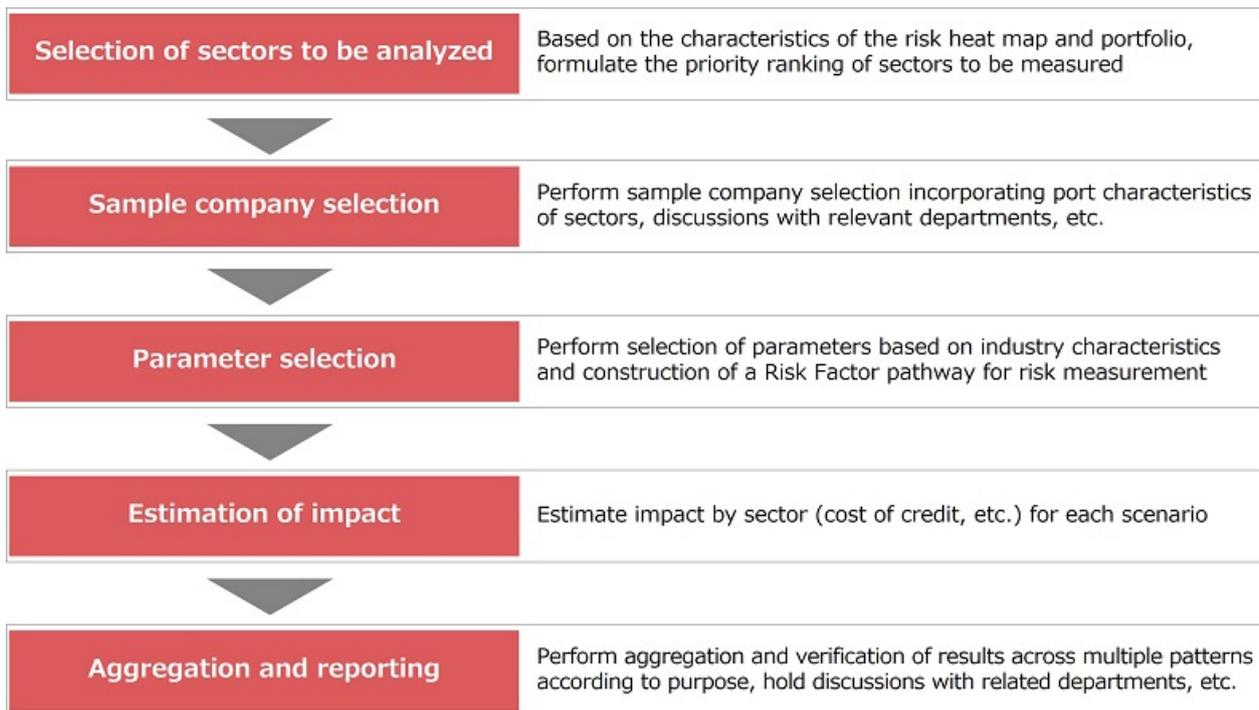
Since the summer of 2019, MUFG has been a participant in the pilot project led by the United Nations Environment Programme Finance Initiative (UNEPFI) with the objective of discussing and developing methods for climate change-related financial information disclosure for the banking industry.

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.

While engaging in dialogue with regulatory authorities, we also continuously examine ways to raise the level of our analytical approaches.

■ Transition Risks

• The scenario analysis process



• Target sectors

We conducted analyses of the energy, utilities, automotive, steel, air transportation, and marine transportation sectors.

| Target sector |
|--|
| Energy (Japan, overseas) / Utilities (Japan, overseas) / Automotive (Japan, overseas) / Steel (Japan, overseas) / Air (Japan, overseas) / Maritime (Japan, overseas) |

• Methods and results

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

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

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

(note) No significant change under standards as of the end of March 2023

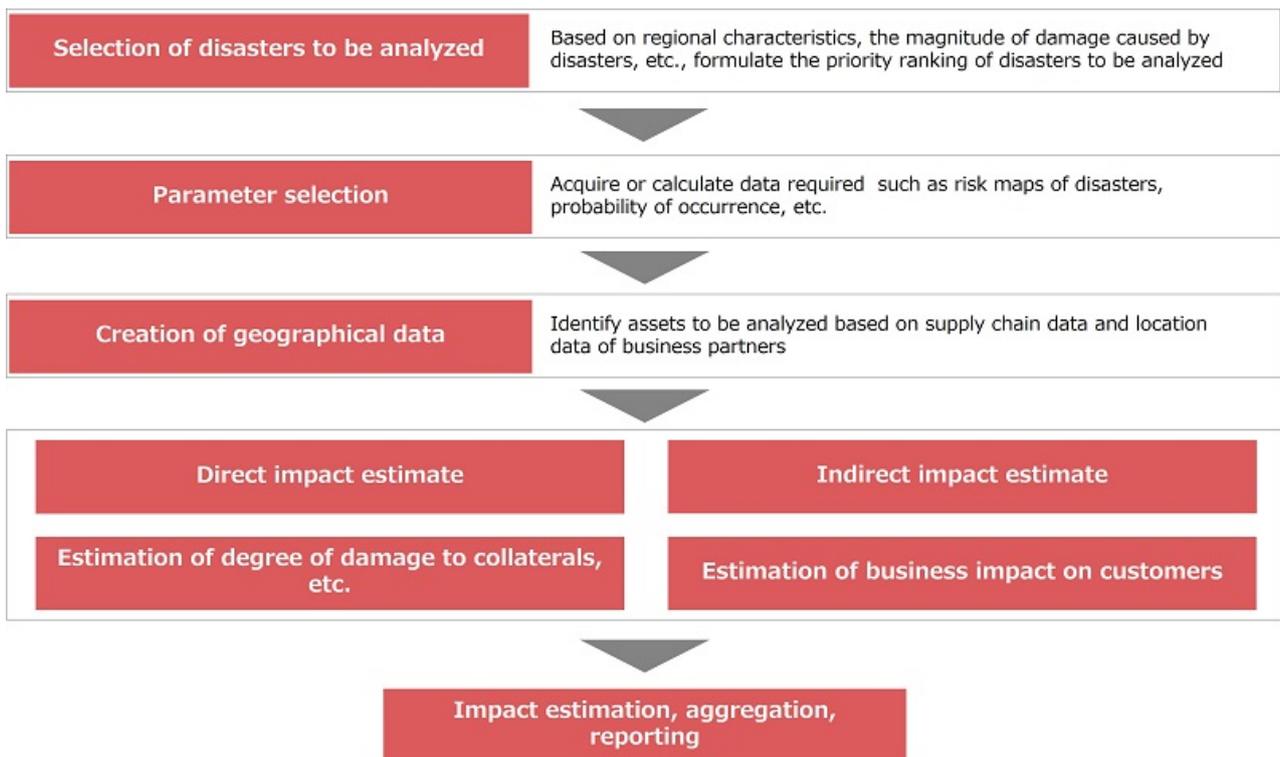
• **Measures to reduce future migration risks**

Based on these results, we reaffirmed the importance of transitioning to decarbonization throughout society and will move forward with the actions as follows.

1. Continued implementation of engagement with customers
2. Support for customers' decarbonization initiatives through sustainable finance, support for GHG emissions visualization and strategy formulation, etc.
3. Implementation of active discussions through regulatory authorities, policy committees, external experts, etc.
4. Active participation in discussions through NZBA and other external initiatives

■ **Physical Risks**

• **The scenario analysis process**



• **Results**

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

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

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

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

| | |
|---------------------------|--|
| Scenario | <ul style="list-style-type: none"> 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 style="list-style-type: none"> Estimated damage in the event of a flood is analyzed, and an approach to measure its impact on the overall credit portfolio using the change in default probability that the occurrence of floods would have on the credit portfolio is adopted. In the calculation of financial impact, the period of the suspension of the business of the borrower and the loss of assets, among other aspects, are reflected. |
| Target of analysis | <ul style="list-style-type: none"> Flood |
| Target period | <ul style="list-style-type: none"> Until 2100 using the end of March 2022 as the standard |
| Result of analysis | <ul style="list-style-type: none"> Cumulative total: Approximately 115.5 billion yen |

(note) No significant change under standards as of the end of March 2023

Net zero GHG Emissions from Our Own Operations

In the “MUFG Group Code of Conduct,” MUFG positions “Commitment to the Environment” as part of its employees’ “Responsibility as a Corporate Citizen,” and the Board of Directors sets forth the policy for the specific actions to be taken in order to implement commitment to the environment in the “MUFG Environmental Policy Statement.” The Policy Statement’s section on “Environmental Actions through Business Activities” stipulates “Reduction of Environmental Impact at Our Offices,” “Environmental Improvement and Pollution Prevention,” and “Awareness Raising Across the Group,” and efforts are being undertaken to address each of these areas.

- [MUFG Group Code of Conduct](#)
- [MUFG Environmental Policy Statement](#)
- [MUFG Environmental and Social Policy Framework](#)

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

To reduce GHG emissions and mitigate global warming, MUFG aims to achieve net-zero GHG emissions^(note1) from its own operations by 2030. In addition to our initiatives to conserve energy, we are making efforts such as adopting renewable energy sources for the electricity we use and switching to electric vehicles (EVs). We are also working to establish and introduce green power,^(note2) which is an expandable renewable power source, to directly contribute to increasing renewable sources of power.

Overseas, while accumulating expertise from promoting domestic environmental initiatives, MUFG will accelerate the implementation of specific measures, taking into account the status of policies and systems to promote decarbonization in each country.

(note1) Scope 1 emissions (direct GHG emissions by business operators) and Scope 2 emissions (indirect emissions associated with the use of electricity, heat, and steam supplied by other companies) in the GHG protocol

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

Progress on Reducing GHG Emissions from Our Own Operations

In FY2022, MUFG accomplished switching to 100% renewable power sources for in-house contracted electric power at all consolidated subsidiaries in Japan, and set interim targets to accelerate initiatives for achieving net-zero emissions from our own operations by 2030.

< Interim targets >

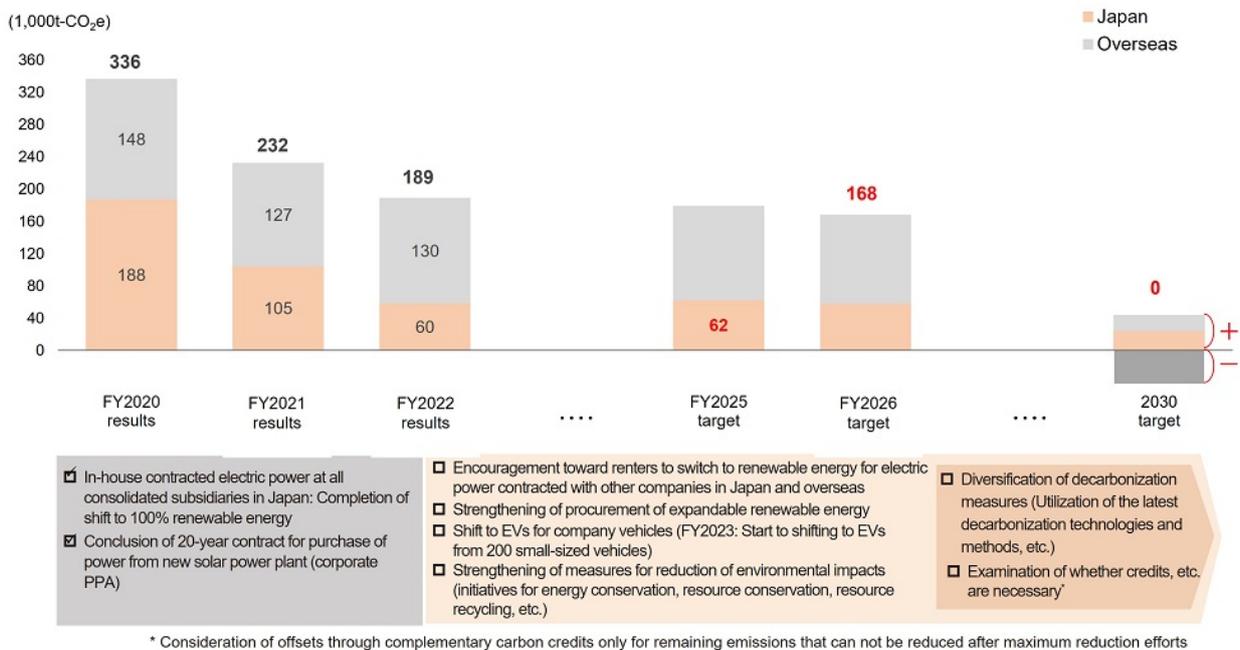
- FY2025: Reduction of GHG emissions from the business in Japan by two-thirds compared to FY2020
- FY2026: Reduction of GHG emissions from the group by 50% compared to FY2020

GHG emissions in FY2022 decreased by 43,000 tCO₂e (19%) from 232,000 tCO₂e in the FY2021 to 189,000 tCO₂e, achieving our interim target for FY2025 ahead of schedule. MUFG has received third-party limited assurance for its FY2022 GHG emissions.

For the first time, we also calculated the Scope 3^(note) (Categories 1-14) GHG emissions of MUFG, the Bank, the Trust Bank, the Securities, NICOS, and ACOM, the Group's six major companies in Japan. Calculated Scope 3 (Categories 1-14) emissions in FY2022 were 1.3million tCO₂e.

(note) Indirect emissions other than Scope 1 and Scope 2 (emissions by other companies related to the own business activities)

Scope 1 and 2 reduction roadmap



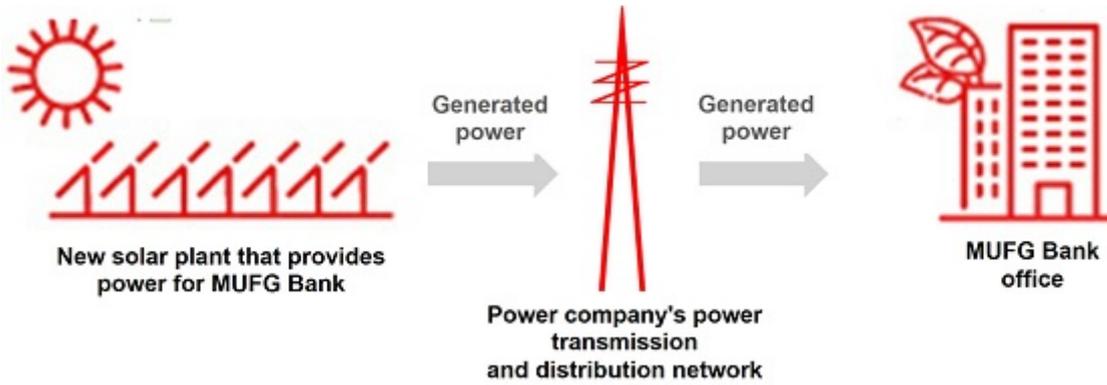
Efforts on Switching to Renewable Energy through Corporate PPAs

In July 2022, MUFG utilized an off-site corporate PPA^(note3) to introduce electricity derived from renewable energy generated by a solar power plant to around 40 locations in Japan. MUFG was 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. Subsequently, MUFG established a new 2,000 kW solar power generation facility in September 2022, with all of the renewable power generated to be utilized at the Bank's data center.

Through these types of initiatives, MUFG is making a direct contribution to the increase in the number of expandable renewable power sources^(note4) in Japan. We will continue to pursue such efforts in order to further the spread of renewable energy.

(note1) PPA, or Power Purchase Agreement, is a service in which the power producers and electricity consumers execute a purchase agreement for renewable electricity for a price and period agreed in advance, and renewable energy 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.



Efforts to Achieve Carbon Neutral Company Vehicles

To achieve its net zero target by 2030, MUFG is gradually replacing company vehicles with models that consume less gasoline. In 2017, the Securities began using fuel cell vehicles on a trial basis, and the Bank began the conversion of 200 small-size vehicles to EVs in FY2023. From FY2024 onward, MUFG will share the expertise acquired in these fore-running efforts within the group and promote the transition to carbon-neutral company vehicles by choosing the latest environmentally friendly automobile models.

Efforts on Energy Efficiency and Conservation

MUFG has been implementing and promoting a variety of initiatives to conserve energy, including response to the Act on the Rational Use of Energy and the Act on Promotion of Global Warming Countermeasures. Under the evaluation system established in the Act on the Rational Use of Energy to categorize business operators, the Bank, the Trust Bank, and ACOM were recognized as S rank companies (excellent companies for energy efficiency) for FY2022 (evaluation of FY2021 results). MUFG will continue to promote various efforts to conserve energy and improve energy efficiency, not limited to adhering to the relevant laws and regulations, in order to achieve net zero by 2030.

Specific Energy Conservation Initiatives

- In terms of equipment, lighting is being switched to LED and motion sensors are being installed to turn lights on and off automatically, while equipment such as air conditioning systems are being replaced with high-efficiency models.
- As for operations, efforts under way include setting air conditioning equipment operating hours (for example, to operate until 7 p.m. at the Tokyo head office building), adjusting the number of elevator cars in operation based on the time of day, shutting of blinds (when the outside temperature reaches 30°C), adjusting the brightness of lighting in common areas, and setting air conditioners to reasonable temperatures in summer and winter (based on the government’s recommended temperature settings, etc.).
- In addition, NICOS and ACOM are engaged in activities to raise awareness at the respective companies through regular internal dissemination of information on various initiatives and training.

Efforts to Conserve Energy in Buildings

- MUFG obtained its first “ZEB Ready^(note)” certification (energy saving of 50% or more) for the new park office and library in MUFG Park, for which construction was completed in June 2023.

(note) Certification as a net zero energy building, which is granted to buildings that achieve a 50% or greater reduction in primary energy consumption from the benchmark based on the building's use, size, etc.



The Park office



The library

- In addition, the Bank reconstructed two of its head office buildings, the Osaka Building in 2018 and the Nagoya Building in 2021. Both buildings were designed to be environmentally conscious and were fitted with all-LED lighting, window glass with advanced insulation (low-E glass), and equipment to effectively utilize rainwater. Subsequent to the CASBEE^(note) evaluation of the buildings' environmental performance, both buildings obtained S rank, the highest rating, based on CASBEE Osaka Mirai and CASBEE Nagoya for the Osaka Building and Nagoya Building respectively.

(note) The Comprehensive Assessment System for Built Environment Efficiency (CASBEE) is a method for evaluating and rating the environmental performance of buildings. It is a comprehensive assessment of the quality of a building, evaluating features such as interior comfort and scenic aesthetics, in consideration of environment practices that include materials and equipment that save energy or achieve smaller environmental loads.



Exterior of the Osaka Building



Exterior of the Nagoya Building

- The MUFG/MUFG Bank Tokyo head office building is slated for future reconstruction, and the plan is to build a new “MUFG Main Building” that is designed to be carbon-neutral, energy-saving, and resource-recycling.
- In other future reconstruction projects as well, MUFG will continue to pursue environmentally conscious building efforts such as obtaining ZEB and CASBEE certification.

Efforts to Establish Recycling-Based Society and Circular Economy

In light of growing international awareness of resource recycling, the worsening waste problem, and the conservation of resources, MUFG is implementing a variety of initiatives to facilitate the transition to a circular economy that uses resources in a sustainable manner.

Recycling of Waste

A target waste recycling rate of at least 90% has been set for MUFG locations in Japan, and making greater efforts to properly sort waste is being promoted by installing waste disposal stations where recyclable waste can be sorted, establishing rules for sorting and collection, and providing specific examples of proper sorting. In FY2022, the Bank achieved a 100% paper products recycling rate for its head office buildings in Tokyo, Nagoya, and Osaka. The Tokyo head office building is also conducting kitchen waste recycling, for which the FY2022 waste recycling rate was over 90% (94.9%). We aim to continue to improve the waste recycling rate, including at other head office buildings. Overseas, Krungsri (Bank of Ayudhya) in Thailand has been promoting the “Krungsri Zero Waste” project since 2018. This project aims to raise employee awareness of waste problems through training sessions and waste sorting activities, and works to reduce and recycle waste.



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Reducing, Reusing, and Recycling of Paper

In order to effectively utilize forest resources, MUFG is reducing the amount of paper used along with reusing and recycling paper. Measures to cut down on paper usage include visualization of the number of pages printed out, promoting smart work (actively using the online meeting system, using monitors to display materials, etc.), and digitization of contract documents and materials distributed to customers such as bank books, prospectuses, and account activity statements. In addition, an initiative is under way on a trial basis at the Bank’s Tokyo head office and the Ikejiri Building to recycle resources within the company by recycling paper to re-use in each building as toilet paper. As for paper recycling, in FY2022 the Bank achieved a 100% recycling rate at its head office buildings (Tokyo, Osaka, and Nagoya).



Reducing, Reusing, and Recycling of Plastic and Switching to Renewables

In response to environmental problems concerning plastic such as the impact on the ocean and oceanic resources, MUFG is promoting initiatives to reduce, reuse, and recycle plastics (the “3Rs”) and adopt renewables.^(note)

Activities aimed at reducing the volume of plastic used include recommending that tenant shops and cafes for employees stop giving out straws derived from petrochemicals and adopting contactless payment and other transaction services. In addition, MUFG is also working to efficiently utilize resources by engaging in activities to encourage reuse, such as the collection and redistribution of used office supplies made of plastic.

MUFG has been promoting recycling by installing dedicated waste bins for PET bottles in order to properly sort plastic waste, and in FY2022 the Bank achieved a PET bottle recycling rate of 100% at its head office buildings in Tokyo, Nagoya, and Osaka. Efforts are also under way to promote the switch to “horizontal recycling” (making used bottles into new bottles), and the Bank head office building in Nagoya has achieved a 100% horizontal recycling rate. We will continue to broadly promote horizontal recycling.

As for initiatives to switch to renewables, NICOS has adopted biomass-derived plastic for the clear wrapping it uses for its member information magazine, and MUFG will continue to pursue the switch to renewable resources for plastics.

(note) Here, renewable refers to substitution with a renewable resource such as paper or plastics derived from plant matter.



Efforts Related to Water Resources

MUFG is engaged in efforts on a global basis to conserve water through the effective use of water resources. To promote the reuse of water and utilization of rainwater, water treatment and rainwater utilization equipment has been installed in some head office buildings in Japan.

Overseas, MUFG is working to reduce water usage at subsidiaries located in highly water-stressed countries. Krungsri^(note) is taking measures such as wastewater reuse in order to reduce the amount of tap water used at the Bangkok head office, and has reduced water usage at its Phloenchit office by approximately 40% by installing water-saving equipment. In addition, Bank Danamon in Indonesia has installed hygienic water infrastructure in five regions.

We will continue to pursue various efforts to effectively utilize water resources.

(note) 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

Risk Management

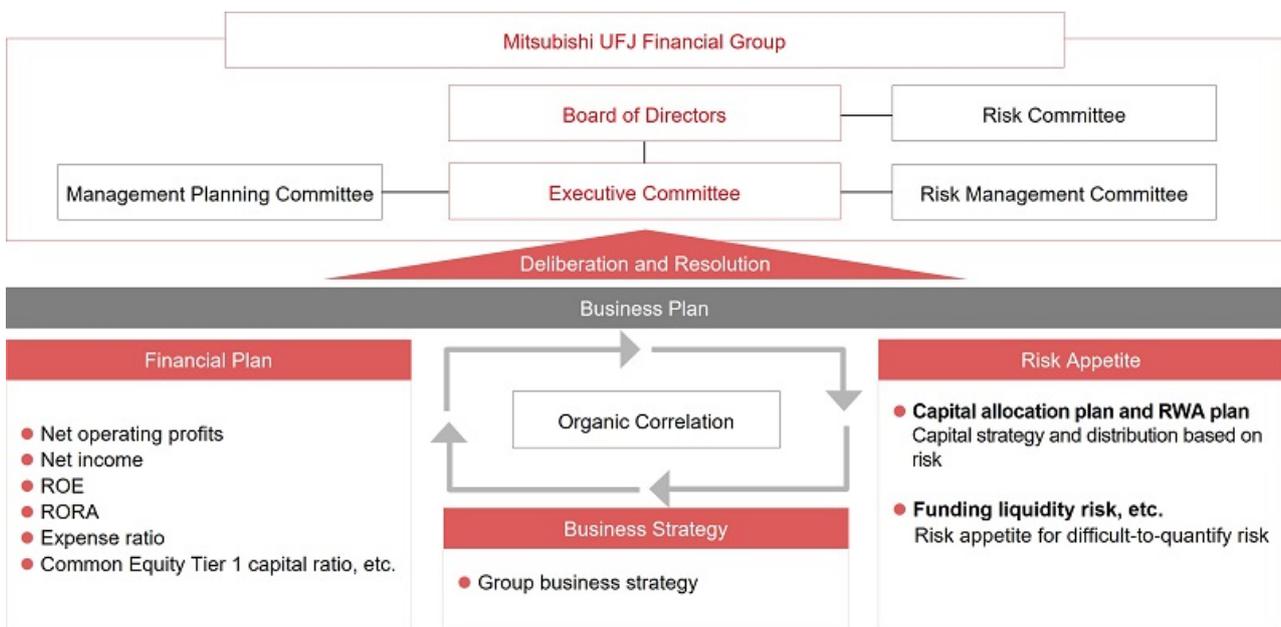
Reflection in the Risk Appetite Framework

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.

The introduction of the framework will enhance transparency in our management planning and make the pursuit of more revenue opportunities possible, while also enabling management with risks controlled.



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.

Overview of Risks Related to Climate Change

| Risk scenarios | Risk countermeasures |
|--|---|
| <ul style="list-style-type: none"> • 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. | <ul style="list-style-type: none"> • 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.

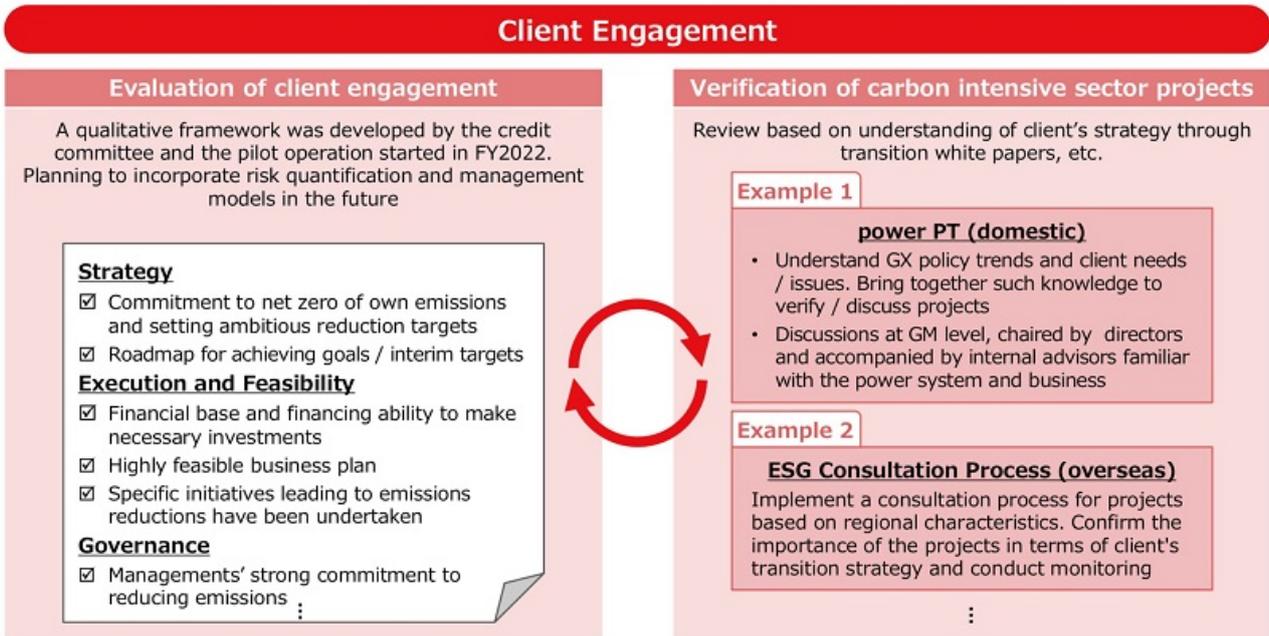
Main items to be considered and addressed

- Consideration of a method of classifying and analyzing risks related to climate change, clarifying risk appetite, establishment of a framework for clients transition evaluation as the way to reflect risk in the credit process, and incorporating risk quantification and management models.
- Organization of risk recognition related to transition risks and physical risks through studies

Framework for Evaluating Client Transitions

We have developed a qualitative framework to evaluate client transitions and started a trial run of the framework in FY2022. Under the framework, we are trying to understand and assess clients' transition strategy, feasibility of their plan, governance and so on through engagement. In addition, we support client transitions by verifying each

transaction or project, considering sector, regional characteristics and clients' transition strategy through the initiatives such as Power PT (domestic) and ESG Consultation Process (overseas).

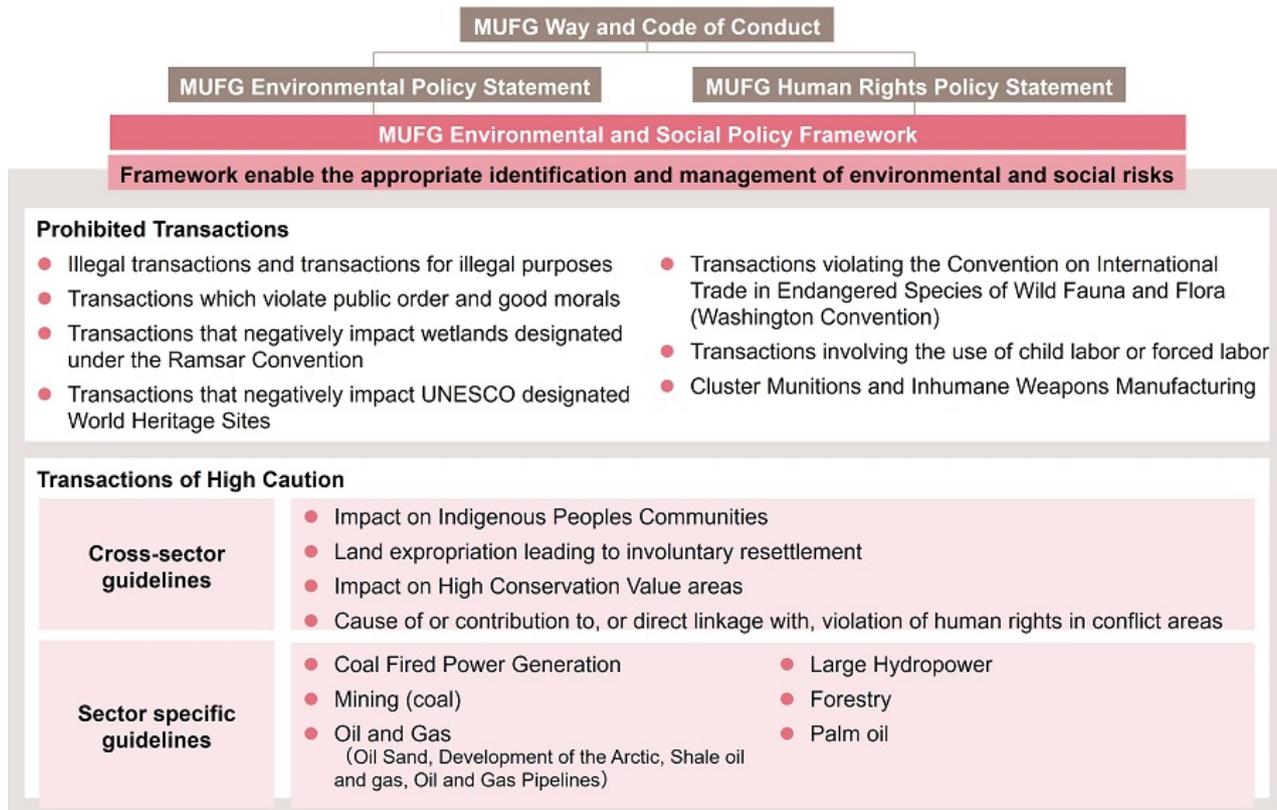


Environmental and Social Risk Management in Finance

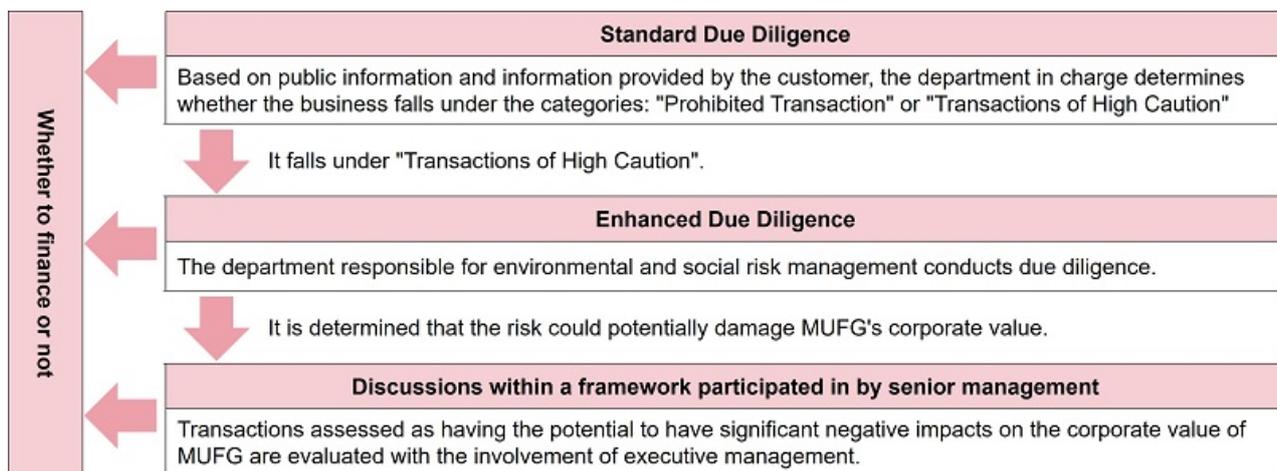
We implemented MUFG Environmental and Social Policy Framework to manage environmental and social risks associated with our financing^(note). Concerning coal-fired power generation, mining (coal), oil and gas, and other specific sectors in which concerns are raised over environmental and social impacts,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

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

MUFG Environmental and Social Policy Framework



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. Our most recent revision in 2023 tightened our policies concerning climate-related sectors (forests, palm oil, and coal mining).

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

| Sector | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Revised content |
|--|-----------|-----------|-----------|----------|----------|----------|--|
| Coal-fired power generation | Enactment | Revision | | Revision | | | Request for strengthening of supply chain management and enhancement of traceability |
| Forestry | | Enactment | | Revision | | Revision | |
| Palm oil | | Enactment | | Revision | Revision | Revision | Request for strengthening of supply chain management and enhancement of traceability |
| Mining (coal) | | Enactment | | | Revision | Revision | |
| Oil and gas | | | Enactment | | Revision | | Prohibition of support for expansion of general coal for power generation projects and linked infrastructure |
| Large-scale hydroelectric power generation | | | Enactment | | | | |

Policies and Guidelines

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

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

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

The Equator Principles

Climate Change-Related Responses Required under the Equator Principles

| Applicable projects | Responses required under the Equator Principles |
|--|---|
| Among the risk categories used in the Equator Principles, all Category A projects, and as appropriate, Category B ^(note) projects | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • Alternatives Analysis • Assessment of transition risks and countermeasures • Annual public reporting of GHG emission levels |

(note) Category A refers to projects with potential significant 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.

Examples of Climate Change Risk Assessment

In environmental and social risk assessments prior to a 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 following are examples of physical and transition risk assessments of individual projects for which the Bank conducted environmental and social risk assessments.

Physical risk (arterial road expansion project)

In order to expand an arterial road located in an urban area, the project's physical risks were assessed as part of the environmental assessment submitted to host-country authorities. Increased flooding associated with extreme rainfall and increased frequency of bushfires were identified as key physical risks. We have ensured that the project proponent commits to management and mitigation of these risks.

Physical risks identified in the assessment

- Increase in flooding and landslides associated with extreme rainfall causing damage to road facilities
- Increased frequency of bushfires (associated with increase in average temperatures) resulting in damage to motorway corridor and/or associated infrastructures

Key actions taken by the project proponent

- Communication to contractors on increased likelihood of extreme rainfall and wind events occurring during construction; incorporation of extreme weather events in construction planning
- Adoption of a drainage design able to withstand projected extreme rainfall and flooding
- Augmented routine maintenance and inspections of structural components

Transition risks (refinery expansion project)

The refinery expansion project intends to increase the facility's processing capacity to meet market demands. A climate change risk assessment report, which included an assessment of transition risks, was prepared in line with TCFD recommendations. In the report, policy, regulatory, and market risks were identified as key transition risks.

Transition risks identified in the assessment

- New costs associated with GHG emissions e.g., introduction of carbon tax
- Increasing obligations against measuring and reporting GHG emissions
- Decline in demands for oil manufacturing services

Key actions taken by the project proponent

- Evaluation of project economics with carbon tax (when introduced)
- Disclosure of climate-related risks and impacts on business and project's initiatives to support low carbon transition
- Monitoring of global and emerging issues on the perceptions on oil and gas industry

Metrics and Targets

Key Metrics and Targets

| Main initiatives | Metric | Target | Emissions at the time of target setting | Results |
|--|---|---|--|--|
| Net Zero GHG from the Financed Portfolio | Scope3 (Emissions through financed portfolio) | Net zero by 2050 | — | — |
| | Power sector: Emission intensity (gCO ₂ e/kWh) | 156-192gCO ₂ e/kwh (target for 2030) | 328gCO ₂ e/kwh (2019) | 299gCO ₂ e/kwh (2021 results) |
| | Oil and gas sector: Absolute GHG emissions (MtCO ₂ e) | 15-28% reduction compared with 2019 level (target for 2030) | 84MtCO ₂ e (2019) | 76MtCO ₂ e (2021 results) |
| | Real estate sector: Emission intensity (kgCO ₂ e/m ²) | Commercial: 44-47kgCO ₂ e/m ² Residential: 23 kgCO ₂ e/m ² (target for 2030) | Commercial: 65kgCO ₂ e/m ² Residential: 27kgCO ₂ e/m ² (2020) | — |
| | Steel sector: Absolute GHG emissions | 22% reduction compared with 2019 level (target for 2030) | 22MtCO ₂ e (2019) | — |
| | Shipping sector: PCA | PCA≤0% (target for 2030) | PCA+0.6% (2021) | — |
| Net Zero GHG from Own Operations | Scope 1 and 2 emissions | Net zero by 2030 | — | FY2021: 232,000 tCO ₂ FY2022: 189,000 tCO ₂ |
| Decarbonization through Financial Services | Cumulative execution amount of sustainable finance | Cumulative total of 35 trillion yen (including 18 trillion yen in the environmental sector) in FY2030 | — | Cumulative total of 24.5 trillion yen (including 8.9 trillion yen in the environmental sector) in FY2022 |
| | Setting Targets for Reducing CO ₂ Emissions Through Renewable Energy Project Financing | Reduction by 70 million tons (cumulative total from FY2019 to FY2030) | — | Reduction by 36.63 million tons (cumulative total from FY2019 to FY2022) |
| | Credit amounts related to coal-fired power generation project finance | 50% reduction in FY2030 compared with FY2019 level; zero by FY2040 | US\$3,580 million (as of the end of FY2019) | US\$2,581 million ^(note) (as of the end of FY2022) |
| | Corporate finance for coal-fired power generation | Zero in FY2040 | Approx. ¥120 billion (as of the end of FY2020) | Approx. ¥80 billion ^(note) (as of the end of FY2022) |

(note) Based on the MUFG Environmental and Social Policy Framework, projects that contribute to initiatives for transitioning to a decarbonized society are excluded.

Other disclosure items:

- Measurement of financed emissions, by sector recommended for disclosure by TCFD recommendations
- Status of carbon-related assets (credit amounts)

Net Zero GHG Emissions from the Financed Portfolio

| | |
|--|---|
| Metric | Absolute emissions (oil and gas, steel sectors) Emission intensity (power, real estate sectors) PCA (shipping sector) |
| Target | Power sector: 156-192gCO ₂ e/kwh (target for 2030) Oil and gas sector: 15-28% decrease compared with 2019 level (target for 2030) Real estate sector <ul style="list-style-type: none"> • Commercial real estate: 44-47kgCO₂e/m² (target for 2030) • Residential: 23kgCO₂e/m² (target for 2030) Steel sector: 22% decrease compared with 2019 level (target for 2030) Shipping sector: PCA≤0% (target for 2030) |
| Emissions at the time of target setting | Power sector: 328gCO ₂ e/kwh (2019) Oil and gas sector: 84MtCO ₂ e (2019) Real estate sector <ul style="list-style-type: none"> • Commercial: 65kgCO₂e/m² (2020) • Residential real estate: 27kgCO₂e/m² (2020) Steel sector: 22MtCO ₂ e (2019) Shipping sector: PCA+0.6% (2021) |
| Results | Power sector: 299gCO ₂ e/kwh (2021) Oil and gas sector: 76MtCO ₂ e (2021) |

Please see [Strategy](#) for details.

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

Global Group-Wide

| | |
|------------------------------------|---|
| Metric | Scope 1 and 2 emissions |
| Target | Net-zero GHG emissions from own operations in 2030 |
| Results^(note1,2) | FY2021: Scope 1 and Scope 2 emissions totaled 232,000tCO ₂ . FY2022: Scope1+2 totaled 189,000tCO ₂ (Completion of conversion to 100% renewable energy for in-house contracted power at all MUFG consolidated subsidiaries in Japan in FY2022) |

(note1) Scope of aggregation: MUFG, MUFG Bank, Ltd., Mitsubishi UFJ Trust and Banking Corporation, Mitsubishi UFJ Morgan Stanley Securities Co., Ltd., Mitsubishi UFJ NICOS Co., Ltd., ACOM, and consolidated subsidiaries.

(note2) Electricity is calculated based on market standards.

CO₂排出量の推移 / Changes in CO₂ Emission

| 計測項目/Item | | 単位/Unit | FY2018 | FY2019 | FY2020 | FY2021 | FY2022※1 | |
|---|--|--|---------------------|---------|---------|---------|----------|-----------|
| CO ₂ 排出量 CO ₂ emission | Scope1 | 直接的なCO ₂ 排出量 Direct CO ₂ emissions | t-CO ₂ e | 10,795 | 9,963 | 9,560 | 13,567 | 31,051 |
| | Scope2 | 間接的なCO ₂ 排出量 Indirect CO ₂ emissions (電力：マーケット基準 Electricity : market-based) | t-CO ₂ | 186,870 | 184,020 | 162,159 | 94,185 | 158,342 |
| | | 間接的なCO ₂ 排出量 Indirect CO ₂ emissions (電力：ロケーション基準 Electricity: location-based) | t-CO ₂ | — | — | — | 167,614 | 311,059 |
| | Scope1・2 小計 Subtotal | 電力：マーケット基準 Electricity: market-based | t-CO ₂ | 197,665 | 193,983 | 171,719 | 107,752 | 189,393 |
| | | 電力：ロケーション基準 Electricity: location-based | t-CO ₂ | — | — | — | 181,181 | 342,110 |
| | Scope3 | その他関連のある 間接的なCO ₂ 排出量 Other indirect CO ₂ Emissions | t-CO ₂ | 10,309 | 7,959 | 3,526 | 74 | 1,318,824 |
| CO ₂ 排出原単位 (床面積あたりCO ₂ 排出量) ※2 Basic unit of CO ₂ emission (CO ₂ emissions per unit of floor space) | 電力：マーケット基準 Electricity : market-based | t-CO ₂ e /1,000m ² | 91 | 90 | 82 | 52 | 59 | |
| | 電力：ロケーション基準 Electricity: location-based | t-CO ₂ e /1,000m ² | — | — | — | 88 | 106 | |

※1 2022年度より集計範囲および算定方法を変更（上水・下水を除く）。FY2018-2021：P5、FY2022：P4を参照

※1 Scope of reporting and CO₂ Emissions Calculation Method changed from FY2022 (excludes Tap, Waste water) . See P5 for FY2018-2021 and P4 for FY2022.

※2 2018-2021年度までのデータを、Scope1,2の合計値を用いて算出したものに更新

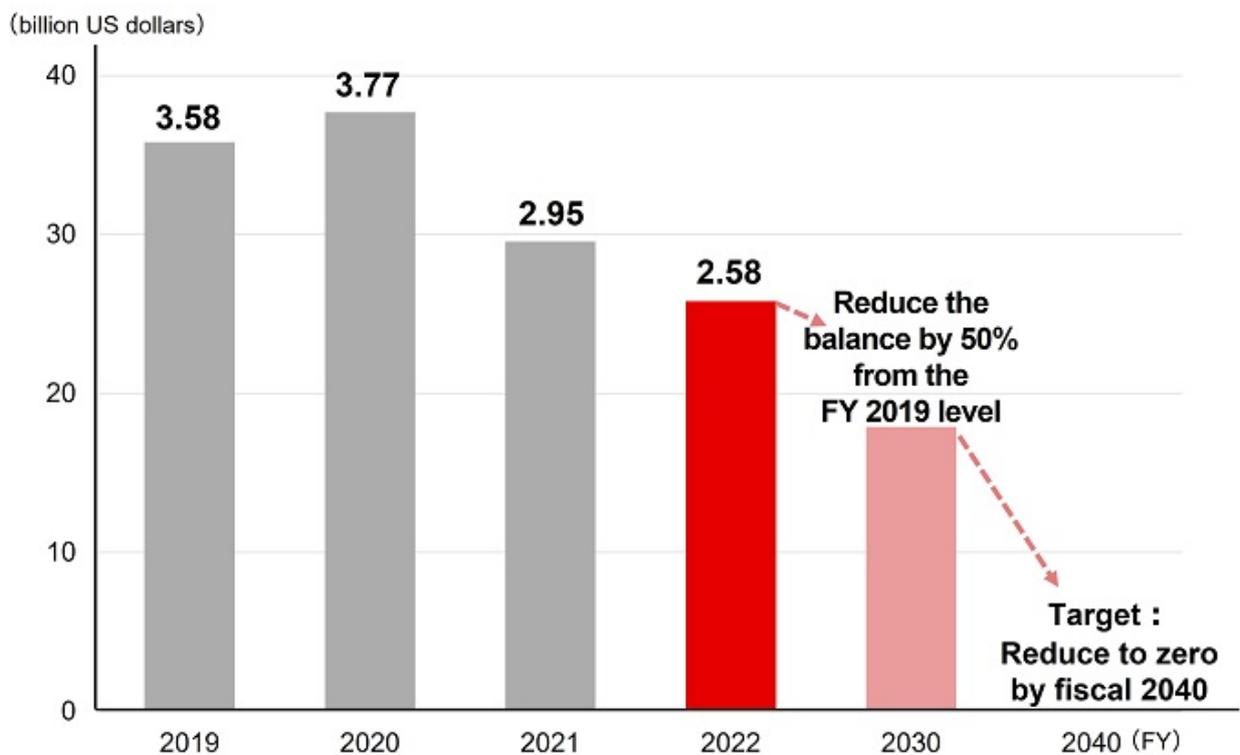
※2 Data from FY 2018 to FY 2021 are revised to those calculated using the sum of Scope1, 2.

(note) The scope of aggregation and calculation method have been changed from FY2022 results. See [ESG Data Book 2023](#) for details.

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

| | |
|--|--|
| Metric | Project finance for coal-fired power plants (balance of lending) |
| Target | Reduce the balance by 50% by FY2030 from the FY2019 level, and reduce it zero by FY2040 (note) |
| Emissions at the time of target setting | US\$3,580 million (as of the end of FY2019) |
| Results | US\$2,581 million (as of the end of FY2022) |

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.



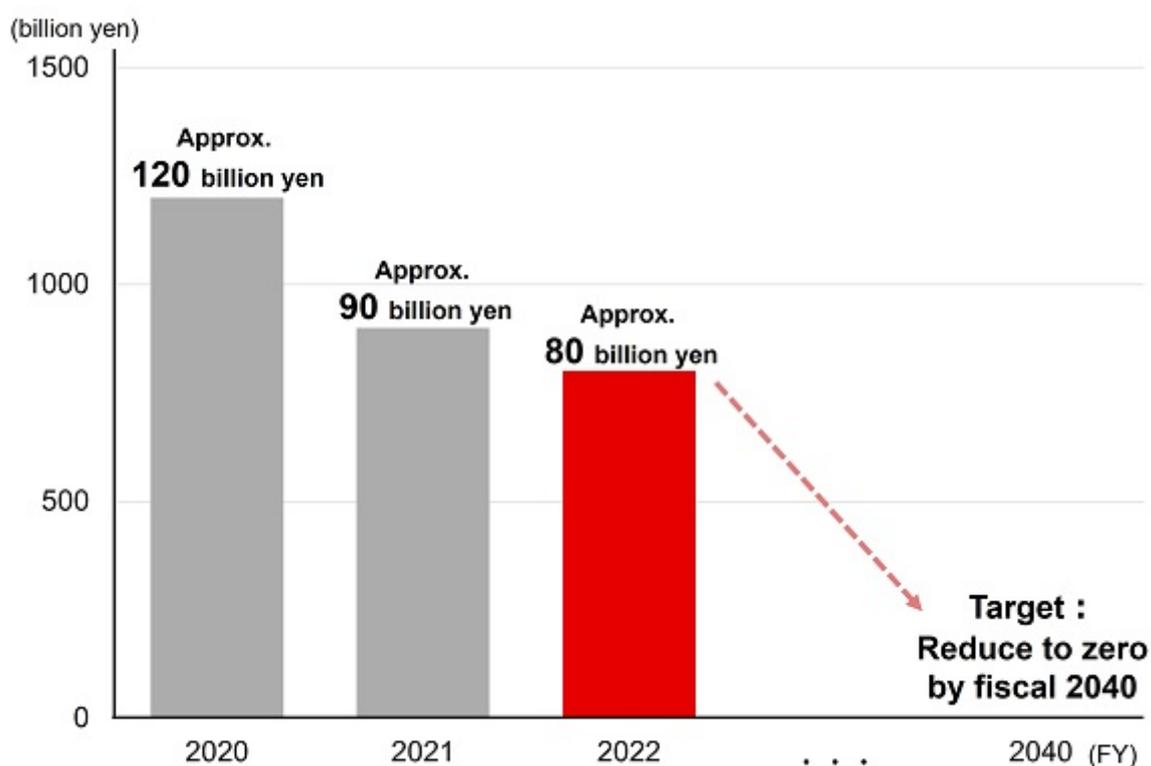
(note) Projects that contribute to the transition toward a decarbonized society are exceptional following the MUFG Environmental and Social Policy Framework.

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

| | |
|--|--|
| Metric | Corporate finance for coal-fired power plants (credit amounts) |
| Target | Reduce the credit balance to zero by FY2040 ^(note) |
| Emissions at the time of target setting | Approx. 120 billion yen (as of the end of FY2020) |
| Results | Approx. 80 billion yen (as of the end of FY2022) |

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.

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) in FY2030 |
| Results | Cumulative total of 24.5 trillion yen, including 8.9 trillion yen in the environmental sector (as of the end of FY2022) |

Please see [Strategy](#) for details.

Setting Targets for Reducing CO₂ Emissions Through Renewable Energy Project Financing

| | |
|----------------|--|
| Metric | CO ₂ reduction through renewable energy project financing |
| Target | Reduction by 70 million tons (cumulative total from FY2019 to FY2030) |
| Results | Reduction by 36.63 million tons (cumulative total from FY2019 to FY2022) |

Please see [Strategy](#) for details.

Measurement of Financed Emission (FE) by Sector in TCFD Recommendations for Disclosure

FE measurement was conducted for corporate and project finance, using the PCAF methodology, by sectors recommended for disclosure in the TCFD (based on March 31, 2022). Going forward, FE measurement results may change significantly as the availability and accuracy of data improves due to expanded disclosure by customers and advances in estimation methodologies.

In FE measurement, we perform estimation using the emission factors in the IEA World Energy Outlook and the emission intensity (emissions per unit of revenue and per amount of loans) published in the PCAF database, in addition to customers' disclosed data. See details on assumptions and measurement methods, see [here \(PDF / 341KB\)](#).

【Overview of Measurement】

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|--------------------------------------|-----------------|-------------------------|--|-----------|------|--------------------|-----------|-------------------------|---------------------|-------------------|--------------------------|-----------------|-----------|------------------------|---------------|--------------------------------------|-----------|-------------|------------------------|-------------------------|--|--|--|
| Applicable assets | Loans (corporate finance and project finance) | | | | | | | | | | | | | | | | | | | | | | | | |
| Applicable FY | <ul style="list-style-type: none"> • Base year: Fiscal year ended March 31, 2022 - Loan balance: As of March 31, 2022 - Customers' financial data and greenhouse gas (GHG) emission data: - In principle, financial closing data for the period from April 2021 to March 2022 | | | | | | | | | | | | | | | | | | | | | | | | |
| Target sectors | <p>The following 17 sectors will be disclosed based on the TCFD Recommendations.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Oil & Gas</td> <td style="width: 20%;">Coal</td> <td style="width: 20%;">Electric Utilities</td> <td style="width: 20%;">Aviation*</td> <td style="width: 20%;">Maritime Transportation</td> </tr> <tr> <td>Rail Transportation</td> <td>Trucking Services</td> <td>Automobiles & Components</td> <td>Metals & Mining</td> <td>Chemicals</td> </tr> <tr> <td>Construction Materials</td> <td>Capital Goods</td> <td>Real Estate Management & Development</td> <td>Beverages</td> <td>Agriculture</td> </tr> <tr> <td>Packaged Foods & Meats</td> <td>Paper & Forest Products</td> <td></td> <td></td> <td></td> </tr> </table> <p>* The aviation sector includes both Air Freight and Passenger Air Transportation</p> | | | | | Oil & Gas | Coal | Electric Utilities | Aviation* | Maritime Transportation | Rail Transportation | Trucking Services | Automobiles & Components | Metals & Mining | Chemicals | Construction Materials | Capital Goods | Real Estate Management & Development | Beverages | Agriculture | Packaged Foods & Meats | Paper & Forest Products | | | |
| Oil & Gas | Coal | Electric Utilities | Aviation* | Maritime Transportation | | | | | | | | | | | | | | | | | | | | | |
| Rail Transportation | Trucking Services | Automobiles & Components | Metals & Mining | Chemicals | | | | | | | | | | | | | | | | | | | | | |
| Construction Materials | Capital Goods | Real Estate Management & Development | Beverages | Agriculture | | | | | | | | | | | | | | | | | | | | | |
| Packaged Foods & Meats | Paper & Forest Products | | | | | | | | | | | | | | | | | | | | | | | | |
| Calculation method | Measurements based on PCAF standards | | | | | | | | | | | | | | | | | | | | | | | | |

*1 The Partnership for Carbon Accounting Financials (PCAF) is an international initiative that was launched in 2015 with the goal of standardizing the measurement and disclosure of financed GHG emission.

【Basic Calculation Formula Based on PCAF Standards】

Basic equations

【Score 1 to 4】

$$\text{Financed Emission} = \sum_n \text{Attribution factor}_n \times \text{Company emission}_n$$

- Attribution factor
= loan amount for each customer/project ÷ Debt + equity of each customer/project
- Company Emission (GHG emission)
= We use the data disclosed by the customer. If we cannot obtain such data, we use estimated figures.

【Score 5】

$$\text{Financed Emission} = \sum_n \text{Loan amount}_n \times \text{GHG emission}_n / \text{Assets}_n^*$$

* Emission factor per asset value taken from the PCAF database

~ What is the PCAF Score ~

We score the quality of emission data by each customer/project according to the categories shown below, and aggregate the average score for the sector as a whole by weighted average of loan amount.

| | Quality | Category | Summary |
|-----------------------|---------|--|--|
| High ↑ ↓ Low | Score 1 | Disclosed information | ● Verified emissions data of each customer/project |
| | Score 2 | | ● Unverified emissions data of each customer/project |
| | Score 3 | Estimated value (based on physical metrics) | ● Estimation based on energy consumption data of each customer/project |
| | Score 4 | | ● Estimation based on production data of each customer/project |
| | Score 5 | | ● Estimation based on the sales of each customer/project and the sectorial emission benchmarks per sales |
| | | Estimated value (based on financial metrics) | ● Estimation based on loan balances of each customer/project and sectorial emission benchmarks per asset |
| | | | ● Estimation based on loan balances of the each customer/project, sectorial emission benchmarks per revenue, and asset turnover ratio per sector |

Source: created by MUFG based on The Global GHG Accounting & Reporting Standard for the Financial Industry

Measurement of Financed Emission (FE) by Sector in TCFD Recommendations for Disclosure

| | Energy | | | Transportation | | | | | Materials & Buildings | | | | | Agriculture, Food & Forest Products | | | |
|---|-----------|------|--------------------|----------------|-------------------------|---------------------|-------------------|--------------------------|-----------------------|-----------|------------------------|---------------|--------------------------------------|-------------------------------------|-------------|------------------------|-------------------------|
| | Oil & Gas | Coal | Electric Utilities | Aviation | Maritime Transportation | Rail Transportation | Trucking Services | Automobiles & Components | Metals & Mining | Chemicals | Construction Materials | Capital Goods | Real Estate Management & Development | Beverages | Agriculture | Packaged Foods & Meats | Paper & Forest Products |
| Scope1+2 (MtCO ₂) | 34 | 0.2 | 85 | 4 | 8 | 0.4 | 0.5 | 3 | 23 | 9 | 3 | 2 | 1 | 0.3 | 2 | 5 | 2 |
| Scope3 (MtCO ₂) | 97 | 0.4 | 29 | 2 | 4 | 0.5 | 4 | 73 | 27 | 25 | 2 | 93 | 1 | 2 | 1 | 11 | 3 |
| FE scope of measurement balance (Billion USD) | 49 | 0.4 | 61 | 11 | 11 | 13 | 14 | 63 | 26 | 35 | 4 | 53 | 80 | 7 | 2 | 16 | 6 |
| Measured coverage ² | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| PCAF score (Scope 1+2) | 3.2 | 2.7 | 2.8 | 2.4 | 2.9 | 3.6 | 3.8 | 2.2 | 2.1 | 2.4 | 2.2 | 2.2 | 3.7 | 2.2 | 4.1 | 3.5 | 3.1 |
| PCAF score (Scope 3) | 3.3 | 3.2 | 3.1 | 2.5 | 3.0 | 3.7 | 3.8 | 2.2 | 2.2 | 2.4 | 2.2 | 2.6 | 3.7 | 2.3 | 4.5 | 3.5 | 3.5 |

1. Excluding mortgages 2. For power and oil & gas upstream business PF, measurement was conducted only for completed construction details

Status of Carbon-Related Assets (Credit Amount)

| Metric | Carbon-Related Assets (Credit Amount) |
|--------|---------------------------------------|
| | |

Based on the TCFD's recommendations, the status of credit balance ^(note1,2) for carbon-related assets is disclosed in order to quantify the risks related to climate change.

The total amount at the end of FY2022 was 60.2 trillion yen ^(note3) (Energy: 8.2 trillion yen; Utilities: 9.2 trillion yen; Transportation: 12.0 trillion yen; Materials and Buildings: 26.8 trillion yen; Agriculture, Food and Forest Products: 4.1 trillion yen).

[Unit : trillion yen]

| | Credit amounts at the end of FY2021 | Credit amounts at the end of FY2022 | Ratio |
|--|-------------------------------------|-------------------------------------|---------------|
| Energy | 8.2 | 8.2 | 5.2% |
| Oil & Gas | 7.8 | 7.8 | 4.9% |
| Coal | 0.3 | 0.4 | 0.2% |
| Utilities | 8.3 | 9.2 | 5.7% |
| Electricity | 6.8 | 7.5 | 4.7% |
| Coal-fired power | 1.2 | 1.2 | 0.8% |
| Gas-fired power, power transmission and distribution, etc. | 5.6 | 6.3 | 3.9% |
| Gas supply etc. | 1.5 | 1.6 | 1.0% |
| Transport | 12.2 | 12.0 | 7.5% |
| Air cargo | 0.7 | 0.9 | 0.6% |
| Passenger cargo | 0.9 | 0.9 | 0.5% |
| Marine transport | 1.6 | 1.5 | 1.0% |
| Rail transport | 1.7 | 1.8 | 1.1% |
| Truck service | 2.0 | 1.7 | 1.1% |
| Automobile and parts | 5.3 | 5.2 | 3.3% |
| Material and building | 27.8 | 26.8 | 16.8% |
| Metals and mining | 4.1 | 4.5 | 2.8% |
| Chemical | 4.6 | 4.7 | 2.9% |
| Building materials | 0.6 | 0.8 | 0.5% |
| Capital goods | 6.8 | 6.9 | 4.3% |
| Real estate management and development | 11.7 | 10.0 | 6.3% |
| Agriculture, foods, forestry products | 4.4 | 4.1 | 2.5% |
| Beverage | 1.0 | 1.0 | 0.6% |
| Agriculture | 0.3 | 0.2 | 0.1% |
| Processed food, meat | 2.2 | 2.0 | 1.3% |
| Paper/Forestry products | 0.9 | 0.8 | 0.5% |
| Carbon-related assets | 60.9 | 60.2 | 37.8% |
| All sector total | 161.3 | 159.5 | 100.0% |

- (note1) Total of loans, trade finance, letter of credit & guarantees and undrawn commitment facility, etc.
- (note2) Excluding interbank transactions, credit to government agencies and central banks, etc.
- (note3) Based on the revision of the TCFD Recommendations in October 2021, the scope has included energy and utilities transportation, materials and buildings, and agriculture, food, and forest products. Credit to renewable power generation is excluded from credit amount related to the utility sector.
The total includes partner banks (Krungsri (Bank of Ayudhya), and Bank Danamon). Sector classification based on the primary business (largest sales) of the borrower.

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

| Items recommended for disclosure | Action plan (during FY2023) |
|----------------------------------|---|
| Governance | <ul style="list-style-type: none"> • 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 • Study of measures based on advice from outside directors and external advisors regarding initiatives to achieve carbon neutrality |
| Strategy | <ul style="list-style-type: none"> • Formulation and release of transition plan in line with GFANZ guidance • Acceleration of efforts including risk management, engagement, and human resource development in line with the transition plan • Through the publication of the MUFG Transition White Paper 2.0, list key technologies and supply chains for advancing carbon neutrality for electricity and heat in Japan, and enhance the predictability of investments for Japan's initiatives • Deeper engagement and provision of a variety of solutions based on engagement • In addition to climate change, enhance initiatives toward biodiversity, natural capital, etc. • Execution of measures for reduction of GHG emissions from own operations through energy conservation initiatives, switching to renewable energy, etc. |
| Risk management | <ul style="list-style-type: none"> • Continuous revision of the finance policy (MUFG Environmental and Social Policy Framework) • Study of framework for customer evaluation and project decision-making processes, engagement policy, etc. aimed to further strengthen climate change-related risk management |
| Metrics and Targets | <ul style="list-style-type: none"> • Additional disclosure of interim targets by sector, as stipulated by the NZBA • Study of enhancement of Scope 3 (Financed Emissions) disclosure |

Climate Change/TCFD Initiatives as an Asset Manager

Recognition of the External Environment

The Necessity of Climate Change Response

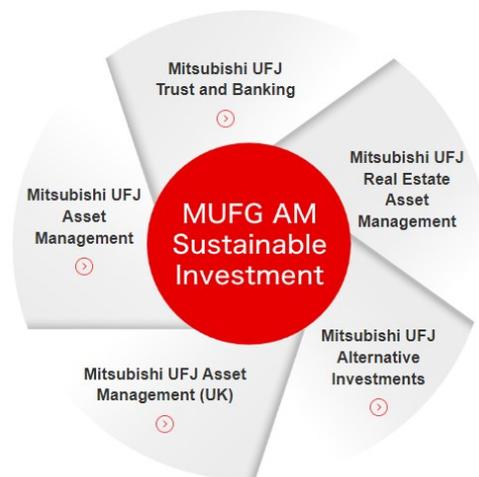
Climate change is an urgent and global-scale environmental issue that has major impacts on our lives, as well as a sustainability issue connected to other environmental and social issues. Accordingly, we believe that initiatives to address climate change are crucial to the business continuity of our customers and investees, and to the enhancement of our corporate value. As an asset manager, we will contribute to a smooth transition to a decarbonized society and to the achievement of a sustainable society through properly grasping the risks and the opportunities that climate change brings, cooperating with our varied stakeholders, and conducting dialogues (engagement activities) with investees.

MUFG Asset Management Initiatives

Launch of MUFG AM Sustainable Investment

In April 2023, MUFG Asset Management ^(note) commenced activities under the name **MUFG AM Sustainable Investment** (hereinafter MUFG AM Su). With a sustainable future as our aim, we are prioritizing initiatives for solving issues that would have major long-term impacts on our assets under management. Among these, we set out climate change as a key theme in asset management. As one action to address this, we have declared our intent to work toward net zero emissions through participation in the Net Zero Asset Managers (NZAM) initiative, and will aim to transition to a decarbonized society through sustainable investment.

(note) MUFG Asset Management (hereinafter MUFG AM) is a brand name formed by Mitsubishi UFJ Trust and Banking Corporation, an asset management company of Mitsubishi UFJ Financial Group (hereinafter MUFG), Mitsubishi UFJ Asset Management Co., Ltd., Mitsubishi UFJ Real Estate Asset Management Co., Ltd., Mitsubishi UFJ Asset Management (UK) Ltd., and Mitsubishi UFJ Alternative Investments Co., Ltd.



Approach to Engagement by MUFG AM

| Thematic Engagement | Collaborative Engagement | Public Engagement |
|---|---|---|
|  <p>Empowering companies through thematic engagement with financial solutions to global challenges for our sustainable future.</p> |  <p>Engaging with companies in global partnership with strategic initiatives and asset managers.</p> |  <p>Evolving policy measures with public sector as integral part of the public engagement in a coordinated manner with asset managers as needed.</p> |

MUFG AM Su conducts engagement through three approaches: thematic engagement, collaborative engagement, and public engagement.

< Thematic Engagement >

In thematic engagement, analysts with abundant management experience and research officers specialized in the area of sustainability conduct engagement with a focus on MUFG AM's four priority themes of climate change, biodiversity, human rights, and health and safety. With regard to the top-priority theme of climate change, we will hold constructive dialogue with 50 companies selected for engagement on the basis of factors including corporate GHG emissions (Scope 1 and 2) and investment amounts.

< Collaborative Engagement >

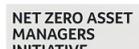
In collaborative engagement, we conduct engagement with investees by collaborating and cooperating with asset management firms in Japan and overseas through participation in initiatives related to key themes. Specifically, we will advance activities such as IAST APAC and the Access to Nutrition Initiative, with a focus on Climate Action 100+.

< Public Engagement >

In public engagement, we make direct and indirect recommendations to stakeholders in government bodies and financial markets to solve sustainability issues. Through our activities in GFANZ and PCAF in particular, we will capture dynamically changing trends in global finance and take an active involvement in rule-making that promotes transformation.

Participation in Initiatives

On the theme of climate change, our activities include collection of up-to-date information on domestic and overseas trends in sustainability, building of relationships with financial institutions and stakeholders, setting of goals, disclosure of information, and proposal of rules by participating in initiatives including PRI, Climate Action 100+, TCFD, CDP, AIGCC, and NZAM. In measurement of GHG emissions, we will examine the setting of science-based goals and enhance the level of our analyses of risks and opportunities.



Overview of initiatives: [Responsible Investment Report \(P115 ~ 117\)](#)

Setting Intermediate Targets for NZAM

In November 2021, MUFG AM announced its participation in the global Net Zero Asset Managers (NZAM) initiative by asset management firms, along with its intent to work toward net-zero emissions from investee companies by 2050 as a means of achieving the 1.5°C target of the Paris Agreement. Our interim target for 2030 covers 55% of assets under management and will reduce GHG emissions per unit of economic intensity (absolute emissions amount (tCO₂e) / balance of assets under management) by 50% compared to 2019 level. To achieve net-zero emissions by 2050, we will further strengthen collaborations involving MUFG AM and will promote cross-organizational initiatives focused on MUFG AM Su. We will also undertake the development of investment products aligned with the achievement of net-zero emissions by 2050 and will promote investment that contributes to solving the climate change problem. We will also review our interim targets every two years, and are studying the gradual increase of the target assets ratio until 100% of assets under management are covered.

Responses to TCFD as an Asset Manager

Endorsing TCFD as an asset manager, MUFG AM is advancing initiatives to analyze and evaluate the impacts of climate change on entrusted portfolios and the status of investees' response to climate change. MUFG AM performs disclosure in accordance with the four key elements involved in climate change-related risks and opportunities (governance, strategy, risk management, and metrics and targets), as recommended by TCFD. As an asset manager, the company will contribute to solving the climate change problem and developing a sustainable society by considering the impacts of climate change on investment decisions and by encouraging investees' responses to climate change.

< Links to companies' information disclosure materials >

- Mitsubishi UFJ Trust and Banking Corporation – [Responsible Investment Report](#)
- Former Mitsubishi UFJ Asset Management Co., Ltd. – [Sustainability Report](#)
- Former MU Investments Co., Ltd. (before October 1, 2023) – [Initiatives toward the TCFD Recommendations](#)

Data on Climate Change

Consistency with the Paris Agreement

In measuring GHG emissions, calculation is performed using analytical methods and data collection through S&P. For GHG emissions in our portfolio, by analyzing allowable GHG emissions (carbon budget) consistent with the Paris Agreement together with emissions under MUFG AM's portfolio by 2030, we confirmed that the portfolio falls below the carbon budget and is consistent with the 1.5°C target. To achieve net-zero emissions in the portfolio, we will monitor investees and work toward the reduction of GHG emissions through engagement.

GHG Emissions-Related Metrics

By analyzing GHG emissions, we confirmed that GHG emissions in MUFG AM's integrated portfolio ^(note) were 16.83 million tCO₂e, and that the portfolio's figures were lower than benchmarks for domestic bonds, domestic stocks, and foreign bonds. The figure for foreign stocks exceeded the benchmark due to relatively large exposure to public utilities within its industry allocation.

GHG Emissions in the Integrated Portfolio of MUFG AM

| | Total GHG emissions (Scope 1, 2: million tCO ₂ e) | Carbon intensity (economic intensity) (tCO ₂ e/US\$ million) | Weighted average carbon intensity (tCO ₂ e/US\$ million) |
|----------------|---|--|--|
| Overall | 16.83 | 70.38 | 115.31 |

GHG Emissions-Related Metrics

- GHG emissions (Total Carbon Emissions): Total GHG emissions related to the portfolio
- Carbon intensity (economic intensity): Total GHG emissions divided by the market value of the portfolio
- Weighted average carbon intensity (WACI): Weighted average of emissions per unit of sales of investee companies, according to composition ratio in the portfolio

GHG Emissions in MUFG AM's Portfolio, by Asset

| | Total GHG emissions (Scope 1, 2: million tCO ₂ e) | BM | Carbon intensity (economic intensity) (tCO ₂ e/US\$ million) | BM | Weighted average carbon intensity (tCO ₂ e/US\$ million) | BM |
|-----------------|--|------|---|------|---|------|
| Domestic bonds | 1.51 | 89% | 186.34 | 73% | 284.43 | 74% |
| Domestic stocks | 11.78 | 91% | 77.92 | 92% | 90.60 | 96% |
| Foreign bonds | 0.11 | 45% | 38.78 | 52% | 120.32 | 54% |
| Foreign stocks | 4.10 | 117% | 53.10 | 118% | 146.03 | 108% |

(note) Mitsubishi UFJ Trust and Banking Corporation and its subsidiaries Mitsubishi UFJ Kokusai Asset Management Co., Ltd., MU Investments Co., Ltd., Mitsubishi UFJ Asset Management (UK) Ltd. (The portfolio is based on the former company, so it is listed under the former company name)

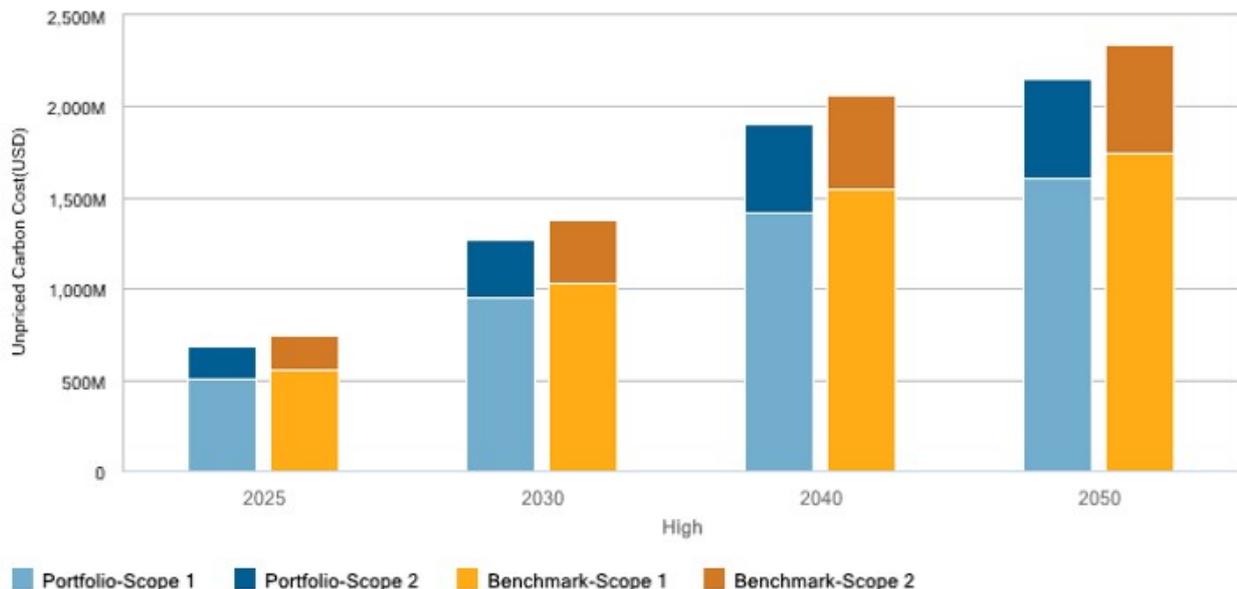
Transition Risks

S&P provides Carbon Earnings at Risk Analysis as a quantitative assessment of transition risk. This model analyzes how much additional cost (Unpriced Carbon Cost) will be imposed on companies by changes in carbon prices under expected future decarbonization.

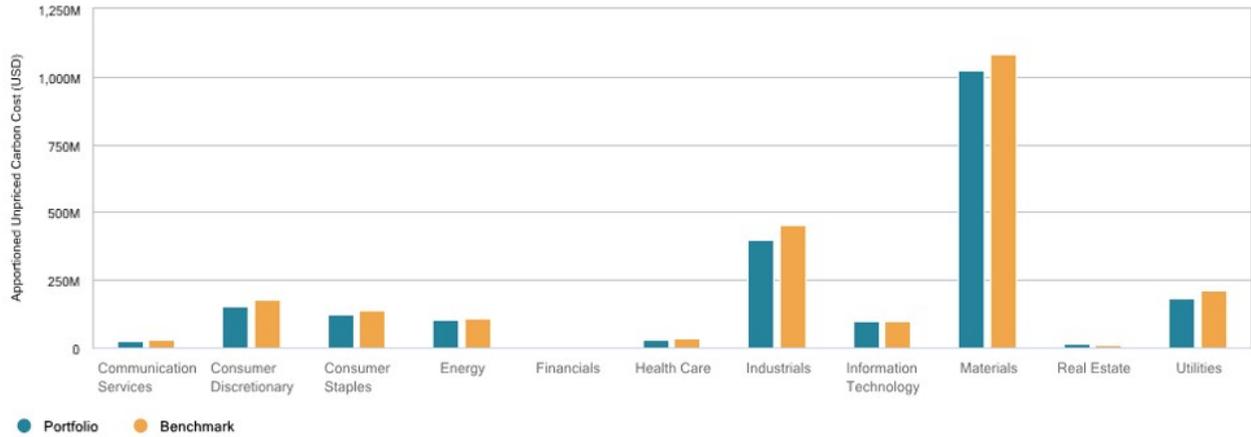
Here, we conducted a scenario analysis ^(note) of domestic stocks with the highest total GHG emissions. The graph compares the domestic stock portfolio of MUFG AM to the benchmark. It shows that the portfolio companies remain at a lower level of impact than the benchmark at any point in time.

(note) Estimated scenarios based on OECD and IEA research, assuming the adoption of policies sufficient to achieve the 2°C target of the Paris Agreement

Unpriced Carbon Cost, by Point in Time

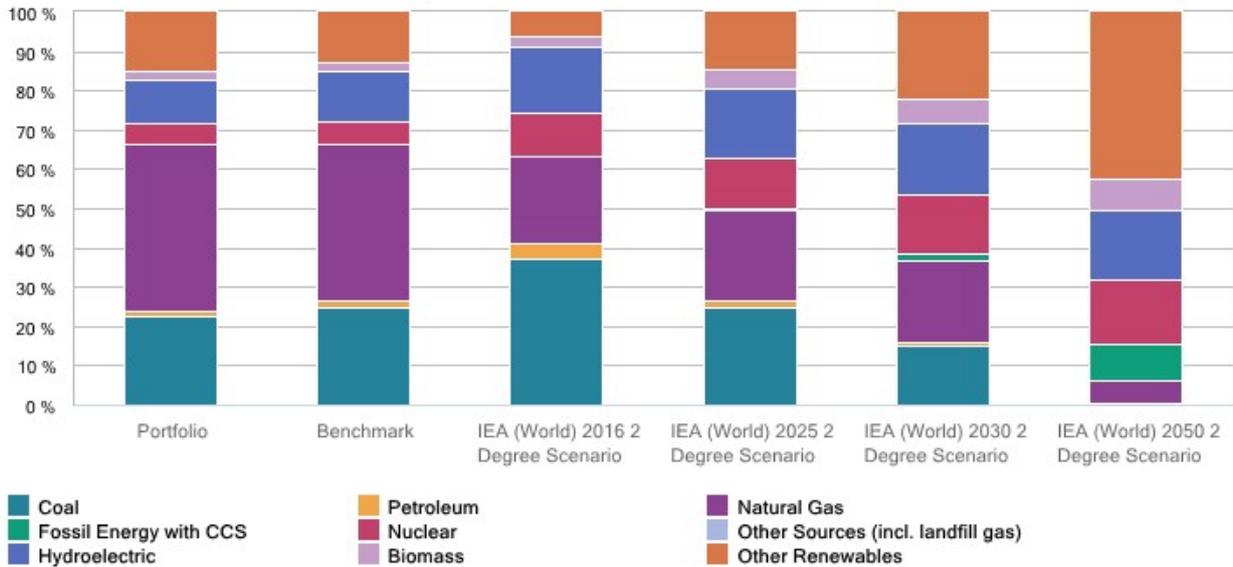


Unpriced Carbon Cost, by Industry



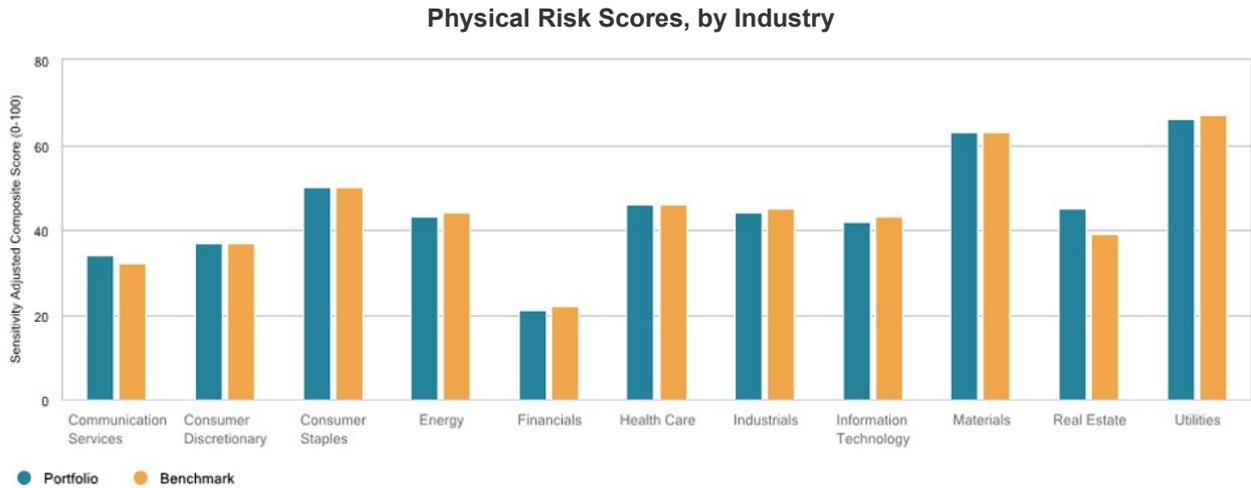
For the energy mix of portfolio constituent companies, S&P's tools allow evaluation of consistency with the Paris Agreement. For points in time, the graph below shows the energy mix of the portfolio (domestic stocks) and the benchmark (TOPIX) as of the end of March 2023, together with the energy mix that is consistent with the 2°C scenario as estimated by IEA. Heading toward 2050, it is expected that the use of fossil fuels will decrease and the use of renewable energy sources will expand. Through engagement, MUFG AM will support the transition of investees.

Current State of the Energy Mix of the Portfolio



Physical Risks

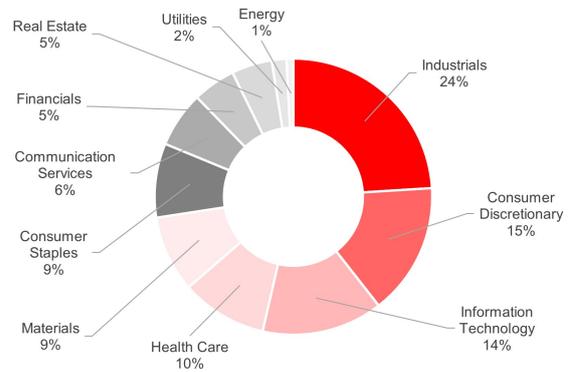
S&P performs analysis and scoring for eight major physical risks caused by climate change: Coastal Flooding, Fluvial Flooding, Extreme Heat, Extreme Cold, Tropical Cyclone, Wildfire, Water Stress, and Drought. The graph below ^(note) compares industry-specific physical risk scores for domestic stocks, which account for the greatest amount of GHG emissions in the MUFG AM portfolio. This confirms that physical risk is particularly high in Utilities and in Materials.



(note) Measurement of amount of risk in 2050, based on the SSP5-8.5 scenario used in IPCC reports (low-mitigation scenario in which GHG emissions triple by 2075 and temperature rises by about 3.3 to 5.7°C by 2100)

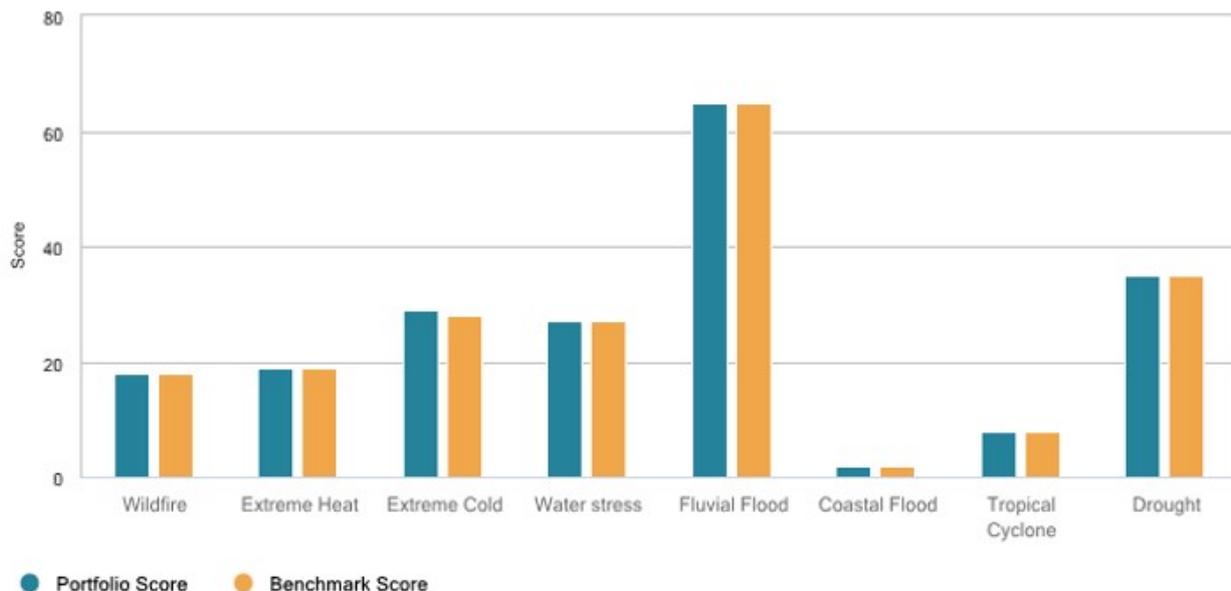
To confirm the degree of impact on the portfolio from physical risks to each industry, the composition ratio was aggregated with weights of holdings taken into account. The result shows large physical risk in some industries including Industrials, Consumer Discretionary, and Information Technology.

Portfolio Composition Ratio of Physical Risk Scores, by Industry



In scores by hazards, i.e., the elements that make up physical risk scores, physical risk due to fluvial flooding was confirmed to be the highest, but no major discrepancy from the benchmark (TOPIX) was found. In this way, MUFG AM strives to assess physical risks and to use that information as reference in allocation and engagement.

Score Comparison, by Hazard

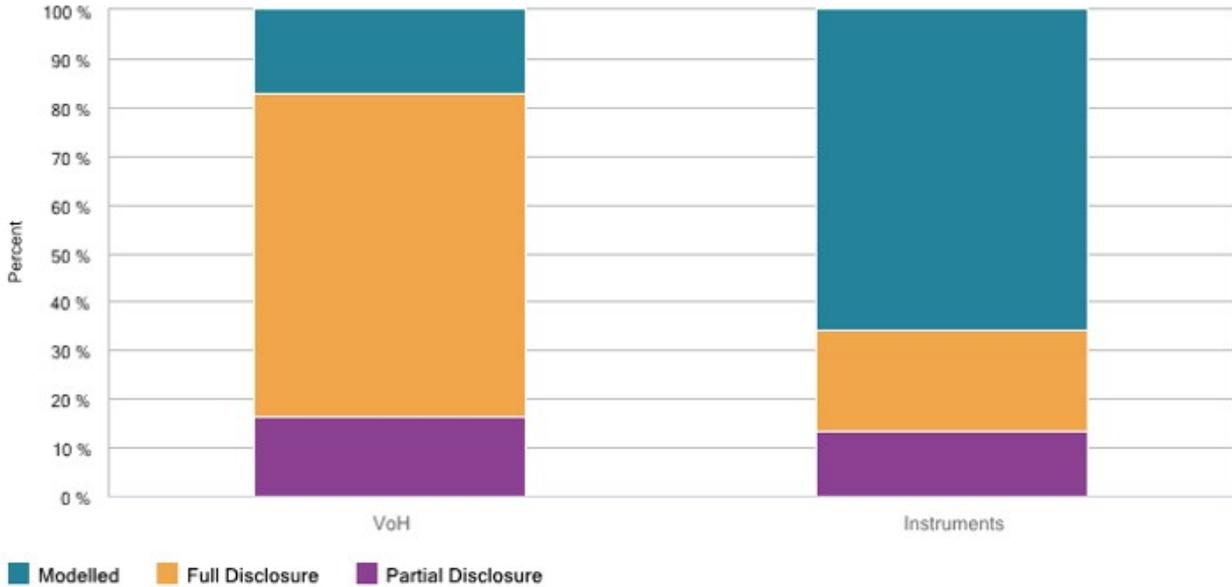


As found in the above analysis, differences exist in industries at high risk, depending on transition risks and physical risks. These results point to the importance of risk management tailored to differences among industries. MUFG AM calculates ESG evaluations and carries out engagement activities by identifying the materiality of individual companies, taking into account the differing risk characteristics of industries.

Future Issues in Analysis

Future issues in analysis include the reliance on estimates, not on actual disclosed data, for a large portion of the disclosed company data used in measurement of GHG emissions-related metrics and scenario analyses. For domestic companies, about 70% of the data is based on estimated values, resulting in a lack of full awareness of the state of individual companies' emissions. We will actively encourage investee companies to enhance their disclosed data.

Composition of Data Sources Used to Calculate GHG Emissions (Domestic Stocks)



VoH (Value of Holdings): Composition ratio by balance under management; Instruments: Composition ratio by stock

Risks and Opportunities Related to Climate Change

Climate change has adverse impacts on society, and companies may bear numerous additional costs for decarbonization. Accordingly, there is a tendency for only negative aspects of climate change to stand out at a glance. However, we believe that climate change also offers companies opportunities to grow, such as by developing new technologies or by reviewing their business portfolios to expand business. We will continue to request further disclosure of information from investee companies, and through our engagement activities will back up companies in addressing climate change.