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 328gCO_2e/kWh (2019) to 156-192gCO_2e/kWh. Results for 2021 were 299gCO_2e/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 84MtCO_2e (2019). Results for 2021 were 76MtCO_2e, 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 65kgCO_2e/㎡ (2020) to 44-47kgCO_2e/㎡, and reduce emission intensity in residential real estate from 27kgCO_2e/㎡ (2020) to 23kgCO_2e/㎡.

- 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	・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_2e/kwh (Emission intensity)	328gCO_2e/kwh (2019)	299gCO_2e/kwh (2021 results)
Oil and gas sector	15-28% reduction compared with 2019 level (Absolute GHG emissions)	84MtCO_2e (2019)	76MtCO_2e (2021 results)
Real estate sector	Commercial: 44-47kgCO_2e/㎡ Residential: 23kgCO_2e/㎡ (Emission intensity)	Commercial: 65kgCO_2e/㎡ Residential: 27kgCO_2e/㎡ (2020)	—
Steel sector	22% reduction compared with 2019 level (Absolute GHG emissions)	22MtCO_2e (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 tCO_2.

・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 CO_2 emissions through renewable energy project financing

・MUFG set a cumulative CO_2 reduction target of 70 million tCO_2 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.

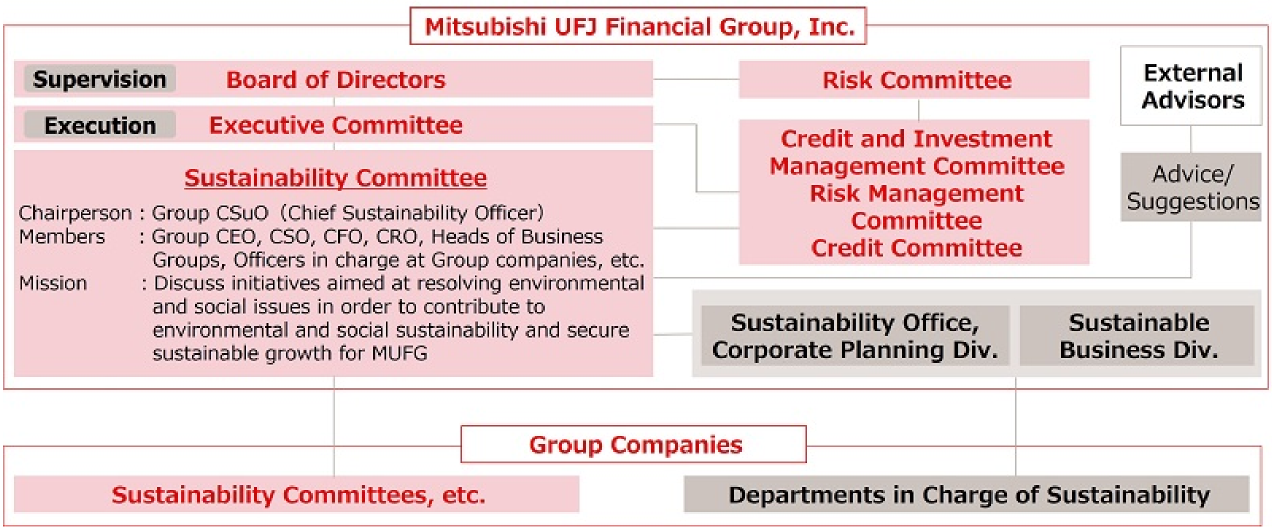
Governance

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.

Promotion Structure for Sustainability Management



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	・State of progress related to the Carbon Neutrality Declaration ‣ 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	・Recommendations for Board of Directors resolutions and reported items
	Compensation Committee	・Revision of the executive compensation system (inclusion of ESG-related items into performance evaluation items)
	Audit Committee	・Monitoring, supervising, and recommending towards our ESG responses
Execution	Executive Committee	・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	・Recognition of current conditions and issues ・Direction of the management system for climate change-related risks
	Risk Management Committee	・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	・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	・Progress toward the Carbon Neutrality Declaration ‣ 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	Weight	Time of payment	Payment method	Proportion of Group CEO's compensation
Annual base salary	Fixed	–		• 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	50% in shares 50% in cash Note: Subject to malus (confiscation) and clawback (restitution claim)	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		
				Target attainment rate of indices below in MTBP (1) Consolidated ROE (2) Consolidated expenses reduction amount (excluding performance-linked expence) 1 (3) Ratings granted by ESG rating agencies 2	30% 15% 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 (2) Profits attributable to owners of parent	25% 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	1
				Rate of year-on-year change and target attainment rate of indices below (1) Consolidated net operating profits (2) Profits attributable to owners of parent (3) Consolidated ROE (4) Consolidated expense amount	20% 10% 20% 10%			
				Status of individual execution of duties (qualitative evaluation factor applied to Group CEO)	<40%>			
				• Improvement in customer-segment profitability • Risks handling • Enhancement of efforts on ESG, evolution of sustainability management 4 • TSR, etc.				

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.

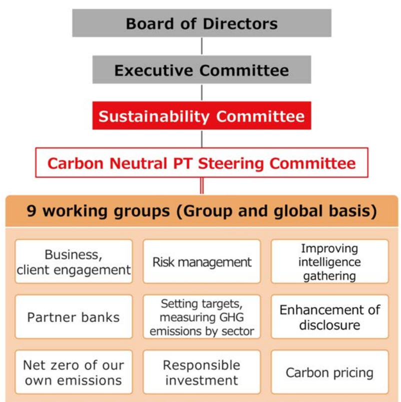
List of Directors

	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

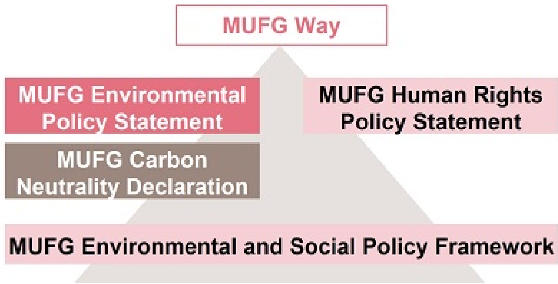
Carbon Neutrality Project Team and Committee

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

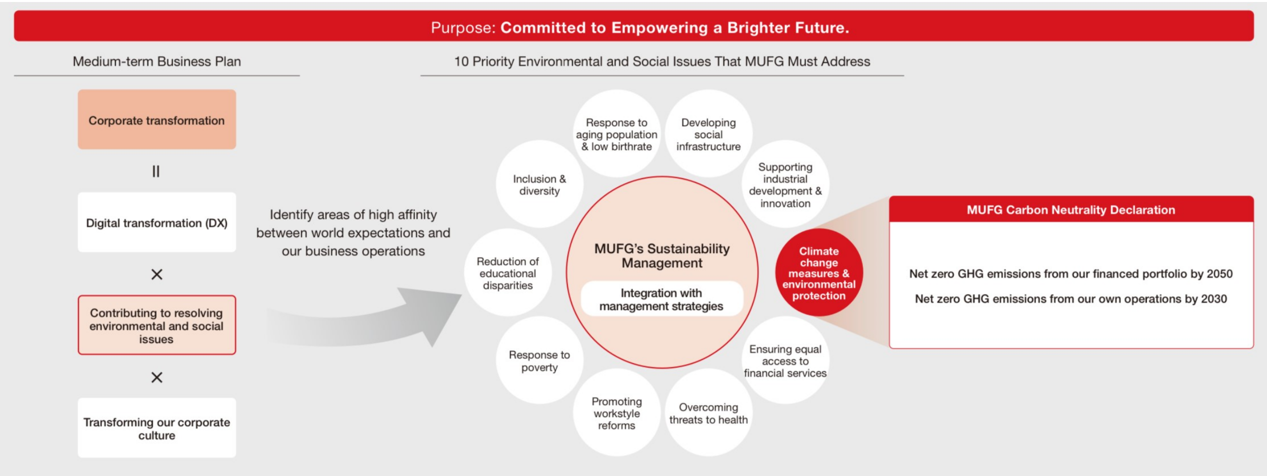
Under the MUFG Way, which guides all of our activities, MUFG has established the MUFG Environmental Policy Statement as a specific action guideline for practicing environmental considerations.
The MUFG Environmental Policy Statement has been the matter to be determined in the Board of Directors since May 2021. The Policy Statement clearly states the company's commitment to proactively disclose information on the environment, including climate change.



Strategy

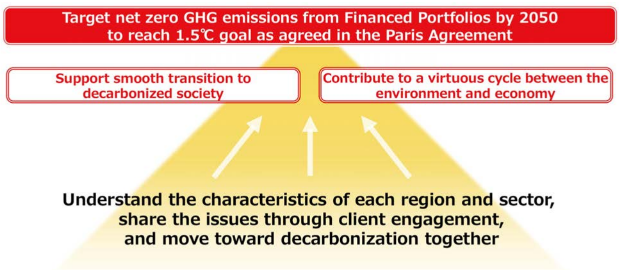
MUFG Carbon Neutrality Declaration

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												Net zero
Power (emission intensity, gCO_2e/kWh)	328	307	299					156-192gCO_2e/kWh				
Oil & gas (emission reduction rate, $MtCO_2e$)	84	81	76					(15%)-(28%)				
Real estate (emission intensity, gCO_2e/m^2)												
Commercial real estate		65						44-47$kgCO_2e/m^2$				
Residential real estate		27						23$kgCO_2e/m^2$				
Steel (emission reduction rate, $MtCO_2e$)	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 manger								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*3)	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.

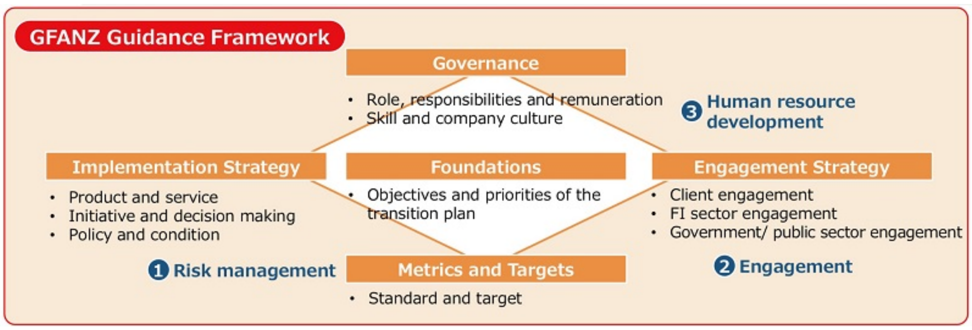
*1 A measure of consistency that indicates the difference from the required level across the portfolio. Calculates the Vessel Climate Alignment (VCA) of individual vessels providing financing as a weighted average of the percentages in the loan portfolio *2 Cumulative annual CO_2 reduction effect from 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.

Guidance

・GFANZ published the transition planning guidance in Nov 2022
・Voluntary recommendations for developing the net-zero transition plan for financial institutions to achieve 1.5℃target by 2050, consisting of 5 elements and 10 items



Future initiatives	・Accelerate the following initiatives. Organize the overall in the GFANZ guidance framework and announce it ①**Risk management**: In addition to the qualitative framework(note), planning to incorporate risk quantification and management models ②**Engagement**: Planning to strengthen the structure for integrated management of business risk and incorporating escalation policies, etc. ③**Human 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.

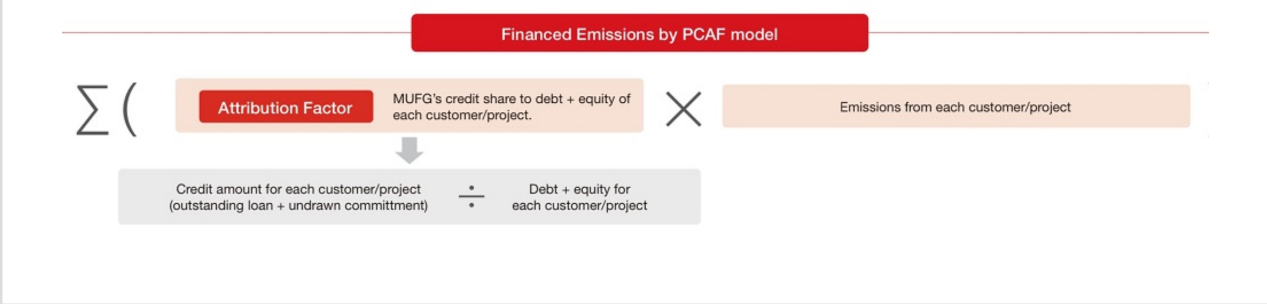
Net Zero GHG Emissions in Our Financed Portfolio

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

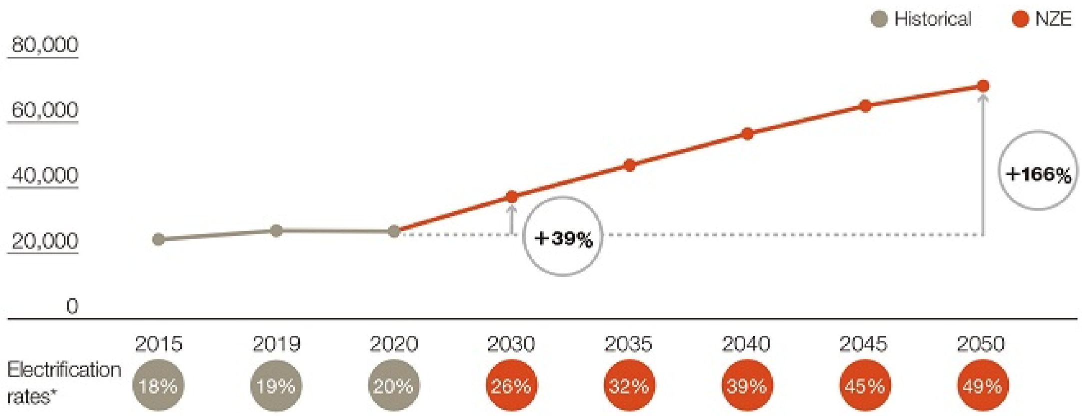
■ Power sector

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
● **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)**	● **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

Method for calculating emission intensity for the power sector

$$\sum \left(\text{GHG emissions intensity of each customer/project } (\text{gCO}_2\text{e/kWh}) \times \frac{\text{Loan amount to each customer/project}}{\text{MUFG total loan amount to power sector}} \right)$$

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_2e/kwh)
Data source	Information disclosed by each customer, CDP, Bloomberg, etc.

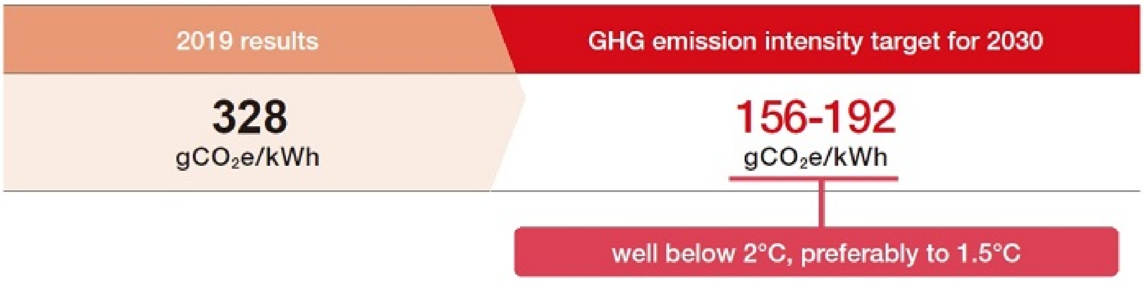
(Target scope)

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.

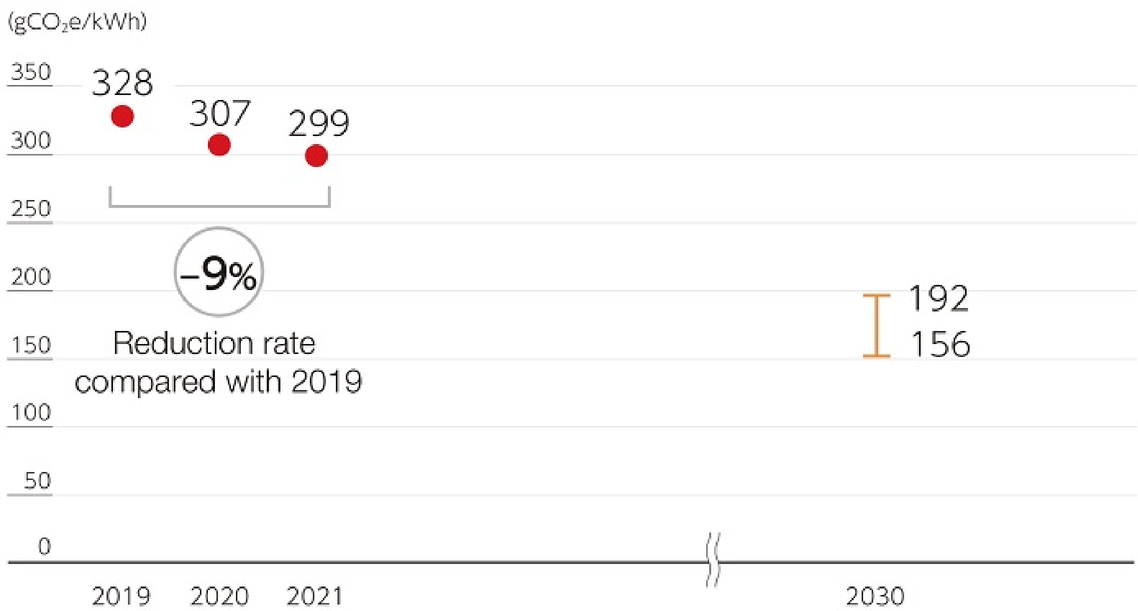
Interim target setting



The interim target for 2030 is 156-192gCO_2e/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 192gCO_2e/kWh by supporting our customers to meet each country's NDCs, which are essential for achieving the Paris Agreement, and also by helping their initiatives for green, transition and innovation. 192gCO_2e/ kWh is a level well below the IEA 2˚C scenario in 2030.
In addition to the above, we aim for 156gCO_2e/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



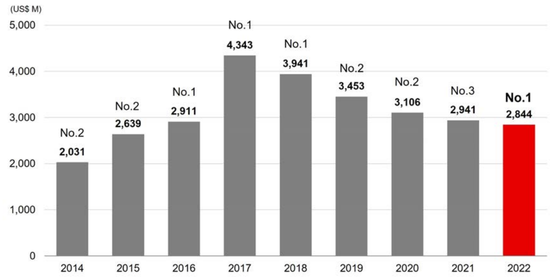
As of March 2022, the emission intensity of the power sector was 299gCO_2e/kWh, a decrease of about 9% from 328gCO_2e/kWh in the base year of 2019. This is due to the progress in decarbonization of our customers.
MUFG will support our customers' initiatives for green, transition, and innovation to achieve 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	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.
	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.
	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.
Company A (EMEA)	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.
Company B Group (APAC)	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.
Company C (Americas)	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.

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 CO_2 emissions through project finance for renewable energy projects by a cumulative total of 70 million tons from FY 2019 to FY 2030. This is equivalent to the annual CO_2 emissions of about half of the households in Japan.
Through FY2022, we have reduced CO_2 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

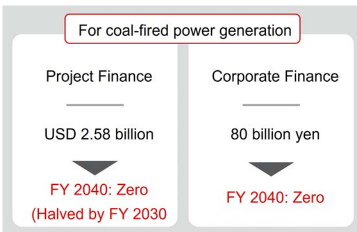
< Examples >

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.

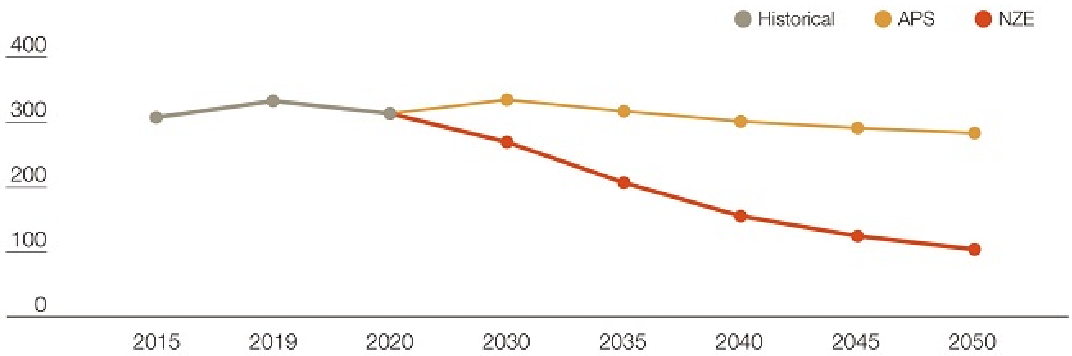


■ Oil and gas sector

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
● **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.	● **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

Absolute GHG emissions calculation method in the Oil & Gas sector

$$\sum\left(\underbrace{\text{MUFG's credit share against debt + equity for each customer/project}}_{\text{Attribution factor}} \times \text{GHG emissions from each customer/project}\right)$$

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 ($MtCO_2e$)
Data source	Information disclosed by each customer, CDP, Bloomberg, etc.

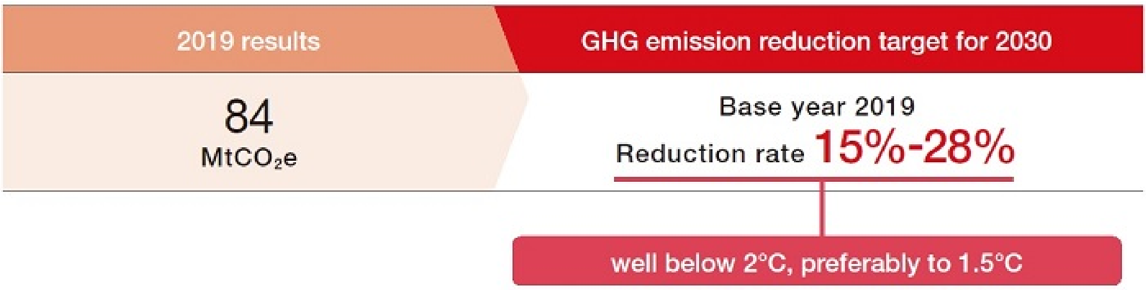
(Target Scope)

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)

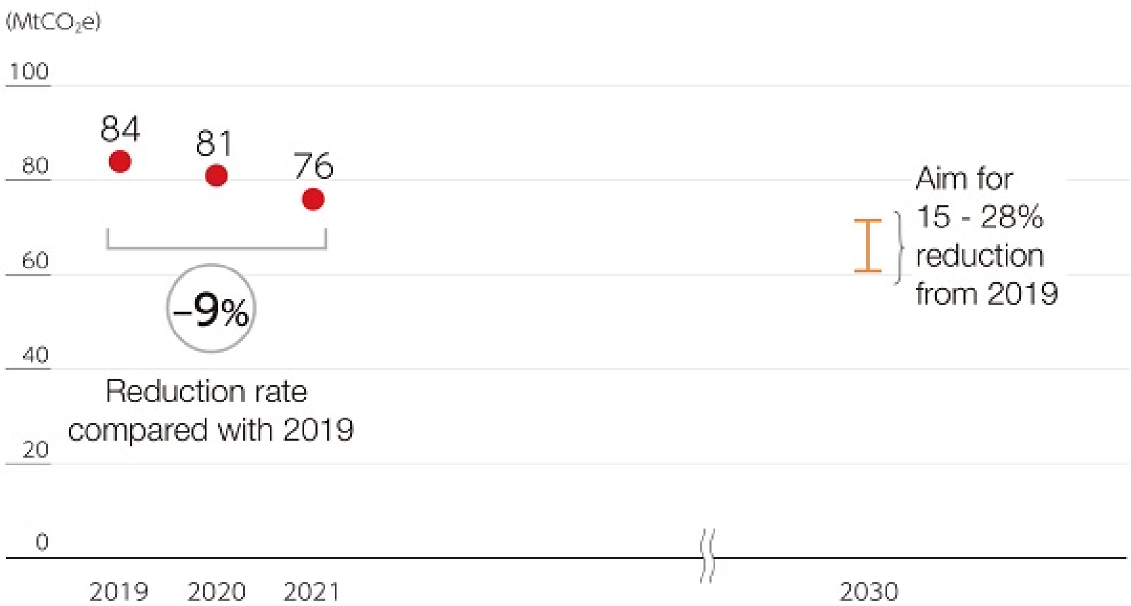
We have chosen to use absolute GHG emissions as the target metric to directly capture fossil fuel burns (Scope 3) which are the main cause of GHG emissions.

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 $76MtCO_2e$, a decrease of about 9% from $84MtCO_2e$ 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
● 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.	**● 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 ($kgCO_2e/m^2$)
Data source	Information disclosed by each customer and statistics from various external sources

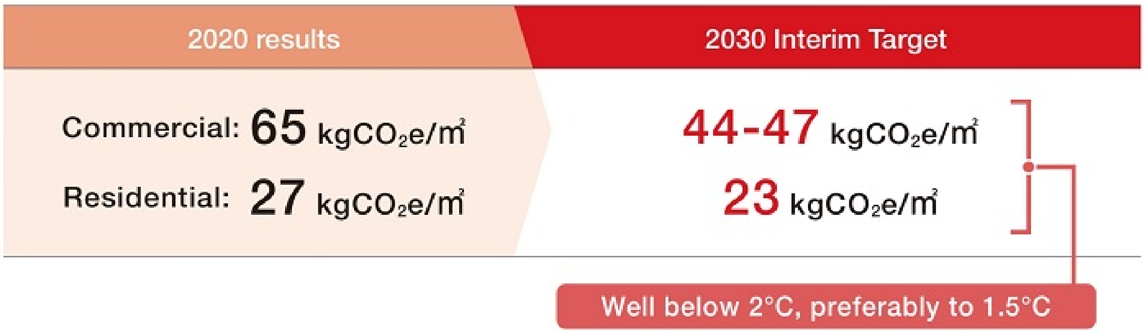
(Target scope)

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 ($kgCO_2e/m^2$) as the target metric for both commercial and residential real estate.

Interim target setting



< Commercial Real Estate >
The 2030 interim target (emission intensity) is 44-47$kgCO_2e/m^2$.
We will achieve 47$kgCO_2e/m^2$ by engaging with our clients to meet their own emissions targets. 47$kgCO_2e/m^2$ 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 44$kgCO_2e/m^2$ 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 23$kgCO_2e/m^2$.
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 23$kgCO_2e/m^2$ 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). (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.
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. (note) According to research by the Mitsubishi UFJ Trust and Banking Corporation. As of February 8, 2023.
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
● **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	● **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 ($MtCO_2e$)
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
● **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 CO_2 transport vessels engaged in the CCS/CCUS business, vessels related to the offshore wind power business, etc.	● **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: CO2 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 (SOx) 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"

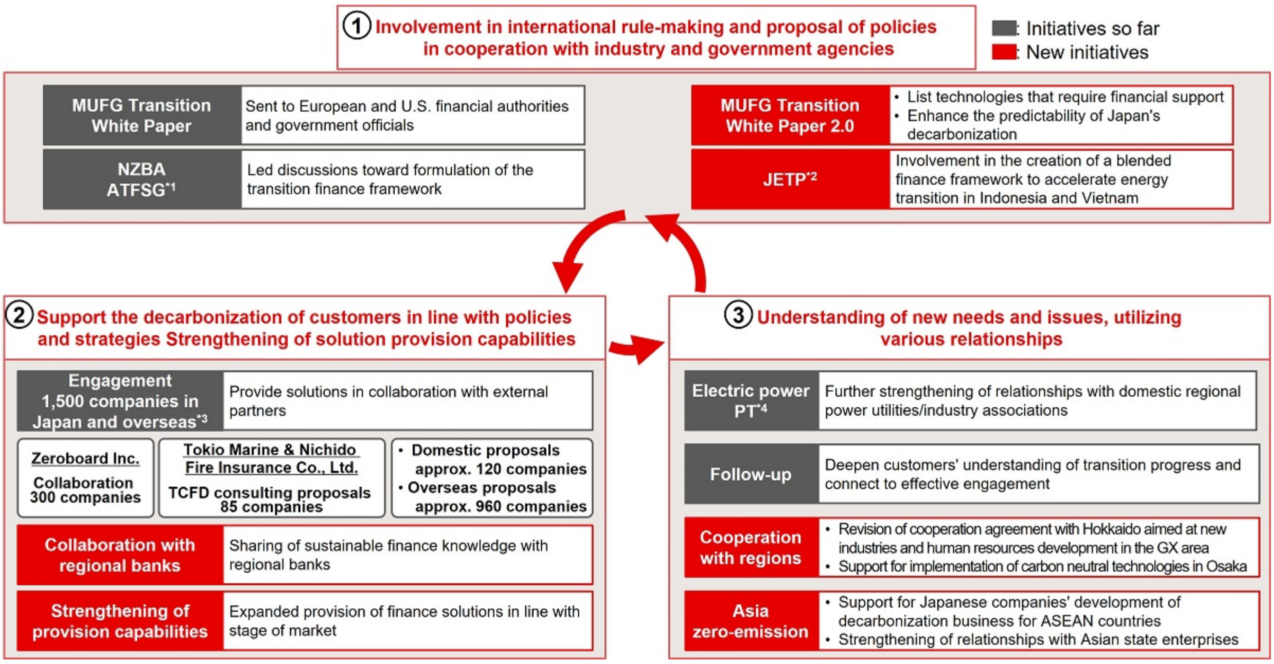
Public-private investment over the next 10 years ¥150 trillion

Type	Envisioned targeted businesses and amounts of public-private investment	
① Decarbonized energy supply & infrastructure construction ¥65 trillion	Renewable energy	¥31 trillion
	Hydrogen, ammonia, and synthetic fuels	¥10 trillion
	Power transmission and distribution	¥6 trillion
	CCS	¥4 trillion
	Others (nuclear power, thermal power, etc.)	¥13 trillion
② Demand-side decarbonization ¥50 trillion	Decarbonization of transport	¥23 trillion
	Digital decarbonization	¥12 trillion
	Decarbonization of materials	¥10 trillion
	Business restructuring	¥5 trillion
③ Manufacture of CN-conformant products ¥35 trillion	ZEB, ZEH	¥15 trillion
	EV	¥10 trillion
	Storage batteries	¥7 trillion
	Bio-manufacturing.	¥3 trillion

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 Insurace 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)

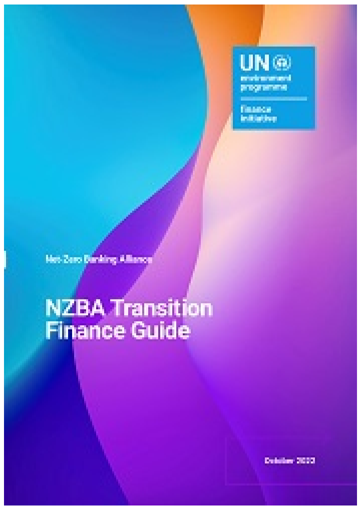
(note4) Project Team

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.

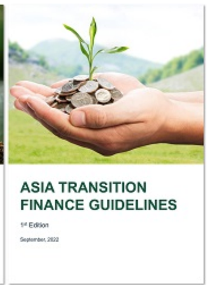
■ Net-Zero Banking Alliance (NZBA)

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℃. 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 (tCO_2e) / 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

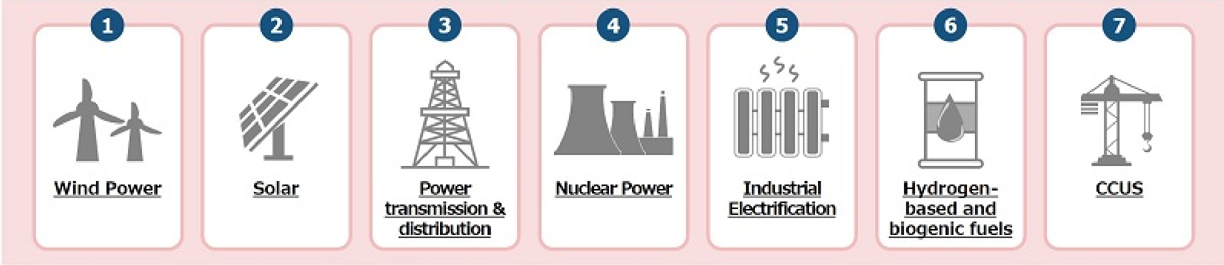
In September 2023, we published the MUFG Transition Whitepaper 2023, to present the list of technologies in supply chains that are important in advancing the path to carbon neutrality in Japan's "electricity and heat" segment. MUFG will also steer its activities towards clarifying Japan's transition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

Technology elements regarding carbon neutrality of “power and heat” mentioned in the Basic Policy for Realization of GX



■ 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

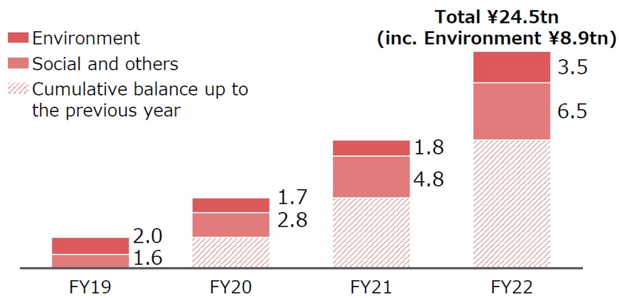
(Excerpts of major items, including past items)

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.

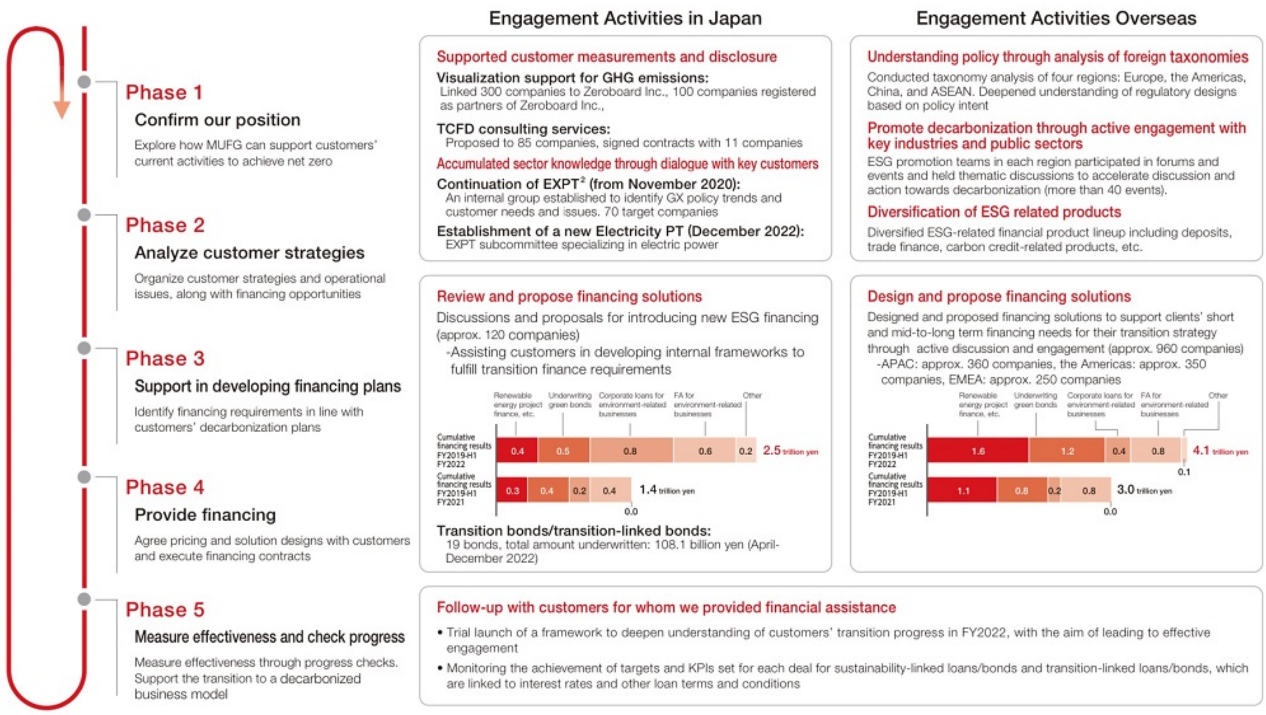
Main Transition Finance Projects

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	Osaka Gas Co., Ltd.	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

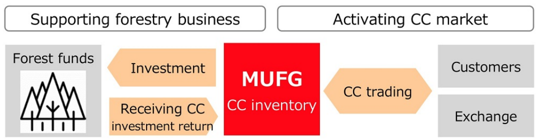
Initiatives by MUFG

Collaboration with Zeroboard/Visualization of GHGs	Development of TCFD consulting services
・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-this-kind in Japan. This was adopted as a model case green financing by the Ministry of the Environment.	・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

・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.



Collaboration with ENGIE SA

・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.

・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.

Financial advisory on acquisition of offshore wind power generator

・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.

・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.

Rooftop solar power generation for self-consumption

・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
・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)
・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
・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
・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 CO_2

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 CO_2 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$40/t$CO_2$ (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 CO_2 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

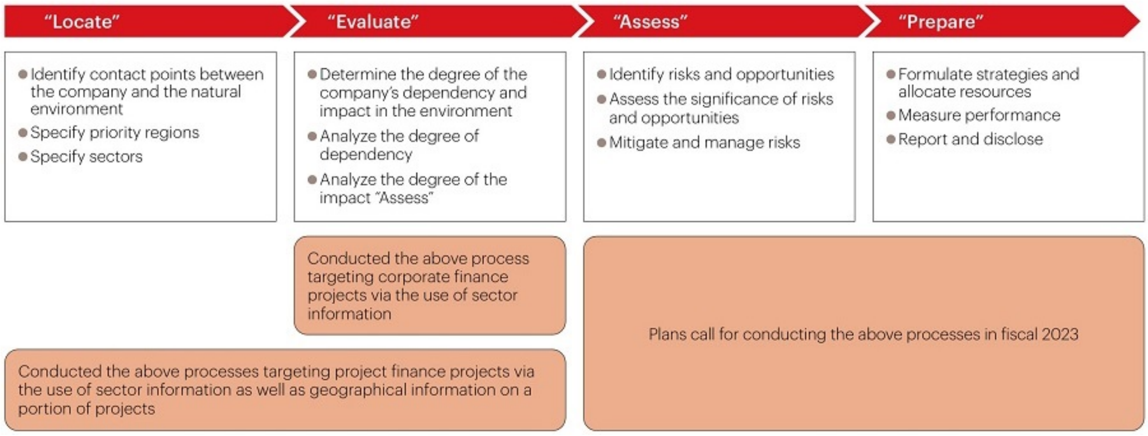
■ Fundamental Concept

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

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

Examples of Impacts of Transition Risks and Physical Risks

MUFG has organized examples of impacts (examples of potential risks) of climate change on each of the major risk categories of the physical and transition risks.
Risks are classified mainly around the following six categories. In the future, the classification of the risks and examples will be reviewed in response to changes in the environment.

■ Example of Transition and Physical Risks

Risk categories	Examples of transition risk	Examples of physical risk	Time frame(note)
Credit risk	・Our corporate clients' business activities and financial positions may be negatively affected if they cannot deal with government policies, regulatory requirements, customer requests or evolving trends in technological development.	・Extreme weather may cause direct damage to assets held by our corporate clients and/or have a negative spillover effect on their business activities and financial positions by indirectly impacting their supply chains.	Short-to long-term
Market risk	・The transition to a decarbonized society may negatively impact certain business sectors, making the value of relevant securities held by MUFG and/or financial instruments deriving from them highly volatile.	・The impact of extreme weather may induce market turmoil and make the value of securities held by MUFG highly volatile. ・The value of securities held by MUFG may become volatile due to changes in market participants' medium- to long-term outlook on the impact of extreme weather and their expectations regarding countermeasures against the phenomenon.	Short-to long-term
Liquidity risk	・If its credit ratings deteriorate due to such factors as delays in its response to transition risks, MUFG may face limitations on methods for funding from the market and thus growth in risks associated with fundraising.	・Corporate clients suffering damage from extreme weather may choose to withdraw their deposits or utilize commitment lines to secure funds for reconstruction, leading to a growing volume of cash outflows from MUFG.	Short-to long-term

Risk categories	Examples of transition risk	Examples of physical risk	Time frame(note)
Operational risk	・Spending on capital investment may grow due to the need for measures aimed at reducing CO_2 emissions and enhancing business continuity capabilities.	・Extreme weather may cause damage to MUFG's headquarters, branches and/or data centers and lead to the disruption of their operations.	Short-to long-term
Reputation risk	・ If MUFG's plans and efforts to realize carbon neutrality are deemed inappropriate or insufficient by external stakeholders, it may suffer from reputational damage. ・MUFG may suffer from reputational damage and/or deterioration in its status as an employer due to the continuation of relationships with business partners who doesn't give enough consideration to environmental concerns or delays in its transition to decarbonization.	・If MUFG's efforts to support customers and communities affected by extreme weather are deemed insufficient, it may suffer from reputational damage or a resulting disruption of operations.	Short-to long-term
Strategic risk	・If MUFG fails to live up to its public commitment to support the transition to a decarbonized society, its capabilities for strategic execution may be negatively affected by a deterioration in its reputation.	・MUFG may fail to meet the goals of its strategies and plans if it fails to properly factor in the direct impact of extreme weather in the course of long-term management planning.	Medium-to long-term

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

Scenario Analysis

The TCFD recommendations recommend 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

Selection of sectors to be analyzed	Based on the characteristics of the risk heat map and portfolio, formulate the priority ranking of sectors to be measured
Sample company selection	Perform sample company selection incorporating port characteristics of sectors, discussions with relevant departments, etc.
Parameter selection	Perform selection of parameters based on industry characteristics and construction of a Risk Factor pathway for risk measurement
Estimation of impact	Estimate impact by sector (cost of credit, etc.) for each scenario
Aggregation and reporting	Perform aggregation and verification of results across multiple patterns according to purpose, hold discussions with related departments, etc.

・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

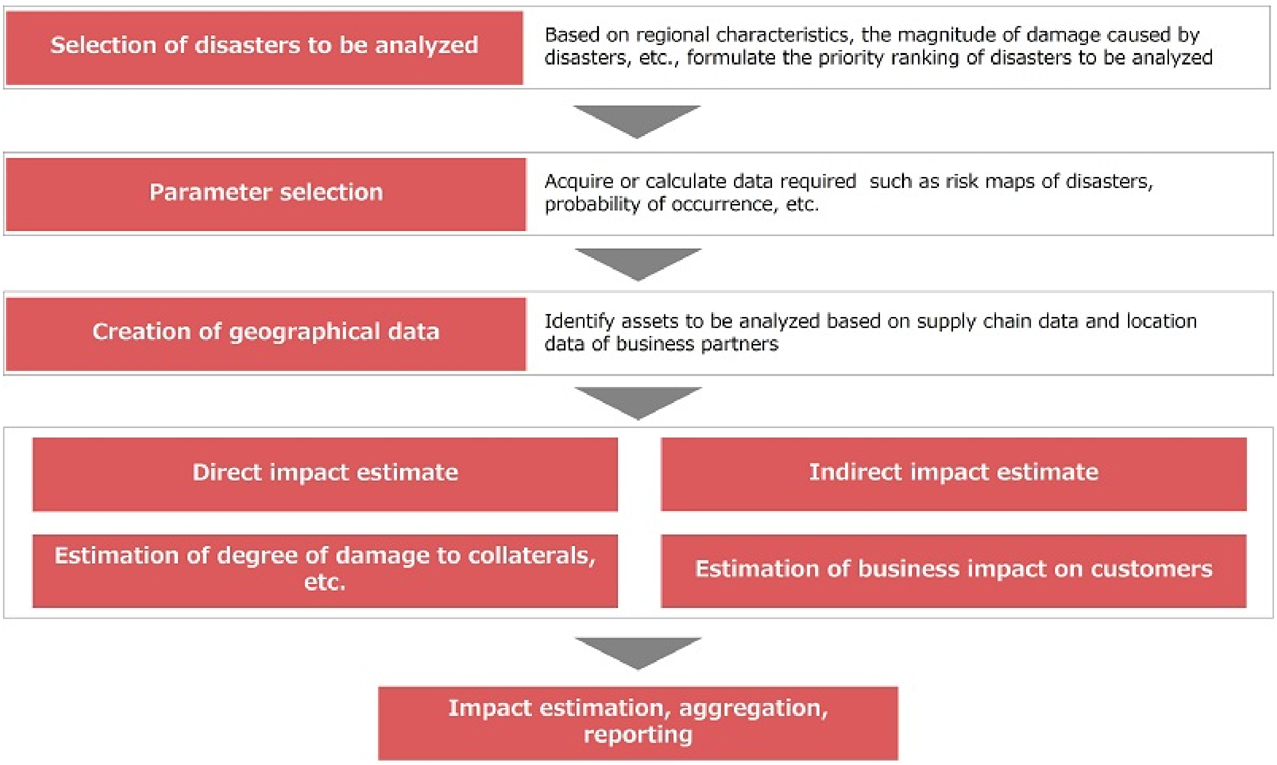
・Measures to reduce future migration risks

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

(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

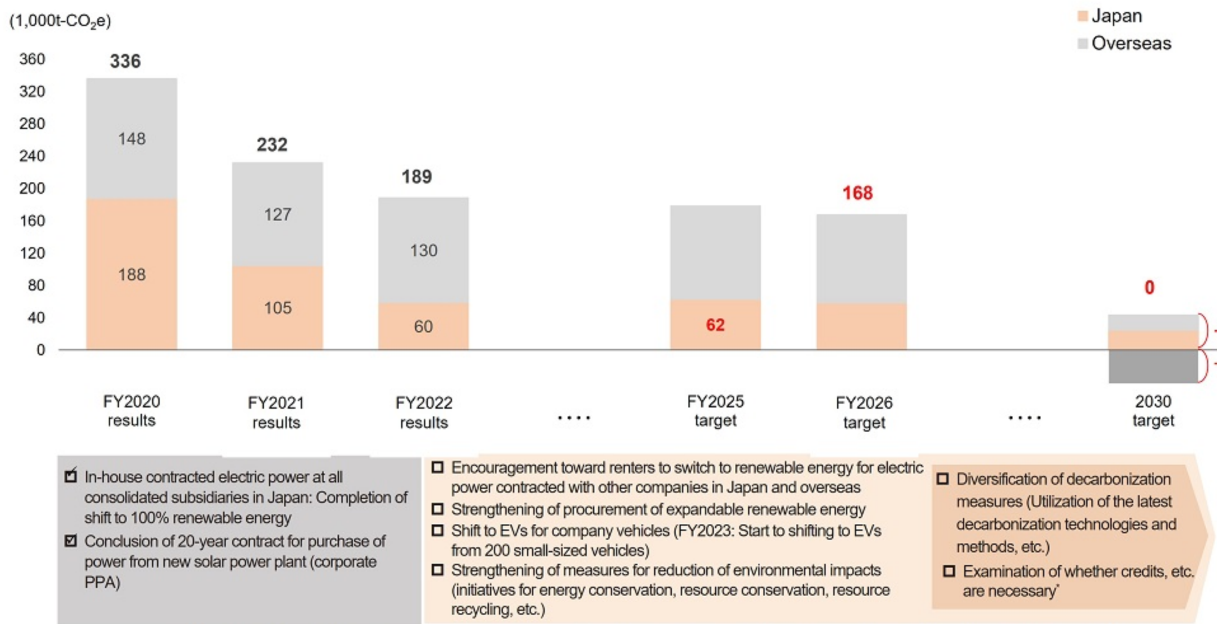
・FY2026: Reduction of GHG emissions from the group by 50% compared to FY2020

GHG emissions in FY2022 decreased by 43,000 tCO_2e (19%) from 232,000 tCO_2e in the FY2021 to 189,000 tCO_2e, 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 tCO_2e.

(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



* Consideration of offsets through complementary carbon credits only for remaining emissions that can not be reduced after maximum reduction efforts

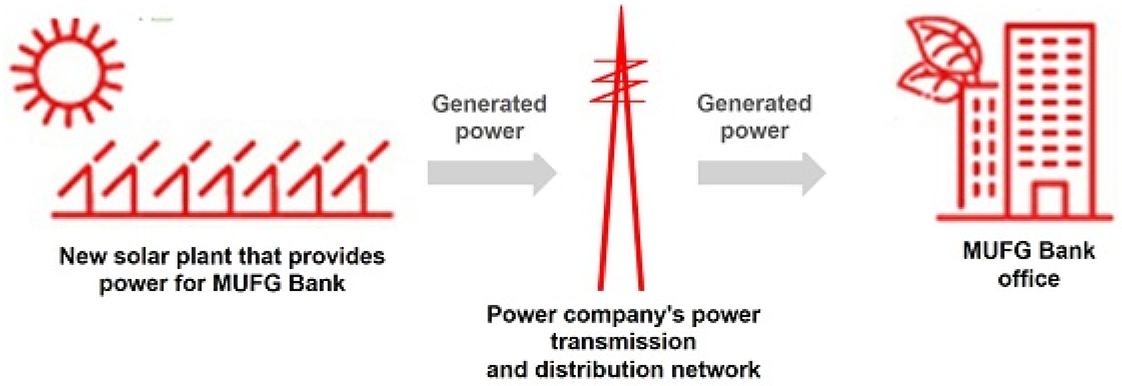
Efforts on Switching to Renewable Energy through Corporate PPAs

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.

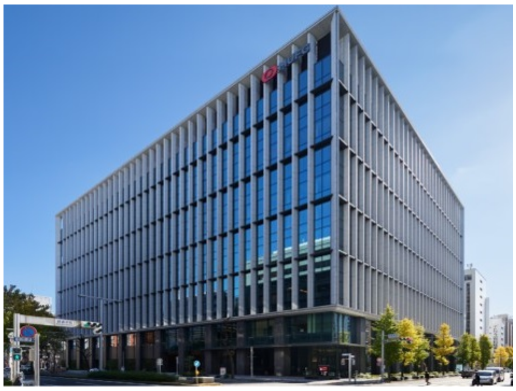
The Park office

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

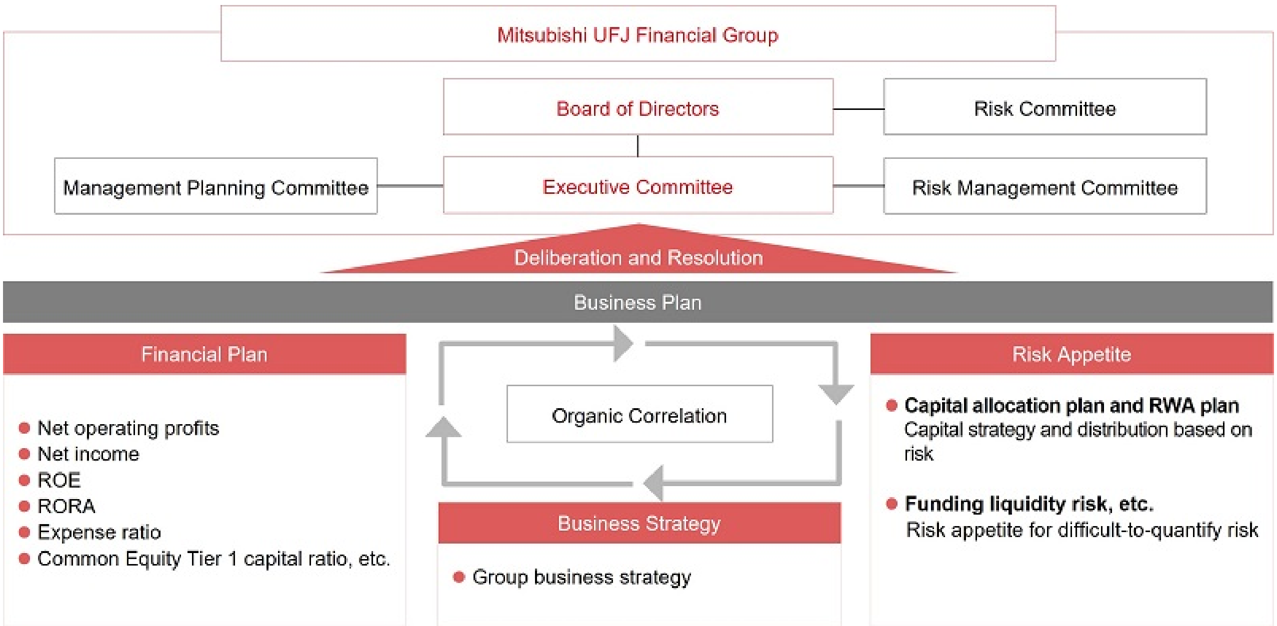
Risk Management

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

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

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

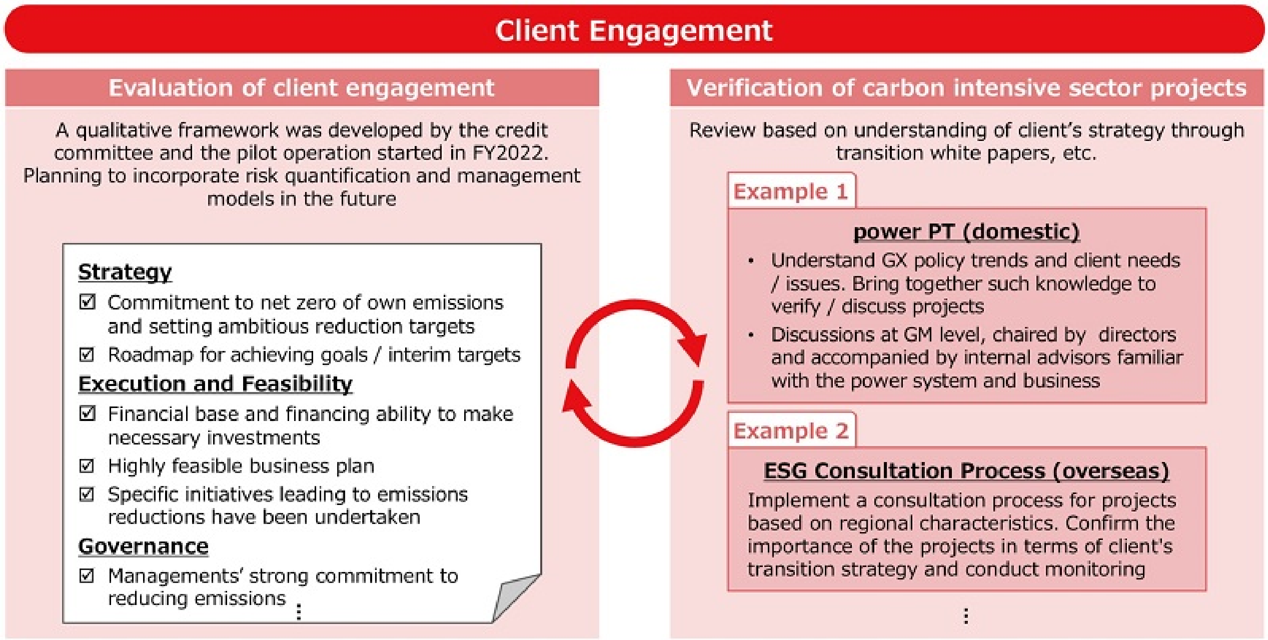
To consider a management framework for risks related to climate change, a project team is established with the Group Chief Risk Officer (CRO) as the lead and with participation of the CROs from the Bank, Trust Bank and Securities, as well as regional CROs.

Main items to be considered and 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

MUFG Way and Code of Conduct

MUFG Environmental Policy Statement | **MUFG Human Rights Policy Statement**

MUFG Environmental and Social Policy Framework

Framework enable the appropriate identification and management of environmental and social risks

Prohibited Transactions

- Illegal transactions and transactions for illegal purposes
- Transactions which violate public order and good morals
- Transactions that negatively impact wetlands designated under the Ramsar Convention
- Transactions that negatively impact UNESCO designated World Heritage Sites
- Transactions violating the Convention on International Trade in Endangered Species of Wild Fauna and Flora (Washington Convention)
- Transactions involving the use of child labor or forced labor
- Cluster Munitions and Inhumane Weapons Manufacturing

Transactions of High Caution

Cross-sector guidelines	• Impact on Indigenous Peoples Communities • Land expropriation leading to involuntary resettlement • Impact on High Conservation Value areas • Cause of or contribution to, or direct linkage with, violation of human rights in conflict areas
Sector specific guidelines	• Coal Fired Power Generation • Mining (coal) • Oil and Gas (Oil Sand, Development of the Arctic, Shale oil and gas, Oil and Gas Pipelines) • Large Hydropower • Forestry • Palm oil

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

Whether to finance or not

Standard Due Diligence

Based on public information and information provided by the customer, the department in charge determines whether the business falls under the categories: "Prohibited Transaction" or "Transactions of High Caution"

↓ It falls under "Transactions of High Caution".

Enhanced Due Diligence

The department responsible for environmental and social risk management conducts due diligence.

↓ It is determined that the risk could potentially damage MUFG's corporate value.

Discussions within a framework participated in by senior management

Transactions assessed as having the potential to have significant negative impacts on the corporate value of MUFG are evaluated with the involvement of executive management.

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
Coal-fired power generation	Enactment	Revision		Revision		
Forestry		Enactment		Revision		Revision
Palm oil		Enactment		Revision	Revision	Revision
Mining (coal)		Enactment			Revision	Revision
Oil and gas			Enactment		Revision	
Large-scale hydroelectric power generation			Enactment			

Revised content
Request for strengthening of supply chain management and enhancement of traceability
Request for strengthening of supply chain management and enhancement of traceability
Prohibition of support for expansion of general coal for power generation projects and linked infrastructure

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	・Identification of physical risks and measures to manage those risks
Projects with GHG emissions (Scope 1 and Scope 2), during its operational phase, of more than 100,000 tonnes of carbon dioxide equivalent per year	・Alternatives Analysis ・Assessment of transition risks 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_2e/kWh)	156-192gCO_2e/kwh (target for 2030)	328gCO_2e/kwh (2019)	299gCO_2e/kwh (2021 results)
	Oil and gas sector: Absolute GHG emissions ($MtCO_2e$)	15-28% reduction compared with 2019 level (target for 2030)	84$MtCO_2e$ (2019)	76$MtCO_2e$ (2021 results)
	Real estate sector: Emission intensity ($kgCO_2e/m^2$)	Commercial: 44-47$kgCO_2e/m^2$ Residential: 23 $kgCO_2e/m^2$ (target for 2030)	Commercial: 65$kgCO_2e/m^2$ Residential: 27$kgCO_2e/m^2$ (2020)	—
	Steel sector: Absolute GHG emissions	22% reduction compared with 2019 level (target for 2030)	22$MtCO_2e$ (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_2e/kwh (target for 2030) Oil and gas sector: 15-28% decrease compared with 2019 level (target for 2030) Real estate sector ・Commercial real estate: 44-47kgCO_2e/㎡ (target for 2030) ・Residential: 23kgCO_2e/㎡ (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_2e/kwh (2019) Oil and gas sector: 84MtCO_2e (2019) Real estate sector ・Commercial: 65kgCO_2e/㎡ (2020) ・Residential real estate: 27kgCO_2e/㎡ (2020) Steel sector: 22MtCO_2e (2019) Shipping sector: PCA+0.6% (2021)
Results	Power sector: 299gCO_2e/kwh (2021) Oil and gas sector: 76MtCO_2e (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.

CO_2排出量の推移／Changes in CO_2 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_2e	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_2e /1,000m^2	91	90	82	52	**59**
		電力：ロケーション基準 Electricity: location-based	t-CO_2e /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 CO_2 Emissions Calculation Method changed from FY2022 (excludes Tap, Waste water) . See P5 for FY2018-2021 and P4 for FY2022.

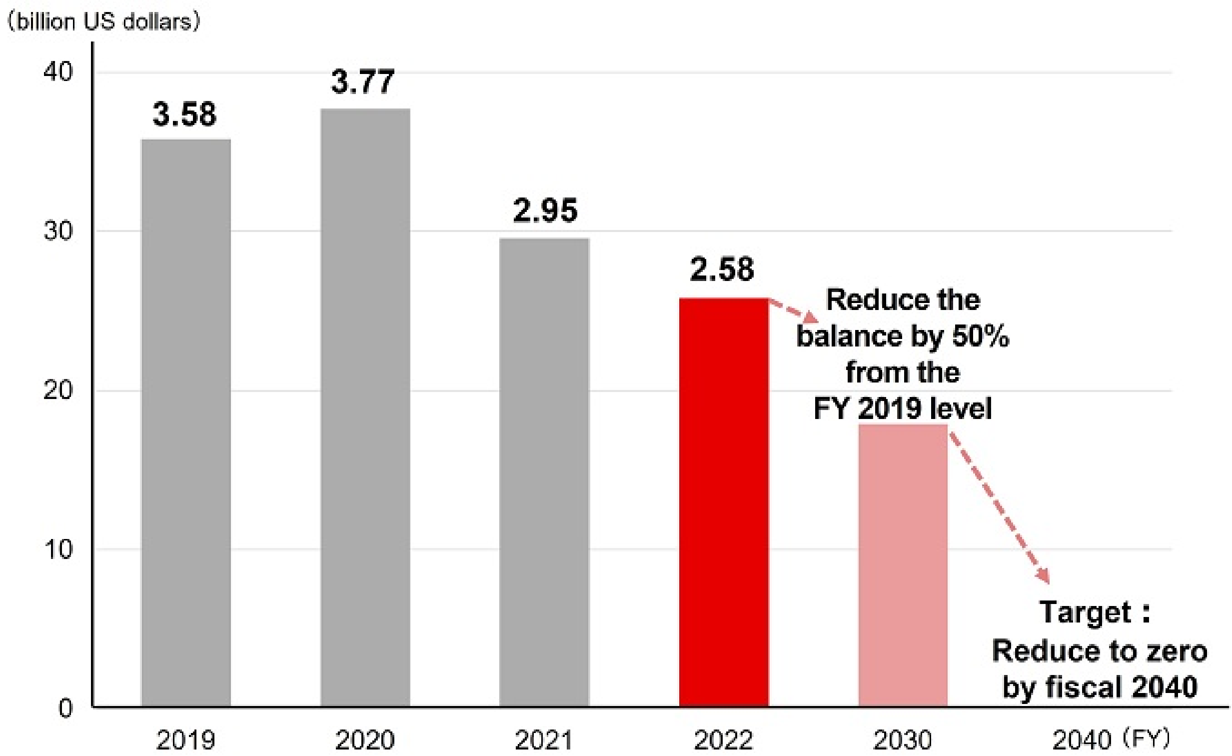
※2 2018-2021年度までのデータを、Scope1,2の合計値を用いて算出したものに更新
※2 Data from FY 2018 to FY 2021 are revised to those calculated using the sum of Scope1, 2.

(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.

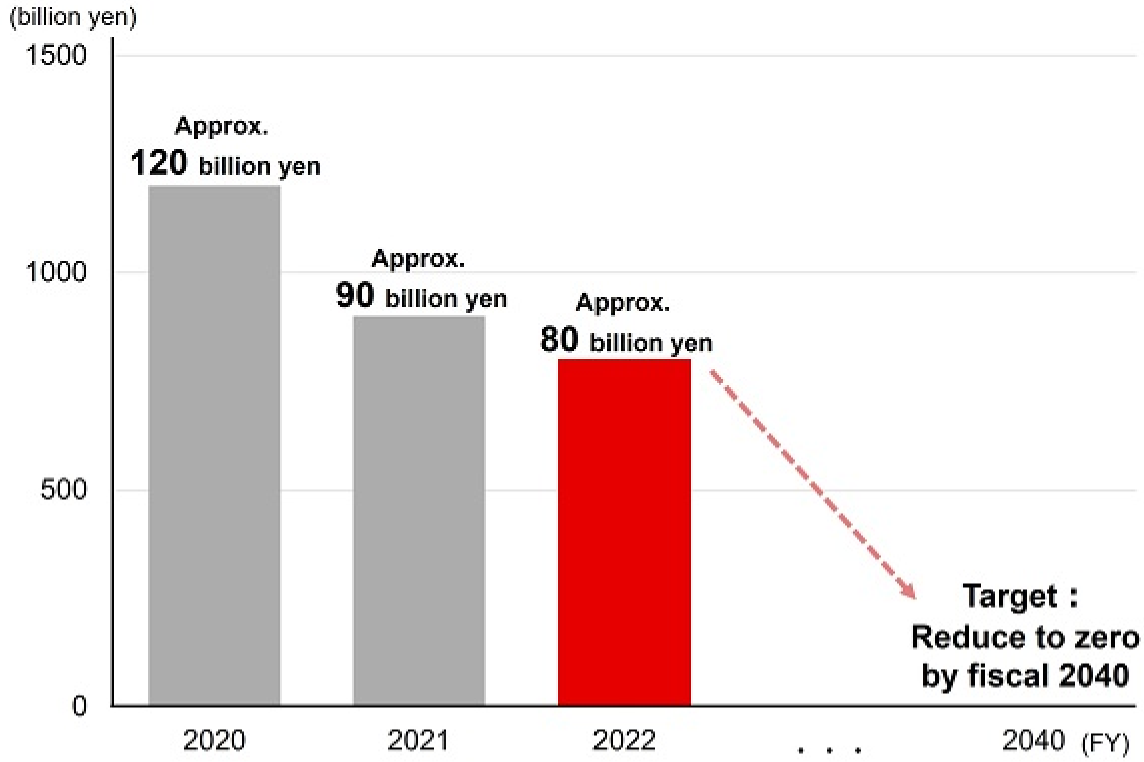


(note) Projects that contribute to the transition toward a decarbonized society are exceptional following the MUFG Environmental and Social Policy Framework.

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 CO_2 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	・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	The following 17 sectors will be disclosed based on the TCFD Recommendations. <table><tr><td>Oil & Gas</td><td>Coal</td><td>Electric Utilities</td><td>Aviation*</td><td>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>* The aviation sector includes both Air Freight and Passenger Air Transportation
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 (High → Low)	Category	Summary
Score 1	Disclosed information	● Verified emissions data of each customer/project
Score 2	Disclosed information	● Unverified emissions data of each customer/project
Score 2	Estimated value (based on physical metrics)	● Estimation based on energy consumption data of each customer/project
Score 3	Estimated value (based on physical metrics)	● Estimation based on production data of each customer/project
Score 4	Estimated value (based on financial metrics)	● Estimation based on the sales of each customer/project and the sectorial emission benchmarks per sales
Score 5	Estimated value (based on financial metrics)	● Estimation based on loan balances of each customer/project and sectorial emission benchmarks per asset
Score 5	Estimated value (based on financial metrics)	● 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[1]	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	・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	・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	・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	・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
		
Empowering companies through thematic engagement with financial solutions to global challenges for our sustainable future.	Engaging with companies in global partnership with strategic initiatives and asset managers.	Evolving policy measures with public sector as integral part of the public engagement in a coordinated manner with asset managers as needed.

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℃ 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 (tCO_2e) / 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℃ 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 tCO_2e, 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_2e)	Carbon intensity (economic intensity) (tCO_2e/US$ million)	Weighted average carbon intensity (tCO_2e/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_2e)	BM	Carbon intensity (economic intensity) (tCO_2e/US$ million)	BM	Weighted average carbon intensity (tCO_2e/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%

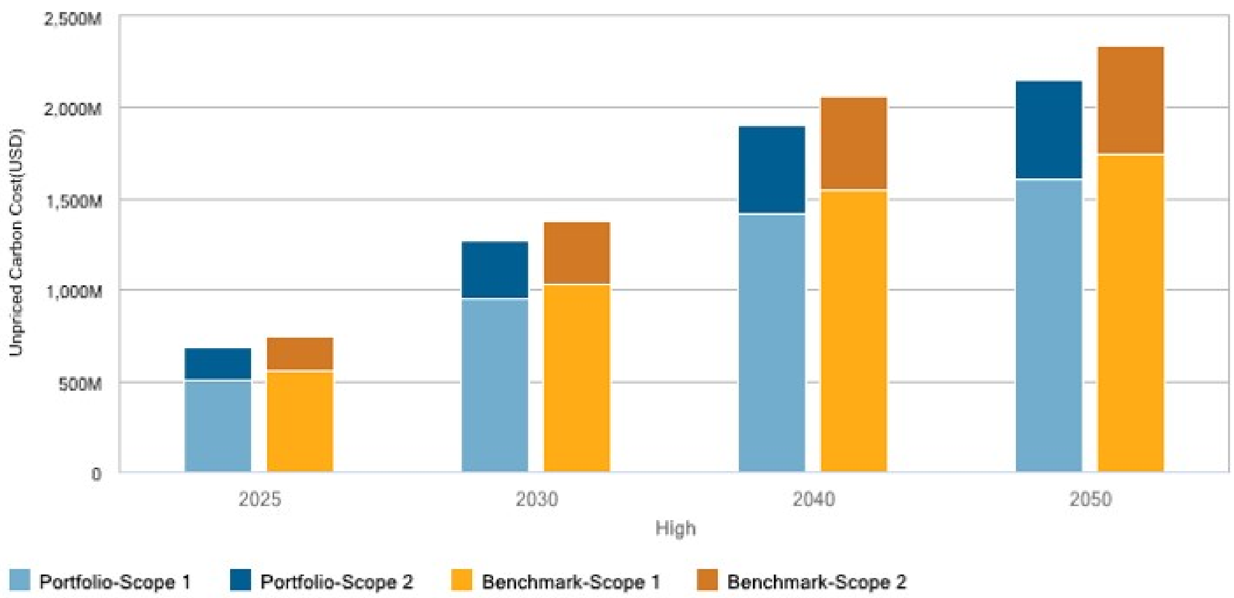
(note) Mitsubishi UFJ Trust and Banking Corporation and its subsidiaries Mitsubishi UFJ Kokusai Asset Management Co., Ltd., MU Investments Co., Ltd., Mitsubishi UFJ Asset Management (UK) Ltd. (The portfolio is based on the former company, so it is listed under the former company name)

Transition Risks

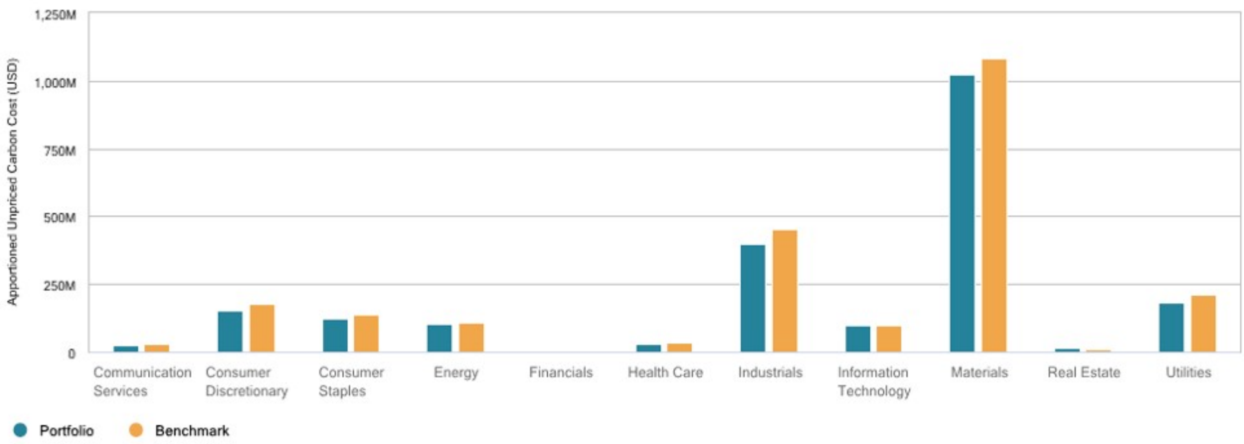
S&P provides Carbon Earnings at Risk Analysis as a quantitative assessment of transition risk. This model analyzes how much additional cost (Unpriced Carbon Cost) will be imposed on companies by changes in carbon prices under expected future decarbonization.
Here, we conducted a scenario analysis (note) 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℃ target of the Paris Agreement

Unpriced Carbon Cost, by Point in Time

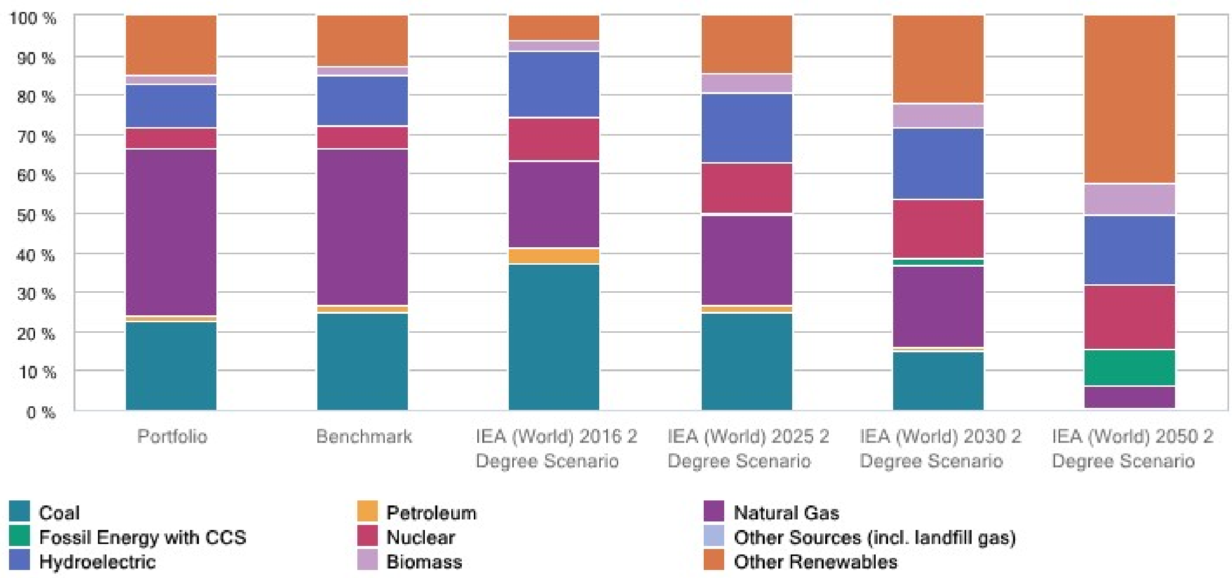


Unpriced Carbon Cost, by Industry



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℃ 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.

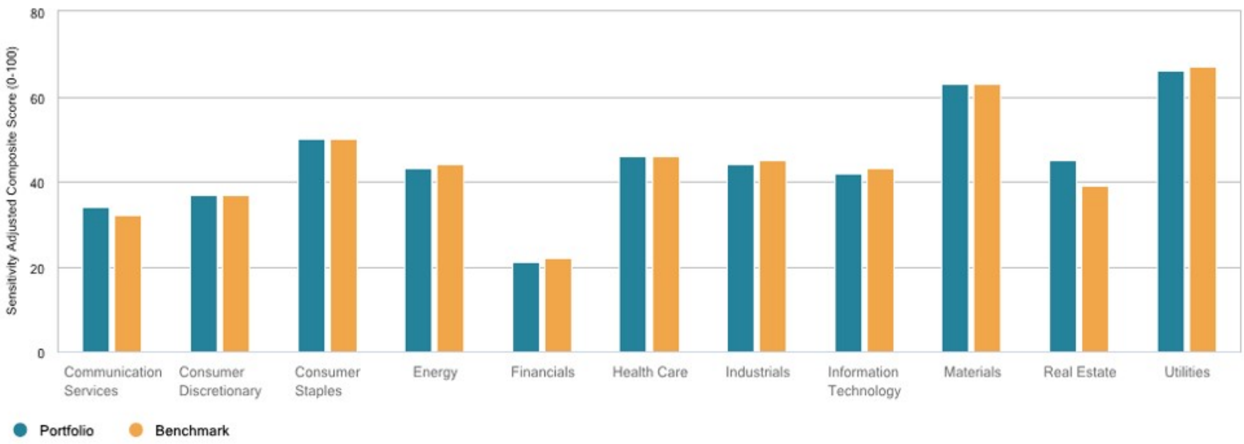
Current State of the Energy Mix of the Portfolio



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.

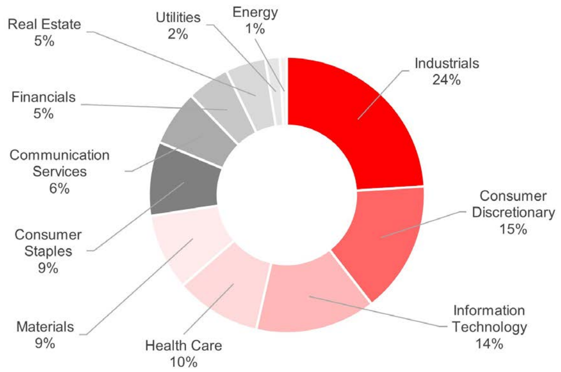
Physical Risk Scores, by Industry



(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℃ by 2100)

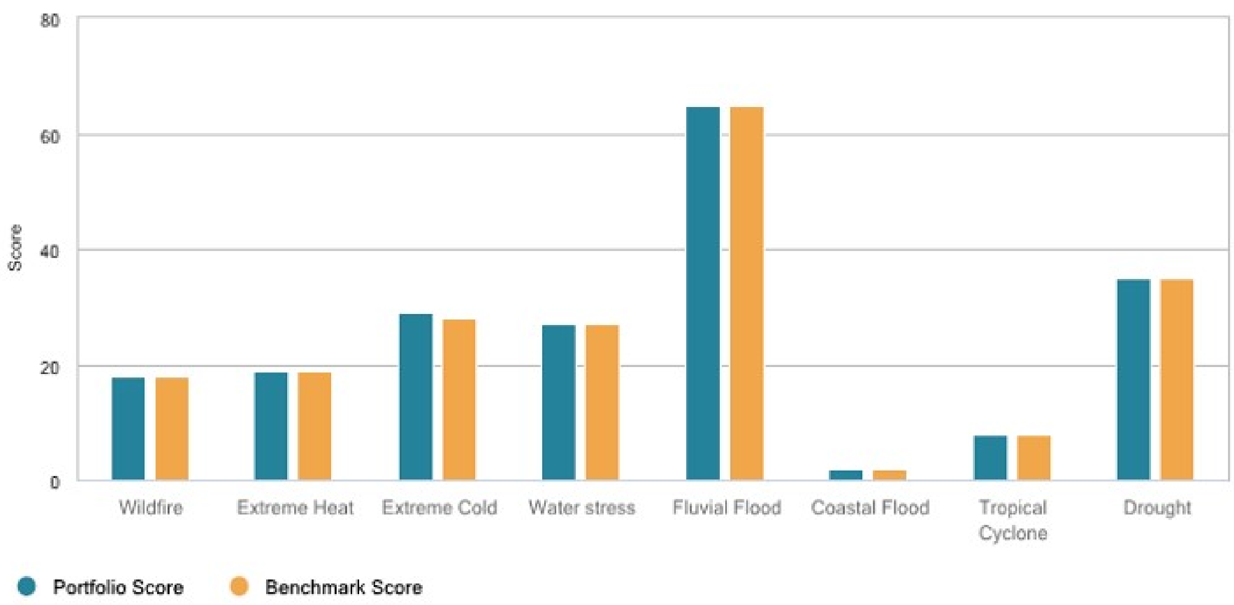
To confirm the degree of impact on the portfolio from physical risks to each industry, the composition ratio was aggregated with weights of holdings taken into account. The result shows large physical risk in some industries including Industrials, Consumer Discretionary, and Information Technology.

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

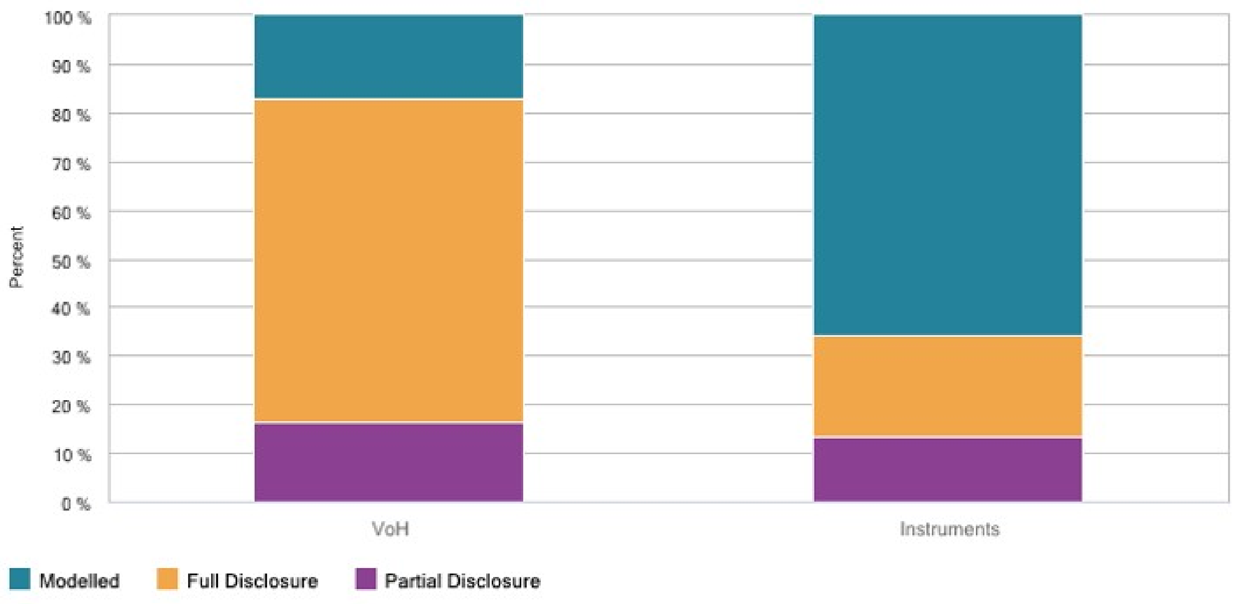


As found in the above analysis, differences exist in industries at high risk, depending on transition risks and physical risks. These results point to the importance of risk management tailored to differences among industries. MUFG AM calculates ESG evaluations and carries out engagement activities by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

The Equator Principles

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

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

MUFG Bank (the Bank) recognizes that large-scale infrastructure and natural resources development projects may have adverse impacts on local environment and surrounding communities.
The Bank, as a financier and/or a financial advisor, works in partnership with its clients to determine, assess and manage environmental and social risks and impacts related to the projects.
The Bank adopted the Equator Principles in 2005 to ensure that the projects it finances and advises on are developed in a socially responsible manner and establish good environmental management practices to minimize, mitigate, and/or offset environmental and social risks and impacts.
The Bank supports its clients' environmental and social risk management and contributes toward a sustainable world through implementation of the Equator Principles, a risk management framework for determining, assessing and managing environmental and social risks and impacts for large-scale projects.

About the Equator Principles

The Equator Principles is a financial industry benchmark for determining, assessing and managing environmental and social risk and impacts in projects, which is intended to serve as a common baseline and framework for all the financial institutions adopting the Equator Principles (EPFIs). EPFIs ensure that the projects they finance and advise on are developed in a manner that is socially responsible and reflects sound environmental management practices.
There are 139 EPFIs globally as of June 30th, 2023.
The Equator Principles (EP4) adopted their fourth edition in November 2019, and the bank has been applying the fourth edition to projects for which they obtained mandates from clients after July 1,2020.
The scope covers the following financial products and services: Project Finance, Project Finance Advisory Services, Project-related Corporate Loans, Bridge Loans, Project-Related Refinance and Project-Related Acquisition Finance.
EPFIs commit to implementing the Equator Principles in their internal environmental and social policies, procedures, and standards for financing projects. EPFIs will not provide loans to projects where the client will not, or is unable to, comply with the Equator Principles.

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

Environmental and Social Risk Assessment

MUFG Bank confirms that environmental and social considerations have been taken into account by clients according to “Implementation Guidelines for the Equator Principles”.
Implementation Guidelines for the Equator Principles (PDF / 369KB)

Confirmation of Environmental and Social Considerations by Solution Products Division, Social & Environment Risk Management Department

At MUFG Bank, Solution Products Division, Social & Environment Risk Management Department is responsible for review and approval of project environmental and social considerations and other relevant activities.

< Environmental and Social Risk and Impact review structure >

Process for Confirmation of Environmental and Social Considerations

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

Principle 1	Definition of the Categories
Category A	Projects with potential significant adverse environmental and social risks and/or impacts that are diverse, irreversible or unprecedented

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

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

e.g. Requirements for Category A projects	
Principle 2 (*1)	Conduct an Environmental and Social Assessment, as appropriate, which includes assessments of potential adverse Human Rights impacts and climate change risks
Principle 3 (*2)	Confirmation of the compliance status of applicable environmental and social standards
Principle 4	Develop or maintain an Environmental and Social Management System(ESMS)
	Prepare an Environmental and Social Management Plan (ESMP) and, where necessary, an Equator Principles Action Plan(EPAP)
Principle 5 (*3)	Demonstrate effective stakeholder engagement with affected communities, workers and, where relevant, other stakeholders
Principle 6	Establish a grievance mechanism designed to receive and facilitate resolution of concerns and grievances from Affected Communities
Principle 7	Engage an Independent Environmental and Social Consultant to carry out an independent review of the Assessment Documentation
Principle 8	Incorporate covenants linked to compliance with the Equator Principles
Principle 9	Engage an Independent Environmental and Social Consultant to verify monitoring information to ensure ongoing monitoring and reporting after Financial Close and over the life of the loan
Principle 10	Recommended online disclosure of environmental and social impacts assessments, including a summary of human rights and climate change risks and impacts where deemed appropriate
	Publicly report GHG emission levels (combined Scope 1 and Scope 2 Emissions, and, if appropriate, the GHG efficiency ratio) during the operational phase for projects emitting over 100,000 tonnes of CO_2 equivalent annually Encourage clients to share commercially non-sensitive project-specific biodiversity data with the Global Biodiversity Information Facility (GBIF) and other relevant national and global data repositories

(*1)
Principle 2 of the Equator Principles requires that a client refer to the United Nations Guiding Principles on Business and Human Rights (UNGPs) when assessing human rights risks and impacts. Also, the Climate Change Risk Assessment is aligned with Climate Physical Risk and Climate Transition Risk categories of the Financial Stability Board Task Force on Climate-related Financial Disclosures (TCFD).

A Climate Change Risk Assessment is required:

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

(*2)
Principle 3 of the Equator Principles introduces two groups of project host countries: “Designated Countries” and “Non-Designated Countries”. The applicable environmental and social standards differ according to the group the project host country belongs to.

- For Designated Countries, the assessment process evaluates compliance with relevant host country laws, regulations, and permits that pertain to environmental and social issues. In addition to the host country laws, The bank may evaluate the specific risks of the project to determine whether one or more of the IFC Performance Standards could be used as guidance to address those risks.
- For Non-Designated Countries, the assessment process evaluates compliance with the applicable IFC Performance Standards and the World Bank Group Environmental, Health, and Safety Guidelines (EHS Guidelines).

The standards mentioned above are the minimum standards that clients are expected to comply with, and the Bank may require customers to comply with additional standards.

(*3)
Principle 5 of the Equator Principles requires projects with the special circumstances defined in IFC Performance Standard 7 paragraphs 13-17 to engage a qualified independent consultant to evaluate the consultation process with Indigenous Peoples, and the outcomes of that process, against the requirements of host country laws and IFC Performance Standard 7.

Special circumstances defined in the IFC Performance Standard are;

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

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

- IFC Performance Standards
- The World Bank EHS Guidelines

Site Visits

Social & Environment Risk Management Department, Solution Products Division conducts site visits as needed to assess the implementation of environmental and social considerations of project sites around the world which we finance, helping us monitor our client’s practices.

Site Visit 1

Site Visit 2

Financial Advisory Service Support

When MUFG Bank provides financial advisory services to clients considering project finance, the Social & Environment Risk Management Department, Solution Products Division works with clients, as appropriate, on the application of EP requirements from an early stage of the transaction.

Education and Training

MUFG Bank conducts training for its employees with the objective of deepening their understanding of environmental and social considerations and promoting the philosophy and practices of EP.
The training is primarily targeted at employees in charge of project finance and credit. The Bank also utilizes internal communication measures to promote better understanding of social and environmental considerations by all employees.
The Bank also provides training for customers at their request.

Education and Training

Environmental and Social Consideration and Categorization Report

MUFG Bank (the "Bank") discloses the numbers of the project finance transactions and the project-related corporate loans that achieved financial close during each fiscal year, and the number of the project finance advisory services where the Bank was mandated during the same period around September-end every year in "Environmental and social consideration and categorization report" in accordance with the Equator Principles and the Bank's Implementation Guidelines for the Equator Principles.
The Bank categorizes the projects proposed for financing based on the magnitude of their potential environmental and social risks and impacts in accordance with the Bank's Implementation Guidelines for the Equator Principles, referring to the International Finance Corporation (IFC)'s Performance Standards and World Bank Group Environmental, Health, and Safety Guidelines. Especially when assigning Category A to a project, the Bank categorizes the project in accordance with the definition of a Category A project in the Equator Principles referring as appropriate to other guidelines including OECD's Common Approaches and relevant public institution's guidelines.

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

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

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

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

Environmental and Social Consideration and Categorization Report and Assurance Report FY2022 (PDF / 2.74MB)

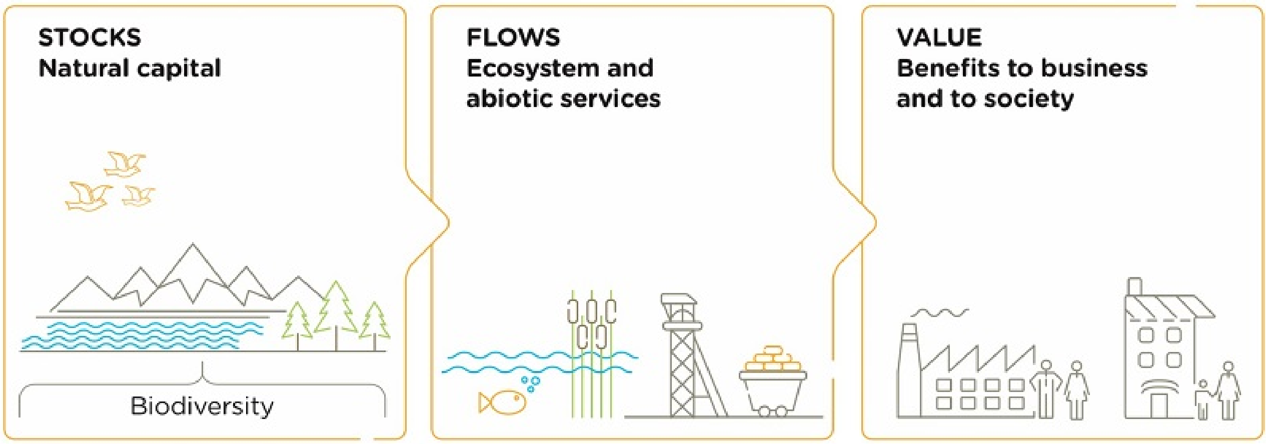
Selected information assured by Deloitte Tohmatsu Sustainability Co., Ltd. is marked with (✓).

Natural Capital and Biodiversity

▼ Natural capital and Biodiversity ▼ Main Initiatives ▼ Circular Economy

Natural Capital and Biodiversity

Natural capital is a stock, composed of animals, plants, water, soil, and air, which provides various merits, including water, food, and minerals to businesses and society through ecosystem services such as water purification as well as climate control.
Biodiversity is the diversity of animals and plants that are part of natural capital, functioning to maintain the natural capital in a healthy and stable state through recovery from natural disasters such as floods and droughts, support for the carbon cycle, the water cycle and soil formation.
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.



(Source: NATURAL CAPITAL PROTOCOL P.12)

Main Initiatives

MUFG Environmental Policy Statement, MUFG Environmental and Social Policy Framework

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

MUFG Environmental Policy Statement

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

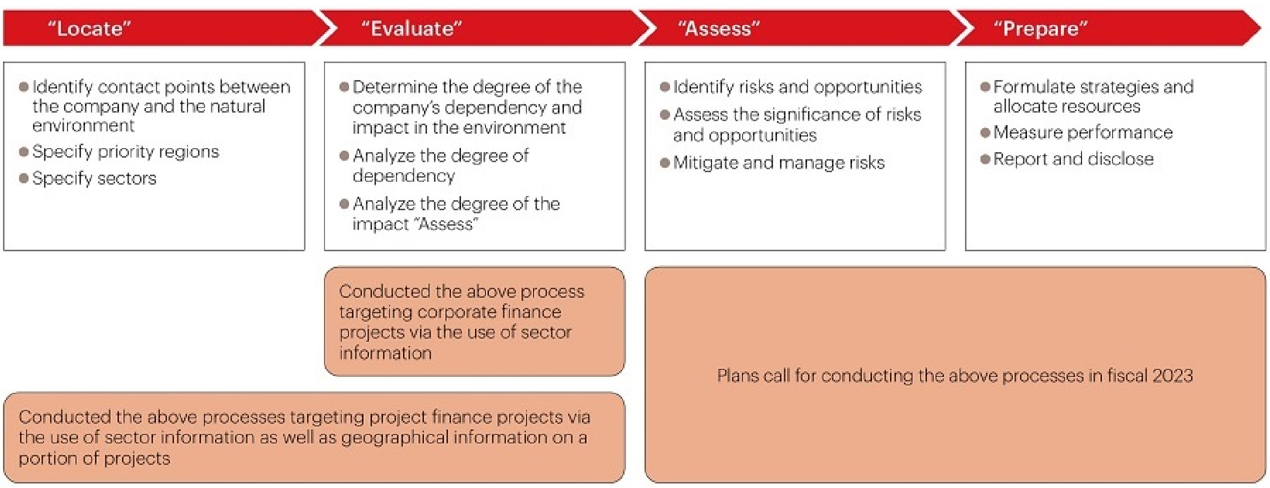
MUFG Environmental and Social Policy Framework

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

Initiatives to Address the TNFD Disclosure

The Taskforce on Nature-related Financial Disclosures (TNFD) is an initiative founded by the UNEP-FI, the United Nations Development Programme (UNDP), the World Wide Fund for Nature (WWF) and the Global Canopy in June 2021. In February 2022, MUFG became a participant in the TNFD forum to promote initiatives to protect natural capital and biodiversity via the use of a groupwide, integrated approach. Also, we act as a member of the TNFD Consultation Group of Japan launched in June 2022.
Looking ahead, we will play proactive roles in discussions among forum members to boost our contribution to the realization of a sustainable environment and society.

Analysis Process Utilizing the LEAP Approach



In reference to the LEAP approach proposed in the beta version of the TNFD framework, we have initiated the analysis of risks associated with natural capital. More specifically, we employ ENCORE, a risk analysis tool, to determine the degree of our "dependency" and "impact" on the natural environment.

Participation to Initiatives

30by30 Alliance for Biodiversity

The Alliance was established in April 2022 as a coalition of the willing to implement the various measures incorporated in the 30by30 Roadmap formulated by the Ministry of the Environment.
Alliance participants make efforts to directly secure conservation areas or support conservation activities towards achieving the 30by30 target and disseminate the progress of such efforts.
MUFG supports the purpose of the Alliance and has been participating in it since its launch.

Declaration of Biodiversity by Keidanren

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

Initiatives for Protecting Natural Capital and Biodiversity

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 create a world in which delicious fish is readily available. The company's proprietary land-based closed recirculating 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, maintaining water quality. Through the investment, MUFG will support their efforts to establish sustainable seafood production methods, improve food self-sufficiency, control marine pollution, and protect water resources and marine ecosystems.

MUFG Pledges Support to Promote Cyclic Utilization of Forests

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

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

Peter Rabbit™ Forest for the Future

In March 2022, the Trust Bank entered a forest development agreement with Fujikawaguchiko Town (Yamanashi Prefecture), Kodachi Property District Management Association, and Fuji-Hokuroku Forest Association, and named a 1.67 ha mountain forest in Kodachi (Fujikawaguchiko Town, Minamitsuru County, Yamanashi Prefecture) "Peter Rabbit™ Forest for the Future," starting a new initiative for biodiversity conservation through forest and water resource conservation.
In May 2009, we entered a similar agreement for forest conservation in Nagatoro Town, Saitama Prefecture. Now, we are engaged in work to cultivate new forests.
Forests play a variety of roles, including conservation of land, conservation of ecosystems, and prevention of global warming. In particular, forests in water source areas play an important role in the stable supply of safe and high-quality water by performing so-called water source rearing functions such as storing water resources and purifying water quality.
We believe that it is important for all officers and employees to continue to care for forests and maintain healthy forests.

ACOM no Mori (ACOM's Forest)

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

Mangrove Reforestation Activity

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

Krungsri： Mangrove Reforestation Activity
Bank Danamon： 2022 Danamon Peduli Environmental Care activity




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

Located in Nishitokyo City, Tokyo, MUFG Park is a facility with abundant nature, sports facilities including tennis courts, and a community library (open in 2023).
With a total area of approximately six hectares, MUFG Park also contributes to the preservation and succession of important natural value in an urban area.

Eco-friendly Mitsubishi UFJ Card

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

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

We engaged in activities to protect Japanese cranes, a national natural treasure of Japan and endangered species in Hokkaido as part of the MUFG SOUL[note].
Activities included participation in local preservation activities, donating equipment used to videos to raise awareness at schools and local communities in Hokkaido and raising awareness at branches through posters that showcase the activity.

(note) MUFG SOUL – Turning passion into power for society –
MUFG provides funding for ideas for solving social issues that are planned by employees.
In fiscal 2022, more than 250 plans and ideas were gathered from employees, including support for children's cafeterias, which provide free or inexpensive meals to children, and orphanages, and contributions to community revitalization, and a total of more than 3,000 people participated in social contribution activities (95 million yen in total).
We will continue to contribute to the resolution of a wider range of social issues by addressing issues from the perspective of our employees.

Satoyama Environmental Conservation Project

As part of MUFG Soul activities, MUFG donated the cost of purchasing equipment for *satoyama* (village-vicinity mountains) maintenance to the Tonda Forest Conservation Society, an NGO that engages in *Satoyama* environmental conservation activities, and conducted the following activities.
[Major activities]
・ Nature observation events (local citizens and children participated)
・ Environmental conservation activities for *satoyama* (forest thinning, promenade maintenance, etc.)
・ Workshops on SDGs and environmental issues

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.

Participation to Initiatives

Japan Partnership for Circular Economy

MUFG has joined the Japan Partnership for Circular Economy (J4CE) that the Ministry of the Environment, the Ministry of Economy, Trade and Industry, and Keidanren (Japan Business Federation) launched in March 2021 with the aim of fostering a better understanding of the circular economy among a wide range of stakeholders, including domestic companies, and promoting its initiatives.

J4CE
JAPAN PARTNERSHIP FOR CIRCULAR ECONOMY

Support through Financing

Construction of the Resource-Circulating "Moriyama Circular Factory®"

Through green loans, the Bank provided necessary funding support for the conversion of Gunze Limited's Moriyama Plant, the backbone of the company's plastic film business, into a Circular Factory® that recycles resources.
The Circular Factory achieves zero emissions without the release of plastic waste. This state-of-the-art facility incorporates a manufacturing structure that sees new resources in products and raw materials that had been discarded without use under the "Take (i.e., mine resources)," "Make," and "Waste (i.e., throw away)" one-way system of the past, and circulates these resources without generating waste.
The factory is also equipped with equipment for the use of solar energy, cooling and heating energy from groundwater, and other forms of renewable energy that contribute to the reduction of CO_2.

Our Initiatives

Net Zero GHG Emissions from Own Operations