

MUFG Climate Report 2025

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CEO Message



Hironori Kamezawa
President & Group CEO

For the second consecutive year, in 2024, the average global temperature soared to an unprecedented high, leading to severe weather events including heavy rains, floods, heatwaves, droughts, and wildfires across multiple regions. Climate change of such significance demands attention, and addressing it requires transition to energy sources aimed at curbing greenhouse-gas emissions and embracing renewables. At the same time, however, energy demand is on the rise due to economic dynamism of emerging nations and expansion of data centers driven by AI growth. All of this is occurring as some nations and regions revisit energy policies from the perspectives of stable supply, security, and industrial competitiveness.

MUFG remains steadfastly committed to addressing the climate-change challenge despite the increasingly complex business landscape because we believe commercial and social activities fundamentally rely on the planet's natural environment and its resources. Tackling climate change is undoubtedly essential for our sustainable growth.

In our current three-year Medium-term Business Plan starting from fiscal year 2024, MUFG has placed “Drive Social and Environmental Progress” as one of the three pillars and identified ten priority issues, amongst which “Achievement of carbon neutral society” being one of the most critical. In April 2024, we have disclosed our own transition plan and have made progress under its four main strategies over the past year.

The first strategy, “Reducing emissions from our own operations”, is on course to meet our 2026 interim target, a milestone on the path to achieving net-zero emissions by 2030. Furthermore, as part of our advanced efforts to minimize environmental impact, we have committed to procuring renewable energy through power-supply services that utilize storage batteries and

CEO Message

agrivoltaic systems. We have also initiated joint demonstration projects employing advanced film-type perovskite solar cells at our branches.

We have seen domestic and international progress in our second strategy, “Engagement and support”. The MUFG Transition White Paper 3.0, published last September, addressed important international financial agendas, such as financial support for diverse transition pathways, public-private dialogue, and the necessity of international cooperation by identifying common issues faced by Europe, the U.S., and Japan. Also, in pursuit of our goal of achieving 100 trillion yen in sustainable finance, we have made consistent strides in project finance for renewable energy and transition finance, maintaining our track record of being the global leader in supporting renewable energy over the past decade. Furthermore, through the GAIA Fund, a public-private partnership, we are engaged in blended finance to support climate-change adaptation in emerging and developing countries, which are particularly, and severely, affected by climate change.

Our third strategy is “Reducing emissions from our financed portfolio”. In fiscal year 2024, we have implemented an operating framework for our transition plan to advance our transition support management and monitoring towards 2030 targets. We have further developed our client engagement as our approach to achieve our sector-specific interim targets which we plan to revisit this fiscal year. We will take into account the upcoming updates to the NDCs of various countries, and our operating framework will continue to evolve accordingly.

Our fourth strategy is “Risk management and governance”. We have established a Climate Change Risk Management Framework and updated our scenario analysis by expanding its scope to encompass all sectors, and incorporating analysis related to temperature rise for assessing physical risks. We are also continuously strengthening our governance structure. Our Sustainability Committee, under the Executive Committee, continuously monitors and assesses a wide range of opportunities and risks related to environmental and social issues, with a focus on climate change. This committee makes decisions and formulates policies under the supervision of the Board of Directors.

Significant development in energy and environmental policies are arising across various countries and regions, increasing the complexity of transition efforts. In this context, supporting clients in overcoming challenges and progressing ahead is a crucial role for financial institutions. MUFG is resolute in further deepening the four primary strategies outlined above, with a strong commitment to supporting energy transitions of our clients within context of the real economy. In this way, we strive to realize MUFG’s stated purpose of “empowering a brighter future.”



Hironori Kamezawa
President & Group CEO

Summary: Key progress under the four strategies of the MUFG Transition Plan

1 Reducing emissions from own operations

- Roadmap to net zero emissions by 2030 and measures to achieve the interim target for FY2026
- Introducing wireless power supply technology and AI-based energy saving
- Procuring renewable energy through storage batteries and agrivoltaic grazing systems; Joint pilot demonstration of film type perovskite solar cells
- Collaborating with our clients in the Chubu region

3 Managing our financed portfolio

- Managing transition support and monitoring the progress toward the interim targets based on the transition plan
- FY2023 results of financed emission (FE) across the portfolio
- FY2023 results and approaches toward the 2030 sector-specific interim targets
- Incorporating facilitated emission (FaE) into the power and oil & gas sector targets

2 Engagement and support

- Progress toward the 2030 sustainable finance target and result of project financing for renewable energy projects
- Publication of the Transition Whitepaper 3.0 and transition support for clients in carbon intensive sectors
- Policy engagement; Promoting blended finance
- Supporting the implementation of new technologies; Delivering a wide range of solutions

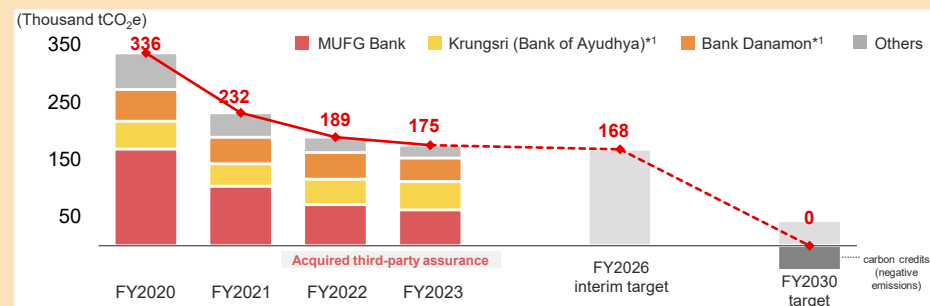
4 Risk management and governance

- Managing climate risks at credit portfolio, sector, client, and transaction levels
- Updating scenario analysis and transition assessment
- Governance structure; Initiatives to enhance directors' competencies
- Building and sharing knowledge and strengthening engagement measures to enhance relationship managers' capabilities

Summary: Highlights

Reducing emissions from own operations

Reduction target and progress (Scope 1, 2)



Engagement and support

Sustainable finance

Cumulative financing total from FY2019 to H1 FY2024

37.7 Trillion Yen

Of which, financing for environmental sector

15.1 Trillion Yen

Renewable energy project finance

Cumulative over the last 10 years

No. 1 Worldwide*2

MUFG Transition White Paper

Publication of Transition White Paper 3.0 (2024)



Various solutions

Expansion of solution line-up



Managing our financed portfolio

Progress of sector-specific interim targets

	Baseline	FY2023 results	FY2030 targets
Power (gCO ₂ e/kWh)	339	288	156~192
Oil & Gas (MtCO ₂ e)	92	72 (-22%)	-15% ~ -28%
Steel (MtCO ₂ e)	22	16 (-28%)	-22%
Commercial Real Estate (kgCO ₂ e/m ²)	65	52	44~47
Residential Real Estate (kgCO ₂ e/m ²)	27	25	23
Automotive (gCO ₂ /vkm)	169	158 (-7%)	-23% ~ -46%
Shipping (PCA Score)*3	Striving 28.9% Minimum 24.3%	Striving 22.7% Minimum 17.0%	PCA ≤ 0%
Aviation (gCO ₂ /RPK)	130	83	71
Coal (JPY billion)	c.JPY 3 billion (c.JPY 12 billion for non-OECD countries)	JPY 1.4 billion (JPY 5.6 billion for non-OECD countries)	Zero (FY2040 for non-OECD countries)

Risk management and governance

Risk management and governance structure

- FY2024 transition assessment results updated
- Initiatives to enhance Directors' competencies

Capability building

- Introducing AI-based client interaction tools for relationship managers and promoting acquisition of sustainability-related qualifications

Number of employees who acquired qualifications in FY2024

2,100+*4

*1 Krungsri (Bank of Ayudhya) is an MUFG consolidated subsidiary in Thailand, and Bank Danamon is an MUFG consolidated subsidiary in Indonesia.

*2 Cumulative finance results for 10 years from 2015 to 2024. Compiled by MUFG based on BloombergNEF ASSET FINANCE / Lead Arrangers LEAGUE TABLE.

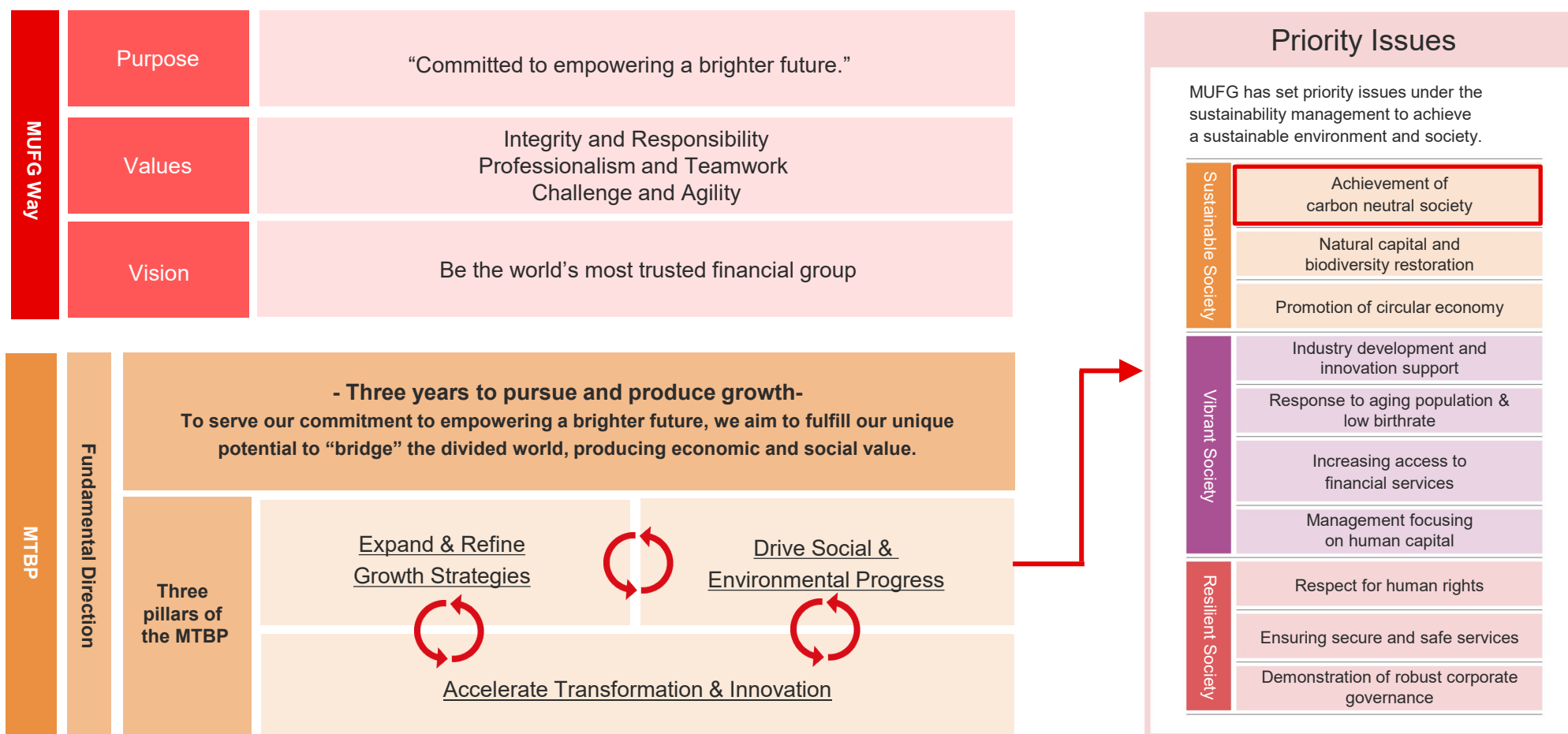
*3 Portfolio Climate Alignment *4 Total of MUFG Bank, Trust, and MUMSS



Our response to climate change

Overview of climate change measures: Positioning in the medium-term business plan

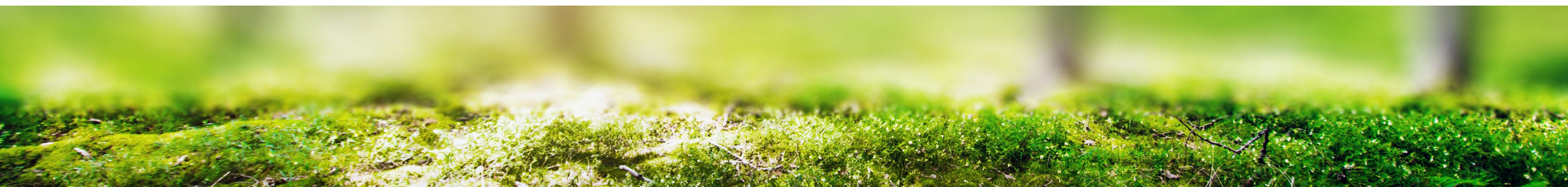
MUFG has placed “Drive Social & Environmental Progress” as one of the three pillars of the medium-term business plan (MTBP) launched in FY2024 and has set 10 priority issues. Among those issues, one of the most important issues is the achievement of a carbon neutral society.



Overview of climate change measures: Timeline

Since announcing the MUFG Carbon Neutrality Declaration in May 2021, we have been working to decarbonize the real economy. We will continue to drive our clients' transition by placing value on engagement activities.

2017	<ul style="list-style-type: none"> Support for the TCFD recommendations 	2022	<ul style="list-style-type: none"> Publication of the Progress Report 2022 Establishment of the interim target for 2030 (power, oil & gas) Publication of the Transition Whitepaper 1.0 (2022) Establishment of the NZAM 2030 interim target Establishment of the MUFG AM Sustainable Investment Policy
2018	<ul style="list-style-type: none"> Establishment of the Environmental Policy Statement Establishment of the Environmental and Social Policy Framework (updated annually thereafter) 	2023	<ul style="list-style-type: none"> Publication of the Progress Report 2023 Establishment of the interim target for reducing emissions from own operations Establishment of the interim target for 2030 (steel, real estate, shipping) Publication of the Transition Whitepaper 2.0 (2023) Publication of the Asia Transition White Paper 2023
2019	<ul style="list-style-type: none"> Establishment of sustainable finance targets (20 trillion yen) Signing of the Principles for Responsible Banking Establishment of the MUFG AM Responsible Investment Policy 	2024	<ul style="list-style-type: none"> Publication of the MUFG Climate Report 2024 Establishment of the interim target for 2030 (automotive, aviation, coal) Revision of the sustainable finance target (100 trillion yen) Publication of Transition Whitepaper 3.0 (2024)
2020	<ul style="list-style-type: none"> Creation of the Chief Sustainability Officer position Publication of the Sustainability Report 	2025	<ul style="list-style-type: none"> Publication of the MUFG Climate Report 2025 Addition of facilitated emission to interim target for 2030 (power, oil & gas)
2021	<ul style="list-style-type: none"> Announcement of the Carbon Neutrality Declaration Net zero GHG emissions from our financed portfolio by 2050 Net zero GHG emissions from our own operations by 2030 Joined the NZBA Joined the NZAM Revision of sustainable finance target (35 trillion yen) 		



Overview of climate change measures: Three unwavering commitments

MUFG has been taking action based on three unwavering commitments: (1) to help achieve the 1.5°C target, (2) to support a smooth transition to a decarbonized society, and (3) to create a sustainable society by fostering a virtuous cycle between the environment and the economy. We also take into account the growing importance of natural capital, circular economy, human rights, and just transition with our climate initiatives.

MUFG's three unwavering climate change commitments

- 1 Helping achieve the 1.5°C target of the Paris Agreement by achieving carbon neutrality by 2050 
- 2 Supporting a smooth transition to a decarbonized society through our financial services 
- 3 Proactively contributing to creating a sustainable society by fostering a virtuous cycle between the environment and the economy 

Key points considered by MUFG along with climate change action



**Connection to natural capital
and circular economy**



MUFG TNFD Report 2025
Published in April 2025



**Consideration for human rights
and just transition**

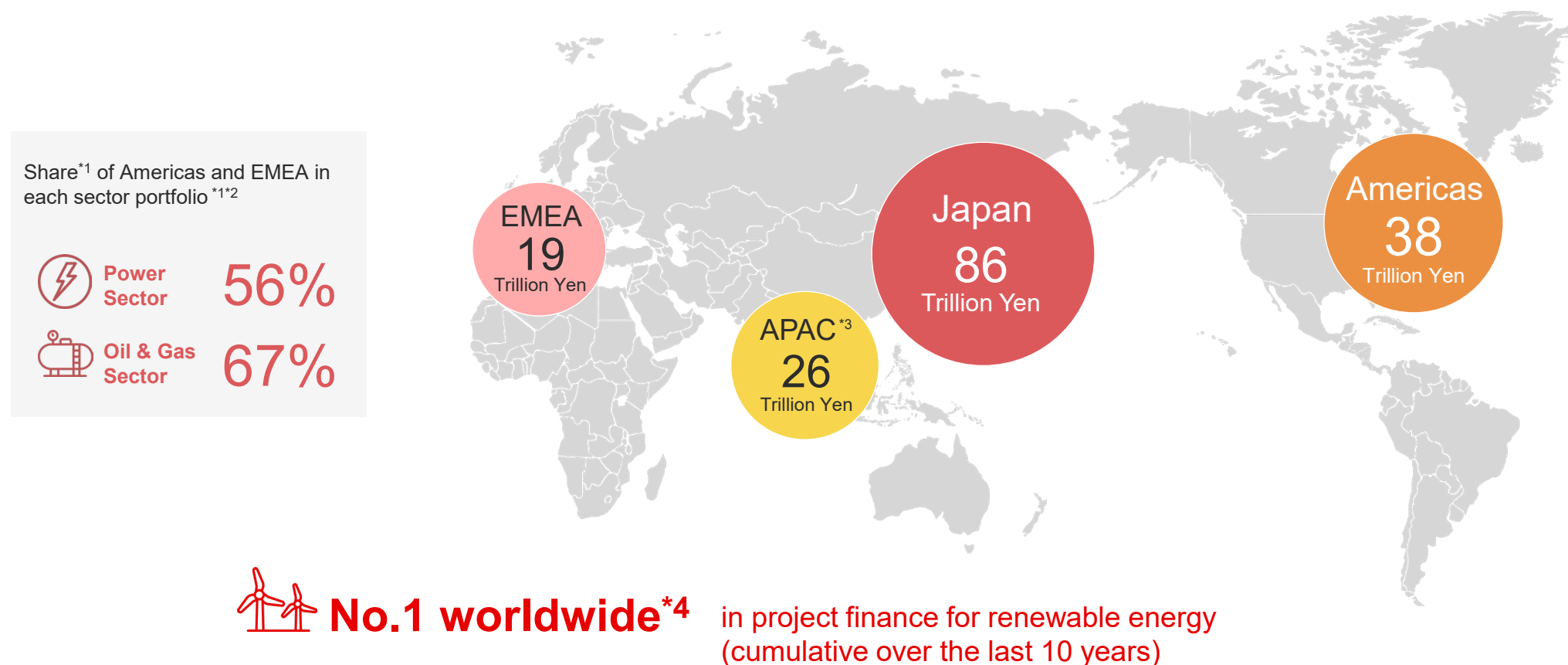


MUFG Human Rights Report 2024
Published in June 2024

Overview of climate change measures: Key features of our portfolio

Though MUFG is a financial institution placing Asia including Japan as our home market, our portfolio is globally diversified, with a high credit share in Europe and the United States for the power and oil & gas sectors. We are also ranked No.1 worldwide in project finance for renewable energy in the past decade.

A global financial institution with Asia as its home market



^{*1} Credit balances are based on the borrower's country location. This includes undrawn-committed amounts, market risk, project finance, and domestic mortgages. It excludes interbank transactions and credit to government agencies and central banks. Data as of September 2024. Currency is converted at 1 USD = 142.73 JPY

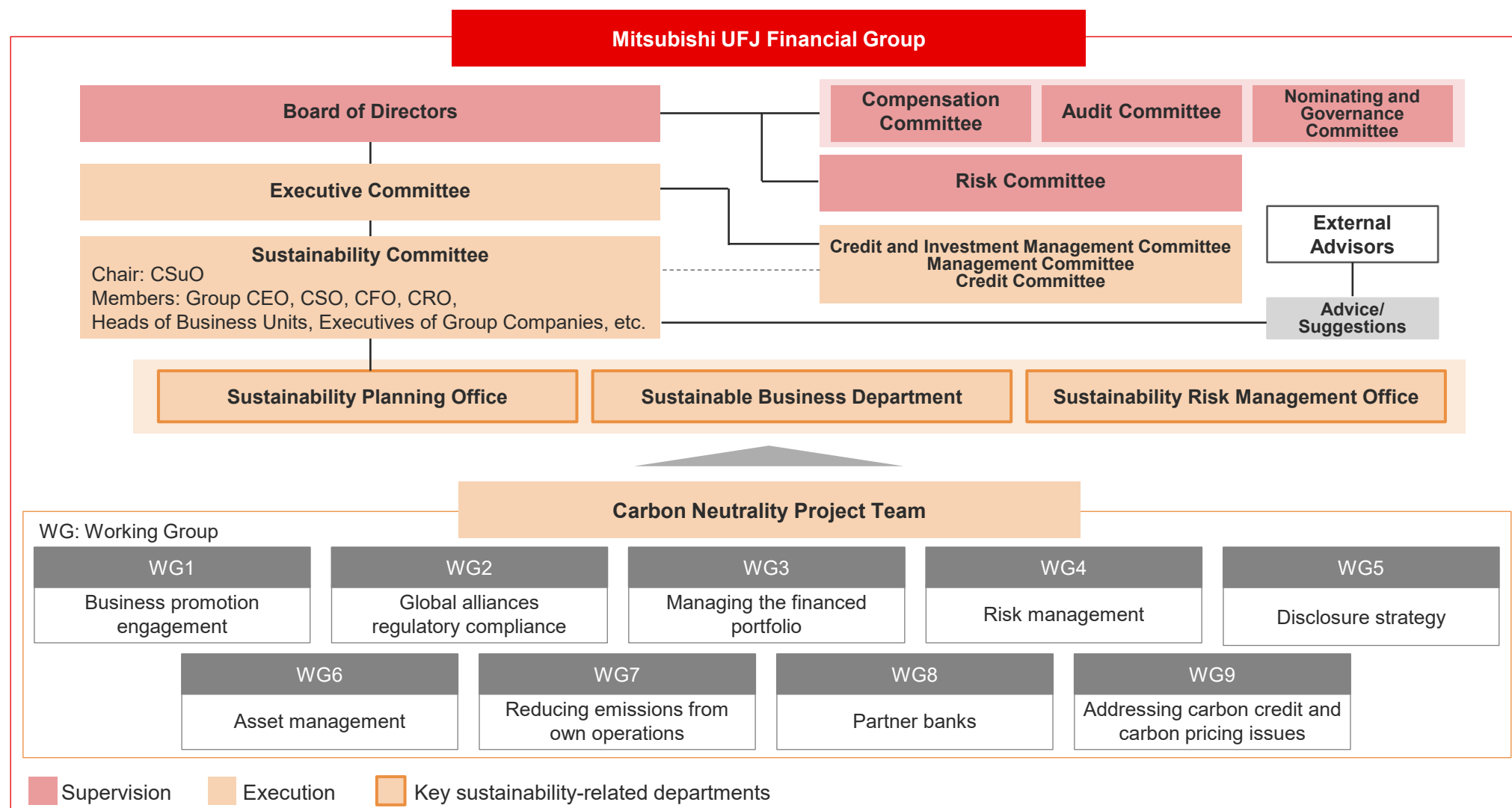
^{*2} Measured based on the balance of loans and unused commitments for entities with 2030 interim targets

^{*3} APAC includes the loan balances of Krungsri and Bank Danamon

^{*4} Cumulative finance performance over the 10 years from 2015 to 2024. Source: Compiled by MUFG based on BloombergNEF ASSET FINANCE / Lead Arrangers LEAGUE TABLE

Organizational structure to promote carbon neutrality

Under the supervision of the Board of Directors, MUFG regularly discusses initiatives to address sustainability opportunities and risks, including climate change, at the Sustainability Committee, which operates under the Executive Committee. The Carbon Neutrality Project Team, comprising nine working groups, brings together planning, business, and risk management departments to collaboratively advance these initiatives.



Key strategies

MUFG's four main strategies to achieve carbon neutrality are (1) reducing emissions from own operations, (2) engagement and support, (3) addressing our financed portfolio, and (4) risk management and governance. These strategies are central to MUFG's transition plan, through which we aim to achieve carbon neutrality by 2050.

1



Reducing emissions
from own operations

Chapter 1

2



Engagement and
support

Chapter 2

3



Managing our
financed portfolio


Chapter 3

4



Risk management and governance

Chapter 4

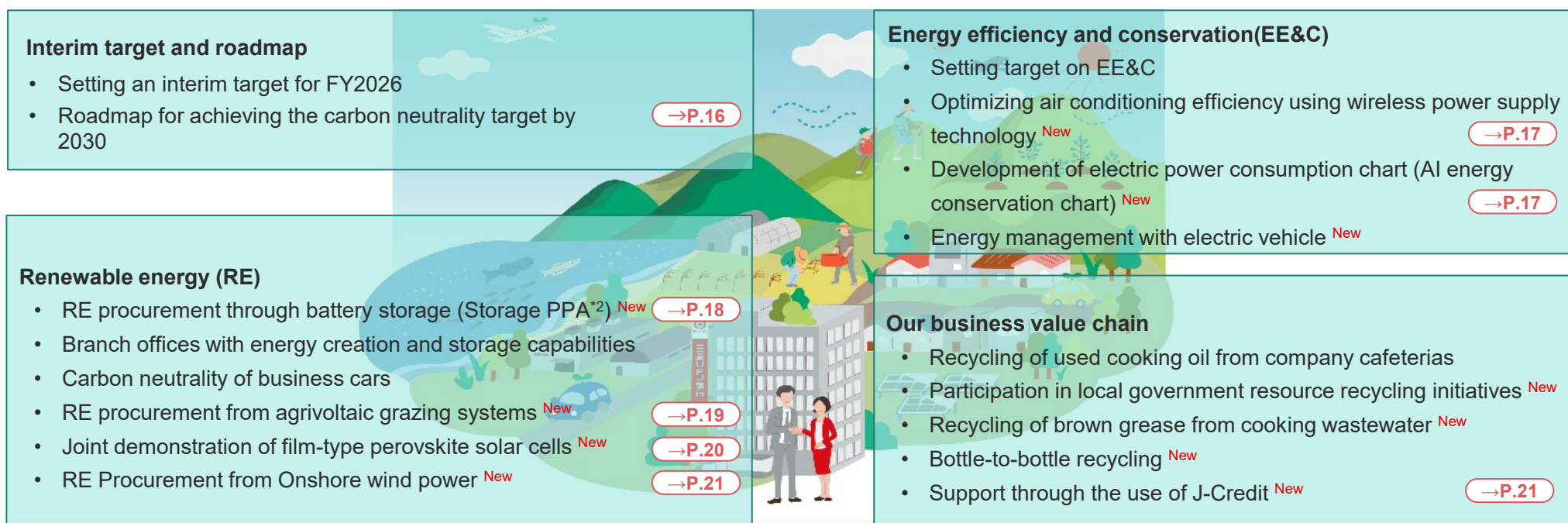


1 Reducing emissions from own operations

Approach to reducing emissions from own operations

Based on the MUFG Carbon Neutrality Declaration released in May 2021, we are working to reduce GHG emissions from our own operations to net zero by 2030. Through partnerships with our clients, we aim to steadily reduce our own emissions and environmental impact. This is facilitated by visualizing GHG emissions, promoting energy efficiency and conservation, renewable energy, and advancing initiatives in our own value chain.

Overview of initiatives on reducing emissions from own operations^{*1}



Strengthening engagement with our clients and fostering environmental awareness among employees

Steady reduction of emissions
from our business activities

Contribution to reducing the environmental impact of
our value chain

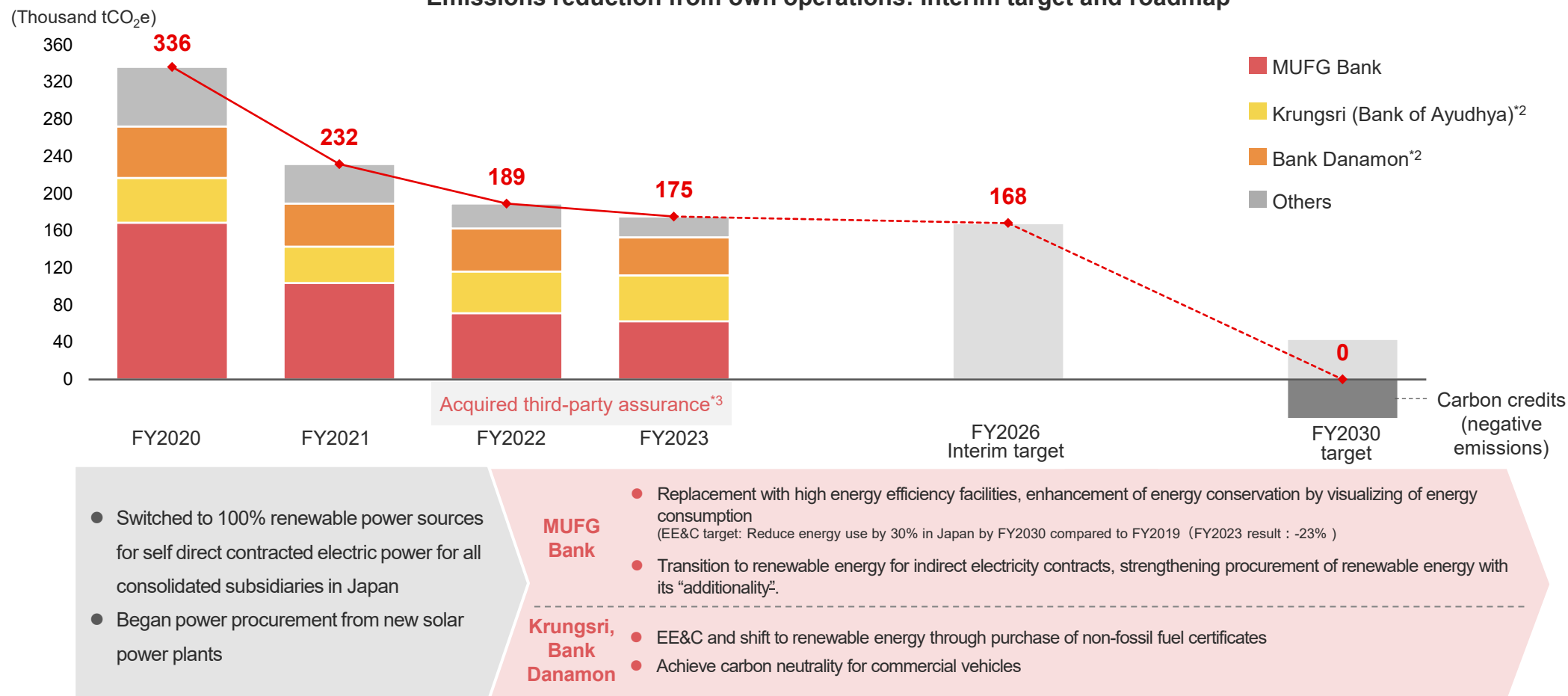
^{*1} Refer to the website "[SUSTAINABILITY AT WORK](#)" for an overview of the initiatives.

^{*2} Power Purchase Agreement

Interim target and roadmap

In FY2023, our emissions were 175,000 tCO₂e, which represents a reduction of 14,000 tCO₂e (c.7%) from 189,000 tCO₂e in FY2022. We will continue to reduce GHG emissions, aiming to achieve our targets through energy efficiency and conservation (EE&C), transition to renewable energy, and procurement of non-fossil fuel certificates. In addition, we will further contribute to the reduction of environmental impacts by advancing the procurement of “additional”^{*1} renewable power.

Emissions reduction from own operations: Interim target and roadmap



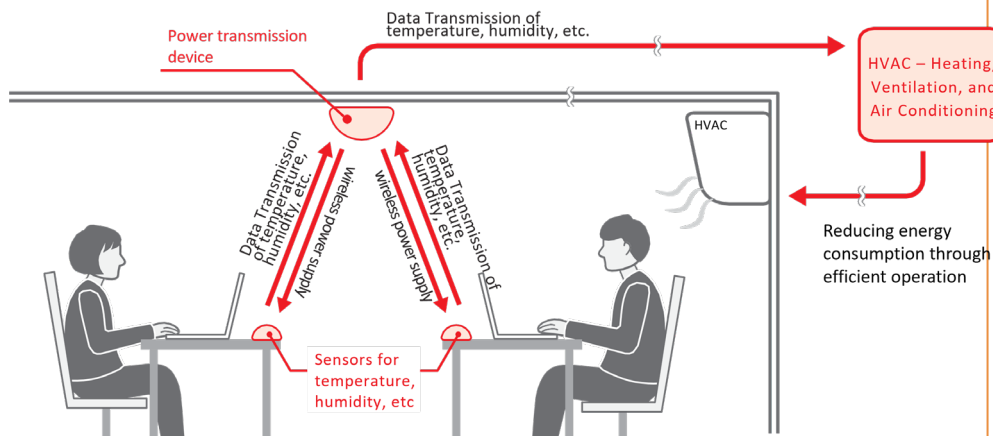
*1 “Additionality” refers to the effect of encouraging an increase in new renewable energy facilities. *2 Asian partner banks Krungsri (Bank of Ayudhya) and Bank Danamon are MUFG consolidated subsidiaries in Thailand and Indonesia, respectively. *3 Assured from an independent third party for actual GHG emissions data

Initiatives on energy efficiency and conservation (EE&C) : Optimizing air conditioning efficiency, EE&C chart by AI

MUFG aims to reduce energy consumption and create comfortable office spaces by improving air conditioning efficiency using wireless power supply technology. We will utilize AI diagnostics to visualize electricity consumption with energy-saving charts, prompting changes in employee behavior.

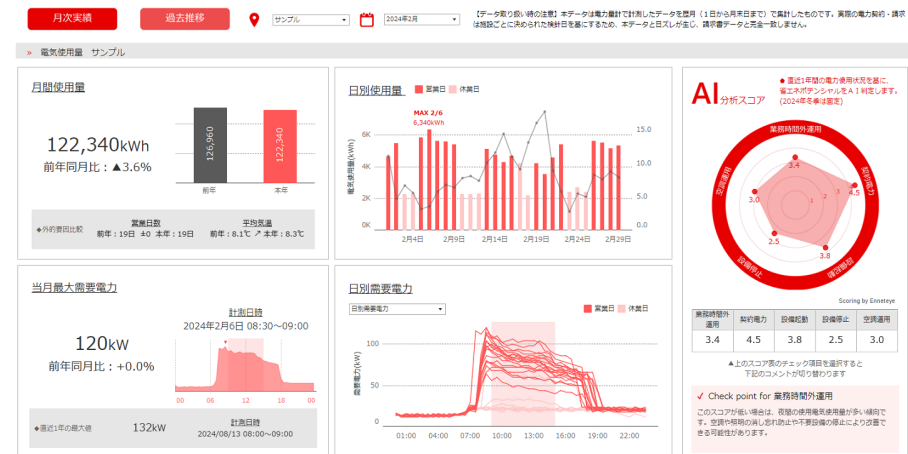
Optimizing air conditioning efficiency with wireless power supply technology

The Bank introduced an air conditioning control system using AirPlug™, a wireless power supply solution developed by Aeterlink Corp., in the office area of Sumitomo Fudosan Kojimachi Garden Tower. This system was introduced in the Sumitomo Fudosan Kojimachi Garden Tower office area, home to the Head Office Department. By controlling air conditioning based on sensor data, we aim to reduce energy consumption by approximately 26% per year and create a comfortable working space.



EE&C chart by AI

We have started using “Enneteye*1” and introduced its AI-generated energy-saving charts to approximately 200 branches and offices of MUFG Bank in Japan. By providing visualization of electricity consumption at each facility and energy saving diagnostic results, employees are able to choose more efficient and effective energy-saving actions.



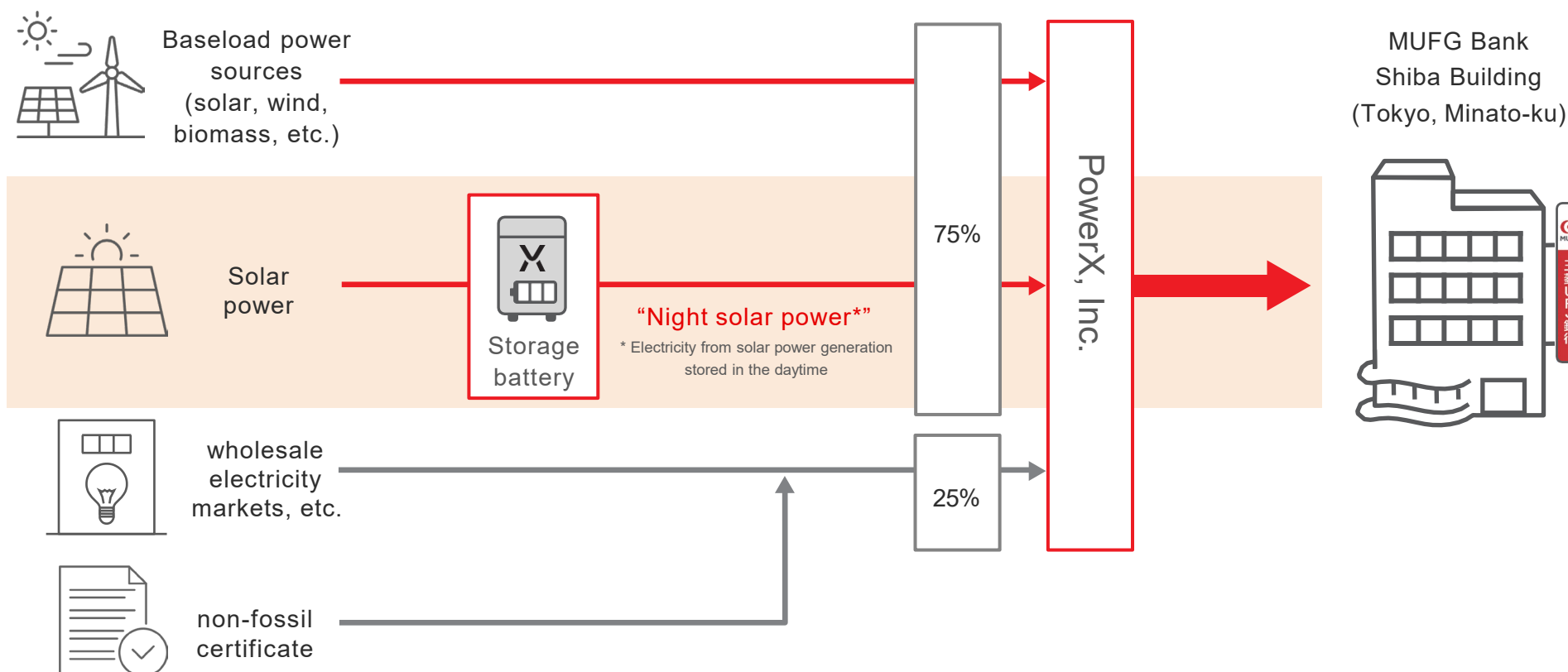
*1 Enneteye is a service provided by Ennet Co., Ltd., which collects electricity data from each facility and use AI and data analysis to visualize electricity usage, extract energy conservation potential, and make energy conservation proposals.

Initiatives on renewable energy (RE) : RE procurement through using storage battery (PPA*¹ with storage battery)

MUFG introduced X-PPA, electricity supply service using storage battery provided by PowerX, Inc., at the Shiba Building, which houses a bank's administrative center.

Overview of RE procurement by PPA with storage battery

This service not only uses solar power, wind power, and domestic biomass during the day, but also supplies electricity generated by solar power during the day and stored in storage batteries as "night solar power" in the evening and later, when demand is high. This will make it possible to switch from the conventional procurement of renewable energy using non-fossil certificates to direct procurement of approximately 75% of the electricity used in Shiba Building from renewable energy sources.

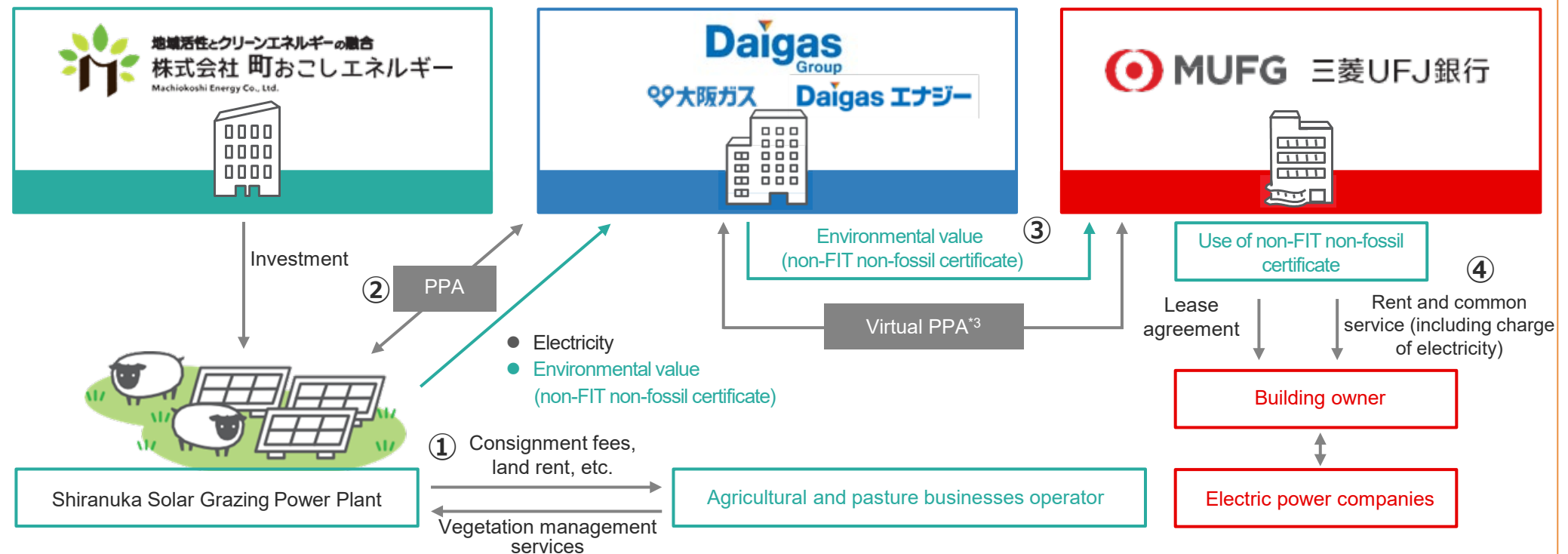


*1 Power Purchase Agreement

Initiatives on renewable energy (RE) : RE procurement from agrivoltaic grazing systems

MUFG has concluded a memorandum of understanding with Machiokoshi Energy Co., Ltd. and Osaka Gas Co., Ltd. for the Shiranuka Solar Grazing^{*1} Power Plant to purchase environmental value (non-FIT non-fossil certificate^{*2}) derived from the solar power plant over the long term. MUFG aims to convert the electricity used in the leased buildings by MUFG Bank into real renewable energy.

Overview of RE procurement from agrivoltaic grazing systems



- ① The Shiranuka Solar Grazing Power Plant, funded and established by Machiokoshi Energy Co., Ltd., operates a solar glazing business that combines photovoltaic power generation with farming and grazing.
- ② Osaka Gas signed a with Shiranuka Solar Grazing Power Plant to purchase electricity and environmental value derived from the solar power plant over the long term.
- ③ MUFG Bank concluded a virtual power purchase agreement (PPA) with Osaka Gas through Daigas Energy Co., Ltd. to purchase environmental values (non-FIT non-fossil certificates) derived from solar power plant.
- ④ MUFG Bank uses non-FIT non-fossil certificate to electricity used in leased stores and offices to reduce CO₂ emissions

^{*1} Solar power generation business that combines solar power generation business and grazing business and adopts vegetation management methods including weeding by sheep and other livestock ^{*2} Certificate concerning the environmental value of RE that is not subject to the FIT (feed-in tariff) ^{*3} Contracts to separate the environmental value from electricity generated by RE and to buy and sell only the environmental value

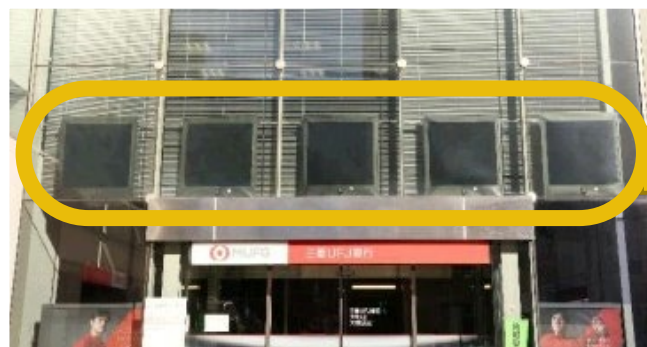
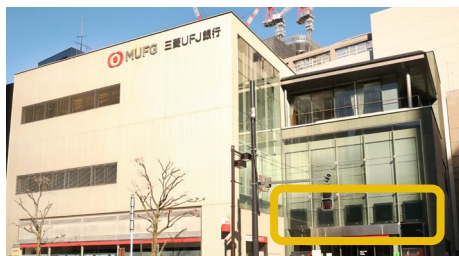
Initiative on renewable energy (RE): Joint pilot demonstration of film type perovskite solar cells

MUFG and Sekisui Chemical Co., Ltd. have started demonstration tests of film-type perovskite solar cells*1 installed at MUFG Bank branch and training center toward realizing a decarbonized society by 2050.

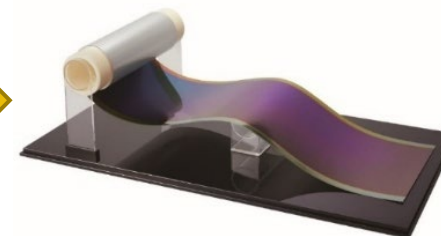
Overviews on joint pilot demonstration of film type perovskite solar cells

Film-type perovskite solar cells are lightweight and flexible, enabling them to be installed in places where conventional silicon-based solar cells would have been difficult to install, and are expected to be a powerful option for expanding the amount of renewable energy introduced. The effectiveness of film-type perovskite solar cells, which can be a solution for decarbonization in Japan, will be verified through demonstration tests at the Ooimachi branch of MUFG Bank and the MUFG Global Learning Center (training center).

**MUFG Bank Ooimachi branch office
(Tokyo, Shinagawa-ku)**



**Used for outdoor bulletin board
lighting at branch entrance**



**MUFG Global Learning Center
(Kanagawa, Yokohama City)**



**Used as power source for cafeteria
users**



*1 Solar cells made from materials with a crystal structure known as perovskite

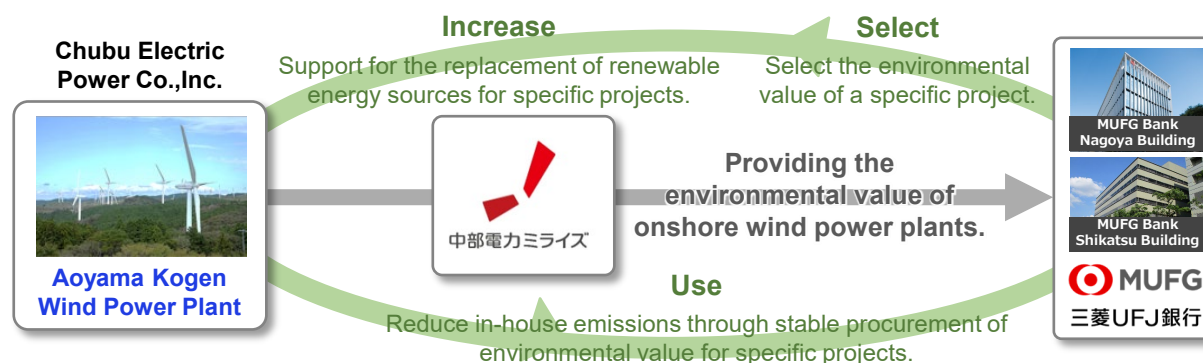
Collaborating with our clients in the Chubu region

Through collaboration with leading companies and startups in the Chubu region, MUFG aims to achieve decarbonization in the Chubu region with supporting local energy production for local consumption and regional industrial development.

Procurement of electricity from onshore wind power

In January 2025, we concluded an off-site virtual PPA^{*1} with Chubu Electric Power Company Mirise Co., Ltd. for the procurement of non-fossil fuel certificates derived from the Aoyama Kogen Wind Farm (Iga City, Mie Prefecture).

We will gradually shift our energy consumption to “local production and local consumption of energy,” which utilizes renewable energy from additional plants created in the region.



J-Credit for city gas

In March 2025, we entered into an agreement with Toho Gas Co., Ltd., concerning the use of J-Credit as a carbon-offset city gas. Toho Gas Co., Ltd. will supply city gas to the Bank Nagoya Building for three years and offset the CO₂ generated by the combustion of the city gas with J-Credit, etc., thereby achieving emissions reductions^{*2} under the SHK system.

City gas menu with zero emission



Procurement and voiding (amortization) processes, such as J-Credit.

factor after adjustment



三菱UFJ銀行
Achieving institutional emissions reductions^{*3}

J-Credit derived from biochar

In March 2025, we concluded a 3-year J-Credit purchase agreement with TOWING Co., Ltd. We will support the cutting-edge decarbonization solutions developed by TOWING Inc. from the perspective of a consumer as well as a financial institution, thereby aiming the spread of biochar, decarbonization of agriculture, revitalization of the J-Credit market, and contributing to the realization of regenerative agriculture in the region.



^{*1} Power Purchase Agreement ^{*2} A system for calculating, reporting, and publishing GHG emissions (SHK system) based on the “Law Concerning the Promotion of Measures to Cope with Global Warming” (Warming Countermeasures Law), with an adjusted emission factor of zero. ^{*3} Applicable only to Japan’s regulations. Unchanged in disclosure and measurement of itself emissions. By setting the adjusted emission factor in the SHK system to zero, CO₂ emissions can be reported as zero.

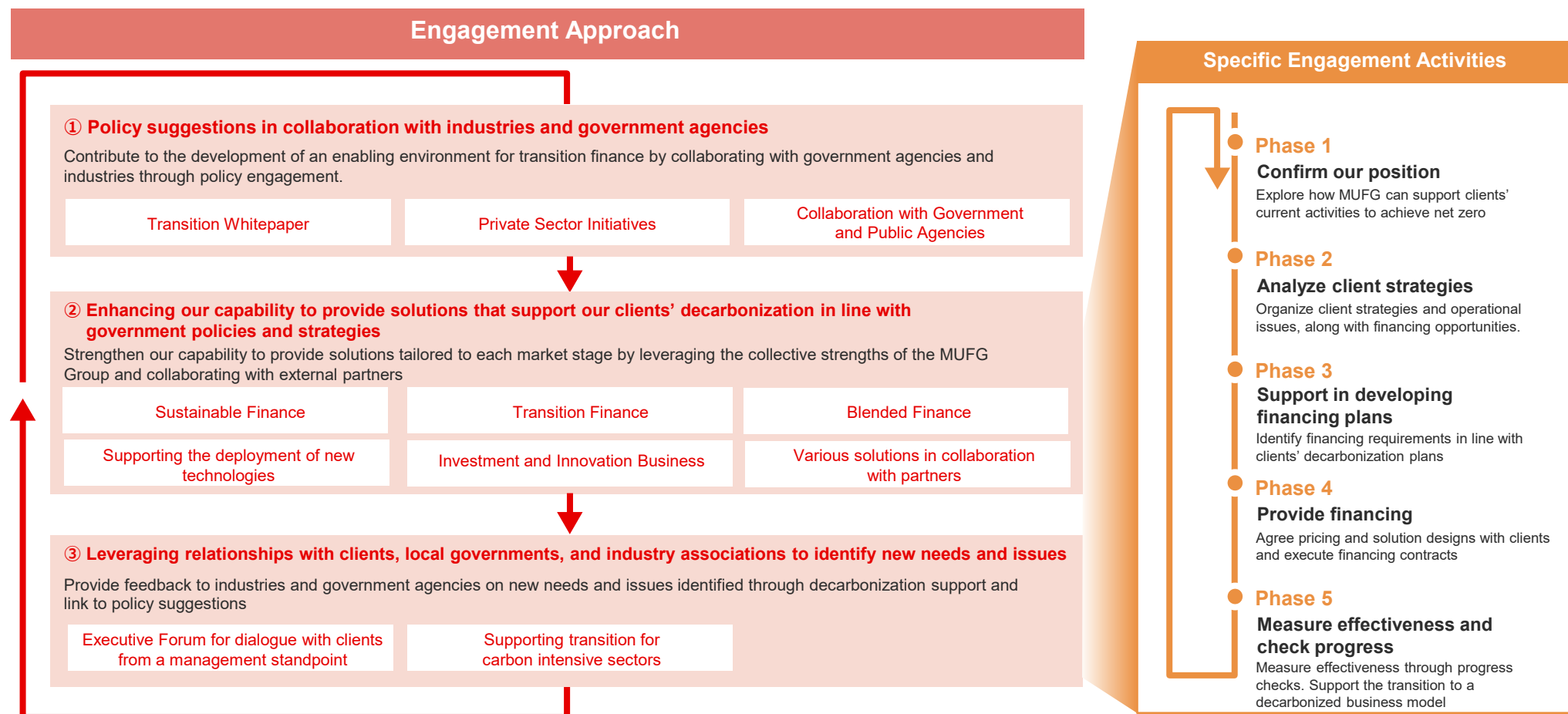


2 Engagement and support

2.1 Our approach and performance

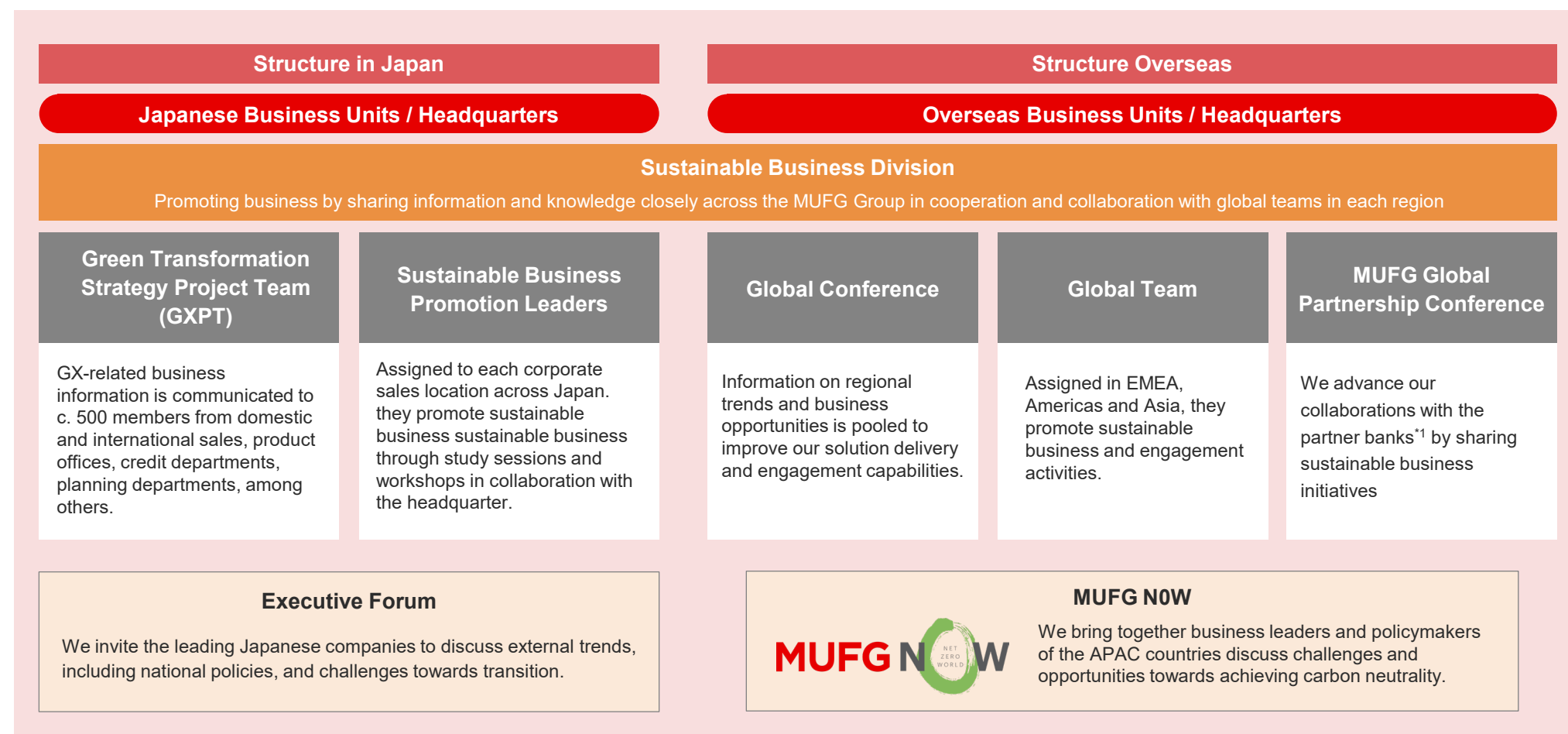
Overview of engagement: Our approach

MUFG will continue to identify new needs and issues through the solutions we provide while offering suggestions to policymakers in collaboration with industries and government agencies. As we deepen our relationships with clients, local governments, and various industries, we provide valuable insights to both industries and government agencies on emerging needs and issues related to decarbonization. We are here to collaborate with our clients towards decarbonization in a responsible manner.



Overview of engagement: Client engagement structure

MUFG has established a project team for the purpose of promoting climate change-related businesses, and is regularly consolidating and sharing knowledge with employees at the executive level and below. This is designed to strengthen our ability to engage with clients seeking carbon neutrality and provide high-quality products and services. Through our global sustainable business promotion structure, we provide solutions for our clients' business transformation and innovations, directed towards addressing environmental and social issues.

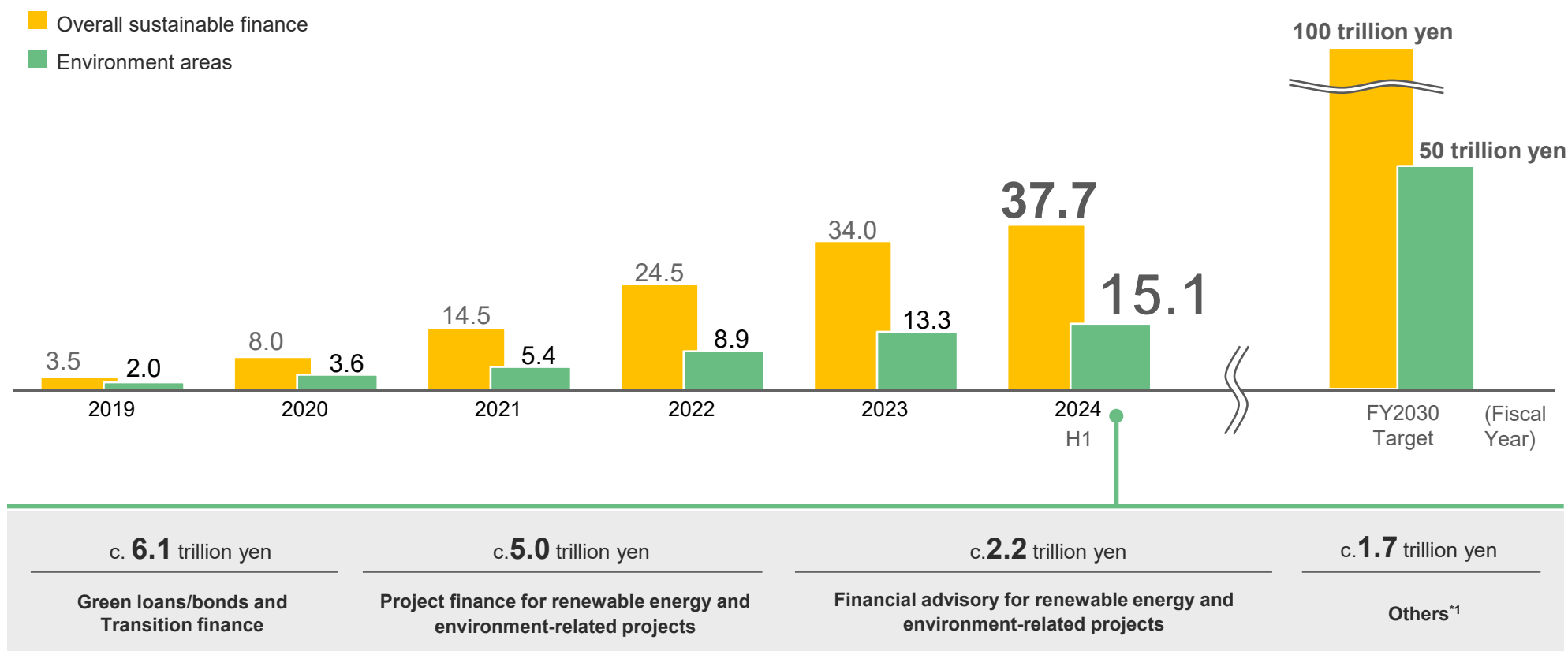


*1 VietinBank of Vietnam and Security Bank of the Philippines are included in addition to Krungsri and Bank Danamon.

Financing activities: Sustainable finance

MUFG aims to provide 100 trillion yen in sustainable finance by FY2030, with 50 trillion yen allocated to the environment areas. As of the first half of FY2024, we have delivered approximately 15 trillion yen, reaching nearly 30% of the FY2030 target.

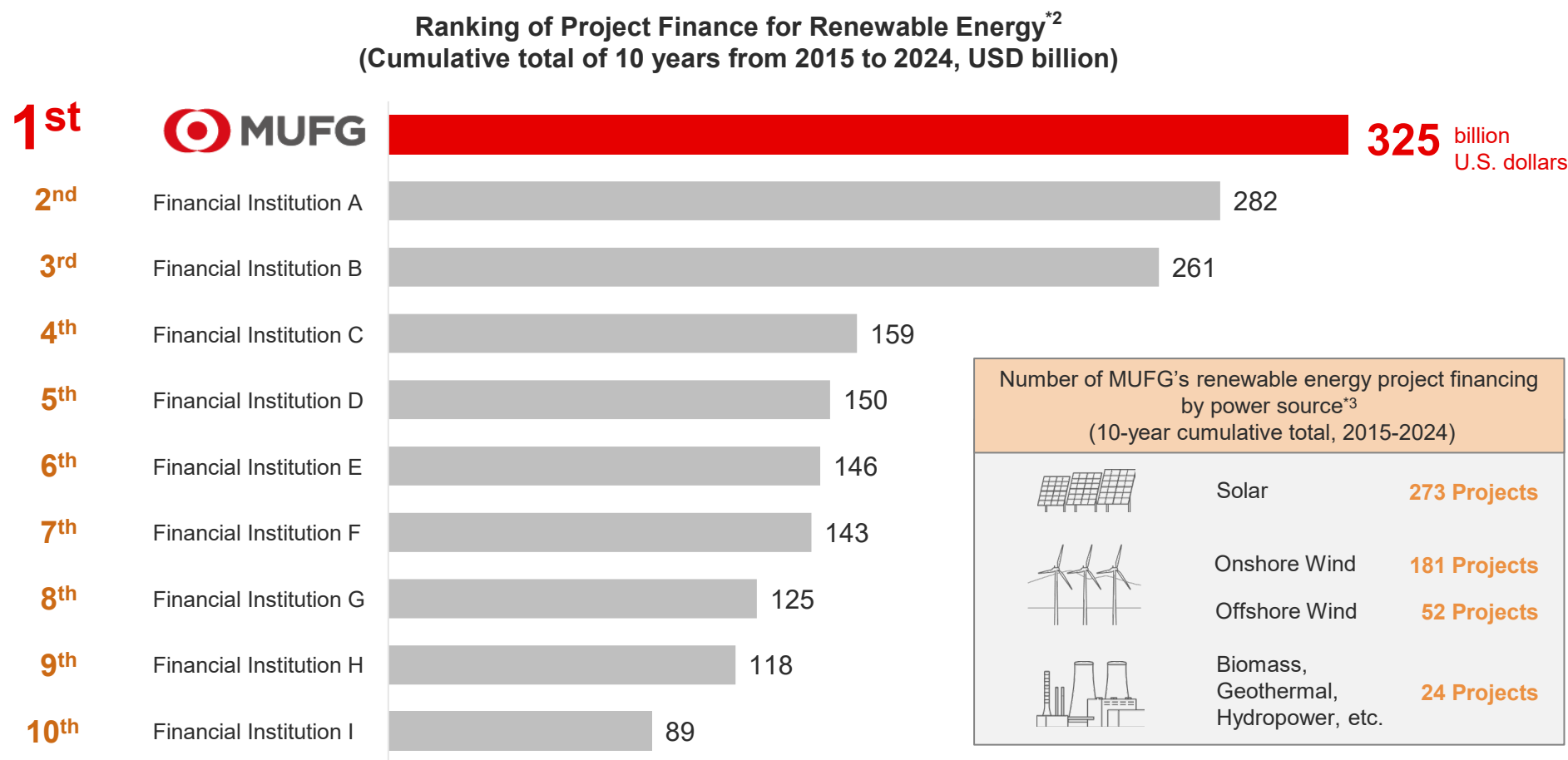
Cumulative amount of MUFG's sustainable finance
(Cumulative total from FY2019 to H1 FY2024, JPY trillion)



^{*1} Positive Impact Finance, MUFG's original sustainability-related products, etc.

Financing activities: Project finance for renewable energy (1/2)

MUFG is a leading financial institution in the renewable energy sector globally. Over the past 10 years, MUFG has ranked first in the world for project finance for renewable energy as a lead arranger^{*1}.



^{*1} The main financial institution that plays a central role in organizing each loan ^{*2} Source: Compiled by MUFG based on BloombergNEF (BNEF) ASSET FINANCE / Lead Arrangers LEAGUE TABLE

^{*3} Source: Compiled by MUFG based on BloombergNEF (BNEF) database

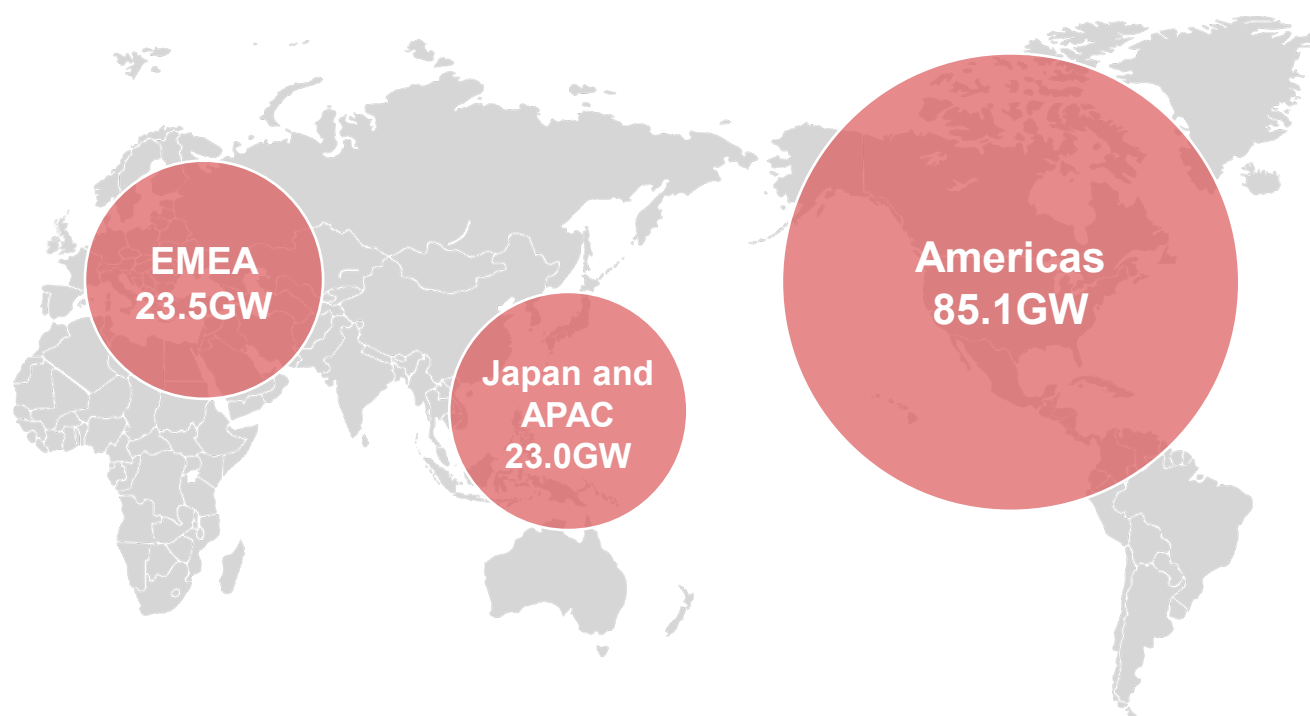
Financing activities: Project finance for renewable energy (2/2)

The total power generation capacity of renewable energy projects MUFG was involved in over the five years from FY2019 to FY2023 is 131.6 gigawatts (GW). This capacity is around the same size as Australia's annual power generation*¹.

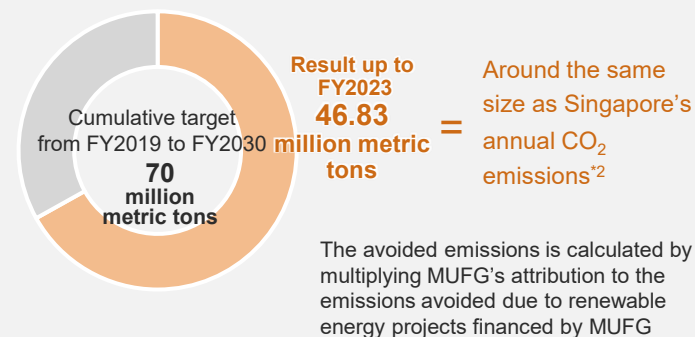
Power Generation Capacity of Renewable Energy Projects financed by MUFG

(cumulative total of 5 years from 2019 to 2023, GW)

Total capacity worldwide: 131.6 GW
(around the same size as Australia's annual power generation*¹)



CO₂ avoided emissions from renewable energy projects financed by MUFG (cumulative of the past 5 years)



Calculating avoided emissions using PCAF*³ methodology

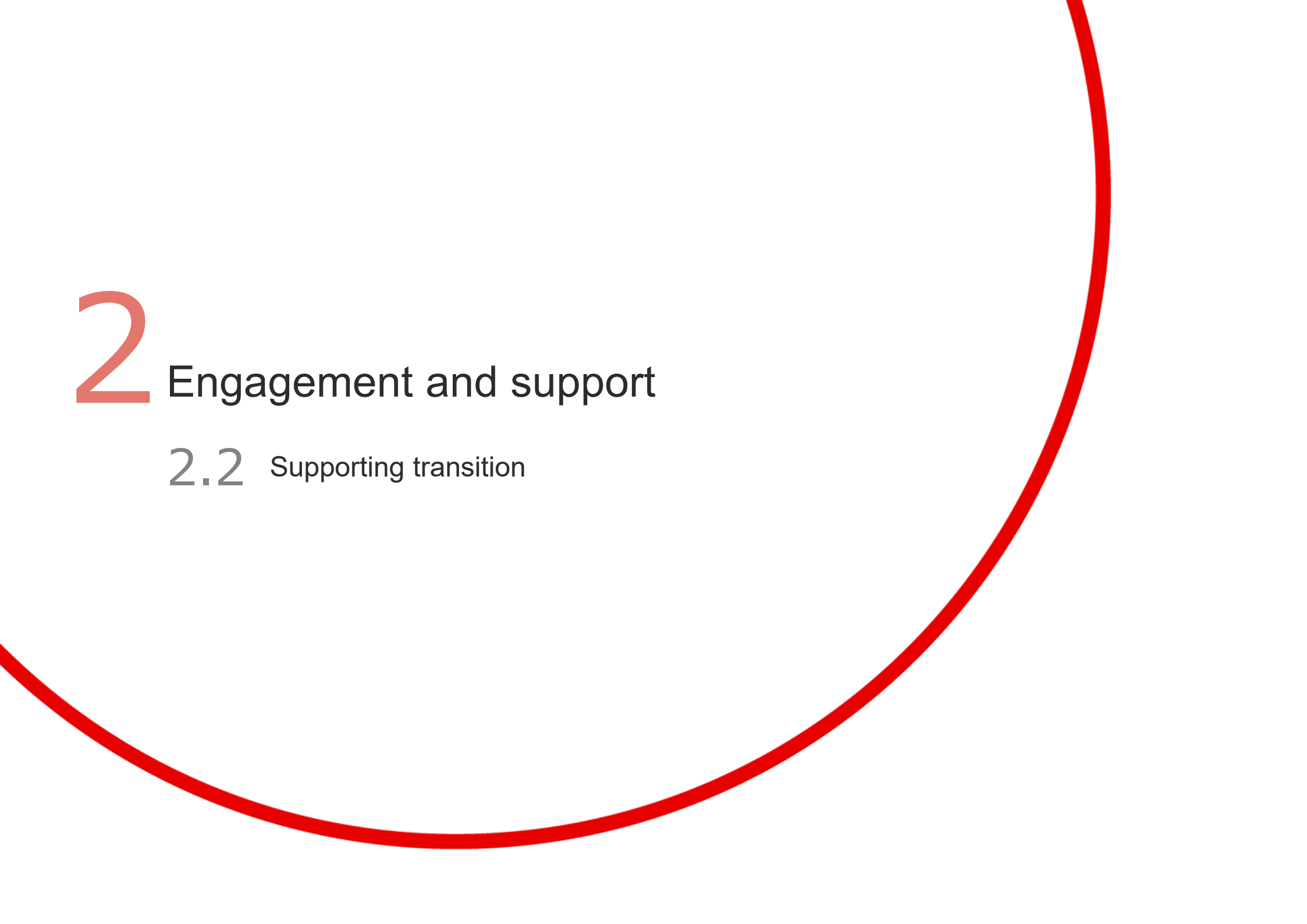
In addition to MUFG's conventional method, we have attempted to calculate the amount of avoided emissions based on the PCAF calculation methodology

	FY2021	FY2022	FY2023
MUFG financed emission from project finance in the power sector (Scope 1, million tCO ₂)	17.50	15.27	17.32
Avoided Emissions (million tCO ₂)	8.18	8.57	11.49

*1 Source: IEA webpage (as of April 3, 2025) Total electricity production, regional ranking, 2022

*2 Source: IEA webpage (as of April 3, 2025) CO₂ emissions from fuel combustion, regional ranking, 2022. Energy-related CO₂ emissions

*3 Partnership for Carbon Accounting Financials



2 Engagement and support

2.2 Supporting transition

How we support transition

Main initiatives to support transition

1

Facilitating transition
considering the regional
characteristics of Japan and
Asia

2

Transition finance

3

Policy engagement

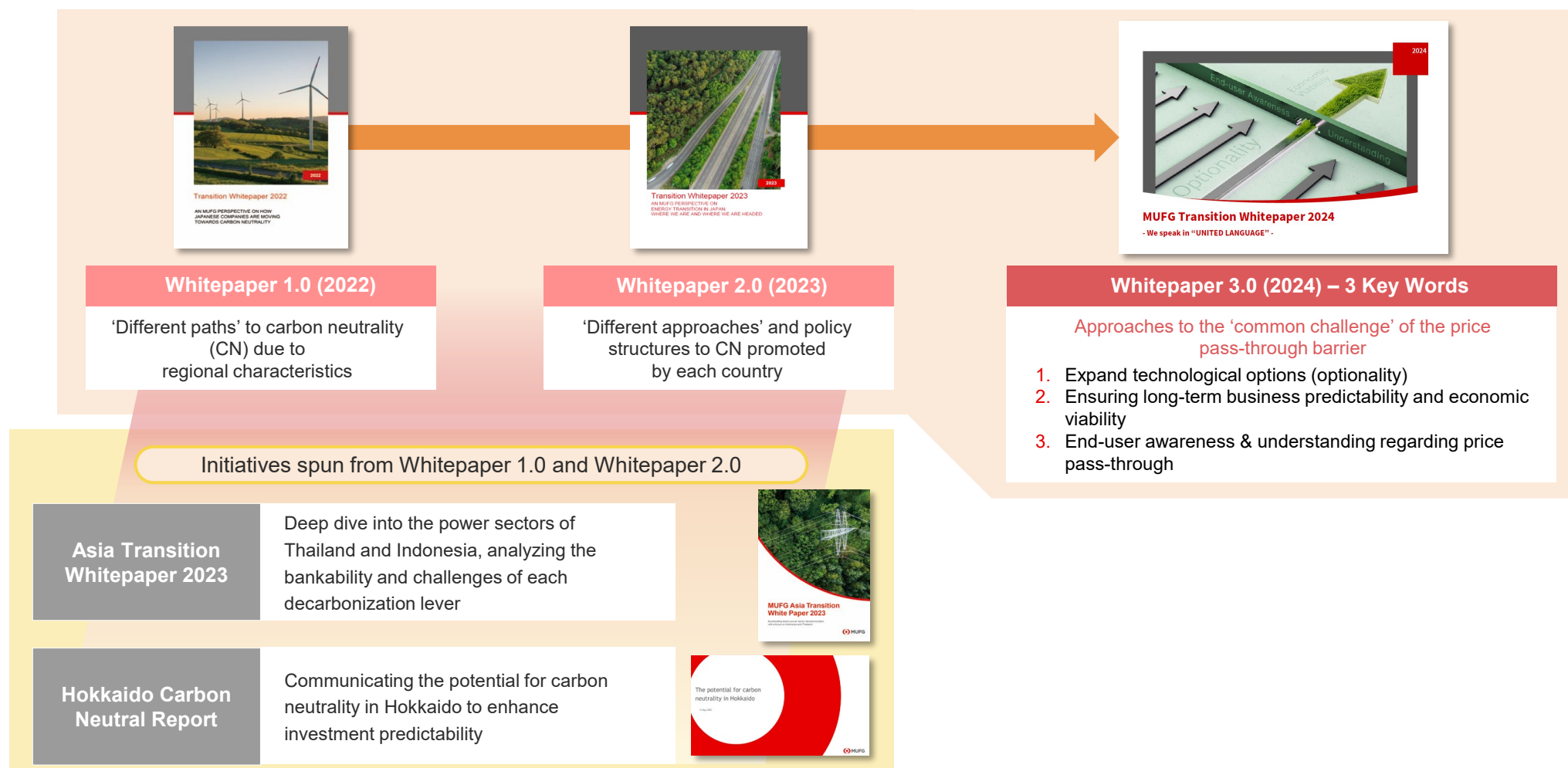
Roles and challenges expected of financial institutions to achieve carbon neutrality

- MUFG believes that financial institutions can achieve carbon neutrality through realizing clients' carbon neutrality, in other words decarbonizing the real economy. To achieve decarbonization in the real economy, **it is more important for financial institutions to support decarbonization of the real economy including carbon intensive sectors, rather than focusing on greening their balance sheets (also the so-called "paper decarbonization")**. MUFG believes that such support for decarbonization is the key purpose of transition finance.
- The decarbonization of the real-economy requires development and implementation of transition strategy which reflects regional characteristics, industry structure and relative strength, inter-dependency among industries, and differences in energy mix. Japan and Asia's unique challenges include transition timelines and pathways being different from those of Europe and the United States because Japan and Asia are still highly dependent on fossil fuels, coal-fired plants in this region are relatively young, and potential to scale up renewable energy is limited at this moment. Also, it is crucial to balance the economic growth and decarbonization in Asia where energy demand is expected to continue to increase in the coming years. **As a global leading financial institution with an extensive footprint across Asia and Japan, we believe it is important to facilitate a whole-of-economy transition in a responsible way** by engaging with broad stakeholders, and acknowledge as well as respect regional, sectoral or individual client's pathways.
- A transition implies a major overhaul of the whole-of-economy, and therefore requires significant amount of capital mobilization and risk-taking. In doing so, **public finance plays a critical role in crowding-in private finance**. MUFG is committed to creating an enabling environment where both real-economy and financial institutions can proactively promote transition.

Transition whitepaper projects: Overview

In “Whitepaper 1.0” and “Whitepaper 2.0”, published in 2022 and 2023 respectively, MUFG has communicated the importance of transition that takes into account ‘different paths’ to carbon neutrality and varying policy structures of each country based on regional characteristics. In 2024, we published “Whitepaper 3.0,” which addressed approaches to the ‘common challenge’ of the price pass-through barrier.

Transition Whitepaper Project



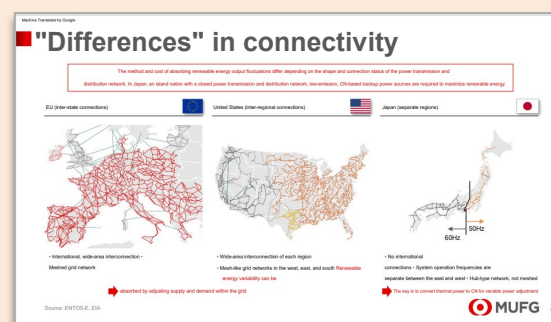
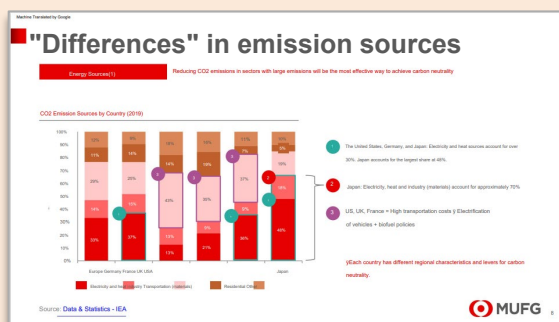
Transition whitepaper projects: Whitepaper 1.0 / Whitepaper 2.0

“Whitepaper 1.0”, published in 2022, highlighted the differences in the paths to carbon neutrality based on regional characteristics and the importance of industrial interdependence. “Whitepaper 2.0”, published in 2023, communicated the differences in policy approaches to technologies crucial for achieving carbon neutrality of electricity and heat in each country.

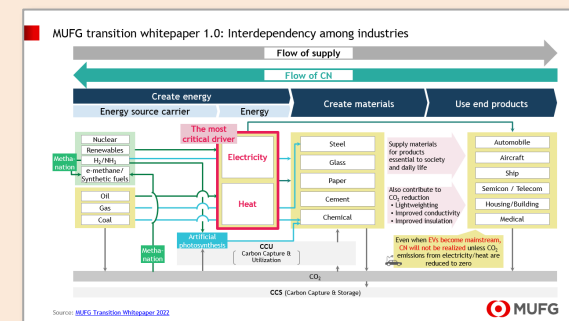
Whitepaper 1.0 (2022)

Highlighted the differences in the paths to carbon neutrality based on regional characteristics and the importance of interdependency among industries

Regional characteristics



Interdependency among industries



Whitepaper 2.0 (2023)

Highlighted the differences in policy approaches to technologies crucial for achieving carbon neutrality of electricity and heat across different countries



Wind power



Solar power



Nuclear power



Industrial electrification
(e.g. heat pumps)



Hydrogen /
Bio-derived fuels



Power grid



CCUS

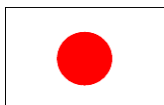


- Based on the assumption that seven areas are universally essential for carbon neutrality in electricity & heat, a “positive technology list” was compiled
- Conveyed the differences in policy approaches and policy structures across countries

Transition whitepaper projects: Whitepaper 3.0 (1/3)

“Whitepaper 3.0”, published in 2024, examined the advancements in carbon-neutral technologies facilitated by policy support and regulatory measures in Japan, Europe, and the United States. While the policies and approaches towards carbon neutrality differ between Japan and Europe and the United States, we confirmed that ensuring long-term investment predictability and overcoming the “price pass-through barrier” are common challenges.

Differences in carbon neutral (CN) policy approach



Industry-Government Collaboration (Cross-industry Collaboration)

- Ensure a wide range of technology options and advance policy support through consensus-building in public-private partnerships
- As projects become full-scale in the future, the impact of inflation and the challenge of price pass-through to the demand side may become evident



Regulation/Rule-Making

- Promote investment through regulations and establishing technology eligibility criteria
- While investment in renewable energy and EVs is progressing, the impact of rising energy prices is causing stagnation and suppression
- Technologies in the market introduction phase, such as hydrogen and CCUS, face the price pass-through barrier to the demand side



Incentive-giving/Market-Oriented

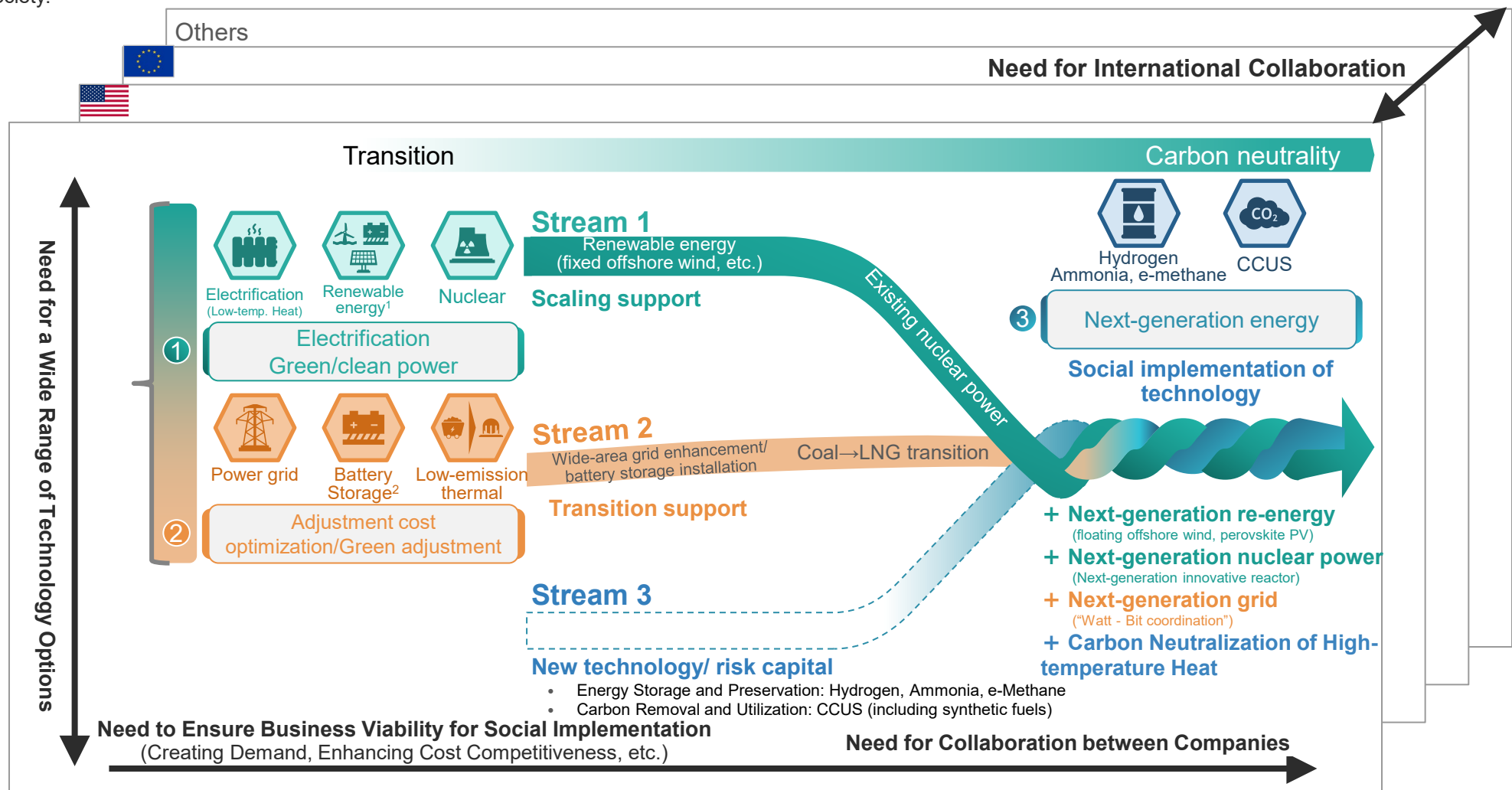
- Promote investment through economic incentives such as IRA^{*1}/IIJA^{*2}
- Investment in renewable energy and EVs is progressing from both domestic and international sources. However, investment in offshore wind is stagnating due to inflation
- Similar to Europe, technologies in the market introduction phase face the price pass-through barrier

Ensuring long-term investment predictability and overcoming the “price pass-through barrier” are common challenges globally.

^{*1} Inflation Reduction Act ^{*2} Infrastructure Investment and Jobs Act

Transition whitepaper projects: Whitepaper 3.0 (2/3)

In order to ensure a stable electricity supply and advance the transition, it is necessary to combine economically viable electrification and clean power (Stream 1) with transition technologies such as equipment to adjust output fluctuations of renewable energy and enhancement of power grid (Stream 2). Additionally, achieving carbon neutrality requires advancing the demonstration of new technologies such as hydrogen, ammonia, and CCUS (Stream 3) and deploying next-generation energy solutions in society.



*1 Includes batteries installed with renewable energy *2 Grid-scale batteries

Transition whitepaper projects: Whitepaper 3.0 (3/3)

The keys to achieving carbon neutrality, as identified through the transition whitepaper project, are as follows: 1) wide range of technology options, 2) collaboration between companies, 3) ensuring profitability for society-wide deployment, and 4) international collaboration.

Wide range of technology options

There is no panacea at present, and it is necessary to secure various technology options and advance policy support and efforts toward society-wide deployment.

Collaboration between companies

From a resource perspective, it is essential to efficiently promote technology collaboration and infrastructure sharing through partnerships between companies and regions.

Ensuring profitability for society-wide deployment

To achieve social implementation of each technology option, it is important to ensure business viability through enhancing cost competitiveness and creating and expanding demand, and it is necessary to collaborate among industry, government, and finance.

International collaboration

To advance the development of a global supply chain, it is crucial to provide policy support and funding across countries, alongside fostering collaboration between companies.

Transition support for clients in carbon intensive sectors

Leveraging the insights gained from the transition whitepaper projects regarding the needs and challenges faced by industries in transition, as well as the details of government support programs, we assist clients in carbon intensive sectors in developing their GX strategies by analyzing their specific needs and challenges during the transition process.



Working alongside company A in the power sector as a financial advisor (FA) for its facility renovation

Needs

- To explore the use of government support programs (e.g. long-term decarbonization power source auction, support for the price gap in hydrogen and its derivatives) in order to advance power plant renovation for transition.

Challenges

- Consideration of fuel procurement and discussion to deploy transition technologies are progressing simultaneously within Company A
- As the conditions for consideration evolve, it is crucial to assess the business viability, as well as the eligibility criteria, of each governmental measure

Key Points of MUFG's Support

- Shared key considerations learned from other transition projects and insights on government support programs
- Led the analysis from a financial perspective, including risk assessment, obligations to be imposed on company A by the uptake of government support program, and risk diversification with stakeholders

MUFG provided information and insights on the transition that are effective in communicating with relevant suppliers, thereby contributing to the planning of company A's facility renovation.



Supporting company B in the cement sector in considering its GX growth strategy by leveraging MUFG Group's capabilities

Needs

- To consider concrete investments while looking ahead to the upcoming full-scale implementation of GX programs and subsidies by the government
- To also consider business strategies after advancing the transition

Challenges

- Assessment on the expected changes in the business environment and government policies (both restrictive or supportive), such as carbon pricing
- Materialize sales strategies for green products and identify potential business partners through peer case studies in order to consider the overall business strategy

Key Points of MUFG's Support

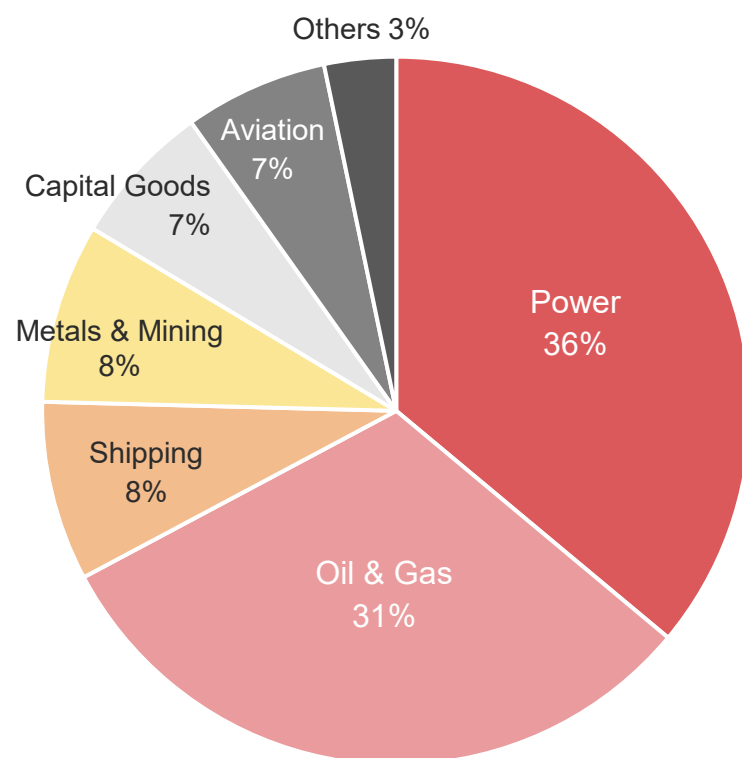
- Engaged in a collaborative effort with Mitsubishi UFJ Research and Consulting to gather comprehensive information
- Provided knowledge cultivated through dialogues with government and companies, and formulated scenarios to illustrate business viability. Conducted an analysis of the potential for cost sharing and the requisite enabling environment by referencing to global case studies.

MUFG contributed to aligning company B's transition strategy with its business strategy and will continue to support the gathering of insights and establishing collaborations with partners.

Transition finance

MUFG is committed to advancing the decarbonization of the real economy by supporting our clients' transition efforts. We will continue to assist clients' transition strategies, including those in the power and oil & gas sectors, through transition finance.

Breakdown of Transition Finance Projects by Sector^{*1}
(FY2022 - FY2024^{*2})



Examples of Transition Finance Transactions



Power

Originated a transition loan for company C to support investments in expanding renewable energy, enhancing transmission capacity, and utilizing battery storage



Oil &
Gas

Underwrote a transition bond issued by company D, a city gas client, to funding projects focused on synthetic methane and hydrogen production.



Shipping

Originated a syndicated transition loan for company E to finance investments in fuel conversion for vessels (e.g. LNG-fueled vessels, LPG-fueled vessels).



Metals &
Mining

Underwrote a transition bond issued by company F, a steel client, to support investments in energy-saving and high-efficiency equipment and renewable energy



Capital
Goods

Underwrote a transition bond issued by company G, a heavy electrical equipment client, to fund projects to decarbonize existing infrastructure



Aviation

Originated a transition-linked loan for company H to purchase fuel-efficient aircrafts

^{*1} Projects certified by a third party in compliance with ICMA's Climate Transition Finance Handbook

^{*2} As of the end of February 2025

Policy engagement: Private sector initiatives

As a leading financial institution representing Asia and Japan, MUFG actively engages in various private sector initiatives and articulates its perspectives on transition finance and related issues.

Key Private Sector Initiatives

Glasgow Financial Alliance for Net Zero (GFANZ)



- MUFG participates in multiple working groups in GFANZ Global, APAC, and Japan Chapter
- In the Japan Chapter, Senior Advisor Masamichi Kono has been an Advisor since its establishment in 2023, and CEO Kamezawa became the Chair in July 2024

Institute of International Finance (IIF)



- In September 2024, IIF published a report on resetting the role of private finance in transition, offering policy recommendations from the perspective of private financial institutions.
- Chairman Mike serves on the IIF board, and MUFG contributed to the formulation of the report mentioned above.

Asia Transition Finance Study Group (ATFSG)



- To achieve just and orderly energy transition in Asia, the Group discusses the importance of transition finance, identifies challenges, explores potential solutions, and makes policy proposals.

Net-Zero Banking Alliance (NZBA)

Since joining NZBA in June 2021, MUFG has been deeply involved in developing target setting guidelines and frameworks for transition. MUFG completed target setting based on the guidelines in April 2024 and withdrew from NZBA in March 2025.

- Although MUFG withdrew from NZBA in March 2025, our commitment and approach towards a net-zero future remain unchanged. MUFG aims to contribute to real-economy decarbonization by providing our clients with the advice and capital required to transform their business models whilst ensuring security and stable supply of energy.
- Going forward, we will significantly further our engagement, as well as our advocacy activities through global initiatives and fora, to promote transition finance, with particular focus on Asia and Japan.

Policy engagement: Collaboration with government and policy makers

MUFG actively collaborates with governments and public agencies to promote transition finance and blended finance. We also engage in various domestic and international committees and initiatives, sharing our perspectives to foster an enabling environment for the transition of the industry and financial sectors.

Collaboration with Government and Public Agencies

World Bank Private Sector Investment Lab



As the only Japanese bank participating, we engage in discussions with World Bank senior leadership to expand private financing for energy transition in emerging countries. Following the Lab's recommendations, the Bank announced a fundamental reform of its guarantee business in February 2024.

Asia Zero Emission Community (AZEC)



AZEC is a cooperation framework led by the Japanese government to accelerate decarbonization in the ASEAN region. MUFG signed a syndicated loan agreement for the Muara Laboh geothermal power project in Indonesia, a project under the AZEC framework.

Asia GX Consortium



The Consortium, established under the leadership of the Financial Services Agency of Japan, aims to promote transition finance in the ASEAN region. MUFG contributes by sharing challenges in transition support through discussions with other financial institutions and ASEAN supervisory authorities.

FAST-P (Financing Asia's Transition Partnership)



FAST-P is an initiative to promote blended finance for decarbonization in Asia. MUFG signed a letter of intent to cooperate on the project led by the Monetary Authority of Singapore and BlackRock.

Participation in Domestic and International Committees*1

Committees and Initiatives	MUFG's Role	Operating body
TCFD Consortium Planning Committee	Committee Member	METI*2, FSA*3, MoE*4, and others (Observers)
Taskforce on Preparation of the Environment for Transition Finance	Committee Member	METI, MoE, FSA
Study Group on Preparation of Operational Environment to Ensure Proper Use of Carbon Credits toward Achieving Carbon Neutrality	Committee Member	METI
GX League	Member	METI
Study Group on Carbon Footprints toward Achieving GX*5	Member	METI
Energy Efficiency Subcommittee, Advisory Committee for Natural Resources and Energy	Temporary Member	ANRE
Asia GX Consortium	Participating Member	FSA
Working Group on Financial Institutions' Efforts towards the Decarbonization of the Economy	Member	FSA
Sustainability Standards Board of Japan	Committee Member	Financial Accounting Standards Foundation
Clean Fuel Ammonia Association (CFAA)	Director	CFAA
Japan Hydrogen Association (JH2A)	Director	JH2A
ASEAN Taxonomy Board Working Group on Taxonomy and Transition	Chair	ASEAN Capital Markets Forum and others
Monetary Authority of Singapore (MAS) Sustainable Finance Advisory Panel	Committee Member	MAS
UNEP FI APAC Advisory Board	Member	UNEP FI
PRB2030 Core Group	Member	UNEP FI
PRB Adaptation Working Group	Member	UNEP FI
Global CCS Institute (GCCSI)	Member	GCCSI
International Emissions Trading Association (IETA)	Member	IETA

*1 A non-exhaustive list that covers major examples, including historical ones

*2 Ministry of Economy, Trade and Industry, Japan *3 Financial Services Agency, Japan

*4 Ministry of the Environment, Japan *MUFG translation

Blended finance through public-private partnerships

MUFG is a founding member of the GAIA Fund, which offers long-term loans, through a blended finance structure, to 25 emerging and developing countries across various regions that are particularly severely affected by climate change, including Africa, Latin America, and Southeast Asia. The Fund will focus 70% of its portfolio in climate adaptation projects^{*1}. MUFG will provide senior LP investment, and also originate the loans provided from the GAIA Fund.

The significance of Blended Finance

Funding Needs for Climate Change Response

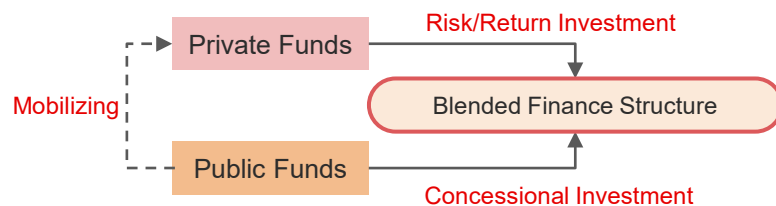
- Funding is needed for both GHG emissions mitigation through energy transition and adaptation to reduce climate change impacts.
- At COP29, agreement was made to set a goal of at least USD 300 billion climate finance to be provided for developing countries annually by 2035 (three times the previous target)

Challenges

- Public funds alone cannot cover the funding needs
- The needs do not necessarily meet the risk/return profile of private funds

Blended Finance

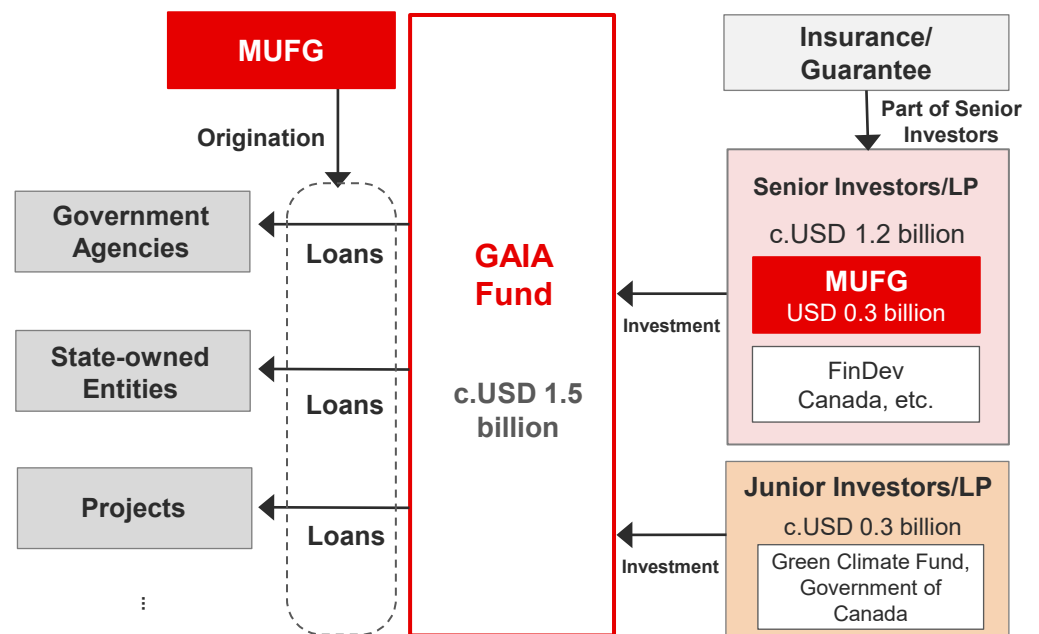
A finance scheme that attracts private funds by blending concessional funds provided by public institutions



Source: Created by MUFG based on Convergence

Blended Finance Initiative: GAIA Fund

- A fund that provides long-term loans mainly for the climate change adaptation related projects to 25 emerging and developing countries
- MUFG co-led the establishment of the fund as the sole Japanese bank among the founding members.
- In addition to investing USD 295 million (c. one-fifth of the total) as a senior limited partner, MUFG will originate the loans for the fund.



^{*1} Measures to avoid or reduce damage caused by the current and expected impacts of climate change. Measures to reduce GHG emissions that cause climate change are called "climate change mitigation".



2 Engagement and support

2.3 Expanding our solutions

Delivering solutions: Solution offering

Achieving carbon neutrality presents unique challenges that vary depending on the different stages of our clients' initiatives. MUFG, in collaboration with partner companies from various industries, has expanded its solution offering and delivers solutions tailored to each clients' specific needs.



当行および連携企業によるカーボンニュートラル対応ツール・サービス

			本編	Appendix	
カーボンニュートラルに向けたプロセス	GHG 排出量可視化 (現状分析)	可視化	GHG 排出量算定ツール(ゼロボード)	✓	
		コンサル	目標・計画策定・開示支援(MUFG×東京海上日動)	✓	
	目標・計画策定/ 開示対応	Scope 1,2	省エネ	省エネ設備提案(三菱HCキャピタル、東銀リース、三菱電機)	✓
			再エネ導入	再エネメニュー(関西電力、中部電力ミライズ)	✓
				コーポレートPPA (三菱HCキャピタル、東銀リース、関西電力、中部電力ミライズ)	✓
				エネルギーマネジメント(三菱電機)	✓
			電化	ユーティリティ設備電化等(三菱HCキャピタル、東銀リース)	✓
	排出量削減ツール導入 (実行)	燃料転換	LPガス・LNG、水素機器(岩谷産業)	✓	
		Scope 3	サプライチェーン管理	サプライチェーンのGHG 排出量管理(ゼロボード)	✓
				サプライチェーンプラットフォーム(東芝デジタルソリューションズ)	✓
			輸送	物流効率化(三菱HCキャピタル)	✓
EV 統合型サービス(三菱HCキャピタル)				✓	
カーボンオフセット	リサイクル・原料調達		バイオ素材・易解体性接着剤(長瀬産業)	✓	
	カーボンオフセット	J-クレジット提供(三菱HCキャピタル)	✓		
	ファイナンス	サステナブルファイナンス(MUFG)	✓		

Appendix掲載の情報は、各スライドに記載の企業からのご案内です。

スライド記載のサービスは各企業のサービスであり、三菱UFJ銀行のサービスではございません。同行は紹介のみ実施し、各サービスの具体的な説明は各企業から実施いたします。

Delivering solutions: Consulting services

In March 2022, MUFG and Tokio Marine & Nichido Fire Insurance Co., Ltd. launched the “GX Promotion Advisory Task Force (GXPAT)”, a joint initiative offering consulting services to support sustainability management.

Delivering solutions through collaboration with Tokio Marine & Nichido Fire Insurance Co., Ltd.

- In March 2022, MUFG Bank and Tokio Marine & Nichido Fire Insurance Co., Ltd. entered into a business alliance and launched the “GX Promotion Advisory Task Force (GXPAT)” as a joint initiative.
- The GXPAT supports clients’ sustainability management, toward carbon neutrality, by utilizing the two companies’ knowledge and network to the fullest extent.



GX Promotion Advisory Task Force (“GXPAT”)

Three key features

- 1 Support aligned with clients’ long-term management plan
- 2 Support based on the points of interest that stakeholders such as financial institutions and investors focus on
- 3 Effective support developed through experience in the banking and non-life insurance industries

Core consulting services

- GXPAT provides a wide range of consulting services for any clients facing different challenges respectively, from “current state analysis” to “strategy development” and finally “disclosure”, according to our clients’ stage and challenges

Policy
development/
Current state
assessment

Materiality analysis/KPI establishment

Development of environmental vision

Internal socialization/study sessions

Response to
climate
change

Enhancement of SSBJ/TCFD disclosure

Development of decarbonization transition plan

Obtaining SBT validation

Others

Creating TNFD disclosure

Responding to ESG rating assessments

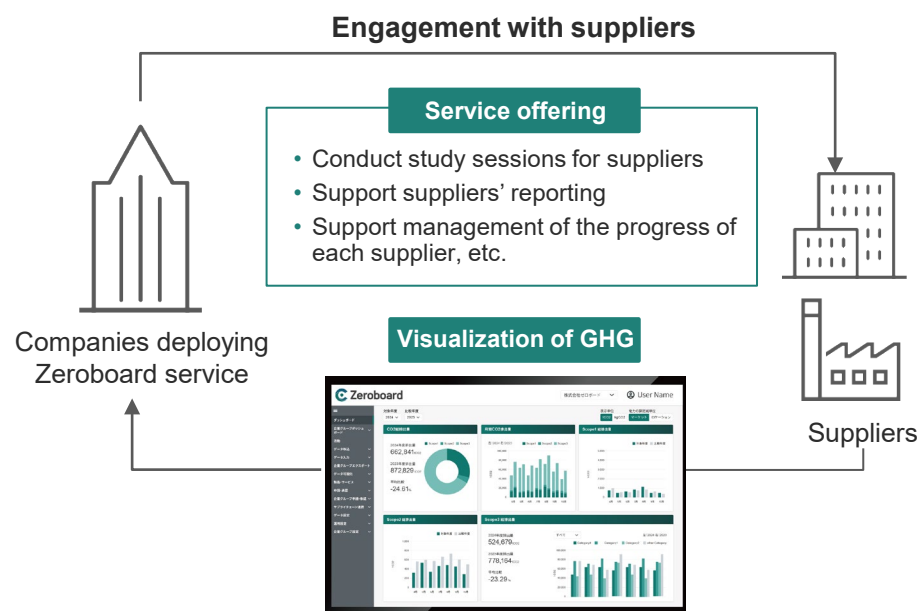
Delivering solutions: Supply chain initiatives

Through investment and collaboration with Zeroboard Inc. (hereinafter, Zeroboard), MUFG is working to visualize and reduce supply chain emissions. Additionally, we are structuring supply chain based sustainability-linked loans, with the calculation of emissions by suppliers as SPT^{*1}.

Visualization of emissions in the supply chain

Zeroboard is a startup that develops software to visualize GHG emissions by inputting activity data.

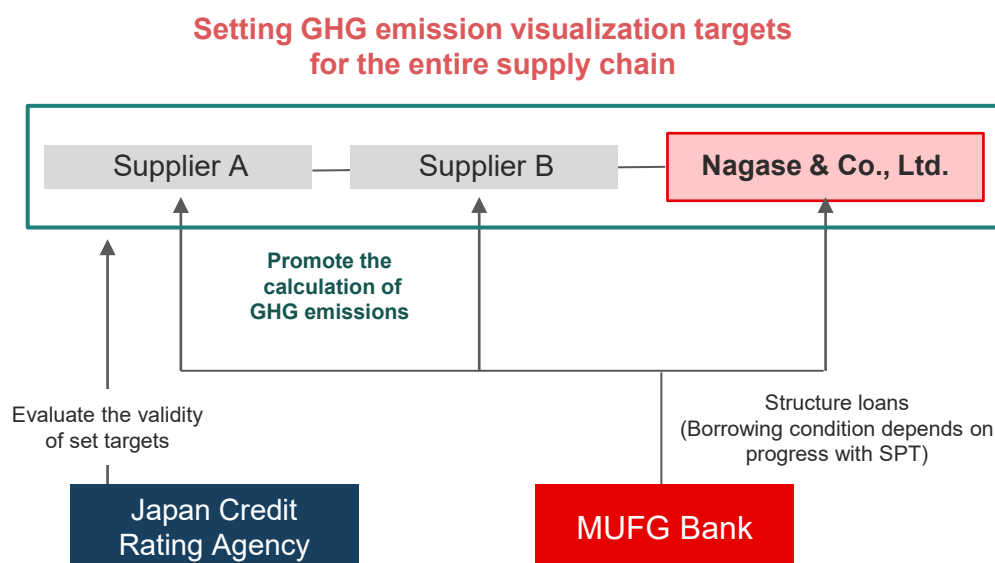
The company not only visualizes emissions but also provides services to promote emission reductions through collaboration with buyers and suppliers, such as linking emission data and setting reduction targets.



Sustainability-linked loan (SLL) framework for the supply chain

MUFG bank, in collaboration with Nagase & Co., Ltd. (hereinafter, Nagase), has structured an SLL framework for borrowers, including suppliers, with the calculation and reduction of emissions as SPT.

This framework incentivizes the calculation and disclosure of emissions by suppliers, contributing to the calculation, disclosure, and reduction of emissions across the entire supply chain.



^{*1} Sustainability Performance Targets. Specific numerical targets declared by issuers of sustainability-linked loans or borrowers of sustainability-linked loans

Investment and implementation support (1/2)

Through investment in growth companies and funds, and by providing support as a Financial Advisor, MUFG facilitates the social implementation of technologies essential for a carbon-neutral society.

Investing in a leading technology provider of Sustainable Aviation Fuel (SAF)

MUFG has invested in LanzaJet Inc. (hereinafter, LanzaJet), which develops efficient production technology for SAF, an essential technology for decarbonizing the aviation industry.

In addition to the scale-up of SAF production plants using LanzaJet's technology and the expansion of related technology licenses, we support the development of a feedstock supply chain network, aiming to build the SAF value chain towards Japan's 2030 SAF supply target.

Image of the SAF value chain



Overview of LanzaJet's plant in Georgia, USA

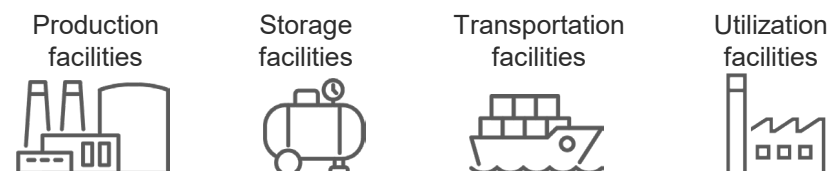


Investing in a hydrogen fund

MUFG is promoting initiatives to accelerate the use of hydrogen in society, which is anticipated to play an important role in the energy transition, and scaling up the hydrogen supply chain.

As part of these initiatives, MUFG has invested as a major LP*¹ investor in a hydrogen fund established by the Japan Hydrogen Association (JH2A) and managed primarily by Advantage Partners Inc.

Examples of upstream and downstream projects covered by the fund



Supporting hydrogen business as a Financial Advisor (FA)

MUFG has served as a financial advisor for numerous projects within the global hydrogen and ammonia value chain, with total aggregated project costs exceeding 10 billion U.S. dollars, by providing services such as bankability assessments, structuring, etc.

Examples of supported projects

- Green hydrogen and ammonia production project
- Transitioning of power plants fueled by LNG into hydrogen

*1 Limited Partnership

Investment and implementation support (2/2)

By investing in climate-tech^{*1}-related startup funds and forest funds, MUFG enhances the corporate value of investees and supports technological innovation towards a carbon-neutral society.

Marunouchi Climate Tech Growth Fund L.P. expands investment in startups

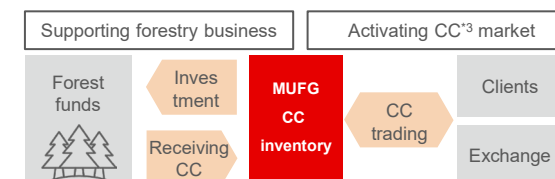
- Marunouchi Climate Tech Growth Fund L.P. is a fund established with Mitsubishi Corporation and Pavilion Private Equity Co., Ltd. to invest in climate-tech-related startups.
- With 744 million U.S. dollars^{*2} of fundraising in 2025, it is one of Asia's largest decarbonization-related investment funds. It has invested in areas such as renewable energy and next-generation electric motors and plans to accelerate investment activities domestically and internationally.



Expanding investment in forest funds

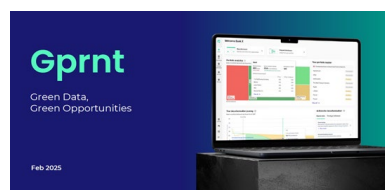
- MUFG is investing in forest funds not only to provide offset opportunities to clients but also to lead the growth and development of the market in sustainable investment.

- In December 2024, a new investment agreement was signed with the Campbell Global Forest & Climate Solutions Fund II.



Participation in Singapore's data platform development project

- Since its inception, MUFG has been participating in a project launched by the Monetary Authority of Singapore to build a platform that centralizes the management of sustainability data.
- In November 2024, a new tool was released for companies in Singapore. The plan is to expand mainly across the APAC region in the future.



Initiating discussions for establishing Z Energy's third fund

- Z Energy Co., Ltd. is a renewable energy fund management company established in September 2021 with partner companies such as NTT Anode Energy Corporation and Osaka Gas Co., Ltd., aiming to build an independent renewable energy market.
- The company has launched its first and second funds to date. In FY2024, discussions began and are ongoing to establish a third fund, targeting energy storage and renewable energy with additionality.

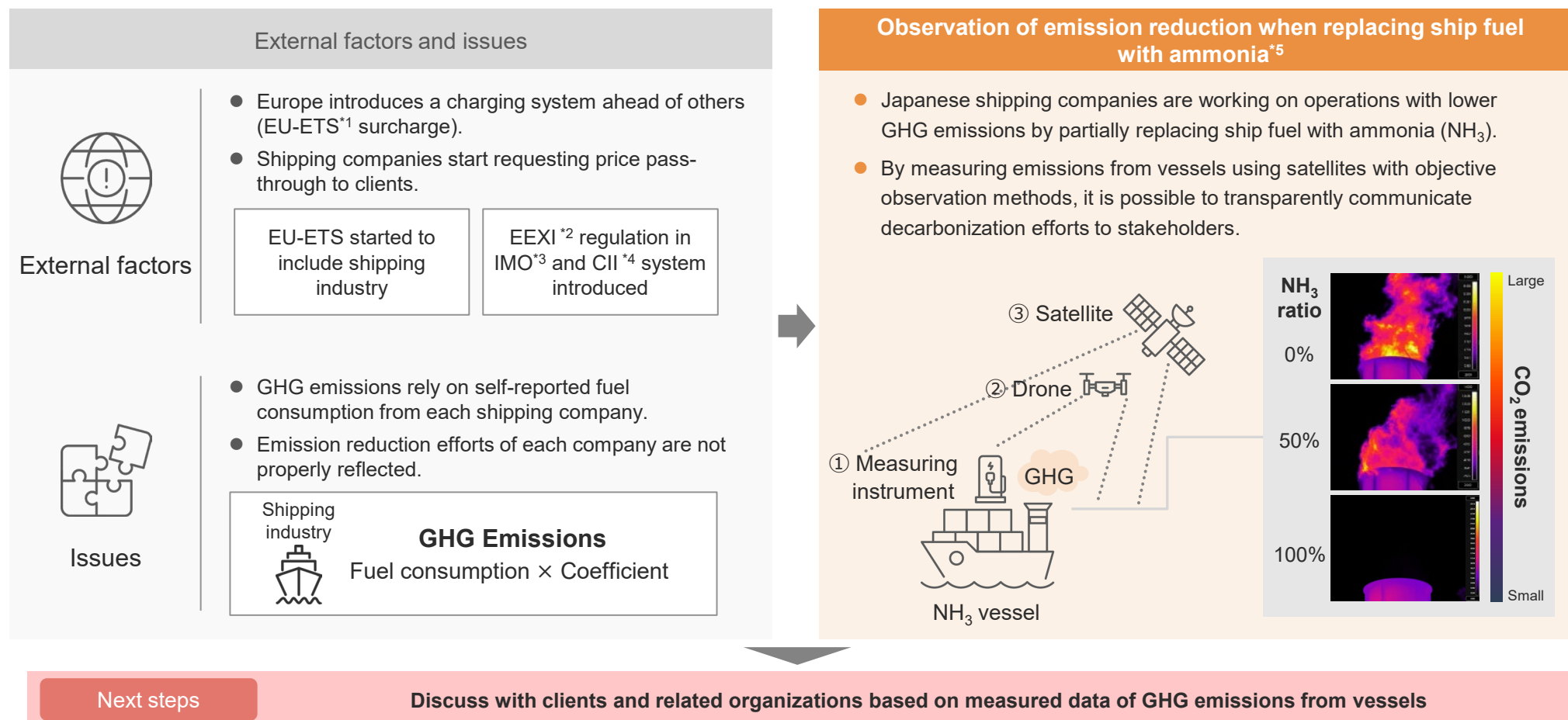
^{*1} A general term for technologies addressing climate change issues ^{*2} Includes related entities for overseas investors

^{*3} Carbon Credits. A system where the effects of GHG reduction can be traded as credits

Initiatives for visualizing GHG emissions using satellites (1/2)

The space industry is a broad industry that includes not only the manufacturing and launching of satellites but also the utilization of space technology and data. Among them, the utilization of satellite data plays a significant role in addressing climate change. MUFG aims to create new business opportunities by visualizing the impact and value on the environment and society using satellite data, thereby stimulating the market and spurring financing needs.

The shipping industry is working to reduce GHG emissions from vessels, but there are challenges such as: ① relying on self-reported fuel consumption by each company, and ② the emission reduction efforts of companies not being properly reflected. MUFG is collaborating with startups and shipping companies to work on objective and transparent emission measurements.

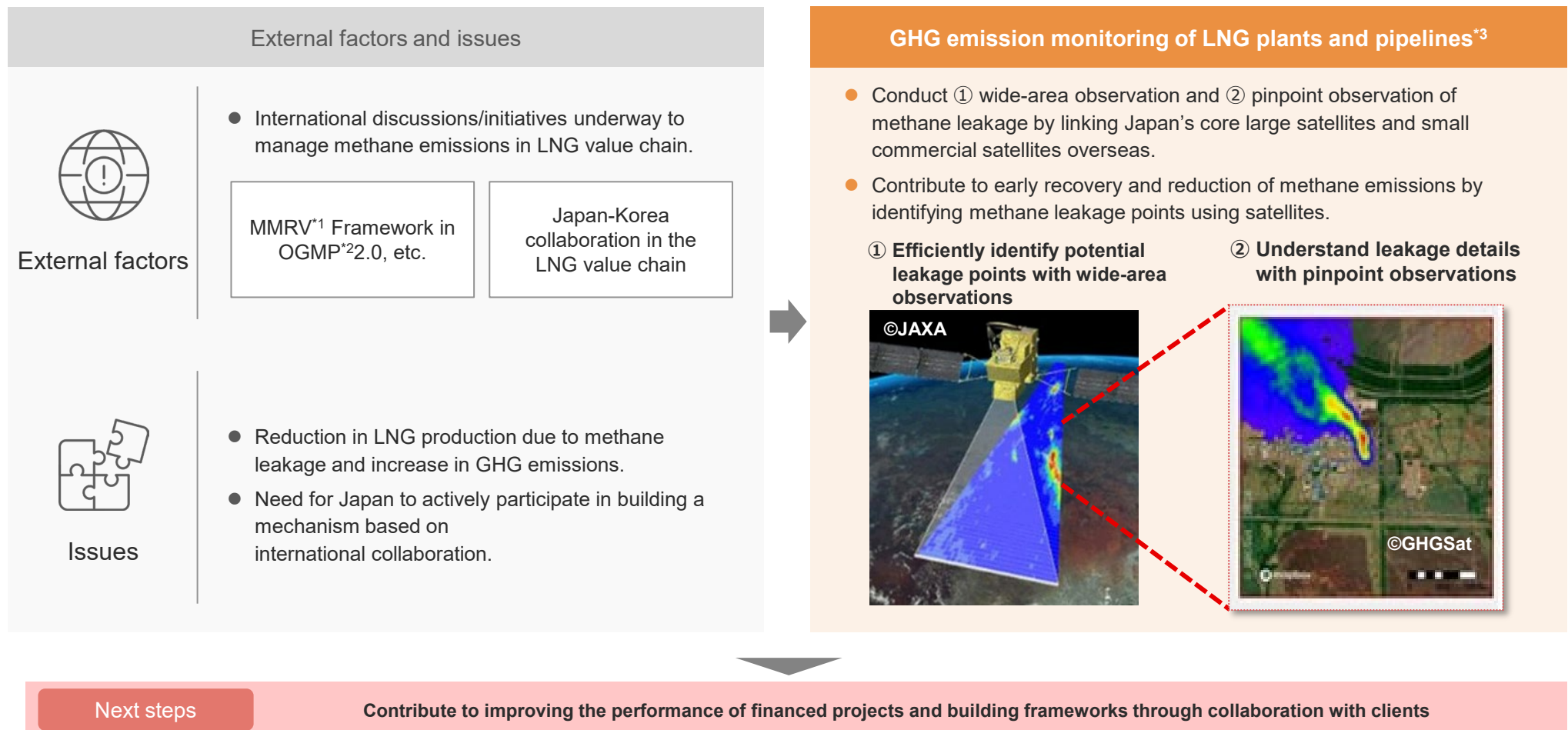


^{*1} European Union Emissions Trading System ^{*2} Energy Efficiency Existing Ship Index ^{*3} International Maritime Organization ^{*4} Carbon Intensity Indicator

^{*5} Collaborative demonstration with Nippon Yusen Kabushiki Kaisha, Nagoya Electric Works Co., Ltd., Shimizu Corporation, ArkEdge Space Inc., Sunflame Co., Ltd., Space One Co., Ltd., and MUFG

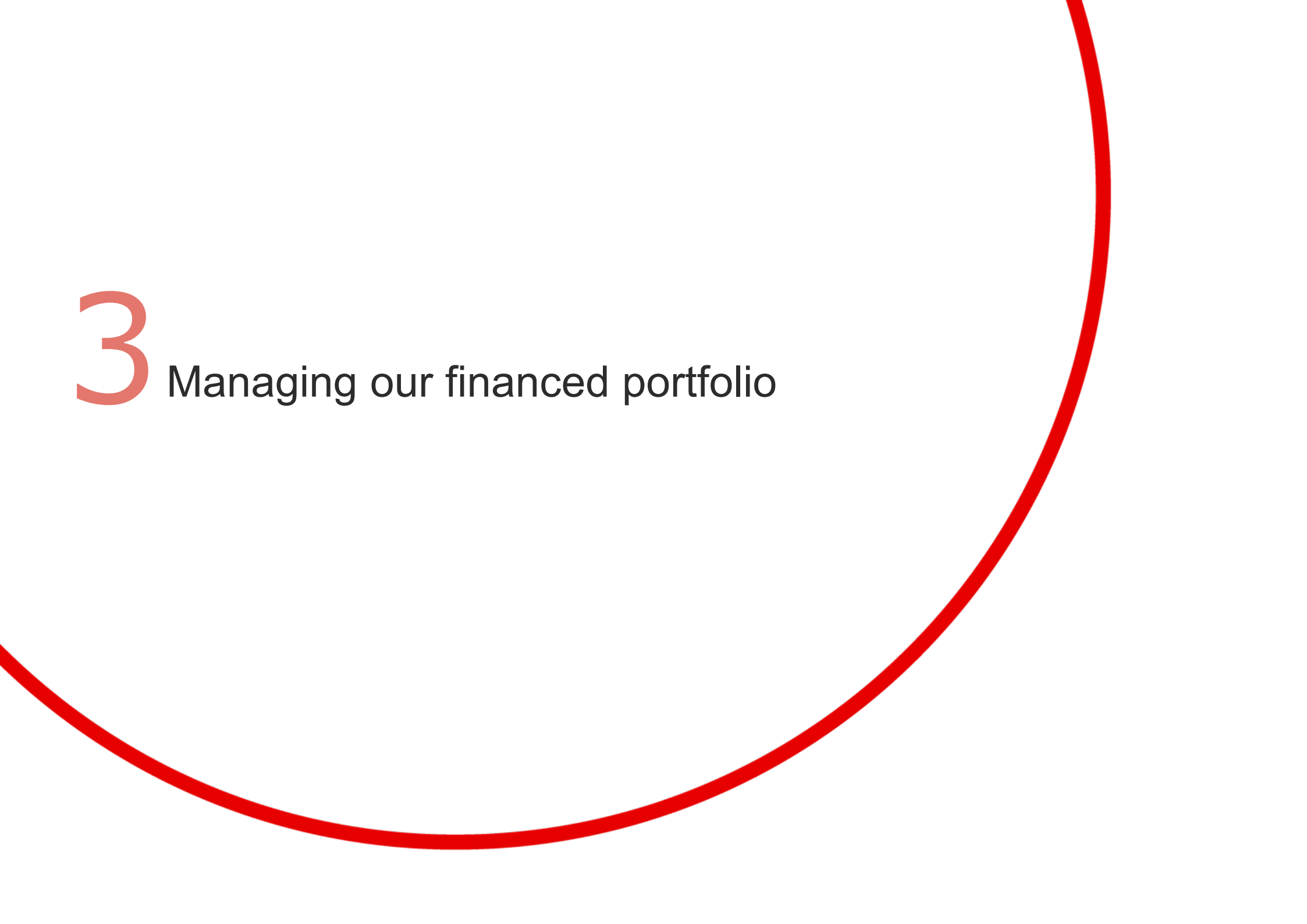
Initiatives for visualizing GHG emissions using satellites (2/2)

While natural gas is an important energy source, one of the challenges is the leakage of methane, which has more than 20 times the greenhouse effect of CO₂, during the LNG manufacturing process and transportation through pipelines. By using satellite data, MUFG aims to improve the economics of projects and reduce emissions by visualizing methane leakage data from LNG plants and pipelines to identify leakage points and facilitate early recovery.



*1 Measurement, Monitoring, Reporting and Verification *2 Oil Gas Methane Partnership

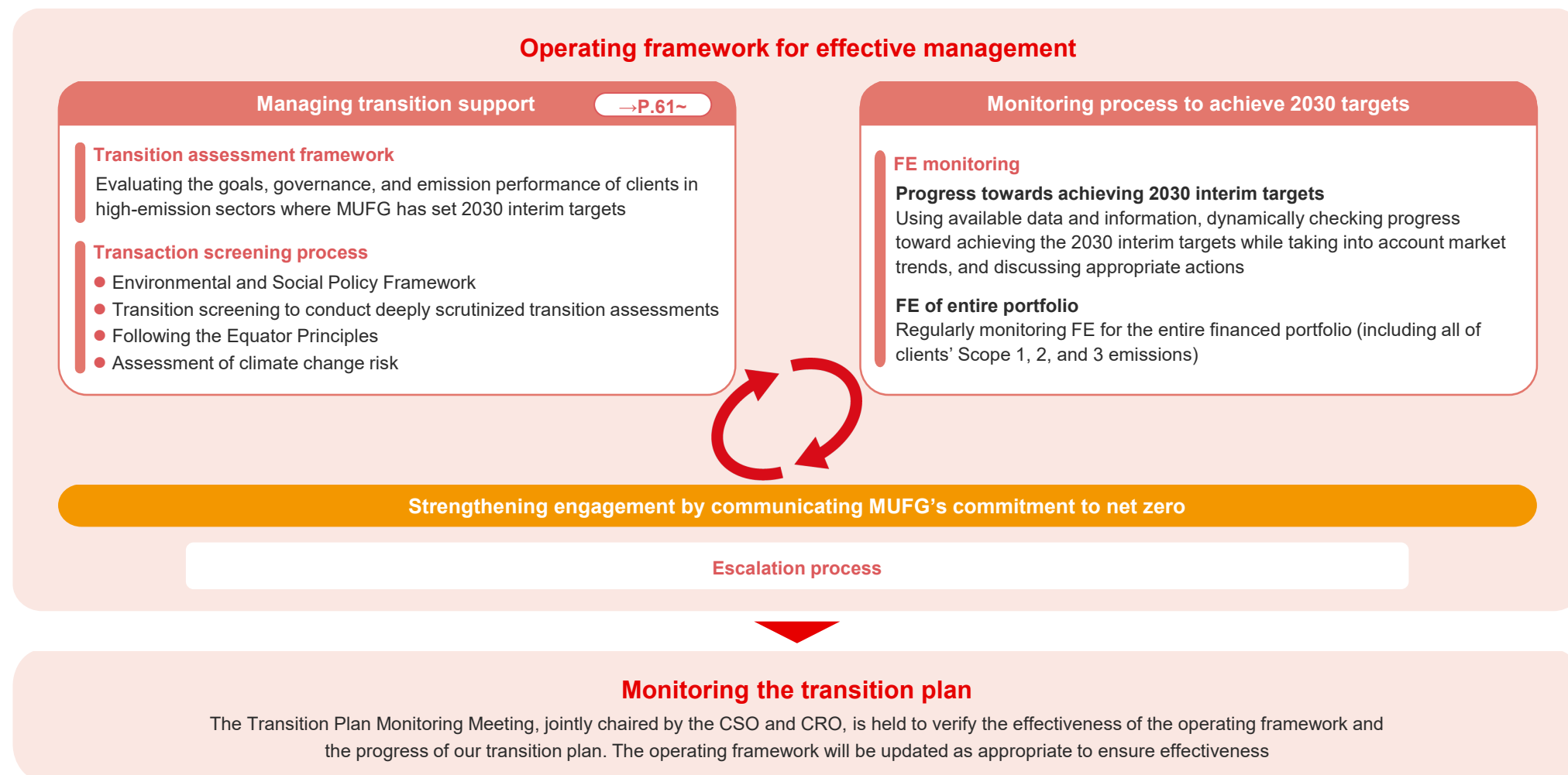
*3 Collaborative demonstration by Mitsubishi Electric Corporation, Satellite Data Service Planning Co., Ltd. (SDS), GHGSat Inc., and MUFG. Cooperation from the Ministry of the Environment, National Institute for Environmental Studies, and Japan Aerospace Exploration Agency (JAXA)



3 Managing our financed portfolio

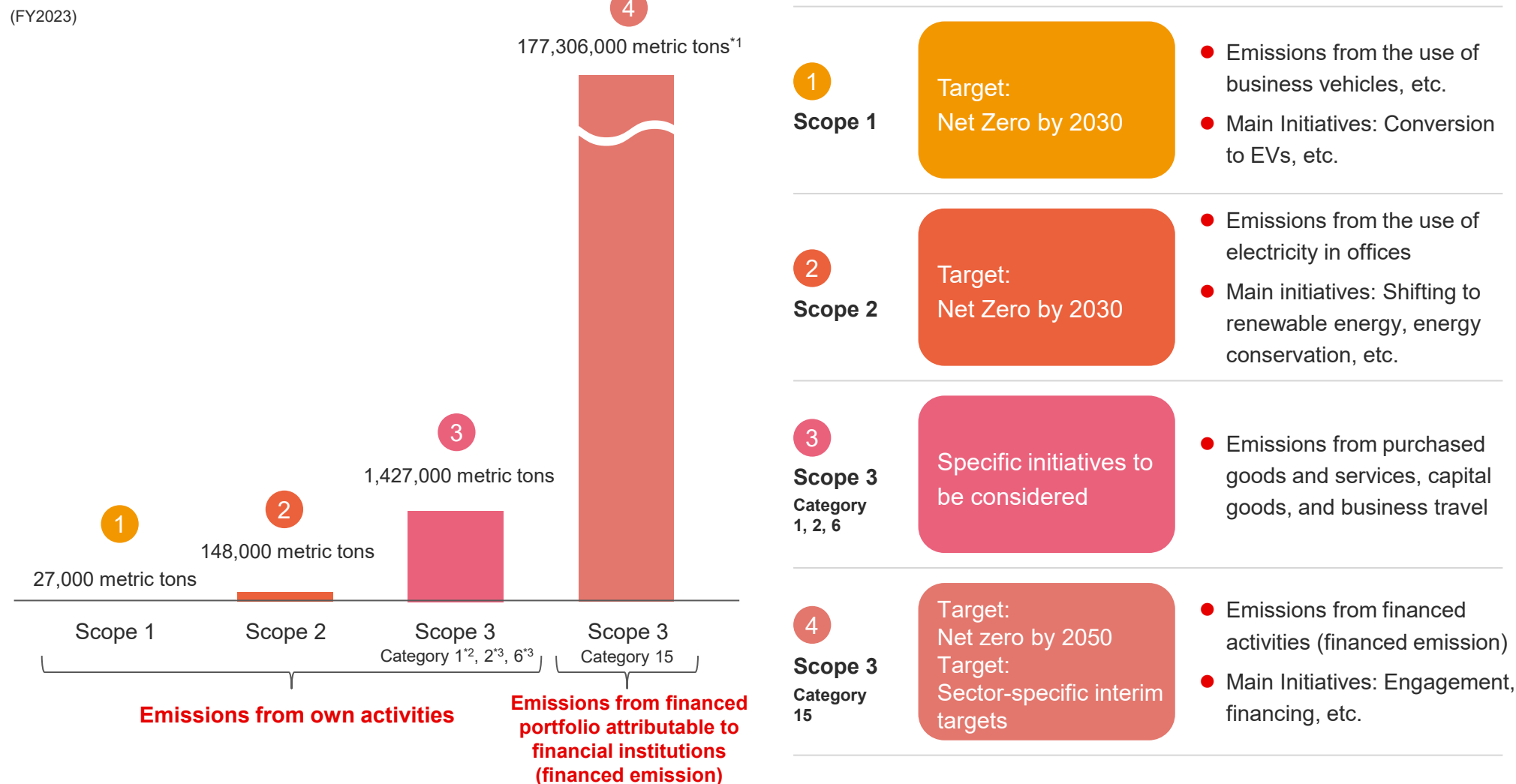
Operating framework for effective management

MUFG has implemented a transition assessment framework, which evaluates our clients' transition status, and a transaction screening process in order to provide managed transition support. We monitor the progress toward achieving our 2030 interim targets as we strengthen our client engagement activities through these activities. The Transition Plan Monitoring Meeting, jointly chaired by the CSO (Chief Strategy Officer) and CRO (Chief Risk Officer), will verify the effectiveness of these frameworks and the progress of our transition plan.



Emissions overview: MUFG's scope 1, 2 and 3 emissions

The main source of emissions for MUFG is Scope 3, Category 15, reported as financed emission (FE), which refers to the emissions of portfolio companies attributable to financial institutions. Reducing these emissions is key to achieving carbon neutrality by 2050.



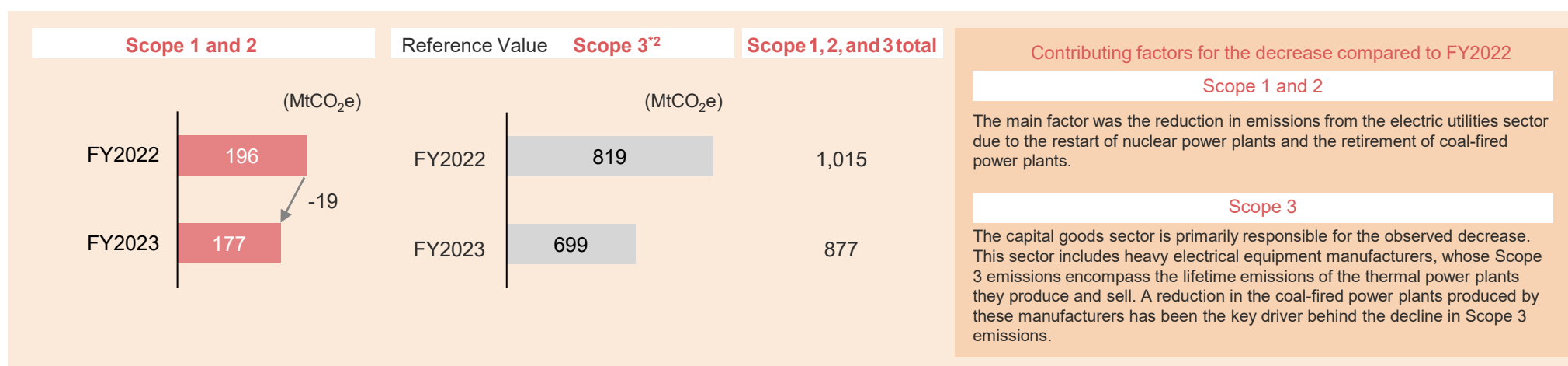
*1 Total financed emission from Scopes 1 and 2 for the Bank's clients/projects *2 Scope: domestic locations of MUFG Bank, Mitsubishi UFJ Trust and Banking, Mitsubishi UFJ Morgan Stanley Securities, Mitsubishi UFJ NICOS and ACOM

*3 Scope: MUFG (including consolidated subsidiaries)

Emissions overview: Financed emission across the portfolio

Financed emission (Scope 1 and 2 emissions by clients/projects) across MUFG's portfolio in FY2023 was 177 MtCO₂e, a decrease of 19 MtCO₂e compared to FY2022. Scope 3 of the portfolio companies also decreased compared to FY2022.

Financed emission of our portfolio by scope



Details by sector










	MtCO ₂ e	Oil & Gas	Coal	Electric Utilities	Aviation	Shipping	Rail Transportation	Trucking Services	Automobiles & Components	Metals & Mining	Chemicals	Building Materials	Capital Goods	Real Estate Management and Development	Beverages	Agriculture	Packaged Foods & Meats	Paper & Forest Products	Others	Total
FY2022	Scope 1 and 2	36	0.2	73	13	10	0.5	1	3	20	11	5	2	0.4	0.3	1	4	2	15	196
	<Reference Value> Scope 3	135	0.3	32	4	5	0.9	4	75	28	26	2	380	2	2	1	17	2	104	819
FY2023	Scope 1 and 2	37	0.3	65	11	8	0.3	0.4	2	19	9	3	2	0.4	0.2	1	3	1	16	177
	<Reference Value> Scope 3	115	0.3	30	4	4	0.8	3	74	23	25	1	258	3	1	0.4	10	2	145	699

*1 Financed emission is calculated across the portfolio for the Bank's corporate finance, project finance, aviation finance, ship finance, and real estate non-recourse loans using methodology provided by the Partnership for Carbon Accounting Financials (PCAF). Data excludes sovereign issuers and clients with unknown industry classification. Industry classifications are based on GICS and organized by TCFD sector, which differs from how interim target clients are organized.

*2 The Scope 3 emissions increase as corporate disclosure expands and data becomes more refined. There is also significant overlap in emissions within the value chain (e.g., Scope 3 of oil and gas overlaps with Scope 1 of other industries and Scope 3 of automobiles, Scope 1 of power overlaps with Scope 2 of other industries)

Sector-specific interim targets: Target and performance












The sector-specific interim targets and their performance are outlined below. For the power and oil & gas sectors, which represent the bulk of emissions from the underwriting of bonds, equities, and syndicated loans, facilitated emission (FaE) have been incorporated into the measurements.

Sector	Target	Emissions scope	Target financing ^{*1}	Indicators	Reference scenarios	Target (FY2030)	Performance (FY2023)	Coverage of emissions in scope ^{*2}	PCAF score ^{*3}
 Power	Power generation companies	Scope 1	Corporate loans Project finance Underwriting bonds, equities, syndicated loans	Emission intensity	Well below IEA SDS level and IEA NZE range	156~192 gCO ₂ e/kWh	288 gCO ₂ e/kWh	89%	1.8
 Oil & Gas	Upstream producers	Scope 1~3	Corporate loans Project finance Underwriting bonds, equities, syndicated loans	Absolute Emissions	Well below IEA SDS level and IEA NZE range	-15% ~ -28%	-22%	84%	2.0
 Steel	Steel manufacturers	Scope 1,2	Corporate loans	Absolute Emissions	Targets of clients Aiming for Carbon Neutrality	-22%	-28%	88%	1.5
 Commercial Real Estate	Developers/ REITs/SPVs ^{*4}	Scope 1,2,3-13	Corporate loans Non-recourse loans	Emission intensity	Well below CRREM ^{*5} 2.0°C level and CRREM 1.5°C range	44~47 kgCO ₂ e/m ²	52 kgCO ₂ e/m ²	73%	2.3
 Residential Real Estate	Mortgage debtors	Scope 1,2	Mortgages	Emission intensity	CRREM 1.5°C	23 kgCO ₂ e/m ²	25 kgCO ₂ e/m ²		5.0
 Automotive	Automotive manufacturers	Scope 3-11	Corporate loans	Emission intensity	JAMA ^{*6} 1.5°C and IEA NZE range	-23% ~ -46%	-7%	97%	2.1
 Shipping	Maritime operators	Scope 1	Ship finance	Portfolio climate alignment (PCA ^{*7}) score	Poseidon Principles ^{*8} Reference Scenario	PCA ≤ 0	Striving 22.7% Minimum 17.0%	87%	-
 Aviation	Airline companies Aircraft lessors	Scope 1 Scope 3-13	Corporate loans Aviation finance	Emission intensity	IEA NZE	71 gCO ₂ /RPK ^{*9}	83 gCO ₂ /RPK	90%	2.5
 Coal	Mining operators ^{*10}	Scope 1~3	Corporate loans	Credit balance	-	Zero (2040 for non-OECD countries)	JPY 14 billion (JPY 56 billion for non-OECD countries)	-	-

^{*1} Including undrawn-committed amounts^{*} ^{*2} Ratio of financing amounts for which actual results are measured to total financing amounts subject to measurement ^{*3} PCAF's own five-point scale scoring system that indicates the quality of the disclosed data. Scores are determined according to the degree of estimation, with Score 1 as the highest rank. ^{*4} Special Purpose Vehicle for real estate securitization ^{*5} Carbon Risk Real Estate Monitor ^{*6} Japan Automobile Manufacturers Association ^{*7} Portfolio Climate Alignment ^{*8} The Poseidon Principles define the role of financial institutions in promoting the decarbonization of the shipping sector through finance and provide a framework for financial institutions to measure, evaluate, and disclose the GHG emissions of their ship finance portfolios to achieve the GHG emission reduction targets of the International Maritime Organization (IMO). The scope includes ship finance linked to ships under the jurisdiction of the IMO ^{*9} Revenue Passenger Kilometers ^{*10} Business operators primarily engaged in mining thermal coal for power generation

Sector-specific interim targets: Selecting sectors in scope

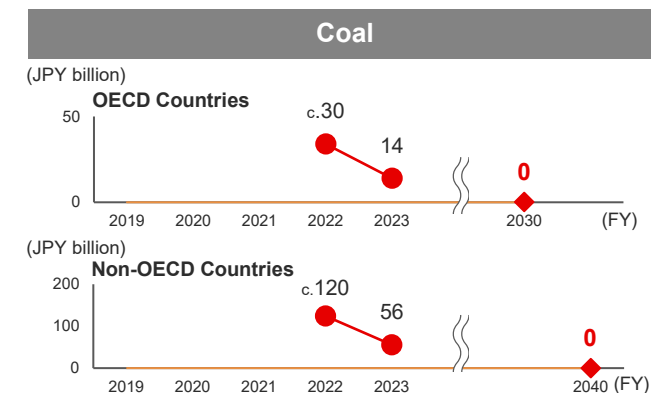
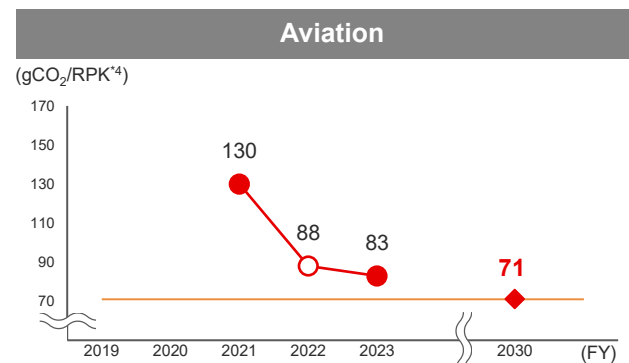
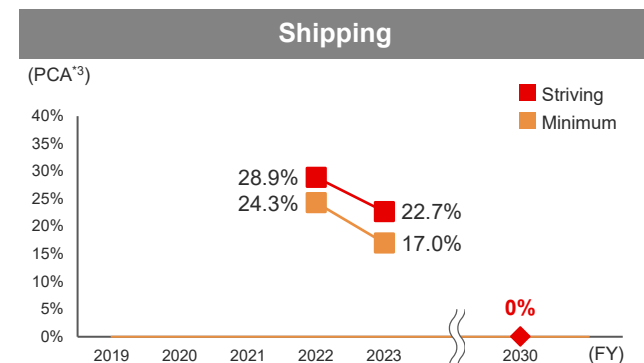
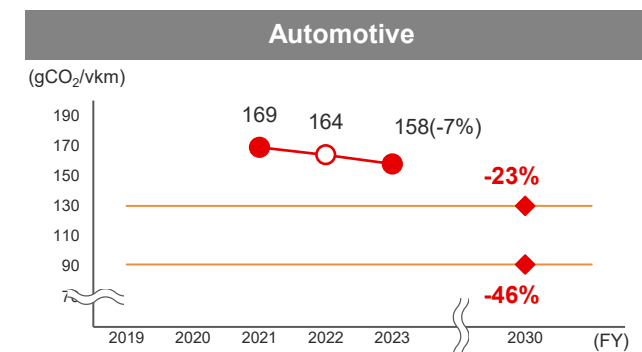
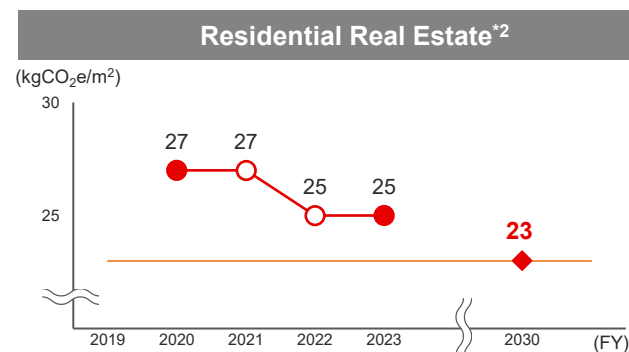
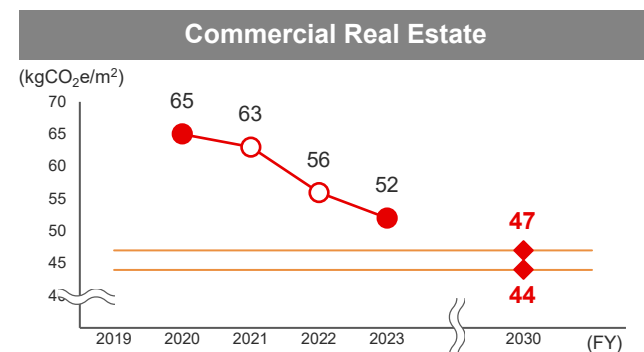
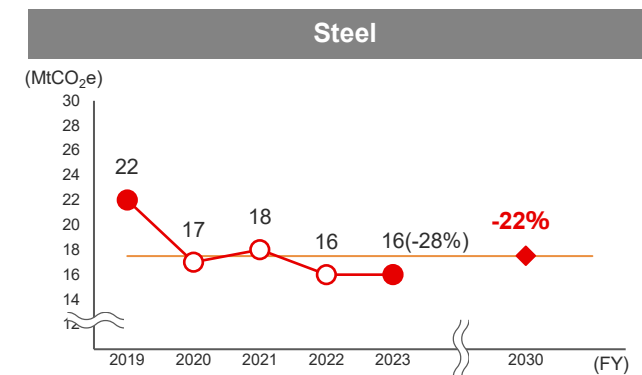
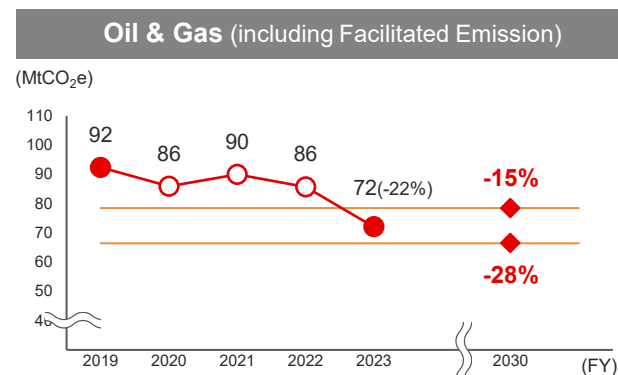
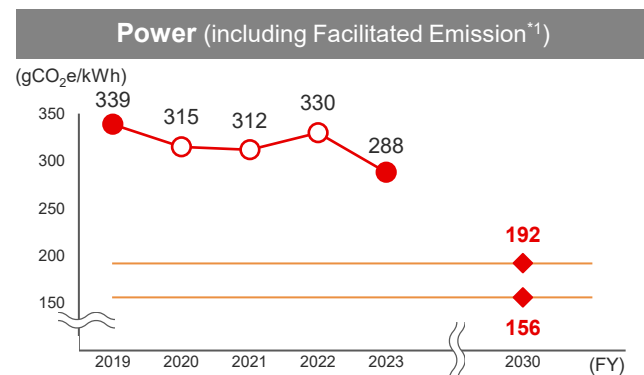
MUFG has selected target setting sectors from carbon intensive sectors*¹ based on three criteria: transition risk, materiality in the portfolio, and feasibility of setting targets (targets were not set for cement, aluminum, or agriculture).

		Transition Risk	Materiality in the portfolio		Feasibility of target setting	
		High	MUFG's FE ^{*2} FY2023, MtCO ₂ e	MUFG's total loan amount ^{*3} FY2023, USD billion	Maturity of methodology	Status of clients' target-setting
Target Sectors	 Power	✓	95	55	Mature	High
	 Oil & Gas	✓	151	42	Mature	Middle
	 Steel		20	11	Mature	High
	 Real Estate ^{*4}		3	71	Mature	High
	 Automotive		76	53	Mature	High
	 Shipping ^{*5}		12	13	Mature	High
	 Aviation		14	15	Limited	High
	 Coal	✓	0.7	0.4	Mature	Middle
	 Cement		2.2	1.1	Mature	Middle
	 Aluminum		0.3	0.3	Under development	Low
	 Agriculture		2	1	Under development	Low

*1 Carbon intensive sectors defined by NZBA guidelines *2 Total financed emission (FE) by portfolio companies for Scope 1, 2, and 3. *3 Outstanding loan Balance as of March 31, 2024 (including undrawn-committed amounts)

*4 Excludes mortgages *5 Includes maritime transportation companies

Sector-specific interim targets: Progress



^{*1} Starting this fiscal year, facilitated emission from underwriting are included in the interim targets and outcomes for the power, and oil & gas sectors.

^{*2} Provisional value derived from adjusted preliminary statistical data

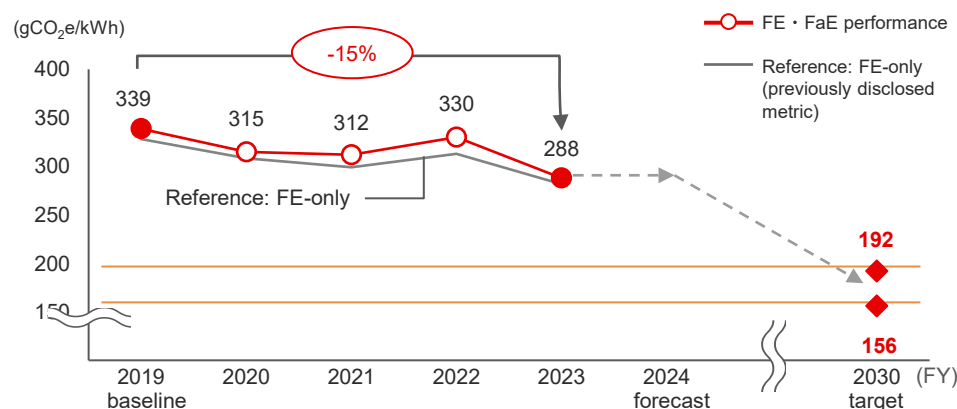
^{*3} Portfolio Climate Alignment

^{*4} Revenue Passenger Kilometers

Sector-specific approaches: Power

Power

Target and progress



As of FY 2023, the emission intensity of the power sector stands at 288gCO₂e/kWh, which represents a reduction of approximately 15% compared to 339gCO₂e/kWh in the base year of FY2019. This result is primarily attributed to the advancements in decarbonization efforts by our clients and the increased project financing for renewable energy initiatives.

While we continue to expand project financing for renewable energy, there has been an increase in loans aimed at supporting the transition for clients with high emission intensity. As a result, the emission intensity is expected to remain flat for now.

Towards FY2030, we aim to achieve our targets by actively supporting our clients in executing their transition strategies through engagement and by further expanding financing for renewable energy-related projects.

Interim target overview

Starting from this fiscal year, we have updated our performance metrics by incorporating emissions from underwriting bonds, stocks, and syndicated loans (facilitated emission, “FaE”) into our FE calculations. We will maintain the interim target for fiscal year 2030 at 156~192gCO₂e/kWh. The methodology for measuring FaE is detailed in the Appendix.

→ P.89

The current interim target was established in fiscal year 2021. We will consider revising it by the end of this fiscal year, taking into account the latest energy supply and demand trends, updated Nationally Determined Contributions (NDCs), and national policies.

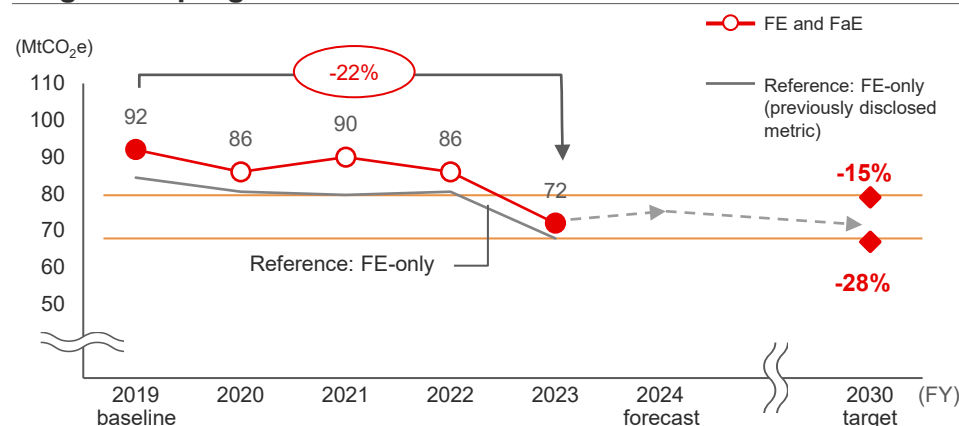
Approach to achieving interim target

- Finance support through engagement
 - We will provide financing support through discussions with our clients' transition strategy, and by considering each country's decarbonization policies and available technologies.
 - We will make policy proposals through activities such as the creation of transition whitepapers and participation in public-private initiatives. Additionally, utilizing the knowledge accumulated through whitepaper projects on industry transitions and government support systems enables us to understand the needs and challenges our clients face when considering transitions, and support the promotion of their GX strategies.
- Expansion of finance for renewable energy-related projects
 - Leveraging our track record and expertise as a leading company for supporting renewable energy projects, we will further promote financing support for renewable energy-related projects including solar and wind power generation, as well as power grids and CCUS.
- Progress management and monitoring
 - Operationalization of the environmental and social policy framework for coal-fired power generation
 - Assessing the transition status of each company based on the transition assess framework and regulatory managing progress on targets at monitoring meetings.

Sector-specific approaches: Oil & gas

Oil & Gas

Target and progress



As of FY2023, the absolute emissions of FE and FaE for the oil & gas sector was 72 MtCO₂e. Against the baseline of 92 MtCO₂e in FY2019, this is a 22% decrease which is within the target range for FY2030. This result is primarily attributed to the repayment of large project finance loans that reached maturity and the decrease in attribution factor driven by the improved financial conditions of clients.

Most recently, increase in M&A activity has led to a rise in demand for funding, which is expected to temporarily increase absolute emissions.

Toward FY2030, we aim to achieve our target by supporting our clients' transition to decarbonized businesses and decarbonization on the demand side.

Interim target overview

Starting from this fiscal year, we have updated our performance metrics by incorporating emissions from underwriting bonds, stocks, and syndicated loans (facilitated emission, "FaE") into our FE calculations. We will maintain the interim target for fiscal year 2030 at -15% ~ -28%. The methodology for measuring FaE is detailed in the Appendix.

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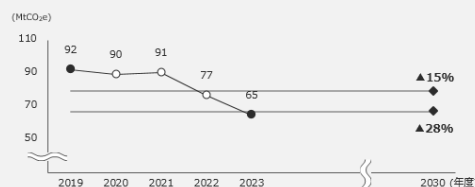
The current interim target was established in fiscal year 2021. We will consider revising it by the end of this fiscal year, taking into account the latest energy supply and demand trends, updated Nationally Determined Contributions (NDCs), and national policies.

Approach to achieving interim target

- Finance support through engagement
 - Based on the energy policies and technological advancements of each region, we will support the necessary finance for the transition to decarbonized businesses and the development of decarbonized fuels.
 - We will encourage disclosure of emissions results, including scope 3, as well as emission reduction targets and activities through dialogue with clients.
- Support demand-side decarbonization
 - Set emission reduction targets for oil & gas demand sectors such as power, automotive, aviation, shipping, and real estate. Support decarbonization efforts through engagement with key players in each sector to achieve targets.
- Progress management and monitoring
 - Check consistency with regional and national transition strategies, sponsor transition strategies, and impact on the environment by technologies employed when providing project finance support.
 - Assess the transition status of each company based on the transition assessment framework and regularly manage progress on targets at monitoring meetings.

Reference: Impact of EVIC on the attribution factor

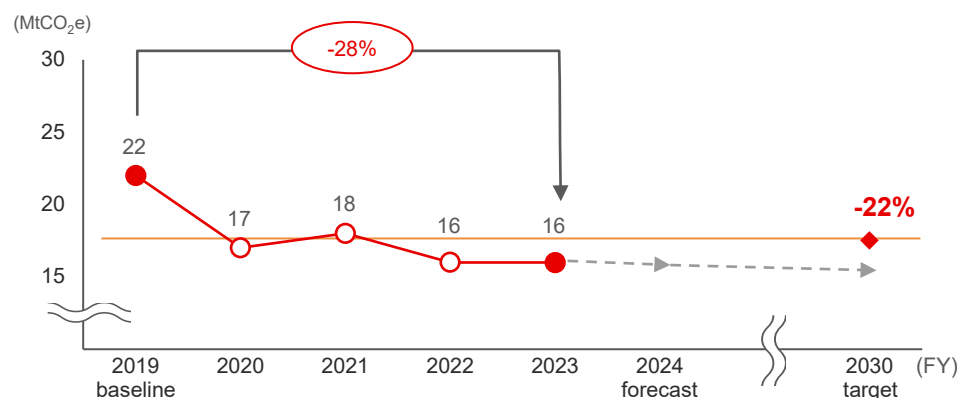
MUFG uses book value to measure the denominator for the attribution factor (credit balance/liabilities + equity) for calculating FE. The FE result with EVIC (market value) as the denominator based on PCAF is as follows.



Sector-specific approaches: Steel, Commercial and Residential Real Estate

Steel

Target and progress



As of FY2023, the steel sector's absolute emissions were 16 MtCO₂e, a 28% decrease from the baseline in FY2019, achieving the 2030 target level. This result is primarily due to the decrease in the attribution factor and the steady progress made by clients in meeting their emission reduction targets, such as the shift to low-carbon steel production processes and the shutdown of blast furnaces.

Toward FY2030, we aim to achieve our target by supporting clients with their emission reduction efforts.

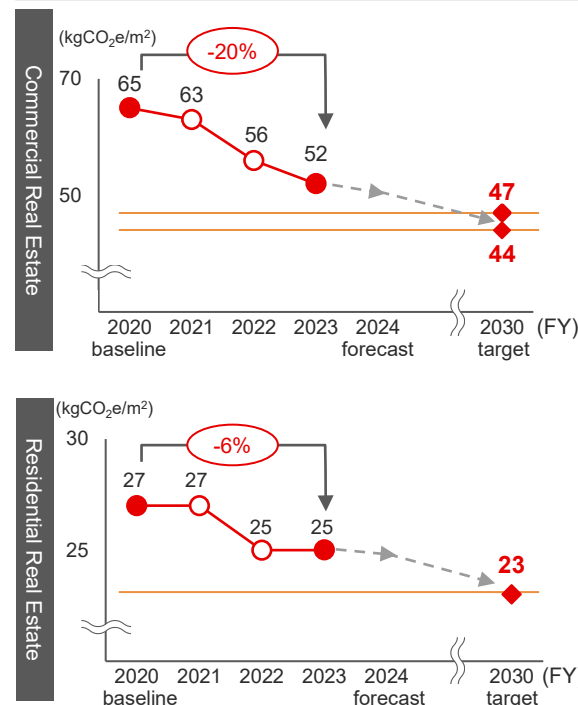
Approach to achieving interim target

- Finance support through engagement
 - Support the necessary financing for decarbonization through discussion of replacement and financial strategies based on retrofitting existing blast furnaces and implementation of new technologies.
- Progress management and monitoring
 - Assess the transition status of each company based on the transition assessment framework and regularly manage progress on targets at monitoring meetings.

*1 Net Zero Energy House

Commercial and Residential Real Estate

Target and progress



As of FY2023, the emissions intensity of the commercial real estate sector was 52 kgCO₂e/m², a 20% decrease from the baseline in FY2020. This result is primarily attributed to the improvement in clients' emissions intensity by switching to the procurement of renewable energy.

As of FY2023, the emissions intensity of the residential real estate sector was 25 kgCO₂e/m², a 6% decrease from the baseline in FY2020. This result is primarily attributed to the decrease in regional emission intensity as a result of advances in energy conservation during building use.

Toward FY2030, we aim to achieve our target by supporting the purchase of energy-efficient homes, such as ZEH^{*1}, and financing green buildings.

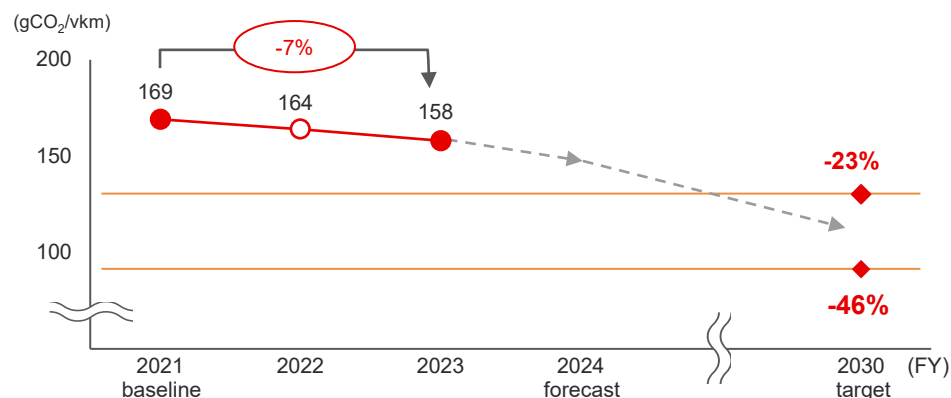
Approach to achieving interim target

- Finance support through engagement
 - For commercial real estate, support clients' decarbonization initiatives through financing such as green bonds for green building construction and sustainability-linked loans.
 - For residential real estate, support the purchase of energy-efficient homes, such as ZEH.
- Progress management and monitoring
 - Assess the transition status of each company based on the transition assessment framework and regularly manage progress on targets at monitoring meetings.

Sector-specific approaches: Automotive, Shipping

Automotive

Target and progress



As of FY2023, the emissions intensity of the automotive sector was 158 gCO₂/vkm, a 7% decrease from the baseline in FY2021. This result is primarily due to the improvement in emissions intensity of our clients, driven by the increase in new car sales of HV, PHV, and EV^{*1}.

Toward FY2030, we aim to achieve our target by supporting clients with their decarbonization strategy and technology development.

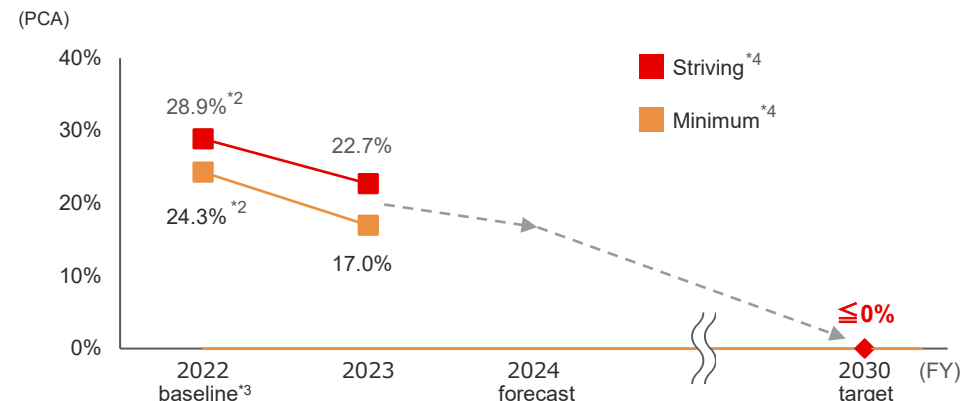
Approach to achieving interim target

- Financial support through engagement
 - Provide financing for developing and expanding technologies to reduce emissions from vehicle use and to decarbonize the electricity and fuels that power vehicles, and for improving mobility efficiency.
 - Support clients that have presence across Japan, Europe, the Americas, and Asia with their strategies and technology development based on each country's fuel efficiency regulations and energy landscape.
- Progress management and monitoring
 - Assess the transition status of each company based on the transition assessment framework and regularly manage progress on targets at monitoring meetings.cc

^{*1} HV: Hybrid Vehicle, PHV: Plug-in Hybrid Vehicle, EV: Electric Vehicle ^{*2} Due to the revision of the PCA calculation formula of the Poseidon Principles, the PCA Minimum for FY2022 was revised from 26.2% to 24.3%, and the PCA Striving was revised from 30.9% to 28.9% ^{*3} Due to the revision of the PCA methodology in 2023, our baseline was changed from FY2021, the year we established our shipping sector target, to FY2022 ^{*4} There are two reference values in the Poseidon Principles, namely "minimum" and "striving" targets, both of which are consistent with achieving net-zero emissions by 2050, but with different reduction guidelines as of 2030 and 2040. The "minimum" target represents a minimum 20% reduction in emissions by 2030 and a minimum 70% reduction by 2040 compared to 2008 levels. The "striving" target represents a 30% reduction in emissions by 2030 and an 80% reduction by 2040 compared to 2008 levels.

Shipping

Target and progress



The Portfolio Climate Alignment (PCA) score for FY2023 improved to minimum 17.0% and striving 22.7% from the previous baseline year. This result is primarily attributed to the reduction in average ship speed due to the normalization of previously robust demand, improved fuel efficiency, and the delivery of low-carbon emission vessels.

Toward FY2030, we aim to achieve our target by collaborating closely with our clients to support their decarbonization strategies, such as expanding low-carbon emission vessels.

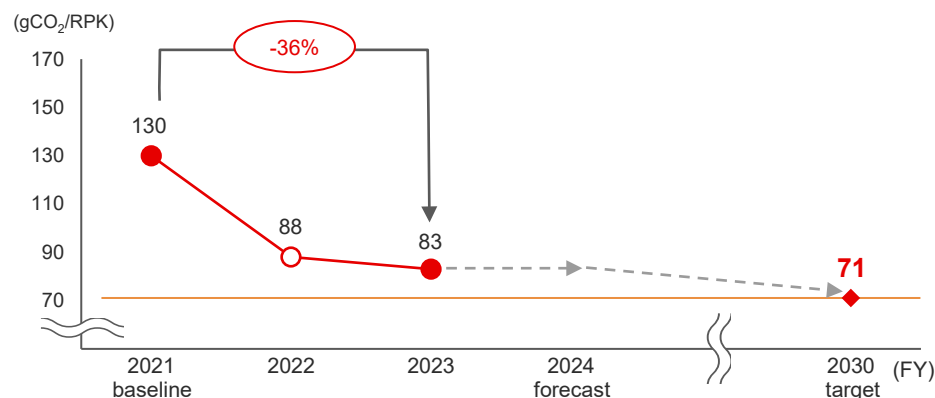
Approach to achieving interim target

- Finance support through engagement
 - Support clients' emission reduction efforts by financing in areas such as expanding low-carbon emission ships and introducing next-generation fuel vessels.
- Progress management and monitoring
 - Monitor GHG emissions from ship finance-tied vessels through PCA disclosure based on the Poseidon Principles.
 - Assess the transition status of each company based on the transition assessment framework and regularly manage progress on targets at monitoring meetings.

Sector-specific approaches: Aviation, Coal

Aviation

Target and progress



As of FY2023, the emissions intensity of the aviation sector was 83 gCO₂/RPK^{*1}, a 36% decrease from the baseline in FY2021. This result is primarily attributed to the improvement in emissions per passenger, driven by the increase in the number of passengers after the COVID-19 pandemic and the continued introduction of new lower emissions aircraft.

Most recently, the retirement of older aircraft has been postponed due to delays in the supply of new aircraft, resulting in a flat forecast for emissions intensity.

Toward FY2030, we aim to achieve our target by supporting clients with their emission reduction efforts, such as increasing the use of SAF and improving fuel efficiency.

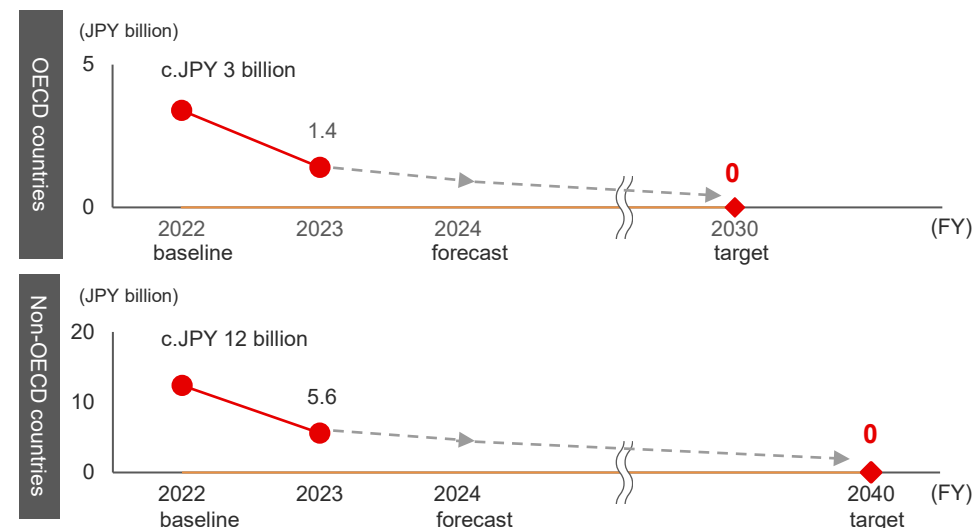
Approach to achieve interim target

- Finance support through engagement
 - Support clients' emission reduction efforts, in areas such as increasing the use of SAF, financing newer and more fuel-efficient aircraft, and improving operations.
- Progress management and monitoring
 - Assess the transition status of each company based on the transition assessment framework and regularly manage progress on targets at monitoring meetings.

*1 Revenue Passenger Kilometers

Coal

Target and progress



As of FY2023, our loan amount for thermal coal mining for power generation was 1.4 billion yen for OECD countries and 5.6 billion yen for non-OECD countries. The loan amount has steadily decreased from the baseline year due to progress in scheduled repayments.

We will continue to manage and monitor our loans to meet our target.

Approach to achieving interim target

- Progress management and monitoring
 - Apply the Environmental and Social Policy Framework for financing thermal coal mining for power generation.
 - Assess the transition status of each company based on the transition assessment framework and regularly manage progress on targets at monitoring meetings.



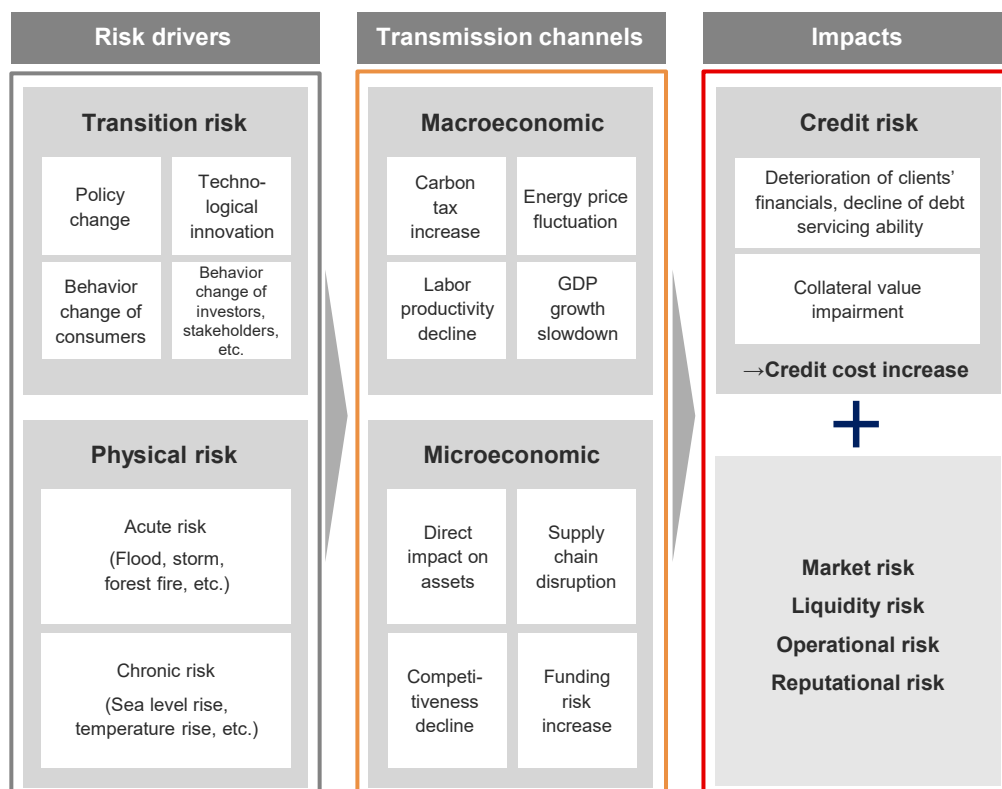
4 Risk management and governance

Risk management: Climate change risk management framework

MUFG recognizes the importance of identifying and assessing climate change-related risks and information disclosure. We have positioned risks arising from climate change as top risk in our Top Risk Management. MUFG acknowledges that transition risks and physical risks arising from climate change can become risk drivers that could impact major risk categories in the medium to long term via transmission channels. Considering the nature of climate change risks, MUFG manages these risks at the credit portfolio, sector, client, and transaction levels within its risk management framework.

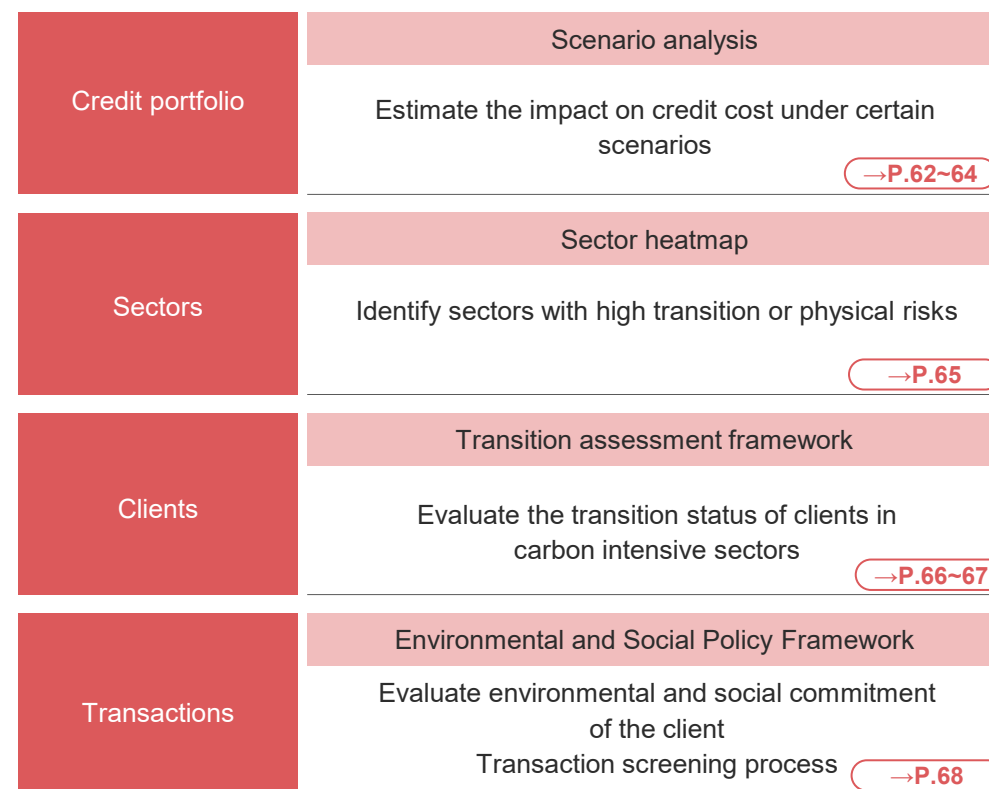
Positioning of climate change risk

Transition risks and physical risks arising from climate change can become risk drivers that could impact risks such as credit and reputational risks through influences on economy.



Climate change risk management framework

Considering the nature of climate change risks, MUFG manages risks at credit portfolio, sector, client, and transaction levels.



Risk management: Scenario analysis (1/3)

MUFG has conducted scenario analysis to identify risks across its entire credit portfolio. This analysis covers transition risks up to 2050 and physical risks up to 2100. In fiscal year 2024, MUFG broadened the scope to include all sectors and added “temperature rise” to the physical risk assessment. The scenario analysis reflect verified results from external experts. Furthermore, MUFG maintains ongoing dialogue with regulatory authorities and is continuously working on enhancing its analytic methods.

Added or expanded items are underlined.

	Transition risks	Physical risks (flood)	<u>Physical risks (temperature rise)</u>
Scenarios	NGFS*1	IPCC*2	IPCC
Risk factors	Rise in carbon prices, etc.	Suspension of the business of borrowers, impairment of fixed asset, and impairment of collateral	Deterioration of the macroeconomic environment due to decline in labor productivity
Analytic methods	Bottom-up approach at client level/ Top-down approach at sector level	Bottom-up approach	Top-down approach
Sectors	<u>All sectors (Corporate loans)</u>		
Time horizons	Up to 2050 using the end of March 2024 as the baseline	Up to 2100 using the end of March 2024 as the baseline	
Results	Cumulative credit cost (Gap with Current Policies): Approximately JPY 500 billion	Cumulative credit cost: Approximately JPY 150 billion	Maximum loss on single year basis: Approximately JPY 30 billion

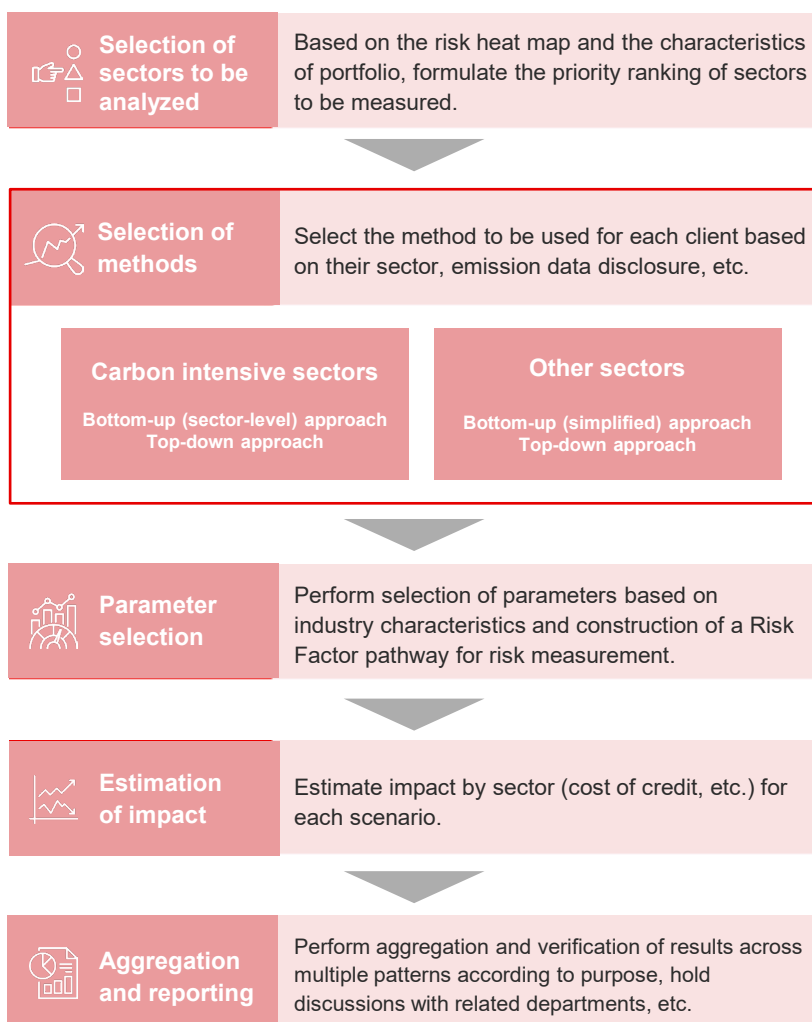
*1 Network for Greening the Financial System

*2 Intergovernmental Panel on Climate Change

Risk management: Scenario analysis (2/3)

Transition risks

Scenario analysis process



Method

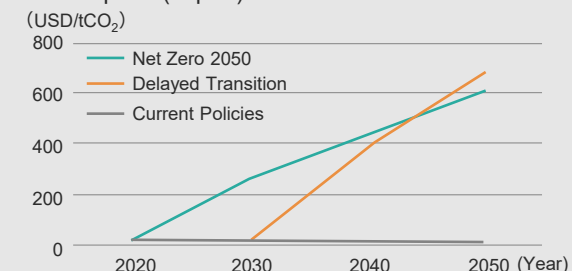
In estimating transition risks, MUFG analyzed the impact of rising carbon prices and other factors on the credit ratings of our borrowers. We adopted a measurement approach that combines a bottom-up approach at the individual company level with a top-down approach at the sector level. The analysis covered all sectors, and for carbon intensive sectors in particular, we took a bottom-up approach taking into account the specific characteristics of such sectors. For the analysis of transition risks, we referred to various scenarios published by the NGFS^{*1}, adopting Net Zero 2050, Delayed Transition, and Current Policies as key scenarios. The difference in credit costs between the Current Policies scenario and each of the other scenarios was considered the impact of transition risks. We then analyzed the financial impact of the entire credit portfolio.

Key scenarios

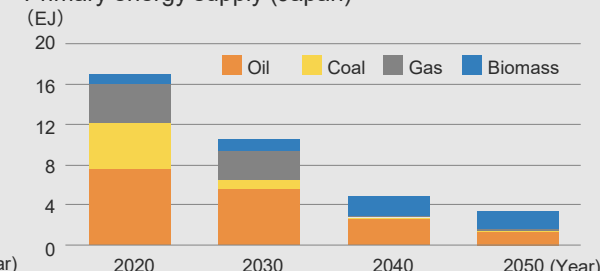
Net Zero 2050	Global warming is limited to 1.5°C. Global net zero CO ₂ emissions will be reached around 2050
Delayed Transition	Emissions do not decrease until 2030. Strong policies are then needed to limit warming to below 2°C
Current Policies	Only currently implemented policies are preserved, leading to high physical risks

Example of parameters for scenario

Carbon price (Japan)



Primary energy supply (Japan)

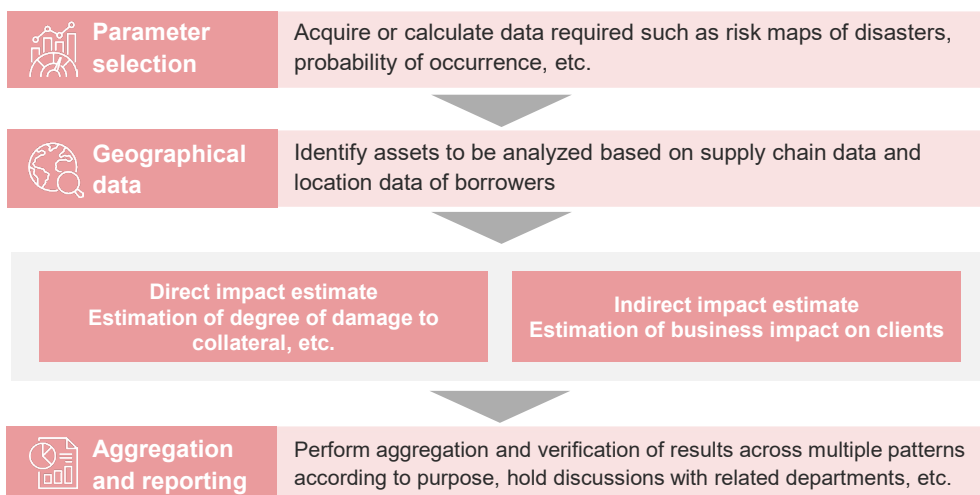


*1 Network for Greening the Financial System

Risk management: Scenario analysis (3/3)

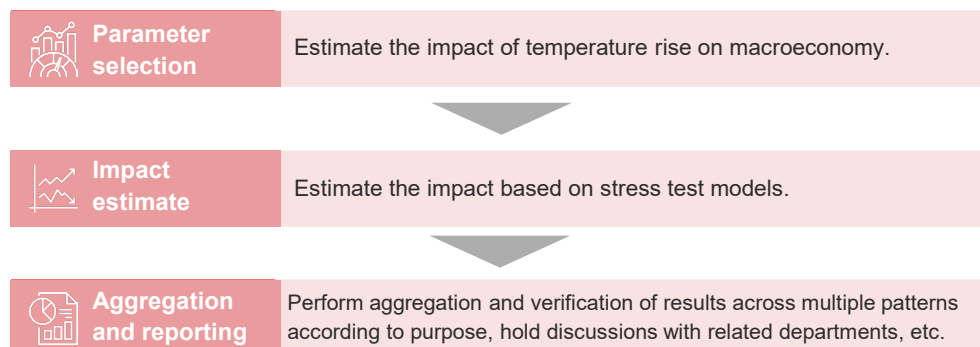
Physical risks (flood)

Scenario analysis process



Physical risks (temperature rise)

Scenario analysis process



*1 Shared Socioeconomic Pathways

*2 Intergovernmental Panel on Climate Change

Method

MUFG analyzed acute physical risks by focusing on floods, which have been particularly frequent and severe in recent years. We adopted an approach that measures the impact on the entire credit portfolio by assessing changes in the default probability of borrowers in case of flood occurrences.

For climate scenarios, we referred to the SSP^{*1} 1-2.6 (2°C scenario) and SSP5-8.5 (4°C scenario) scenarios from the Coupled Model Intercomparison Project 6 (CMIP6) published in the IPCC^{*2} Sixth Assessment Report. We conducted an analysis of the estimated damage in the event of a flood, particularly under the SSP5-8.5 scenario, which assumes significant physical risks. In calculating the financial impact, we have reflected factors such as the period of the business suspension of the borrower and the loss of assets.










Method









In conducting the analysis of chronic physical risks, MUFG adopted an approach that, as an initial analysis, measures the impact of macroeconomic shocks due to rising temperatures on the entire credit portfolio and then uses a stress test model to measure the financial impact.

We referred to the SSP1-2.6 and SSP5-8.5 scenarios from the IPCC Sixth Assessment Report for climate scenarios. In particular, we estimated the impact that the temperature changes projected in the SSP5-8.5 scenario would have on the macroeconomy through the decline in labor productivity, and subsequently assessed the overall impact on the entire credit portfolio.

Risk management: Sector heat map

In FY2024, MUFG reviewed the heat map of transition risks and physical risks by sector recommended for disclosure by TCFD^{*1}. As with scenario analysis, sector assessments will continually be reviewed and upgraded to keep pace with changes in climate change-related policies, technologies, markets, and other changes, as well as the latest developments in climate science.

Sector	Transition risk	Physical risk	Business opportunity ^{*2}
 Oil & Gas	High	Middle	++
 Coal	High	Middle	+
 Electric Utilities	High	Low	+++
 Aviation	Middle	Low	+
 Maritime Transportation	Low	Low	+
 Rail Transportation	Low	Middle	+
 Trucking Services	Low	Middle	++
 Automobiles & Components	Middle	Middle	+++
 Metals & Mining	Low	Middle	+

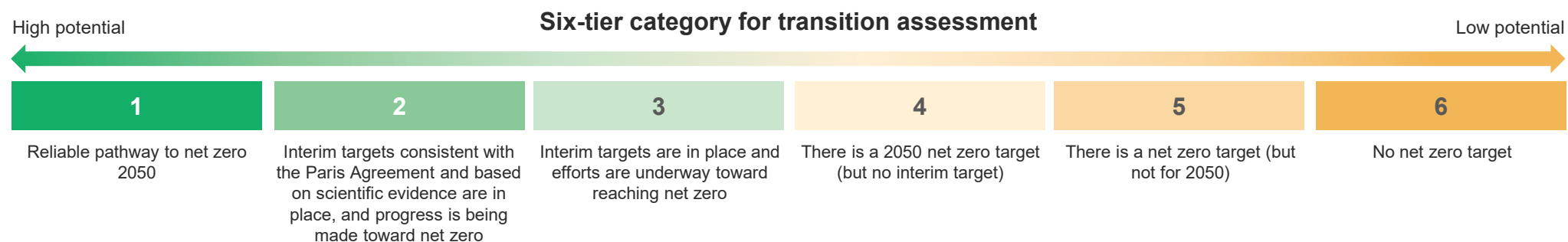
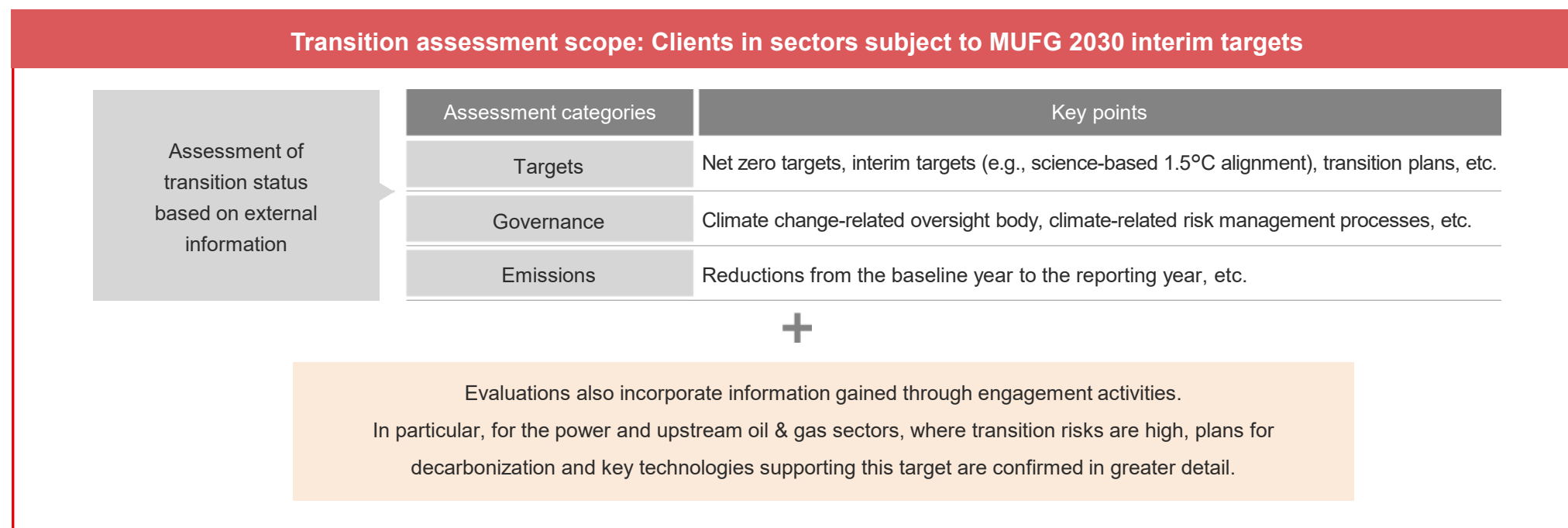
Sector	Transition risk	Physical risk	Business opportunity
 Chemicals	Middle	Middle	+
 Construction Materials	Middle	Middle	+
 Capital Goods	Middle	Middle	++
 Real Estate Management & Development	Low	Low	++
 Beverages	Low	Middle	+
 Agriculture	Low	Middle	++
 Packaged Foods & Meats	Low	Middle	++
 Paper & Forest Products	Middle	Middle	+

^{*1} Task Force on Climate-related Financial Disclosures

^{*2} Based on a sector-specific 2050 capital investment forecasts that takes the NGFS scenario into account, conducted by an external research organization

Risk management: Transition assessment framework (overview)

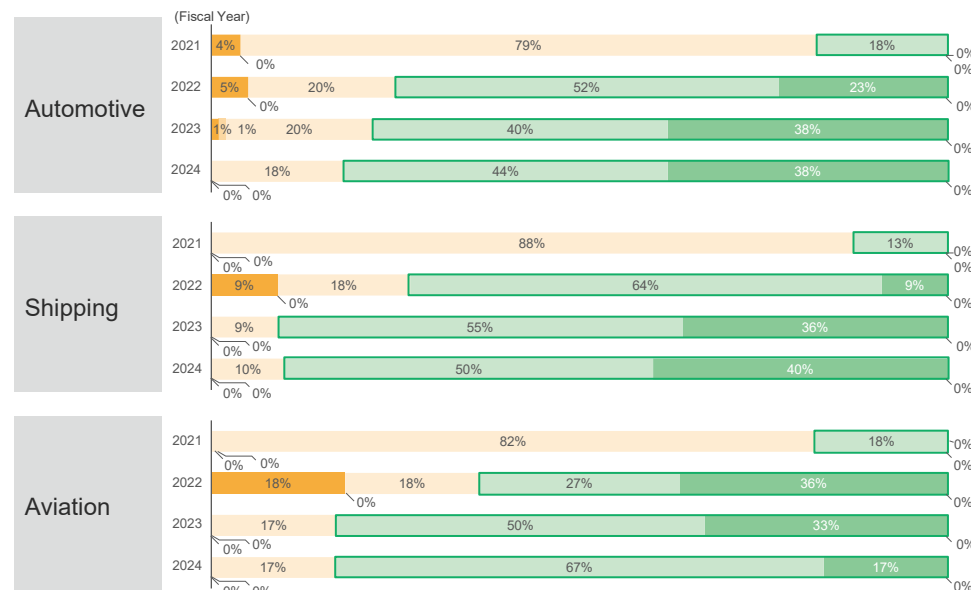
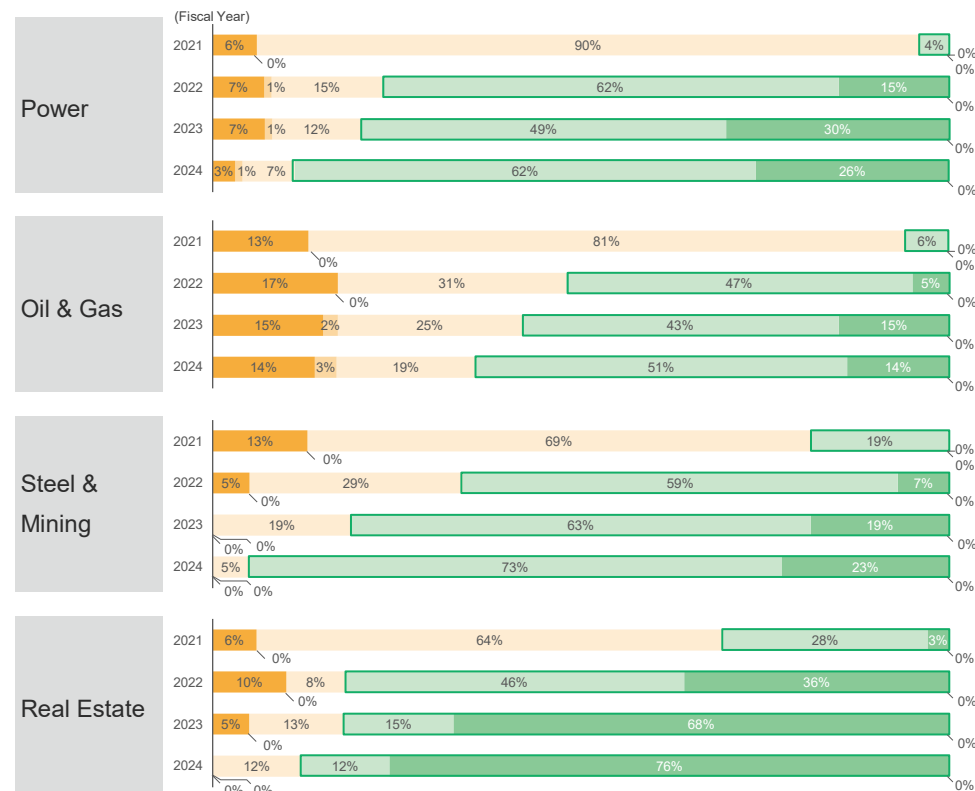
MUFG assesses the transition status of clients in carbon intensive sectors, looking at areas such as 1.5°C alignment with interim targets, transition plans, climate-related governance structure, and past emission reduction records. In addition to this assessment, other information obtained through engagement activities are reflected in the six-tier category to evaluate our clients' transition progress.



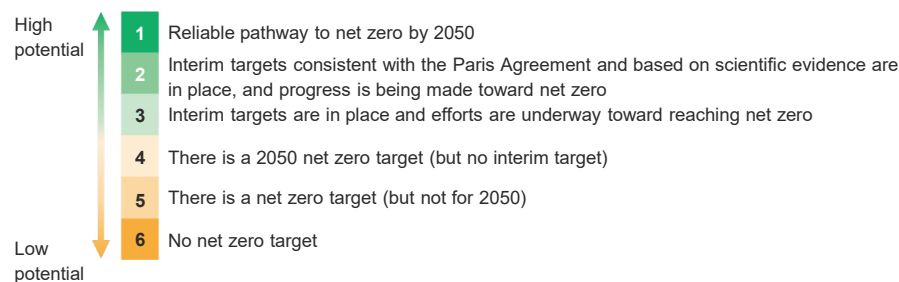
Risk management: Transition assessment framework (assessment results)

Through engagement activities, MUFG checks on clients' transition status and provides support to accelerate towards net zero. With regard to carbon intensive sectors for which 2030 interim targets have been set by MUFG, the percentage of clients who are working toward transitions increased from 2022 to 2023.

Transition assessment^{*1*2}



Six-tier category for transition assessment



^{*1} For clients in emissions-intensive sectors subject to MUFG 2030 interim targets, transition assessments are conducted based on CDP data for each year, confirmed by department in charge of clients.

For clients without CDP data and in sectors with high transition risk, assessment is conducted with information from the latest disclosure information and client interviews.

^{*2} Transition assessment results for past years have been revised due to refinement in available data

(Power: FY2023, Oil & gas: FY2022, FY2023)

Risk management: Environmental and Social Policy Framework

When considering an individual project, we apply the Environmental and Social Policy Framework to appropriately identify and manage environmental and social risks, and confirm the implementation status of clients' environmental and social considerations. Furthermore, we have implemented a transition screening mechanism for projects that require specialized transition assessments where several expert departments collaborate to determine how to handle such project.

Environmental and Social Policy Framework

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 Washington Convention
- Transactions involving the use of child labor, forced labor, or human trafficking
- Cluster munitions and inhumane weapons manufacturing

Transactions of High Caution

Cross-sector guidelines	<ul style="list-style-type: none"> ● Transactions that negatively impact indigenous communities ● Land expropriation leading to involuntary resettlement ● Transactions that negatively impact high conservation value areas ● Transactions that cause or contribute to, or directly link with, violation of human rights in conflict areas 		
Sector-specific guidelines	<ul style="list-style-type: none"> ● Coal-fired power generation ● Mining ● Oil & gas (oil sand, development of the Arctic, shale oil & gas, oil & gas pipelines) 	<ul style="list-style-type: none"> ● Large hydropower generation ● Biomass power generation 	<ul style="list-style-type: none"> ● Forestry ● Palm oil ● Fisheries and aquaculture

Transition screening

Screening is conducted by several expert departments for transactions that require deeply scrutinized transition assessments.

Screening points (non-exhaustive)

Alignment with national decarbonization plans

Plans for net zero

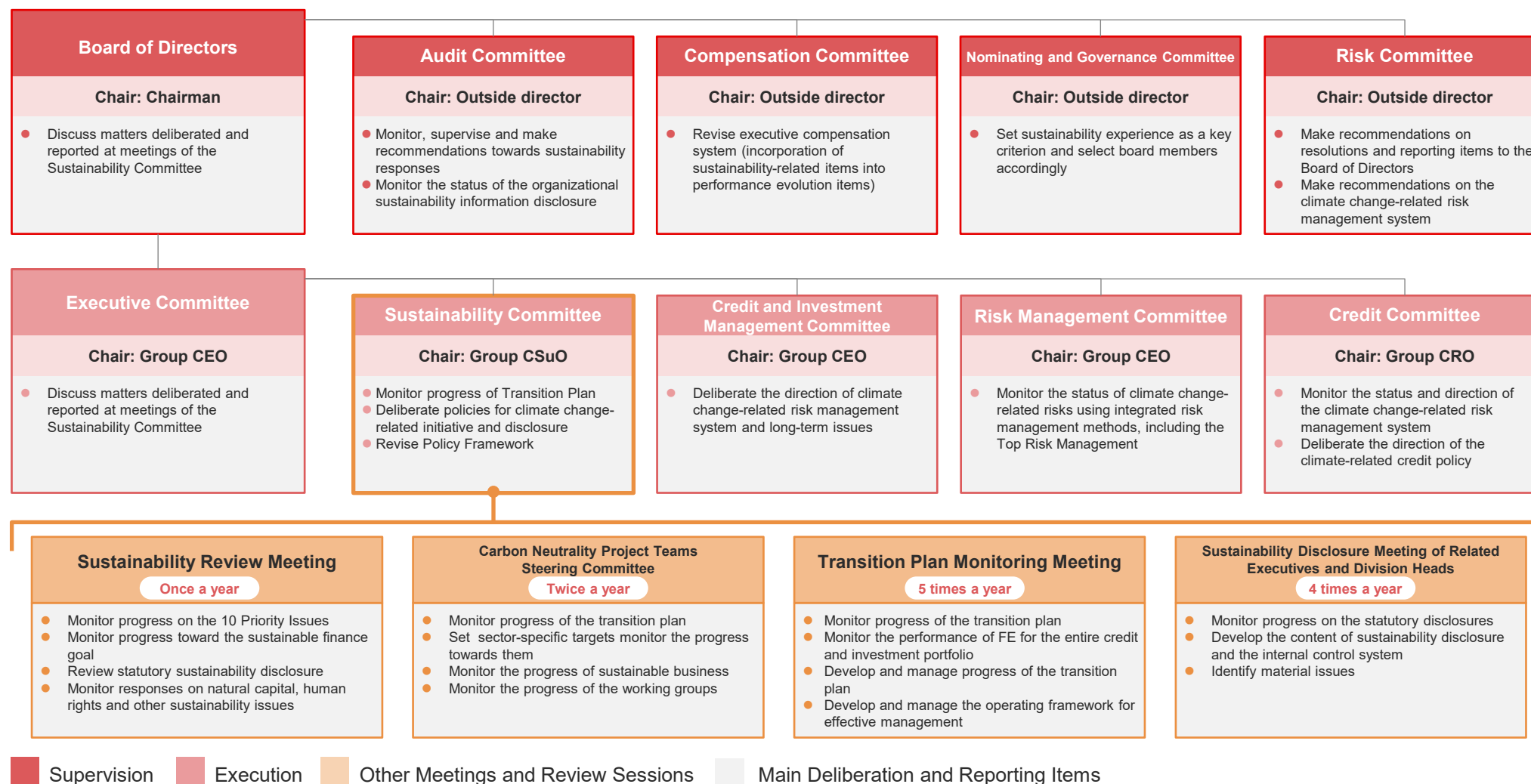
Effective and ongoing dialogue

Efforts to measure and reduce emissions from installed equipment

Technical readiness and social implementation

Governance: Overview of committees

The Sustainability Committee under the Executive Committee discusses a wide range of opportunities and risks related to environmental and social issues. For climate change response, the Steering Committee and the Transition Plan Monitoring Meeting convene to discuss strategies and policies, ensuring timely decision-making. Furthermore, each initiative is reviewed and reported to supervisory bodies, including the Board of Directors.



Governance: Directors skills matrix

MUFG's Board of Directors is comprised of multiple Outside Directors and candidates with knowledge, expertise, and experience in sustainability.

Skills Matrix

Name	Responsibility	Outside Director	Knowledge, expertise, experience						
			Corporate Management	Finance	Finance & Accounting	Legal affairs	Global	IT/Digital	Sustainability
1 Mariko Fujii ^{*1}	Nomination, Compensation, Risk ²	●	—	●	—	—	●	—	—
2 Keiko Honda	Audit	●	—	●	—	—	●	—	●
3 Kaoru Kato ^{*1}	Nomination, Compensation, Audit	●	●	—	—	—	—	●	●
4 Satoko Kuwabara	Nomination, Compensation ^{*2}	●	—	—	—	●	●	—	●
5 Hiromichi Nomoto	Nomination ^{*2} , Compensation	●	●	—	—	—	—	●	●
6 Mari Elka Pangestu	Risk	●	—	●	—	—	●	—	●
7 Hiroshi Shimizu	Risk	●	●	●	—	—	—	●	●
8 David Sneider	Risk	●	—	—	—	●	●	—	—
9 Koichi Tsuji	Audit ^{*2}	●	—	—	●	—	●	—	—
10 Kenichi Miyanaga ^{*1}	Audit	—	Familiar with the Group's business and possesses the ability to properly execute the Group's business management				●	—	—
11 Ryoichi Shinke	Audit						●	—	—
12 Kanetsugu Mike	—						●	●	●
13 Hironori Kamezawa	Nomination, Compensation						●	●	●
14 Iwao Nagashima ^{*1}	—						●	—	●
15 Junichi Hanzawa	—						—	—	●
16 Makoto Kobayashi	—						●	—	●

As of March 31, 2025. Nomination: Nominating and Governance Committee member, Compensation: Compensation Committee member, Audit: Audit Committee member, Risk: Risk Committee Member

*1 Scheduled to retire at the conclusion of the Annual General Meeting in June 2025

*2 Indicates chair

Knowledge, Expertise, and Experience of Outside Directors and Candidates

Ms. Keiko Honda

- Worked at McKinsey & Company, Inc. Japan, and served as CEO of the Multilateral Investment Guarantee Agency (World Bank Group)
- Possesses expertise in finance and economics gained during this period
- Additionally, has extensive experience in sustainability, including serving as a professor specializing in sustainable investment at a graduate school

Mr. Kaoru Kato

- Former President and CEO of NTT DOCOMO, Inc.
- Has extensive experience as a business executive and actively promotes sustainability management
- Additionally, has extensive experience in the fields of telecommunications and digital technology

Mr. Hirofumi Nomoto

- Former President of Tokyu Corporation (formerly Tokyo Kyuko Electric Railway Company)
- Has extensive experience as a business executive and actively promotes sustainability management
- Additionally, has extensive experience in real estate, life services, IT, and digital technology

Ms. Satoko Kuwabara

- Has extensive experience as a lawyer and expertise in general legal affairs
- Additionally, has extensive experience in sustainability, including serving as a member of the Advisory Committee for Natural Resources and Energy of the Ministry of Economy, Trade and Industry, Japan

Mr. Hiroshi Shimizu

- Former Senior Managing Executive Officer (Head of Asset Management Division, Head of Financial Planning Department) at Nippon Life Insurance Company
- Currently serves as President of the Company, bringing extensive experience as a business executive and actively promoting sustainability management
- Additionally, has expertise in finance and extensive experience in IT and digital technology

Ms. Mari Elka Pangestu

- Former Minister of Trade and Minister of Tourism and Creative Economy of Indonesia, and Managing Director of Development Policy and Partnerships at the World Bank
- Possesses extensive experience in sustainability, with expertise in finance, economics, and public policy, along with a broad background in international organizations and government

As of March 31, 2025.

Governance: Initiatives to enhance directors' competencies

Sustainability initiatives, including those aimed at carbon neutrality, are regularly reported to and discussed with the Board of Directors. Additionally, measures to enhance the competencies of the directors, such as regular study sessions and discussions with external experts, are implemented.

Discussions with Directors

In addition to discussing the progress of the transition plan and the direction of future responses at Board of Directors meetings, we provide opportunities for directors to further enhance their knowledge and expertise. The outside directors provide recommendations for sustainability management and carbon neutrality from diverse perspectives, informed by international discussions and market demands.

Main Discussion Points

- Issues and Direction of Transition
 - Challenges to society-wide deployment of transition technologies (e.g. price pass-through, timeframe)
 - Types of finance needed to achieve transition
 - International discussions on blended finance
- Direction of Climate Change Response Informed by Domestic and International Contexts
 - Policies and energy-related plans in various jurisdictions and trends in international initiatives
 - Claims of external stakeholders including NGOs
- Sustainability Disclosure
 - Selection process of material issues and candidate topics for disclosure
 - Processes for identifying, evaluating, and prioritizing risks and opportunities

Study Sessions for Directors

Regular study sessions are held for the directors. In December 2024, we invited Professor Hideka Morimoto from Waseda University, a former Vice Minister of Environment, to deliver a lecture on “Global and Domestic Trends Related to Climate Change.” The session included discussions on global trends and Japan's efforts to advance the GX strategy.

Main Discussion Points of the Lecture

- Current status of GX strategies in major countries, including the US, EU, China, and comparison with Japan
- Assessment of renewable energy and EV considering their life cycles and long-term use
- Future prospects of carbon pricing

Discussions with External Advisors

Management regularly meets with external advisors to stay informed about the latest trends and receive recommendations for enhancing MUFG's strategies and initiatives.

(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.
Miyuki Zeniya ^{*1}	Former CSuO of MUFG

^{*1} Appointed from April 2025

Governance: Compensation system

MUFG has established a “ESG Assessment” system, which integrates sustainability-related factors, such as reductions of GHG emissions from own operations, into medium- to long-term performance-based stock compensations. In addition, the qualitative evaluation of individual execution of duties for bonuses for the CEO and relevant officers incorporates “contribution to solution of social and environmental issues” as a target. In the executive compensation system from FY2025 onwards, we will continue to emphasize contributions to sustainability and solution of social and environmental issues, including climate change.

	Linkage with performance	Performance-based range	Time of payment	Payment method	Standards for payment															
						Weight														
Annual base salary	Fixed	-	Monthly	Cash	Paid based on positions, etc.															
Stock Compensation	Non-performance-based	-	At the time of retirement of executives		Base amount by position															
	Medium- to Long-term Performance-based	0-150%	At the end of the MTBP	50% in shares and 50% in cash *Subject to malus (confiscation) and clawback (restitution claim)	Base amount by position ×	<table><tr><td>Performance factor (MTBP achievement evaluation)</td><td>55%</td></tr><tr><td>1.Consolidated ROE*¹</td><td>30%</td></tr><tr><td>2.Consolidated expense ratio *¹</td><td>10%</td></tr><tr><td>3.ESG assessment</td><td>10%</td></tr><tr><td>4.TSR *²</td><td>5%</td></tr><tr><td>Performance-linked Coefficient (competitor Comparison Evaluation)*³</td><td>45%</td></tr></table>	Performance factor (MTBP achievement evaluation)	55%	1.Consolidated ROE* ¹	30%	2.Consolidated expense ratio * ¹	10%	3.ESG assessment	10%	4.TSR * ²	5%	Performance-linked Coefficient (competitor Comparison Evaluation)*³	45%		
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4.TSR * ²	5%																			
Performance-linked Coefficient (competitor Comparison Evaluation)*³	45%																			
Cash Bonuses	Short-term Performance-based	0-150%	Annually	Cash *Subject to malus (confiscation) and clawback (restitution claim)	Base amount by position ×	<table><tr><td>Performance factor (quantitative evaluation factor)</td><td>60%</td></tr><tr><td>Status of individual execution of duties (qualitative evaluation factor)</td><td>40%</td></tr><tr><td colspan="2">(Example of the CEO)</td></tr><tr><td colspan="2">• Expand & refine growth strategies</td></tr><tr><td colspan="2">• Drive social & environmental progress</td></tr><tr><td colspan="2">• Accelerate transformation & innovation</td></tr><tr><td colspan="2">• Enhancement of value provided to stakeholders</td></tr></table>	Performance factor (quantitative evaluation factor)	60%	Status of individual execution of duties (qualitative evaluation factor)	40%	(Example of the CEO)		• Expand & refine growth strategies		• Drive social & environmental progress		• Accelerate transformation & innovation		• Enhancement of value provided to stakeholders	
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(Example of the CEO)																				
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• Enhancement of value provided to stakeholders																				

Breakdown *Each weighs 2.5%

- Reduction of GHG emissions from own operations
- Improvement of the employee survey scores
- Raising of the ratio of women in management
- ESG assessments by external assessment agencies

A relative evaluation is carried out on the degree of improvement of third-party assessments By the five major ESG assessment agencies (MSCI, FTSE Russell, Sustainalytics, S&P Dow Jones and CDP)

Establishment of targets for the initiatives below in evaluation of the Group CEO and relevant officers

Sustainable Society

- Achievement of carbon neutral society
- Natural capital and biodiversity restoration
- Promotion of circular economy

Vibrant Society

- Industry Development
- Response to aging population & low birthrate
- Management focusing on human capital etc.

Resilient Society

- Respect for human rights, ensure secure and safe services, etc.

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*¹ The degree of achievement vis-à-vis target levels stipulated in the Medium-Term Business Plan (MTBP) regarding consolidated ROE and consolidated expense ratio is determined on an absolute evaluation basis.

*² Total Shareholder Return

*³ Relative comparisons with competitors are made with Mizuho Financial Group and Sumitomo Mitsui Financial Group

Capability building

MUFG is also committed to developing employee capabilities to achieve carbon neutrality by 2050. In addition to fostering awareness among all staff, we are implementing measures tailored to employees' roles, including knowledge development and strengthening of engagement skills.

1 Knowledge development and sharing for staff managing large corporate clients



Sharing of GX-related Information

- Facilitation of information sharing with approximately 500 employees through GXPT Information Liaison Meetings to promote GX-related investments and financing.

17 times

Mandatory Acquisition of Sustainability-related Qualifications

- Mandatory requirements for large corporate relationship managers to obtain sustainability-related qualifications.

Visualization of Emissions for the Companies under the Interim Targets

- A tool for relationship managers for the companies covered by MUFG's interim targets to check the emission statuses

Introduction of Client Dialogue Tool

- Various tools that use generative AI to analyze clients' sustainability disclosures, providing an objective understanding of their efforts and facilitating discussions, etc.

2 Strengthening engagement capabilities of staff managing SMEs



Study Sessions for Sustainable Business Promotion Leaders

- Study sessions for Sustainable Business Promotion Leaders at sales offices

6 times

Example theme: Analyzing management issues based on clients' disclosure information

Study Sessions for Sales Offices

- In-person study sessions by the Sustainable Business Department for each sales office

19 times

Example Theme: Importance of incorporating sustainability into business

Introduction of Client Dialogue Tool

- A tool for identifying issues and providing tailored advice depending on clients' sustainability management initiatives

3 Education and awareness-raising for all employees



e-Learning for All Employees

- e-learning at the bank, trust bank, and MUMSS to provide basic knowledge on the 10 priority issues, including climate change

Seminars for Employees

- Seminar by Kenji Fuma, an external advisor in the environmental and social fields, on the theme of "Social and Economic Value"

c.630 employees*1

Support for Obtaining Sustainability-related Qualifications

- Expansion of the support system for obtaining sustainability-related qualifications starting FY2024.

2,100+ employees*2

*1 Total number of seminar participants *2 Total number of qualification holders at the bank, trust bank, and MUMSS in FY2024

Next steps

Key initiatives under the four strategies of the MUFG Transition Plan

While strengthening existing initiatives for each of our key strategies, MUFG will also pursue new initiatives that will contribute to achieving carbon neutrality.

1

Reducing emissions from own operations

- Promote GHG emissions reduction initiatives domestically and internationally to achieve the FY2026 interim targets
- Contribute to reduction of environmental impact by advancing the procurement of renewable energy with additionality
- Realize and promote various business co-creations through partnerships with clients

3

Managing our financed portfolio

- Enhance the framework for the evaluation and management of the progress through transition plan monitoring
- Improve portfolio emissions forecast based on real economy trends, including policy, sector, and technology.
- Periodically review sector-specific interim targets based on the latest energy supply and demand trends, as well as updated NDCs and national policies

2

Engagement and support

- Further promote renewable energy-related businesses and transition support
- Pursue effective engagement and promote blended finance through activities such as transition whitepapers and policy proposals
- Strengthen communication to promote transition in Japan and Asia
- Implement integrated initiatives for natural capital, circular economy, and human rights

4

Risk management and governance

- Regularly review the climate change risk management framework
- Respond to sustainability information disclosure regulations and strengthen internal controls
- Enhance climate change-related data management
- Continue to strengthen capabilities to improve engagement

Other initiatives

Initiatives of MUFG AM: Progress

Since April 2023, MUFG Asset Management (“MUFG AM”) has been promoting sustainable investment through group discussions as MUFG AM Sustainable Investment. By consolidating specialized personnel and appointing external talent of MUFG AM. MUFG AM aims to accumulate globally competitive expertise and expand its products and services to further promote sustainable investment.

Progress on Climate Change

We have been actively tackling with Climate Change. We joined NZAM (Net Zero Asset Managers Initiative) in 2021 and held a side event with the Asian Development Bank (ADB) at COP28 in 2023. In addition, we published “MUFG Asset Management Climate & Nature Report” in March 2025.

2019 Start of the MUFG AM Structure

2021 Participated in NZAM

2023 Co-hosted a side event with the Asian Development Bank (ADB) at COP28

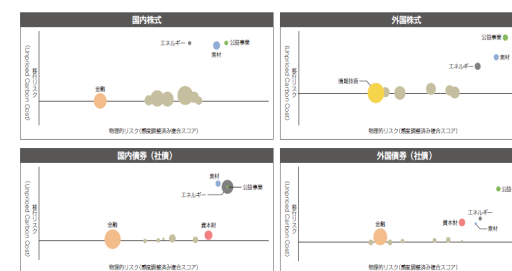
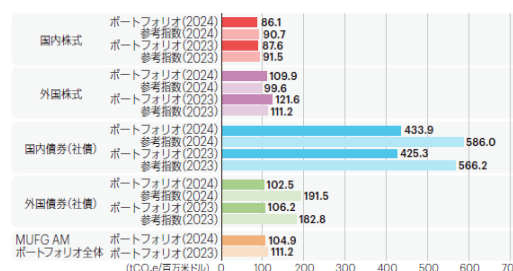
2024 Host an expert roundtable with ADB
Prepare a joint research paper

2025 Published MUFG AM Climate & Nature report

Overview of Climate & Nature report

Because “Climate Change” and “Natural capital / Biodiversity” are interconnected, we published “MUFG Asset Management Climate & Nature Report” in March 2025, which integrated “Climate Change” and “Natural capital / Biodiversity”.

In addition to analyzing the GHG emissions, transition and physical risks of MUFG AM equity and corporate bond portfolio, we disclose the analysis and engagement cases for key sectors by analysts in achieving decarbonization.



*1 As of the publication date of this report (April 4, 2025), NZAM is temporarily suspended.

Initiatives of MUFG AM: Approach to realization of transition plan

MUFG AM announced its NZAM interim target to “reduce GHG emissions by 50 percent by 2030, compared to FY2019 for 55 percent of assets under management” in 2022.

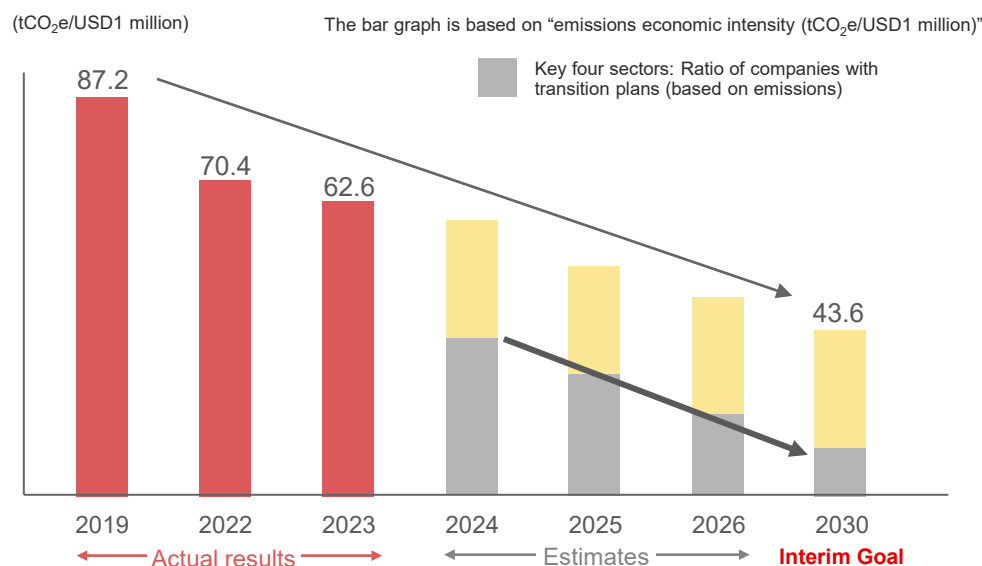
NZAM intermediate Goals and Achievements

Transition plans (pathways) and actual emissions data toward the interim goal achievement have been steadily decreasing. But this pace of decline needs to be maintained and expanded to achieve the interim target for 2030.

In order to identify sectors with large impact toward achieving the interim goal, we extracted four sectors with large GHG emissions (hereinafter referred to as the “key four sectors”) from the sector classification defined by TCFD*¹, further subdivided them into 16 sub-sectors, then conducted detailed analyses of risks and opportunities for each sub-sector.

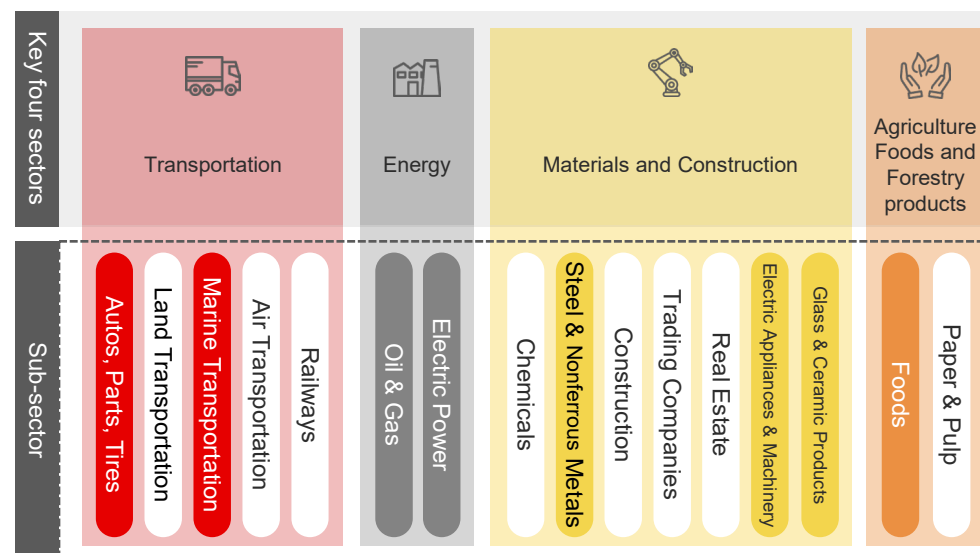
We aim to achieve a transition plan (pathway) for decarbonation by implementing more effective engagement based on these analyses’ results.

Transition plan (pathway) toward achieving the NZAM interim goal and actual GHG emissions



A list of sub-sectors linked to TCFD key four sectors

Subsectors that have a high percentage of GHG emissions and require detailed analysis



*1 Task Force on Climate-related Financial Disclosures

Initiatives of MUFG AM: Summary of analyst's analysis results regarding the four key sectors

The results of the qualitative analysis conducted by analysts on the four key sectors and their subsectors are as follows*1.



Transportation sector

Autos, Parts, Tires

Marine Transportation

- The automotive industry is making progress in reducing CO₂ emissions during operation through electrification. The challenges include formulating effective policies considering fuel circumstances in each market and determining the timing for implementation.
- The shipping industry is making progress in energy-saving technologies and slow steaming. Transitioning to low-emission next-generation fuels is key to decarbonization among stakeholders are necessary.
- Across the entire sector, it is necessary to redefine the industrial structure considering the introduction of new technologies and to formulate strategies that achieve both co-creation advantages and decarbonization.



Energy sector

Oil & Gas

Electric Power

- The oil and gas industry is making progress in energy conservation at refineries and fuel switching, but significant emission reductions remain challenging. The practical application of e-methane and next-generation fuels through technological development will be key in the future.
- The electricity industry is making progress towards achieving its 2030 goals. To support this achievement, it is necessary to expand and enhance the efficiency of non-fossil power sources.
- Across the sector, there is a need to strengthen efforts to promote decarbonization through technological innovation and policy response.



Materials and Construction sector

Steel & Nonferrous Metals

Electric Appliances & Machinery

Glass & Ceramic Products

- The steel industry is making progress in reducing emissions through equipment optimization. The full-scale introduction of low-carbon technologies is expected to begin in the 2030s. Expanding investments and addressing cost burdens are key factors.
- The non-ferrous industry is focusing on both short-term challenges, such as fuel conversion, and long-term challenges such as expanding downstream businesses.
- Across the entire sector, it is necessary to develop technologies and select key investment areas tailored to the characteristics of the industry.



Agriculture Foods and Forestry Products sector




Foods

- The food industry is making progress in reducing Scope 1, 2 emissions. Many companies are now in sight of achieving their medium-term goals due to the shift to renewable energy and the introduction of energy-efficient equipment. However, achieving net zero across the entire supply chain remains challenging. There are still a wide range of issues to address, including collaboration with upstream processes such as crop improvement, decarbonization of logistics, and reduction of production losses.
- A precise understanding of these challenges and accelerated decarbonization efforts through dialogue with companies, sharing examples from other industries, are essential.

*1 For detailed analysis results on the four key sectors and sub-sectors by analysts, please refer to "MUFG Asset Management Climate & Nature Report (2024)".

Initiatives of MUFG AM: Cases of thematic engagement

At MUFG AM, we are promoting initiatives to enhance our engagement framework aimed at addressing environmental and social issues, as well as strengthening support for corporate behavioral changes. Regarding climate change, there is a pressing need to implement steady measures toward achieving net zero. We will focus our dialogue on companies with significant impact, working to foster mutual understanding with our investee companies as we move forward.

	 Transportation sector Automotive company A	 Energy sector Electric Power company B	 Materials and Construction sector Non-Ferrous Company C
Focus and aim of analysts	The details of the medium to long-term development and investment plans for core products have not been clarified. Engagement is being conducted with the aim of examining potential transition risks and the necessary measures moving forward.	The company's performance is strong, and it has high financial investment capacity. By strengthening its response to climate change, the company has room to further differentiate itself from competitors. A proposal has been made to discuss long-term growth strategies.	The expansion of recycling processes that do not rely on existing processes has emerged as an important theme. The stable procurement of recycled materials is also a challenge, and discussions are ongoing regarding the establishment of a sustainable resource recycling business.
Reaction from companies that we held dialogues with	It has been confirmed that short to medium-term investment risks are limited. For medium to long term themes such as air pollution are tire dust, there is agreement on establishing industry-wide measurement methods and monitoring policy trends.	The GHG emission targets have been revised. The development of renewable energy is also progressing steadily. The plans of major competitor are quite aggressive, and the company intends to enhance the specificity of its growth strategy while considering national energy policies.	The plant undergoing feasibility studies in the United States faces challenges due to the heavy burden of initial investment, while in Europe, progress has been confirmed in establishing the foundation for closed-loop recycling.
Future engagement objectives	In addition to environmental measures for vehicles, leveraging connected technologies for logistics efficiency is crucial, and there is a need to shift the focus on soft measures in the future.	A request has been made to refine the road map for future emission reductions. Discussions will continue on whether there is room to further accelerate growth strategies, including renewable energy.	Along with strengthening the business foundation in Europe, there has also been an exchange of opinions regarding potential business opportunities and future expansion in regions outside of Europe.

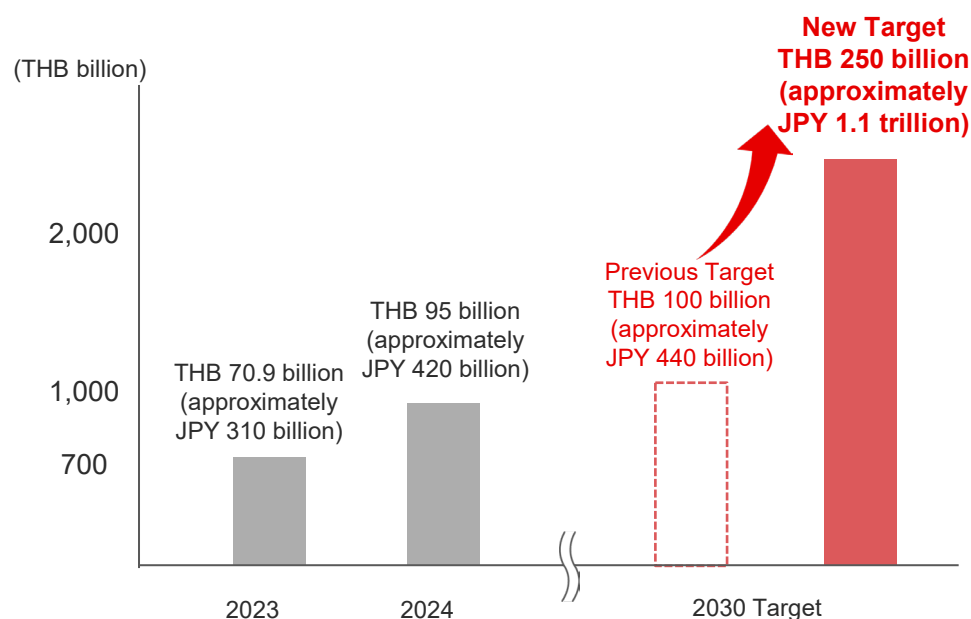
Initiatives of our partner bank (Krungsri)

Krungsri has expanded its 2030 target, taking into account the steady accumulation of sustainable finance achievements amid growing financing needs.

Krungsri's initiatives

- Krungsri expanded its sustainable finance target for 2030 from 100 billion baht (approximately 440 billion yen) to 250 billion baht (approximately 1.1 trillion yen). In addition to financing support, Krungsri is also collaborating with the Electricity Generating Authority of Thailand (EGAT) to introduce decarbonization solutions.
- Going forward, Krungsri is developing its transition plan to submit to the Bank of Thailand and enhancing its measurement and disclosure of FE.

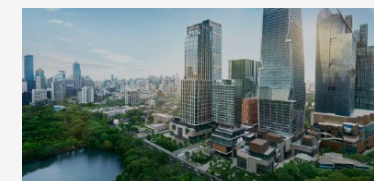
Expanded sustainable finance target



Key initiatives

One Bangkok: Supporting green financing

- In November 2024, Krungsri, as a joint lead manager, supported a 50 billion baht green loan for One Bangkok, a major urban development project in Bangkok.
- This marks the largest green loan in Thailand, aimed at promoting sustainable urban development, including the construction of green buildings.



Signing MOU with EGAT

- In April 2024, an MOU was signed with the state-owned Electricity Generating Authority of Thailand (EGAT).
- Collaboration in introducing EGAT's solutions, such as renewable energy equipment, to support clients' decarbonization efforts, and providing financial support.



Appendix

Transition plan based on GFANZ guidance

MUFG has developed its own transition plan in accordance with the transition plan guidance framework by GFANZ. The content of this report is aligned with the transition plan guidance framework as shown in the following table.

GFANZ guidance framework themes and recommended components*1			MUFG's Response	
Foundations	Objectives and priorities	<ul style="list-style-type: none"> Definition of targets and timeline to achieve net zero emissions by 2050 (or earlier) to achieve a 1.5°C pathway Financing strategies (including priorities) for measurable medium- and long-term goals and achieving net-zero emissions 	MTBP P.8 CN Declaration P.10 3 Commitments P.10 Sustainable finance target P.25 Sector-specific interim targets P.52	
	Products and services	<ul style="list-style-type: none"> Existing and new products and services to support client transitions to achieve 1.5°C Support for net-zero transition of the real economy and advice on portfolio decarbonization 	2.1 Approach and finance P.22-27 2.2 Transition support P.28-39 2.3 Expanded solutions P.40-47	
Implementation Strategy	Activities and decision-making	<ul style="list-style-type: none"> Embed the financial institution's net-zero objectives and priorities in its evaluation and decision-making tools and processes to support its net-zero commitment 	Effective management framework P.49 Sector-specific Risks P.65 Transition assessment P.66 Transition screening P.68	
	Policies and conditions	<ul style="list-style-type: none"> Establish and apply policies and conditions on priority sectors and activities such as thermal coal, oil and gas, and deforestation Include other high-emitting sectors to define business boundaries in line with net-zero objectives 	Approach to achieving targets by sector P.55-59 Environmental and Social Policy Framework P.68	
	Clients and portfolio companies	<ul style="list-style-type: none"> Proactively and constructively provide feedback and support to clients to encourage net zero-aligned transition strategies, plans, and processes Escalation process when engagement is ineffective 	Engagement approach P.23 Transition support P.29 Escalation process P.49 Transition assessment P.66	
Engagement Strategy	Industry	<ul style="list-style-type: none"> As appropriate, exchange transition expertise and collectively work on common challenges Represent the financial sector's views cohesively to external stakeholders, such as clients and governments 	Engagement approach P.23 Transition support P.29 Transition whitepaper P.30-34	
	Government and public sector	<ul style="list-style-type: none"> Direct and indirect lobbying and partner with governments/public sector toward net-zero transitions Ensure alignment between client/portfolio companies' lobbying and initiatives for net zero 	Engagement approach P.23 Transition support P.29 Policy engagement P.37-38	
	Metrics and targets	<ul style="list-style-type: none"> Establish appropriate metrics to drive execution of the net-zero transition plan and monitor the progress 	Operational emissions P.16 Sustainable finance target P.25 Sector-specific interim targets P.52 Approach to achieving targets by sector P.55-59	
Metrics and Targets	Roles, responsibilities, and remuneration	<ul style="list-style-type: none"> Define roles for the Board of Directors or management/organizations responsible for managing net-zero targets Review remuneration systems and transition plans regularly 	Promotion structure P.12 Meeting structure P.69 Directors' skill set P.70 Directors' competency P.71 Compensation system P.72	
	Skills and culture	<ul style="list-style-type: none"> Training and development support to provide skills and knowledge (including the Board of Directors and management) Programs and communications to embed the net-zero transition plan into the organization's culture and practices 	Capability building P.73	
Governance				

*1 Based on "Financial Institution Net-zero Transition Plans – Fundamentals, Recommendations, and Guidance" (Nov. 2022)

Details of financed emission (FE) in our portfolio

Portfolio FE breakdown by sector

	MtCO ₂ e	Oil & Gas	Coal	Electric Utilities	Aviation	Maritime Transportation	Rail Transportation	Trucking Services	Auto-Mobiles & Components	Metals & Mining	Chemicals	Construction Materials	Capital Goods	Real Estate Management & Development	Beverages	Agriculture	Packaged Foods & Meats	Paper & Forest Products	Others	Total
FY2022	Scope 1 and 2	36	0.2	73	13	10	0.5	1	3	20	11	5	2	0.4	0.3	1	4	2	15	196
	Scope 3	135	0.3	32	4	5	0.9	4	75	28	26	2	380	2	2	1	17	2	104	819
	Loan balance in scope of FE *1 (USD billion)	48	0.4	58	18	14	13	11	59	26	34	5	48	74	6	1	14	5	404	839
	PCAF Score (Scope 1 and 2)	2.7	3.3	2.4	2.6	2.9	2.7	3.6	2.1	2.1	2.2	2.5	1.9	2.9	2.0	3.4	3.0	2.8	3.7	3.1
	PCAF Score (Scope 3)	2.8	3.5	2.6	2.6	3.0	2.7	3.7	2.0	2.2	2.3	2.6	2.0	2.8	1.6	3.6	3.1	3.1	3.7	3.1
FY2023	Scope 1 and 2	37	0.3	65	11	8	0.3	0.4	2	19	9	3	2	0.4	0.2	1	3	1	16	177
	Scope 3	115	0.3	30	4	4	1	3	74	23	25	1	258	3	1	0.4	10	2	145	699
	Loan balance in scope of FE *2 (USD billion)	42	0.4	55	15	13	10	12	53	22	29	3	41	71	6	1	13	5	369	758
	PCAF Score (Scope 1 and 2)	2.8	4.0	2.6	2.9	3.0	3.3	3.5	1.9	2.0	2.3	2.2	2.2	2.9	1.9	3.6	3.2	2.9	3.0	2.8
	PCAF Score (Scope 3)	2.9	4.1	2.9	3.0	3.0	2.9	3.7	2.0	2.2	2.5	2.4	2.3	2.9	2.0	4.1	3.2	3.2	3.0	2.8

*1 Loan balance as of March 31, 2023 (including undrawn-committed amounts)

*2 Loan balance as of March 31, 2024 (including undrawn-committed amounts)

Target-setting process

MUFG has set 2030 targets by sector through process of ❶ selecting methodology, ❷ calculating baseline year results (baseline), ❸ estimating reduction trajectory (forecast), ❹ setting 2030 interim targets.



- Value chain, emissions scope (Upstream and downstream, Scope 1, 2, and 3)
- Target indicator (absolute emissions or emission intensity)

Main Target Indicators

Absolute Emissions (tCO₂e)
= Financed emission

Calculated by multiplying the client's absolute emissions by MUFG's share of credit to the client (Attribution factor)

Calculation Method

Absolute Emissions for Company A

×

Credit balance of Company A
Debt + equity for Company A

Attribution factor

Emission intensity (tCO₂e / activity volume)





Absolute emissions divided by activity volume^{*1}

Absolute Emissions for Company A

Activity volume for Company A

^{*1} The unit for activity volume differs by sector (e.g., electricity generation in the power sector, distance traveled in the automotive sector and the aviation sector, and floor area in the real estate sector).

Selecting sectors in scope: Approach to the value chain (1/2)




Sector		Target scope in the value chain				<div> <div></div> <div></div> </div> Scope for target setting	
 Power			Generation	Transmission	Use	Total	
	Share of emissions		96%	4%	*1	100%	
	Key players		Power generation companies*2	Power transmission companies	Users		
	Emissions scope from power utilities		Scope 1	Scope 3	Scope 1		
 Oil & Gas			Production & Refining	Transport & processing	Use	Total	
	Share of emissions		18%		82%	100%	
	Key players		Oil Companies	Transport companies	Users		
	Emissions scope from oil companies		Scope 1 and 2	Scope 3	Scope 3		
 Steel			Raw material procurement	Steel production	Use	Total	
	Share of emissions		11%	77%	12%	100%	
	Key players		Raw material companies	Steel Companies	Users		
	Emissions scope from steel companies		Scope 3	Scope 1 and 2	Scope 3		
 Real Estate			Materials & construction	Residence/use	Reconstruction & refurbishment	Demolition	Total
	Share of emissions		22%	75%	2%	1%	100%
	Key players		Construction companies	Real estate owners	Construction companies	Demolition Companies	
	Emissions scope from real estate owners	Properties owned	Scope 3	Scope 1 and 2	Scope 3	Scope 3	
		Leased Assets		Scope 3 Category 13			

*1 No new emissions from electricity use, same as Scope 1

*2 Scope 2 is excluded from scope due to low emissions share and immaterial impact

(Source) CDP; Japan Iron and Steel Federation; White Paper on Land, Infrastructure, Transport and Tourism in Japan; National Maritime Research Institute, Japan

Selecting sectors in scope: Approach to the value chain (2/2)

Sector	Target scope in the value chain	<div> <div></div> <div></div> Scope for target setting </div>			
		Parts manufacturing	Complete vehicle manufacturing	Driving & use	Total
 Automotive ^{*1}	Share of emissions	20%	1%	79%	100%
	Key players	Auto parts companies	Auto OEMs	Auto owners	
	Emissions scope from OEMs	Scope 3	Scope 1 and 2	Scope 3	
 Shipping	Share of emissions	Less than 1%	2%	98%	100%
	Key players	Shipping parts companies	Shipbuilders	Operators ^{*2}	
	Emissions scope from operators	Scope 3	Scope 3	Scope 1	
 Aviation	Share of emissions	2%	Less than 1%	98%	100%
	Key players	Aircraft parts companies	Aircraft manufacturers	Operators ^{*2}	
	Emissions scope from operators	Scope 3	Scope 3	Scope 1	

*1 Though OEMs are the scope for target setting with regard to automotive sector, Scope 3 (emissions from fuel use and driving) is the target scope

*2 Scope 2 is excluded from the target scope due to low emissions share and immaterial impact.

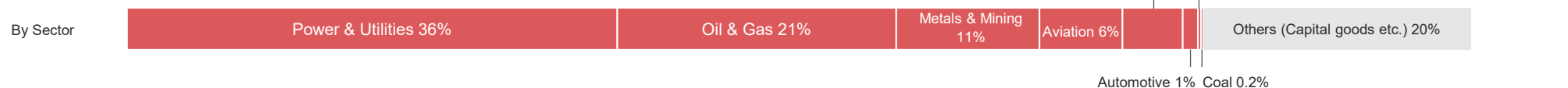
(Source) CDP, Greenhouse Gas Protocol

Supplementary sector information

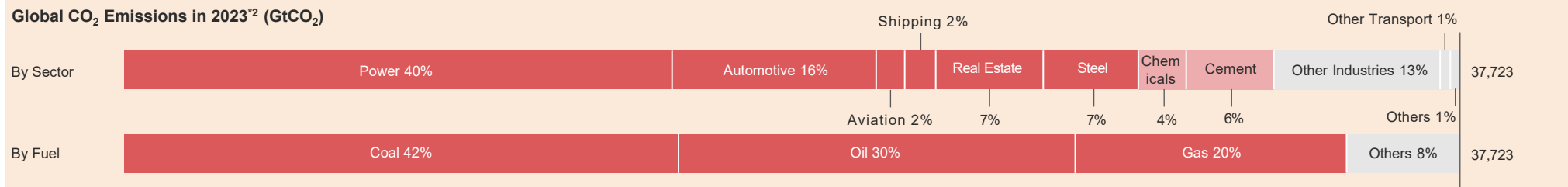
Sector overview

MUFG's Portfolio FE for FY2023

Coverage of the sectors by the set targets: Approximately 80%*1



Global CO₂ Emissions in 2023^{*2} (GtCO₂)



Formula for calculating emissions from the financed portfolio^{*3} (by sector)

- Emission intensity for the power sector

$$\sum \left(\text{Emission intensity for each client or project (gCO}_2\text{/kWh)} \times \frac{\text{Loan Amount for Each client and Project}}{\text{Total of loan amount to each client/project}} \right)$$

- Emission intensity for the commercial real estate sector

$$\sum \left(\text{Emission intensity of each client and NRL}^{*4} \text{ property (kgCO}_2\text{e/m}^2\text{)} \times \frac{\text{Loan Amount for Each client and NRL Property}}{\text{Total of loan amount to each client or NRL property}} \right)$$

- Absolute GHG emissions from the steel sector

$$\sum \left(\text{Attribution factor} \times \text{MUFG's credit share against debt + equity of each client} \times \text{GHG emissions of each client} \right)$$

- Emission intensity for the aviation sector

$$\sum \left(\text{Emission intensity for each client and aircraft (gCO}_2\text{/RPK)} \times \frac{\text{Loan amount to each client and aircraft}}{\text{Total of loan amount to each client or aircraft}} \right)$$

- Absolute GHG emissions from the oil & gas sector

$$\sum \left(\text{Attribution factor} \times \text{MUFG's credit share against debt + equity of each client/project} \times \text{GHG emissions of each client and project} \right)$$

- Emission intensity for the residential real estate sector

$$\sum \left(\text{Emission intensity of each property used to secure mortgage (kgCO}_2\text{e/m}^2\text{)} \times \frac{\text{Loan amount to each mortgage}}{\text{Total of loan amount to each mortgage}} \right)$$

- Emission intensity for the automotive sector

$$\sum \left(\text{Emission intensity of each client (gCO}_2\text{/vkm)} \times \frac{\text{Loan amount to each client}}{\text{Total of loan amount to each client}} \right)$$

- Method for calculating PCA for the shipping sector

$$\sum \left(\text{VCA} \times \frac{\text{Loan amount to each vessel}}{\text{Total of loan amount to each vessel in asset scope}} \right)$$

*1 Ratio of target sectors to the portfolio FE of Scope 1 and 2

*2 Source: Compiled by MUFG based on IEA WEO 2024

*3 Does not consider client offsets such as carbon credits

*4 Non-recourse loan

$$\text{Vessel Climate Alignment (VCA)} = \frac{\text{CO}_2\text{e emission intensity of each vessel (gCO}_2\text{e/dwt-nm)} - \text{Required trajectory value by vessel}}{\text{Required trajectory value by vessel}}$$

Methodology for facilitated emission

Facilitated emission (FaE) is the emission through financial institutions' capital market activities. We referred to PCAF Guidelines Part B for measuring facilitated emission.

Methodology for Facilitated Emission

	Power	Oil & Gas
Target Assets	Capital Market Activities (Bonds* ¹ , Equities, Syndicated Loans* ²)	
Target Projects	Projects facilitated by MUFG as lead bookrunner during the fiscal year (April to March)	
Combined with FE	<p>FaE Calculation Formula</p> $\sum \left(\frac{\text{Company A's absolute emissions}}{\text{Company A's power generation}} \times \frac{\text{MUFG's facilitated amount for company A}}{\text{Total facilitated amount in scope of FaE}} \right)$ $\left(\text{FE Intensity} \times \text{Total loan amount in scope of FE} \right) + \left(\text{FaE Intensity} \times \text{Total facilitated amount in scope of FaE} \times 33\% \right)$ $\text{Total loan amount in scope of FE} + \text{Total facilitated amount in scope of FaE} \times 33\%$	<p>FaE Calculation Formula</p> $\sum \left(\text{Company A's absolute emissions} \times \frac{\text{MUFG's facilitated amount for company A}}{\text{D+E of company A}} \times 33\% \right)$ $\text{FE absolute emissions} + \text{FaE absolute emissions}$
Data Sources	<ul style="list-style-type: none"> • Data on clients' finances and emissions: clients' disclosures, Bloomberg • Underwriting results: internal data, Dealogic 	

*1 Excludes green bonds *2 Excludes use-specific loans. Underwritten portions are measured as FE

Target products for sustainable finance

Target Products		Definition (Including for refinancing)
Environment	Project finance for renewable energy and environment-related projects	Underwriting amount of project finance executed for renewable energy and environment-related projects such as solar and wind power generation
	Financial advisory services for transactions/business for renewable energy and environment-related projects	Total amount of finance executed for renewable energy and environment-related projects such as solar and wind power generation (excluding the project finance above)
	Green bonds	Underwriting amount of finance executed for deals complying with the Green Bond Principles by the ICMA ^{*1}
	Green loans	Underwriting amount of finance executed for deals complying with the Green Loan Principles by the LMA and others ^{*2}
	Transition bonds / transition-linked bonds	Underwriting amount of finance executed for third-party certified projects that comply with the Green Loan Principles by the LMA and others
	Transition loans / transition-linked loans	
	Others	Finance that utilizes the government's environment-related interest subsidy programs or that is used for resolving environmental issues (e.g. renewable energy funds)
Social	Social bonds	Underwriting amount of finance executed for deals complying with the Social Bond Principles by the ICMA
	Project finance for public infrastructure-related projects	Underwriting amount of project finance for basic infrastructure facilities such as public transportation and water facilities as well as essential services such as hospitals and schools
	Financial advisory services for public infrastructure-related project financing	Total amount of finance for basic infrastructure facilities such as public transportation and water facilities as well as essential services such as hospitals and schools (excluding the project finance above)
	Others	Financing that utilizes the government's society-oriented interest subsidy programs or the new industry growth support program, or that is used for resolving social issues (e.g. microfinance funds and funds to make Japan a center of tourism initiatives)
Others	Sustainability bonds / sustainability-linked bonds	Underwriting amount of finance executed for projects that comply with the Sustainability Bond Guidelines and the Sustainability-Linked Bond Principles, both by ICMA
	Sustainability loans / sustainability-linked loans	Underwriting amount of finance executed for projects that comply with the Sustainability Bond Guidelines by the ICMA and the Sustainability-Linked Loan Principles by the LMA and others.
	Proprietary investments in green bonds, etc.	New investment amount for proprietary investments in green bonds, social bonds, etc.
	Positive impact finance	Underwriting amount of finance executed for deals complying with the Principles for Positive Impact Finance by the UNEP FI.
	Others	MUFG's proprietary sustainability-related products including sustainability management support loans and private placement bonds

^{*1} International Capital Market Association ^{*2} Loan Market Association

Abbreviations of MUFG organizations and titles

MUFG Organizations

Organization	Official Name/notes
MUFG	Mitsubishi UFJ Financial Group, Inc.
Bank	MUFG Bank, Ltd.
Trust	Mitsubishi UFJ Trust and Banking Corporation
Securities	Mitsubishi UFJ Securities Holdings Co., Ltd.
MUMSS	Mitsubishi UFJ Morgan Stanley Securities Co., Ltd.
MUFG AM	MUFG Asset Management – a brand consisting of Mitsubishi UFJ Trust and Banking Corporation, 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.
Krungsri (Bank of Ayudhya)	Bank of Ayudhya Public Company Limited.: An MUFG consolidated subsidiary in Thailand
Bank Danamon	PT Bank Danamon Indonesia Tbk: An MUFG consolidated subsidiary in Indonesia

MUFG titles

Abbreviation	Official title
CEO	Chief Executive Officer
CRO	Chief Risk Officer
CSO	Chief Strategy Officer
CFO	Chief Financial Officer
CSuO	Chief Sustainability Officer

Glossary (1/2)


Terms and Abbreviations	Official Name	Remarks
ATFSG	Asia Transition Finance Study Group	Based on the Asia Energy Transition Initiative (AETI) proposed at the Special Meeting of ASEAN Ministers on Energy in June 2021, the Asia Transition Finance Study Group was launched in October 2021 to "present and disseminate the concept of an Asian version of transition finance."
CCS CCU CCUS	Carbon dioxide Capture and Storage Carbon dioxide Capture and Utilization Carbon dioxide Capture, Utilization and Storage	CCS is a carbon capture and storage technology that separates out CO ₂ emitted from power plants, chemical plants, etc. from other gases, collects them, then stores or injects the CO ₂ deep underground. CCU refers to technology that separates, recovers, and reuses CO ₂ for fuel, while CCUS refers to technology that recovers, effectively uses, and stores CO ₂ .
CDP	-	CDP (a nonprofit organization) run by a coalition of institutional investors and with an office in London that calls on companies with high market capitalization in major countries to disclose their environmental strategies and greenhouse gas emissions.
CII	Carbon Intensity Indicator	An IMO framework for rating the annual fuel efficiency performance of existing ships on a five-point scale. It mandates the submission of improvement plans and approval by a relevant authority for low-rated ships to promote continuous energy-saving operations.
CO ₂ e	CO ₂ equivalent	Carbon dioxide equivalent (examples: methane and nitrous oxide, etc.) figures
COP	Conference of the Parties	The Conference of the Parties to the United Nations Framework Convention on Climate Change. The 29th Conference (COP28) was held in November 2023 in Baku, Azerbaijan.
CRREM	Carbon Risk Real Estate Monitor	An initiative that calculates and provides scenario benchmark values for 2°C and 1.5°C by building types covering 44 countries (as of November 2023) across Europe, Americas, and APAC, including Japan.
EEXI	Energy Efficiency Existing Ship Index	An IMO framework for evaluating the fuel efficiency of existing ships, which exceed 400Gt, on a per-ship basis. Ships that fall below the regulatory values set for each ship type are required to achieve fuel efficiency performance equivalent to new ships through engine power limitations and energy-saving modifications.
FaE	Facilitated Emission	Emissions related to capital market activities such as underwriting, securitization, and advisory services. See P.89 for the calculation method.
FE	Financed Emission	A concept that indicates the portion of GHG emissions from each client or project in which a financial institution invests and finances that are deemed to be attributable to the financial institution through financing.
EU-ETS	European Union Emissions Trading System	An emissions trading system (ETS) sets caps on emissions for companies and companies can trade emission allowances to meet their limits. The EU-ETS was introduced in the EU in 2005.
GFANZ	Glasgow Financial Alliance for Net Zero	A coalition of initiatives, including those of banks, insurance companies, asset owners, and investment institutions, established to support the transition to net zero emissions.
GHG	Greenhouse Gas	Gases, such as CO ₂ and methane, that cause the greenhouse effect.
GX	Green Transformation	Transformation of the entire economic and social system to achieve emission reductions and increase industrial competitiveness by viewing efforts to achieve 2050 carbon neutrality and 2030 national GHG emission reduction targets as an opportunity for economic growth.
IEA	International Energy Agency	An international organization within the Organisation for Economic Co-operation and Development (OECD) that publishes scenarios (SDS, APS, NZE, etc.) for achieving the goal of limiting the increase in global average surface temperature.
IIF	Institute of International Finance	A global association of the financial industry established in Washington in 1983 to maintain the stability of the international financial system. Nearly 500 private financial institutions from over 70 countries and regions participate.
IMO	International Maritime Organization	A specialized agency of the United Nations to promote international cooperation on maritime issues, including ship safety and the prevention of marine pollution from ships.
JETP	Just Energy Transition Partnership	A multilateral partnership to accelerate the phase-out of coal-fired power plants and provide support for investment in renewable energy and related infrastructure.
MMRV	Measurement, Monitoring, Reporting and Verification	Measurement, monitoring, reporting, and verification of greenhouse gases. The Oil and Gas Methane Partnership (OGMP), an initiative led by the United Nations Environment Programme, provides a comprehensive methane measurement-based reporting framework (MMRV framework) for the oil and gas sector.
NDC	Nationally Determined Contribution	An agreement, as part of the Paris Agreement, that sets out how much a given country will contribute to reducing GHG emissions. Agreements have been submitted by more than 190 countries, and must be updated every five years.
Net zero	-	A state in which GHG emissions are reduced to a net value of zero when combining captured and removed emissions.
NGFS	Network for Greening the Financial System	A network of central banks and financial regulatory authorities established in 2017. It aims to expand climate risk management and green finance for financial institutions, providing stress test scenarios for climate risk.
NZAM	Net Zero Asset Managers initiative	Formed voluntarily in 2020 by asset management companies, this initiative calls for becoming net zero by 2050 as well as limiting, through investments, the increase in global average surface temperature to 1.5°C.
NZBA	Net-Zero Banking Alliance	Established by the United Nations Environment Programme Finance Initiative (UNEP FI) in April 2021, this initiative commits banks to net zero GHG emissions in their financed portfolios by 2050.
OGMP	Oil Gas Methane Partnership	An initiative led by the United Nations Environment Programme to reduce methane emissions in the oil and gas sector. It provides a comprehensive measurement-based reporting framework (MMRV framework) for the sector.

Glossary (2/2)

Terms and Abbreviations	Official Name	Remarks
PACTA	Paris Agreement Capital Transition Assessment	A tool to analyze the alignment of portfolios with climate change scenarios, led by 2° Investing Initiative, a French thinktank
PCA	Portfolio Climate Alignment	An index of alignment that indicates the difference from the required level for an entire financed portfolio related to vessels. Calculated by weighted average of the Vessel Climate Alignment (VCA) of each vessel financed as a percentage of the loan portfolio.
PCAF	Partnership for Carbon Accounting Financials	Launched in 2015 with the goal of standardizing GHG measurements and the disclosure of financed GHG emissions.
PCAF Score	PCAF Data Quality Score	PCAF's own five-point scale scoring system that indicates the quality of the disclosed data. Scores are determined according to the degree of estimation, with Score 1 as the highest rank
PPA	Power Purchase Agreement	A system in which businesses rent the roofs of facilities or idle land owned by companies and municipalities, install power generation equipment free of charge, and use the electricity generated at their facilities, thereby reducing electricity costs and CO ₂ emissions.
SAF	Sustainable Aviation Fuel	An aviation fuel produced mainly from biomass, used cooking oil, and garbage from cities, and is expected to significantly reduce GHG emissions compared to conventional aviation fuel. Global SAF production is limited currently, and manufacturing costs present a challenge.
SBTi	Science Based Targets initiative	Established by the United Nations and other organizations to encourage the private sector to set GHG emission reduction targets based on climate science. certificate can be obtained by meeting SBTi's goal-setting guidelines.
Scope 1, 2, 3	-	Scope 1: Direct GHG emissions by the reporting company itself (e.g., fuel combustion, industrial process); Scope 2: Indirect GHG emissions from using electricity, heat, or steam supplied by others; and Scope 3: Indirect GHG emissions other than Scope 1 and 2 (GHG emissions by others related to the company's activities).
TCFD	Task Force on Climate-related Financial Disclosures	Taskforce set up by the Financial Stability Board (FSB) in 2015 to develop a consistent approach to disclosing climate change-related financial risks.
TNFD	Taskforce on Nature-related Financial Disclosures	Established in 2021 by the United Nations Environment Programme Finance Initiative (UNEP FI), United Nations Development Programme (UNDP), World Wide Fund for Nature (WWF), and UK NGO Global Canopy to develop a framework for appropriately assessing and disclosing financial risks and opportunities related to natural capital and biodiversity.
UNEP FI	United Nations Environment Programme Finance Initiative	A global partnership established between the United Nations Environment Programme (UNEP) and the financial sector. Promotes action to align economies with sustainable development throughout the financial system.
VCA	Vessel Climate Alignment	The degree of climate alignment of individual vessels for which financing is being provided. Calculated by dividing the difference between the GHG emission intensity of each ship and the required level for each ship for each year by the required level for each ship for each year.
ZEH	Net Zero Energy House	Housing that is highly insulated and airtight, consumes less energy through use of high-efficiency equipment, and generates energy through solar power generation and other methods, resulting in annual net energy consumption for the residence of around zero or less.

PCAF Data Quality Score*1

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

	Quality	Category	Overview
	Score 1	Disclosed Information	Verified emissions data of each client/project
	Score 2		Unverified emissions data of each client/project
	Score 3	Estimated value (based on physical metrics)	Estimation based on energy consumption data of each client/project
	Score 4		Estimation based on production data of each client/project
	Score 5		Estimation based on the sales of each client/project and the sectorial emission benchmarks per sales
		Estimated value (based on financial metrics)	Estimation based on loan balances of each client/project and sectorial emission benchmarks per asset
			Estimation based on loan balances of each client/project, sectorial emission benchmarks per revenue, and asset turnover ratio per sector

*1 Based on The Global GHG Accounting & Reporting Standard for the Financial Industry

Links

Publication Date	Report	Overview
May 2021	Carbon Neutral Declaration	Declaration of carbon neutrality by MUFG. We are committed to achieving net-zero GHG emissions from our financed portfolio by 2050 and our own net-zero GHG emissions by 2030. Click here for reference page
Apr. 2022 Apr. 2023	Progress Report	In addition to presenting MUFG's quantitative results and targets, the report provides an overview of the approach to achieving carbon neutrality and our thought process on which this is based. Click here for reference page
Sept. 2022 Sept. 2023 Nov. 2024	Sustainability Report	This report summarizes MUFG's most recent initiatives on sustainability, focusing on policies, systems, and measures to achieve a sustainable environment and society as well as sustainable growth. Click here for reference page
Sept. 2022 Sept. 2023	TCFD Report	Based on the TCFD recommendation, this report provides a summary of MUFG's climate change-related risks and opportunities disclosure report based on Governance, Strategy, Risk Management, and Indicators and Targets. Click here for reference page
Sept. 2022	Transition Whitepaper 1.0 (2022)	Taking the six sectors of materials and power (iron & steel, cement, chemicals, paper, glass, and power) as examples, this report summarizes the path to carbon neutrality in Japan, including background information, such as regional characteristics Click here for reference page
Sept. 2023	Transition Whitepaper 2.0 (2023)	Focusing on carbon neutrality for electricity and heat in Japan, this report makes policy comparisons against Europe and the United States, and compiles a list of technologies that Japan is considering implementing with respect to carbon neutrality for electricity and heat. Click here for reference page
Nov. 2023	Asia Transition Whitepaper 2023	This report provides a deep dive into the power sector in Thailand and Indonesia, analyzing the bankability and challenges of each decarbonization lever, and compiling examples of support measures from a financial institution perspective. Click here for reference page
Apr. 2024 Apr. 2025	Climate Report	This report describes MUFG's transition plan in line with GFANZ guidance, as well as the progress and performance of MUFG's broad initiatives towards decarbonization and the underlying principles. Click here for reference page
Apr. 2024 Apr. 2025	TNFD Report	This report summarizes MUFG's approach and activities related to natural capital in line with the TNFD disclosure framework. Click here for reference page
Jun. 2023 Jun. 2024	Human Rights Report	This report summarizes MUFG's framework and efforts related to respect for human rights based on the UN Guiding Principles Reporting Framework. Click here for reference page
Sept. 2024	Transition Whitepaper 3.0 (2024)	The paper focuses on approaches to overcoming the price pass-through barrier, which is a common international challenge, as well as other key points relevant to international financial discussions. Click here for reference page
Apr. 2025	MUFG Driving Social & Environmental Progress ~for our Brighter Future~	The report summarizes MUFG's initiatives to contribute to solving social issues through financial services, with the aim to enhance corporate value. Click here for reference page

Disclaimer

This report (the "Subject") is intended to comply with the general principles related to the environment, nature, biodiversity or corporate responsibility. However, please be aware that environmental, social and governance (ESG) standards, laws, regulatory requirements and practice may vary significantly across different jurisdictions. As such, depending on your country of residence or incorporation, there may be specific local requirements or standards that the Subject does not fully address. We encourage you to consider your local requirements and your own ESG criteria and objectives when selecting our products and services.

It should be noted that no universally accepted global framework (legal, regulatory, or otherwise) currently exists, nor is there a market consensus in terms of what constitutes a "green", "sustainable", "responsible", "traditional", or equivalent "ESG" investment, communication, product, or offering. Furthermore, no assurance can be given that such a universally accepted framework or consensus will develop over time. Although there have been regulatory efforts in certain jurisdictions and regions (in particular, in the European Economic Area) to define such concepts, the legal and regulatory framework is still under development.

Additionally, the lack of common or harmonized definitions and labels currently regarding what is considered "green", "ESG", "sustainable", "responsible", and other similar criteria, or clear guidelines on what these monikers mean may result in different approaches being taken by different institutions.

Alongside its sustainable financing activities, MUFG and its affiliates invest in and finance projects associated with a wide range of industries, businesses and jurisdictions including in, but not limited to, high-emitting and hard to abate sectors such as the energy sector. MUFG commits to achieve net zero emissions in its finance portfolio by 2050 and its own operations by 2030. MUFG's Carbon Neutrality Declaration can be found [here](#).

Accordingly, no assurance, warranty or representation can be given by MUFG that any of their investments, products, communications, services or offerings will meet any or all expectations regarding "green", "ESG", "sustainable", "responsible", or other equivalently labelled objectives or that no adverse environmental, social, and/or other impacts will occur.