2023
TCFD Report

Task Force on Climate-related Financial Disclosures

2023.9

CEO Message

As a green financial institution contributing to the realization of a sustainable society, we will work as a group to contribute to the realization of a decarbonized society through supporting our customers' transitions, and to the conservation and restoration of natural capital.

Once again this year, we are witnessing an increase in extreme weather events worldwide. Massive wildfires have occurred in regions such as Canada and Hawaii, while serious droughts have impacted Europe and Africa. Disasters that were considered "once in a century" have unfortunately become commonplace in recent years. Decarbonization of the real economy is essential, requiring business transitions and technological innovation in high-emission sectors. However, this process will demand a considerable amount of time. With the goal of achieving net zero emissions by 2050, the world must now accelerate its efforts towards decarbonization.

Furthermore, in protecting the lush green environment of our planet, we must simultaneously focus on both climate change mitigation and the preservation and restoration of natural capital - the surrounding plants, animals, air, water, and soil. For instance, even if we manage to halt global warming, if it is achieved by clearing green mountains to install solar panels, we cannot claim to have preserved the environment. During last year's COP15, it was established that the goal is to achieve nature positivity by 2030 and realize a world coexisting with nature by 2050. To address environmental issues, the world must intensify efforts towards the preservation and restoration of natural capital.

Finance is often referred to as the "lifeblood of the economy." SMBC Group, providing over 90 trillion yen in loans to customers in various sectors all over the world, understands that our funds can contribute to environmental protection when they are channeled towards green projects through our customers. However, there's also a risk that these funds could lead to environmental degradation. We, at SMBC Group, recognize the significant role we play in the global environment.

Under this recognition, SMBC Group has positioned its commitment to the "environment" as one of its key priorities in the business strategy. We are aiming for both the realization of a decarbonized society through supporting our customers' transitions and contributing to the preservation and restoration of natural capital.

The world is aiming to achieve net-zero emissions by 2050 in pursuit of a decarbonized society, but the optimal path to decarbonization is not uniform and varies by country. While carefully considering each country's unique circumstances, we will meticulously determine a realistic route and pace, and solidly support our customers' medium to long-term transitions and technological innovations. Specifically, as a diversified financial group offering variety of solutions such as finance, underwriting, leasing, and advisory services, we will support a series of customer initiatives on a group-wide basis, including calculating greenhouse gas emissions, developing transition plans, transitioning business models, and fundraising.

Additionally, in Japan where procuring green energy is challenging, we are considering more proactive measures, such as investing in renewable energy plants ourselves to acquire green power.

Towards the preservation and restoration of natural capital, we are engaged in practicing sustainable agricultural business through a corporation we have established in Akita Prefecture, as well as investing in forest funds that conduct reforestation activities mainly in South America. Alongside these in-house initiatives, we will provide a diverse range of solutions at the group level to support our customers' efforts towards achieving nature positivity. These include financing projects that contribute to biodiversity conservation, underwriting green bonds, providing leasing solutions that contribute to the realization of a circular economy, and offering consulting on natural risk analysis.

The corporate color of SMBC Group is green. As a green financial institution committed to contributing to a sustainable society, we will collectively strive to support our customers' transition to a decarbonized society and contribute to the conservation and restoration of natural capital, so that we can faithfully pass on this green planet to future generations.

Sumitomo Mitsui Financial Group
Director President and Group CEO

Status of Responding to the TCFD recommendations

(Underlined contents are the modified points from our last TCFD Report)

Governance

- Established a supervisory and execution system for measures against climate change, and introduced an executive compensation system that incorporates ESG initiatives into evaluation indicators (from FY2023, added to medium-term performance-based compensation as well).

Supervision	• The Board of Directors, Sustainability Committee, and other committees supervise and deliberate on sustainability-related measures.
Execution	• Reporting to the Board of Directors and Sustainability Committee by the Group CSuO. • Reporting to the Board of Directors and Risk Committee by the Group CRO. • Deliberations and discussions at the Management Committee, Corporate Sustainability Committee, and other committees.

Strategy

- Identified physical risks and transition risks, conducted sector-specific analysis (heat map, loan balance, and simple calculation of portfolio GHG emissions), and quantified financial impacts through scenario analysis.
- Formulated the Transition Plan towards decarbonization and the reduction/capture of climate-related risks and opportunities, and organized actions for the new medium-term management plan period (FY23-25).

Implementation Strategy	• Reduction of our operational GHG emissions. • Advancement of managing portfolio GHG emissions. • Enhancement of climate-related risk analysis and risk control capabilities. • Promotion of decarbonization solutions.
Engagement Strategy	• Engagement with borrowers, focusing on sectors with high carbon intensity (utilizing the Transition Finance Playbook). • Engagement with the industrial sector, government, and international initiatives.
Organizational Enhancements	• Considering the introduction of a sustainability training system to enhance the expertise of not only employees, but also directors and executives.

Risk Management

- Positioned climate-related risks as Top Risks and added climate-related category to our "Risk Appetite Framework", which is a risk control framework for the entire group, managing both risks and GHG emissions.
- Developed the Policies for Specific Businesses and Sectors considering the impact of climate change, and conducted due diligence (utilizing non-financial information for lending and environmental/social risk assessment for individual cases).
- Started trialing a framework for assessing company-specific transition strategies, with a view to future application in borrower evaluation and engagement.

Metrics	Targets	Recent Results	YoY
Operational GHG emissions	**Net Zero by 2030**	**166** kt-CO2e (FY2022)	-8%
Portfolio GHG emissions	**Net Zero by 2050**	–	–
Oil and Gas	FY2030 **-12～29%** (from FY2020)	**33.3** Mt-CO2e (FY2021)	-18%
Coal	FY2030 **-37～60%** (from FY2020)	**7.4** Mt-CO2e (FY2021)	-46%
Power	FY2030 **138～195**g-CO2e/kWh	**320**g-CO2e/kWh (FY2021)	-4%
Steel (est. value)	(To be established in FY2023)	**2.0**t-CO2e/t-Steel (FY2021) **8.2M**t-CO2e (FY2021)	–
Automobile (est. value)	(To be established in FY2023)	**217**g-CO2e/vkm (FY2021)	–
Real estate (est. value)	(To be established by spring FY2024)	**78.7**kg-CO2e/㎡ (FY2021)	–
Loan balance for coal fired generation	**Zero balance by FY2040** Project finance/ equipment-linked corporate finance	Project finance : JPY **228** billion (FY2022) equipment-linked corporate finance : JPY **77** billion (FY2022)	-24 bn -9 bn
Loan balance for thermal coal mining sector	**Zero balance by FY2030** OECD countries	JPY **20** billion (FY2022)	-8 bn
	Zero balance by FY2040 Non-OECD countries	JPY **69** billion (FY2022)	-10 bn
Sustainable finance	JPY **50** trillion by 2030 (Upward revision from JPY 30 trillion)	JPY **14.9** trillion (FY2020-FY2022)	+6.9 tn

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The TCFD report is created with the aim of disclosing financial and non-financial information related to climate. For financial and non-financial information related to natural capital, please refer to the separately published "SMBC Group TNFD Report".

Executive Summary

The average global temperature has risen by about 1.1℃ since the pre-industrial revolution, and the effects of climate change, including the occurrence of numerous extreme weather events and changes in regulations and industries, are expanding, making it a global urgency to address these issues.

SMBC Group (hereinafter, “SMBC Group” and the “Group” are used interchangeably) positions initiatives for sustainability, including climate change, as key initiatives in its business strategy, and is working as a group for the smooth transition to a decarbonized society, and mitigating risks and seizing opportunities to enhance corporate value over the medium to long term.

(Strategy) Awareness towards Climate Change

Awareness of Risks:

According to the results of our portfolio analysis, it is important to address transition risks in carbon-intensive sectors such as power, oil and gas, and coal, and further sophistication of analysis on physical and transition risks is a challenge.

- Physical risks such as deterioration of customer’s business performance due to intensification of natural disasters and collateral damage, or transition risks such as deterioration of customer performance due to regulatory strengthening and changes in market environment, may increase SMBC Group's credit-related costs.
- From the perspective of decarbonization and risk reduction, it is important to make efforts on carbon-intensive sectors such as power, oil and gas, coal, steel, and automobiles.
- Each sector has its own issues and risks, so it is necessary to set a sector-specific analysis approach and draw reduction targets considering scientific evidence and regional characteristics when reducing greenhouse gas (GHG) emissions.
- According to the results of the current scenario analysis, impact of physical risks is limited, while impact of transition risks is somewhat significant, requiring proactive responses.
- Also, it is important to strengthen risk awareness by expanding the scope of analysis (risk events, sectors, etc.) for physical risks and transition risks, reduce our operational GHG emissions considering reputational risks due to delays in decarbonization, and reduce the portfolio GHG emissions of carbon-intensive sectors.

Awareness of Opportunities :

In addition to the increasing demand for funds due to investment in decarbonization equipment, technological innovation, and business reorganization, there are needs for new financial products and services, and new growth opportunities exist for SMBC Group

- In order to realize a decarbonized society, it is necessary to urgently develop and help scale innovative technologies, such as practical application of carbon dioxide capture, usage and storage (CCUS) technology and construction of hydrogen value chains, which are expected as next-generation energy.
- The International Energy Agency (IEA) estimates that an additional USD 4 trillion in annual investment to clean energy sectors is needed by 2030 under the Net Zero Emissions by 2050 Scenario (NZE scenario). For SMBC Group to contribute to the expansion and popularization of these technologies while capturing growth opportunities, it is necessary to expand knowledge of new technologies and build appropriate risk-taking functions.
- In addition to the expanding demand for funds due to capital investment and business reorganization, there are expanding diverse needs for decarbonization such as consulting on management issues such as advanced non-financial information disclosure, matching of decarbonization technology companies and customers who need them, system efficiency and data visualization using digital tools, and procurement of carbon credits, etc.
- It is possible to capture growth opportunities by organically linking know-how in SMBC Group's business areas and deploying solutions for diverse customer needs.

Understanding of Decarbonization in the Real Economy :

In addition to reducing GHG emissions from financial institutions themselves, it is crucial to decarbonize their portfolios. A new evaluation criterion is needed to measure contributions towards decarbonization in the real economy.

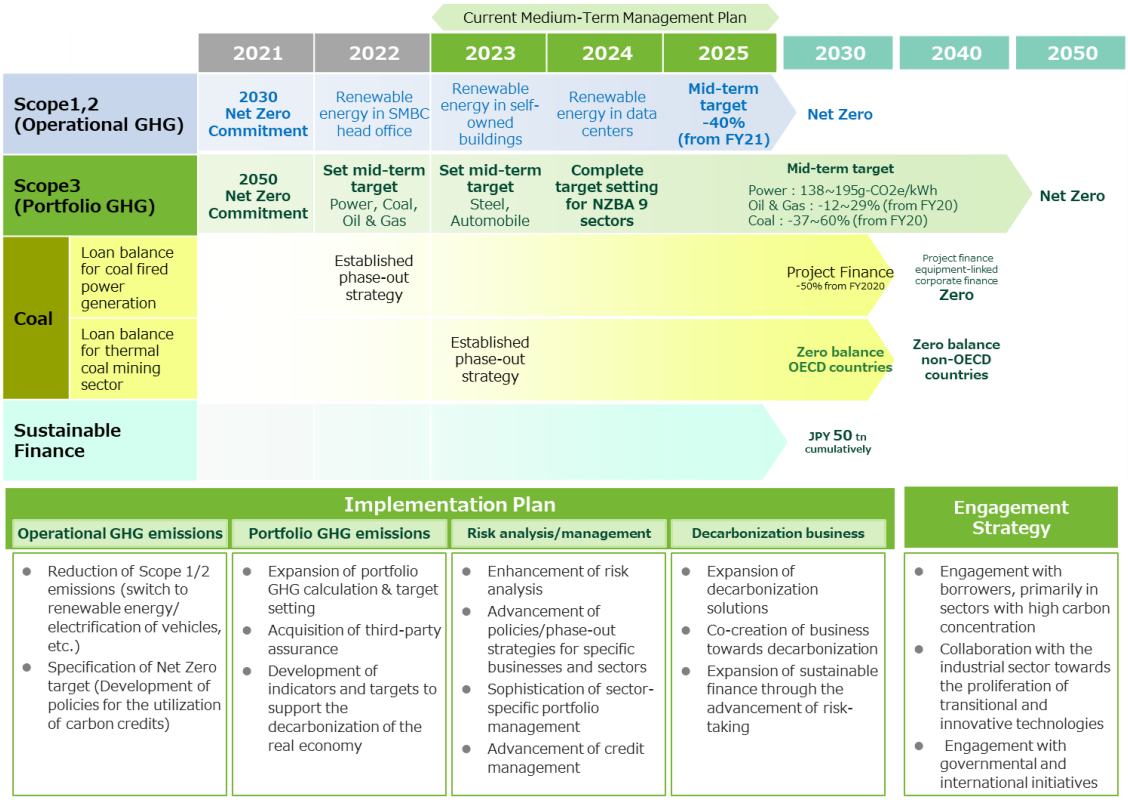
- As climate change issues escalate, it is vital for financial institutions to not only reduce their operational GHG emissions but also decarbonize their loan and investment portfolios. To achieve this, the decarbonization of corporations, i.e., the decarbonization of the real economy, is necessary.
- Transition finance plays a critical role in advancing the decarbonization of the real economy, particularly in high-emission industries. However, such financing could potentially lead to a temporary increase in portfolio GHG emissions.

- For financial institutions, to assess contributions to the decarbonization of the real economy and alignment with the Paris Agreement, it is necessary to adopt a new perspective that not only considers portfolio GHG emissions but also involves more sophisticated methods and a combination of multiple indicators.

(Strategy) Basic Strategy and Transition Plan against Climate Change

SMBC Group has formulated the Transition Plan and actions during the current medium-term management plan to realize a smooth transition to a decarbonized society and enhance corporate value through reducing climate-related risks and seizing climate-related opportunities.

[Outline of Metrics, Targets and the Transition Plan]



Implementation Strategy 1) Reducing our operational GHG emissions : We are steadily reducing GHG emissions through the introduction of renewable energy in data centers and overseas offices where power consumption is large, challenging to reduce Scope 1 through the electrification of company vehicles, and starting to consider the use of carbon credits.

[Scope 1/Scope 2 Reduction]

- We are steadily promoting the introduction of renewable energy mainly in our own properties in Japan and the head office buildings of major consolidated subsidiaries[1], reducing Scope 2 at domestic offices by about 40%.
- We will start the operation of mega-watt class solar and offsite corporate PPA[2] for further reduction, and start introducing renewable energy in data centers and overseas offices. We will also work on introducing EVs (Electric Vehicles) and FCVs (Fuel Cell Vehicles) for company vehicles for Scope 1 reduction.

[Specifying the Net Zero Target]

- We have revised the scope of operational GHG calculation according to the GHG Protocol and set interim targets (for FY2025/2026) for achieving net zero by 2030, and obtained limited assurance.
- In the future, we will aim to obtain reasonable assurance and establish a utilization policy for carbon credits to clarify the definition of the "net zero target" that SMBC Group sets.

Implementation Strategy 2) Advancement of Portfolio GHG Emission Management
We aim to expand and refine the scope of portfolio GHG emission calculation/target setting and develop indicators that incorporates the impact on the real economy.

[Expansion of Portfolio GHG Emission Calculation/Target Setting]

- We have constructed a portfolio GHG emission calculation method and set reduction targets consistent with the Paris Agreement for the coal, oil and gas,

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[1] This applies to Sumitomo Mitsui Banking Corporation (SMBC), SMBC Trust Bank, SMBC Nikko Securities, Sumitomo Mitsui Card, SMBC Finance Service, SMBC Consumer Finance, Nomura Research Institute, and Sumitomo Mitsui DS Asset Management.

[2] Power Purchase Agreement: An electricity sales contract.

and power sectors as priority sectors for our lending portfolio (currently considering targets for steel, automobile, and real estate).

- In the future, we will consider the remaining sectors (aluminum, cement and agriculture) targeted in the NZBA (Net-Zero Banking Alliance) guidelines by October 2024, and also promote consideration of further expansion of target sectors and asset classes such as investment and underwriting.

[Obtaining Third-Party Assurance for Portfolio GHG Emissions]

- We are building an internal control system and aiming to obtain third-party assurance.

[Development of Metrics and Targets to Support Decarbonization of Real Economy]

- In collaboration with the government and international initiatives, we promote the development of metrics and complementary metrics (such as avoided emissions) that appropriately represent the contribution to decarbonization of the real economy.

Implementation Strategy 3) Enhancing Climate-Related Risk Analysis and Risk Control Capabilities :
To mitigate climate-related risks, we are expanding risk analysis and enhancing risk management at the sector, portfolio, and individual company levels for key areas.

[Expansion of Risk Analysis]

- Previously, we have conducted sector-specific risk heat map creation, GHG emission-related analysis, and scenario analysis (physical risk analysis related to water disasters, and transition risk analysis for energy, power, automobile, and steel sectors) from the perspective of physical and transition risks, and developed measures such as the Policies for Specific Businesses and Sectors and portfolio management based on the results.
- In the future, we will consider expanding and enhancing risk analysis including scenario analysis, and promote risk analysis for individual companies, focusing on sectors expected to be high risk.

[Enhancement of Policies for Specific Businesses and Sectors and Phase-out Strategies]

- Based on the results of sector-specific climate-related risk analysis, portfolio GHG emission analysis, etc., we have formulated a phase-out strategy for coal-fired power generation and thermal coal mining sectors and revised our Policies for Specific Businesses and Sectors.

- In the future, in addition to further revisions of the Policies for Specific Businesses and Sectors, we will also consider expanding phase-out strategies using ETM schemes (an innovative blend finance approach aiming to prematurely decommission existing coal-fired power plants and replace them with clean generation facilities).

[Enhancing Sector-Specific Portfolio Management]

- We have introduced the Climate-Related Risk Appetite Framework (RAF), established management indicators for portfolio GHG emissions in the coal, oil and gas, and power sectors, and enhanced sector-specific portfolio management.
- We will continue to expand the target sectors of the Climate-Related RAF and also consider expanding management indicators, taking into account phase-out strategies.

[Enhancement of Credit Operations]

- By utilizing the "ESG Risk Summary Sheet" and other tools, we have been able to understand the status of environmental and social risks, including GHG emissions and climate-related risks, for each company and use this as a qualitative judgment element in credit analysis.
- In the future, we will promote the use of borrower evaluation and engagement, and account plans by conducting evaluations of transition strategies for each company through frameworks for assessing company-specific transition strategies, etc.

Implementation Strategy 4) Promotion of Decarbonization Solutions : In addition to providing comprehensive solutions through group-global collaboration, we are advancing the development of new solutions and enhancing risk-taking for new technologies, and expanding sustainability-related businesses (finance, leasing, consulting, digital solutions, carbon credit business, etc.).

[Expansion of Decarbonization Solutions]

- As a comprehensive financial group offering a wide range of businesses, we have developed and provided digital solutions such as the GHG emissions calculation and reduction support cloud tool "Sustana," and GHG emissions visualization services using corporate card payment data.
- In the future, we will enhance competitiveness by strategic investment (Sustainability Investment Fund) for the development of businesses/solutions

aimed at solving social issues, and develop/upgrade decarbonization solutions such as launching carbon credit business.

[Business Co-creation for Decarbonization]

- We contribute to the realization of net zero with our customers by utilizing our network and the ability to overlook the entire supply chain of SMBC Group, expanding our knowledge of decarbonization-related technologies, and understanding the decarbonization technologies and know-how of our customers and connecting them with customers who need these technologies.

[Expansion of Sustainable Finance through Enhanced Risk Taking]

- We have offered a variety of sustainability-related financial products, including green loans/bonds and sustainability-linked loans, and have gained a strong market presence in finance for renewable energy, etc.
- We have raised our sustainable finance target amount for FY2029 from JPY 30 trillion to 50 trillion, and we will promote the expansion of sustainable finance through the creation/capture of funding needs using the Transition Finance Playbook (the "Playbook") and the enhancement of risk-taking for new technology cases (such as equipment investment related to hydrogen) that are expected to increase in the future.

Engagement Strategy :

We aim to promote comprehensive and in-depth engagement with customers, industries, and governments/regulatory authorities, in order to build a common understanding towards decarbonization, collaborate on problem solving, and provide solutions, with a focus on high carbon-intensive sectors.

[Engagement with Customers, Mainly in High Carbon-Intensive Sectors]

- We have extracted major credit customers that we should focus on from the perspective of risk management and promotion of decarbonization business, and conducted customer engagement centered on proposal of solutions for decarbonization, understanding of transition strategies and issues towards decarbonization, and exchange of views for enhancing risk management, using the results of our scenario analysis, etc.
- In the future, we will promote customer engagement according to the situation of each credit customer to transition risks, using the company-specific assessment framework and the Playbook. By this, we will promote the gradual reduction of transition risks and the expansion of sustainable finance.

[Engagement with Industry for the Dissemination of Transition/Innovative Technologies]

- We are working with over 370 member companies to make policy recommendations and create projects aimed at the realization of a hydrogen society as a launching member of the "Japan Hydrogen Association".
- We are also striving to form a common understanding and foster comprehension of transition finance through the explanation of the Playbook, etc. to domestic financial institutions and industry groups in Japan, thereby promoting the response to climate change in the real economy from the financial side.

[Engagement with Governments and International Initiatives]

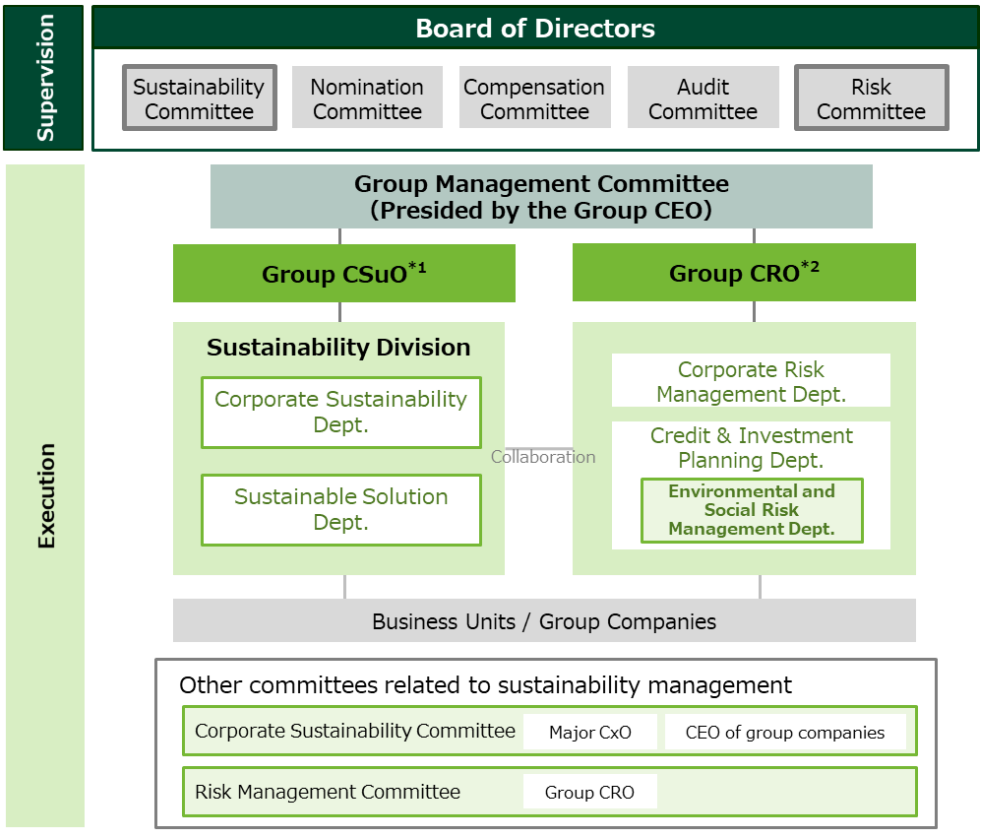
- We participate in financial private initiatives such as the Glasgow Financial Alliance for Net Zero (GFANZ), NZBA, industry initiatives such as the Japan Hydrogen Association and sustainability-related meetings hosted by the Japanese government.
- We contribute to discussions and exchange of opinions on the methods of portfolio/underwriting GHG emission calculation, the importance and challenges of transition finance, and measures for the realization of a decarbonized society.

Strengthening Governance and Organizational Infrastructure

Executive and Supervisory Structure ：

Our approach to sustainability management is driven by our CxO and overseen by our Board of Directors. By enabling our executives and directors to fully utilize their expertise and by integrating ESG evaluations into our executive compensation system, we are constructing a robust governance framework.

[SMBC Group's Sustainability Management System]



*1 CSuO : Chief Sustainability Officer
*2 CRO : Chief Risk Officer

- We are appointing knowledgeable individuals to executive roles and to our Sustainability Committee, allowing them to demonstrate their expertise in both the execution and oversight of our initiatives.
- We have incorporated ESG metrics, such as the reduction of portfolio GHG emissions and the volume of sustainable finance efforts, into our executive compensation system. This explicitly manifests our management's commitment to creating societal value, including our response to climate change.
- Furthermore, we have recently welcomed Mr. Paul Polman, former CEO of Unilever, as a Global Advisor, bolstering our leadership's capabilities in sustainability.

- In order to further enhance our structure for advancing climate change initiatives, we are considering the introduction of a sustainability training system. This program would not only benefit our employees, but also contribute to the professional development of our executives and directors.

Risk Management

Risk Management :

SMBC Group manages climate-related risks within the "Risk Appetite Framework", which is a framework for managing risks across the Group, and we have established a risk management system that is integrated with each risk management process.

- SMBC Group recognizes that deficiencies in measures against climate change pose a significant risk to management, and positions climate-related risks as "Top Risks", which are particularly significant risks in management.
- For these climate-related risks positioned as "Top Risks", we conduct scenario analysis targeting major risk events and sectors, estimate credit-related costs to understand financial impacts, and reflect these in business strategies and risk management measures.
- We have added "climate" to the categories of the "Risk Appetite Framework" (RAF), which is a framework for managing risks across the Group, and clarified our policy to suppress the increase of climate-related risks through measures such as promoting engagement and controlling the portfolio. We manage portfolio GHG emissions as a key indicator, and introduce it by sector and business units in line with the 1.5°C scenario.
- For projects that are likely to have a significant impact on climate change, we set "Policies for Specific Businesses and Sectors" and implement measures such as prohibiting support and conducting due diligence on environmental and social risks.
- For sectors such as power and oil/gas, which are considered to have high transition risks, we plan to introduce a framework for assessing individual company transition strategies, confirm the response to transition risks for each borrower, and construct a risk control framework according to the evaluation.

1. Approach to Climate Change

(1) Basic Approach to Climate Change

Responding to climate change is one of the global challenges to be addressed in the 21st century. Since the adoption of the Paris Agreement, global efforts to combat climate change have accelerated, and in October 2020, the Japanese government announced its goal of achieving carbon neutrality by 2050, aiming to realize a decarbonized society. At COP26 held in 2021, a formal agreement was concluded to pursue the effort to limit the temperature increase from pre-industrial levels to "1.5°C". With this goal set by the Paris Agreement positioned as a stronger global target, each country and company are required to further strengthen measures towards the 1.5°C target, that is, net zero.

In this context, SMBC Group is committed to achieving net zero for our operational GHG emissions by 2030 and achieving net zero across our entire lending portfolio by 2050 in line with the goals of the Paris Agreement. Based on this commitment, we have joined international initiatives such as NZBA and the NZAMI (Net Zero Asset Managers Initiative). SMBC Group will accelerate our journey towards achieving our net zero targets by supporting our customers' efforts to contribute to the transition to and realization of a decarbonized society.

(2) Group Mission, SMBC Group Statement on Sustainability, and the Group Environmental Policy

SMBC Group has set forth a management philosophy (Group Mission) to "contribute to a sustainable society by addressing environmental and social issues." to clarify our stance to contribute to the society more than ever before in the face of serious environmental and social issues on a global scale.

As a basic stance of SMBC Group towards achieving a sustainable society, we have established the " SMBC Group Statement on Sustainability[3]", which explicitly states that we will engage and act together with customers and other stakeholders to contribute to the global transformation into a better society. In addition, we have established the "Group Environmental Policy[4]" to continuously address environmental conservation and the prevention of pollution in harmony with corporate activities, and we have

[3] SMBC Group Website: SMBC Group Statement on Sustainability (https://www.smfg.co.jp/english/sustainability/group_sustainability/)

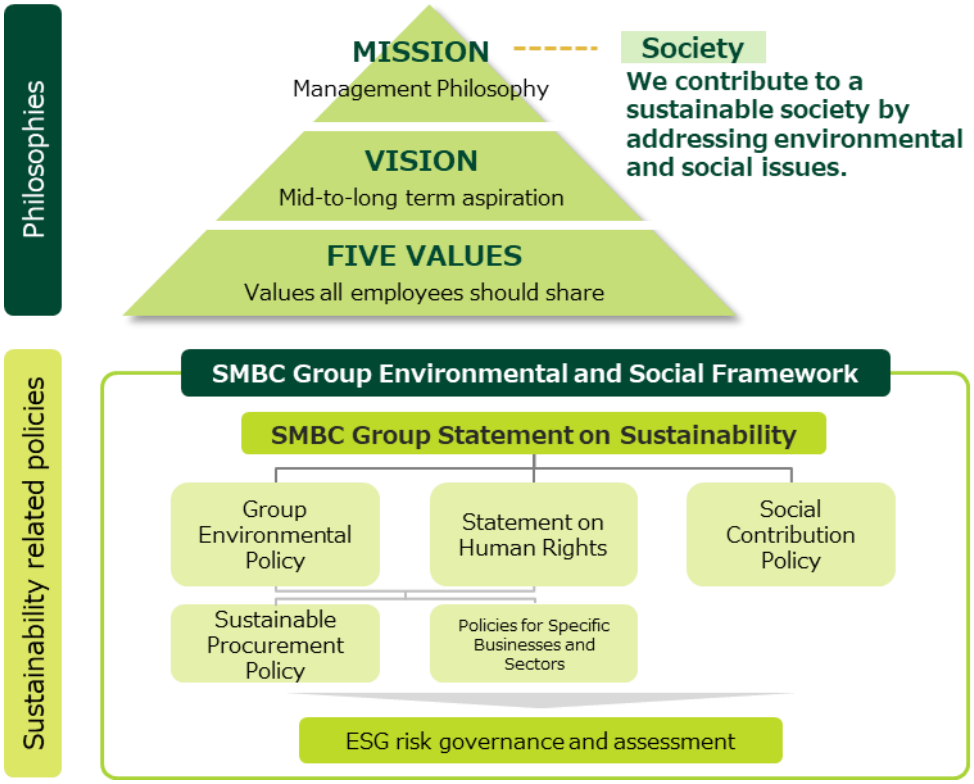
[4] SMBC Group Website: Sustainability Policy (https://www.smfg.co.jp/english/sustainability/group_sustainability/)

established the "Sustainable Procurement Policy" and "Polices for Specific Businesses and Sectors" as well.

In addition, we have formulated the new medium-term management plan "Plan for Fulfilled Growth[5]" for the three-year period starting from the FY2023, and we have set "Creating Social Value" as a new pillar of our management towards achieving "Growth with Quality". In line with the start of this medium-term management plan, we have newly identified (1) "Environment", (2) "DE&I and Human Rights", (3) "Poverty and Inequality", (4) "Declining Birthrate and Aging Population", and (5) "Japan's Regrowth" as priority issues (materiality issues) for SMBC Group to proactively address. We will expand our activities to date to create social value and aim to contribute to "fulfilled growth", where society as a whole and people become sustainably prosperous, through returning social value to the society. In the future, we will further enhance awareness of participation of each employee towards the creation of social value so that they can feel a sense of job satisfaction through actively addressing these priority issues.

SMBC Group will actively contribute to the realization of sustainability while adhering to SMBC Group Mission, Statement on Sustainability and Group Environmental Policy.

Figure 1-1 Outlook of our Philosophies and Policies on Sustainability



[5] SMBC Group Website: Medium-Term Management Plan "Plan for Fulfilled Growth" (https://www.smfg.co.jp/news_e/pdf/e20230515_03.pdf)

Figure 1-2 SMBC Group Statement on Sustainability (excerpt)

Throughout its 400-year history, SMBC Group has continuously upheld its commitment to sustainability. We hereby declare that we will drive forward our efforts to make sustainability a reality.

- **Definition of Sustainability**
  SMBC Group defines sustainability as "creating a society in which today's generation can enjoy economic prosperity and well-being and pass it on to future generations."

- **Understanding of the Present Situation and Our Role**
  As a financial institution, we will engage and act together with customers and other stakeholders to contribute to the global transformation into a better society.

Figure 1-3 Group Environmental Policy

Group Environmental Policy

1. Based on this policy, SMBC Group strives to resolve environmental issues and contribute to the realization of a sustainable society.
2. This policy is established to make continuous efforts toward the environment, recognizing it as one of the materiality of SMBC Group. This policy is approved by the Board of Directors.
3. We offer financial products, information and solutions which contribute to the maintenance and improvement of both the global and local environment, as well as technological innovation, to support our clients deal with environmental issues.
4. We properly assess environmental risks to reduce that risks posed by our own activities and the society.
5. We strive to reduce negative environmental impact through the conservation of resources and energy, and the reduction of waste.
6. We strictly comply with environment-related laws and regulations.
7. We actively and effectively implement this policy by setting goals and targets for every fiscal year. We monitor and evaluate the status of their implementation and make continuous efforts to improve our system.
8. We regularly report to the Board of Directors and the Sustainability Committee on the status of environmental initiatives.
9. We place high priority on thoroughly educating our executives and staff about our environmental principles to ensure that they conform to these principles in the performance of their work.
10. We strive to implement this policy by disclosing the Group’s environmental activities and communicating with our staff as well as the third parties.
11. We create a financial flow consistent with the Paris Agreement and contribute to an orderly and just transition to a decarbonized society, while strengthening climate actions and striving to reduce greenhouse gas emissions.
12. We make decisions recognizing the interplay between SMBC Group and nature, promote the conservation and restoration of natural capital, and strive to realize nature positive initiatives.
13. This policy is disclosed on the Group's website, and the printed version is available upon request.

(3) Response to the TCFD Recommendations

SMBC Group has positioned "Environment" as a priority issue in management and has been addressing environmental issues since the establishment of the Environmental Policy in 1998. In December 2017, we expressed our support for the Task Force on Climate-Related Financial Disclosures (TCFD) and have accelerated our efforts to combat climate change. We have set initiatives for each of the disclosure fundamentals proposed by the TCFD: "Governance", "Strategy", "Risk Management", and "Metrics and Targets", and strive to level up on a regular basis. The progress we have made so far in addressing climate change is as follows.

Figure 1-4 Progress to Date

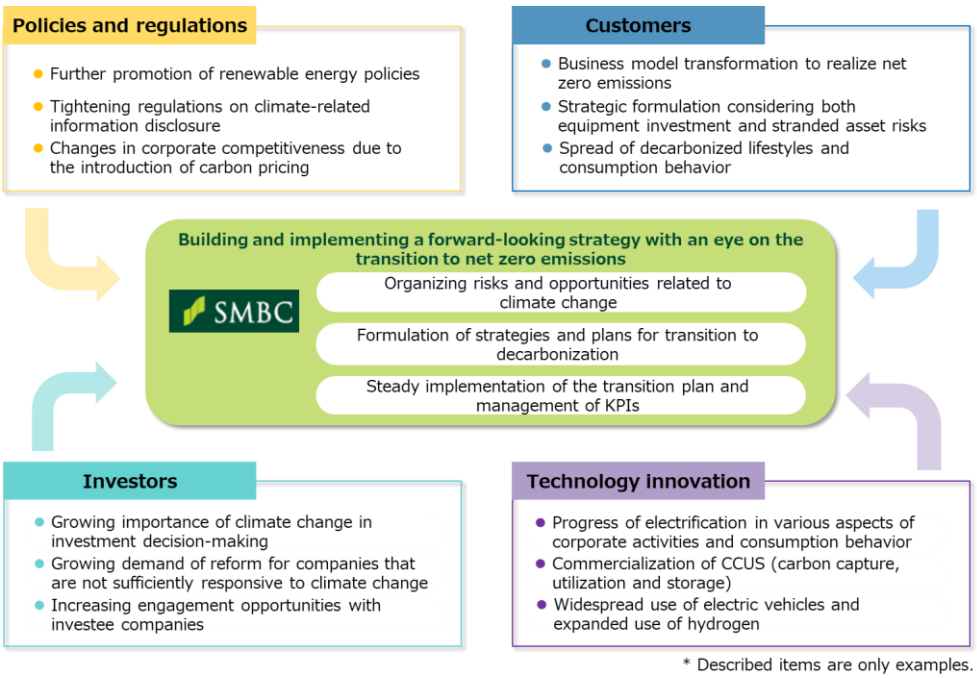
1998	● Established the Environmental Policy
2002	● Announced support for the Finance Initiative of the UN Environment Programme
2006	● Adopted the Equator Principles
2007	● Announced support for the UN Global Compact
2017	● Announced support for the TCFD recommendations
2018	● Announced policies on coal-fired power generation, palm oil planation development, and projects involving deforestation ● Established the Corporate Sustainability Committee
2019	● Announced the results of scenario analysis regarding physical risks (First global financial institution in the world to disclose such assumed risk) ● Signed the Principles for Responsible Banking
2020	● Announced the results of scenario analysis regarding transition risks ● Revised the Group Mission (Added "We contribute to a sustainable society by addressing environmental and social issues") ● Announced the "SMBC Group Statement on Sustainability" and "SMBC Group GREEN×GLOBE 2030" ● Released a statement on the "Consideration of ESG risks" (Expanded policies on individual businesses and sectors)
2021	● Released long-term action plan "Roadmap Addressing Climate Change" (Targets in "SMBC Group GREEN×GLOBE 2030" were revised upward) ● Revised policies for specific businesses and sectors regarding coal-fired power generation ● Newly introduced Group CSuO (Chief Sustainability Officer) position ● Newly established "Sustainability Committee" as a committee inside the Board of Directors ● Expressed commitment to achieve net zero GHG Emissions (by 2030 for our own operations, by 2050 for our overall investment and loan portfolio) ● Joined NZBA (Net-Zero Banking Alliance)
2022	● Announced medium-term portfolio GHG emission reduction targets (power, oil and gas, coal) ● Joined NZAMI (Net Zero Asset Managers Initiative) ● Established "Net Zero Transition Plan"
2023	● Revision of the executive compensation system (incorporating ESG quantitative indicators into medium-term performance-linked compensation) ● Formulation of Transition Plan during the new medium-term period ● Development of phase-out strategy related to thermal coal mining ● Introduction of Climate-Related Risk Appetite Framework ● Development of the Transition Finance Playbook ● Formulation of company-specific transition strategy assessment framework

2. Strategy

As the world navigates its transition towards a net zero carbon footprint, SMBC Group anticipates significant shifts in the operational landscape. These changes will be driven by the strengthening of policy measures and regulations, behavioral modifications amongst stakeholders - including our customers and investors - and advancements in technological innovation. In light of these uncertainties, it is crucial that we progressively implement climate change measures. This should be done under a forward-thinking strategy aimed at achieving net zero by 2050, all while closely monitoring external trends.

In this context, SMBC Group is constructing a perspective that aligns with the global move towards decarbonization. In maintaining this viewpoint, we are diligently assessing the impact of the transition to net zero on our business. This is being done from both risk and opportunity standpoints. Furthermore, we have established a comprehensive Transition Plan. This plan outlines SMBC Group's coherent goals and actions towards achieving net zero, as well as our response to the potential risks and opportunities that may arise. Through the implementation of strategic initiatives outlined in the Transition Plan, we aim to mitigate climate-related risks, capitalize on growth opportunities presented by decarbonization, and enhance corporate value via our proactive approach to climate change measures.

Figure 2-1: Global Outlook on Decarbonization



* Described items are only examples.

(1) Awareness of Risks associated with Climate Change

SMBC Group is categorizing the potential pathways and incidents of physical and transition risks that could have a financial impact. We are also conducting risk assessments by sector (heat maps), analyzing the concentration of outstanding credit balances, and evaluating the GHG emissions of our portfolio. Particularly for sectors and risk events presumed to have a significant impact, we implement scenario analyses to quantify the financial effects. The understanding of risk obtained through these measures is shared internally and is incorporated into our group-wide strategy.

① Physical Risks and Transition Risks

We preemptively consider changes in the external and business environments associated with the emergence of climate change issues. By identifying risk events based on various transmission pathways, we determine the potential financial impact on SMBC Group. The summary and primary effects of the risk events that SMBC Group envisages are as follows.

[Physical Risks]

- **Acute weather phenomena and chronic climate changes**

The advancement of global warming may potentially result in an increase in acute natural disasters such as typhoons and floods, as well as chronic climate changes like an increase in rainfall due to the rise in average temperatures.

[Assumed main impacts on SMBC Group (Short to Long Term)]

There is a risk that our branch could become unable to continue operations due to disaster damage, as well as a risk of increased costs associated with countermeasures and restoration efforts. Additionally, there are risks such as an increase in SMBC Group's credit-related expenses and a reduction in deposits due to the deterioration of our customers' performance and damage to collateral as a result of natural disasters.

[Transition Risks]

- **Tightening policies, laws and regulations and changes in technology and markets**

The shift towards a decarbonized society could likely be accompanied by the strengthening of regulations in various countries, including stricter carbon emission targets and increased carbon taxes. Moreover, the introduction of new technologies and energy sources, coupled with changes in consumer preferences, may potentially drive transformations in industrial structures.

[Assumed main impacts on SMBC Group (Medium to Long Term)]

There is a risk of increased costs for carbon emission control and changes in the supply-demand landscape for products and services. This could result in reduced profits and asset impairment for some clients, leading to a decline in performance and an increase in SMBC Group's credit-related expenses. Additionally, it may be necessary to reevaluate business strategies, including sector-specific policies.

■ **Reputation concerning Corporate Efforts**

Companies are required to transform their business models to adapt to a decarbonized society and to take measures to reduce carbon emissions. There is also a growing demand from stakeholders for disclosure, and initiatives to respond to climate change are becoming one of the evaluation criteria for companies.

[Assumed main impacts on SMBC Group (Short to Long Term)]

Inadequate initiatives to tackle climate change issues or delays in responding to demands for information disclosure could potentially harm SMBC Group's reputation, leading to risks such as a deteriorating capital raising environment.

② Risk Analysis by Sector

SMBC Group is formulating a sector-by-sector heatmap, taking into account our understanding of the risks and opportunities associated with climate change. This heatmap evaluates the level of climate change impact in terms of risks and opportunities from both quantitative aspects such as the anticipated risk volume and projected capital investments per sector, and qualitative aspects including the scale of impact that changes towards net zero in "policies and regulations", "technology", "markets", and "reputation" are expected to exert on sectors, and the priority areas in growth strategies of different countries. The sectors for evaluation were selected based on the definition of carbon-related assets in the TCFD's supplemental guidance[6], and we are classifying the degrees of impact for transition risks, physical risks, and opportunities.

In terms of transition risks, we perceive a high risk level in sectors with high carbon intensity such as electricity/oil and gas/coal, as well as steel/automobiles, and we acknowledge the significance of addressing these sectors. Conversely, based on our current analysis, while there is some risk in sectors heavily reliant on resources such as beverages/agriculture/food/paper and forest products for physical risks, the level is deemed lower than that of transition risks.

However, these methods of analyzing transition/physical risks are still evolving, and the charts and tables below merely represent the results of our current analysis. Similar to the subsequent scenario analysis, we plan to continuously update our sector

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[6] While the "steel" sector is not defined as a carbon-related asset in the TCFD's supplemental guidance, it has been added to the evaluation targets by segregating it from the "metals and mining" sector.

evaluations in line with changes in climate change-related policies, technology, market trends, as well as advancements in climate science, aiming to further enhance our strategies.

Figure 2-2 Risks and Opportunities Heatmap

Risk level: Low | Middle | High | Very High

Opportunity level: ↗ | ↗↗ | ↗↗↗

	Transition risks	Physical risks	Opportunities
Power	Very High	Low	↗↗↗
Oil and gas	Very High	Middle	↗↗
Coal	Very High	Middle	↗
Air cargo	Low	Low	↗↗
Passenger aviation	Middle	Middle	↗↗
Shipping	High	Low	↗↗
Railroad	Low	Low	↗↗
Truck service	Middle	Low	↗
Automobiles and components	High	Low	↗↗↗
Metals and mining	Middle	Low	↗↗
Steel	High	Low	↗↗
Chemical products	Middle	Low	↗↗
Construction materials	High	Low	↗↗
Capital goods*1	Middle	Low	↗↗
Real estate	Low	Low	↗↗
Beverages	Low	Middle	↗
Agriculture	Low	Middle	↗↗
Packaged food and meat*2	Low	Middle	↗
Paper and forestry products	Low	Middle	↗

*1 Machinery, electrical equipment, construction, etc.
*2 Manufacture of packaged food products including dairy products and meat, etc.

<Evaluation process for each sector>
(Transition risks and physical risks) Referred to the risks related to policies and legal matters, regulations, technology, markets, reputation, impact on sectors assumed from chronic or acute risks, sector-by-sector scenario analysis results, etc.
(Opportunities) Referred to the areas that are considered future growth areas in domestic and overseas policies, equipment investment projection for each sector, etc.

③ Credit Exposure by Sector

SMBC Group is compiling the status of outstanding loans at SMBC (hereinafter referred to as "SMBC") for each sector evaluated in the heatmap. In sectors where the transition risk assessment in the heatmap is deemed "Very High" or "High", we note substantial balances in the power/oil and gas sectors, and considerable balances in sectors such as automobiles & components/steel/marine transport. In undertaking initiatives to minimize climate-related risks, we will utilize this information in combination with other sector-specific analysis results, pinpoint our focus areas, and incorporate these insights into our strategies.

Figure 2-3 Status of Credit Exposure by Sector mentioned in the TCFD Recommendations

Sectors	2022/03		2023/03	
	Credit exposure (¥ trillion)	Ratio (%)	Credit exposure (¥ trillion)	Ratio (%)
Power	9.0	3.5	10.5	3.9
Oil and gas	9.5	3.7	9.4	3.5
(Upstream/General and E&P)	2.6	1.0	2.3	0.9
(Upstream/Mining and equipment)	0.2	0.1	0.2	0.1
(Midstream/Storage and transport)	3.1	1.2	3.5	1.3
(Downstream/Refinery and sales)	2.9	1.1	2.7	1.0
(Gas utilities)	0.6	0.2	0.7	0.3
Coal (thermal coal)	0.1	0.1	0.1	0.0
Energy (including power) subtotal	**18.6**	**7.2**	**20.0**	**7.4**
Air cargo	0.2	0.1	0.3	0.1
Passenger aviation	1.4	0.5	1.5	0.6
Shipping	1.9	0.7	2.1	0.8
Railroad	1.6	0.6	1.6	0.6
Truck service	0.8	0.3	1.0	0.4
Automobiles and components	3.5	1.3	3.4	1.2
Transportation subtotal	**9.5**	**3.6**	**9.9**	**3.6**
Metals and mining	1.4	0.5	1.6	0.6
Chemical products	3.4	1.3	3.6	1.3
Construction materials	0.7	0.3	0.8	0.3
Capital goods *1	7.3	2.8	8.2	3.0
Real estate	13.4	5.2	15.4	5.7
Steel	2.3	0.9	2.4	0.9
Materials and buildings subtotal	**28.5**	**11.0**	**31.9**	**11.8**
Beverages	0.6	0.2	0.7	0.3
Agriculture	0.8	0.3	0.7	0.3
Packaged food and meat *2	1.2	0.5	1.4	0.5
Paper and forestry products	0.6	0.2	0.7	0.3
Agriculture, food, forestry products subtotal	**3.2**	**1.2**	**3.5**	**1.3**
Total of the above sectors *3	**59.8**	**23.1**	**65.3**	**24.1**
Grand total *4	**259.1**	**100**	**271.1**	**100**

*1 Machinery, electrical facilities, construction, etc.

*2 Manufacturers of packaged food products, including dairy products and meat, etc.

*3 Credit exposure of SMBC and major local subsidiaries, etc. (internal control basis)

*4 Total exposure of SMBC (including consolidated subsidiaries) (total assets on consolidated financial statements + off-balance sheet assets, etc.)

[Column] Portfolio GHG Emissions by Sector (Simplified Calculation)

■ Simplified Calculation of Portfolio GHG Emissions

A significant portion of GHG emissions for financial institutions is attributable to indirect emissions associated with investments and loans. It is crucial not only to reduce the institutions' own emissions but also to progress towards the decarbonization of their portfolios.

SMBC carry out a simplified calculation for each sector's portfolio GHG emissions. This is done to grasp an overview based on the calculation standards set by the Partnership for Carbon Accounting Financials (PCAF). This calculation, performed using a uniform approach for inter-sector comparisons, utilizes estimated values derived from the PCAF database. We acknowledge that these estimates may deviate from the actual GHG emissions. For more details and challenges concerning this method, please refer to "Appendix 2: Simplified Calculation of Portfolio GHG Emissions by Sector".

Sectors	Loan balance (¥ trillion)	Portfolio GHG emissions (Mt-CO2e)		PCAF score	Coverage (%)
		Scope1/2	Scope3		
Power	6.1	182.3	63.3	4.4	100%
Oil and gas	4.3	343.1	49.1	4.5	100%
Coal (thermal coal)	0.1	0.3	0.4	4.1	100%
Energy (including power) subtotal	10.4	525.8	112.9	4.4	100%
Air cargo	0.1	0.3	0.1	4.6	100%
Passenger aviation	1.2	4.3	2.2	4.6	100%
Shipping	1.6	5.8	5.9	4.6	100%
Railroad	0.9	0.9	0.8	4.2	100%
Truck service	0.7	2.4	1.8	4.0	100%
Automobiles and components	2.0	0.9	10.7	4.0	100%
Transportation subtotal	6.5	14.6	21.5	4.3	100%
Metals and mining	0.8	5.6	5.4	4.1	100%
Aluminum	0.1	0.6	0.9	4.1	100%
Chemical products	2.2	165.5	18.8	4.0	100%
Construction materials	0.6	0.3	4.3	4.1	100%
Cement	0.1	0.0	0.5	4.0	100%
Capital goods	3.9	2.3	23.3	4.1	100%
Real estate	12.3	0.5	2.5	4.4	100%
Steel	1.6	10.4	20.8	4.1	100%
Materials and buildings subtotal	21.4	185.2	76.5	4.3	100%
Beverages	0.3	0.2	1.0	4.1	100%
Agriculture	0.4	2.9	1.6	4.1	100%
Packaged food and meat	0.8	11.8	4.2	4.1	100%
Paper and forestry products	0.5	0.7	2.1	4.2	100%
Agriculture, food, forestry products subtotal	2.0	15.7	8.8	4.2	100%
Total of the above sectors	**40.4**	**741.3**	**219.6**	**4.3**	100%

■ **The Significance of a Sector-Specific Approach for Portfolio GHG Emissions**

When analyzing each sector from the perspective of GHG emissions, essential value chains and scopes differ based on the characteristics of the industry. Moreover, regulations, including carbon taxes, are formulated considering these industry-specific attributes. Therefore, understanding the distinct features of each sector is vital in identifying key climate-related risks. For instance, when considering GHG emissions in an automobile's life cycle, emissions from parts and vehicle production as well as those associated with driving are significant, and are hence targeted in regulations like fuel economy standards.

Additionally, the guidelines of NZBA, which SMBC Group is a member of, necessitate such objectives for the nine carbon-intensive sectors be established within 36 months of membership.

Therefore, at SMBC, while referring to the simplified calculation results of portfolio GHG emissions, we determine detailed calculation methods starting from high-priority sectors. This is done by considering the results of sector-specific risk analysis and NZBA guidelines, and we proceed with the calculation and goal-setting of portfolio GHG emissions. Regarding sector-specific goals, we set them by considering each sector's characteristics and the situation in each region, based on a science-based decarbonization scenario.

④ Climate Change Scenario Analysis

SMBC Group carries out scenario analyses at SMBC concerning physical and transition risks, and we estimate the anticipated risk quantities. Please note, this scenario analysis does not necessarily take into account elements such as potential business model transformations or technological innovations at each company, and the calculated results are based on certain assumptions. Similarly, Sumitomo Mitsui DS Asset Management conducts scenario analyses[7] on physical and transition risks within its asset management portfolio.

Regarding physical risks within domestic analyses, we have performed assessments based on the Shared Socioeconomic Pathways (SSP) scenarios utilized in the IPCC's Sixth Assessment Report, and we have clearly defined the anticipated risk quantities for each region. For transition risks, we analyze the energy, power, automotive, and steel sectors, based on trends such as climate change-related policies and the

[7] Sumitomo Mitsui DS Asset Management website " Disclosure Based on TCFD recommendations " (https://www.smd-am.co.jp/english/corporate/vision/fiduciary/03/)

intensification of regulations towards decarbonization. More details about our analysis methods are provided in "4. Risk Management (2) Risk Management ④ Scenario Analysis".

Considering the results of this scenario analysis, the presumed risk associated with transition risks is larger compared to physical risks. Under certain assumptions, we believe that transition risks could potentially entail substantial financial implications. Recognizing this as a central tenet in managing climate-related risks, we emphasize addressing transition risks in our strategic planning.

However, for physical risks, recent scenario analyses[8] by the Network for Greening the Financial System (NGFS) suggest that chronic physical risks could potentially lead to the greatest economic losses due to climate change. Analyses by some central banks imply that physical risks might have a more substantial impact on businesses than transition risks. We recognize the ongoing need for vigilance towards these risks. Moving forward, we will endeavor to enhance our analytical methods and if risk manifestation is anticipated, we will encourage our clients to respond while we ourselves strive to mitigate these risks.

Figure 2-4 Overview of Scenario Analysis

	Physical risks		Transition risks
Risk event	Water disasters		Policy changes Changes in the supply-demand balance
Scenario	IPCC*1/RCP*2 2.6 [overseas] SSP *3 1-2.6 [domestic] (2℃ scenario) IPCC/RCP8.5 [overseas] SSP5-8.5 [domestic] (4℃ scenario)		NGFS*4 / Net Zero 2050 (1.5℃ scenario) IEA*5 / Net-Zero Emissions (1.5℃ scenario) NGFS / Current Policies (3℃ scenario)
Analysis target	Corporate customers		Energy, utilities, automobiles *6, and steel
Region	Global		Global
Analysis period	Up to 2050		Up to 2050
Risk indicator	Credit costs expected to increase (credit costs)		Credit costs expected to increase (credit costs)
Result of Analyses	Cumulative JPY67 to 85 billion		JPY2.5 to 28 billion per year
	Domestic	JPY45 to 58 billion	
	Americas	JPY7.5 to 8 billion	
	Europe, Middle East, Africa	JPY11.5 to 12.0 billion	
	Asia and Oceania	JPY2.5 to 8 billion	

*1 Intergovernmental Panel on Climate Change
*2 Representative Concentration Pathways:
For example, "RCP2.6" means that the end-of-the-century radiative forcing (the level of radiation force that the energy entering and leaving the earth's surface has with respect to the Earth's climate) will be 2.6w/m^2.
*3 Shared Socioeconomic Pathway scenario:
Scenario that combines future socio-economic changes (e. g. population) and radiative forcing
*4 Network for Greening the Financial System
*5 International Energy Agency
*6 Analysis targets are OEMs (Original Equipment Manufacturers).

8 NGFS: NGFS Scenarios for central banks and supervisors

■ Results of Analysis (Physical Risks)

For physical risks, the anticipated cumulative credit-related costs up to 2050 amount to between JPY 67 and 85 billion. When viewed as an annual average, the result indicates that additional credit-related costs would remain around JPY 2 to 3 billion. When examining the projected credit-related costs by region (Domestic, Americas, Europe-Middle East, Asia-Oceania), the domestic value is relatively larger, reflecting the size of the exposure. However, there are no overseas regions with particularly high values, suggesting only a slight difference between regions.

Taking this into account, the impact of flood risks due to climate change on SMBC's annual finances is considered to be limited. In the future, we will strive to enhance our analytical methods and, if risk manifestation is anticipated, we will encourage our clients to respond while we ourselves aim to reduce our own risks.

■ Results of Analysis (Transition Risks)

In the case of transition risks, compared to the Current Policies scenario[9], we estimate an increase in credit-related costs between JPY 2.5 and 28 billion per year up to 2050 under the 1.5°C scenario. The expected financial impact is somewhat larger compared to physical risks, suggesting there could be a significant cost burden in transitioning towards net zero.

In light of these analysis results, SMBC Group is placing an intensified focus on managing transition risks. Based on sector insights derived from risk perception and analysis, we have initially set medium-term reduction targets for portfolio GHG emissions in the power and energy sectors. Keeping these reduction targets in mind, we will strive to mitigate future transition risks by strengthening risk management predicated on engagement with stakeholders and supporting our clients' decarbonization efforts.

[9] A scenario that assumes the continuation of current climate change policies implemented by governments, but does not anticipate further strengthening of these measures.

(2) Awareness of Opportunities Associated with Climate Change

As indicated in our global perspective towards decarbonization, achieving net zero necessitates a significant reduction in GHG emissions through the transformation of business models, technological innovation, and large-scale equipment investment. The International Energy Agency (IEA) estimates that an additional USD 4 trillion per year will be needed in the clean energy sector by 2030 under the NZE scenario. [10] Moreover, as stated in the Ministry of Economy, Trade, and Industry's "Green Growth Strategy Through Achieving Carbon Neutrality by 2050", " green and digital are the 2 inseparable wheels of a car ". This signifies that digital transformation is indispensable for achieving net zero. Additionally, as society's demand for decarbonization intensifies, expansion of the carbon credit market is also anticipated.

In this context, we understand that businesses will face increasing needs for capital, business restructuring, new financial products/services, leasing of decarbonization-related equipment, and consulting on management issues. These issues may include advanced responses to climate-related information disclosure, formulation of climate change strategies and visions, business development, and enhanced risk management. There will also be a demand for matchmaking between companies holding decarbonization technologies and customers who require them, digital solutions, and carbon credit procurement. We believe that SMBC Group will see an increase in opportunities to provide various financial services and that it will be crucial to offer multifaceted solutions that organically connect expertise in different business areas within SMBC Group.

SMBC Group is committed to addressing these complex needs of our customers. We strive to provide support from both financial and non-financial perspectives, utilizing collaborations not only within SMBC Group but also with external partners.

(3) Understanding of Decarbonization in the Real Economy

The world's average temperature has risen approximately 1.1℃ since pre-industrial times, leading to a rise in various weather anomalies and driving changes in regulations and industries. The impacts of climate change are expanding, and global responses have become an urgent priority.

In financial institutions, the majority of GHG emissions are indirect emissions associated with investments and loans. It is not only necessary to reduce the emissions produced by the financial institutions themselves, but also to advance the decarbonization of their portfolios. When considering portfolio decarbonization, it is vital to contribute to the reduction of GHG emissions by businesses, essentially aiding

[10] IEA World Energy Outlook 2022

the decarbonization of the real economy. Additionally, it is crucial that financial institutions perform engagements considering their customers' risks and opportunities related to climate change, provide necessary support and growth capital, including sustainable finance, and facilitate the transition to carbon neutrality in the socio-economic spectrum from a financial standpoint.

■ Formulation of the Transition Finance Playbook

Under the above recognition, SMBC Group has defined transition finance as " financial services provided to clients aiming to support them align their business and/or operations with pathways in line with the objectives of the Paris Agreement." We have devised the Transition Finance Playbook that outlines the expectations and decision-making methods for our customers in implementing transition finance.

The Playbook has been crafted with the aim of carrying out transitions realistically and steadily, taking into account various international guidelines, taxonomies from different countries and regions, and the condition of power structures and energy supply and demand. The Playbook has been reviewed by SMBC Group's Sustainability Committee, an internal board committee, and approved by the Group's Chief Sustainability Officer (CSuO), who is responsible for planning and managing sustainability-related initiatives. We have also received a second-party opinion from DNV Business Assurance Japan. Considering the updates and changes in technological innovation, various regulations, taxonomies, and guidance, the Playbook is updated at least once a year, and a second-party opinion is obtained annually.

SMBC Group, while utilizing this Playbook, will continue to have dialogues with customers and aim to realize a decarbonized society through the promotion of transition finance that contributes to the reduction of GHG emissions in the real economy.

■ Decarbonization of the Real Economy and Portfolio GHG Emissions

Portfolio GHG emissions are an indicator that shows emissions associated with investments and loans in financial institutions and are used as an evaluation metric for initiatives towards net zero. However, this is merely an emission viewpoint from the specific financial institution and does not directly indicate the impact on the decarbonization of the real economy.

For example, even if a financial institution reduces its portfolio GHG emissions by shrinking the balance of high-emission projects through sales, etc., if there are other fund contributors, the location of the portfolio GHG emissions merely shifts, and the emissions in the real economy may remain unchanged. Also, if a financial institution provides investment and financing towards decarbonization for a high-emission industry, even if the project leads to a reduction in emissions in the real economy in

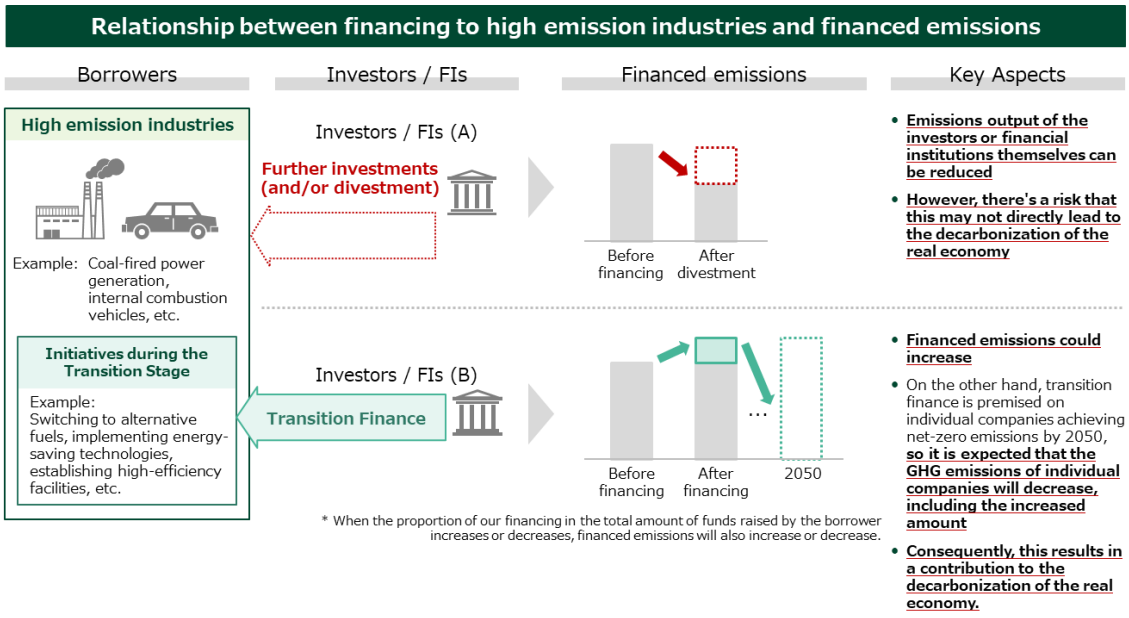
the medium to long term, it could potentially increase the portfolio GHG emissions of the financial institution in the short term (Figure 2-5).

For an orderly and fair transition, it is important not just to simply distance oneself from the objective of reducing portfolio GHG emissions of one financial institution but to deeply understand each situation, discern whether it contributes to sustainable decarbonization or transition, provide transition finance, and support innovation towards establishing next-generation technologies.

Towards the realization of a decarbonized society, it is crucial to steadily decarbonize the real economy, not just "decarbonization from the perspective of a financial institution (decarbonization on paper)." In measuring the contribution of financial institutions to the decarbonization of the real economy, the conventional calculation of portfolio GHG emissions alone is insufficient. Therefore, we recognize that a new perspective through the enhancement of calculation methods and combinations of multiple indicators is needed.

SMBC Group, sharing the same problem recognition, participates in initiatives such as the public-private co-sponsored "Sub-working group on Finance and Emissions for Promoting Transition Finance" and the NZBA Transition Finance Working Group, and will explore appropriate indicators.

Figure 2-5 Relationship between the Decarbonization of the Real Economy and Portfolio GHG Emissions



(Source: Sub-working group of Financed Emissions for the Promotion of Transition Finance, jointly established by the Private Sector and the Ministry of Economy, Trade and Industry)

(4) SMBC Group's Transition Plan

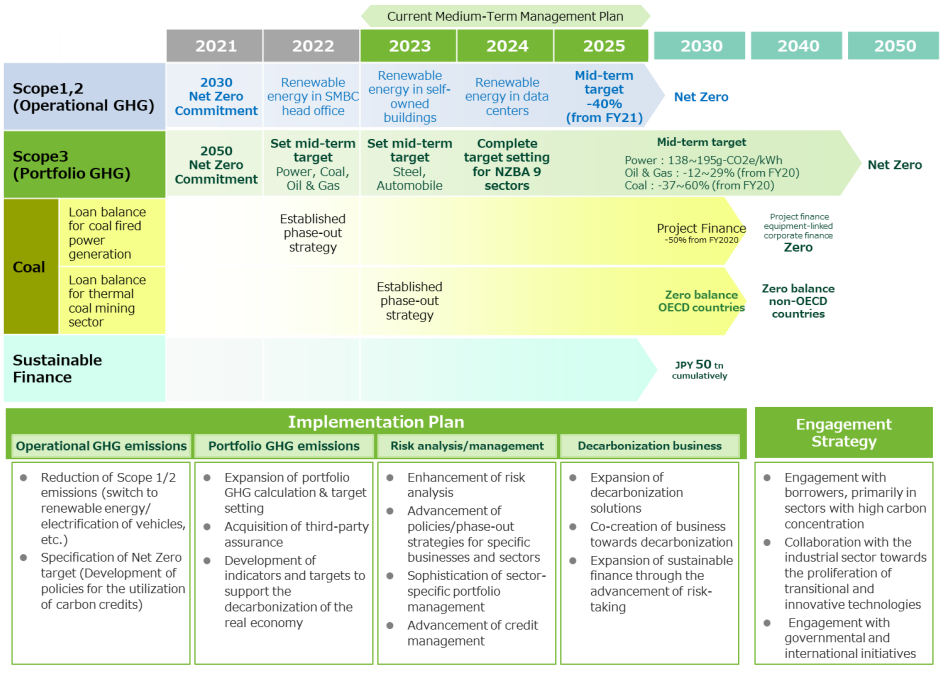
Based on our corporate philosophy of “contributing to a sustainable society by addressing environmental and social issues," SMBC Group is striving to achieve a decarbonized society. As part of this, we aim to reduce climate-related risks, capture growth opportunities stemming from the transition to decarbonization, and enhance our corporate value through climate change measures.

Furthermore, SMBC Group is committed to achieving net zero GHG emissions from our own operations by 2030, as well as net zero GHG emissions from our loan and investment portfolio by 2050. We acknowledge the importance of providing transition finance for a smooth and fair transition, and of supporting innovation for the establishment of next-generation technologies.

Guided by these beliefs, SMBC Group has developed the Transition Plan that consolidates future objectives and a series of actions. This plan, which refer to guidance from the TCFD and GFANZ, was established through SMBC Group Management Committee and Board of Directors. Progress on the Transition Plan is regularly reported and overseen at the Group Management Committee and Board of Directors meetings (including internal committees), with some metrics tied to the compensation of executives.

As a financial institution, we take pride in our strong commitment to firmly supporting our customers' endeavors towards transition and technological innovation. This is all with the aim of contributing maximally to securing a stable supply of energy and achieving long-term decarbonization.

Figure 2-6 SMBC Group's Transition Plan



Implementation Strategy 1: Reduction of our operational GHG Emissions

SMBC Group has announced a "net zero by 2030" target regarding the reduction of GHG emissions from our own business activities. We are advancing the adoption of renewable energy for our procured power and promoting cleaner electricity consumption.

In preparation for the forthcoming mandatory disclosure requirements, we are proactively implementing initiatives such as aligning our information disclosure practices with international standards, enhancing data governance through the deployment of a platform for quantifying GHG emissions, and establishing a robust internal control system.

■ Scope 1/Scope 2 Reduction

In FY2022, we promoted the introduction of renewable energy, primarily in our own properties such as the four headquarter buildings of SMBC (Head Office, East Building, Osaka Head Office, Kobe Headquarters) (Figure 2-7). We are also implementing renewable energy initiatives using the SMBC Kawasaki Mega Solar Place, an on-site solar power generation facility, and offsite corporate PPAs (Figure 2-8). Furthermore, we have introduced a global carbon accounting platform (Persefoni) to enhance and streamline GHG emissions calculations.

In FY2023, we will complete the transition to renewable energy-sourced electricity in SMBC Group's domestically owned properties and the headquarters buildings of our major consolidated subsidiaries. Moving forward, we will make the switch to renewable energy-sourced electricity primarily in data centers, leased properties, and overseas bases. We will also progressively introduce EVs and FCVs and install chargers (Figure 2-9) for company cars, thereby reducing GHG emissions from sources other than electricity.

■ Specifying the Net Zero target

As an interim target for GHG emissions reduction, we have established a goal of a 40% reduction by FY2025 and a 55% reduction by FY2026 compared to FY2021. Additionally, in preparation for mandatory disclosure, we have developed an internal control system, streamlined the business process of GHG emissions calculation, and obtained a third-party assurance (limited assurance) to validate the effectiveness of these operations. Alongside these internal initiatives, we also participate in the GX League, contributing to the formation of market rules for GHG emissions reduction and working towards the realization of a decarbonized society.

In the future, we plan to work towards obtaining a reasonable assurance for the third-party assurance, and by 2025, we aim to establish definitions for net zero and a policy for utilizing carbon credits, taking into account the trends of international initiatives such as the SBTi (Science Based Targets initiative), VCMI (The Voluntary

Carbon Markets Integrity Initiative), and ICVCM (The Integrity Council for the Voluntary Carbon Market).

Figure 2-7 Overview of Our GHG Emissions Reduction Plan

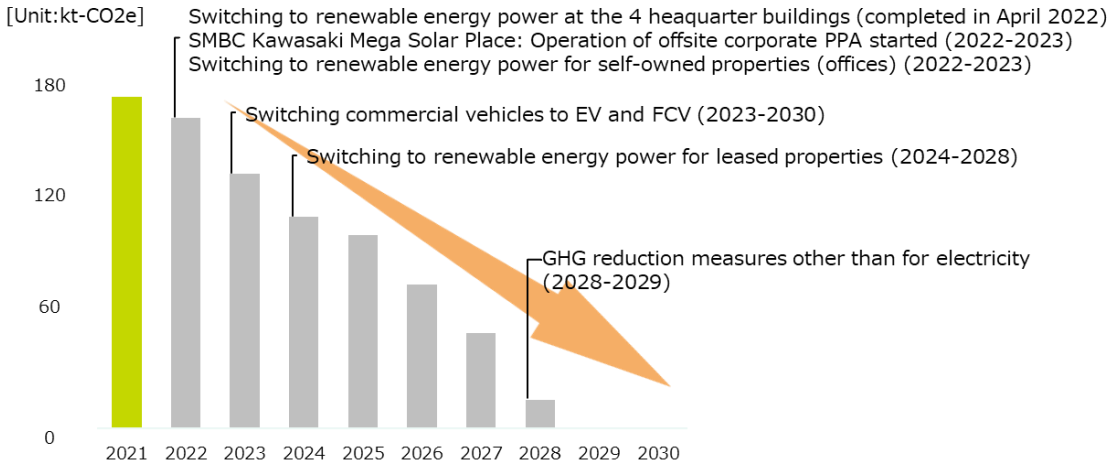


Figure 2-8 Offsite Corporate PPA (Ibaraki Prefecture)

Figure 2-9 Introduction of EV & FCV, Rollout of EV Chargers

Implementation Strategy 2: Advanced Management of Portfolio GHG Emissions

SMBC Group has set a goal to reach net zero GHG emissions in our loan and investment portfolio by 2050. However, each sector has unique challenges and risks, and regional characteristics also differ. As such, rather than advancing uniform calculation and target setting, it is crucial to define sector-specific calculation approaches and plot reduction pathways that consider regional characteristics, based on each characteristic, risk, and scientific basis. This is vital from the perspectives of decarbonization and risk management.

Moreover, while financial support for high-emission industries' transition is essential for decarbonization, such funding might lead to a temporary increase in portfolio GHG emissions. Therefore, to measure a financial institution's contribution to the real economy's decarbonization, further enhancement of portfolio GHG emission measurements and new perspectives through the combination of multiple indicators are necessary.

SMBC Group will expand the scope of portfolio GHG calculation and target setting based on analysis results and will continue to examine setting goals and KPIs considering the impact on the real economy and risk perspectives.

■ Expansion of Portfolio GHG Calculation & Target Setting

SMBC has identified six sectors (coal, oil and gas, electricity, steel, automobiles, real estate) as priority sectors for setting reduction targets for portfolio GHG emissions in lending operations. We have built a calculation method, referencing the NZBA guidelines, scenario analysis results, heat maps, and more. Also, sector-specific GHG emissions are setting and considering reduction targets based on scientific scenarios such as the IEA's SDS and NZE.

Furthermore, Sumitomo Mitsui DS Asset Management, as a member of the NZAMI initiative for asset managers, has set an interim target of reducing GHG emissions per amount of managed assets (stocks, corporate bonds) by 50% by 2030, compared to FY2020.[11]

Moreover, SMBC Nikko Securities, considering the draft methodological proposal released by PCAF, which sets the Scope 3 calculation standard for financial institutions, has conducted preliminary calculations of emissions for the electricity and oil and gas sectors for future considerations related to underwriting operations such as stocks and bonds.

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[11] Sumitomo Mitsui DS Asset Management Co., Ltd. " Setting an Interim Targets for 2030 Based on Commitment to the Net Zero Asset Managers Initiative"
(https://www.smd-am.co.jp/english/pressrelease/2023/NewsRelease_20230227_E.pdf)

Going forward, by October 2024, SMBC will consider expanding the reduction targets to the nine sectors covered by the NZBA. We will also continue to consider progressively expanding the sectors for calculation and target setting from 2024 onwards, based on sector-specific analysis results. Additionally, as a group, we will consider calculations and targets for asset classes such as investments and underwriting, in addition to in-house calculations, through participation in various working groups in the NZBA, PCAF, and more.

■ Obtaining Third-Party Assurance for Portfolio GHG Calculation

Portfolio GHG calculation is one of the key metrics and goals in the Transition Plan. While obtaining third-party assurance is recommended by the Principles for Responsible Banking (PRB) and NZBA, there exist challenges such as data acquisition and its accuracy. SMBC Group will address these issues, establish a robust internal control system, and aim to obtain third-party assurance moving forward.

■ Development of Metrics and Targets to Support Decarbonization of the Real Economy

To measure the contribution of financial institutions to the decarbonization of the real economy, discussions on enhancing indicators (such as deductions in portfolio emission volume due to planned phase-outs) and complementary indicators (such as reduction contribution volume) are being advanced. These discussions are led by initiatives like GFANZ, NZBA, PCAF, and in Japan by the Ministry of Economy, Trade and Industry, the Ministry of Environment, and the Financial Services Agency. SMBC Group participates in these working groups, develops indicators/targets that contribute to the decarbonization of the real economy, and puts them into practice.

Implementation Strategy 3: Enhancement of Climate-Related Risk Analysis and Control

■ Expansion of Risk Analysis

Traditionally, we have strengthened risk management towards net zero through risk recognition via sector-specific heat maps, GHG emission-related analysis, and scenario analysis, considering physical and transition risks.

SMBC Group conducts scenario analyses on transition risks, focusing on the energy, power, steel, and automobile sectors, based on sector-specific heat maps. The analysis results are shared with customers in discussions, fostering a mutual understanding of external environment and individual company strategies towards net zero. In addition, for sectors deemed to have a significant impact on our company, we will advance more rigorous management through the formulation of policies and phase-out strategies for specific businesses and sectors, and manage and monitor portfolio GHG emissions, carbon intensity, etc., within the framework of our risk appetite. Also, we introduce a

company-specific transition strategy assessment framework and evaluate the transition strategies.

Going forward, we aim to expand the scope of risk analysis, including scenario analysis, to grasp the assumed risk volume, reflect it in the Transition Plan, and disseminate the contents to stakeholders, including customers, more accurately.

- **Enhancement of Policies/Phase-out Strategies for Specific Businesses and Sectors**

SMBC Group has established the Policies for Specific Businesses and Sectors that are considered to have a high potential impact on climate change, such as coal-fired power generation, oil and gas, coal mining, palm oil plantation development, and deforestation. In addition, based on the results of risk analysis and portfolio GHG emission reduction targets, we have set zero balance targets for the coal-fired power generation and thermal coal mining sectors. We are advancing the reduction of balance related to coal-fired power generation and thermal coal mining.

In the future, we will consider expanding the policies and phase-out strategies for specific businesses and sectors for appropriate risk management, while taking into account the results of each risk analysis and portfolio GHG emission reduction targets. We will also consider expanding phase-out strategies, such as the utilization of ETM schemes.

- **Enhancement of Sector-specific Portfolio GHG Emission Management**

With the reduction target of portfolio GHG emissions in mind, we will continue to manage and monitor portfolio GHG emissions and carbon intensity according to the sector within the framework of the risk appetite framework.

In the future, we will continue to operate the portfolio with the aim of reducing GHG emissions step by step towards the achievement of the 2030 target, while considering the increase and decrease of GHG emissions due to project engagement, focusing on the sectors where reduction targets are set.

- **Enhancement of Credit Operations**

In addition to the Policies for Specific Businesses and Sectors, we use "ESG Risk Summary Sheet" among other tools for major clients in the power and energy sectors to evaluate long-term strategies for climate change and disclosure information on GHG emissions of each company for credit decisions.

In the future, we will conduct a climate-related risk assessment including the evaluation of individual company transition strategies, promote the use of borrower evaluations and engagement, account plans, and consider the enhancement and strictness of credit judgments that consider the carbon intensity of each company and the impact of carbon prices for the management of transition risks.

Implementation Strategy 4: Promotion of Decarbonization Solutions

The world is aiming to achieve net zero by 2050 in order to realize a decarbonized society, but the optimal path to decarbonization is not uniform and differs by country. SMBC Group has the responsibility to carefully determine the realistic route and speed, taking into full consideration the unique circumstances of each country, and to firmly support our customers' medium- to long-term transition and technological innovation.

Moreover, the environment is a game changer for both SMBC Group and our customers, and in recent years, industries around the world are at a major turning point with the environment as a key factor. In particular, climate change response is not just a problem for large corporations or high-emission sectors, but is now a management issue for many companies. SMBC Group needs to timely and accurately grasp the increasingly complex and sophisticated needs, fully utilize financial and non-financial functions on a group and global basis, and firmly meet our customers' needs.

Under this recognition, SMBC Group established the Sustainability Division under the Group CSuO in FY2022. The Sustainability Division consists of the Corporate Sustainability Department, which oversees the group's overall strategy and develops businesses from a medium-term perspective, and the Sustainable Solution Department, which promotes sustainable business and engagement with customers on a group and global basis.

To contribute firmly to the realization of our customers' transition and technological innovation, we will support a series of customer initiatives, such as GHG emission calculations, formulation of transition plans, conversion of business models, and fundraising, by leveraging our strengths as a compound financial group that provides various solutions such as finance, underwriting, leasing, and advisory, on a group and global basis. In addition, we will accelerate new initiatives to enhance the provision of global decarbonization-related insights to customers, expand support measures to connect customers and promote energy transition solutions and decarbonization, and enhance risk-taking for new technologies, in response to the ever-changing needs of our customers.

Figure 2-10 Line-up of Solutions for Climate Change Response

Classification	Main Customer Needs	Solution	Proposing Body
Initial Support	Initial disclosure	Organization of SDGs and business relations, materiality formulation, etc.	Japan Research Institute SMBC Consulting
	Internal structure enhancement, awareness cultivation	Revision of internal regulations and HR systems, internal penetration measures, etc.	
GHG Emission Calculation	Greenhouse gas visualization & analysis	Use of "Sustana", a tool for GHG calculation & analysis	SMBC
		Global carbon accounting platform "Persefoni"	
Formulation and Disclosure of Targets and Goals	Goal setting tailored to the company	KPI setting consulting	Japan Research Institute SMBC Consulting
	Creation of a roadmap towards decarbonization	Consultation on formulating mid to long-term reduction plans	
	Enhanced disclosure	Consultation on compliance with TCFD and TNFD, etc.	
Reduction Measures	Collaborative reduction measures with other companies	Various support for co-creation of decarbonizing businesses (renewable energy supply, energy saving products/services, environment-friendly materials, etc.)	SMBC
	Reduction measures through equipment replacement, etc.	Leasing of energy saving/renewable energy equipment, supply of carbon-free electricity	Sumitomo Mitsui Finance & Leasing
		Sale of equipment during relocation or replacement, demolition work	
		EV conversion of business vehicles, etc.	Sumitomo Mitsui Auto Service
	Utilization of carbon credits	Carbon credit trading platform "Carbonplace" (planned to be operational in 2023)	SMBC
Investment & Business Transformation	Business transformation and external PR through capital raising/management	Evaluation-type loans (loans for promoting SDGs, etc.)	SMBC Japan Research Institute
		Sustainability-linked loan/bond, green loan/bond, transition loan/bond, etc.	SMBC SMBC Nikko Securities
		Project financing related to renewable energy	SMBC
		Green deposit	SMBC

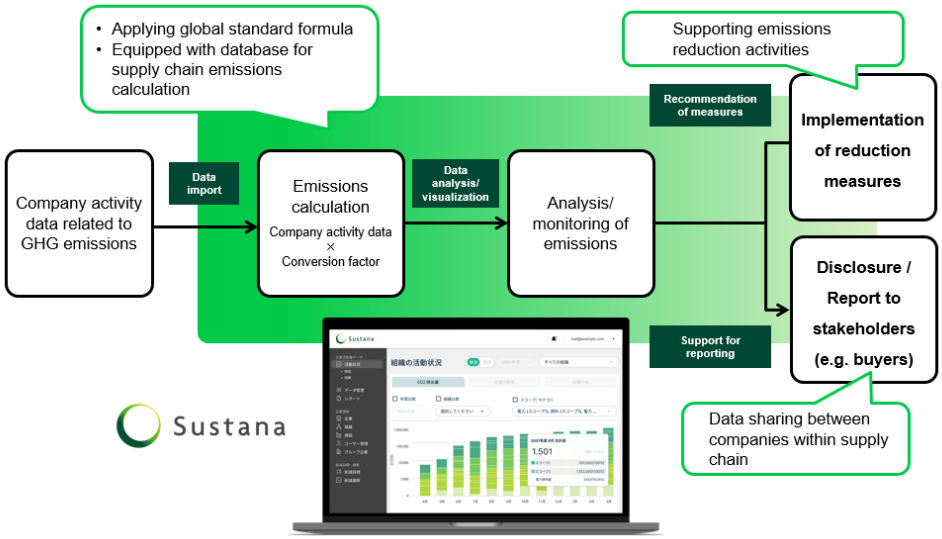
■ Expansion of Decarbonization Solutions

SMBC Group develops and provides digital solutions such as the GHG Emission Calculation and Reduction Support Cloud Tool "Sustana", the Global Carbon Accounting Platform "Persefoni", and the GHG Emission Visualization Service using Corporate Card Payment Data, leveraging the strengths of being a compound financial group that develops a wide range of businesses.

In the future, we will enhance our competitiveness through strategic investments (sustainability investment framework) for the development of businesses and solutions for solving social issues and collaboration with partners from different industries, and promote the development and sophistication of decarbonization solutions. The current initiatives for decarbonization solutions are as follows:

① GHG Emission Calculation and Reduction Support Cloud Tool "Sustana"

SMBC provides a service called "Sustana", which allows companies to manage a series of tasks from the calculation of GHG emissions for the entire supply chain to the planning and execution of reduction measures on the cloud. The service is used by over 1,000 companies. We provide support for the implementation of reduction measures based on the estimated emission volumes from the customers' activities.



Case Study: Implementation of "Sustana" (OSG Corporation)

- OSG Corporation aims to reduce its GHG emissions by 30% in FY2030 compared to FY2019, and to achieve carbon neutrality in FY2050. They have developed a roadmap towards achieving these goals and are promoting initiatives for decarbonization management, such as the development of environmentally friendly products.
- OSG Corporation had been facing challenges in calculating the GHG emissions of their entire supply chain, which led to the implementation of "Sustana" in June 2022. Following the results calculated by "Sustana", they have engaged in efforts such as on-site Power Purchase Agreements (PPAs), the introduction of energy-saving equipment, and the issuance of green bonds to fund the development of environmentally friendly products. Furthermore, through the provision of information from SMBC Group, they have undertaken the first agriculture-based off-site PPA in the Chubu area.
- SMBC Group will continue to support our clients' transition to decarbonization by providing carbon-reducing solutions.

② Global Carbon Accounting Platform "Persefoni"

"Persefoni" is a platform that supports the calculation and management of GHG emissions, provided in collaboration between Persefoni, IBM Japan, and SMBC. "Persefoni" is characterized by its ability to calculate the GHG emissions (Scope 3 Category 15) of loan and investment recipients according to the PCAF, as well as its various features that make complex calculations for Scope 3 easy and the various emission factors necessary for GHG emission calculations globally. We introduce it to customers who have needs for advanced emission calculations and global emission calculations, including overseas bases.

③ GHG Emission Visualization Service Utilizing Corporate Card Payment Data

We provide a service that calculates the GHG emissions (Scope 3 Category 6) of a company due to employee business trips based on the payment data for travel-related expenses of corporate cards issued by Sumitomo Mitsui Card, and links the data to the GHG Emission Calculation and Reduction Support Cloud Tool "Sustana" provided by SMBC. We also plan to calculate and link data for "purchased product/service emissions" (Scope 3 Category 1).

④ Solutions Related to Carbon Credits

In recent years, there has been a growing interest in initiatives to offset GHG emissions that cannot be reduced through self-help efforts such as the use of renewable energy, by utilizing carbon credits, and initiatives to use carbon credits to enhance the competitiveness of their own products. SMBC Group positions the provision of carbon credits as one of the important decarbonization solutions and contributes to the activation of the carbon credit market by building a carbon credit value chain through strategic investments (sustainability investment fund), external collaboration, etc., while supporting our customers' decarbonization. Specifically, we are implementing the following initiatives:

A) Investment in "The Reforestation Fund" and "Eastwood Climate Smart Forestry Fund"

In December 2022, SMBC entered into an investment contract with "The Reforestation Fund", a forestry fund that conducts afforestation projects mainly in South America. In June 2023, we also entered into an investment contract with "Eastwood Climate Smart Forestry Fund I", a forestry fund that conducts appropriate forest management mainly in North America. The GHG emissions avoided/absorbed by the business activities of both funds are certified and issued as carbon credits in accordance with internationally recognized standards and are distributed to investors. SMBC will use the received carbon credits to provide decarbonization solutions to customers.

B) Investment and Participation in "Carbonplace"

In May 2022, SMBC invested in and participated in "Carbonplace", a carbon credit trading platform, along with several global major financial institutions. Traditionally, carbon credits have mainly been traded through brokers, but by using this platform, customers can easily access high-quality carbon credits.

C) Provision of J-Credit Creation Support and Buying and Selling Services by ByWill

In July 2023, SMBC entered into a cooperation agreement with ByWill Co., Ltd. to build a supply chain for environmental value, and started a business to intermediate J-Credit creation support and buying and selling services provided by ByWill. This allows us to convert GHG absorption from appropriate forest management into J-Credits, as well as provide J-Credits to customers.

D) Aircraft Operating Lease with Sale of Carbon Credits

In September 2022, Sumitomo Mitsui Finance & Leasing, through its subsidiary SMBC Aviation Capital Limited, started offering a solution combining aircraft operating leases for airlines and the sale of carbon credits. The aviation industry has set global GHG reduction targets by the International Civil Aviation Organization, a specialized agency of the United Nations, and is promoting the use of carbon credit trading systems as one of the measures to achieve these targets. Through this initiative, Sumitomo Mitsui Finance & Leasing will support the decarbonization of airlines.

■ Business Co-creation towards Decarbonization

The realization of a decarbonized society is impossible for a single company to achieve alone. SMBC Group has a responsibility to expand knowledge on decarbonization-related technologies, understand the decarbonization technologies and know-how our customers possess, and match them with customers who need these technologies. This is done by utilizing our network and the function to oversee the entire supply chain, thereby contributing to the realization of net zero together with our customers.

① Strengthening Initiatives towards New Energy

SMBC Group is actively working on initiatives to promote the diffusion of next-generation fuels such as hydrogen and ammonia in order to realize a decarbonized society. Specifically, we have been participating as a board member since the establishment of the Japan Hydrogen Association (JH2A), which aims to realize a hydrogen society through the realization of social implementation projects, and we are the first Japanese financial institution to participate in the Hydrogen Council, an initiative aimed at realizing a global hydrogen society.

In addition, we participate in the Hydrogen Utilization Study Group in Chubu, which discusses the construction of a hydrogen supply chain in the central region, and work on initiatives for the commercialization of hydrogen supply. In policy discussions, we participate as a member of the Council for a Strategy for Hydrogen and Fuel Cells sponsored by the Agency for Natural Resources and Energy and discuss policy support

necessary for the diffusion of hydrogen and ammonia from the perspective of financial institutions. Through these activities, we will initiate initiatives for new business co-creation using hydrogen and ammonia.

② Strengthening Initiatives for Climate Technology that Contributes to Decarbonization

While further progress in decarbonization-related advanced technologies (hereinafter referred to as "climate technology") is essential in many business areas to aim for carbon neutrality, it is important to collaborate with venture companies and academic research laboratories for the development of advanced climate technology, while assuming a medium to long-term time axis, and we recognize that the difficulty of the initiative is high, including the cultivation of discerning ability.

In view of this, SMBC Group participated as an anchor partner in the U.S. fund "Remarkable Ventures Climate" in March 2023, which invests in venture companies in the seed and early stages related to climate technology. Along with nurturing climate technology, we aim to expand the impact in this field by introducing these technologies to customers who need them.

Together with the investment in the U.S. funds "TPG Rise Climate Fund" and "Ares Climate Infrastructure Partners LP", which target late-stage ventures in the field of climate technology that we have been working on so far, we will work on further development of climate technology and solution development towards the realization of a decarbonized society.

Case Study: Business Co-creation for Decarbonization (Mitsui Fudosan Group)

- GHG emissions of the Mitsui Fudosan Group are largely dominated by emissions outside of the company's direct control (Scope 3), accounting for about 90%, making initiatives to reduce emissions after occupancy in their for-sale and rental properties crucial.
- In response to this challenge, we proposed a business co-creation to the Group, who are supporting individual customers' transition to decarbonization through their "Sustainable Living Program (the “Sus-Katsu Program”) "(*). Specifically, we linked the ANA Group, who are committed to regional revitalization and sustainability initiatives, and the Furano Shizen Juku (Furano Nature School), which is sponsored by SMBC Group, to provide the “Sustainable Tourism” program, allowing participants to join a tree-planting program at their travel destination. This initiative contributes to the reduction of GHG emissions.

  (*)"Sustainable Living Program (the “Sus-Katsu Program”) " is an initiative by Mitsui Fudosan Group that encourages actions towards decarbonization in daily life, providing attractive benefits to participants.

■ Expansion of Sustainable Finance through Enhanced Risk-Taking

SMBC Group offers a diverse array of sustainability-related financial products, including green loans/bonds and sustainability-linked loans, and has secured a strong market presence in areas such as financing for renewable energy.

SMBC Group had initially set a target of "JPY 30 trillion in sustainable finance[12] execution from FY2020 to 2029". As a result of our efforts, the cumulative performance from FY2020 to 2022 reached JPY 14.9 trillion. To accelerate these initiatives further, we revised this goal upward to JPY 50 trillion in May 2023.

Additionally, in May 2023, SMBC Group published a Playbook that illustrates our definitions and criteria for transition finance. Achieving transition in sectors where early decarbonization is difficult due to technical and economic factors is crucial for the smooth realization of a decarbonized society. By implementing this Playbook, we aim to meet our customers' financial needs for decarbonization and enhance our risk-taking for anticipated increases in new technology projects (such as investment in hydrogen-related equipment) to expand sustainable finance.

SMBC Group is committed to supporting our customers' endeavors towards transition and technological innovation in order to contribute as much as possible to ensuring a stable energy supply and realizing long-term decarbonization. We will work alongside our customers to tackle societal issues, including climate change.

[12] Including finance that targets transitions and social-related businesses as use of proceeds.

Figure 2-11 Sustainable Finance Performance*

(Unit: JPY Trillion)

Category	Definition	FY2020	FY2021	FY2022	Total
Total amount of sustainable finance		**2.8**	**5.2**	**6.9**	**14.9**
Green Finance	Finance targeting environmentally considerate businesses including climate change measures (businesses corresponding to the "Green Project Category" in the ICMA's Green Bond Principles, etc.)	1.4	2.2	3.3	6.9
Social Finance	Finance targeting social related businesses (businesses corresponding to the "Social Project Category" in the ICMA's Social Bond Principles, etc.)	0.2	0.3	0.6	1.1
Transition Finance	Finance in accordance with the "Transition Finance Handbook" of the ICMA or the "Transition Finance Playbook" defined by SMBC, with the aim of supporting efforts to reduce greenhouse gases based on a long-term strategy towards the realization of carbon neutrality.	0.0	0.0	0.1	0.1
Others	Other finance that supports and promotes the resolution of environmental and social issues.	1.2	2.7	2.9	6.8

*The data collected includes both SMBC and SMBC Nikko Securities. The figures from past years have been revised due to the refinement of calculations and the review of the data collection targets.

Case Study: Sustainable Finance

- SMBC has signed project finance agreements for the world's largest green hydrogen/green ammonia production and export project, sponsored by NEOM Energy & Water (Saudi Arabia), ACWA Power Company (Saudi Arabia), and Air Products (United States). This project achieved financial close in May 2023. By the end of 2026, the project aims to produce up to ~600 tons per day of green hydrogen for green ammonia production.
- SMBC is among the top lenders contributing to the approximately USD 6.1 billion non-recourse financing for the roughly USD 8.4 billion project. SMBC provided high-quality service, focusing on assisting the Company and Sponsors with the documentation strategy.
- SMBC will continue to support the promotion of new energies to achieve a decarbonized society.

Engagement Strategy

■ Strengthening Customer Engagement

For our customers to reduce transition risk and seize growth opportunities that come with decarbonization, it is essential for SMBC Group, our customers, and society to have a shared understanding of the path to decarbonization, which differs by industry and sector. This necessitates ongoing dialogue.

In SMBC Group, we conduct study sessions for sales representatives (Relationship Managers/RMs), working on initiatives to improve literacy and expand knowledge, and we identify sectors and individual companies that should be focused on from the perspectives of both risk management enhancement and promotion of decarbonization business. Then, through exchanges of views using the results of SMBC Group's scenario analysis, we understand our customers' strategies and challenges towards

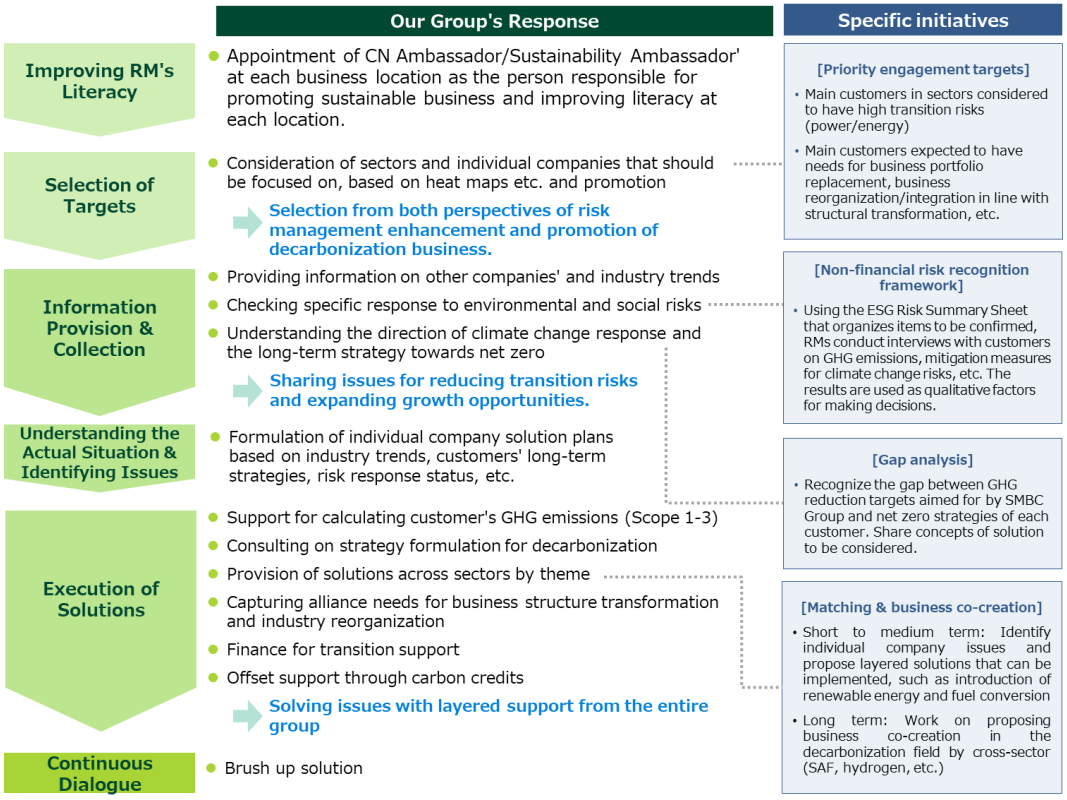
decarbonization, and we work on proposing solutions using SMBC Group's knowledge and network. For some major companies in sectors that we believe have significant transition risk, we are intensively deploying engagement.

We also conduct engagement using a Playbook that details SMBC Group's expectations and judgment methods for transition finance for our customers. Since the establishment of the Playbook, we have received consultations and applications for more than 50 cases globally. Sales representatives use the Playbook not only for the certification of transition finance, but also for building a common understanding with customers regarding transition and providing guidance on deficiencies. By reflecting the realities and circumstances of transition learned through these processes in the Playbook, we are aiming for further refinement.

In the future, while utilizing the framework for confirming individual company transition strategies, we will deploy engagement tailored to the status of each credit recipient's response to transition risks, and promote the gradual reduction of transition risk and the expansion of SMBC Group's decarbonization solutions and sustainable finance.

Continuing to support our customers' transition to net zero, we will reduce transition risk, create growth opportunities related to decarbonization, and contribute to our customers' sustainable growth and the improvement of their long-term corporate value.

Figure 2-12 Engagement Promotion Flow



Case Study: Customer Engagement (JERA Co., Inc.)

- SMBC Group consistently offers advisory services related to transition finance to our customers including assistance in formulating transition strategies and frameworks, as well as supporting individual finance arrangement.
- JERA Co., Inc. has announced its "JERA Zero CO2 Emission 2050" initiative, dedicating their efforts to research and development of zero-emission thermal power generation, with the aim of reducing their GHG emissions to zero by 2050 while supporting stable power supply in Japan.
- One of these initiatives involves the co-firing of clean ammonia in existing high-efficiency power plants. From FY2021 onwards, they have been conducting a demonstration project at the Hekinan Thermal Power Station with the aim of establishing large-scale co-firing technology using fuel ammonia.
- SMBC supports JERA's fuel ammonia procurement as a Financial Advisor, including considerations for fundraising for fuel ammonia production projects.
- SMBC has provided financial advisory services for new energy-related projects, including hydrogen and fuel ammonia, to 16 projects in 9 countries, and has also provided loans for green ammonia and EV battery projects. We will continue to contribute to the realization of a decarbonized society by supporting our customers' transition and technological innovations.

■ Strengthening Engagement with Other Stakeholders

Considering the societal influence of financial institutions, SMBC Group actively participates in the formulation of international standards and policy decisions. We have a significant role in the creation of international standards by voicing our perspectives as a Japanese financial institution, participating in various international initiatives aimed at achieving net zero by 2050, such as GFANZ/NZBA, as well as initiatives like the PCAF, a joint initiative of financial institutions developing methodologies for measuring portfolio GHG emissions.

Domestically, we participate in a variety of meetings and study groups related to climate change, organized by government agencies, local governments, research institutions, and others. We regularly engage in dialogues with government institutions, relevant ministries, and financial supervisory authorities, sharing our understanding of issues based on our efforts towards climate change and customer engagement, contributing to the formulation of various policies and public guidelines related to climate change. In FY2023, we are participating in initiatives to explore suitable portfolio GHG calculation methods, disclosure methods, and to promote transition finance that encourages the decarbonization of the real economy.

In December 2020, SMBC Group launched the Japan Hydrogen Association (JH2A) with Toyota Motor Corporation and Iwatani Corporation, aiming to propose policies and

create projects for the realization of a hydrogen society. JH2A is working on establishing a hydrogen supply chain with over 370 member companies, aiming to construct a hydrogen society swiftly. As the chairman of the financial committee in the JH2A, SMBC Group is considering supporting hydrogen projects through the formation of a hydrogen fund.

Furthermore, we aim to foster a shared understanding and comprehension of transition finance among our stakeholders through explanations of the Playbook and other materials, and to promote efforts towards addressing climate change. We have provided explanations about the Playbook to government/regulatory authorities/corporations/financial institutions both domestically and internationally, receiving feedback such as "realistic and effective approach considering regional characteristics", "a mechanism that supports medium to long-term transition", and "a transparent approach policy". We also provide information to promote transition in Asia, such as holding a study session on the Playbook in the Asia Transition Finance Study Group launched by major Asian financial institutions under the "Asia Energy Transition Initiative (AETI)", a comprehensive support measure for Asian countries proposed by the Ministry of Economy, Trade and Industry.

Additionally, SMBC Group regularly conducts engagements on climate change measures with various stakeholders such as investors and environmental NGOs. We exchange opinions on the direction and recognition of issues related to SMBC Group's transition towards net zero, receiving valuable suggestions on specific improvements for our initiatives, some of which have been reflected in our operations.

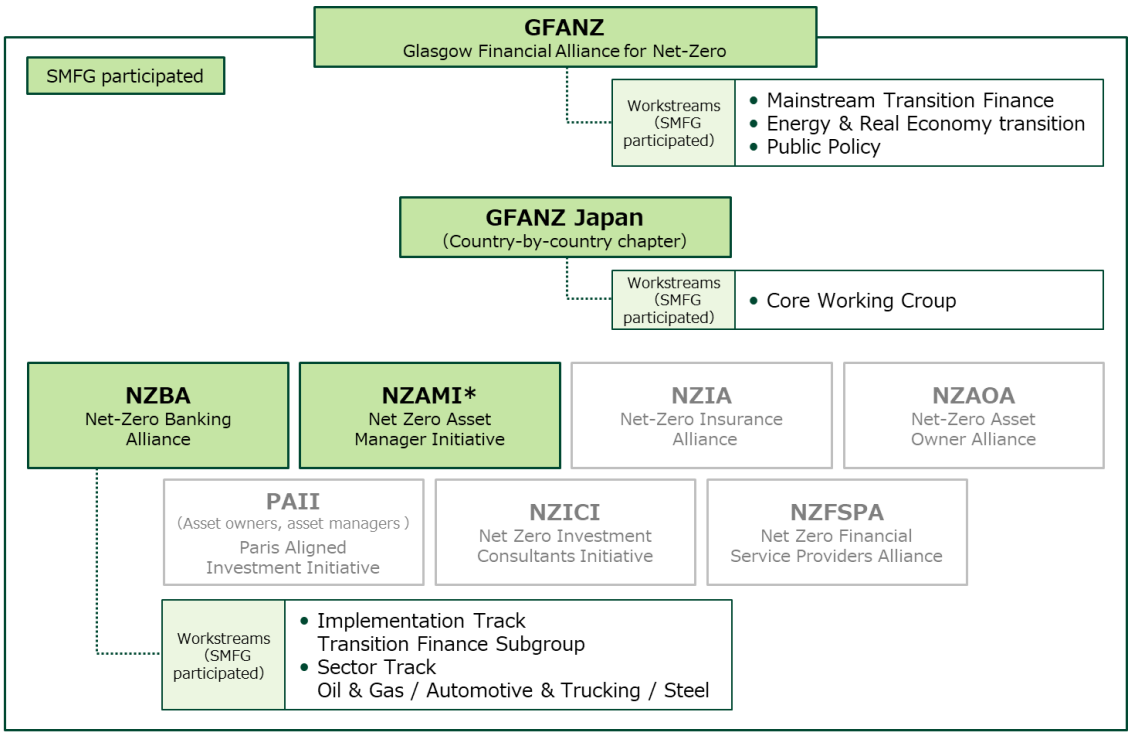
Moreover, as a result of our efforts towards realizing sustainability, including measures against climate change, SMBC Group has been incorporated into many of the world's major ESG indices.

Moving forward, we will reflect valuable advice and suggestions into our strategies and Transition Plan through dialogues with various stakeholders, and continue to strengthen our international opinion expressions.

Figure 2-13 Dialogue with Other Stakeholders

Stakeholders	Content of Dialogue
International initiatives	• Formulation of international standards for the net-zero transition of financial institutions
Various domestic conferences and study groups	• Information exchange on new technologies and industry trends for securing business opportunities and acquiring knowledge
Japanese government	• Expectations for the role of financial institutions in responding to climate change risks and engaging with customers • Financial institutions' views on trends in international initiatives towards net-zero transition
Investors	• Organizational revision for enhancing sustainability initiatives • Thoughts on portfolio GHG emission reduction targets • Stance towards fossil fuel sector, direction of exposure management
NGO	• Policies on coal-fired power generation and coal mining, policies for setting phase out plans • Policy formulation on palm oil plantation development and deforestation business

Figure 2-14 Examples of Participation in International Initiatives: Participation in Working Groups in GFANZ and NZBA



* Joined by Sumitomo Mitsui DS Asset Management

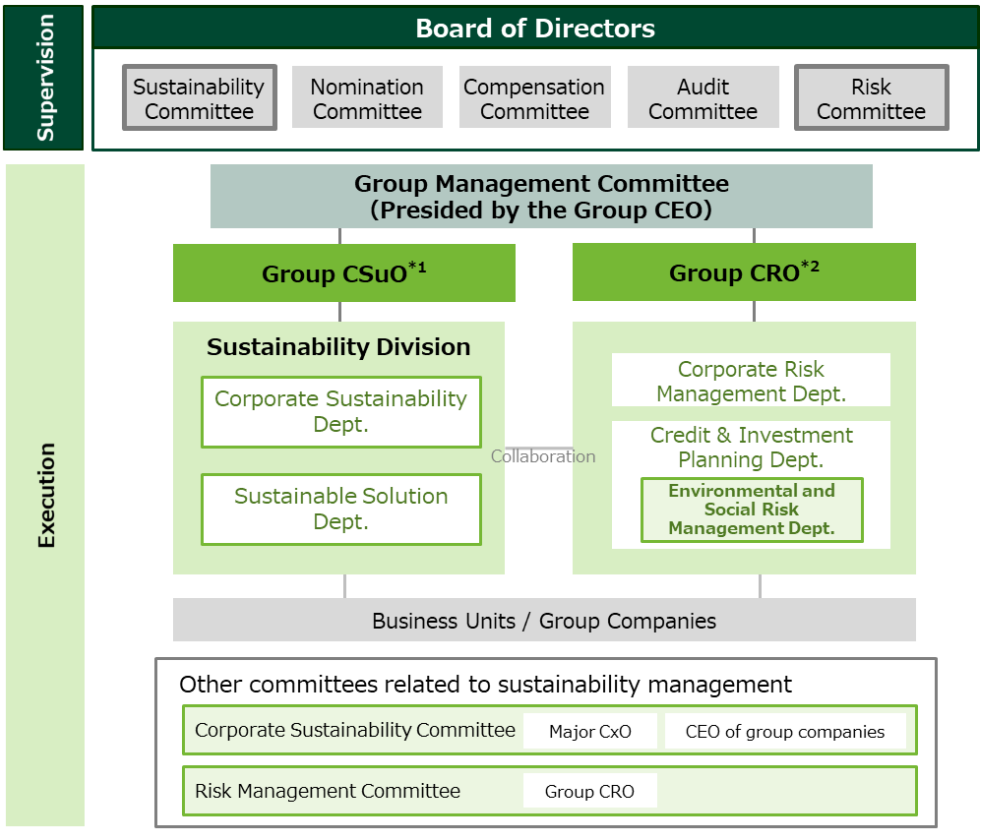
Figure 2-15 Domestic and International Initiatives and ESG Indices

3. Governance

(1) Overall Picture of Sustainability Management

Sustainability management within SMBC Group is driven under the responsibility of the CxO, including the CEO, and is overseen by the Board of Directors, operating under a robust governance structure. For climate change measures, internal committees including the Sustainability Committee, in addition to the Board of Directors, provide oversight, and deliberations are held in each committee. Furthermore, specific business strategies related to climate change measures are implemented based on deliberations and decisions made in management committees and the like.

Figure 3-1 SMBC Group's Sustainability Management Structure



*1 CSuO : Chief Sustainability Officer
*2 CRO : Chief Risk Officer

Figure 3-2 State of Governance Regarding Climate Change Measures

Committees			Examples of Reporting/Discussion Items on Climate Change
Supervision	Board of Directors		• International environmental recognition surrounding climate change and sustainability • Revision of SMBC Group's materiality issues • Formulation of medium-term management plans and business operation plans related to sustainability • Enhancement of the Transition Plan • Introduction of internal control system related to TCFD report • Publication of TNFD Report and Human Rights Report • Supervision of issues deliberated at the management committee
	Internal Committees	Nomination Committee	• Appointment of Group CSuO
		Compensation Committee	• Realization of executive compensation system to promote further penetration of sustainability management
		Audit Committee	• Reporting on sustainability initiatives
		Risk Committee	• Recognition of current environment and risks, including climate-related risks • Formulation of Risk Appetite Statements and indicators related to climate change
		Sustainability Committee	• International environmental recognition surrounding climate change and sustainability • Revision of SMBC Group's materiality issues • Direction of medium-term management plans and business operation plans related to sustainability
Execution	Management Committee		• International environmental recognition surrounding climate change and sustainability • Revision of SMBC Group's materiality issues • Formulation of medium-term management plans and business operation plans related to sustainability • Enhancement of the Transition Plan • Introduction of Climate-Related RAF and setting of medium-term financed emissions reduction targets for each department • Formulation of Transition Finance Playbook
	Risk Management Committee		• Recognition of current environment and risks, including climate-related risks • Formulation of Risk Appetite Statements and indicators related to climate change
	Corporate Sustainability Committee		• International environmental recognition surrounding climate change and sustainability • Strengthening group collaboration towards creating social value and realizing sustainability

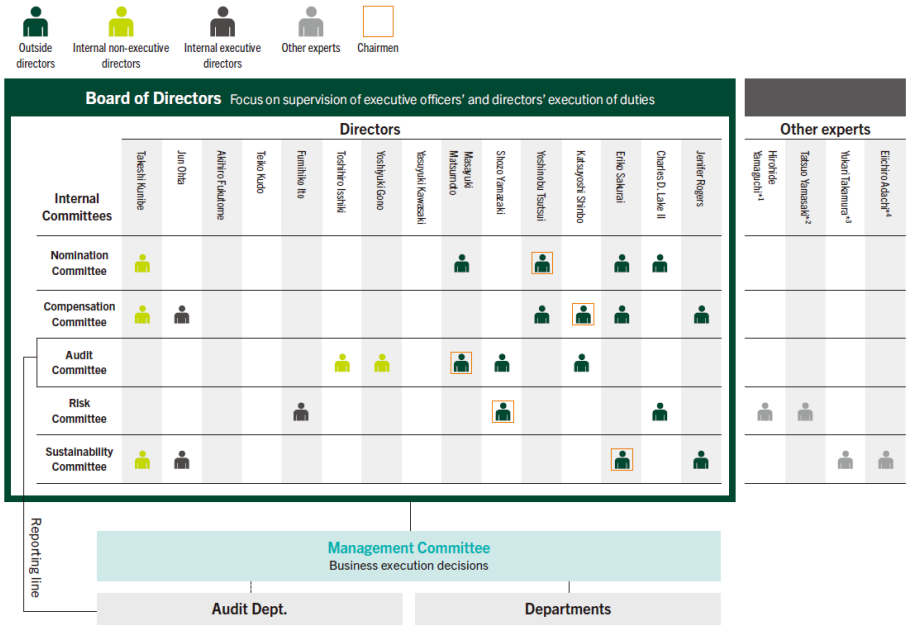
Figure 3-3 Composition and Attendance of Internal Committee Members (FY2022)

Committee members		Nomination Committee Internal 1 Outside 5		Compensation Committee Internal 2 Outside 4		Audit Committee Internal 2 Outside 3		Risk Committee Internal 1 Outside 4		Sustainability Committee Internal 3 Outside 3	
Takeshi Kunibe	Chairman of the Board	●	Attended 5/5 times	●	Attended 7/7 times					●	Attended 2/2 times
Jun Ohta	Director President and Group CEO			●	Attended 7/7 times					●	Attended 2/2 times
Toru Nakashima	Director Senior Managing Executive Officer							●	Attended 4/4 times		
Atsuhiko Inoue (Retired on 2023/6/29)	Director					●	Attended 16/16 times				
Toshihiro Isshiki	Director					●	Attended 16/16 times				
Eiichiro Adachi *1	Internal Expert									●	Attended 2/2 times
Masayuki Matsumoto	Outside Director	●	Attended 5/5 times			◉	Attended 16/16 times				
Arthur M. Mitchell (Retired on 2023/6/29)	Outside Director	●	Attended 5/5 times	●	Attended 7/7 times						
Shozo Yamazaki	Outside Director					●	Attended 16/16 times	◉	Attended 4/4 times		
Masaharu Kohno (Retired on 2023/6/29)	Outside Director	●	Attended 3/5 times					●	Attended 4/4 times	●	Attended 2/2 times
Yoshinobu Tsutsui	Outside Director	◉	Attended 5/5 times	●	Attended 7/7 times						
Katsuyoshi Shinbo	Outside Director			◉	Attended 7/7 times	●	Attended 16/16 times				
Eriko Sakurai	Outside Director	●	Attended 5/5 times	●	Attended 7/7 times					◉	Attended 2/2 times
Hirohide Yamaguchi *2	Outside expert							●	Attended 4/4 times		
Tatsuo Yamazaki *3	Outside expert							●	Attended 4/4 times		
Yukari Takamura *4	Outside expert									●	Attended 2/2 times

◉ : Chairman ● : Committee member

* 1 Senior Counselor of The Japan Research Institute, Limited.
* 2 Chairman of the Advisory Board of Nikko Research Center, Inc.; Former Deputy Governor of the BOJ
* 3 Specially Appointed Professor, International University of Health and Welfare
* 4 Professor at the University of Tokyo Institute for Future Initiatives

Figure 3-4 Composition of Directors and Internal Committees (As of September 2023)



*1 Chairman of the Advisory Board of Nikko Research Center, Inc., former Deputy Governor of the Bank of Japan
*2 Specially appointed professor of International University of Health and Welfare
*3 Professor at the University of Tokyo Institute for Future Initiatives
*4 Senior Counselor of The Japan Research Institute, Limited.

(2) Supervisory Structure for Sustainability

① Board of Directors

The main role of the Board of Directors of SMBC Group is to decide on matters such as the basic management policy and matters defined as exclusive resolutions by the Board of Directors under the law, and to supervise the execution of duties by executive officers and directors. In addition, to enhance the supervisory function of the Board of Directors and to expedite the execution of business, the decision to execute business other than matters defined as exclusive resolutions is delegated to executive officers in principle.

The Board of Directors is composed of a diverse group of directors, including those with knowledge and experience in sustainability. The Board of Directors ultimately oversees sustainability management and deliberates from the perspective of responding to climate-related risks and opportunities. In the Board of Directors meetings in FY2022, the Group CSuO, who oversees and promotes sustainability initiatives in general, reported five times on climate change-related matters, including the formulation of medium-term management plans and business operation policies related to sustainability, the enhancement of Transition Plan, and the introduction of internal controls for non-financial information.

Figure 3-5 Skills Matrix of Directors

	Expected knowledge and experience in particular*						
	Corporate management	Finance	Global	Legal affairs/ Risk management	Financial accounting	IT/DX	**Sustainability**
Takeshi Kunibe	●	●	●	●	●	●	●
Jun Ohta	●	●	●	●	●	●	●
Akihiro Fukutome (Appointed 2023)	●	●	●	●	●	●	●
Teiko Kudo		●	●	●			●
Fumihiko Ito (Appointed 2023)		●	●	●	●	●	●
Toshihiro Isshiki		●		●			
Yoshiyuki Gono (Appointed 2023)		●	●	●			
Yasuyuki Kawasaki	●	●	●				
Masayuki Matsumoto	●			●			
Shozo Yamazaki				●	●		
Yoshinobu Tsutsui	●	●					
Katsuyoshi Shinbo				●			
Eriko Sakurai	●		●				●
Charles D. Lake II (Appointed 2023)	●	●	●	●			
Jenifer Rogers (Appointed 2023)	●	●	●	●		●	●

* The items listed in "Skills Matrix of Directors" are areas particularly expected of the relevant directors and do not represent all of the knowledge and experience possessed by the directors.

② Nomination Committee

The Nomination Committee decides on the contents of proposals regarding the appointment and dismissal of our company's directors to be submitted to the general meeting of shareholders, and deliberates on matters concerning the personnel affairs of officers of our company and major subsidiaries, and the selection of successors to the president of Sumitomo Mitsui Financial Group, SMBC, and SMBC Nikko Securities. The Nomination Committee is composed of one internal director and four outside directors. From the standpoint of ensuring transparency in deliberations on personnel affairs, the chairperson of the Nomination Committee is an outside director. This committee deliberates on the appointment of the Group CSuO and the appointment of the chairperson and members of the Sustainability Committee.

③ Compensation Committee

The Compensation Committee determines the policy for determining the compensation, etc., of directors, corporate executive officers, and executive officers, and the content of the individual compensation, etc., of directors and executive officers based on this policy. It also deliberates on the policy for determining the compensation, etc., of officers of major subsidiaries, and the content of the individual compensation, etc., of executive officers, etc. The Compensation Committee is composed of two internal directors and four outside directors. From the standpoint of ensuring transparency in deliberations on officer compensation, the chairperson of the Compensation Committee is an outside director. The compensation system and compensation level are determined by the Compensation Committee, in which outside directors make up the majority, taking into account the results of third-party surveys on executive compensation, economic and social conditions, and the business environment. This committee deliberates on officer compensation based on a compensation system that includes both quantitative and qualitative ESG evaluation items.

④ Audit Committee

The Audit Committee audits the execution of duties by executive officers and directors, prepares audit reports, decides on the content of proposals concerning the appointment and dismissal of accounting auditors to be submitted to the general meeting of shareholders, and conducts investigations of the business and property of Sumitomo Mitsui Financial Group and its subsidiaries by the members selected by the Audit Committee. The Audit Committee is composed of two internal directors and three outside directors. From the perspective of ensuring objectivity and independence from business execution, the chairperson of the Audit Committee is an outside director, and it is assumed that at least one member will be a financial expert in principle. This committee monitors the progress of initiatives related to sustainability.

⑤ Risk Committee

The Risk Committee, chaired by an outside director, deliberates on matters concerning the operation of environmental and risk recognition and risk appetite, matters concerning the operational structure related to risk management, and other important matters related to risk management, and advises the Board of Directors. The Risk Committee is composed of one internal director, two outside directors, and two external experts, for a total of five members. From the standpoint of ensuring transparency in deliberations related to risk management, the chairperson is an outside director.

In terms of climate change measures, while the Sustainability Committee deliberates on overall policy formulation and progress, the Risk Committee is held in principle once a quarter, with the Group CRO reporting on environmental and risk recognition related to climate change issues, risk appetite, execution status of risk management related measures, etc., and providing advice to the Board of Directors after deliberation.

⑥ Sustainability Committee

The Sustainability Committee, established in July 2021, consists of a total of six members: two outside directors, two internal directors, and two internal and external experts. The Sustainability Committee deliberates on matters related to the progress of sustainability promotion measures, including climate change measures, matters related to domestic and international conditions surrounding sustainability, and other important matters related to sustainability, and in principle reports and advises the Board of Directors once every half year.

The Group CSuO discusses the formulation of sustainability-related medium-term management plans and business operation policies, along with domestic and international conditions surrounding sustainability, and the progress report of sustainability-related measures and the policy of sustainability-related initiatives in the company, which are overseen and deliberated by directors and external experts. In the Sustainability Committee in FY2022, deliberations were held on international environmental recognition surrounding climate change and sustainability, review of the Group's materiality issues, and the direction of medium-term management plans and business operation policies related to sustainability.

■ Expertise of Sustainability Committee Members

The following members with expertise in sustainability have been appointed to this committee.

Eriko Sakurai (Outside Director, Chairperson of the Sustainability Committee)

Appointed as an outside director of our company in 2015 and chairperson of this committee in 2021. After long involvement in the global business division and corporate management of Dow, a U.S. chemical manufacturer with global operations, she

promoted sustainability-related measures such as environmentally conscious product development and initiatives toward GHG emission reduction, based on the company's purpose of "delivering a sustainable future for the world." She currently holds concurrent positions as an outside director of Astellas Pharma Inc., Kao Corporation, Nippon Sheet Glass Co., Ltd., and our company.

Jenifer Rogers (Outside Director)

Appointed as a Sustainability Committee member as an outside director of our company in 2023. A New York State attorney. She has professional knowledge in the field of corporate legal affairs and, as the president of The American Chamber of Commerce in Japan (ACCJ) in 2021, promoted initiatives for the advancement of Japan-US economic relations, including the field of sustainability, and strengthening the international business environment. She holds concurrent positions as General Counsel Asia of Ashlion Japan Holdings G.K., and as an outside director of Kawasaki Heavy Industries, Ltd. and Seven & I Holdings Co., Ltd.

Yukari Takamura (External Expert)

Appointed as a Sustainability Committee member of our company in 2021. She specializes in international law and environmental law, conducting research on international treaties related to the environment, legal policies on climate change and energy. After serving as a professor at the Nagoya University Graduate School and the University of Tokyo Integrated Research System for Sustainability Science (IR3S), she has been a professor at the Institute for Future Initiatives of the University of Tokyo since April 2019. She also serves as the chairperson of the Central Environment Council, the Tokyo Metropolitan Environmental Council, the Procurement Price Calculation Committee for Feed-in Tariff Scheme for Renewable Energy, a member of the Financial Services Agency's Expert Panel on Sustainable Finance, a member of the Working Group on Corporate Disclosure of the Financial System Council, a member of the Sustainability Standards Board of Japan (SSBJ) of the Financial Accounting Standards Foundation, and a member of the Advisory Group on Climate Change and Sustainable Development of the Asian Development Bank.

Eiichiro Adachi (Internal Expert)

Appointed as a Sustainability Committee member of our company in 2021. After joining the Japan Research Institute, Ltd. in 1990, he has been involved in industry research and corporate evaluation from the perspective of corporate social responsibility, and has been involved in many projects such as surveys on environmental activities by financial institutions and socially responsible investments. He is serving as the Japanese Expert of the Technical Committee ISO (International Organization for Standardization)/TC 322, Sustainable finance, and one of the members of the Japan Financial Services Agency Expert Panel on Sustainable Finance. He is currently a Senior Counselor and Head of the Institute for Societal Values in Future Generations at the Japan Research Institute, Ltd.

(3) Executive Structure for Sustainability

① Management Committee / Corporate Sustainability Committee

SMBC Group's approach to climate change issues in response to TCFD recommendations is reflected in our strategy based on decisions made at the Group Management Committee and the Corporate Sustainability Committee. The Group Management Committee is the highest decision-making body for business execution and management of the entire group, under the board of directors.

Measures for realizing sustainability across the group, including climate change, are discussed at the Group Management Committee, and specific details are deliberated and decided at the "Corporate Sustainability Committee". This committee, with the Group CEO as its chairman, was established to realize sustainability from an execution standpoint under top-level commitment. Discussions on climate change measures are being held here as well.

Moreover, in March 2023, Paul Polman, former CEO of Unilever and Deputy Chairman of the UN Global Compact, was appointed as a new Global Advisor[13]. We will deepen our discussions on sustainability in the group management by welcoming Mr. Polman, who has been promoting advanced initiatives in the field of sustainability.

② Group CxO

The Group CEO approves measures for realizing sustainability and responses to climate change, at the Group Management Committee and other venues.

To further strengthen these measures, the Group CSuO was established from FY2021 to oversee and promote overall sustainability efforts, including those on climate change. The Group CSuO is responsible for planning and managing progress on sustainability initiatives.

The Group CRO is responsible for risk management considering sustainability. From FY2022, the Environmental and Social Risk Management Department was newly established within the Credit & Investment Planning Department to strengthen the risk management system. Under the Group CRO, scenario analysis and portfolio management are conducted.

[13] The “SMBC Group Global Advisory Meeting" is regularly held as an advisory body to the Group Management Committee, selecting experts of politics, economics, and global business in the Americas, EMEA and Asia

■ Insights and Expertise from CSuO

Masayuki Takanashi

(Group CSuO and General Manager of Corporate Sustainability Department)

Appointed as the General Manager of the Corporate Sustainability Department of Sumitomo Mitsui Financial Group and Sumitomo Mitsui Banking Corporation in April 2022. Subsequently, from April 2023, he assumed the additional role of Group CSuO. He joined the Sumitomo Bank (now Sumitomo Mitsui Banking Corporation) in 1993. During his tenure in the Corporate Planning Department, he led the creation of the company's first integrated report (published in 2016). As the Co-General Manager of the Loan Capital Markets Department in London, he promoted sustainable finance in EMEA. After assuming his current position, he has taken charge of supervising the sustainability strategy across the entire Group. This strategy includes the reduction of GHG emissions, enhancement of climate-related risk management, and improving and advancing the Transition Plan that incorporates the expansion of decarbonization solutions. Furthermore, he is promoting initiatives to foster capability building withing the company and stimulate communications with our stakeholders.

③ Sustainability Division

SMBC Group has established the Sustainability Division under the Group CSuO starting from the FY2022. The Sustainability Division aims to consolidate functions and knowledge related to sustainability on a group basis, enhancing resources and strengthening responsiveness to environmental and social issues. It consists of the Corporate Sustainability Department, which oversees the overall group strategy and develops businesses from a medium-term perspective, and the Sustainable Solution Department, which promotes sustainable businesses and customer engagement.

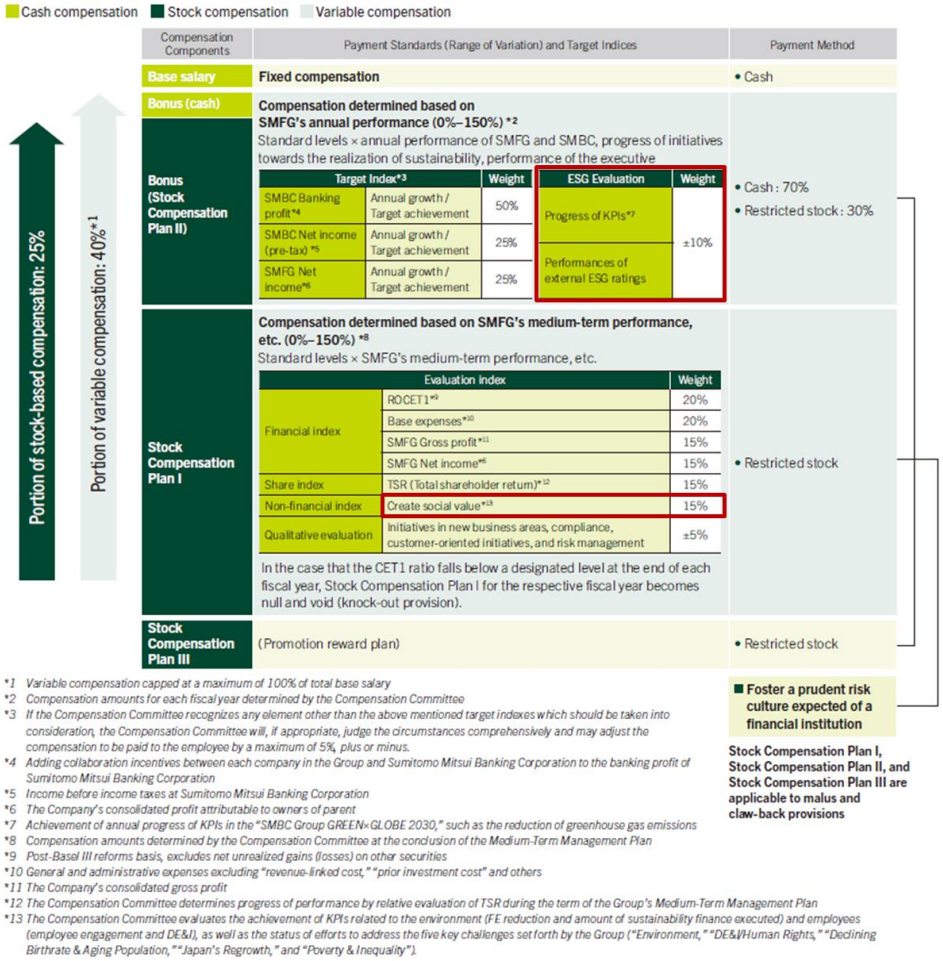
Under the Group CSuO, we are addressing sustainability issues, including climate change, in a comprehensive manner from planning to promotion. To implement climate change measures steadily, the Sustainability Division collaborates with relevant departments and group companies in each initiative. We are planning and promoting cross-group measures, such as risk management, promotion of decarbonization business, and the calculation and reduction of GHG emissions.

(4) Executive Compensation System

From FY2020, SMBC Group has incorporated "ESG initiatives" as one of the qualitative items in medium-term performance-linked compensation, reflecting the achievement of long-term sustainability-related targets, including measures against climate change, in executive compensation. In addition, from FY2022, we expanded the ESG evaluation to the single-year performance-linked compensation. Specifically, the achievements of internal goals for ESG initiatives in a single year and the evaluation results of major external rating agencies are determined by the Compensation Committee, which is composed of a majority of outside directors. The results are then reflected in the single-year performance-linked compensation within a range of a maximum of ±10%.

Furthermore, in April 2023, we incorporated quantitative ESG indicators related to the environment (portfolio GHG emissions reduction, sustainable finance implementation amount) and qualitative evaluation indicators related to initiatives on SMBC Group's materiality issues into the medium-term performance-linked compensation.

Figure 3-6 Executive Compensation System



(5) Capability Building

SMBC Group has introduced the “Sustainability University”, a framework that systematizes training on sustainability. This framework is designed to enable employees to acquire the knowledge necessary to contribute to the realization of sustainability through their respective operations. Going forward, we will strengthen this framework, expand training content, and organize the level of knowledge required for each job to further raise employees' awareness of sustainability. In addition, we will consider introducing training for executive officers and directors to further improve the sustainability expertise of officers and others.

In addition, under the title of "CSuO Channel," the Group CSuO itself holds study sessions for employees to explain sustainability topics and the Group's initiatives, and visits sales offices to directly listen to the voices of those in charge.

In addition, SMBC's Wholesale Banking Unit has appointed Sustainability Ambassadors and CN (Carbon Neutral) Ambassadors at each sales office since FY2022. From FY2023 we are gradually expanding the scope to include some offices in the Global Banking Unit. Each ambassador will serve as a hub to collaborate information between headquarters and sales offices, and will support customers' sustainability management initiatives throughout the sales office by implementing measures to foster employee awareness of sustainability and strengthen proposal capabilities within each sales office.

Furthermore, from FY2023, SMBC's Global Banking Division launched the "Global Sustainable Business Task Force". Through this system, we will focus on creating global projects through collaboration between the Sustainability Division and the U.S., EMEA, and Asia, and promoting initiatives related to sustainable finance.

Through these measures, we will continue to strive to improve sustainability literacy within the company.

Figure 3-7 Initiatives for Capability Building

Initiatives	Targets	Contents of Initiatives
Sustainability University	Employees	• Penetration of sustainability initiatives according to business and hierarchy • "Sustainability Basic Study Session" targeting all employees • Sustainability programs in new employee training, hierarchical and departmental training • Management training under consideration
CSuO Channel	Employees	• CSuO explains initiatives related to sustainability • CSuO visits sales offices and listens to the opinions of staffs
Sustainability Ambassador / Carbon Neutral (CN) Ambassador	SMBC Wholesale Banking Unit	• Approximately 370 appointed in each sales office • Enhancement of literacy on sustainability, promotion of dialogue with customers on sustainability and decarbonization, promotion of solution proposals

Sustainability Ambassadors/CN Ambassadors

In order to strengthen our customer engagement and solution proposal capabilities, we have established Sustainability Ambassadors/CN Ambassadors at each sales office.

4. Risk Management

(1) Process of Identifying and Assessing Climate-Related Risks

SMBC Group recognizes that the escalation in abnormal weather patterns, natural disasters, and shortcomings in climate change adaptation pose significant risks to our operations. As such, we have identified risks related to climate change as “Top Risks”. In dealing with this, we classify climate-related risks according to category and timeframe, further assessing their chain of impacts and potential consequences. Additionally, we create sector-specific risk heat maps and implement appropriate management strategies based on the projected level of these risks.

■ Top Risks

SMBC Group identifies the risks that are particularly material in terms of corporate management as "Top Risks." When selecting Top Risks, we comprehensively gather a wide range of risk events, assess the occurrence probability of assumed risk scenarios and their impact on the corporate management, and then hold lively discussions on them at the Group Management Committee, etc. In addition, the Board of Directors and the Risk Management Committee (an internal committee of the Board) verify the adequacy of Top Risks, etc.

As global awareness of environmental issues increases and environmental policy development progresses, SMBC Group identifies climate-related risks (both physical and transition risks) as one of our Top Risks.

Figure 4-1 Top Risks

World economic stagnation	Global economic recession due to factors such as the reversal of the credit cycle and economic slowdown in China
Highly volatile financial and foreign exchange markets/sudden deterioration of foreign currency funding conditions	Adverse effects of monetary tightening in major economies on the financial system; sudden deterioration of the foreign currency funding condition due to market disruption
Materialization of a global financial crisis	The emergence of a global financial crisis due to bank failures or abrupt money outflows from shadow banks
Japanese economic stagnation	Deterioration of the economy accompanied by debt adjustments due to the shift from monetary easing, and decline in potential growth due to a decline in the labor force
Japanese fiscal instability	Emergence of Japan sell-off due to increased interest payments on government debt and deteriorating public finances due to rising defense spending
Intensification of the U.S. - China struggle for supremacy	Deterioration of the business environment due to political conflict between the U.S. and China and growing concerns over the security environment
Growing intension of Russia-Ukraine conflict	Russia's escalation including the use of nuclear weapons, against Western countries' enhancing support to Ukraine
Unstable situations in Asia and the Middle East	Occurrence of emergency incidents due to heightened tensions in the Korean Peninsula; opposition from neighboring countries in connection with Japan's policies
Political turmoil and social instability	Social turmoil surrounding the next presidential election in the U.S.; opaque policy management due to changes in China's leadership
Outbreak of serious infectious disease	Occurrence of a pandemic due to the emergence of a virus or bacterium that is highly infectious to humans
Disasters such as large-scale earthquakes, storms, and floods	Negative impact caused by the occurrence of large-scale earthquakes and volcanic eruptions, increased frequency of extreme weather events and natural disasters, and impairment of natural capital
Inadequate responses to Cyber-attacks	Adverse effects on provision of services to customers, large scale leakage of information and deterioration of reputation due to cyber-attacks
Changes in industrial structure due to technological innovation	Decrease in our competitiveness due to the rapid digitization of financial services (fintech, digital currency, etc.)
Inadequate responses to climate change and conservation and restoration of natural capital	Deterioration of reputation and occurrence of stranded assets due to inadequate efforts to reduce GHG emissions and to conserve natural capital
Inadequate responses to human rights and other social problems	Reputational damage due to inadequate response to issues such as forced labor and racial discrimination
Misconduct against customer protection and market integrity	Administrative disposition and reputational damage due to a management's/employee's inappropriate action or breaching regulation
Inadequate preparedness for AML/CFT	Administrative disposition or reputational damage due to inadequate preparedness to AML/CFT/CPF controls
Inadequate responses to system failures	Adverse effects on provision of services to customers and reputational damage due to system failures
Inadequate preparedness for heightened regulatory and supervisory scrutiny	Impact on our business due to the strengthening of financial supervision and regulation
Difficulty in securing human resources	Decrease in mid-/long-term competitiveness and resilience due to a lack of personnel and specialists commensurate with business strategy and management infrastructure

■ Classification of Climate-Related Risks

SMBC Group organizes climate-related risks by category. Such risks are anticipated to have extensive knock-on effects and may materialize over various time frames. We envision scenarios as per the examples laid out in the following table within the Group.

Furthermore, we have constructed a risk heat map focused on sectors that are greatly affected by climate change. This heat map aims to delineate the levels of climate-related risks for each respective sector. For additional details, please refer to "Figure 2-2 Risks and Opportunities Heat Map".

Figure 4-2 Examples of Main Risk Events by Category Related to Climate Change

Risk category	Definition	Event examples relating to physical risks <Timeframe>	Event examples relating to transition risks <Timeframe>
Credit risk	Risk for the Bank of incurring losses due to reduction or loss of asset value (including off-BS assets) resulting from credit events such as deterioration of financial condition of obligors	Risk of increasing credit costs for SMBC Group along with the deterioration of customer performance or impairment of collateral items due to natural disasters <Short- to long-term>	Risk of increasing credit costs for SMBC Group along with the deterioration of customer performance resulting from a decline in revenue or impairment of existing assets <Medium- to long-term>
Market risk	Risk of incurring losses due to fluctuation in the market value of financial instruments resulting from changes in interest rates, currency rates, stock prices, etc.	Risk of falling prices of our strategically held stocks and funds along with the deterioration of customer performance due to natural disasters <Short- to long-term>	Risk of falling prices of our strategically held stocks and funds along with the deterioration of customer performance resulting from a decline in revenue or impairment of existing assets <Short- to long-term>
Liquidity risk	Risk of difficulty in procuring funds necessary for settlement due to mismatch in the period between fund management and procurement or unexpected outflow of funds; risk of incurring losses due to forced procurement of funds at a significantly higher interest rate than usual	Risk of losing deposits from SMBC Group along with the deterioration of customer performance due to natural disasters <Short- to long-term>	Risk of deterioration of the funding environment and risk of a funds drain from deposits due to deterioration of the Group's reputation <Short- to long-term>
Operational risk	Risk of incurring losses resulting from improper or non-functional internal processes, people and/or systems, or from the occurrence of external events	Risk of business discontinuation due to damage to the Head Office and branch offices; risk of increasing costs due to the need for a response and recovery <Short- to long-term>	Risk of incurring losses due to fines and court proceedings relating to sales of products and services that do not meet climate change measures and green finance criteria <Short- to long-term>
Reputational risk	Risk of leading to impairment in enterprise value or a decline in customer trust due to failure in meeting expectations regarding high ethics, sincerity, etc. by stakeholders (customers, shareholders/markets, society/environment, employees, etc.), resulting from certain business operations of SMBC Group or a certain act conducted by its employee or another related person.	Risk of being criticized for a delayed response for business recovery from a damaged Head Office and/or branch offices <Short- to long-term>	Risk of deterioration in the reputation of SMBC Group due to a lack of responses to climate change and a delayed response to requests from stakeholders for information disclosure <Short- to long-term>

(Short-term : About 3 years, Medium-term : About 4 to 10 years, Long-term : Over 10 years)

(2) Management Process for Climate-Related Risks

In pursuit of achieving net zero targets, SMBC Group is committed to fostering engagement with sectors that have significant GHG emissions, controlling credit portfolios, and sharing the understanding of specific and evaluated climate-related risks internally, all within the confines of our “Risk Appetite Framework” that assumes the guarantee of appropriate risk-return.

In our operations, we utilize scenario analysis to estimate the cost implications of physical and transition risks on our credit operations, thus enabling us to proactively quantify their impact on the Group. We also employ risk registers and Key Risk Events (KREs) to analyze and evaluate SMBC Group's response to climate change, facilitating the verification of its sufficiency.

① Risk Appetite Framework

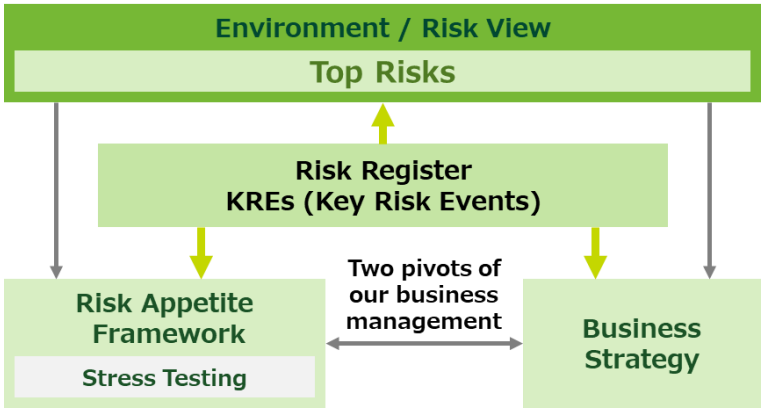
SMBC Group is introducing the "Risk Appetite Framework" to control the total risk of the group. This framework clearly stipulates the type and quantity of risk we are prepared to assume or accept in order to expand our revenues.

SMBC Group's Risk Appetite Framework is considered alongside business strategy as the two main pillars of business management. It serves as a management structure where the leadership team shares their understanding of the environment and risk perception surrounding the group, and undertakes appropriate risk-taking actions.

Taking into account the overall risk appetite of the group, we establish risk appetite at necessary levels, as per the business strategy for each department. Specifically, during the formulation of business strategies and operational policies, we identify particularly significant risks as "Top Risks". Then, we conduct risk analysis through stress tests and determine the risk appetite, while considering the potential impacts if the risks materialize.

In April 2023, we added "climate-related" as a new category of our risk appetite framework. Our risk appetite statement outlines our commitment to curbing the increase in climate-related risks through measures such as enhancing engagement and controlling portfolios, in order to achieve our net zero targets. We will manage our portfolio GHG emissions as a risk appetite indicator, controlling portfolio GHG emissions at sector and business unit level to align with the 1.5℃ scenario.

Figure 4-3 Risk Appetite Framework



■ Stress Testing (Scenario Analysis)

In the pursuit of formulating and executing forward-looking business strategies, we strive to pre-emptively analyze and understand the potential impacts on the group during periods of economic and market volatility through the use of stress tests.

In the context of climate-related risks, we employ scenario analysis using stress test methodologies to consider both physical and transition risks. This allows us to estimate credit-related costs and pre-emptively grasp the financial implications on SMBC. For additional details on our scenario analysis, please refer to "2. Strategy (1) Awareness of Risks Associated with Climate Change" and this section's "④ Scenario Analysis".

■ Risk Register

With the aim of advancing risk governance and fortifying risk ownership, each business unit has established a risk register. Specifically, each unit identifies inherent risks in their operations through communication with the risk management department. Following the evaluation of these risks and the verification of the sufficiency of control measures, they incorporate this knowledge into their business strategies.

This framework enables us to identify and evaluate climate-related risks inherent in the business strategy, consider appropriate control measures, and incorporate necessary responses into the business strategy during its formulation.

■ KRE（Key Risk Events）

Aiming to identify early signs of potential risks, we extract external events (Key Risk Events, or KREs) that signify an escalation in risk, which includes matters pertaining to climate change. We analyze and assess the likelihood of similar occurrences within the Group and the potential impact if they were to occur. This information is then utilized to heighten SMBC Group's risk management system.

■ Risk Control for each Sector

For initiatives that are considered to potentially have a significant impact on climate change, we have established the "Policies for Specific Businesses and Sectors", and we undertake actions such as prohibiting support and performing due diligence related to environmental and social risks. For projects deemed to carry particularly high environmental and social risks, our Group Chief Risk Officer (CRO) expresses opinions regarding the support policy, and these opinions are reflected in the support decision-making process at our branch offices. Projects considered of high importance are reported to the management committee.

Furthermore, we have integrated the Climate-Related Risk Appetite Framework (RAF) into our existing risk appetite framework. In regard to the power and energy sectors, we not only manage GHG emissions and carbon intensity towards achieving our portfolio GHG emission reduction targets, but also continue to manage and monitor credit balances.

For sectors such as power and oil & gas, which are perceived to carry high transition risks, we have undertaken a pilot of the framework to verify individual company transition strategies, and have assessed the status of each borrower's response to transition risks. Specifically, we have carried out evaluations based on several questions concerning whether the borrower has set goals in alignment with the Paris Agreement, their governance structure, and their initiatives towards achieving these goals. The results of this verification will be utilized for future borrower evaluations and engagement activities. For corporate entities that are included in the calculation targets for portfolio GHG emissions within the power and oil & gas sectors, we have selected approximately 60 companies, covering about 60% of the credit balance as of the end of March 2023. The results of the pilot in FY2023 are as shown in Figure 4-5. We plan to expand our target entities and enhance the questionnaire items going forward.

Figure 4-4 Conceptual Diagram of the Climate-Related Risk Appetite Framework

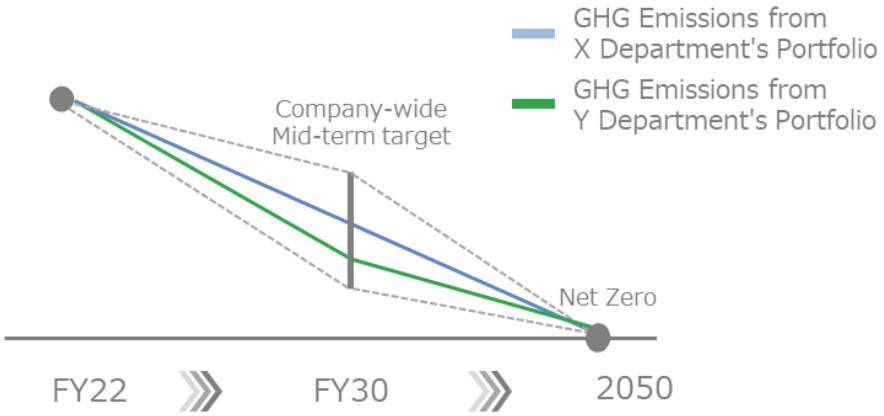
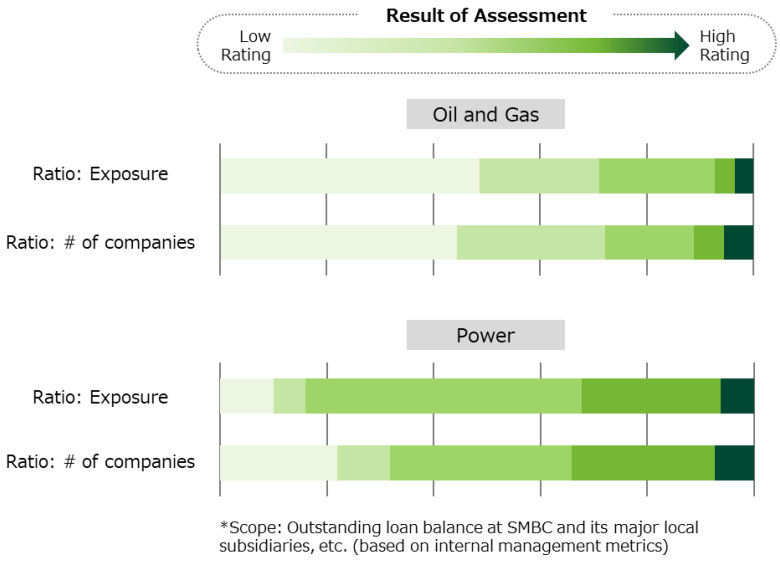


Figure 4-5 Results of the Pilot for the Company-Specific Transition Strategy Assessment Framework



*Scope: Outstanding loan balance at SMBC and its major local subsidiaries, etc. (based on internal management metrics)

② Risk Management by Category

Climate change has implications for all risks that impact the Group. We undertake risk management in each category as described below.

■ Credit Risk

SMBC Group has established the "Group Credit Policy", which explicitly defines the universal and basic principles, guidelines, and norms for credit operations, grounded in our management philosophy and code of conduct. We manage and comprehend the credit risk of individual credits and the entire credit portfolio in a quantitative and continual manner.

In terms of the credit risk management structure, the Group Chief Risk Officer (CRO) formulates and manages the basic policy for credit risk management each year, drawing from the Group-Wide Basic Policy for Risk Management. Additionally, we have instituted the "Credit Risk Committee", a discussion body aimed at ensuring agile and appropriate risk control, as well as safeguarding a robust governance structure in credit operations.

Regarding climate-related risks, we calculate the impact on the Group through scenario analysis, which assists in identifying anticipated future risks. We also engage in discussions to enhance portfolio management, taking into account the risk levels of each sector as assessed by the heatmap.

As part of the management of individual cases, as outlined in this chapter's "⑤ Policies for Specific Businesses and Sectors", we formulate and operate this Policy deemed likely to significantly impact climate change. For some major entities within the sectors targeted by this policy, we conduct due diligence utilizing the "ESG Risk Summary Sheet", a tool for understanding non-financial ESG-related information, and we incorporate this information as qualitative factors in our credit decisions. This Policy will be proactively reviewed for the sectors/businesses targeted, considering the external environment.

Going forward, as we continue to evaluate potential climate-related risks in our portfolio, we will continue refining processes to control their impact.

■ Market Risk and Liquidity Risk

In line with the " Basic Policy for Group-Wide Risk Management" decided at the Group Management Committee, we establish and manage significant matters such as the basic policy for market risk and liquidity risk management, and risk limits.

At SMBC, the core bank of SMBC Group, we convene an ALM Committee on a monthly basis to report on the adherence to market risk and liquidity risk limits, and to deliberate on ALM operation policies. An independent audit department conducts regular internal audits to verify our risk management system.

Moving forward, we will analyze the influence of climate-related risks on market risk and liquidity risk.

■ Operational Risk

Having established the "Policies for Operational Risk Management" that outline the fundamental aspects for managing the group-wide operational risk, we are dedicated to enhancing our group-wide operational risk management. This is based on the principle of developing an effective framework for recognizing, evaluating, controlling, and monitoring significant risks, as well as preparing accident handling and emergency readiness mechanisms for when risks materialize.

Also, in line with the Basel Framework, we continuously strive to quantify operational risk and elevate group-wide management. The Corporate Risk Management Department and Corporate Risk Information Department, as departments overseeing operational risk, along with the management departments responsible for administrative risk, system risk, tangible asset risk, legal risk, etc., function as a comprehensive operational risk management system. They collect and analyze internal loss data and Key Risk Indicators (KRIs), and ensure the effectiveness of risk management by regularly reporting on the status of internal loss data, KRIs, risk amounts from scenarios, and risk reduction progress to the Group CRO.

Specifically, in response to physical risks such as the inability to continue business due to disasters at our branches and transition risks such as fines and lawsuits resulting from the sale of products and services that do not comply with climate change measures and green finance standards, we are working on developing response manuals assuming flood damage. We are also establishing systems for risk analysis and verification, which include climate-related risks when introducing products and services. We collect internal loss data caused by abnormal weather and use it for quantifying operational risk, while also gathering incident information related to climate change that occurred externally, including fines and lawsuits. This information is used to verify the system establishment status within the Group and raise awareness.

In the future, we will strive for a deeper understanding of the impact of climate change on operational risk, such as the impact of physical risks on business continuity and the potential for climate change to lead to an increase in compliance risk. We will continue to enhance our management systems and processes.

■ Reputational Risk

In line with the basic principles for managing reputational risk, we have established the "Policies for Reputational Risk Management" which outline the fundamental matters for managing reputational risk. We strive to clarify the operational structure and the system, methodology, and rules related to reputational risk management, working towards achieving effective risk management.

In terms of the management structure for reputational risk, based on the "Basic Policy for Group-Wide Risk Management ", the General Affairs Department and Public Relations Department centrally oversee this risk. They are responsible for planning, executing, promoting, and supporting risk management measures. Additionally, we have established a body to discuss various strategies to minimize reputational risk.

SMBC Group diligently collects information related to scenarios that may lead to the materialization of reputational risk. Taking into account the magnitude of the risk and the likelihood of the event occurring, we analyze and understand the extent of the risk, and discuss measures to address it. We are dedicated to controlling and reducing the risk. For high-risk and significant events, we verify and discuss response measures and report the content of these discussions to the management committee.

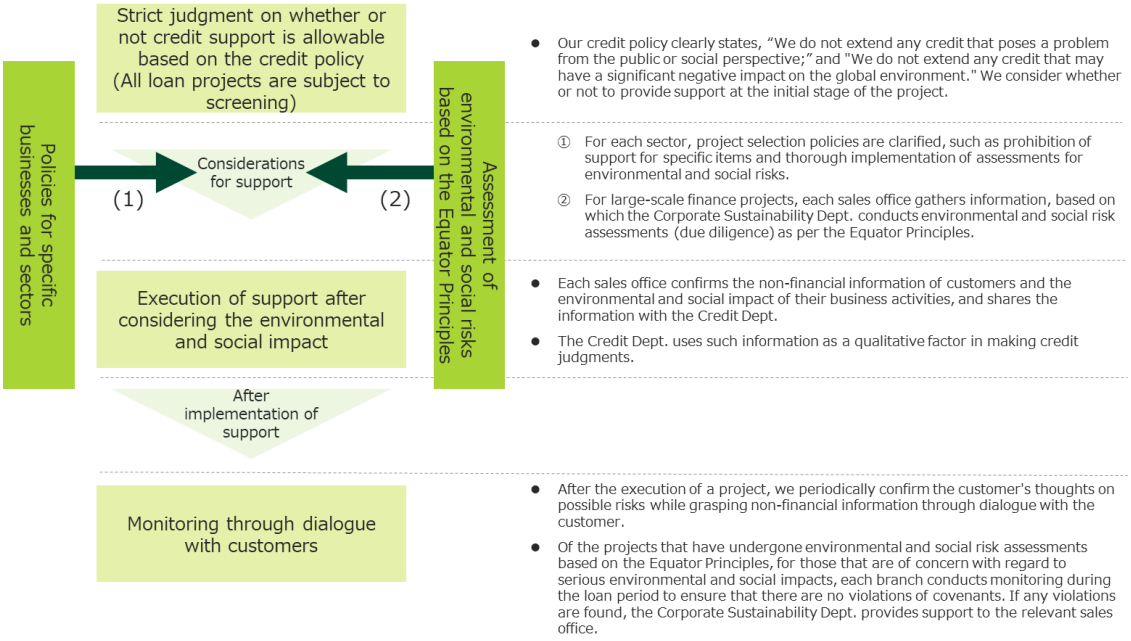
Moving forward, we will strive to deepen our understanding of the impact of climate-related risks on reputational risk and continue to enhance our management systems and processes.

③ Due Diligence

In our "Group Credit Policy", which clearly stipulates the universal and fundamental philosophies, guidelines, and norms of the Group's credit operations, SMBC Group has outlined that we will not undertake credit provision that could pose problems from public and societal perspectives, nor provide credit that potentially imparts significant adverse effects on the global environment.

At SMBC, which plays a central role in the Group's credit operations, we appropriately identify and manage environmental and social risks through the qualitative application of our customers' non-financial information in credit provision, and through assessing environmental and social risks for individual cases. We implement this management through regular monitoring.

Figure 4-6 Due Diligence Flow



■ Grasping Non-Financial Information

SMBC acknowledge the impacts of our customers' business activities on the environment and society by understanding non-financial information, embodied by ESG factors, in addition to financial information, through dialogue with our customers. For certain key clients who operate in sectors and businesses that are considered likely to significantly impact climate change, we employ the "ESG Risk Summary Sheet". This allows us to understand their response to environmental and social risks, including GHG emissions and climate-related risks, which we then use as qualitative judgement factors in credit provision. This non-financial information is regularly updated through ongoing monitoring of customers.

By carrying out these initiatives concurrently with the environmental and social risk assessments based on the "Equator Principles", we are able to conduct more comprehensive and advanced due diligence.

Through the collection of non-financial information, we deepen the quality of our engagement with our customers regarding ESG-related risks, actively support initiatives aimed at considering environmental and societal impacts, and strive to improve areas of concern jointly with our customers.

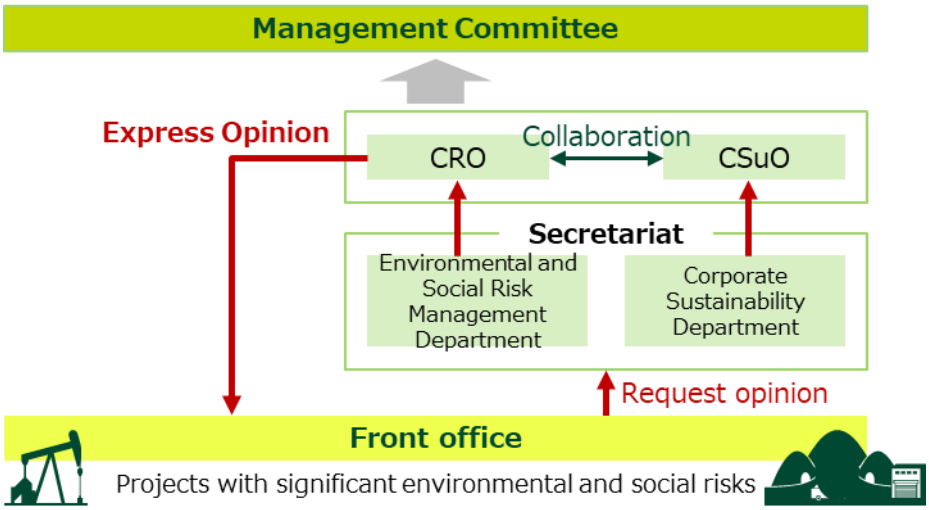
■ Assessment of Environmental and Social Risks

For financing large-scale projects that are deemed likely to exert a significant impact on the environment and society, SMBC have adopted the "Equator Principles", which serve as environmental and social consideration standards for private financial institutions. Our Corporate Sustainability Department conducts assessments of environmental and social risks via due diligence.

Furthermore, we require project operators to adhere to the TCFD recommendations and respect Free, Prior and Informed Consent (FPIC) from local residents and other stakeholders, among other environmental and societal considerations, including climate change and human rights.

Especially for projects considered to carry high environmental and social risks, we have implemented a framework where the Group Chief Risk Officer (CRO) expresses opinions on the support policy, and these opinions are reflected in the support decision-making process at our branch offices. Projects deemed of high importance are reported to the management committee.

Figure 4-7 Escalation Process when Contemplating Support for Projects with High Environmental and Social Risks



④ Scenario Analysis

As indicated under "2. Strategy (1) Awareness of Risks associated with Climate Change", SMBC Group, especially at SMBC, which is a key company in the Group, conducts scenario analyses regarding physical and transition risks. The importance of conducting these scenario analyses lies in the visualization of potential risk pathways and volume of risk, thereby establishing a foundation for shaping strategies towards climate-related risk management and transitioning to net zero. To reduce the calculated risk volume, it is crucial to collaborate with our customers on addressing climate change and to promote mitigation measures, including support for transition.

In terms of the analysis of physical risks within Japan, we have conducted an analysis based on the Shared Socioeconomic Pathways (SSP) scenarios used in the IPCC's Sixth Assessment Report and have clarified the assumed risk volume for each region. For transition risks, we have analyzed sectors including energy, power, automotive, and steel.

Given that climate-related risks have a high degree of uncertainty regarding the timing and scale of risk manifestation, it is extremely challenging to predict potential impacts. In this context, our current analyses are based on certain assumptions regarding natural disasters and the subjects of analysis, and do not necessarily take into account expected technological innovations aimed at resolving climate change issues, or potential shifts in ESG strategies and business models in various companies in the future. Therefore, we will continually review and refine our analysis methods.

For an overview of the analysis, please refer to "2. Strategy (1) Awareness of Risks associated with Climate Change ", and for supplementary materials and data related to the analysis, please refer to "Appendix1. Scenario Analysis".

■ Physical Risks

The increase in extreme weather events due to climate change could potentially impact the businesses of the Group's customers. At SMBC, we perform scenario analysis focused on physical risks and assess the potential impacts up until 2050.

Given that the bulk of natural disasters attributable to climate change are water-related calamities such as floods and wind and water damage, this analysis specifically targets water disasters. For the scenarios, we utilize the RCP2.6 scenario & SSP1-2.6 scenario (2°C scenario), and the RCP8.5 scenario & SSP5-8.5 scenario (4°C scenario), which are employed by the IPCC as a basis for their research.

The scenario analysis is conducted in collaboration with MS&AD InterRisk Research & Consulting, Inc., leveraging the AI technology of Jupiter Intelligence[14], a US-based startup. By implementing machine learning via AI and analyzing diverse climate-related data and satellite imagery of terrain, we are able to quantitatively understand the risk in the event of a water disaster.

The analysis is carried out in the following three steps:

Step 1 In terms of the impact of water disasters on performance, we estimate credit-related costs that are anticipated to arise from two paths: impairment of collateral value in corporate businesses at SMBC, and degradation of borrower classification due to financial deterioration. Domestically, we utilize the hazard maps (areas presumed to be flooded in the event of maximum scale rainfall) disclosed by Japan's Ministry of Land, Infrastructure, Transport and Tourism, to identify the assumed flood depth for each piece of collateral and for each corporate business located on these maps. Internationally, we calculate the assumed flood depth for each corporate business based on AI analysis by Jupiter Intelligence. Using these flood depth estimates, we analyze the impact on collateral damage and financial deterioration.

Step 2 We employ data provided by the flood risk evaluation project that MS&AD InterRisk Research & Consulting conducts in partnership with the University of Tokyo and Shibaura Institute of Technology[15]. This data allows us to establish the probabilities of flood occurrence up until 2050 for both the 2°C and 4°C scenarios.

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[14] A US-based venture firm specializing in climate-related risk analysis, capable of predicting the occurrence of natural disasters through AI analysis by collecting a broad range of data, including communication satellite data.

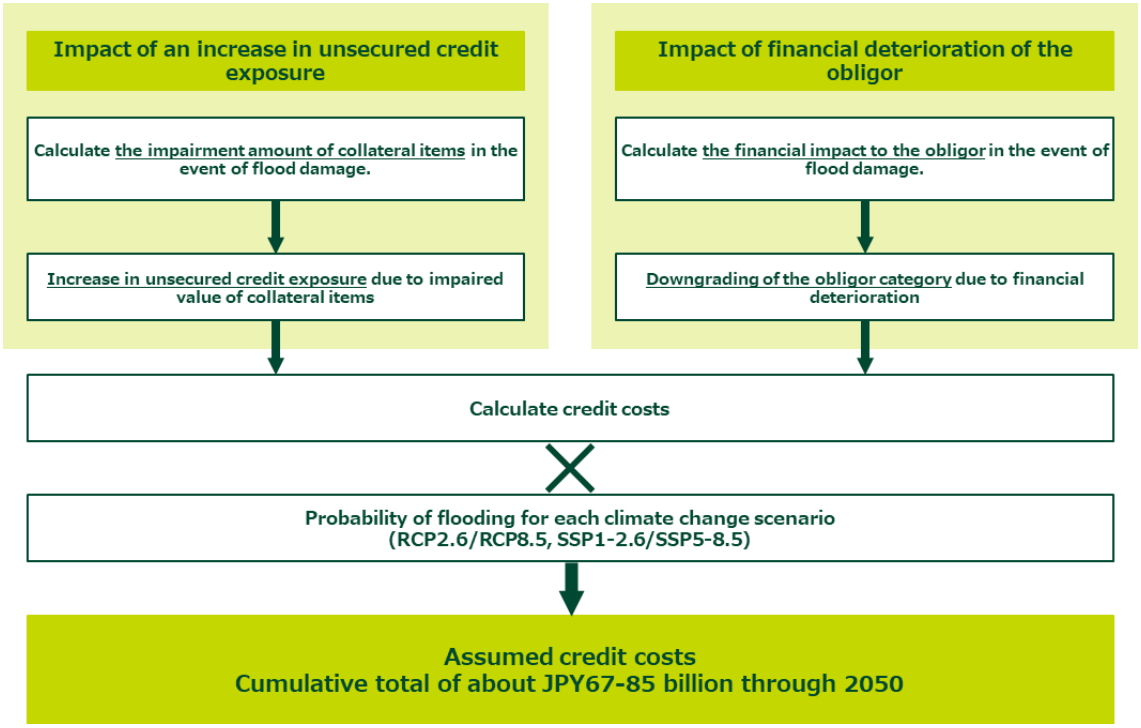
[15] Hirabayashi Y, Mahendran R, Koirala S, Konoshima L, Yamazaki D, Watanabe S, Kim H and Kanae S (2013) Global flood risk under climate change. Nat Clim Chang., 3(9), 816-821. doi:10.1038/nclimate1911.

Step 3 The credit-related costs calculated in Step 1 are factored in with the probabilities of flood occurrence established for each climate change scenario in Step 2. This is done to compute the expected credit-related costs.

As a result of this analysis, the projected credit-related costs amounted to approximately JPY 67 to 85 billion in total by 2050. This translates to an additional credit-related expense of about JPY 2 to 3 billion per annum on average. Furthermore, when viewing the projected credit-related costs by region (Japan, Americas, Europe, Middle East, Asia, and Oceania), the values within Japan are relatively higher, reflecting the magnitude of the exposure. However, no overseas region has a significantly larger value, suggesting only minor differences between regions.

Considering the above, the impact of water disaster risks stemming from climate change on SMBCs annual finances is deemed to be limited. In the future, we will strive to enhance our analysis methods and, if risk materialization is anticipated, we will prompt our customers to take appropriate action while we work towards reducing our own risk.

Figure 4-8 Physical Risks Analysis Process



■ Transition Risks

The transition to a decarbonized society may pose risks to the Group's customer businesses. These risks could arise from the strengthening of policies and regulations, changes in industrial structures, shifts in carbon and resource prices, supply and demand conditions, and manufacturing costs in line with GHG emission reduction. At SMBC, we undertake scenario analyses focusing on transition risks and evaluate impacts up until 2050. In the transition towards a decarbonized society, we carry out analyses focusing on the energy, power, automotive, and steel sectors, which are presumed to be particularly susceptible to impacts due to their substantial GHG emissions.

In terms of scenarios, we utilize the Current Policies scenario (3°C scenario) of the Network for Greening the Financial System (NGFS), which pertains to climate-related risks. Additionally, we use the Net Zero 2050 scenario (1.5°C scenario) from the same institution, which assumes the achievement of carbon neutrality by 2050, and the NZE scenario (1.5°C scenario) from the IEA[16]. The analysis is carried out in the following two steps:

Step 1 We analyze the impact on performance from risk factors anticipated for each sector (refer to Figure 4-5) for each scenario.

Step 2 The results of the analysis are incorporated into a stress test model that estimates the impact on credit risk. From this, we calculate the credit-related costs expected up to 2050.

As a result of this analysis, under the 1.5℃ scenario, we anticipate an increase in credit-related costs of approximately JPY 2.5 to 28 billion annually by 2050, compared to the Current Policies scenario. The financial impact expected is somewhat larger compared to the physical risks, suggesting that there could be a significant cost burden in advancing the transition to net zero.

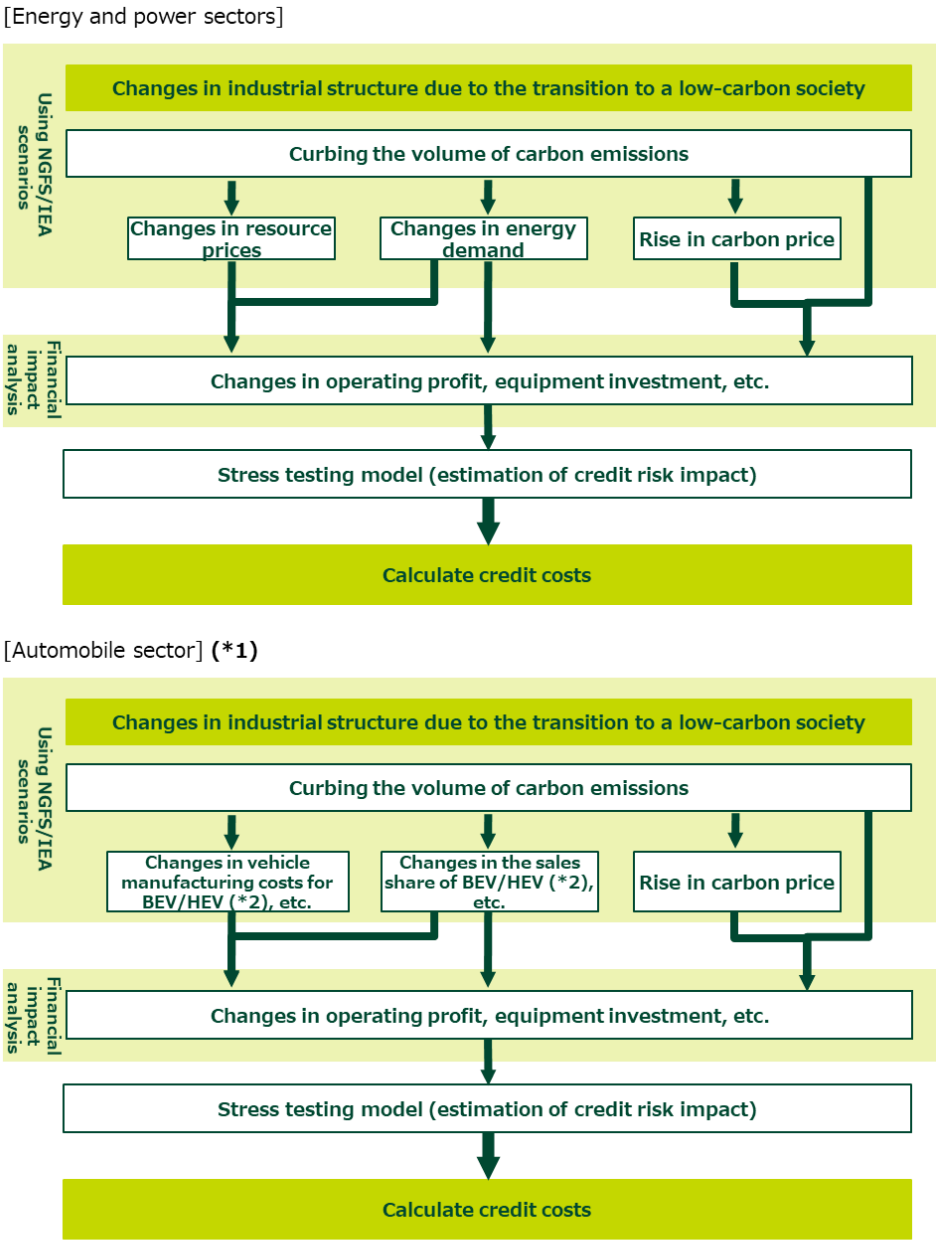
Taking into consideration this risk perception derived from the analysis results and the sectoral insights gained from the analysis, we have set medium-term reduction targets for portfolio GHG emissions in the power and energy (oil, gas, and coal) sectors. As outlined in "2. Strategy (4) SMBC Group's Transition Plan" and this chapter "②Risk Management by Category", we are supporting the transition by regularly engaging with customers and managing portfolios by sector to reduce transition risks through portfolio GHG emission reduction.

[16] A scenario that aligns with the Paris Agreement, which confines the rise in global average temperature from pre-industrial times to 2100 to 1.5°C, due to stringent climate change policies and technological innovation.

This analysis incorporates carbon prices. When comparing the carbon prices in 2050 under the 1.5℃ scenario used in this analysis, the Net Zero 2050 scenario of NGFS is at 670USD/t-CO2, and the Net Zero Emissions by 2050 scenario of the IEA is at 250USD/t-CO2. These significant differences contribute to the variation in the projected credit-related costs.

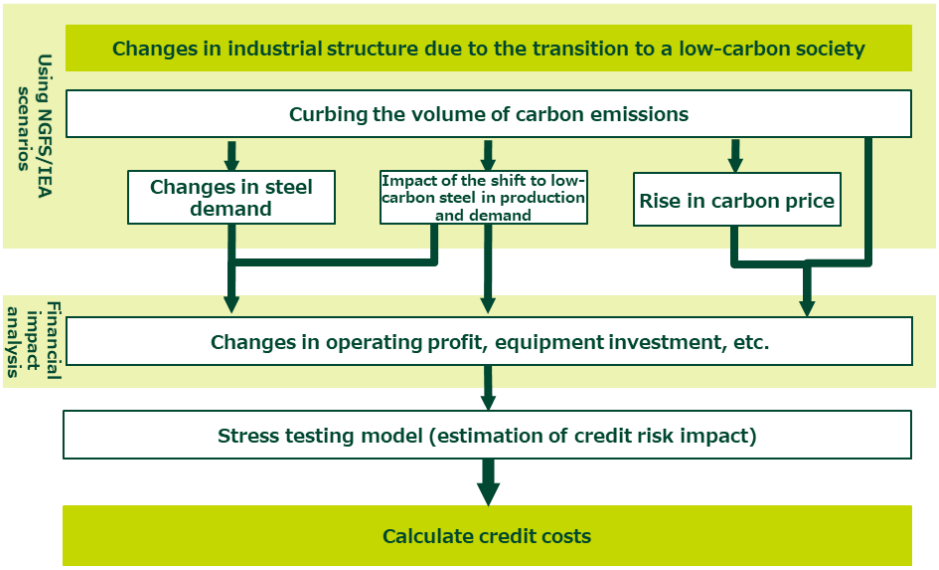
In the future, we will strive to advance our scenario analysis methods, and work towards risk reduction by supporting our customers' efforts to transition towards a decarbonized society.

Figure 4-9 Transition Risks Analysis Process



(*1) For the automobile sector, analysis is conducted targeting OEMs (Original Equipment Manufacturers).
(*2) All powertrains are subject to analysis, such as internal combustion engine vehicles, hybrid electric vehicles, fuel cell electric vehicles, and battery electric vehicles.

[Steel sector]

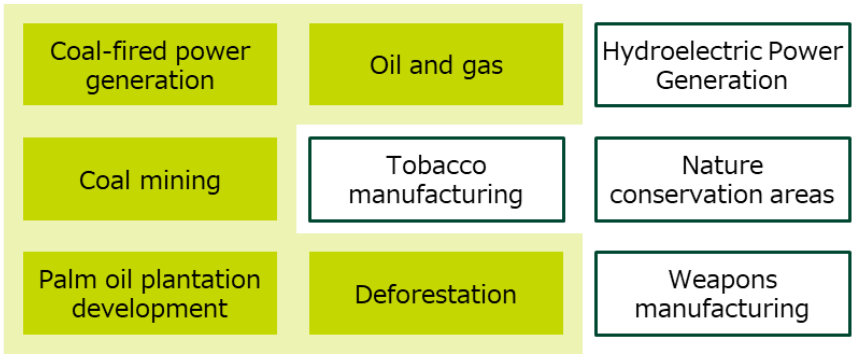


⑤ Policies for Specific Businesses and Sectors

SMBC Group has formulated policies for sectors and businesses that are believed to have a high potential to significantly impact the environment and society. These policies are implemented in Sumitomo Mitsui Banking Corporation, SMBC Trust Bank, Sumitomo Mitsui Finance & Leasing, and SMBC Nikko Securities, each in a manner tailored to their respective business models[17]. For sectors/businesses such as coal-fired power generation, oil and gas, coal mining, palm oil plantation development, and deforestation, which are considered to have a high potential to influence climate change, the Group has established the following policies.

Figure 4-10 Businesses and sectors that are likely to have significant impact on the environment and society

(Businesses and sectors with a high possibility of impacting climate change are indicated in the yellow-green frame.)



[17] SMBC Group Website: Response to Environmental Risk (https://www.smfg.co.jp/english/sustainability/materiality/environment/risk/))

Coal-fired power generation	**Policy** Support for newly planned coal-fired power plants and the expansion of existing plants are not provided. In addition, among companies whose main businesses are coal-fired power generation, we will not provide support for those that do not have any existing transactions, including but not limited to lending, with SMBC Group. **Understanding of the Business/Sector** SMBC Group expects our customers to establish and publicly announce long-term strategies aimed at realizing a carbon neutral business model and other initiatives to address climate change. Moreover, SMBC Group will support the activities of our customers contributing to the transition toward and realization of a decarbonized society.
Oil and gas	**Policy** The scope of environmental and social risk assessment that takes into account the Equator Principles is expanded to the following businesses and sectors when we consider lending. After identifying and evaluating environmental and social risks, appropriate measures are considered. **Understanding of the Business/Sector** Oil and gas will continue to be an important source of energy, and we actively consider measures that contribute to the transition to a decarbonized society. On the other hand, as the transition to a decarbonized society progresses, it is important to consider the risk of stranded assets that will cause the value of the assets owned to decline in the future, measures to reduce the environmental impact associated with development, and give proper consideration to the residents of the development area. ■ **Oil sand** Oil sand (tar sand) has relatively high carbon intensity and large environmental impacts are associated with its development. As such, SMBC Group conducts environmental and social risk assessments, paying close attention to soil and water pollution caused by wastewater, deforestation, and efforts to protect biodiversity and indigenous communities, when we consider lending. ■ **Shale oil and shale gas** During shale oil and shale gas development, the use of hydraulic fracturing methods is assumed to cause groundwater contamination and induce earthquakes. SMBC Group carefully monitors whether appropriate mitigation measures have been implemented for these issues, and then we conduct environmental and social risk assessments when we consider lending. ■ **Oil and Gas Mining Projects in the Arctic** The Arctic Circle (an area north of the 66°33' latitude) is home to rare ecosystems and indigenous people with a unique culture. For mining projects in this region, SMBC Group conducts environmental and social risk assessments, playing close attention not only to environmental considerations but also to measures to protect biodiversity and indigenous communities, when we consider lending. ■ **Oil and gas pipelines** Pipelines are expected to have a wide range of environmental impacts due to oil spills and deforestation, as well as social impacts on indigenous communities, not only at the time of construction but also when completed. SMBC Group carefully monitors whether appropriate mitigation measures have been implemented for these issues, and then we conduct environmental and social risk assessments when we consider lending.

Coal mining	**Policy** Support for newly planned and the expansion of thermal coal mining projects, as well as those using the Mountain Top Removal (MTR) method are not provided. Support for newly planned and the expansion of infrastructure developments that are dedicated to above-mentioned projects are not provided either. When considering lending for coal mining projects other than the above, the scope of environmental and social risk assessment that takes into account the Equator Principles is to be expanded, and environmental and social risks are identified and evaluated. In addition, among companies whose main businesses are thermal coal mining or linked infrastructure development, we will not provide support for those that do not have any existing transactions, including but not limited to lending, with SMBC Group. **Understanding of the Business/Sector** In addition to the risks of stranded assets associated with the transition to a decarbonized society, it is important to consider human rights with respect to the elimination of illegal labor and child labor in coal mines and biodiversity issues associated with mining. SMBC Group expects our customers to establish and publicly announce long-term strategies aimed at realizing a carbon neutral business model and other initiatives to address climate change. Moreover, SMBC Group will support the activities of our customers contributing to the transition toward and realization of a decarbonized society.
Palm oil plantation development	**Policy** For palm oil plantation development projects, whether they have been certified by the Roundtable on Sustainable Palm Oil (RSPO), which is given for palm oil produced with environmental and social consideration, is confirmed. Support is only provided after confirming that forest resources and biodiversity are protected when new plantations are developed and that there are no human rights violations, such as child labor. For those customers that have not yet been certified, obtaining certification is encouraged and supported, and submission of a plan to acquire certification is required. For customers who have no plans to acquire RSPO certification, we encourage their acquirement, and require actions according to the same standard as RSPO certification. In addition, we will require our business partners to publicly declare their compliance with NDPE (No Deforestation, No Peat, No Exploitation). We also encourage them to enhance their supply chain management and improve traceability to obtain RSPO certification and comply with NDPE through their supply chain.
Deforestation	**Policy** For any business involving deforestation, we provide them with support only after having confirmed as per the laws and regulations of respective country that there is no illegal deforestation, burning, nor illegal labor. Among them, especially regarding large-scale farm (*1) development projects, we will require them to publicly declare their compliance with NDPE. *1 Farm of 10,000 ha or more (e. g. business aimed at cultivating soybeans, natural rubber, coffee, etc., or using it as a grazing land for livestock) When supporting forest management projects (*2) in countries other than high-income OECD member countries, we will require them to obtain FSC (Forest Stewardship Council) certification or PEFC (Programme for the Endorsement of Forest Certification Scheme) certification, and to declare NDPE compliance. If certification is yet to be acquired, we encourage and support their acquirement, and request them to submit a plan to acquire certification. We also encourage them to enhance their supply chain management and improve traceability to obtain such certification and comply with NDPE through their supply chain. *2 A forest management business refers to business that nurtures and manages forests, which involves cutting down forest trees for the purpose of harvesting and selling them. This policy does not apply to businesses that only cut trees (thinning) for the purpose of forest conservation without the purpose of harvesting and selling them. In addition, when considering financing for any large-scale project not limited to the above projects, we will surely conduct environmental and social risk assessments as per the Equator Principles, while closely monitoring the applicant's stance on the following points: impact on virgin forests and ecosystems; mitigation measures for the foregoing; inclusion of peatland development; considerations for workers and local residents, etc.

5. Metrics and Targets

As described in “2. Strategy”, we use a variety of indicators related to GHG emissions and exposures to measure and manage risks/opportunities related to climate change and to chart a path toward alignment with the Paris Agreement and net zero. Progress of these indicators is regularly reported to the Group Management Committee and the Board of Directors, and some indicators are reflected in the executive compensation system.

We have been obtaining third-party assurance (limited warranty) for our operational GHG emissions. In addition, we are building an internal control system for various indicators.

Results described in this report are calculated as of September 2023. In the future, actual results may change due to changes in global standards for each indicator and changes and sophistication of measurement methods. For the latest results, please refer to the latest disclosure materials published by the Group.

Figure 5-1: SMBC Group’s Major Climate-Related Indicators and Targets

Metrics	Targets	Recent Results	YoY
Operational GHG emissions	**Net Zero by 2030**	**166** kt-CO2e（FY2022）	-8%
Portfolio GHG emissions	**Net Zero by 2050**	–	–
Oil and Gas	FY2030 **-12～29%** (from FY2020)	**33.3** Mt-CO2e（FY2021）	-18%
Coal	FY2030 **-37～60%** (from FY2020)	**7.4** Mt-CO2e（FY2021）	-46%
Power	FY2030 **138～195**g-CO2e/kWh	**320** g-CO2e/kWh（FY2021）	-4%
Steel（est. value）	(To be established in FY2023)	**2.0**t-CO2e/t-Steel（FY2021） **8.2M**t-CO2e（FY2021）	–
Automobile（est. value）	(To be established in FY2023)	**217**g-CO2e/vkm（FY2021）	–
Real estate（est. value）	(To be established by spring FY2024)	**78.7**kg-CO2e/㎡（FY2021）	–
Loan balance for coal fired generation	**Zero balance by FY2040** Project finance/ equipment-linked corporate finance	Project finance : JPY **228** billion（FY2022） equipment-linked corporate finance : JPY **77** billion（FY2022）	-24 bn -9 bn
Loan balance for thermal coal mining sector	**Zero balance by FY2030** OECD countries	JPY **20** billion（FY2022）	-8 bn
	Zero balance by FY2040 Non-OECD countries	JPY **69** billion（FY2022）	-10 bn
Sustainable finance	JPY **50** trillion by 2030 (Upward revision from JPY 30 trillion)	JPY **14.9** trillion（FY2020-FY2022）	+6.9 tn

(1) GHG Emissions of SMBC Group

To fulfill the objectives of the Paris Agreement and progress towards achieving net zero, reducing GHG emissions is an essential step. There are ongoing discussions globally about the need for legally mandated disclosure of GHG emissions. Given the increasing demand for disclosure according to international standards, alongside assurances on GHG emissions data and related business processes, SMBC Group is implementing a sophisticated system for the measurement and calculation of GHG emissions and establishing a robust internal control system. In addition to setting the net zero target by 2030 for our operational GHG emissions (Scope 1 and 2), we have also established medium-term targets and are actively pursuing its reductions (Figure 5-2).

In FY2022, despite the addition of new consolidated subsidiaries due to acquisitions[18], we have managed to achieve an 8% reduction compared to FY2021. This has been made possible through the promotion of renewable energy installations in our owned properties, the introduction of self-consumption mega-watt class solar systems, and the implementation of off-site corporate PPAs.

In terms of initiatives for FY2023, we are progressively transitioning our company vehicles to electric vehicles (EVs) and fuel cell vehicles (FCVs). We have already completed the switch to renewable energy in our owned properties and key company headquarters within Japan. We will persistently continue our efforts in data centers, leased properties, and overseas locations.

Figure 5-2 GHG Emissions of SMBC Group[19]

Unit : kt-CO_2e

Category	FY2021	FY2022	Mid-term target	Target
Scope1 (direct emissions)	19.1*	15.1	40% reduction by FY2025, 55% reduction by FY2026 (from FY2021)	Net Zero by 2030
Scope2 (indirect emissions)	160.6*	151.1		
Scope1&2 Total	**179.7***	**166.2**		

* In accordance with the refinement of calculations, figures have been revised from the TCFD Report 2022.

[18] The impact of increased GHG emissions due to the addition of new subsidiaries in FY2022 is approximately 18kt-CO_2e.

[19] Scope of calculation: Domestic and overseas locations of Sumitomo Mitsui Financial Group Inc. and its consolidated subsidiaries (excluding equity-method affiliates)

(2) Portfolio GHG Emissions

GHG emissions from financial institutions are believed to be largely attributable to their lending and investment activities. Consequently, it is crucial to establish and pursue reduction targets for these areas in alignment with the Paris Agreement and in the broader pursuit of net zero. As previously noted, the assets within a financial institution's portfolio are exposed to transition risks, with potential increased credit-related costs as we transition to a decarbonized society.

To align with the Paris Agreement and mitigate transition risks, we have initially conducted a simplified calculation of sector-specific portfolio GHG emissions at SMBC, where lending amounts are substantial. Drawing from this simplified calculation of portfolio GHG emissions, sector-specific risk analysis, and NZBA guidelines, we have established detailed calculations of portfolio GHG emissions and set medium-term reduction targets. These are particularly focused on high-priority sectors such as power, oil and gas, and coal, and are established with each sector's unique characteristics in mind. Looking ahead, we plan to set targets for the steel and automotive sectors by 2023 and have also started initiatives concerning the real estate sector. We are in the process of considering target setting based on these calculation results.

When setting medium-term reduction targets, we establish a range for our reduction targets based on scientific scenarios, such as the IEA's SDS and NZE scenarios. These targets align with levels significantly below the 2°C target and are consistent with the 1.5°C target. Achieving net zero requires consideration of each country's unique circumstances, and there are multiple pathways considered, accounting for geographic and economic factors, as well as the progression of innovation. With this in mind, we set a range target for 2030 and work towards its realization while identifying a realistic pathway to net zero.

Apart from the calculation and target setting at SMBC mentioned above, Sumitomo Mitsui DS Asset Management, which performs asset management operations, calculates GHG emissions for each asset (domestic stocks, foreign stocks, domestic bonds, and foreign bonds) it manages, and sets a medium-term target for the company-wide portfolio by summing these[20]. In addition, SMBC Nikko Securities is conducting estimated calculations of GHG emissions related to underwriting operations to consider future metrics and targets. For more details on the calculation and target setting of portfolio GHG emissions at SMBC, and the estimated calculation of GHG emissions related to underwriting operations at SMBC Nikko Securities, please refer to "Appendix 3. Portfolio GHG Emissions" and "Appendix 4. Calculation of GHG Emissions Related to Underwriting"

[20] Sumitomo Mitsui DS Asset Management website (https://www.smd-am.co.jp/english/corporate/vision/fiduciary/03/)

Figure 5-3 Status of Portfolio GHG Emissions: Results and Targets

Sectors	Scope	KPI	FY2020 Results	FY2021 Results	Mid-term reduction targets	Scenarios
Power	Power generation Scope1	Carbon intensity	**332** g-CO2e/kWh	**320** g-CO2e/kWh (YoY -4%)	FY2030 **138～195** g-CO2e/kWh	IEA/SDS・NZE
Oil and Gas	Upstream Production Scope1,2,3	Absolute emissions	**40.8*** Mt-CO2e	**33.3** Mt-CO2e (YoY -18%)	FY2030 **-12～29%** (from FY2020)	
Coal	Upstream Production Scope1,2,3	Absolute emissions	**13.6*** Mt-CO2e	**7.4** Mt-CO2e (YoY -46%)	FY2030 **-37～60%** (from FY2020)	
Steel (est. value)	Crude steel production Scope1,2	Carbon intensity	-	**2.0** t-CO2e/t-Steel **8.2** Mt-CO2e	(To be established in FY2023)	
Automobile (est. value)	Manufacturing of automobile Scope1,2,3	Carbon intensity	-	**217** g-CO2e/vkm	(To be established in FY2023)	
Real estate (est. value)	Commercial real estate / REIT Scope1,2(,3)	Carbon intensity	-	**78.7** kg-CO2e/㎡	(To be established by spring FY2024)	

* In accordance with the refinement of calculations, the figures for oil & gas and coal have been revised from the TCFD Report 2022.

■ Efforts to Achieve Emissions Reduction Targets

SMBC is deploying a broad range of initiatives to meet the targets across all sectors. These initiatives include implementing the Climate-Related Risk Assessment Framework and advancing engagement strategies. In order to facilitate an orderly and fair transition towards achieving net zero emissions by 2050, it is essential to foster the development of next-generation technologies. We also need to carefully identify a realistic pathway and pace towards 2050, considering the unique circumstances of each country and working closely with our customers. SMBC Group is committed to fostering mutual understanding with all our stakeholders through thoughtful engagement. We aim to make the maximum possible contribution to ensuring a stable energy supply and achieving long-term decarbonization, by strongly supporting our clients' efforts towards transition and technological innovation.

[Common Efforts]

- We have introduced a Climate-Related RAF, which enables us to manage GHG emissions from our portfolio on a sector-by-sector and department-by-department basis.
- Through our engagement initiatives, we gain an understanding of the transition strategies and challenges faced by our primary borrowers. We also formulate and implement individual solution including financing.
- We leverage non-financial information from the ESG Risk Summary Sheet as qualitative factors in our lending decisions.
- We are expanding sustainable finance initiatives aimed at decarbonization.

- Using the company-specific transition strategy assessment framework and the Playbook, we plan to further enhance our engagement, account planning, and credit decision-making processes.

[Power Sector]

- We have introduced a credit policy that prohibits support for new and the expansion of projects related to coal-fired power generation.
- We have also developed and implemented a strategy to phase out from coal-fired power generation (aiming for zero balance by 2040).

[Coal Sector]

- Our credit policy prohibits support for new and the expansion of projects related to thermal coal mining.
- We have developed and implemented a strategy to phase out businesses and projects primarily engaged in thermal coal mining (aiming for zero balance in OECD countries by 2030, and in non-OECD countries by 2040).

■ **Progress for the Power Sector**

Performance for FY2021 was 320g-CO2e/kWh, a decrease of 12g-CO2e/kWh (about 4% decrease) from the base year of FY2020. This reduction is primarily attributable to the advancement of decarbonization due to the resumption of nuclear power operations and the introduction of renewable energy generation within the domestic power sector - our key market. Also contributing to this reduction was the progression of phasing out coal-fired power generation and the expansion of the balance of project finance for renewable energy projects within our portfolio, driven by our promotion of sustainable finance.

■ **Progress for the Oil and Gas/Coal Sectors**

For the oil and gas sector, the performance for FY2021 was 33.3Mt-CO2e, a decrease of 7.5Mt-CO2e (about 18% decrease) from the base year of FY2020. The coal sector's performance for FY2021 was 7.4Mt-CO2e, a decrease of 6.2Mt-CO2e (about 46% decrease) from the base year of FY2020. These reductions are primarily attributable to a decrease in loans due to the maturity of contracts, as we advance restrictions on thermal coal operations through our credit policy. However, while there was a degree of recovery in FY2021, the continued impact of the COVID-19 pandemic on energy demand, coupled with the geopolitical situation in Ukraine affecting supply-demand balance and significant fluctuations in resource prices in FY2022, could potentially impact future performance.

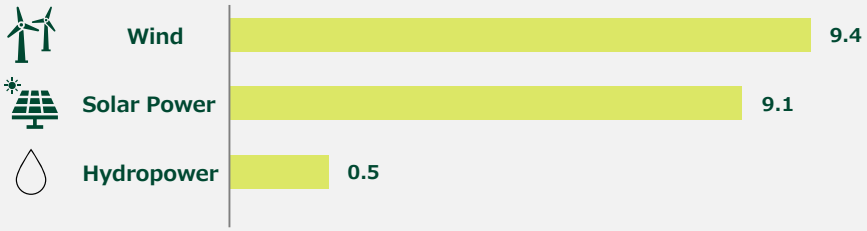
[Column] CO2 Reduction Through Support for Renewable Energy Projects

SMBC contributes to the reduction of CO2 emissions from power generation by supporting projects aimed at renewable energy. It is estimated that the renewable energy projects we undertook in FY2022 will contribute to a reduction of approximately 19 million tons of CO2 emissions. The amount of CO2 reduction is calculated by estimating the annual power generation amount based on the type of renewable energy and the power generation capacity and utilization rate of the target facilities in each country, and multiplying this value by the power emission factor of each country.

So far in our calculations, we have not considered the proportion of the total project cost that is covered by loans from SMBC (loan share). In the future, we will consider how to calculate avoided emissions while referring to the guidelines issued by the World Business Council for Sustainable Development (WBCSD) and the Partnership for Carbon Accounting Financials (PCAF).

Measured Item	FY2020	FY2021	FY2022
CO2 reduction (annual)	**29.7** Mt-CO2	**15.1** Mt-CO2	**19.0** Mt-CO2

Breakdown by type of energy (FY2022 / Unit: Mt-CO2)



[Column] Response to the Poseidon Principles

The Poseidon Principles represent an international framework established in 2019 by leading financial institutions as an initiative to address climate change in the shipping industry. The International Maritime Organization (IMO) has set emission reduction targets aiming for zero GHG emissions as early as possible within this century, and the Poseidon Principles are a private financial institution-led initiative towards these IMO-defined reduction targets.

Sumitomo Mitsui Finance & Leasing signed the Principles in December 2020, and SMBC followed in January 2021. As a financial institution participating in the Principles, SMBC measures and discloses the Portfolio Alignment Score of its shipping portfolio annually, based on the common framework set out in the Principles. Following the initial disclosure in FY2021, both SMBC and Sumitomo Mitsui Finance & Leasing have disclosed their results for FY2022. The Portfolio Alignment Score of SMBC, in relation to the IMO's GHG emission reduction targets, is 2.5% (as of December 2022). The same indicator for Sumitomo Mitsui Finance & Leasing is -5.0%.

SMBC Group will fulfill the disclosure obligations required by the Poseidon Principles with respect to shipping, which is one of the key sectors in tackling climate change.

(3) Coal-related Exposure

As mentioned earlier, SMBC Group has set medium-term reduction targets for our portfolio's GHG emissions in line with the Paris Agreement and towards the reduction of transition risks. As a concrete measure, SMBC Group has announced phase-out strategies for coal-fired power generation and thermal coal mining.

In addition, for coal-fired power generation, we also monitor the outstanding credit to power generators who mainly use coal-fired power generation.

Figure 5-4 Status of Exposure to Coal-fired Power Generation and Thermal Coal Mining

Assets	Definition	FY2021	FY2022	Targets
Loan balance for coal fired generation	Total outstanding loans for coal-fired power generation-related project finance, equipment-linked corporate finance, and power generators whose main power source is coal-fired power generation (excluding cases contributing to efforts towards the transition to a decarbonized society)	JPY 927 billion*	JPY 884 billion	–
Loan balance for project finance	Out of the above outstanding loans, the total of project finance loans and the undrawn amount of commitments	JPY 251 billion*	JPY 228 billion	**-50% by FY2030** (from FY2020) **Zero balance by FY2040**
Loan balance for equipment-linked corporate finance	Out of the above outstanding loans, the total of equipment-linked corporate finance loans and the undrawn amount of commitments	JPY 86 billion*	JPY 77 billion	**Zero balance by FY2040**
Loan balance for thermal coal mining sector (OECD countries)	Total loans and undrawn amounts of commitments to corporates whose main business is general coal mining, located in OECD countries (excluding cases that contribute to the conversion from fossil fuel business)	JPY 29 billion	JPY 20 billion	**Zero balance by FY2030**
Loan balance for thermal coal mining sector (Non-OECD countries)	Businesses located in non-OECD countries (definition other than location is the same as above)	JPY 78 billion	JPY 69 billion	**Zero balance by FY2040**

* Loans and outstanding credits (on an internal management basis) at SMBC and its major local subsidiaries, etc. In accordance with the refinement of calculations, the figures have been revised from the TCFD Report 2022.

(4) Amount of Sustainable Finance Execution

In order to realize a decarbonized society, innovations based on significant GHG emission reductions and large-scale equipment investment are essential, and it is expected that many additional investments, mainly in energy-related fields, will be made. This will lead to increased demand for funds, the emergence of new financial products and services, and potential growth opportunities for financial institutions.

In this context, SMBC Group revised its targets upward in April 2023 and set a new target of "executing JPY 50 trillion of sustainable finance from FY2020 to 2029 (including JPY 20 trillion in green finance)." With our high presence in the market, we are steadily accumulating achievements, mainly in green finance. For detailed results, please refer to "Figure 2-11 Performance of Sustainable Finance."

Figure 5-5 Amount of Finance Execution and Target

Measured Item	Cumulative total (since FY2020)	FY2022	Target (2030)
Amount of Sustainable Finance Executed	JPY **14.9** trillion	JPY **6.9** trillion	JPY **50** trillion (cumulatively)

*The data collected includes both SMBC and SMBC Nikko Securities. The figures from past years have been revised due to the refinement of calculations and the review of the data collection targets.

6. Looking Ahead

The world is facing intensifying and diversifying social challenges, and there is an increasing demand for corporations to actively engage in resolving a wide range of social issues. In response to this significant environmental shift, which could even be described as a paradigm shift, SMBC Group is harnessing its collective strength to further evolve our initiatives. We have formulated a medium-term management plan, "Plan for Fulfilled Growth," for the three years from FY2023, aiming for positive and robust "Growth with Quality." We have also positioned "Creating Social Value" as a new pillar of our management strategy.

While the urgency to tackle global warming is undeniable, the potential fallout from abrupt decarbonization could impede stable energy supply and consequently, economic growth. Moreover, if people and businesses are unable to adapt to the swift societal and industrial transformations resulting from decarbonization, we risk triggering new social challenges, including employment and human rights issues, beyond those posed by climate change. Given the inherent uncertainties in the impacts anticipated during the transition process, it is imperative that we implement a transition plan in a cautious and smooth manner, ensuring the burden on society remains manageable.

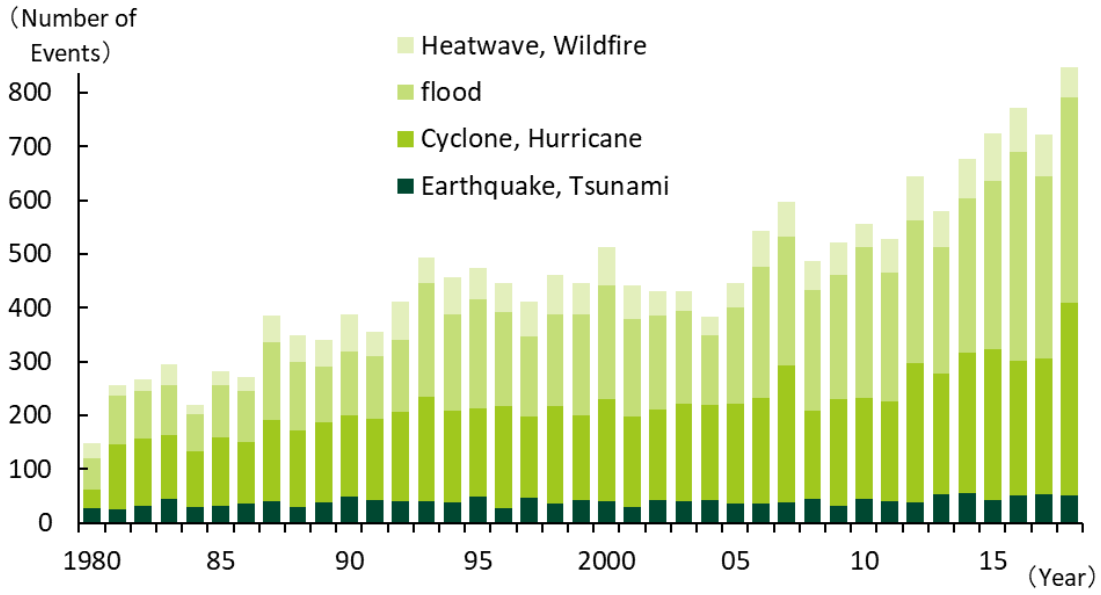
Against this backdrop, SMBC Group has formulated the Transition Finance Playbook with the goal of promoting an orderly and equitable transition. We have also concretized our strategies for enhancing the Transition Plan and outlined the direction for our initiatives over the next three years. Going forward, we will strive to execute strategies in line with our Transition Plan, promoting risk reduction and seizing growth opportunities.

By taking the lead in addressing climate change, achieving net zero emissions, and solving other social issues, we aim to contribute to 'Fulfilled Growth'. This concept embodies a future where economic growth coincides with the resolution of social issues, fostering a society where individuals can experience happiness.

Appendix 1. Scenario Analysis

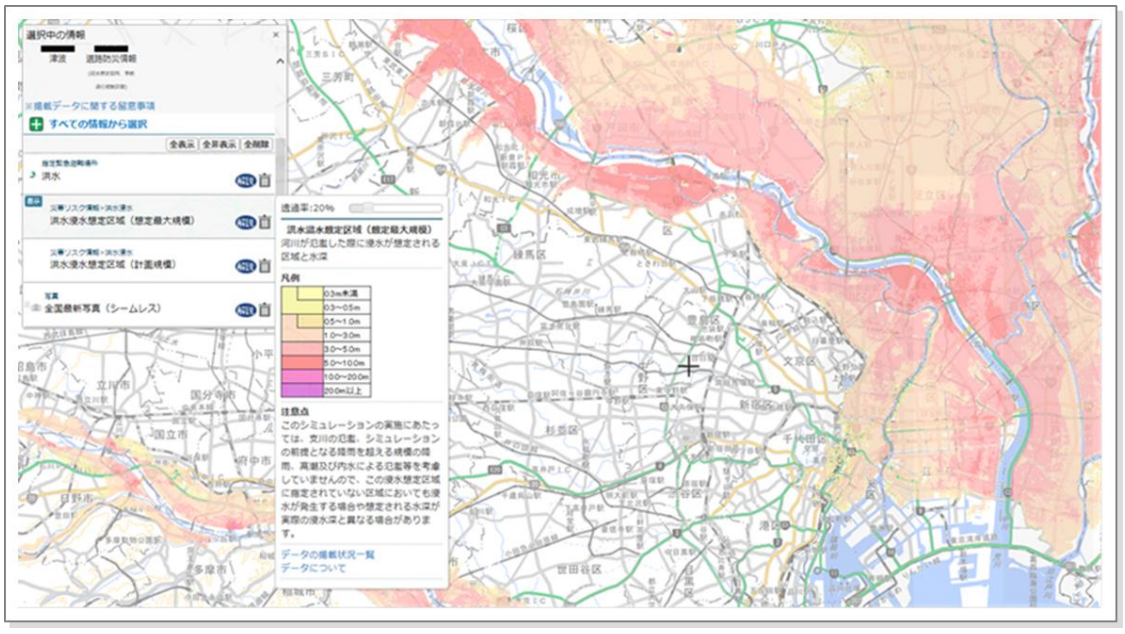
① Physical Risks: Supplementary Materials and Data

Figure App-1 Incidence of Natural Disasters



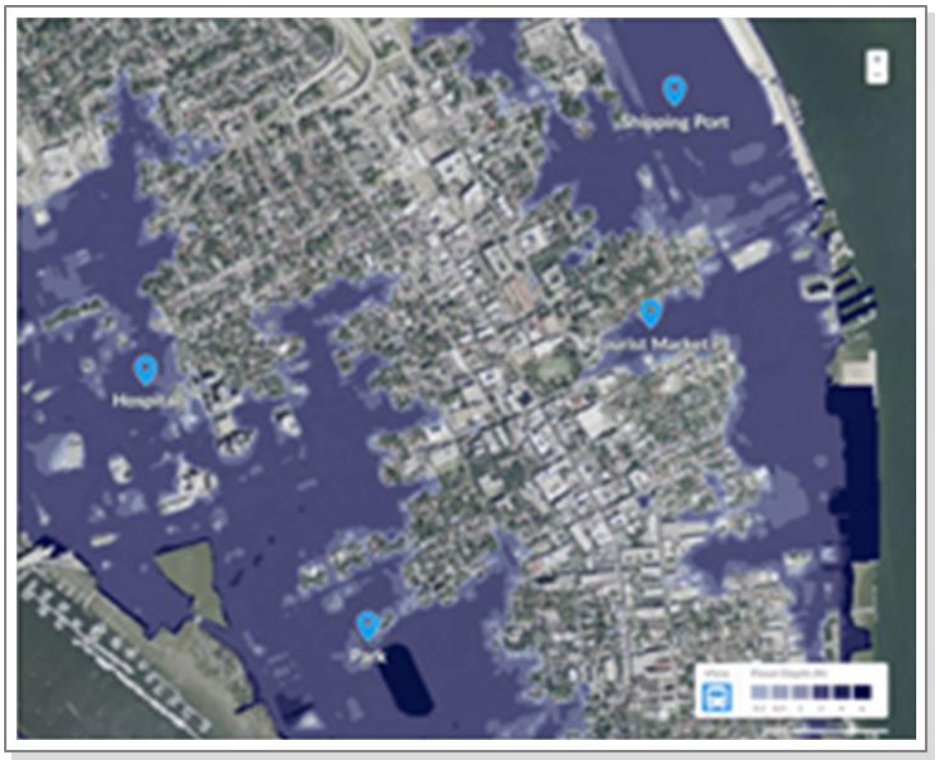
(Source) Munich Reinsurance Company

Figure App-2 Water Disaster Hazard Map



(Source) Ministry of Land, Infrastructure, Transport and Tourism

Figure App-3 Jupiter Intelligence: Analysis of Satellite Images

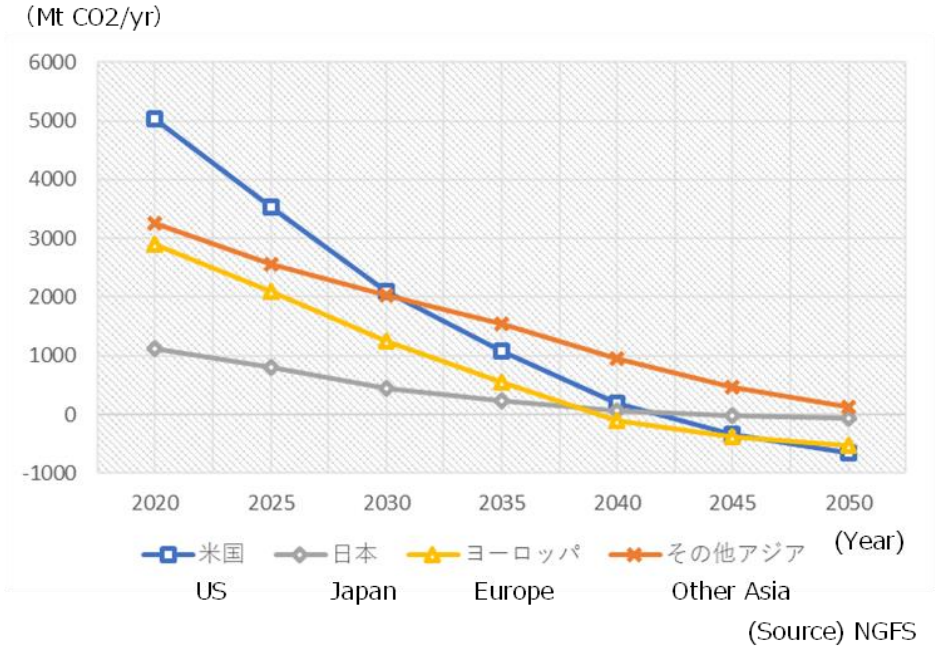


(Source) Jupiter Intelligence

② Transition Risks: Supplementary Materials and Data

Figure App-4 Transition of CO2 Emissions

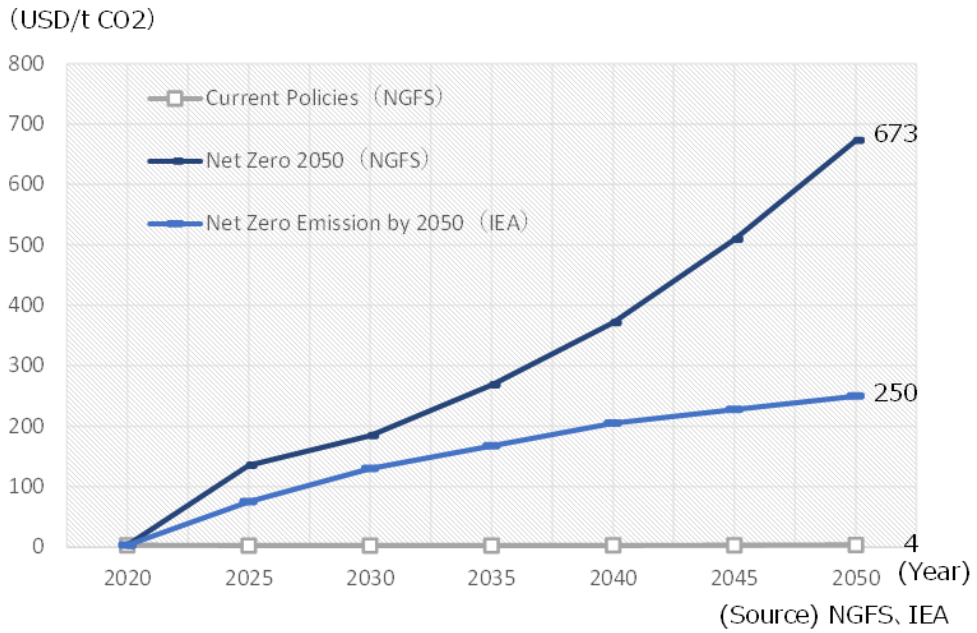
Transition in CO2 emissions in the NGFS “Net Zero 2050 scenario”



(Source) NGFS

Figure App-5 Transition of Carbon Price

Transition of carbon price in each of the NGFS scenarios and IEA “Net Zero Emissions scenario”



(Source) NGFS、IEA

Appendix 2. Simplified Calculation of Portfolio GHG Emissions by Sector

(1) Overview of the Calculation Method

SMBC is conducting a simplified calculation based on the PCAF Standard for an overview of the portfolio GHG emissions (Financed Emissions) for each sector as recommended by the TCFD. This calculation is conducted using a unified method for comparison between sectors. It is an estimation using projected values based on the PCAF database, and we acknowledge that there may be discrepancies with the GHG emissions in real economy.

Figure App-6 Overview of the Methodologies for Simplified Calculation of Portfolio GHG Emissions for Each Sector

<table>
<tr><td>Target Assets</td><td>Loans *1</td></tr>
<tr><td>Target Sectors</td><td>The following 21 sectors based on items in TCFD recommendations, etc.
<table>
<tr><td>Power</td><td>Oil and gas</td><td>Coal</td><td>Air cargo</td><td>Passenger aviation</td><td>Shipping</td></tr>
<tr><td>Railroad</td><td>Truck service</td><td>Automobiles and components</td><td>Metals and mining</td><td>Aluminum</td><td>Chemical products</td></tr>
<tr><td>Construction materials</td><td>Cement</td><td>Capital goods *2</td><td>Real estate *3</td><td>Steel</td><td>Beverages</td></tr>
<tr><td>Agriculture</td><td>Packaged food and meat *4</td><td>Paper and forestry products</td><td></td><td></td><td></td></tr>
</table></td></tr>
<tr><td>Target Year</td><td>Baseline : End of March 2023
Loan balance : Loan balance as of the end of March 2023
Customer's financial data : Most recent financial data available at the time of calculation *5</td></tr>
<tr><td>GHG Emission Data Source</td><td>Calculated using a unified method for all sectors using emission coefficients per revenue/asset amount cited from the PCAF database
(Corporate Finance)
• Estimated using emission coefficients per revenue cited from the PCAF database (Equivalent to Score4)
• If calculation is not possible with emission coefficients per revenue, estimated using emission coefficients per asset amount cited from the PCAF database (Equivalent to Score5)
(Non-Corporate Finance)
• Estimated using emission coefficients per asset amount cited from the PCAF database (Equivalent to Score5)</td></tr>
<tr><td>Basic Calculation Formula ① (Score4)</td><td>Financed Emissions = Σ Attribution Factor × Company Emissions
• Attribution Factor= Loan amount to each customer / (Equity + Debt*6 of each customer/project)
• Company Emissions (GHG Emissions) = Revenue*7 of each customer × Emission coefficient per revenue</td></tr>
<tr><td>Basic Calculation Formula ② (Score5)</td><td>Use the following formula when calculation is not possible with basic calculation formula
Financed Emissions = Σ Outstanding amount × GHG emissions / Assets
• Outstanding amount = Loan amount to each customer/project
• GHG emissions / Assets = Emission coefficient per asset amount cited from the PCAF Standard database</td></tr>
</table>

*1 Loan balance at SMBC and its major local subsidiaries, etc. (on internal control basis)
*2 Machinery, electrical equipment, construction, etc.
*3 Excluding mortgages
*4 Including packaged food manufacturing such as dairy products and meat
*5 If there is no consolidated financial data, use single-entity financial data
*6 Only total equity + debt used, not EVIC
*7 Using each customer's sales data

(2) Points to Note Regarding the Simplified Calculation

In this calculation, we have adopted a unified calculation method for all sectors, and the GHG emissions are only estimated values equivalent to Score4 and Score5. In the future, the calculation results of Financed Emissions may change significantly due to the sophistication of the calculation method and other factors.

Moreover, the coefficients used to calculate the estimated values are the emission coefficients per revenue amount and asset amount in the PCAF database. These coefficients may change in the process of refinement in the future, which could potentially lead to significant changes in the calculation results.

By their definitions, Scope 1, 2, and 3 may result in multiple sectors or companies double-counting the same GHG emissions. We also recognize the issue that the PCAF database does not include data for estimating downstream GHG emissions under Scope 3.

Considering revisions to the PCAF Standard, changes in definitions (various definitions, measurement scope, timing, etc.) based on practical aspects of measurement, and other sophistications, there are possibilities to change our calculation method in the future.

Appendix 3. Portfolio GHG Emissions by Sector

（1）Introduction

In the GHG emissions of financial institutions, the portion through loans and investments is considered to make up a large proportion. In order to comply with the Paris Agreement and aim for net zero, it is important to set goals and reduce these emissions.

This section organizes the Group's current approach to the calculation and target setting of portfolio GHG emissions.

In the calculation and target setting, we are building an approach referencing the PCAF Standard and TCFD Measuring Portfolio Alignment: Technical Supplement, among others. The calculation and disclosure of portfolio GHG emissions is an ongoing effort, and guidelines and standards are currently being developed.

SMBC Group participates in initiatives related to calculation and target setting, following the latest trends in methodology, and making proposals for further development. Based on these trends and the latest climate science, we will update the calculation and target setting methods as necessary, and build an approach that is scientific, highly transparent, and comparable.

Figure App-7 Overview of SMBC Group's Approach to Portfolio GHG Emissions Calculation and Target Setting

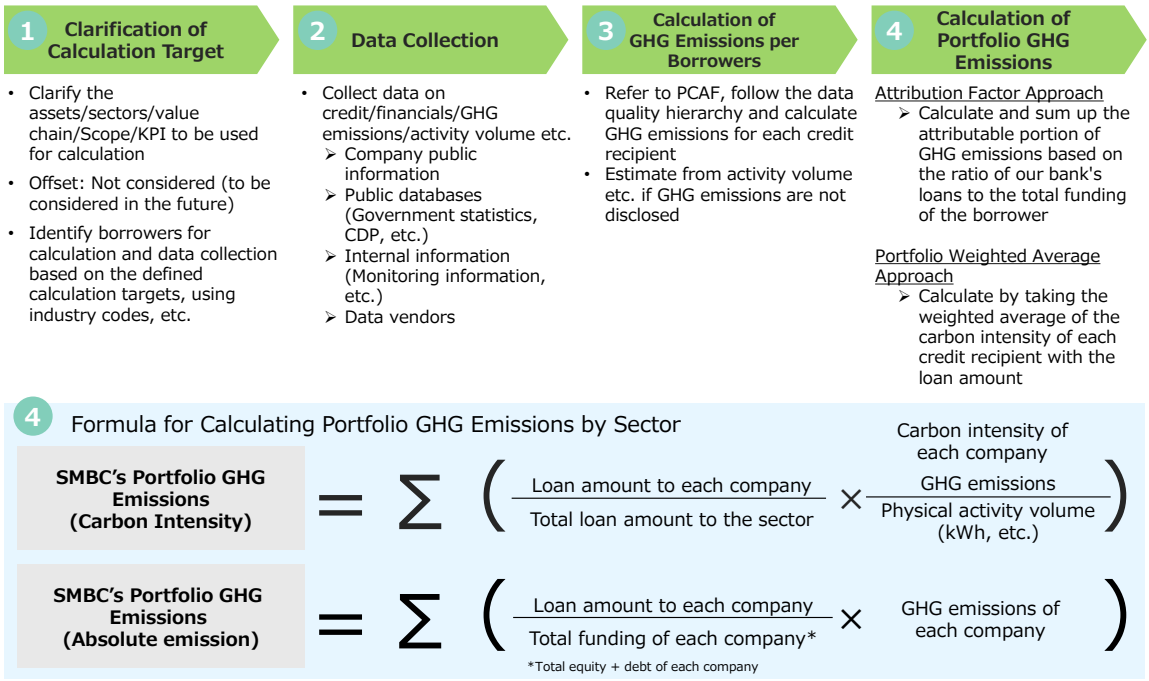
Category		Oil & Gas/Coal	Power	Steel	Automobile	Real Estate
Approach to Calculate Portfolio GHG Emissions						
Target of Calculation	**Assets**	Loans of SMBC (one of the core companies of SMBC group) and its major local subsidiaries				
	Sector	Borrowers in the Oil & Gas / Coal Sector (GICS) with upstream production operations	Borrowers in the Power Sector (GICS) with power generation operations	Borrowers in the Steel Sector (GICS) with crude steel production operations	Borrowers in the Automobile Sector (GICS) with automobile manufacturing operations (vehicles total weight 3.5t or less)	Domestic borrowes of Commercial Real Estate (Non-recourse loans) or Real Estate REIT
	Value Chain / Scope	Scope1 & 2 and Scope3 (Category 11) related to upstream production operations	Scope1 related to power generation operations	Scope1 & 2 related to crude steel production operations	Scope1 & 2 and Scope3 (Category 11, WTW) related to automobile manufacturing operations	Scope1 & 2 related to property operations, including Scope3 Category 13 for REITs
	KPI	Absolute emission (Mt-CO2e)	Carbon intensity (g-CO2e/kWh)	Carbon intensity (t-CO2e/t-Steel)	Carbon intensity (g-CO2e/vkm)	Carbon intensity (g-CO2e/㎡)
	Offset	Not considered at the moment (to be considered when GFANZ/NZBA guidelines are established)				
Data Collection		Company disclosures / Public databases / Internal information / Data providers				
Individual Calculation		Refer to PCAF, follow the data quality hierarchy, and estimate from production volume or sales as needed	Refer to PCAF, follow the data quality hierarchy, and estimate from power generation and equipment capacity as needed.	Refer to PCAF, follow the data quality hierarchy, and estimate from crude steel production volume by technology as needed.	Refer to PCAF, follow the data quality hierarchy, and estimate from production and sales figures by powertrain as needed.	Refer to PCAF, follow the data quality hierarchy, and estimate from property types as needed.
Portfolio Calculation		Calculate portfolio emissions (absolute emissions) using the attribution factor approach	Calculate portfolio carbon intensity using the portfolio weighted average approach			
Portfolio GHG Reduction Target						
Mid-term Reduction Target (FY2030)		Oil & Gas: 12-29% reduction Coal: 37-60% reduction (from FY2020)	138~195g-CO2e /kWh	To be established in FY2023	To be established in FY2023	To be established by spring FY2023
Alignment with the Paris Agreement		Set sector targets referring to IEA scenarios (SDS/NZE)		To be established in FY2023	To be established in FY2023	To be established by spring FY2023
Regular Review		Consider the need for review during this medium-term management plan period (FY2023~25)				
Approval & Review						
Governance for Reduction Targets		Reviewed by the Management Committee & Board of Directors (+ Sustainability Committee)		Plan to be reviewed by the Management Commettee & Board of Directors (+ Sustainability Committee)		
Third-Party Assurance		In the process of prepration		To be considered		

*For the steel sector, we are also considering using absolute figures for KPIs and adopting an attribution factor approach for portfolio calculations.

（2）Calculation Approach for Portfolio GHG Emissions

In this section, we will describe the main process for calculating portfolio GHG emissions in the Group. SMBC Group primarily structures the calculation process in four steps.

Figure App-8 Main Process for Calculating Portfolio GHG Emissions



① Clarification of Calculation Target

■ Target Assets

SMBC Group is committed to achieving net zero across our entire investment and loan portfolio. However, the calculation of GHG emissions from the investment and loan portfolio is an evolving initiative, with guidelines and standards still in development.

SMBC Group conducts GHG emission calculations and sets targets for the sectors mentioned below, focusing on Sumitomo Mitsui Banking Corporation[21] and its major consolidated subsidiaries, which make up the majority of our core business, lending[22].

■ Target sectors

Each industry has its own challenges towards decarbonization, and it is expected that the paths and speeds of decarbonization will differ. The approach to setting

[21] As of FY2022, the outstanding loans of Sumitomo Mitsui Financial Group (consolidated) amount to JPY 98.4 trillion, and those of Sumitomo Mitsui Banking Corporation (consolidated) amount to JPY 94.3 trillion.

[22] We focus on loans (corporate finance and project finance, etc.).

industry-specific emission paths while considering the perspective of climate science is called the 'Sectoral Decarbonization Approach (SDA)', and it is widely used by companies participating in SBTi, among others. Financial institutions' portfolios are diverse, and there is a need to engage with customers in many industries according to their circumstances. Therefore, SMBC Group adopts a sectoral approach when calculating and setting targets for portfolio GHG emissions.

SMBC Group joined the NZBA in October 2021. The NZBA guidelines recommend prioritizing the calculation and target setting of GHG emissions from nine carbon-intensive sectors[23]. Among these nine sectors, we are advancing the calculation and target setting from the power, oil and gas, and coal sectors as material sectors, considering GHG emissions, climate-related risks, and loan balances, and we have also started on the steel, automobile, and real estate sectors.

As shown in Figure App-9, we identify specific borrowers to be calculated for each sector based on GICS. For real estate, we focus on non-recourse loans in Japan and J-REITs (Japanese REITs). The specific calculation targets in each sector are identified considering the perspective of the target value chain (whether they have a business to be calculated).

Figure App-9 Target Sectors for Calculation and Goal Setting

Target Sectors	Target Industry Code (GICS)
Oil and Gas	• Integrated Oil & Gas • Oil & Gas Exploration & Production
Coal	• Coal & Consumable Fuels
Power	• Electric Utilities • Multi-Utilities • Independent Power Producers & Energy Traders • Renewable Electricity
Steel	• Steel
Automobile	• Automobile Manufacturers
Real Estate	• Non-recourse loans for commercial real estate in Japan • Domestic REITs (J-REITs) * Extracting the above real estate-related cases regardless of GICS.

■ Target Value Chain/Scope of GHG Emissions

When considering the lifecycle GHG emissions for the oil and gas and coal sectors, the majority originate from GHG emissions in the upstream processes of mining and

[23] Power generation, oil and gas, coal, steel, transport, real estate, aluminum, cement and agriculture

production (including methane leakage) and from GHG emissions during the use of fossil fuels. Therefore, in the energy sector, we aim to measure GHG emissions related to upstream production and the use of its products. Hence, we calculate the direct and indirect emissions (Scope 1/2) related to the production of fossil fuels of our loan recipient companies and the supply chain emissions related to product use (Scope 3 Category 11) as calculation targets[24].

In the case of the power sector, the majority of GHG emissions are not due to transmission and distribution or retail businesses, but to power generation. Furthermore, stranded assets are typically power generation assets. Therefore, it is crucial to focus on power generation. Accordingly, in the power sector, we measure GHG emissions related to power generation and treat the direct emissions (Scope 1) related to power generation by our borrowers as the calculation target[25].

In the case of the steel sector, the majority of GHG emissions are not due to raw material mining or processing and distribution, but to iron and steel production (crude steel production). Therefore, in the steel sector, we measure GHG emissions related to production and treat the direct and indirect emissions (Scope 1/2) of our borrowers as the calculation target.

For the automobile sector, the main cause of GHG emissions differs depending on the powertrain of the vehicles produced. In the case of internal combustion engine vehicles, the main emission source is fossil fuel consumption during driving. In contrast, for electric vehicles, emissions during the manufacture of batteries, which are key components, and emissions at the power generation stage of the electricity consumed during driving are significant. The emissions from the process of fuel extraction to energy supply to the vehicle are called WTT (Well to Tank), the emissions from vehicle driving are TTW (Tank to Wheel), and the emissions associated with vehicle driving in the lifecycle considering both are WTW (Well to Wheel). The progress of GHG emissions related to power generation differs by country and region, and from the perspective of reducing GHG in the real economy, the WTW perspective is important. Therefore, in the automobile sector, we measure GHG emissions related to vehicle production and driving and treat the direct and indirect emissions (Scope 1/2) related to vehicle production by our borrowers and supply chain emissions related to product use from the WTW perspective (Scope 3 Category 11) as the calculation targets.

In the case of the real estate sector, when considering lifecycle GHG emissions, the majority are not due to construction, renovation, or demolition, but to the use of buildings. Therefore, we measure GHG emissions at the stage of building use and treat

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[24] We include companies that have upstream production operations (using a guideline of 5% or more of revenue) in the calculation target among the companies classified in the target sectors.

[25] We include companies that have power generation operations (using a guideline of 5% or more of revenue) in the calculation target among the companies classified in the target sectors.

the direct and indirect emissions (Scope 1/2) at the commercial real estate properties that are the subject of lending as the calculation target. For REITs, which indirectly funnel funds into commercial real estate properties, in cases where emissions are recorded as leased properties, supply chain emissions related to lease calculation (downstream) (Scope 3 Category 13) are also included in the calculation target.

Note that at the current calculation stage, carbon credits are not considered. There is ongoing global discussion about the nature of net zero targets and the accompanying carbon credits. SMBC Group participates in initiatives such as NZBA and TSVCM[26], and will consider the use of carbon credits by the Group and our borrowers, taking into account the development of global standards.

■ **KPI**

In the power sector, in addition to the continued economic growth in developing countries, the electrification of industries, such as the shift from gasoline cars to electric vehicles, is expected to increase total demand during the process of decarbonization. Even in the IEA/NZE scenario (1.5°C scenario), the power sector is shown to increase power generation, mainly from renewable energy, while reducing GHG emissions towards 2050. Based on these characteristics, we focus on efficiency in terms of GHG emissions during the transition process and set the carbon intensity of power generation (g-CO2e/kWh) as a measurement indicator.

Similarly to power, steel is an essential material in infrastructure sectors such as energy, construction, transport, and electronic devices. Cars and real estate are also important infrastructures. Therefore, an increase in total demand is expected with economic growth in developing countries. In the IEA/NZE scenario (1.5°C scenario), each sector is shown to increase total demand (crude steel production, passenger car mileage, building floor area) while reducing GHG emissions towards 2050. Based on these characteristics, during the transition process, we focus on efficiency in terms of GHG emissions and set carbon intensity related to the activity volume of each sector, such as crude steel production, vehicle driving, and building use, as measurement indicators. (However, for the steel sector, we are also considering setting the KPI as an absolute value.)

On the other hand, for fossil fuels, it is necessary to reduce consumption itself by promoting alternatives such as electrification and hydrogen in decarbonization. In the IEA/NZE scenario, the scenario shows that the ratio of fossil fuels in primary energy will decrease, and consumption itself will be controlled. Based on these characteristics,

[26] Taskforce on Scaling Voluntary Carbon Markets: A private sector-led initiative launched in September 2020 by UN Special Envoy for Climate Action and Finance, Mark Carney. It aims to expand effective voluntary carbon trading markets (carbon credit trading markets) towards achieving the goals of the Paris Agreement.

in the oil and gas and coal sectors, we set the absolute amount (Mt-CO2e) representing direct GHG emissions as a measurement indicator.

② Data Collection

When calculating the GHG emissions of an investment and loan portfolio in a financial institution, it is necessary to have emissions and related data from each company that is invested or lent to. In addition to various information that we have grasped through credit business and monitoring, we collect data such as emission volumes and activity data (power generation) based on research on disclosure information (such as integrated reports) and public information (such as power survey statistics) from the companies we lend to.

As part of our efforts to collect non-financial information related to ESG, we are advancing information collection using the “ESG Risk Summary Sheet”, and we are considering further use of third-party data providers to streamline data collection.

Figure App-10 Main Data Sources

Category	Example Data Sources
GHG Emission Related Data	✓ Integrated Reports & Various ESG Reports ✓ Monitoring Reports (Project Finance) ✓ CDP ✓ Data Vendors
Activity Volume Data	✓ Integrated Reports & Various ESG Reports ✓ Public Databases in Various Countries ✓ Financial Reports (Securities Reports, Annual Reports, etc.) ✓ Monitoring Reports (Project Finance) ✓ Internal Data ✓ Data Vendors
Financial Data	✓ Financial Reports (Securities Reports, Annual Reports, etc.) ✓ Internal Data ✓ Data Vendors

③ Calculation of GHG Emissions per Borrowers

When calculating the GHG emissions of an investment and loan portfolio in a financial institution, emission data from each company that receives investment or loans is required. However, not all companies disclose their GHG emissions, and there are differences in disclosure status depending on the company size, industry, and region. This creates a significant challenge for financial institutions in calculating GHG emissions.

Given this situation, the PCAF Standard has established a data quality score, and it is recommended to calculate in accordance with this score. In our current calculation,

we refer to this data quality score, prioritize emission data based on disclosure information, and when this is not available, we estimate the emissions[27] to calculate the GHG emissions of the portfolio. Specifically, as mentioned earlier, we calculate the absolute amount related to upstream production business and its supply chain in the energy sector per borrower, and the carbon intensity related to each activity volume in the power, steel, automobile, and real estate sectors.

Figure App-11　Table of Data Quality Scores by PCAF

Category	Example	Score
Reported emissions	Emissions data authenticated by an independent third-party	1
	Unauthenticated emissions data	2
Physical activity-based emissions	Estimated emissions volume based on energy consumption volume, etc.	
	Estimated emissions volume based on production volume data, etc.	3
Economic activity-based emissions	Estimated emissions volume based on each company's sales data	4
	Estimated emissions volume based on each company's asset data	5

High

Low

(Source: Compiled by the company using sources from the PCAF Standard)

④ Calculation of Portfolio GHG Emissions

Based on the GHG emissions of each borrower, we calculate the sector-specific portfolio GHG emissions for the Group. The main methods for calculating portfolio-level emissions include the approach using the weighted average value in each financial institution's portfolio, recommended by PACTA[28] and others, and the approach using the attribution coefficient based on total funding (or EVIC for listed companies), recommended by PCAF.

In the calculation for each sector that uses carbon intensity as an indicator, we use the portfolio-weighted average approach, while in the energy sector, we use the attribution coefficient approach to calculate portfolio-level emissions. The current preliminary calculation results according to these calculation processes are as follows. We aim to further raise the data quality score/coverage rate through the use of data providers and customer engagement in the future.

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[27] From the perspective of portfolio management, to understand the potential of emissions, we also estimate for projects under construction in project finance based on expected power generation and production volumes.

[28] Paris Agreement Capital Transition Assessment: A climate change transition risk assessment tool developed by the climate-related think tank, 2 Degrees Investing Initiative (2DII).

Figure App-12 Calculation Results of Portfolio GHG Emissions

Sectors	Scope	KPI	FY2020 Results	FY2021 Results
Power	Power generation Scope1	Carbon intensity	**332** g-CO2e/kWh	**320** g-CO2e/kWh (YoY -4%)
Oil and Gas	Upstream Production Scope1,2,3	Absolute emissions	**40.8*** Mt-CO2e	**33.3** Mt-CO2e (YoY -18%)
Coal	Upstream Production Scope1,2,3	Absolute emissions	**13.6*** Mt-CO2e	**7.4** Mt-CO2e (YoY -46%)
Steel (est. value)	Crude steel production Scope1,2	Carbon intensity	-	**8.2** Mt-CO2e **2.0** t-CO2e/t-Steel
Automobile (est. value)	Manufacturing of automobile Scope1,2,3	Carbon intensity	-	**217** g-CO2e/vkm
Real estate (est. value)	Domestic Commercial real estate / Domestic REIT Scope1,2,3	Carbon intensity	-	**78.7** kg-CO2e/㎡

* In accordance with the refinement of calculations, the figures for oil & gas and coal have been revised from the TCFD Report 2022.

（3）Reduction Targets for Portfolio GHG Emissions

① Reference scenarios

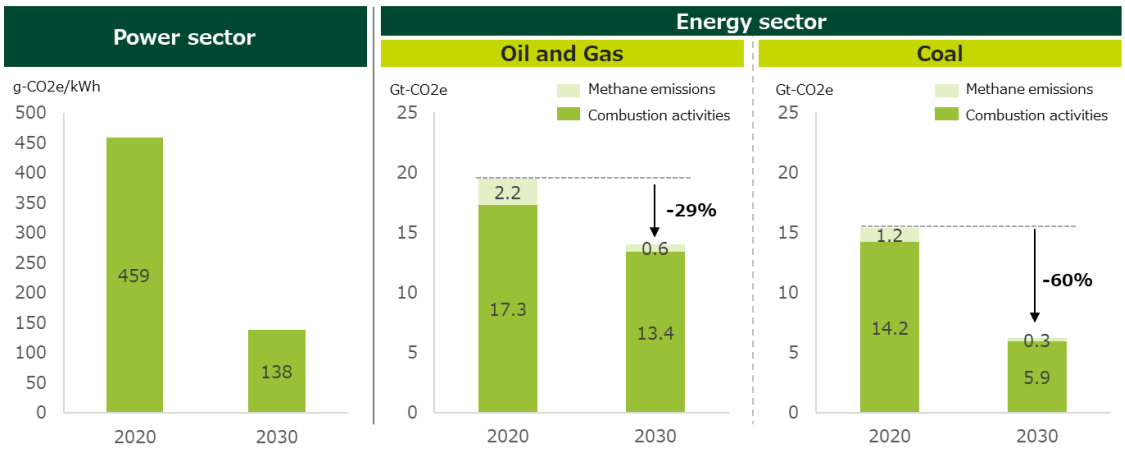
SMBC Group is a member of the NZBA and is committed to achieving net zero GHG emissions across our entire loan and investment portfolio by 2050, in line with the goals of the Paris Agreement. Towards this end, we have set medium-term reduction targets for each sector.

NZBA recommends that when setting targets, it is preferable to reference a scenario that is consistent with the temperature target of the Paris Agreement and does not assume overshooting, and that uses a scientific scenario published by a reliable and widely recognized institution. The SDS/NZE scenario published by the IEA is mentioned as an example of such a scenario, and the Group refers to these scenarios when setting our targets.

In the NZE scenario, the carbon intensity (g-CO2e/kWh) at the time of power generation is indicated for the power sector, and a pathway is depicted to reduce it to 138 g-CO2e/kWh by 2030. We refer to this carbon intensity when setting our targets.

On the other hand, for the energy sector, the GHG emissions derived from each fossil fuel are indicated, and a pathway is depicted to reduce them by about 29% for oil and gas and about 60% for coal by 2030 compared to 2020. We refer to this reduction rate when setting our targets.

Figure App-13 Transition in GHG Emissions in the Power, Oil and Gas and Coal sectors under the IEA/NZE scenario



(Source) Compiled by SMBC Group from IEA World Energy Outlook 2021

② Medium-term Reduction Targets

SMBC Group is committed to achieving net zero GHG emissions across our entire loan and investment portfolio by 2050, in line with the goals of the Paris Agreement, and we have set medium-term reduction targets for each sector to achieve this.

From the perspective of supporting our customers' transition and technological innovation towards decarbonization, and aiming to achieve the 1.5°C target as a global financial institution, after achieving a level well below the target of less than 2°C, we have set our targets in a range for the power, oil and gas, and coal sectors.

Achieving the 1.5°C target is a common long-term goal for both our Group and our customers, and we will continue to engage with our customers and work together towards decarbonization.

For the steel, automobile, and real estate sectors, we are currently refining the calculation of GHG emissions and considering medium-term reduction targets. In addition to the previously mentioned IEA, we will continue to consider these targets while referring to scientific decarbonization scenarios formulated by various industry initiatives, and taking into account factors such as sector and regional characteristics of the portfolio.

Figure App-14 Portfolio GHG Emissions and Reduction Targets

Sectors	Scope	KPI	FY2020 Results	FY2021 Results	Mid-term reduction targets	Scenarios
Power	Power generation Scope1	Carbon intensity	332 g-CO2e/kWh	320 g-CO2e/kWh	FY2030 138～195 g-CO2e/kWh	IEA/SDS・NZE
Oil and Gas	Upstream Production Scope1,2,3	Absolute emissions	40.8* Mt-CO2e	33.3 Mt-CO2e	FY2030 -12～29% (from FY2020)	
Coal	Upstream Production Scope1,2,3	Absolute emissions	13.6* Mt-CO2e	7.4 Mt-CO2e	FY2030 -37～60% (from FY2020)	

* In accordance with the refinement of calculations, the figures for oil & gas and coal have been revised from the TCFD Report 2022.

（4）Approval and Review

① Governance for Reduction Targets and Transition Plan

NZBA recommends that reduction targets be approved by management and reviewed by the highest governance body. In SMBC Group, as described in “3. Governance”, we have clarified responsibilities for sustainability in both supervision and execution, and have established a system. Under this system, reduction targets and the Transition Plan are appropriately supervised and reflected in business execution. The reduction targets and the Transition Plan have been formulated through deliberation in management committee, and regular reports are made to the Board of Directors by the Group CSuO.

In the future, we will accurately disclose the progress of the Transition Plan and performance against targets, and based on the opinions of each committee, we will regularly review the reduction targets and the Transition Plan.

② Regular Review of Medium-term Reduction Targets

NZBA recommends regularly reviewing targets (at least every five years) to ensure consistency with the latest climate science. In SMBC Group, we are considering revising our Transition Plan towards achieving net zero in conjunction with the medium-term management plan, and we will review our medium-term reduction targets as necessary, considering the latest state of climate science, including the IPCC.

In addition, the aforementioned calculation results and targets are based on current methods, and there may be changes to the scope and calculation method as they become more sophisticated in the future, and we may review targets along with the base year figures.

③ Third-Party Assurance

NZBA recommends obtaining assurance from an independent third-party for reduction targets and their progress reports. SMBC Group have obtained third-party assurance for our operational GHG emissions, and we are also preparing for our portfolio GHG emissions.

Appendix 4. GHG Emissions related to Underwriting

（1）Introduction

In the operations of financial institutions, underwriting business doesn't directly provide funds to corporations, unlike investments and loans. However, it is recognized as significantly contributing to corporate expansion, business transformations, and influencing the capital market.

SMBC Group has recently calculated GHG emissions related to our underwriting business. The calculation and subsequent disclosure of these emissions is an ongoing initiative, with guidelines and standards currently being established. This section outlines the Group's current policy on calculating these emissions.

NZBA guidelines are expected to be announced in the future, and for sector expansion and goal setting, we will proceed with appropriate considerations, including the need for goal setting, while taking into account the content of the guidelines and international trends.

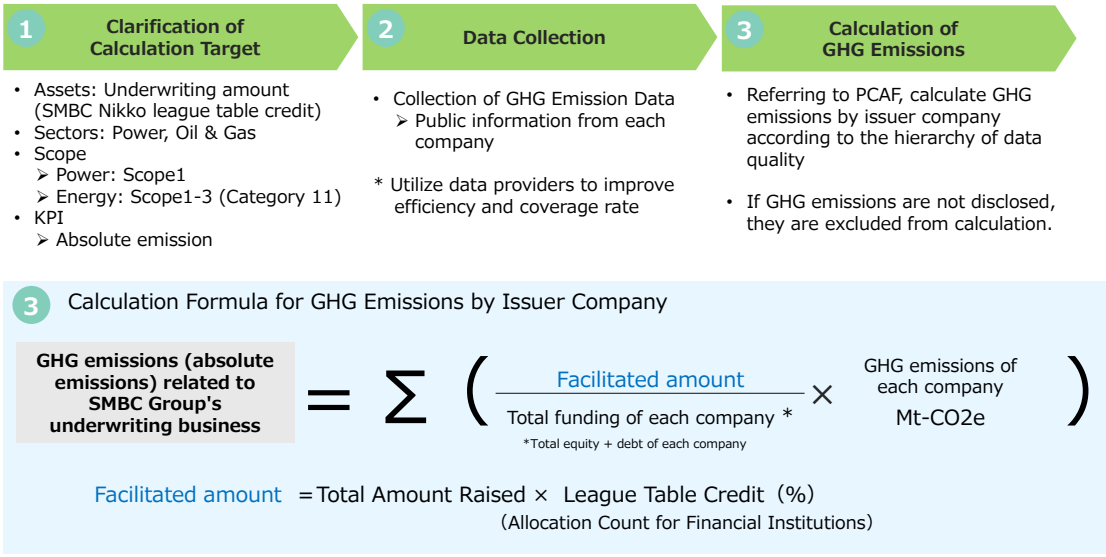
Figure App-15 Overview of SMBC Group's Approach to Calculating GHG Emissions Related to Underwriting

Category		Power	Oil and Gas
Approach to Calculate GHG Emissions related to Underwriting			
Calculation Target	Assets	League table credits of SMBC Nikko Securities (one of the core companies of SMBC group) and its major local subsidiary, etc.	
	Sector	Issuer companies that fall under the power sector (based on GICS) and have a power generation business.	Issuer companies that fall under the oil and gas sector (based on GICS) and have an upstream production
	Scope	Scope1	Scope1, 2 and Scope3 (Category11)
	KPI	Absolute emission (Mt-CO2e)	
	Offset	Not considered at the moment (to be considered when GFANZ/NZBA guidelines are established)	
Data Collection		Company disclosure / Data provider	
GHG Reduction Target related to Underwriting			
Reduction Target		When NZBA guidelines are established, we will consider including whether to set a target, based on the contents of the guidelines and international trends, etc.	

（2）Approach to Calculating GHG Emissions Related to Underwriting

In this section, we describe the main process for calculating GHG emissions related to underwriting operations in SMBC Group. We primarily construct the calculation process in three steps.

Figure App-16 Main process for calculating GHG emissions related to underwriting



① Clarification of Calculation Target

■ Target Assets

As a first step, SMBC Group carries out the calculation of GHG emissions for the sectors mentioned below. We focus on SMBC Nikko Securities and its major subsidiaries, which constitute a large portion of our underwriting operations[29], a core operation in our securities business.

■ Target Sectors

Every industry faces its unique challenges in the journey towards decarbonization, and it is anticipated that the paths and speed towards carbon reduction will differ across sectors. An approach known as the “Sectoral Decarbonization Approach (SDA)”, which sets decarbonization paths for each industry while considering the perspectives of climate science, is widely employed by companies, including those participating in SBTi. Given the broad range of underwriting sectors in financial institutions and the need to engage with a diverse clientele in alignment with their respective situations, SMBC

[29] The underwriting in this context refers to the underwriting of bonds, stocks, etc.

Group has adopted a sectoral approach for calculating GHG emissions related to our underwriting operations.

SMBC Group became a member of the NZBA in October 2021. NZBA guidelines identify nine carbon-intensive sectors[30]. Among these sectors, we have prioritized calculations for the power sector, which is known globally for significant GHG emissions, and the oil & gas sector, which has the largest GHG emissions by fuel type[31].

As indicated in Figure App-15, we identify specific issuer companies that are the subjects of calculation based on the GICS for each sector. During this identification process, we also consider aspects of the target value chain (such as whether they possess a power generation business or upstream production business).

Figure App-17 Target Sectors for Calculation and Goal Setting

Target Sectors	GICS
Power	・ Electric Utilities ・ Multi-Utilities ・ Independent Power Producers & Energy Traders ・ Renewable Electricity
Oil & Gas	・ Integrated Oil & Gas ・ Oil & Gas Exploration & Production

■ Target Value Chain/Scope of GHG Emissions

In the power sector, a consideration of lifecycle GHG emissions reveals that a significant majority are not attributable to transmission, distribution, or retail operations, but rather are caused by power generation. Moreover, power generation assets are most susceptible to stranded asset risks. Hence, focusing on power generation becomes crucial. Consequently, in the power sector, we target the emissions (Scope 1) of companies engaged in power generation to measure their GHG emissions.

Similarly, in the oil and gas sector, when considering lifecycle GHG emissions, a large portion is attributable to GHG emissions from upstream operations such as extraction and production, and from the use of fossil fuels. Therefore, in the energy sector, we aim to measure GHG emissions related to upstream production and product use. For this, we target the direct and indirect emissions (Scope 1/2) of issuing companies, along with the supply chain emissions related to product use (Scope 3 Category 11).

Currently, carbon credits are not factored into our calculations. The concept of net zero targets and accompanying carbon credits is an ongoing global discussion. SMBC

[30] Power Generation, Oil and Gas, Coal, Iron and Steel, Transport, Commercial and Residential Real Estate, Aluminium, Cement, Agriculture

[31] IEA World Energy Outlook 2022

Group is involved in initiatives like the NZBA and TSVCM, and we intend to explore the use of carbon credits within the Group and our credit recipients, considering the progress of global standardization.

■ **KPI**

Regarding GHG emissions related to underwriting operations, as the guidelines and standards for calculation methods and target setting are still being developed, SMBC Nikko Securities has set the absolute amount (Mt-CO2e) that represents direct GHG emissions as a measurement indicator.

② Data Collection

In order to calculate GHG emissions associated with underwriting activities, we need emissions data from each issuer company. We gather this information from disclosure materials such as integrated reports and ESG reports published by these companies.

Figure App-18 Main Data Sources

Category	Examples Data Sources
GHG Emission Related Data	✓ Integrated Reports & Various ESG Reports
Financial Data	✓ Financial Reports (Securities Reports, Annual Reports, etc.) ✓ Data Vendors

③ Calculation of GHG Emissions by Issuer Company

The PCAF Standard prescribes a data quality score, with the recommendation to perform calculations in line with this score. For our calculations, we reference this data quality score and base our calculations on emission data (scores 1-2) derived from disclosed information.

Figure App-19 Table of Data Quality scores by PCAF

Category	Example	Score
Reported emissions	Emissions data authenticated by an independent third-party	1
	Unauthenticated emissions data	2
Physical activity-based emissions	Estimated emissions volume based on energy consumption volume, etc.	
	Estimated emissions volume based on production volume data, etc.	3
Economic activity-based emissions	Estimated emissions volume based on each company's sales data	4
	Estimated emissions volume based on each company's asset data	5

High

Low

(Source: Compiled by the company using sources from the PCAF Standard)

Figure App-20 Calculation results of GHG emissions related to underwriting

Sectors	GHG emission	Data Quality Score	Coverage *2
Power	3.1Mt-CO2e	Scope1 : 1.5	95%
Oil & Gas	1.0Mt-CO2e ✓ Scope1/2 : 0.1 ✓ Scope3 : 0.9 *1	Scope1/2 : 1.2 Scope3 : 1.0	88%

*1 Scope3 Category11: Use of sold product
*2 Sectoral, League Table Credit basis

（3）Reduction Targets for GHG Emissions related to Underwriting

For the GHG emissions from SMBC's portfolio, we have set intermediate targets and are progressively expanding the target sectors, in line with the target-setting guidance for NZBA member financial institutions. Conversely, for GHG emissions related to SMBC Nikko Securities' underwriting activities, guidelines from the NZBA are anticipated to be issued in the future. We will continue to appropriately review the expansion of sectors and the setting of targets, including the necessity thereof, while considering the content of these guidelines and international trends.

Appendix 5. GFANZ Index

Reference Table to GFANZ "Financial Institution Net-zero Transition Plans - Fundamentals, Recommendations, and Guidance"

Component	Recommendations	Report Section
FOUNDATIONS		
1) Objectives and priorities	Define the organization's objectives to reach net zero by 2050 or sooner, with measurable targets, milestones, and timelines, and identify the priority approaches of net zero transition action considering financing climate solutions, decarbonization through seeking net-zero aligned clients and portfolio companies, working to bring clients and portfolio companies into net-zero alignment, and supporting managed phaseout projects.	2.Strategy (4) SMBC Group's Transition Plan
IMPLEMENTATION STRATEGY		
1) Products and services	Align existing and new products and services with a 1.5 degrees C net-zero pathway to accelerate and scale the net-zero transition in the real economy, provide transition-related education and advice, and support portfolio decarbonization in accordance with the institution's net-zero transition strategy.	2.Strategy (4) SMBC Group's Transition Plan Implementation Strategy 4: Promotion of Decarbonization Solutions
2) Activities and decision-making	Embed the financial institution's net-zero objectives and priorities in its core evaluation and decision-making tools and processes, to support its net-zero commitment. This applies to both top-down/oversight structures and bottom-up tools and actions.	2.Strategy (4) SMBC Group's Transition Plan Implementation Strategy 3: Enhancement of Climate-Related Risk Analysis and Control 4.Risk Management (2) Management process for climate-related risks Policies for Specific Businesses and Sectors
3) Policies and conditions	Establish and apply policies and conditions on priority sectors and activities, such as thermal coal, oil and gas, and deforestation. Include other sectors and activities within lending, investment, and underwriting portfolios that are high emitting, or otherwise harmful to the climate, to define business boundaries in line with the institution's net-zero objectives and priorities.	
ENGAGEMENT STRATEGY		
1) Clients and portfolio companies	Proactively and constructively provide feedback and support to clients and portfolio companies to encourage net zero-aligned transition strategies, plans, and progress with an escalation framework with consequences when engagement is ineffective.	2.Strategy (4) SMBC Group's Transition Plan Engagement Strategy
2) Industry	Proactively engage with peers in the industry to a) exchange transition expertise as appropriate, and collectively work on common challenges; and b) represent the financial sector's views cohesively to external stakeholders such as clients and governments.	
3) Government and public sector	Ensure that direct and indirect lobbying and public-sector engagement advocate for policies that support or enable an accelerated and orderly transition to net zero, and do not contravene any net-zero commitments of the institution. Review portfolio companies' lobbying and advocacy efforts and utilize engagement levers to encourage consistency with the institution's own net-zero objectives. Discuss clean investment plans and policies with governments and other key stakeholders to help attract private investment in climate solutions.	
METRICS AND TARGETS		
1) Metrics and targets	Set targets against key metrics that support the net-zero strategy and priorities, including targets for support and scaling of climate solutions, engagement, internal implementation, financed GHG emissions, and where relevant, managed phaseout projects. Monitor a range of metrics to assess progress in implementing the net-zero transition plan.	5.Metrics and Targets
Governance		
1) Roles, responsibilities, and remuneration	Define roles for Board and senior management so they have ownership, oversight, and responsibility for the net-zero targets. Assign appropriate individuals and teams to all aspects of both design and delivery. Review the transition plan regularly to ensure material updates/ developments are incorporated, challenges are reviewed as an opportunity to course correct, and implementation risks are being managed.	3.Governance (1) Overall Picture of Sustainability Management (2) Supervisory Structure for Sustainability
2) Skills and culture	Provide training and development support to the teams and individuals designing, implementing, and overseeing the plan so that they have sufficient skills and knowledge to perform their roles (including at the Board and senior management level). Implement a change management program and foster open communications to embed the net-zero transition plan into the organization's culture and practices.	3.Governance (1) Overall Picture of Sustainability Management (2) Supervisory Structure for Sustainability

Editorial Policy

“SMBC Group TCFD Report” is designated to convey financial and non-financial information related to climate change to our stakeholders. It has been compiled with reference to the "Recommendations of the Task Force on Climate-Related Financial Disclosures" by the Task Force on Climate-Related Financial Disclosures, established by the Financial Stability Board, as well as the "Financial Institution Net-zero Transition Plans" by the Glasgow Financial Alliance for Net Zero (GFANZ), among others.

This document contains “forward-looking statements”, regarding the intent, belief or current expectations of us with respect to our future financial condition and results of operations. In many cases but not all, these statements contain words such as “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “probability,” “risk,” “project,” “should,” “seek,” “target,” “will” and similar expressions. Such forward-looking statements are not guarantees of future performance and involve risks and uncertainties, and actual results may differ from those expressed in or implied by such forward-looking statements contained or deemed to be contained herein.

The risks and uncertainties which may affect future performance include: deterioration of Japanese and global economic conditions and financial markets; declines in the value of our securities portfolio; incurrence of significant credit-related costs; our ability to successfully implement our business strategy through our subsidiaries, affiliates and alliance partners; and exposure to new risks as we expand the scope of our business. Given these and other risks and uncertainties, you should not place undue reliance on forward-looking statements, which speak only as of the date of this document. We undertake no obligation to update or revise any forward looking statements.

Please refer to our most recent disclosure documents such as our annual report on Form 20-F and other documents submitted to the U.S. Securities and Exchange Commission, as well as our earnings press releases, for a more detailed description of the risks and uncertainties that may affect our financial condition and our operating results, and investors’ decisions.