

Sumitomo Mitsui Trust Asset Management Co., Ltd.

# *Climate Change & Natural Capital Report 2026*

May 2026



This report is in line with recommendations by the Task Force on Climate-related Financial Disclosures (TCFD) and the Task Force on Nature-related Financial Disclosures (TNFD)

# Climate Change & Natural Capital Report 2026

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### Editorial Policy of This Report

The purpose of this report is to inform our stakeholders about our initiatives on climate change issues and issues related to natural capital. Statements regarding outlook, targets, and plans in this report are based on our judgment at the time of report preparation but contain uncertainties that may result in outcomes different from those described due to various changing factors. The period covered by this report is from January 2025 to December 2025. The portfolio used in the analysis is our own managed portion of assets under management excluding sovereign bonds. The FY2024 figures are based on the balance at the end of March 2024, and the FY2025 figures are based on the balance at the end of March 2025. The information contained in this disclosure was approved at the executive committee held in May 2026.



David Semaya  
Representative Director and Chairperson/  
Chairperson of the Board of Directors

DAVID SEMAYA

## 1. Forwards

The corporate philosophy of Sumitomo Mitsui Trust Asset Management is to share various ideas with our diverse stakeholders from a global perspective, continue searching for possibilities leading to a better future, and work to create a society that is not just economically wealthy, but truly affluent. With regard to climate change issues, the effects such as extreme heat and heavy rainfall have certainly begun to materialize. In addition, while forests, a key component of natural capital, are gaining attention as a carbon sink (i.e., absorbing CO<sub>2</sub> from the atmosphere and storing it in the soil and ocean floor) in response to climate change, illegal logging and forest fires are becoming serious issues. Natural capital can be considered the foundation of economic activity, as a World Economic Forum report states that “over half of global gross domestic product (GDP) depends on natural capital. We believe that important issues concerning Environment, Social, and Governance (hereinafter, ESG) will affect the long-term return of assets under management entrusted to us by our clients. In this environment, we believe it is important to evaluate the potential risks and opportunities related to climate change and natural capital in these investee companies. As such, we are reflecting the evaluation in investment decision processes and leveraging it in business management.

We view recent changes in the sustainability landscape including diversification of values in the U.S. and the regulatory and policy shifts in Europe and the U.S. as opportunities to further advance our stewardship activities. Through our three-pillar framework across Japan, Europe, and the U.S., we evaluate and support companies with consideration for each region’s characteristics. We also accumulate insights on topics such as climate change, natural capital, human rights, and supply chain management by participating in global initiatives and gathering information, thereby supporting companies in their transition efforts. Further, while staying aligned with our clients’ intentions, we will continue to emphasize constructive and pragmatic dialogue based on our understanding of these environmental changes, the characteristics of each investee company, and their competitive landscapes. Through collaboration among our global offices, we aim to further enhance the effectiveness of our engagement activities.

As our own disclosure efforts, not only have we worked to enhance TCFD disclosures after endorsing the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) in February 2019,

but in June 2024, we also disclosed a TCFD report in English as part of our compliance with disclosure regulations implemented by the UK Financial Conduct Authority (FCA). Additionally, we have been involved in the preparatory activities of the Taskforce on Nature-related Financial Disclosures (TNFD) Forum since its inception in 2021. In January 2024, we officially declared our commitment as a TNFD Early Adopter to implement early disclosures based on these recommendations and conducted TNFD disclosure in October 2024. The following is an explanation of our initiatives to address climate change and natural capital in accordance with these disclosure frameworks.

## **2. The current situation of the global environment and the importance of an integrated approach to addressing social issues**

The planetary boundaries framework, proposed in 2009 by researchers at the Stockholm Resilience Centre in Sweden, is a scientific framework indicating the limits of the global environment that humanity must respect to maintain a stable and resilient Earth system, which summarizes the extent of crisis faced by the current global environment in a manner that is readily understood. This framework assesses nine planetary boundaries: climate change, stratospheric ozone depletion, ocean acidification, biosphere integrity, biogeochemical flows, freshwater use, land-system change, novel entities, and atmospheric aerosol loading. It has been shown that six boundaries—all except ocean acidification, stratospheric ozone depletion, and atmospheric aerosol loading—have already been crossed. Within this context, in October 2023, the Finance for Biodiversity (FfB) Foundation published the guide “Unlocking the biodiversity-climate nexus,” which outlines the synergies and trade-offs between climate change and biodiversity, focusing on the interaction of the two.

In addition, IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services), known as the biodiversity counterpart to the Intergovernmental Panel on Climate Change (IPCC), published in December 2024 what is called the Nexus Assessment Report, which is “the Thematic Assessment Report on the Interlinkages among Biodiversity, Water, Food, and Health” under climate change. This report emphasizes the necessity of taking an integrated approach to deeply intertwined global challenges (nexus elements) such as biodiversity loss, water availability, food security, human health, and climate change. The “nexus approach” represents the comprehensive understanding and practice in order to promote integrated and adaptive decision-making aimed at maximizing synergies and minimizing trade-offs.

In contrast, the “siloes approach,” which refers to the compartmentalized handling of individual issues, is noted to potentially cause management failures and unexpected adverse effects.

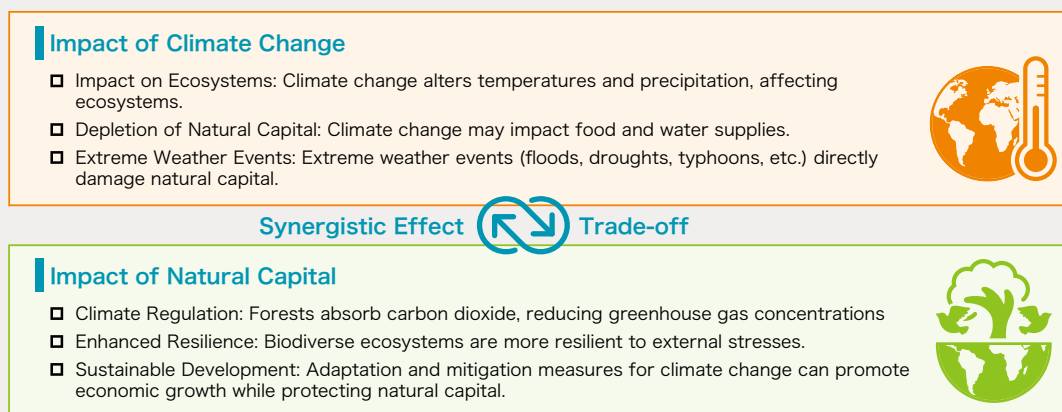
Specifically, indirect drivers of environmental impact, such as specific economic systems, excessive consumption, and technological advancement and its use, do not act directly on the environment, but increase indirect pressure on the environment through social structures and human lifestyles. These indirect drivers have increased direct drivers of environmental impact, such as changes in land and sea usage (e.g., deforestation and agricultural land conversion), unsustainable development, pollution (e.g., air, water, and soil pollution), the spread of invasive alien species, and climate change. These direct drivers have exerted concrete negative impacts on the environment and worsened the condition of nexus elements.

The report also states that compartmentalized governance of global challenges and decision-making that prioritizes short-term profits hinder the resolution of issues across the entire nexus, including climate change measures.

Furthermore, the need for greater integration of measures for climate change and measures for natural capital was discussed extensively at the PRI (Principles for Responsible Investment) conference held in Toronto in October 2024 with over 1,700 participants from 48 countries, where Mark Carney (currently the Prime Minister of Canada) delivered a keynote address with a strong message, “There will be no net zero without nature.”

In this way, discussions on the interaction of climate change and biodiversity have intensified over the years.

**Figure 1: Relationship Between Climate Change and Natural Capital**



### 3. The concept of our integrated approach to addressing social issues

We recognize the current situation of the global environment and the importance of an integrated approach to addressing social issues. When companies delay measures to address climate change and natural capital, various financial impacts may arise over the medium to long term through the internalization of negative externalities. We believe that the impacts shown in Figure 2 can arise in complex ways through multiple factors. Furthermore, if market participants deem a company’s measures to address social issues inadequate, this is reflected in equity valuation as an increase in the cost of capital, which can affect investment returns. By contrast, proactive actions can enhance the sustainability of corporate value in the medium to long term, although they incur investment and costs in the short term.

**Figure 2: The relationship between environmental initiatives and corporate value (financial risk as an example, opportunities are generally the opposite concept)**

Financial Risk	Climate Change	Deforestation	Water Resource
Decline in sales	Loss of sales opportunities (factory shutdown / substitution with compatible products)	Loss of sales opportunities (difficulty in securing raw materials, substitution with alternative products)	Loss of sales opportunities (difficulty in securing raw materials, suspension of factory operations)
	Occurrence of reputational risk (Boycott)		
Increase in raw material costs	Supply instability	Increased costs due to supplier changes	
Increase in selling expenses	Carbon tax / Emissions trading / Carbon credits	Traceability and rising certification costs	Water conservation and water quality improvement, etc. Investment and related costs
Occurrence of extraordinary loss	Impairment Loss Related to Carbon (Stranded Assets)	—	Impairment losses due to floods and droughts
	Occurrence of reputational risk (compensation from lawsuits)		
Net Profit (Funds Available for Shareholder Distribution)	Failing to respond may lead to the internalization of externalities in the future. Proactively addressing them can potentially reduce risks, seize opportunities, and lead to sustainable improvements in corporate value.		

We emphasize an integrated approach to addressing social issues across all our stewardship activities. In the stewardship activities, we have identified 12 ESG materiality items encompassing social issues and addressed key activity items based on these, applying them in combination according to each investee company’s own materiality\*. Through these initiatives, we promote more effective and impactful stewardship activities in order to encourage value enhancement and sustainable growth at investee companies while maximizing investment returns and building a sustainable society.

※See our Sustainability Report for details on our ESG materiality and key activity items.

#### 4. Information disclosure on initiatives for climate change and natural capital disclosure

The TCFD is a widely recognized disclosure framework that has been adopted by many companies and financial institutions. Aligning TNFD disclosure with TCFD disclosure allows us to disclose climate-related and nature-related data consistently, increasing the reliability and transparency of our disclosure overall. Moreover, as climate change and natural capital are closely intertwined, using similar frameworks for TCFD and TNFD disclosure enables us to comprehensively assess and manage these risks and opportunities while improving complementarity and comparability for information users. Based on this concept, we first explain the initiatives of our Group and our corporate efforts, then outline our integrated approach to social issues as well as relevant activities in accordance with the TCFD and TNFD disclosure frameworks.

Figure 3: Core elements in information disclosure recommended by the TCFD and TNFD

	TCFD Disclosure	TNFD Disclosure
<b>Governance</b>	<ul style="list-style-type: none"> <li>● Board Oversight</li> <li>● Role of Management</li> </ul>	<ul style="list-style-type: none"> <li>● Board Oversight</li> <li>● Role of Management</li> <li>● Stakeholder Engagement</li> </ul>
<b>Strategy</b>	<ul style="list-style-type: none"> <li>● Climate Change Risks and Opportunities</li> <li>● Impacts of Climate Change Risks and Opportunities</li> <li>● Potential impacts under various climate scenarios, including scenarios below 2 degrees</li> </ul>	<ul style="list-style-type: none"> <li>● Dependency, impacts, risks, and opportunities of natural capital</li> <li>● Impacts from dependency, impacts, risks, and opportunities of natural capital</li> <li>● Resilience of organizational strategy considering various scenarios</li> <li>● Assets and activities of prior regions</li> </ul>
<b>Risk (and Impact) Management</b>	<ul style="list-style-type: none"> <li>● Process for Identifying and Assessing Climate Change Risks</li> <li>● Climate Change Risk Management Process</li> <li>● Integration of the Process for Identifying, Assessing, and Managing Climate Change Risks into Comprehensive Risk Management</li> </ul>	<ul style="list-style-type: none"> <li>● Process for Identifying an Organization's Dependence on, Impact on, Risks to, and Opportunities from Natural Capital</li> <li>● Process for Identifying Dependence on, Impact on, Risks to, and Opportunities from Natural Capital in the Value Chain</li> <li>● Process for Managing Dependence on, Impact on, Risks to, and Opportunities from Natural Capital</li> <li>● Integration of the Process for Identifying, Assessing, and Managing Natural Capital Risks into Comprehensive Risk Management</li> </ul>
<b>Metrics and Targets</b>	<ul style="list-style-type: none"> <li>● Indicators for Assessing Climate Change Risks and Opportunities</li> <li>● GHG Emissions of Scope 1, 2, and 3</li> <li>● Targets Used for Managing Climate Change Risks and Opportunities</li> </ul>	<ul style="list-style-type: none"> <li>● Indicators for Assessing Natural Capital Risks and Opportunities</li> <li>● Indicators for Assessing Dependence and Impact</li> <li>● Targets used for managing dependence on, impact on, risks, and opportunities related to natural capital</li> </ul>

(Source: Created by SMTAM based on TCFD and TNFD final recommendations)

#### 5. Sumitomo Mitsui Trust Group's initiatives for climate change and natural capital

Our Group, under its common principles (action principles) known as the "Action Guidelines for Mitigating Climate Change," appropriately recognizes the risks and opportunities posed by climate change. Our Group is committed to minimizing negative impacts and maximizing positive impacts through its diverse trust banking business.

Figure 4: Sumitomo Mitsui Trust Group's Action Guidelines for Mitigating Climate Change

<b>1. Implementation of Measures and Support to Help Mitigate Climate Change</b>	<b>3. Collaboration with Stakeholders</b>
<p>In addition to actively taking measures to reduce greenhouse gas emissions in our own business operations, we are making efforts, as a corporate citizen, to support activities that mitigate and adapt to climate change.</p>	<p>We engage in dialogue and cooperation with our stakeholders as we work to mitigate climate change.</p>
<b>2. Provision of Products and Services</b>	<b>4. Education and Training</b>
<p>We are working on developing and providing products and services that help mitigate climate change. We leverage our financial functions to promote renewable energy and the use of carbon offset products.</p>	<p>We will ensure that these guidelines are fully implemented at Group companies, and will actively conduct education and training to mitigate climate change.</p>
	<b>5. Information Disclosure</b>
	<p>We will actively disclose information related to our efforts to mitigate climate change.</p>

(Source: Compiled by SMTAM based on Sumitomo Mitsui Trust Group's Action Guidelines for Mitigating Climate Change)

Our Group recognizes natural capital risk, like climate change risk, as a significant risk that can affect our lending and investment operations. Since the 2000s, the Group has worked to develop financial products

and services that contribute to the proper assessment and preservation of natural capital. In September 2023, the Taskforce on Nature-related Financial Disclosures (TNFD) published recommendations to shift global finance toward nature-positive business by encouraging companies to disclose natural capital data, leading to keener recognition of the importance of natural capital across society. Our Group joined the TNFD Forum in 2023, and in FY2024 commenced a pilot analysis to identify and deepen its fundamental understanding of natural capital risks. As financial institutions are connected to natural capital and biodiversity through borrowers and investees, our Group identified its nature-related dependencies, impacts, and risks by using ENCORE to select and analyze key sectors among Sumitomo Mitsui Trust Bank's lending and investment portfolio.

## 6. Our initiatives on climate change and natural capital issues

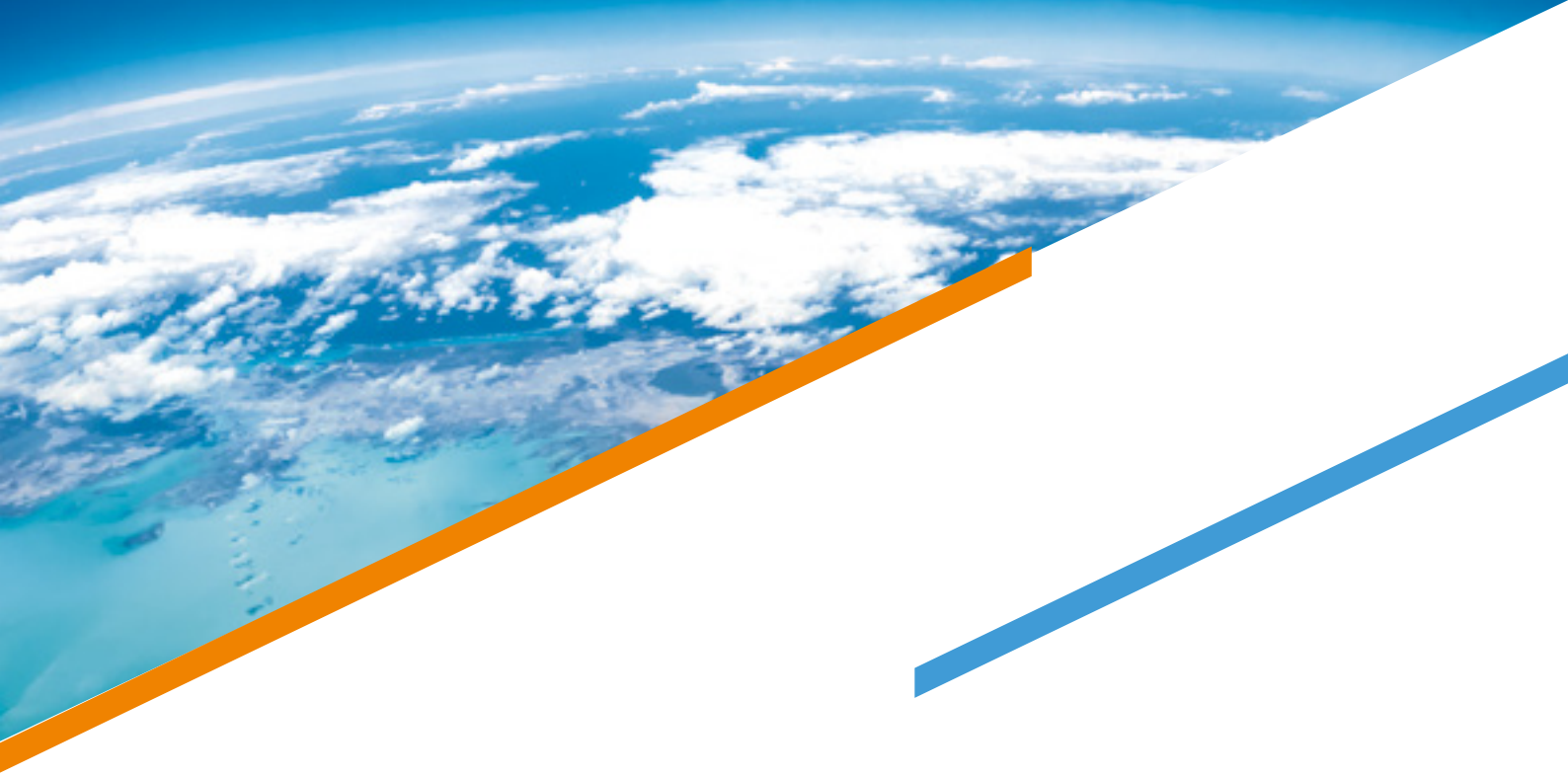
We consider the impact on the sustainability of investment target companies while implementing climate change initiatives internally. We believe that small, incremental efforts are critically important in today's era, contributing to the sustainability of the entire industry and fulfilling our responsibility to the future of a society as a whole.

**Figure 5: Our approach against climate change issues**

<p><b>1. Promoting Climate Change Measures Through Dialogue with Investee Companies</b></p>	<p><b>4. Supporting Green Procurement and Greening Projects</b></p>
<p>While advancing our internal initiatives, we leverage our influence as an asset management company to encourage investee companies to address sustainability and climate change. We believe that every additional initiative, no matter how small, contributes to a sustainable future for the planet.</p>	<p>We recommend green procurement for office supplies to help curb deforestation. Additionally, we actively participate in and support greening projects to help preserve the environment locally and globally. For more details, please refer to the social contribution activities described on the right side.</p>
<p><b>2. Enhancing Energy Efficiency in Office Operations</b></p>	<p><b>5. Raising Awareness Among Employees</b></p>
<p>We aim to improve energy efficiency in office operations by introducing energy-saving equipment and transitioning to renewable energy sources. We utilize LED lighting and motion sensor lighting.</p>	<p>Alongside the initiatives above, we properly manage, recycle, and dispose of office waste, including paper waste, to raise employee awareness about the importance of addressing climate change even through the smallest of our actions.</p>
<p><b>3. Promoting Digitization and Paperless Operations</b></p>	<p><b>6. Measuring and Reporting Greenhouse Gas Emissions</b></p>
<p>By digitizing internal documents such as reports and meeting materials, as well as external documents like contracts and prospectuses, we reduce paper usage and contribute to forest conservation. We are also transitioning to delivering client reports digitally via email and online portals.</p>	<p>Regarding greenhouse gases, identified as a primary cause of global warming, we regularly measure emissions from office operations and strive for continuous improvement. The Sumitomo Mitsui Trust Group aims to achieve net-zero CO<sub>2</sub> emissions (Scope 1+2) by 2030. We are also working to reduce greenhouse gas emissions within this framework.</p>

(Source: Compiled by SMTAM)

In light of these environmental changes, we recognize the need to further strengthen our governance of sustainability, including climate change, more than ever. To achieve this, in October 2023, we restructured and expanded the role of the former Stewardship Committee (see page 9 for details) and reorganized it into the Sustainability Committee to enhance our framework. Furthermore, in April 2024, we established the "Sustainability Development Office" within the Corporate Planning Department to strengthen our framework for addressing management issues related to sustainability, including climate change, and we have continued our efforts since then. We also engage in the conservation and cultivation of water conservation forests as concrete actions to address climate change and natural capital issues. As part of the engagement, we endorsed the "Plan for Nurturing a Watershed Forest Together Project" by the Tokyo Metropolitan Government Bureau of Waterworks and signed an agreement for the "Tokyo Waterworks - Corporate Forest (Naming Rights)" initiative with the Bureau. Based on this agreement, 3.01 hectares of water conservation forest in the city of Koshu, Yamanashi Prefecture, has been named the "SMTAM's Forest," where we carry out conservation activities for the water conservation forest upstream of the Tama River. By participating in the "Corporate Forest initiative," we strive as a corporate citizen to conserve local water and forest resources and maintain the biodiversity conservation function of forests, thereby contributing to achieving the SDGs.



# *Climate Change*

*Taskforce on Climate-related Financial Disclosures*

**TCFD Disclosures**



# Recognition of climate change issues

Climate change issues are a variety of phenomena caused by the progression of global warming, mainly attributable to human economic activities. Changes in weather patterns due to global warming cause ecosystem changes and damage to food, water, health, and the economy, which can adversely affect sustainable social/economic activities. Under the “Paris Agreement” that came into force in November 2016, signatory nations globally agreed to “hold the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels,” in order to ensure global sustainability. We agreed with the purpose of the Paris Agreement and set our interim targets by 2030 which should be achieved to realize net zero greenhouse gas (hereinafter, GHG) emissions from our investee companies by 2050. We have since been working to reduce GHG emissions from our portfolio.

Meanwhile, if we look globally, business conditions related to climate change are undergoing significant transformation. However, the World Meteorological Organization (WMO) announced in January 2025 that “the global average temperature in 2024 rose by 1.55°C compared with pre-industrial levels,” indicating that global warming has intensified. The Intergovernmental Panel on Climate Change (IPCC), in the AR6 Synthesis Report released in March 2023, stated that “global warming is caused by human activities, and efforts to reduce GHG emissions over ‘the next decade’ are critical to limiting temperature rise to within 1.5°C by 2100.” The reason for this is that a 2°C rise in global average temperature could “reduce crop yields in some regions,” while a 3°C rise could “cause widespread loss of biodiversity,” showing that even small temperature increases can have significant impacts on the global environment.

Based on our recognition of this, we fulfill our fiduciary duty of maximizing medium- to long-term investment returns and suppressing downside risks while bolstering our initiatives and disclosure on climate change issues.

## Information disclosure based on TCFD Recommendations

### 1. Climate-related governance

#### ■ (1) Policies related to climate change

As a Sumitomo Mitsui Trust Group member, we have established policies and related rules regarding sustainability, including climate change, based on the Group’s Sustainability Policy, and are continuously working to develop our organization and systems. In FY2024, we identified “ESG/sustainable management,” including dealing with climate change, as one of our materiality items, and made engagement activities with investee companies our main initiative. In addition, regarding our initiatives with investee companies, in our investment management business rules and related rules, we have established rules regarding the concepts and processes for addressing climate change issues in engagement, the exercise of voting rights, and ESG considerations in investment decision-making (hereinafter, ESG investment).

#### ■ (2) Governance related to climate change

We recognize that climate change represents risks and opportunities that can significantly impact our operations and investee companies. These issues are managed with the same level of importance as other critical management challenges, with oversight by the Board of Directors. Since 2020, we have formalized the reporting of climate change and other significant sustainability issues to the Board of Directors by

including it in the board of directors' regulations to enable more direct oversight.

During the period covered by this report, the Board of Directors received reports from the executive committee and deliberated on enhanced disclosure content for the Climate Change and Natural Capital Report 2025/26, and disclosure of the UK TCFD report, etc. The executive committee, an executive body comprising members including the President, is responsible for formulating plans and initiatives related to climate change issues, setting up operational structures, and managing and promoting these initiatives. During the period covered by this report, the executive committee received reports from the Sustainability Committee and deliberated on matters including analysis of GHG emissions in our portfolio, review of ESG materiality for TCFD disclosures, etc.

Under this framework, our entire company advances sustainability initiatives, including actions regarding climate change. In particular, in our asset management operations, the Sustainability Committee is responsible for formulating plans and monitoring all sustainability activities, including climate change responses. Additionally, the Sustainability Committee reviews matters to be discussed at or reported to the executive committee in advance.

**Figure 6: Our governance structure for sustainability and key discussions/reports during the reporting period**



**(3) Remuneration for executives**

Our evaluation methods for remuneration of the CEO and Named Executive Officers have been determined by the Compensation Committee comprised mainly of external directors. One KPI in the evaluation method includes the reduction of GHG emissions in our portfolio. For example, the level of achievement for climate-related KPIs is reflected at a certain rate in the long-term incentive remunerations of CEOs. The methods to evaluate the remunerations of other Named Executive Officers are similar to CEOs. Additionally, investment behavior and business operations based on the ESG Investment Policy have also been incorporated into the incentive system for all employees in the Investment Departments.

## 2. Climate change-related strategies

### ■ (1) Common climate change risks and opportunities

As average temperatures and sea levels rise, weather-related disasters including large-scale wildfires, floods, droughts, extreme heat, and heavy rains are occurring more often around the world. The increase in temperature affects climate patterns over the medium to long term, and there is concern that this will impact farming production and marine and fishery resources. Since resolving these changes will require a large amount of money, there is an ongoing global debate on how such economic costs will be borne. Thus, climate change issues are increasingly recognized as a serious risk to social and economic activities all over the world. Based on recommendations by the TCFD, transition risks are defined as changes in climate change policies, changes in financial markets and social norms, and rapid transition to a low-carbon society through technical innovations, etc., while physical risks are defined as damage to social infrastructure and nature, etc., as a result of medium- to long-term climate change and abnormal weather. Transition risks include stricter environmental standards, obsolete existing technologies, stranded fossil fuel assets, and risk of boycotts by consumers, while physical risks include flooding risk and drought risk. These recommendations define things such as the increased demand for energy-saving technology and renewable energy as business opportunities related to climate change and organize them into five categories ranging from resource efficiency to resilience. In particular, energy-saving technologies and products, renewable energy, environmentally-friendly products and services, carbon credits, recycled products, and the like are expected to increase. Figure 7 shows an overview of this. Moreover, these recommendations request business entities and financial institutions to identify climate change risks and opportunities that will impact their business activities, and to disclose and explain the impact on business and resilience. We understand such climate change risks and opportunities and utilize these in investment decisions and business management.

**Figure 7: Common climate change risks and opportunities**

Transition risks		Opportunities	
<b>Regulatory Risk</b>	Stricter environmental standards Example: Stricter emission regulations and higher carbon tax	<b>Efficient resources</b>	Energy-saving technologies/products Example: Heat pump technology and inverter technology
<b>Technological risk</b>	Obsolescence of existing technology Example: Prohibiting sales of gasoline vehicles	<b>Energy shift</b>	Renewable energy Example: Solar power, wind power, hydrogen power, and biomass power generation
<b>Market risk</b>	Shift of fossil fuel assets into stranded assets Example: Oil, coal, and natural gas	<b>Products/services</b>	Expansion of environmentally-friendly products and services Example: Electric and fuel cell vehicles, zero-emission buildings/houses
<b>Reputational risk</b>	Risk of boycotts by consumers Example: Exclusion from ultimate consumers and supply chain	<b>Financial market</b>	Carbon credit, etc. Example: J Credits, Non-Fossil Fuel Certificates, and Renewable Energy Certificates
Physical risks		<b>Resilience</b>	Recycled products, etc. Example: Carbon dioxide capture and utilization (CCU) and battery reuse/recycling
<b>Acute risk</b>	Flood risk, etc. Example: Shutdown of equipment and social infrastructure, and increased restoration costs		
<b>Chronic risks</b>	Drought risk, etc. Example: Damage to crops and wildfires		

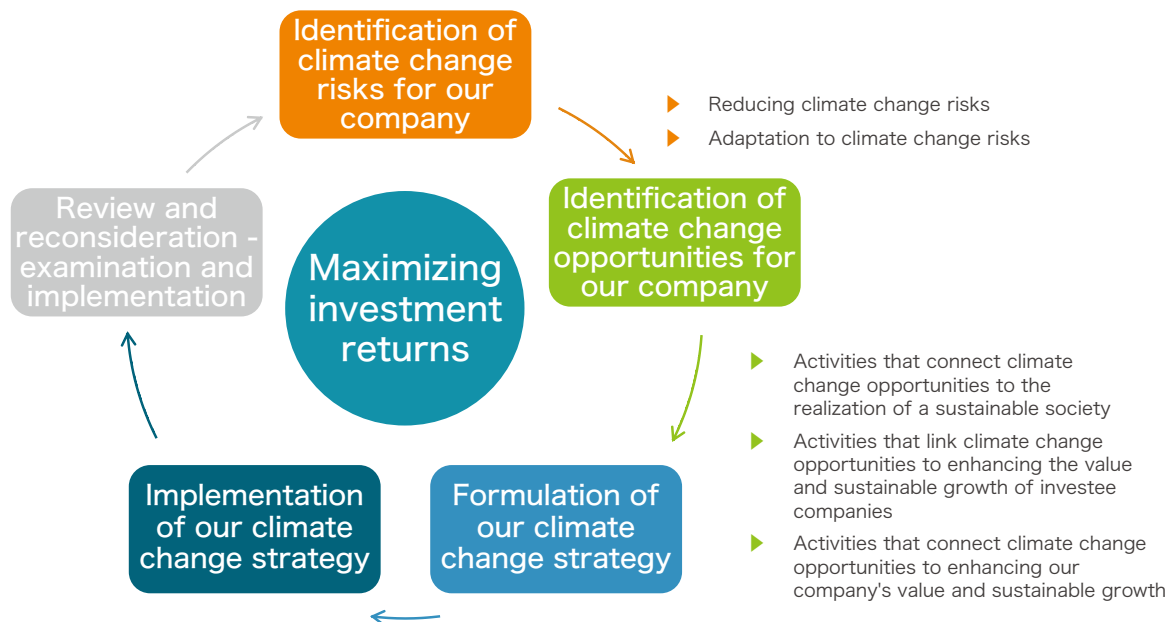
(Source: Created by SMTAM based on TCFD final recommendations)

### ■ (2) Our views on the risks, opportunities, and strategies related to climate change

Through a series of processes involving identifying climate change risks and opportunities, formulating and implementing strategies based on this identification, and reviewing and revising these strategies, we pursue “maximization of investment return,” the goal and outcome of our climate change response. Specifically, we start by identifying climate change risks for us and consider how to mitigate and address the risks, which in turn enables us to identify climate change opportunities for us. We then develop a strategy that defines

specific actions to leverage the identified opportunities in order to enhance value for society, investee companies, and us.

**Figure 8: The relationship between climate change risks, opportunities, and strategies as we see it**



### ■ (3) Our approach to climate change risks and opportunities

This section will explain climate change risks and opportunities that we have identified as well as their impact on business management.

#### A. Climate change risks

We recognize how climate change risks impact our business management through three routes, which are damage to the value of investee companies, loss of existing clients and missed opportunities to acquire potential clients, and loss of business continuity, all of which can ultimately worsen our finances and lower our viability as a company. Figure 9 shows a list of the climate change risks that we have identified, their assumed impact on management, and when they are expected to appear according to risk category. Main market risks are expected to be a failure of investee companies to handle transition risks and physical risks, which can greatly damage corporate value and significantly reduce our assets under management. Main reputational risks include existing clients no longer choosing us due to our failure to properly handle climate change risks, and difficulty in acquiring personnel and increasing turnover due to insufficient responses to climate-related risks. Operational risks include an increase in compliance risks due to a delay with system response such as disclosure of climate-related information, damage to servers and lines due to increased wind/water damage, and decreased employee safety. Finally, credit risk is assumed to be a drawdown of overall financial markets resulting in a sudden loss of assets under management when credit risks for companies and markets increase when transition risks and physical risks become manifest. We have positioned these risks according to their impact on our business management. Those that impact finance such as periodic profit and loss are classified as "medium," and those that may have a major impact on our viability as a company are classified as "major." As for the time horizon of their manifestation, although there are differences with each risk factor, risk factors related to transition risks are expected to appear in approximately 10 years from now (short/medium term), whereas risk factors related to physical risks are expected to appear in around 10 to 30 years (medium/long term).

**Figure 9: Climate change risks for us**

Risk category	Specific risk factor		Impact <sup>※2</sup>	Time Horizon <sup>※3</sup>
Market risk	Damage to value of investee companies due to insufficient response to transition risks such as policy changes, technological innovations, and market changes associated with the transition to a low-carbon Economy	Transition	Major	Short/medium term
	Damage to value of investee companies through damage to business assets due to insufficient response to physical risks such as climate change, sea level rise, and increased natural disasters	Physical	Major	Medium/long term
	Lower profitability due to complex and diverse climate-related data and indices, and increased costs	Transition	Medium	Short/medium term
Reputational risk	Loss of existing clients due to our improper response to climate-related risks, including client doubts about our climate change initiatives caused by insufficient information disclosure, failure to effectively reduce GHG emissions through investment strategies or products, inability to introduce products that effectively address climate change issues, or significantly lagging behind competitors in these areas	Transition	Major	Short/medium term
	Missed opportunities to acquire potential clients due to our improper response to climate-related risk	Transition	Medium	Short/medium term
	Difficulty in acquiring personnel and increased turnover as a result of our insufficient commitment to climate change initiatives affecting its corporate image and brand value	Transition	Major	Short/medium term
Operational risk	Compliance risk arising from our failure to adequately comply with regulations due to the expanded scope and complexity of information disclosure <sup>※1</sup>	Transition	Major	Short/medium term
	Lack of personnel and resources due to advancement, expanded scope, and complexity of climate-related responses	Transition	Medium	Short/medium term
	Business deterioration due to increased climate change response costs, and decreased business continuity of business partners and vendors affected by increased and more severe natural disasters	Transition / Physical	Medium	Medium/long term
	Damage to servers and lines due to increased natural disasters, etc., decreased employee safety, and increased outflow of human resources	Physical	Major	Medium/long term
Credit risk	Drawdown of financial markets due to increased credit risk for companies and markets as a result of climate change issues	Transition / Physical	Medium	Medium/long term
	Decreased viability due to lowering of our credit as a result of climate change issues (loss of existing clients and missed opportunities to acquire potential clients)	Transition	Major	Short/medium term

※1 Includes greenwashing (the act of creating a misleading impression, such as pretending to be environmentally conscious when it is far from the reality).

※2 Major: Impact assumed on our viability, Medium: Impact assumed on our finances.

※3 Short to medium term: Assumed to be 10 years from now, Medium to long term: Assumed to be 10 to 30 years from now.

## B. Climate change opportunities

We view climate change opportunities as opportunities to fulfill our fiduciary duty, and that taking advantage of these to implement strategies can help to expand our assets under management and improve business continuity and viability.

We have identified six items as “opportunities” to convert climate change risks to business growth, which are engagement with investee companies, stakeholder engagement, exercise of voting rights, investment decisions and investment strategies, product lineups, and information dissemination. For example, our engagement extends beyond investee companies to a wide range of stakeholders, including governmental agencies, industry groups, NGOs, and universities. As for exercise of voting rights, there is a measure to strengthen guidelines related to climate change issues in the Guideline on the Exercise of Voting Rights. In this way, we encourage companies to change their behavior toward decarbonization in order to maintain and increase assets under management while reducing climate change risks.

In investment decisions and investment strategies as well as product lineups, we reflect climate change factors based on the style of individual funds, provide new investment opportunities for the climate change

field that can meet the needs of existing and potential clients to invest in the climate change field, and maintain and increase the balance under management while minimizing loss of opportunities. We also believe that information dissemination can help raise awareness of climate change issues for existing and potential clients, and that improving our evaluations will help expand our client base.

There are two items we view as “opportunities” from a broad perspective that are essential for acquiring such growth opportunities. One is our climate-related organizational structure, and the other is engagement with the value chain. For our climate-related organizational structure, we intend to establish a system able to respond appropriately to standards and regulations on climate-related information disclosure such as those of the TCFD and SFDR (Sustainable Finance Disclosure Regulation), and advance human capital management by recruiting and developing the necessary talent, in order to improve our ability to execute business.

For engagement with the value chain, we expect that maintaining and improving the quality of climate-related data through collaboration with data vendors and index vendors that handle ESG data will enable the steady execution and advancement of our investment strategies, leading to the maximization of investment returns. Figure 10 gives an overview of these opportunities.

**Figure 10: Climate change opportunities for us**

Opportunity	Approach to Opportunities	Examples of Opportunities
<b>Engagement with investee companies</b>	By promoting decarbonization through engagement with investee companies, we reduce their climate change risks. Furthermore, by encouraging initiatives to seize climate change opportunities, we contribute to increased corporate value and investment opportunities.	<ul style="list-style-type: none"> <li>• Focus on companies with high greenhouse gas emissions</li> <li>• Horizontal deployment of best practices</li> <li>• Increasing frequency of adoption as an agenda item</li> </ul>
<b>Stakeholder Engagement</b>	Engaging with government agencies, industry associations, NGOs, academia, etc., to encourage the introduction of systems and mechanisms that facilitate corporate decarbonization and business opportunities, thereby increasing the value of investee companies and creating investment opportunities.	<ul style="list-style-type: none"> <li>• Indirectly driving behavioral change in (portfolio) companies</li> <li>• Enhancing our value through obtaining and utilizing the latest information</li> </ul>
<b>Proxy Voting</b>	Strengthen climate change criteria in voting guidelines to reduce climate risks in investee companies and maintain/increase asset values	<ul style="list-style-type: none"> <li>• Reflecting global trends and insights</li> <li>• Revised voting guidelines to enable opposition to director nomination proposals for high-emission companies with inadequate climate-related disclosure</li> </ul>
<b>Investment Decisions and Investment Strategy</b>	Reduce climate change risks for investee companies and contribute to the preservation and growth of assets under management by incorporating climate change factors into individual fund styles and considering climate change factors in investment decisions for individual securities	<ul style="list-style-type: none"> <li>• ESG Monitoring (Fund Governance)</li> <li>• Expansion of target assets</li> </ul>
<b>Product Lineup</b>	Develop and offer investment strategies and products addressing climate change issues to meet the investment needs of climate-conscious clients, thereby increasing assets under management	<ul style="list-style-type: none"> <li>• Development of indices contributing to climate change solutions</li> <li>• Development of investment products contributing to climate change solutions</li> </ul>
<b>Information Dissemination</b>	Enhance customer trust and strengthen market competitiveness by raising customer awareness of climate change issues and engaging potential customers	<ul style="list-style-type: none"> <li>• External communications and customer outreach</li> </ul>
The following are considered to be essential items for acquiring a growth base and opportunities; as a broad definition, “opportunities”		
<b>Our climate-related organizational structure</b>	Maintain and enhance our company's sustainability through appropriate responses to climate-related regulations, development of climate change response personnel, and resource advancement (strengthening retention, increasing recruitment, maintaining creditworthiness)	<ul style="list-style-type: none"> <li>• Compliance with overseas frameworks such as SFDR, UK SSC, and UK TCFD</li> <li>• Investment in employees (human capital)</li> </ul>
<b>Engagement with the value chain</b>	Through engagement with the value chain, enhance the sustainability of companies within it and strengthen the continuity of our own business. Simultaneously, by maintaining and improving data quality, we advance our investment decisions and strategies, leading to maximized investment returns	<ul style="list-style-type: none"> <li>• Conducting dialogue to maintain and improve the sustainability and quality of data vendors and index vendors, and to enhance their response to climate change issues</li> </ul>

#### ■ (4) Climate change-related strategies

Based on the climate change risks and opportunities for us, we have developed specific strategies shown in the table below.

These are categorized into six areas, “Implementation and enhancement of engagements with investee companies,” “Implementation and enhancement of stakeholder engagements,” “Enhancement of voting guidelines and linkage with engagement,” “Reflecting climate change factors according to individual fund styles, and taking climate change factors into account in investment decisions on individual securities,” “Supporting actions to address climate change issues by providing investment opportunities,” and “Enhancing customer awareness of climate change issues, engaging potential clients.” Under “Implementation and enhancement of engagements with investee companies,” we encourage investee companies to change their behavior by sharing best practices in top-down approach engagement, especially for companies with high GHG emissions (hereinafter, high-emission companies), and by actively utilizing agenda items in bottom-up engagement approaches. Under “Implementation and enhancement of stakeholder engagements,” targets include government agencies, industry groups, NGOs, and academic institutions, and our aim is to be a bridge with investee companies while indirectly encouraging them to change their behavior. Under “Enhancement of voting guidelines and linkage with engagement,” in order to enhance connectivity between exercise of voting rights and engagement, especially if standards set in the Guideline on the Exercise of Voting Rights are not being met and there is no legitimate reason, we would principally vote against proposals for electing directors for high-emission companies.

Moreover, we will not simply withdraw from investment (divestment) to exclude high-emission companies from the investment universe. Rather, through engagement and the proper exercise of voting rights, our aim is to encourage investee companies to promote realistic solutions for addressing climate change including transition, and to achieve sustainable growth and sustainability for companies and society as a whole.

Under “Reflecting climate change factors according to individual fund styles and taking climate change factors into account in investment decisions on individual securities,” we consider climate change factors in investment decision-making, and aim to maximize medium-to-long-term returns for clients and mitigate downside risks. Recently, we have enhanced fund governance by ESG monitoring including climate change issues and have promoted expansion of target assets with climate change factors considered.

Under “Supporting actions to address climate change issues by providing investment opportunities,” we provide clients with investment products that address climate change issues, and by having the clients use these products, we aim to contribute to reduction of GHG emissions.

Under “Enhancing customer awareness of climate change issues, engaging potential clients,” we aim to have future or potential clients deepen their knowledge of climate change issues through information dissemination, and help them see that they can help resolve such issues through investment. There are three items we view as “strategies” from a broad perspective that are the foundation for growth and essential for acquiring such growth opportunities.

The first is “appropriate response to climate change-related regulations.” In recent years, we have disclosed information on climate-related risks in accordance with SFDR disclosure regulations, and prior to that, we were already performing TCFD information disclosure. We believe that it is very important for us to be recognized as an asset management company and to be sustainable, and therefore, we are working to refine and enhance the content of these disclosures. The second is “enhancement of personnel development and resources for our addressing climate related response.” Improving personnel development and resources for climate-related response is essential for the continued existence of our company, and we have been providing various types of in-house education and workshops. The third is “active engagement across the value chain.” We aim to strengthen lasting collaboration with data vendors and index vendors and advance our response to climate change issues through the collaboration.

Figure 11: Our strategy and implementation based on risks and opportunities related to climate change

Strategy	Target	Strategy Implementation
Implementation and Enhancement of Engagement with Investee Companies	Investee Companies	<ul style="list-style-type: none"> <li>•Promoting top-down approach engagement with high-emission companies</li> <li>•Horizontal deployment of best practices to portfolio companies</li> <li>•Proactive utilization as an agenda item in bottom-up approach engagement</li> </ul>
Implementation and Enhancement of Stakeholder Engagement	Government Agencies Industry Associations NGOs Academia, etc.	<ul style="list-style-type: none"> <li>•Conducted dialogues with the Ministry of Economy, Trade and Industry (METI), Financial Services Agency, Ministry of the Environment, etc., on themes such as climate-related information disclosure</li> <li>•Exchanged views with the Central Research Institute of Electric Power Industry (CRIEPI) on the Basic Energy Plan</li> <li>•Discussed phased reduction of greenhouse gas emissions by high-emission companies in Asia at the AIGCC's AUEP</li> <li>•Held climate change dialogues with overseas policy authorities (Central Bank of Brazil, Indonesian government) and overseas exchanges (Indonesia, Thailand, Malaysia)</li> <li>•Exchanged views with PRI on approaches to sovereign engagement (e.g., Australia)</li> <li>•Submitted public comments on the SSBJ disclosure proposal</li> <li>•Appointed as an Asian member of the Taskforce on Inequality and Social-related Financial Disclosures (TISFD). Announced becoming an Early Adopter of the Taskforce on Nature-related Financial Disclosures (TNFD). Disclosed TNFD report</li> </ul>
Enhancement of voting guidelines and linkage with engagement	Investee Companies	<ul style="list-style-type: none"> <li>•Conducted assessments on climate change responses at high-emission companies. In accordance with voting guidelines, opposed director election proposals for companies with inadequate responses, considering engagement outcomes. Provided feedback on voting results to target companies (see page 22 for specific examples)</li> </ul>
Reflecting climate change factors according to individual fund styles, and taking climate change factors into account in investment decisions on individual securities	Our company (clients)	<ul style="list-style-type: none"> <li>•Report quarterly ESG monitoring results for each fund at internal meetings</li> </ul>
Supporting actions to address climate change issues by providing investment opportunities	Clients	<ul style="list-style-type: none"> <li>•Establishment of the S&amp;P/JPX Carbon Efficient Index-linked Strategy (Japanese Equities)</li> <li>•Establishment of the Bloomberg MSCI Global Comprehensive Sustainability A+ Strategy (Global Bonds)</li> </ul>
Enhancing customer awareness of climate change issues, engaging potential clients	Customers (including potential customers)	<ul style="list-style-type: none"> <li>•Web column distribution</li> <li>•Promotion of financial outreach classes</li> <li>•Former President Hishida held discussions in New York with U.S. asset management firms regarding Japan's efforts to support positive economic cycles through financial measures</li> <li>•Continued sponsorship of the PRI Annual Meeting to demonstrate commitment to the Principles for Responsible Investment and support for sustainable finance</li> </ul>
The following are considered to be essential items for acquiring a growth base and opportunities; as a broad definition, "strategies"		
Appropriate response to climate change-related regulations	Our Company (Customers)	<ul style="list-style-type: none"> <li>•Enhance TCFD reporting to align with overseas regulations and disclose internationally</li> <li>•Approval as a signatory to the UK Stewardship Code</li> <li>•Implement information disclosure aligned with the ICAP (Investor Climate Action Plans) framework</li> </ul>
Enhancement of personnel development and resources for our addressing climate related response	Our Company (Clients)	<ul style="list-style-type: none"> <li>•Employees completing PRI Academy and AIGCC online training courses on forest conservation and natural capital</li> <li>•Implementation of internal e-learning programs</li> <li>•Holding internal study sessions on climate change and decarbonization direction, and on the approach to ESG investing</li> <li>•Holding internal study sessions on natural capital in collaboration with WWF Japan</li> </ul>
Active engagement across the value chain	Data vendors Index vendors etc.	<ul style="list-style-type: none"> <li>•Engaged in dialogue with ISS, Bloomberg, and Sustainalytics regarding data related to "assessing investee companies' alignment with net-zero scenarios"</li> <li>•Engaged in dialogue with ISS to clarify climate-related voting criteria and recommendations, and to enhance climate change databases</li> <li>•Engaged in dialogue with MSCI regarding changes to the ESG score calculation process and submitted public comments</li> <li>•Submitted opinions and proposals within the GFANZ Index Investing Workstream</li> </ul>

## 3. Risk management

### ■ (1) Our climate change risk management process

#### Our climate change risk management process

The board of directors of Sumitomo Mitsui Trust Group, our parent company, formulates “the Action Guidelines for Mitigating Climate Change” as a fundamental policy of the group relating to climate change. We also formulated the sustainability risk management policy, including climate change risks in the “risk management policy” stipulated by the board of directors’ resolution. We articulated the basic policy of sustainability risk management, the definition of each sustainability risk, the meaning of sustainability-related risk management, the role, responsibility, and organizational structure of the board of directors/ executive committee, and the three lines defense system. In addition, regarding sustainability-related risks associated with assets under management, we stipulate the proper management of such risks from the perspective of fiduciary duty and other considerations, as outlined in the investment management business rules and related rules that are separately defined. In this way, we have established a comprehensive risk management framework, including sustainability-related risks, for both our corporate risks and risks associated with assets under management.

#### Definition of climate change risks

We define climate change risks as risks which give adverse effects on Sumitomo Mitsui Trust Group, clients, markets, financial infrastructure, and society by realizing physical and transition risks, and further define sustainability-related risks, including climate-related risks as a possibility in which each factor of medium- and long-term issues in environment, society, economy and governance becomes a risk driver and gives our company adverse effects by influencing existing risk categories cross-sectionally or in which the adverse impact on our company influences existing risk categories cross-sectionally, which affects our company’s stakeholders negatively. Also, we define Sustainability-related risks in assets under management, as the possibilities that have a cross-sectional impact on asset management risks and may negatively affect the assets under management or have a cross-sectional impact on asset management risks by affecting the assets under management and may negatively impact our shareholders, with each medium- to long-term factors in issues related to environmental, social, and governance becoming a risk driver. Specifically, our approach to climate change is set forth in our ESG investment policy as follows: “Climate change: Global warming, caused by the accumulation of GHG such as carbon dioxide, and the resulting extreme weather are not a threat in the future, but rather a reality in front of us. We consider climate change as the most important issue affecting society and economic activities as a whole and reflect measures for mitigating and adapting to it in ESG investment decisions by considering matters such as international frameworks.”

#### Classification of climate change risks

We regularly review risks which our group companies face and identify the risks that should be monitored based on the scale and trait of these risks under the framework of enterprise risk management with our parent company, Sumitomo Mitsui Trust Group. Among critical risks, we identify particularly significant risks as “significant risks” and classify them by risk driver, risk category, etc., and by doing so, we manage significant risk inventory. Regarding significant risk management, we assess significant risk inventory one by one under monitoring in terms of importance for the corporate management and decide whether they are applicable for top risks (risks which management needs to take care of because they will have significant influence within one year) or emerging risks (risks which will not give substantial influence within one year but will give considerable influence over one year or in medium and long term), etc. Besides, “climate change risks” have been reclassified since 2021 from “emerging risks” to “top risks.”

#### Organizational process for identifying and managing climate change risks

To manage climate change risks, our board of directors has developed a risk management policies and risk management plans for sustainability-related risks, including climate change risks (hereinafter, sustainability-related risks), based on risk management rules. The executive committee develops and reviews the

organization to exhibit checking functions of sustainability-related risks, formulates appetite framework relating to sustainability-related risks, and creates GHG emissions reduction targets. Executive officers fully recognize belittling the risk management relating to sustainability-related risks, will significantly affect our company to achieve the strategic targets and, therefore, need to consider sustainability-related risks at risk management.

Our sustainability-related risk management is conducted by the three lines defense system.

The first line of defense is defined as departments that are responsible for each business operation directly in our company. These departments understand sustainability-related risks that our stakeholders, such as clients and employees, etc., face and think together about how to cope with such sustainability-related risks in cooperation with stakeholders (engagement) and endeavor product development and expansion of client base by identifying sustainability-related opportunities. Also, the first line of defense departments plays a significant role in risk identification, risk assessment, and control based on our risk appetite relating to climate change and risk-taking policy. They correctly report the ongoing operation of risk management and risk itself to departments of the second line of defense.

Our second line of defense that has formulated management policy for sustainability-related risks, develops risk management plans, which are resolved at the executive committee and the board of directors. Maintaining an independent position from the first line of defense, the second line of defense monitors and checks the first line of defense's identification, assessment, and controlling of sustainability-related risks and instructs and supports the first line of defense's risk-controlling activity.

Our third line of defense conducts internal audits to assess the efficacy of climate change risk management, maintaining an independent position of risk management functions by the first and second line of defense.

Moreover, for sustainability-related risks in our asset management, the investment risk management performed at our Investment Departments acts as the first line of defense, while the investment risk management performed at our middle offices acts as the second line of defense. Additionally, discussion and monitoring are conducted at the Sustainability Committee for overall stewardship activities. The Sustainability Committee conducts quarterly monitoring of considering ESG factors, including climate change risks, for investment. This report is also discussed by the Sustainability Committee, and the disclosure contents of climate-related financial information is effectively governed by it.

The Sustainability Committee includes not only the investment management department, such as the Stewardship Development Department, but also the Investment Risk Management Department, an independent and specialized department for monitoring. Discussion at the Sustainability Committee is reported as necessary to the executive committee, composed of executive officers, with the president at the top as needed. By doing so, we develop and operate a corporatwide, multitiered, and multifaceted risk management system. Utilizing these organizations, the role, and the process, we enhance the effectiveness of climate change risk management.

### **Contribution to risk management through engagement activities, exercising voting rights and investment decision-making in portfolio companies, taking into account climate change factors**

#### **(Identification of climate change risks as ESG materiality)**

We define climate change as an ESG materiality on our ESG investment policy. ESG materiality refers to ESG issues that we view as important for improving the value of the investee company and promoting sustainable growth. We consider this ESG materiality when performing ESG investment including ESG evaluation of investee companies, engagement activities, and decisions for exercise of voting rights. The Sustainability Committee annually reviews ESG materiality based on information collected through ESG regulations by financial authorities, participations in various initiatives, dialogues with multiple stakeholders, etc., and if the committee decides to amend or abolish them, the amendment and abolishment are to be resolved at the executive committee.

In this way, ESG materiality which we stipulate are considered through our engagement, exercise of voting right and investment activities, so that identification and response to climate change risks become possible.

**(Engagement)**

We view engagement activities as opportunities to seek best practices from companies, and we communicate our views so as to contribute to the enhancement of corporate value over the medium to long term. Gaining a proper understanding of a company's state of management and business situation is crucial to engagement. The ESG experts in our Stewardship Development Department work together with industrial corporate analysis professionals in the Research Investment Department to conduct in-depth engagement from both an ESG and business perspective, utilizing our proprietary MBIS® non-financial information assessments.

We use our networks in Tokyo, New York and London to have our own engagement with investee companies. We also conduct various activities and engage with stakeholders outside our investee companies through a wide variety of initiatives.

While engagement is something we can do on our own, it is also done in collaboration with other investors who share the same beliefs. Engagement also includes activities that expand the investor base. Certain social issues such as climate change are global. Collaborative engagement is an approach to such issues across barriers in collaboration with other investors who share the same beliefs. In addition, our top management proactively communicate our opinions at international conferences and other events.

Column 1 Case studies of engagement with individual companies

**Case 1 Company A (Japan, Steel)**

**Our Opinion**

Company A's 2030 reduction targets do not include subsidiaries overseas or equity-method investees, although its business strategy includes establishing a global production system to maintain production volumes. The company has also made investments overseas to ensure the stable procurement of raw materials. However, its reduction targets do not include the impact of these factors, meaning the company's risk awareness may be insufficient. We therefore conveyed the opinion to the company that investors need to understand investee companies on a consolidated group basis, and that, given trends in international regulations, it would be necessary to set targets with boundaries that are in line with the GHG Protocol.

**Our Evaluation / Future Policy**

While we commend Company A for disclosing global consolidated emissions and reduction targets (including equity-method affiliates), merely presenting the targets submitted by equity-method affiliates as-is does not demonstrate effective governance, even when accounting for regional differences. It would be better to set up targets and frameworks that are consistent with the group business strategy, review the company's strategies, and enhance the effectiveness of the reduction plan, for example, by disclosing the investment amounts required to achieve already announced reduction targets. In addition, as the company has not yet introduced executive remuneration systems linked to GHG reduction, we intend to encourage the company to introduce such a system because providing appropriate incentives can be effective in promoting medium- to long-term efforts.

**Company Response and Actions**

In managing global operations, Company A determines how to define the scope of formulating GHG reduction targets (subsidiaries and affiliated companies to be covered, Scope 3, etc.) based on international trends, local regulations, and the movement of discussions regarding information disclosure systems and standards. However, the company thought that it was not practical to set uniform targets that include equity-method affiliates. As a result of engagement, emissions for overseas equity-method affiliates were disclosed, specifically showing that even with targets set on a domestic consolidated subsidiary basis, the majority of emissions were covered. In addition, the company disclosed the emission reduction targets for each equity-method affiliate overseas in its presentation materials.

## Case 2 Company B (Thailand, Petrochemicals)

### Our Opinion

Company B is an integrated energy company with a broad range of fossil resource-based businesses, and each of its group companies is required to address climate change as a listed company. We conveyed to the company our opinion that, given that it operates in Asia, which is a region with high dependence on fossil fuels, it should disclose management policies for reducing GHG in line with Thailand's NDCs, effective transition plans, and group-wide policies and plans regarding financial and environmental impact.

### Our Evaluation / Future Policy

Regarding information disclosure, we commend Company B and its group companies have nearly attained the expected levels, as they have established capital policies and governance structures for climate change. Regarding target setting, however, given its extensive petrochemical operations, more robust measures are called for setting Scope 3 and other targets. Going forward, we plan to continue dialogue on exiting coal operations, establishing methane leakage prevention measures, achieving CCS development, and operating EV business platforms in the retail business.

### Company Response and Actions

Initially, we engaged in dialogue with the group's personnel and officers in charge of sustainability, requesting that they establish climate change management policies and governance systems. As a result, the company disclosed its climate change management policies and announced a climate change governance structure headed by a group vice president. Furthermore, while Company B had initially been hesitant about climate change initiatives, dialogues with management at group companies on the disclosure of climate change management strategies and creation of effective transition plans resulted in greater awareness by Company B amid increasing awareness of this issue both in Thailand and abroad, and ultimately the company came to disclose information such as a group-wide transition plan that included capital policy.

## Column 2 Case studies of collaborative engagement

### Climate Action 100+ Activities

Climate Action100+ is an initiative that promotes collaborative engagement on approximately 170 global companies with high GHG emissions. We were appointed as Co-Chair of the Asia Advisory Group in the Asia-Pacific region and is involved in the operation of this initiative. For Asian companies in Japan, Indonesia, South Korea, Thailand, etc., we promote collaborative engagement as a lead manager.

### AUEP Activities in AIGCC (Asian Investor Group on Climate Change)

AUEP stands for Asian Utilities Engagement Program and is one of the collaborative engagement programs operated by AIGCC. To complement Climate Action 100+ activities, AUEP aims to promote decarbonization among major Asian electric power sector companies. We are currently conducting ongoing collaborative engagement with major electric power companies in the Asian region. We currently serve as lead manager for two Japanese companies and promotes dialogue with other institutional investors on specific strategies and action plans to accelerate decarbonization.

## Column 3 Case studies of top management engagement and continued sponsor participation in the PRI Annual Conference

We practice engagement activities with a broad range of stakeholders beyond investee companies. By actively engaging with a wide range of institutions including government agencies, public agencies, and international initiatives, we aim to improve the external environment surrounding companies and enhance the likelihood of achieving sustainable growth for investee companies. Based on this approach, we participate in related international conferences and bring cutting-edge knowledge back to Japan to enhance effectiveness.

Furthermore, our top management, including the Chairperson and President, participates in these activities themselves, proactively communicating our opinions externally, thereby exercising global influence as one of Asia's largest asset management companies.

An example of this is that, when then Prime Minister Kishida visited New York to exchange opinions with Japanese and US asset management companies on initiatives by asset management nations to support a virtuous economic cycle from the financial side, our former president Hishida also participated in the discussion as a member. Furthermore, following the 2023 Annual Conference in Tokyo, we participated as a sponsor in the PRI Annual Conference held in Toronto, Canada in 2024; we continued our sponsorship by exhibiting at PRI in Person 2025, held in São Paulo, Brazil, in November 2025. Not only did our staff participate in panel discussions, but Chairperson Semaya also visited the event to engage in dialogue with local companies and government agencies. Established under the leadership of UN agencies, the PRI advocated for incorporating ESG into institutional investors' decision-making processes, and we signed at its inception in 2006. Sponsorship of the PRI Annual Conference demonstrates our commitment to the Principles for Responsible Investment. Through sponsorship of the Annual Conference, we are working to contribute to responsible investment in Japan and around the world and to help solve social issues such as climate change while maintaining and improving medium- to long-term investment returns for clients.

### **(Exercise of voting rights)**

As to our engagement, we view the exercise of voting rights as an opportunity to call for a minimum standard of governance and consider it to be one method of governance-related engagement. We emphasize three key points when exercising voting rights: (1) high-quality governance that respects shareholders' equity; (2) efficient utilization of shareholders' capital for sustainable growth; and (3) appropriate action in the event an incident occurs that damages corporate value. We disclose our Principles for Exercising Voting Rights based on these criteria. We also actively pursue engagement with companies regarding the exercise of voting rights. Regarding our response to climate change, we are opposed in principle to companies with relatively high levels of GHG emissions that fall into any of the following categories and do not provide a rational explanation for their actions:

- ① Cases where there has been inadequate disclosure in accordance with the Task Force on Climate-related Financial Disclosures (TCFD) or equivalent framework;
- ② When there has been a failure to set medium- and long-term goals in line with the Paris Agreement or to disclose specific measures to achieve them;
- ③ When there has been no evidence of progress in reducing GHG emissions.

With regard to equities, we evaluated our investee companies' initiatives through engagement and other methods from the standpoints of information disclosure in line with the TCFD, medium- to long-term goal setting in line with the Paris Agreement, and relevant specific measures, according to the criteria set in the Principles for Exercising Voting Rights, at general meetings of shareholders held in 2024. Out of about 100 global companies that have a large impact on reducing total GHG emissions on a global level, we opposed proposals for the election of directors at a total of seven companies.

### **(Incorporating ESG factors into investment decision-making)**

As a signatory investor to PRI, we believe that, based on the values presented in the United Nations Global Compact and SDGs, conducting investment activities as ESG investments, which focus on environmental, social, and governance factors over the medium to long term, and fulfilling our role as an asset management company in the investment chain will contribute to value improvement and sustainable growth in investee companies, maximizing the investment return of clients (beneficiaries) over a medium to long term, reducing downside risks, and achieving a sustainable society.

Including climate change risks, we conduct non-financial evaluations using our in-house ESG score calculation based on "ESG materiality" and MBIS<sup>®</sup>, which is a proprietary system, and reflect these into our investment decision-making process according to portfolio characteristics in order to maximize investment return.

In principle, we assign an in-house ESG score to every asset in our investment universe and an MBIS<sup>®</sup> score to stocks covered by analysts. Regarding in-house ESG scores, regular reports are made to the Sustainability Committee on the status of score assignment, examples of score assignment based on ESG materiality, and our evaluation of the validity of the scores. Furthermore, we have established a system that enables the calculation of in-house ESG scores in terms of our portfolio; in particular, we not only chronologically monitor the in-house ESG score of the portfolio for our main products and funds we certify as ESG products in comparison with reference indices and similar strategies but also review the integration of ESG-related information. Additionally, to more broadly monitor ESG consideration in investment decisions, we have also designated the indices (benchmarks) tracked by passive products, such as the S&P/JPX Carbon Efficient Index-linked strategy, as ESG indices, comprehensively considering index methodology and index-based in-house ESG scores, and conduct regular monitoring.

### **Climate change risks of investee companies and managed portfolio**

As to climate change risks of investee companies, we capture and analyze not only carbon-related indices of the corporation itself but also recognition and contributed emissions, etc., of the life cycle and entire supply chain of investee companies' products and services through the utilization of our in-house corporate research and ESG scores and engagement. By doing so, we utilize them for our investment decision-making. Regarding the climate change risks of our portfolio, we identify and analyze them through the analytical functions of ISS<sup>※4</sup>, due diligence on foreign investment trust companies included in our fund of funds, etc. These findings are monitored by the Sustainability Committee and are reported to executive committees or the Board of Directors as necessary.

In this way, we have established processes to identify, evaluate, and manage climate change risks, and monitor them through our integrated risk management process.

※4 Institutional Shareholder Services

## ■ (2) Climate change risk assessment of our portfolio

Toward achieving net-zero GHG emissions from our portfolio by 2050, we set an interim target for 2030: to halve emissions compared to 2019 levels for our self-managed assets, which equate to approximately 43 trillion yen, excluding sovereign bonds, out of a total of approximately 85 trillion yen in assets under management as of the end of June 2021. We evaluate risks for portfolios related to this mid-term target by asset class, and then integrate asset classes to evaluate held assets. Our assessment method involves using (1) baseline analysis based on the disclosed information of companies that make up our portfolio, along with their performance figures, (2) transition pathway analysis based on future climate change-related scenarios, and (3) portfolio resilience analysis related to climate change.

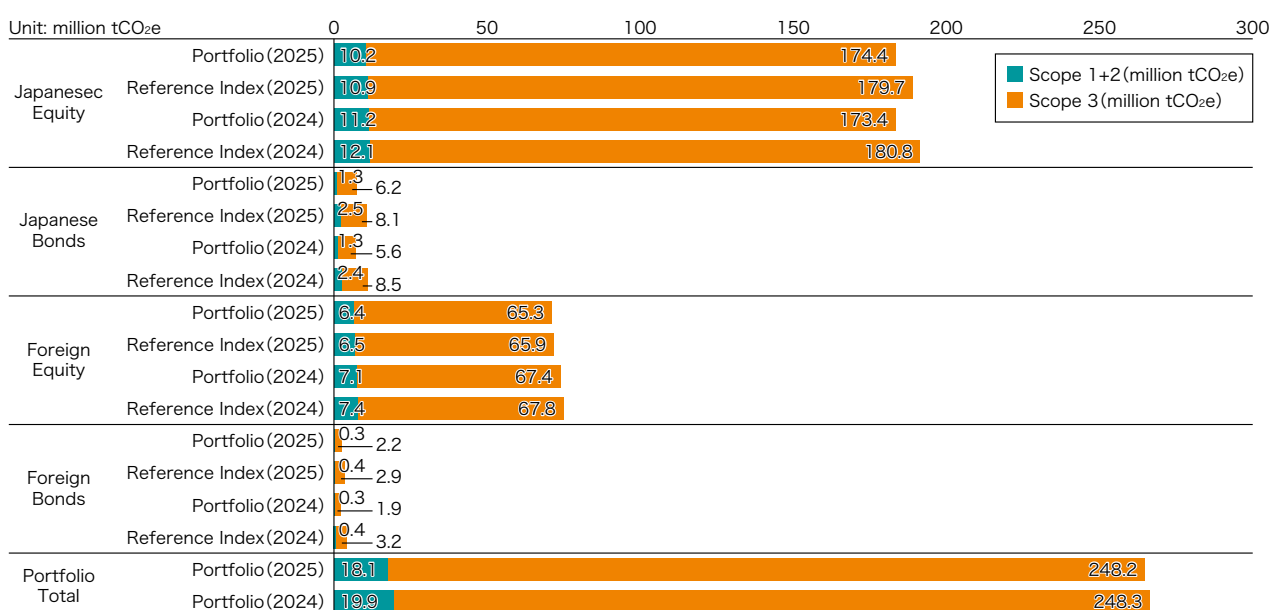
The following is a summarized disclosure of analysis results related to Japanese and foreign equities as well as domestic and foreign bonds managed by us. The analysis was conducted using ISS data and analysis methods (based on the portfolios as of March 31, 2025 and March 31, 2024, analyzed using ISS data as of June 2025<sup>※5</sup>).

The analysis results on financed emissions from sovereign bonds in our portfolio are shown on pages 30 to 38. It is disclosed separately because the calculation method differs from that used for the financed emissions from equity and bond portfolios.

### A. Baseline analysis (GHG emissions, etc.)

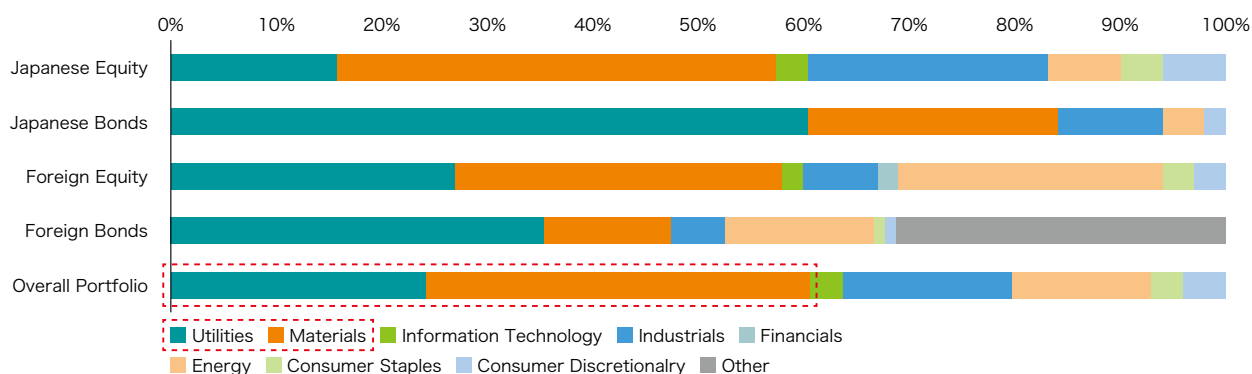
This is an attempt to ascertain the status of GHG emissions exposure and other conditions at a fixed point in time, based on investee company disclosure data and other information. For example, when looking at the GHG emissions by asset class (targets are Japanese equity, Japanese bonds, foreign equity, and foreign bonds), we see that the total GHG emissions<sup>※6</sup> based on Scope 1 and 2 of each asset are below the reference index. In addition, compared to the previous year<sup>※7</sup>, emissions from Japanese equity and foreign equity decreased, resulting in a reduction of emissions for the overall portfolio to 18.1 million tCO<sub>2</sub>e (19.9 million tCO<sub>2</sub>e the previous year). On the other hand, GHG emissions were below the reference index for all asset classes for Scope 3<sup>※8</sup>. Compared to the previous year, although emissions from Japanese equity and foreign bonds increased slightly, emissions from foreign equity decreased, resulting in emissions for the overall portfolio that remained nearly the same at 248.2 million tCO<sub>2</sub>e (248.3 million tCO<sub>2</sub>e the previous year) (Figure 12). Emissions by industry showed the same tendencies as the previous year where the utilities sector and materials sector made up the largest amount for all asset classes (Figure 13).

Figure 12: GHG emissions by asset class<sup>※9※11※12</sup>



(Source: Created by SMTAM based on ISS data)

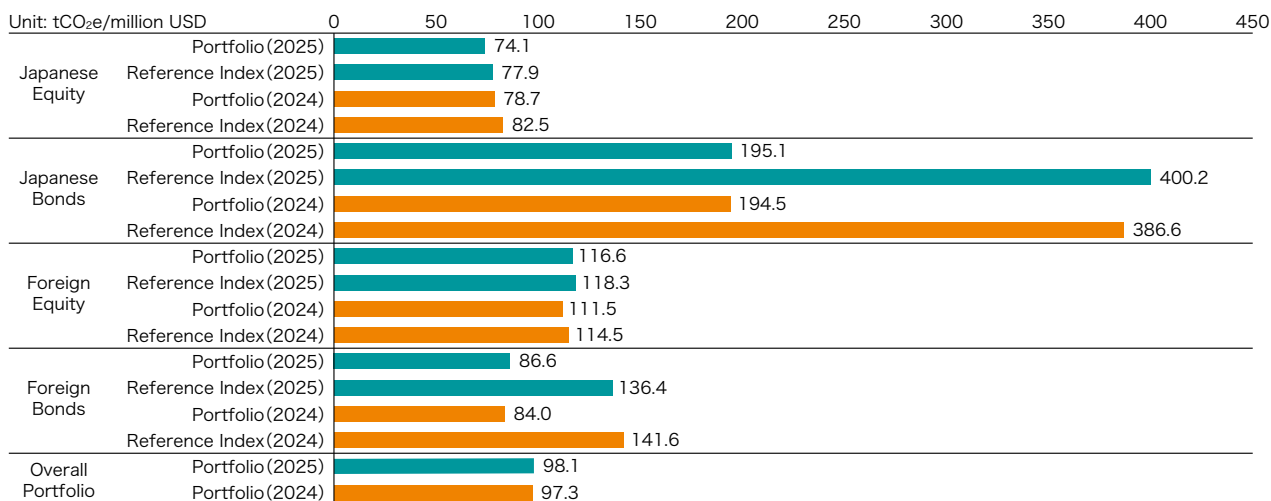
**Figure 13: Industry breakdown of GHG emissions**<sup>※10※12</sup>



(Source: Created by SMTAM based on ISS data)

Next, we will explain the trend in weighted average carbon intensity (WACI, emissions per unit of sales). As in the previous year, the WACI remains below the reference index for all asset classes. In addition, compared to the previous year<sup>※7</sup>, the WACI for Japanese equity decreased, but the WACI for the remaining three asset classes increased. As a result, the overall portfolio increased slightly to 98.1 tCO<sub>2</sub>e / million USD (97.3 tCO<sub>2</sub>e / million USD the previous year). The main reason for this is the increase in WACI for foreign equity, which has a high composition ratio. Among our investee companies overseas, GHG emissions decreased, but this seems to be primarily affected by the decline in sales due to falling electricity sales prices, particularly in electric power companies, where the rate of sales decline exceeded the rate of emissions reduced. The reason why the WACI value of domestic bonds is higher than other asset classes is the high proportion of the utilities sector, including power companies, which have higher emissions per sales (Figure 14).

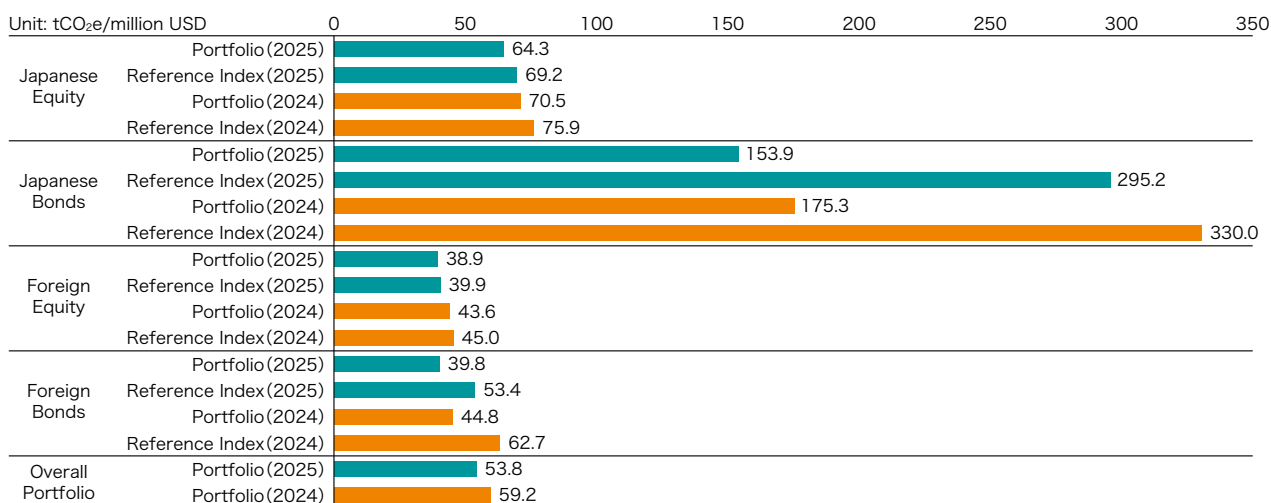
**Figure 14: Weighted average carbon intensity (WACI) by asset class (emissions per unit of sales)**<sup>※10※11※12</sup>



(Source: Created by SMTAM based on ISS data)

Regarding carbon footprint, all asset classes are below the reference index, as in the previous year. In addition, compared to the previous year<sup>※7</sup>, all asset classes decreased, resulting in a decrease in the carbon footprint of the overall portfolio to 53.8 tCO<sub>2</sub>e per million USD (59.2 tCO<sub>2</sub>e per million USD the previous year) (Figure 15). Carbon footprint is calculated by dividing carbon emissions by the market value of the portfolio. Since the market value of our portfolio has not changed significantly from the previous year, we believe that this improvement in our carbon footprint is due to progress in decarbonization among investee companies in general.

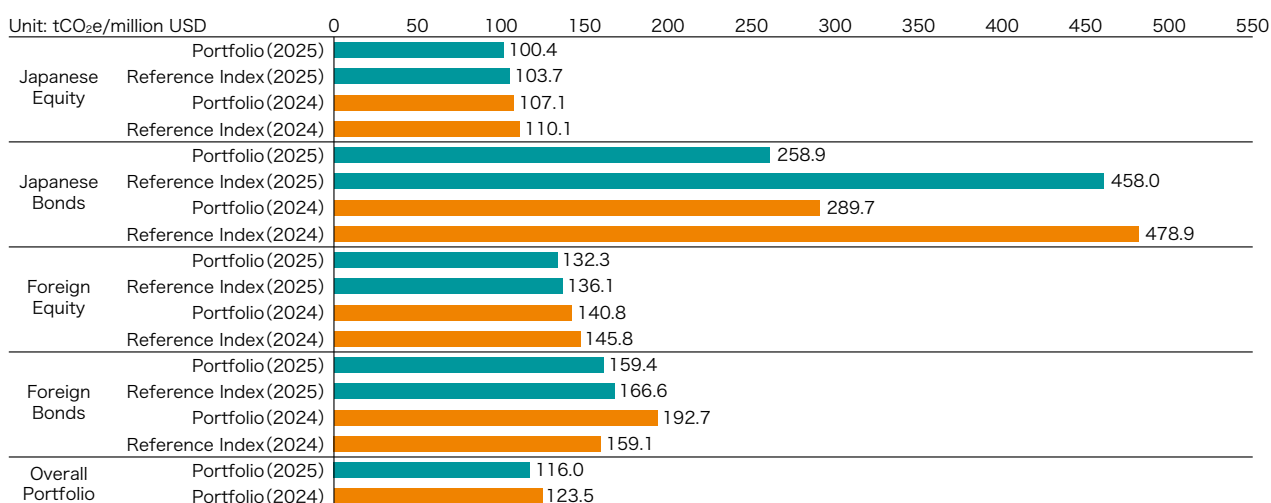
**Figure 15: Carbon footprint by asset class**<sup>\*10\*\*11\*\*12</sup>



(Source: Created by SMTAM based on ISS data)

With respect to carbon intensity, all asset classes are below the reference index. In addition, compared to the previous year<sup>\*7</sup>, all asset classes decreased, resulting in a decrease in the overall portfolio to 116.0 tCO<sub>2</sub>e per million USD (123.5 tCO<sub>2</sub>e per million USD the previous year) (Figure 16).

**Figure 16: Carbon intensity by asset class**<sup>\*10\*\*11\*\*12</sup>



(Source: Created by SMTAM based on ISS data)

## B. Transition pathway analysis

### (a) The year the net zero scenario carbon budget is surpassed per operational strategy

Here, we analyzed the year when cumulative estimated GHG emissions would exceed the carbon budget of the Net Zero 2050 (1.5°C) scenario, which is provided by the Network for Greening Financial System (NGFS), under two patterns: a “target pathway” that presumes investee companies in our portfolio will have reduced GHG emissions according to plan, and a “business-as-usual pathway” that presumes the current pace of emissions continues.

NGFS is an international platform established in December 2017 by central banks and financial supervisors to manage climate change risks. The system has created multiple climate change scenarios for financial institutions in different nations to use as reference when conducting climate change risk analysis of their own portfolios. The latest NGFS scenarios (Version 5) provide four transition categories and seven scenarios, ranging from “Too little, too late” to “Orderly.” The Net Zero 2050 (1.5°C) scenario is one of the orderly transition scenarios. The underlying concept is to achieve net-zero global GHG emissions by 2050

in order to limit the global average temperature rise to 1.5 degrees through strict emission reduction policies and innovation.

**Figure 17: The year the NGFS Net Zero 2050 (1.5°C) scenario carbon budget is surpassed per operational strategy<sup>\*9\*\*12</sup>**

Investment Strategy	Portfolio	Year Carbon Budget Exceeded	
		Target Pathway	Business-as-usual Path
Passive	2025	2041	2032
	2024	2041	2031
Active	2025	2041	2032
	2024	2044	2031

(Source: Created by SMTAM based on ISS data)

Under the “target pathway,” it was shown that emissions from our portfolio would likely reach the upper limit allowed under the Net Zero 2050 (1.5°C) scenario in 2041 (2041 the previous year) for the Passive Investment Strategy, which accounts for approximately 90% of the target managed assets, and in 2041 (2044 the previous year) for the Active Investment Strategy.

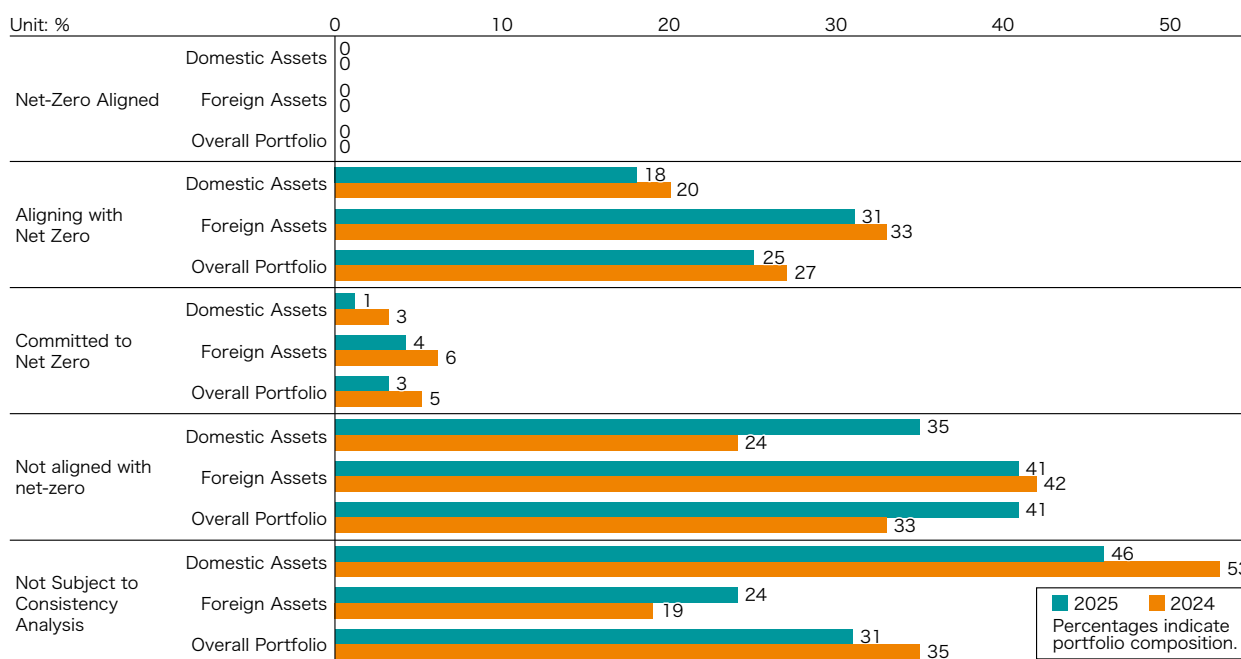
Compared to the previous year<sup>\*7</sup>, there is no significant change in the Passive Investment Strategy, but in the Active Investment Strategy, the year the carbon budget would be surpassed is earlier by approximately three years. A possible reason for this is that a certain number of companies that would surpass the carbon budget earlier on or had increased projected emissions received higher investment weight under the Active Investment Strategy.

On the other hand, when following a “business-as-usual” pathway, both the Passive Investment Strategy and Active Investment Strategy reach 2032 (2031 the previous year), indicating an improvement of approximately one year for the year the carbon budget would be surpassed (Figure 17).

**(b) Assessment on net zero target**

ISS has a proprietary assessment that analyzes net zero alignment based on company transition plans and more. When looking at net zero alignment of our portfolio, the composition ratio of “Aligning with net zero” decreased to 18% for domestic assets (20% the previous year) and to 31% for foreign assets (33% the previous year), while the composition ratio of “Not aligned with net zero” increased to 35% for domestic assets (24% the previous year) and to 41% for foreign assets (42% the previous year), with domestic assets seeing a significant increase. A factor behind this is the overall increase in companies subject to analysis because they have disclosed information on net zero, but have not yet fully committed to net zero. This indicates that the companies are making efforts for information disclosure, but the quality has not yet reached alignment with net zero. We will continue to engage with investee companies to improve the quality of disclosure so that they can enhance net zero alignment (Figure 18).

Figure 18: Survey results on net zero alignment by asset class<sup>\*\*12</sup>

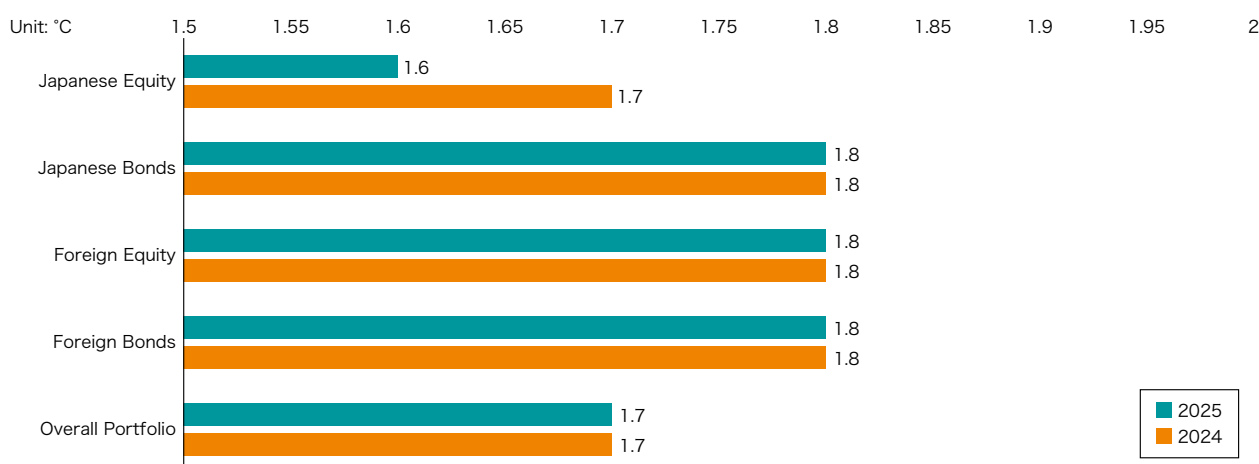


(Source: Created by SMTAM based on ISS data)

**(c) Temperature score analysis**

The temperature score index expresses how consistent the future estimated value of portfolio GHG emissions based on the “target pathway” is in line with the carbon budget for achieving the NGFS Net Zero 2050 (1.5°C) scenario by converting it to a rise in temperature. For example, with a portfolio consistent with the Net Zero 2050 (1.5°C) scenario in 2050, it will be 1.5°C. Looking at the temperature score by asset class, Japanese equity was 1.6°C (1.7°C the previous year), domestic bonds were 1.8°C (1.8°C the previous year), foreign equity was 1.8°C (1.8°C the previous year), and foreign bond was 1.8°C (1.8°C the previous year), and the overall portfolio was 1.7°C (1.7°C the previous year), remaining at almost the same level as the previous year (Figure 19).

Figure 19: Temperature score by asset class<sup>\*\*9\*\*12</sup>



(Source: Created by SMTAM based on ISS data)

**C. Portfolio resilience analysis related to climate change**

**(a) Transition risk analysis (Portfolio transition VaR analysis)**

Another transition risk evaluation indicator is called transition value at risk (hereinafter, VaR). Transition VaR is an indicator that converts the impact on investee companies to portfolio value based on the Net Zero Emission (NZE) Scenario announced by the International Energy Agency (IEA). When

comparing each asset class and reference index using this indicator, as shown in Figure 20, the amount of transition risk for us with each asset class is equivalent to the reference index or lower. Domestic bonds in particular have a very narrow risk range.

Compared to the previous year\*7, the level of transition risk for the overall portfolio is 7% (8% in the previous year), showing a decrease from the previous year.

**Figure 20: Transition VaR by asset class**\*11\*12

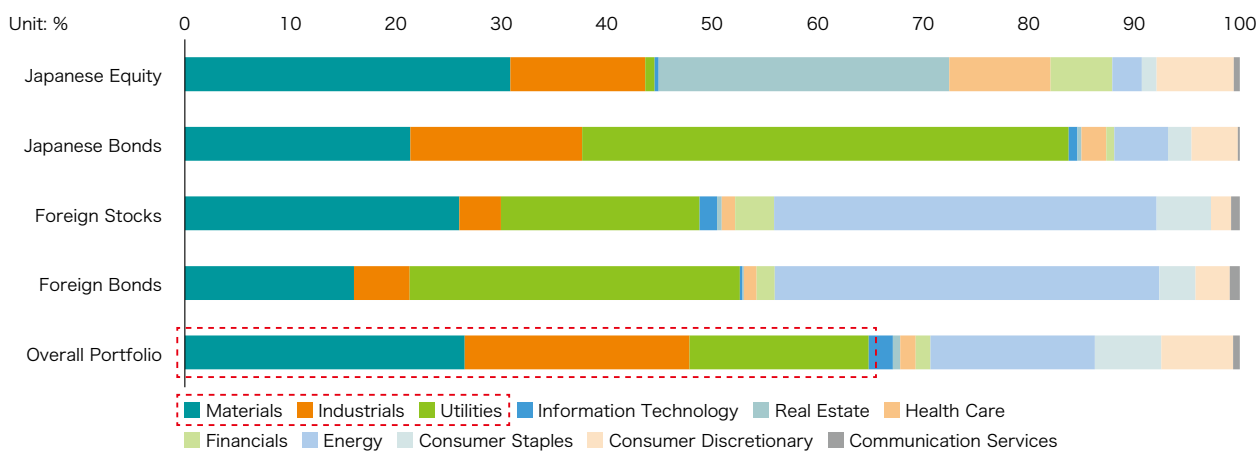
Unit: %

	Japanese Equity	Japanese Bonds	Foreign Equity	Foreign Bonds	Overall Portfolio
Portfolio (2025) (A)	9	18	5	3	7
Reference Index (B)	10	32	5	5	-
Difference (A-B)	0	-14	0	-2	-
(Reference) Portfolio (2024)	10	19	5	3	8

(Source: Created by SMTAM based on ISS data)

Figure 21 shows the composition ratio of overall portfolio transition VaR by sector, and as can be seen, over half is comprised of materials, industrials, and utilities sectors. Since a high carbon price is introduced with the NZE Scenario, companies that have high emissions face a heavy burden, and this is believed to impact the corporate value of investee companies. As for transition risk, it can be seen that our portfolio is designed in such a way that it is strongly impacted by these three sectors.

**Figure 21: Sectoral composition ratio of transition VaR by asset class**\*12



(Source: Created by SMTAM based on ISS data)

**(b) Physical risk analysis (Portfolio physical VaR analysis)**

There is also a physical risk evaluation indicator called physical VaR. This is an indicator that converts the physical risk impact on investee companies to portfolio value based on the assumed scenario (a 2°C rise in temperature) prepared by the Intergovernmental Panel on Climate Change (IPCC). Figure 22 shows a comparison between the reference index and the physical risk by asset class based on this indicator. As can be seen, our physical risks by asset class are the same as the reference index or below. Additionally, the proportion of physical risk in the overall portfolio is 0.9% (0.9% the previous year), which is lower than the transition risk of 7%, showing that there has been no significant change compared to the previous year\*7.

Figure 22: Physical VaR by asset class<sup>※11※12</sup>

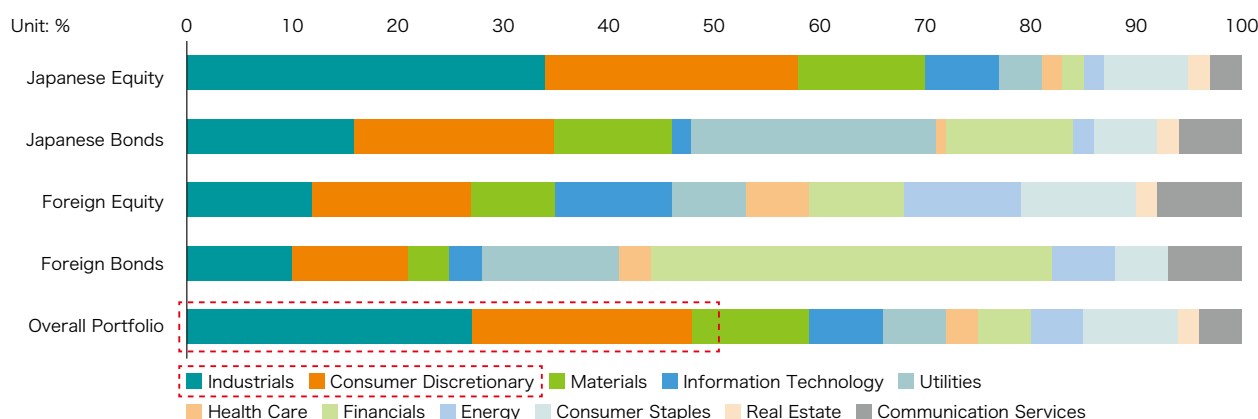
Unit: %

	Japanese Equity	Japanese Bonds	Foreign Equity	Foreign Bonds	Overall Portfolio
Portfolio (2025) (A)	1.3	1.9	0.5	0.4	0.9
Reference Index (B)	1.3	2.4	0.5	0.4	-
Difference (A-B)	0.0	-0.5	0.0	0.0	-
(Reference) Portfolio (2024)	1.3	1.9	0.5	0.4	0.9

(Source: Created by SMTAM based on ISS data)

Figure 23 shows the composition ratio of overall portfolio physical VaR by sector, and as can be seen, about half is comprised of the industrials and consumer discretionary sectors, which are exposed to risks such as wind and flood damage due to their global supply chains. It can be seen that our portfolio is designed in such a way that it is strongly impacted by these two sectors.

Figure 23: Sectoral composition ratio of physical VaR by asset class<sup>※12</sup>



(Source: Created by SMTAM based on ISS data)

Looking at the overall analysis results, to effectively reduce GHG emissions for our portfolio, Japanese equity and foreign equity are important as asset classes, and utilities and materials are important as sectors, and the approach to the industrials sector is important from the perspective of reducing transition risk. In addition, while GHG emissions from our portfolio are trending downward in absolute terms, it has been indicated that efforts are needed to improve consistency with the 1.5°C scenario. We will further encourage investee companies in prioritized target assets and sectors to enhance their initiatives related to climate change issues through our engagement and exercise of voting rights.

※5 Figures 17, 19, 20, and 21 show analyzed results using ISS data as of July 2025.

※6 Scope 1 refers to GHG emissions from fuel combustion by companies, while Scope 2 refers to GHG emissions from electricity usage by companies. These are defined by the GHG Protocol, an international standard for calculating and reporting GHG emissions for corporations.

※7 Since the values for the previous year (end of March 2024) were calculated (remeasured) using updated data such as carbon emissions, these do not match with the values in the SS report 2023/2024.

※8 Scope 3 refers to GHG emissions from purchased goods and services by companies, capital goods, upstream and downstream transportation and distribution, waste, employee travel and daily commutes, and product usage. This is a category of GHG emissions defined by the GHG Protocol.

※9 Based on Scope 1+2+3

※10 Based on Scope 1+2

※11 The following are reference indices used:

Japanese equity: Tokyo Stock Price Index (TOPIX)

Japanese bonds: NOMURA-BPI Overall (Corporate bonds only)

Foreign equity: MSCI-ACWI (ex Japan)

Foreign bonds: Bloomberg Global Overall (excluding Japan) (Corporate bonds only)

※12 Calculated based on our holdings for the adjusted corporate value of each asset.

## D. Analysis of GHG emissions (Financed Emissions) of our sovereign bond portfolio

Partnership for Carbon Accounting Financials (PCAF) proposed a calculation methodology and a format of information disclosure of GHG emissions from sovereign bond investment, etc., (hereinafter, Sovereign GHG emissions) in “The Global GHG Accounting and Reporting Standard Part A: Financed Emissions. Second Edition” in December 2022.

### (a) Sovereign GHG emissions

PCAF stipulates sovereign GHG emissions as “GHG emissions from production activities within a country’s boundary” and sets it as “Scope 1.” This scope 1 emission is also called the “production emissions,” and PCAF set it as a mandate for disclosure. Regarding the production emissions, PCAF recommends disclosing both numbers: GHG emissions with LULUCF (Land Use, Land Use Change, and Forestry, hereinafter, “Forest absorption”) and without it. In addition, these production emissions include GHG emissions from the companies because the production emissions are caused by the production facilities in that country. Though it is named “sovereign,” it is worth noting that the emission does not mean the GHG emissions from only the public sector.

**Figure 24: Definition of each scope relating to GHG emissions from sovereign bonds**

Category	Disclosure Recommendation Level	Definition
<b>Scope 1</b> <sup>※13</sup> <b>(Production Emissions)</b>	Mandatory (shall)	● GHG emissions from the production activities in the realm of the country are called production emissions, and it is recommended to disclose GHG emissions considering forest absorption (LULUCF), etc.
<b>Scope 2</b> <sup>※14</sup>	Recommended (should)	● GHG emissions that are emitted when energy imported and consumed in that country was produced outside of that country.
<b>Scope 3</b> <sup>※14</sup>	Recommended (should)	● GHG emissions that are emitted when products and services (excluding energy) produced overseas and consumed in that country were produced outside of that country.
<b>Export Emissions</b> <sup>※15</sup>	—	● Regarding export, GHG emissions emitted in the country during the production of the said products and services (including energy) in the country.
<b>Import Emissions</b> <sup>※15</sup>	—	● Regarding import, GHG emissions emitted in other country during the production of the said products and services (including energy) in that country.
<b>Consumption Emissions</b>	Recommended (should)	● GHG emissions that are emitted by production processes relating to products and services used within the country’s realm.

(Source: Created by SMTAM based on PCAF, etc.)

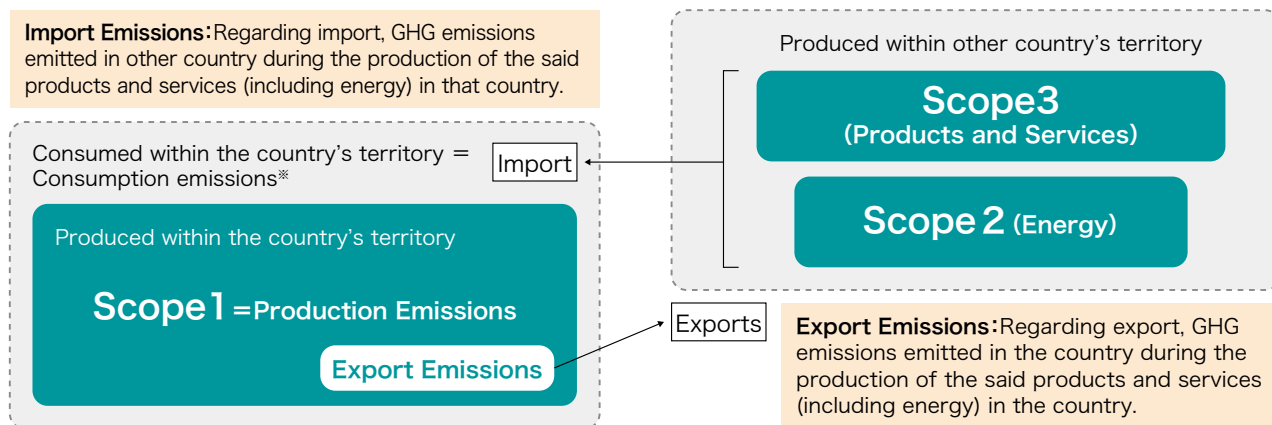
PCAF also recommends disclosing the “consumption emissions” as the metrics corresponds to the production emissions. The “consumption emissions” are defined as “GHG emissions that are emitted by production processes relating to products and services used within the country’s realm.” For example, a country where its consumption scale is more significant than its production scale globally contributes to increasing GHG emissions through imported products and services, although that country’s production emissions are relatively small. PCAF recommends disclosing the consumption emissions to visualize the transfer of GHG emissions from a GHG production country to a GHG consumption country.

The consumption emissions are calculated by adding the GHG emissions from the production process relating to imported products and services categorized by Scope 2 and 3 to the production emissions and by excluding the GHG emissions from the production process of products and services which are produced in the country and exported to other countries (exported emissions).

Besides, Scope 2 means “GHG emissions emitted when energy imported and consumed in that country was produced outside of that country, and Scope 3 means “GHG emissions emitted when products and services (excluding energy) produced overseas and consumed in that country were produced outside of that country. Also, exported emissions are “GHG emissions emitted in the country during the production of the said products and services (including energy) in the country” regarding the export goods. Figure 25 shows these relationships. The category of sovereign GHG emissions is as a same term as GHG protocol, but we

have to be careful that it is different by coverage from the scope of GHG emissions that companies use as Scope2 and Scope3.

**Figure 25: Coverage of each scope regarding sovereign GHG emissions**



※Consumption emissions = Production emissions (Scope1) + Import emissions – Export emissions

**(b) Calculation methodology of GHG emissions from sovereign bond portfolio**

PCAF defines the methodology of GHG emissions from the sovereign bond portfolio below, being based on the calculation methodology of GHG emissions emitted from a portfolio of investee and loaned companies, so called financed emissions.

**[Formula]**

$$\text{Sovereign Financial Emissions} = \sum_S \frac{\text{Outstanding Amount to Sovereign Bonds of Country S}}{\text{PPP-adjusted GDP of Country S}^{*16}} \times \text{GHG emissions of Country S}$$

S=all countries included in portfolio measured      Attribution Factor

The sovereign financed emissions are derived by GHG emissions of each country issuing sovereign bonds invested (= GHG emissions of country S) multiplied by each country's attribution factor, which shows to what extent invested money to the bonds contributes to GHG emission of each country (= invested money to sovereign bonds of country S / PPP-adjusted GDP<sup>\*16</sup>), and adding up derived numbers of emissions among countries belonging to the portfolio. The calculation methodology is as same as that for the portfolio of investee and loaned companies.

However, a different point of the calculation methodology of GHG emissions of sovereign bond portfolio from that of corporate stocks and bonds is the calculation methodology of the attribution factor. GHG emissions from the investment portfolio of corporate stocks and bonds are derived by making the investment exposure of investee companies the numerator while making the corporate value (EVIC) of investee companies the denominator; GHG emissions of sovereign bond portfolio are derived by making investment exposure of sovereign bonds of the invested country the numerator while nominal GDP adjusted by purchase power parity, the PPP-adjusted GDP<sup>\*16</sup>, the denominator.

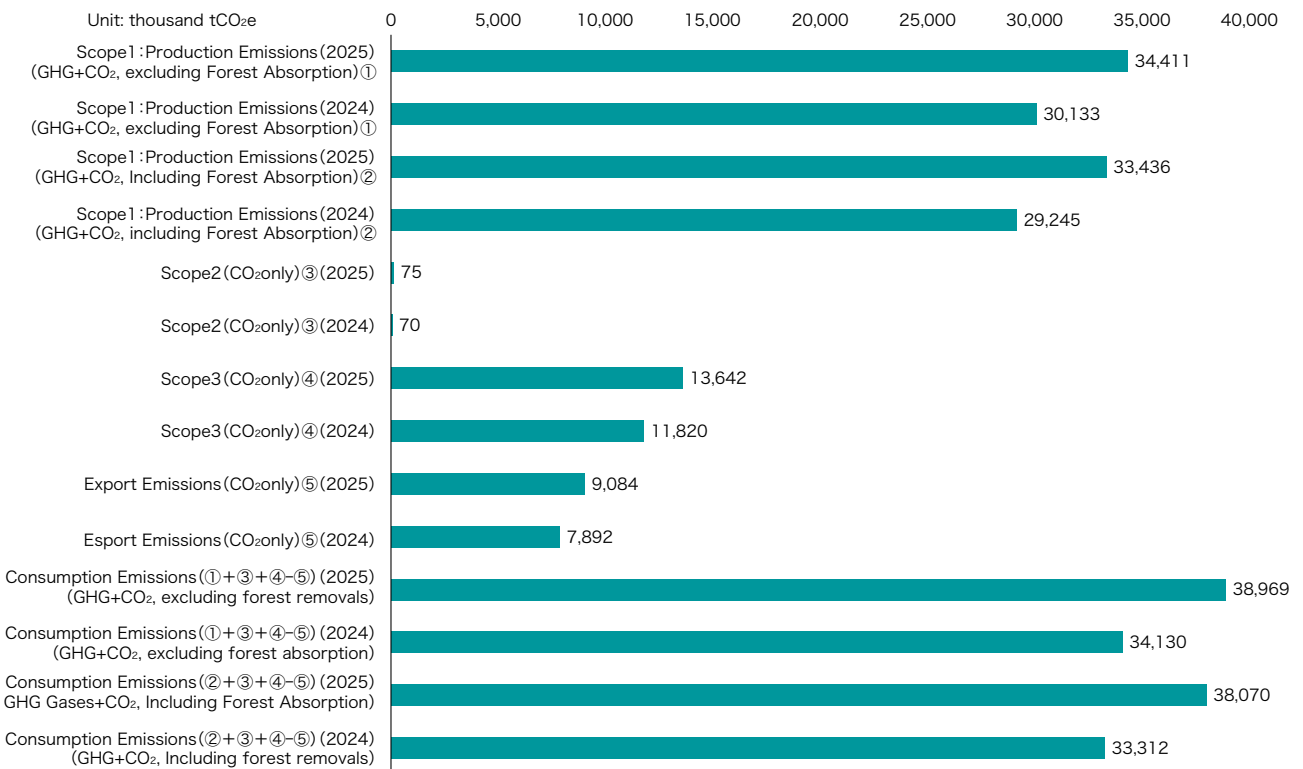
PCAF explained “there was an option that the public debt of invested country should be the denominator based on the calculation methodology of the investment portfolio of corporate stocks and bonds, but we finally chose PPP-adjusted GDP, which had a higher correlation with each country's emissions, as the denominator because the attribution factor of a country with large outstanding public debt could be underestimated.”

**(c) GHG emissions from our sovereign bond portfolio**

Based on PCAF’s recommended methodology, GHG emissions from our sovereign bond portfolio are shown in Figure 26. Our production emissions without forest absorption in 2025 amount to 34.4 million tCO<sub>2</sub>e, and those with forest absorption amount to 33.4 million tCO<sub>2</sub>e.

Also, our consumption emissions without forest absorption amount to 39.0 million tCO<sub>2</sub>e, and those with forest absorption amount to 38.0 million tCO<sub>2</sub>e. Both increased significantly over the previous year<sup>\*7</sup>, believed to be due primarily to the fact that the total value of our sovereign bond portfolio was 196.3 billion USD, an increase of 21.6% over the previous year (161.4 billion USD) (see page 41, Reference (3)).

**Figure 26: Sovereign GHG emissions by scope**



(Source: Created by SMTAM based on CAIT statistics, etc.)

Also, PCAF recommends portfolio analysis using two ways of carbon intensities: the production emissions intensity and the consumption emissions intensity. Emissions intensities by country are derived from the formula below.

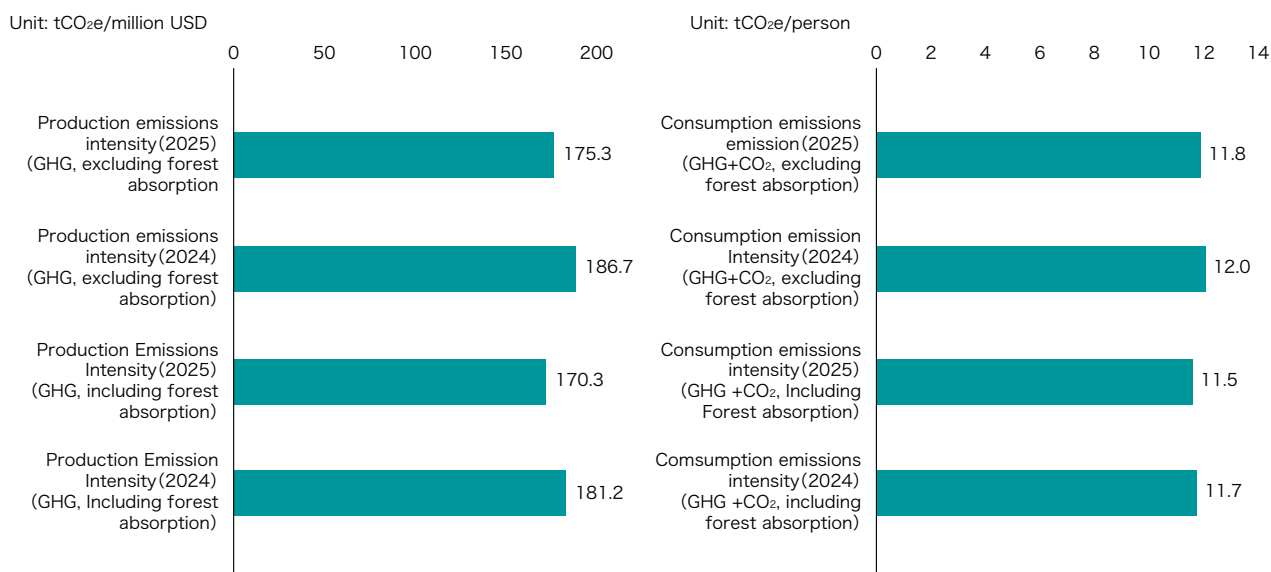
**[Formula]**

$$\begin{aligned}
 \text{Production Emissions Intensity of Country S} &= \frac{\text{Production Emissions of Country S}}{\text{PPP-adjusted GDP of Country S}^{*16}} \\
 \text{Consumption Emission Intensity of Country S} &= \frac{\text{Consumption Emissions of Country S}}{\text{Population of Country S}^{*17}}
 \end{aligned}$$

Each invested country’s emissions intensity is calculated based on the formula above. Then, based on the formula below, the portfolio-based emissions intensity is derived by weight-averaging each country’s intensity using each country’s investment weight of the portfolio, which is shown in Figure 27. The production emissions intensity of our sovereign bond portfolio in 2025 (without forest absorption) is 175.3

tCO<sub>2</sub>e/million USD (186.7 tCO<sub>2</sub>e/million USD the previous year), and our consumption emissions intensity (without forest absorption) is 11.8 tCO<sub>2</sub>e per capita (12.0 tCO<sub>2</sub>e per capita the previous year), both decreasing compared to the previous year<sup>\*\*7</sup>. Despite the fact that total GHG emissions from the portfolio increased, production emissions intensity decreased, indicating that many of the countries we invest in either reduced GHG emissions or improved carbon efficiency, as the pace of economic growth exceeded the pace of GHG emissions growth.

**Figure 27: Our production emissions intensity and consumption emissions intensity (Unit: tCO<sub>2</sub>e/million USD, tCO<sub>2</sub>e/capita)**



(Source: Created by SMTAM based on CAIT statistics, etc.)

**[Formula]**

$$\text{Production emissions intensity of sovereign bonds portfolio} = \sum_s \left[ \text{Production emissions intensity of country S} \times \text{Investment Weight of sovereign bonds of country S} \right]$$

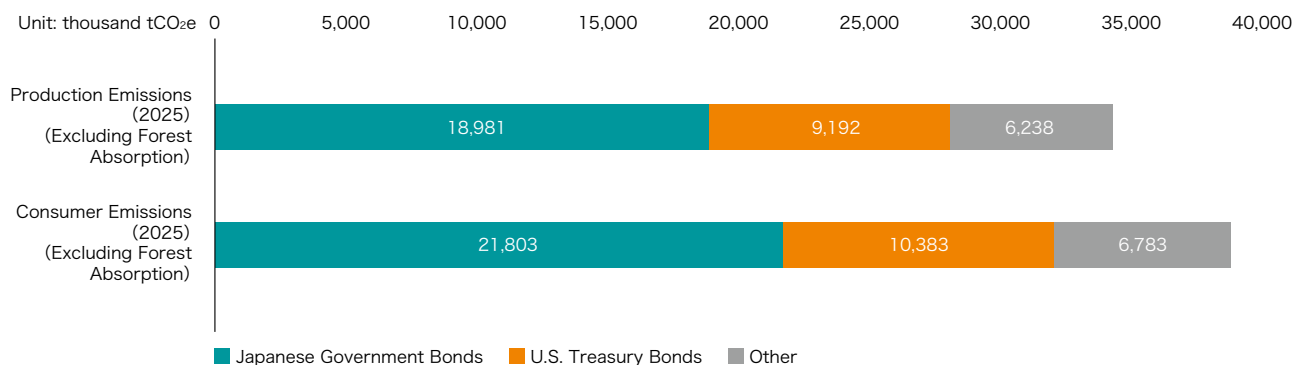
$$\text{Consumption emissions intensity of sovereign bonds portfolio} = \sum_s \left[ \text{Consumption emissions intensity of country S} \times \text{Investment weight of sovereign bonds of country S} \right]$$

S=all countries included in portfolio measured

Investment weight of sovereign bonds of country S = Investment value of sovereign bonds of country S / total value of our sovereign bonds portfolio

The result of the analysis of our contribution to production emissions and consumption emissions by country is shown in Figure 28. As in the previous year, Japanese Government Bonds and U.S. Treasuries are largely contributing to both production emissions and consumption emissions. To align our sovereign bond portfolio with the 1.5°C scenario, it is indispensable that Japan and the U.S. firmly reduce their GHG emissions. Therefore, intensively and actively engaging with companies in our major invested countries, including not only Japan but also the U.S., is crucial.

**Figure 28: Country contribution to GHG emissions from our sovereign bond portfolio**



(Source: Created by SMTAM based on CAIT statistics, etc.)

**(d) Forest absorption analysis on our sovereign bond portfolio and engagement strategy**

To enhance policy engagement, we conducted a forest absorption analysis by country using production emissions data. The forest’s role in absorbing and storing CO<sub>2</sub> is called “carbon sink.” The importance has been recognized globally. On the other hand, the amount of CO<sub>2</sub> emitted by illegal lumbering and land use change associated with it, etc., is said to reach a significant scale. Therefore, seeing the scale of forest absorption by country gives us some understanding of the degree of contribution of forest benefit or impact on global warming through the release of fixed CO<sub>2</sub> from land, etc., by deforestation.

Figure 29 shows three countries with the largest net positive absorption and three countries with the largest net negative absorption (net emissions) in our sovereign bond portfolio, under the definition that the net absorption is a difference between the production emissions with forest absorption and without forest absorption, based on the production emissions data by country. Countries that most benefit from forest absorption are China and the U.S., which own large lands and enormous forest resources, while countries that have negative impact are unexpectedly Indonesia and Brazil. Both countries own large amounts of forest assets; however, it is thought that this fact indicates that the massive CO<sub>2</sub> emissions by decomposition of sludge and forest fire by influence of deforestation, etc., through plantation development and development to farmland and ranch are larger than the absorption capacity of the forest. The protection of tropical rainforests is an urgent matter internationally because the enormous amount of CO<sub>2</sub> emitted by deforestation can be a significant obstacle to achieving net zero by 2050 globally.

**Figure 29: Comparison of net absorption by country in terms of sovereign bond portfolio**

Ranking	Countries with net absorption	Absorption (thousand tCO <sub>2</sub> e)	Countries with negative net absorption	Absorption (thousand tCO <sub>2</sub> e)
1st	China	647,580	Indonesia	▲ 467,910
2nd	USA	219,460	Brazil	▲ 397,220
3rd	France	61,350	Peru	▲ 89,980

(Source: Created by SMTAM based on CAIT statistics, etc.)

Next, the impact of forest absorption on our sovereign bond portfolio is considered. As shown in Figure 26, our production emissions with forest absorption are 33.4 million tCO<sub>2</sub>e and 34.4 million tCO<sub>2</sub>e without forest absorption; therefore, the net absorption of our sovereign bond portfolio is 1.0 million tCO<sub>2</sub>e. The net absorption is equivalent to about 3% of our production emissions without forest absorption. Also, looking at the contribution to this net absorption country-by-country, countries that work negatively for this net absorption value, in other words, countries with significant CO<sub>2</sub> emissions by deforestation, are Canada, Malaysia, and Indonesia (Figure 30).

**Figure 30: Impact by country on net absorption in our sovereign bond portfolio**

Ranking	Country	Impact on Portfolio Forest Absorption Capacity (Thousand tCO <sub>2</sub> e)
1st	Canada	▲ 48.5
2nd	Malaysia	▲ 29.7
3rd	Indonesia	▲ 20.5
(Reference)	Forest Absorption Capacity of Our Government Bond Portfolio	975.1

(Source: Created by SMTAM based on CAIT statistics, etc.)

We are collectively engaging in forest conservation and restoration activities with other investors through some global initiatives such as “The Investors Policy Dialogue on Deforestation (IPDD)” and “Financial Sector Deforestation Action (FSDA).” From these analyses, intensively engaging the Indonesian and Brazilian governments is very worthwhile because it substantially impacts reducing financed emissions from our portfolio.

**(e) Transition analysis and engagement strategy for our sovereign bond portfolio**

To enhance the effectiveness of policy engagement with government authorities and related institutions, we utilized information from ASCOR (Assessing Sovereign Climate-related Opportunities and Risks) to conduct analyses on climate change responses and the transition to a decarbonized economy in each country, targeting our sovereign bond portfolio and held sovereign bonds.

**About ASCOR**

ASCOR is an evaluation framework designed to support decision-making in investors’ sovereign bond investment. In addition to institutional investors, participation also includes academic institutions such as the PRI and the Transition Pathway Initiative (TPI) Centre at the London School of Economics and Political Science. Assessments of how effectively national governments address climate change are based on publicly available information and are conducted from three perspectives: Emissions Pathways (EP), Climate Policies (CP), and Climate Finance (CF), comprising a total of 13 indicators.

**1. Emissions Pathways**

This assesses how much a country has reduced or plans to reduce GHG emissions.

- EP1. Emissions trends
- EP2. 2030 targets
- EP3. Net zero targets

Purpose: To assess whether a country is aligned with the Paris Agreement goals (1.5°C target).

**2. Climate Policies**

This assesses how much the government of a country addresses climate change.

- CP1. Climate legislation
- CP2. Carbon pricing
- CP3. Fossil fuels
- CP4. Sectoral transitions
- CP5. Adaptation
- CP6. Just transition

Purpose: To measure policy quality and effectiveness in order to predict future risks and opportunities.

**3. Climate Finance**

This assesses how much a country invests in climate change measures or provides international support.

- CF1. International climate finance
- CF2. Transparency in climate costing (clarity of anticipated costs for achieving emission reduction targets and adaptation measures)

- CF3. Transparency in climate spending (clarity of budget allocation, actual spending on climate change measures, and use of spending)
- CF4. Renewable energy opportunities (investment environment for renewable energy)

Purpose: To measure international contributions and capacity to implement climate change measures through financial flows.

## ASCOR analysis results for the sovereign bond portfolio

Figure 31: Transition analysis results for the sovereign bond portfolio using ASCOR

		Portfolio Overall	Developed Countries <sup>※1</sup>	Emerging Countries <sup>※1</sup>	Others <sup>※1</sup>
Basic Information	Number of Countries	64	23	21	20
	(Percentage)	100.0%	35.9%	32.8%	31.3%
	Market Capitalization	196,339	190,964	5,174	201
	(Percentage)	100.0%	97.3%	2.6%	0.1%
Overall Evaluation <sup>※2, ※3, ※4</sup>		48.5%	48.7%	43.3%	28.7%
Evaluation by three Categories	Emission Pathways (EP)	50.2%	50.5%	39.2%	35.3%
	Climate Policy (CP)	50.1%	50.4%	40.2%	41.5%
	Climate Finance (CF)	45.2%	45.1%	50.4%	9.5%
Emission Pathways (EP)	EP1: Emission Trends	48.4%	49.7%	2.2%	25.2%
	EP2: 2030 Targets	50.0%	50.0%	49.8%	50.3%
	EP3: Net-Zero Targets	52.1%	51.8%	65.7%	30.3%
Climate Policy (CP)	CP1: Climate Legislation	71.7%	71.9%	64.6%	14.7%
	CP2: Carbon Pricing	51.7%	51.8%	46.6%	44.8%
	CP3: Fossil Fuels	7.7%	7.9%	0.3%	30.9%
	CP4: Sectoral Transitions	50.0%	50.0%	48.5%	47.9%
	CP5: Adaptation	95.0%	96.2%	50.8%	71.3%
	CP6: Just Transition	24.5%	24.4%	27.8%	39.4%
Climate Finance (CF)	CF1: International Climate Finance	34.1%	35.1%	-	0.1%
	CF2: Transparency of Climate Costing	1.2%	0.0%	46.3%	5.1%
	CF3: Transparency of Climate Spending	55.1%	55.2%	54.0%	11.9%
	CF4: Renewable Energy Opportunities	-	-	-	-

※1 "Developed countries" and "emerging countries" are based on classification by MSCI; "others" are countries other than those.

※2 The percentage displayed for the overall rating and below represents the three-tiered evaluation of each rating category on a 100% basis

※3 Each rating below the overall rating is a weighted average based on the sovereign bond weight within categories such as developed markets

※4 "-" indicates an item not included in the rating

(Source: Created by SMTAM based on ASCOR evaluation data conducted in August 2024)

In ASCOR, each indicator is evaluated on a three-level scale: "Yes" if a country's policies and performance align with international climate targets and best practices, "Partial" if they are partially aligned, and "No" if policies do not exist, targets are not set, or implementation is significantly delayed, with indicators designated as "Exempt" if they are outside the scope of evaluation due to a country's income level or institutional constraints. Using these evaluations, we conducted a quantitative transition analysis of our sovereign bond portfolio (Figure 31).

The results showed that the overall transition progress of the portfolio was 48.5%, remaining below the halfway mark. This highlights the importance of accelerating national transitions toward decarbonization. The progress rate for emerging countries is just over 40%, lagging behind developed countries at just under 50%, highlighting the need to accelerate transitions in emerging countries in particular.

From the EP perspective, the results indicate that the lack of progress in "EP1. Emission trends" is particularly notable among emerging economies, suggesting a need for further advancement in emission reduction efforts in these nations.

In terms of CP, while both developed and emerging countries show progress in "CP1: Climate legislation," there are notable delays in "CP3: Fossil fuels" underscoring the necessity of policy engagement regarding

fossil fuel measures. Furthermore, while “CP5. Adaptation” is advancing in developed countries, “CP6. Just transition” remains insufficiently advanced in both developed and emerging markets, indicating the need to strengthen policy engagement in this area.

From the CF perspective, challenges were also identified in developed countries. Specifically, “CF1: International climate finance” received low scores, reaffirming that mobilizing and supporting transition finance for emerging economies is a critical issue. Additionally, the low ratings for “CF2: Transparency in climate costing” suggest that clearly disclosing expenditures such as disaster response and transition costs could help stimulate investment in climate change measures.

We intend to utilize the findings from this analysis to enhance the effectiveness of future policy engagement efforts.

### ASCOR analysis results for sovereign bonds by country

We selected a total of six countries from our sovereign bond portfolio to conduct country-based analysis. First, we selected three countries: Japan, the US, and China. They are the top three producers of GHG emissions on a sovereign portfolio basis (calculated by multiplying national GHG emissions by the holding ratio in the sovereign bond portfolio). The other three countries are Canada, Malaysia, and Indonesia, which rank as the top three in terms of negative impact on the portfolio’s forest absorption, as analyzed in “(d) Forest absorption analysis and engagement strategy for our sovereign bond portfolio.”

Figure 32 shows the ASCOR analysis results for these six countries.

**Figure 32: Transition analysis results for sovereign bonds by country using ASCOR**

	Japan	USA	China	Canada	Malaysia	Indonesia
Overall Assessment	50.0%	40.9%	45.5%	54.5%	40.9%	40.9%
EP1: Emission Trends	50.0%	50.0%	0.0%	50.0%	0.0%	0.0%
EP2: 2030 Targets	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
EP3: Net-Zero Targets	50.0%	50.0%	100.0%	50.0%	100.0%	0.0%
CP1: Climate Legislation	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%
CP2: Carbon Pricing	50.0%	50.0%	50.0%	50.0%	0.0%	50.0%
CP3: Fossil Fuels	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%
CP4: Sectoral Transitions	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
CP5: Adaptation	100.0%	100.0%	50.0%	50.0%	50.0%	50.0%
CP6: Just Transition	0.0%	50.0%	0.0%	50.0%	50.0%	50.0%
CF1: International Climate Finance	50.0%	0.0%	-	0.0%	-	-
CF2: Transparency of Climate Costing	-	-	50.0%	-	100.0%	100.0%
CF3: Transparency of Climate Spending	50.0%	50.0%	50.0%	100.0%	50.0%	100.0%
CF4: Renewable Energy Opportunities	-	-	-	-	-	-

(Source: Created by SMTAM based on ASCOR data)

Among these six countries, Canada received the highest assessment, followed by Japan. The US, Malaysia, and Indonesia received the lowest assessments.

An overview of characteristics by country is as follows. Areas found to be particularly insufficient (“No” in the three-tier assessment) were “Fossil fuels” and “Just transition” for Japan; “Climate legislation,” “Fossil fuels,” and “International climate finance” for the US; and “Emission trends,” “Fossil fuels,” and “Just transition” for China. For Canada, only “International climate finance” was found to be insufficient, while Malaysia and Indonesia showed insufficient responses in four areas.

To promote each country’s transition to a decarbonized economy in a more meaningful way through sovereign engagement, it is effective to conduct a thorough analysis of each country’s initiatives and the differences among them, and then focus engagement efforts on areas where each country’s response is insufficient. Based on such an analysis, we will implement more effective policy engagement with government authorities and other policymakers.

#### **(f) Next step regarding sovereign bond portfolio analysis**

We calculated GHG emissions from our sovereign bond portfolio using the PCAF recommended methodology. Based on this calculation, GHG emissions by country come from OECD and CAIT statistics; it is noted that two statistics coverages differ in data coverage: OECD statistics is based on CO<sub>2</sub> emissions while CAIT statistics is based on GHG emissions. Despite such limitations, it is a significant progress for us to visualize GHG emissions from our sovereign bond portfolio in realizing net zero of our entire portfolio under management. Our sovereign bonds portfolio amounts to 29.4 trillion JPY<sup>※18</sup>, and it is one of our major asset classes. We will make efforts to monitor our sovereign bonds' GHG emissions and reduce them by further improving analysis methodologies and through policy engagement.

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※13 Calculation of Scope 1 for each country uses the Climate Analysis Indicators Tool (CAIT) statistics for 2021 and 2022. PCAF also recommends using the CAIT statistics. For countries where data is unavailable, GHG emissions are estimated based on a similar country's GDP intensity with a consideration of economic and geographical conditions. The unit is tCO<sub>2</sub> equivalent (tCO<sub>2</sub>e).

※14 We use OECD statistics for the calculation of Scopes 2 and 3. Countries that have no emission data are treated as "no emissions." Only CO<sub>2</sub> emission data is available in these statistics. Data from 2018, which is the latest, is used for the analysis. The unit is tCO<sub>2</sub>.

※15 Data used for calculating exported and imported emissions is from OECD statistics. Only CO<sub>2</sub> emission data is available in these statistics. Countries that have no emission data are treated as "no emissions." Data from 2018, which is the latest, is used for the analysis. The unit is tCO<sub>2</sub>.

※16 Data of PPP-adjusted GDP is from FY2022 and FY2023 of World Bank statistics.

※17 Data of Population is from FY2022 and FY2023 of World Bank statistics.

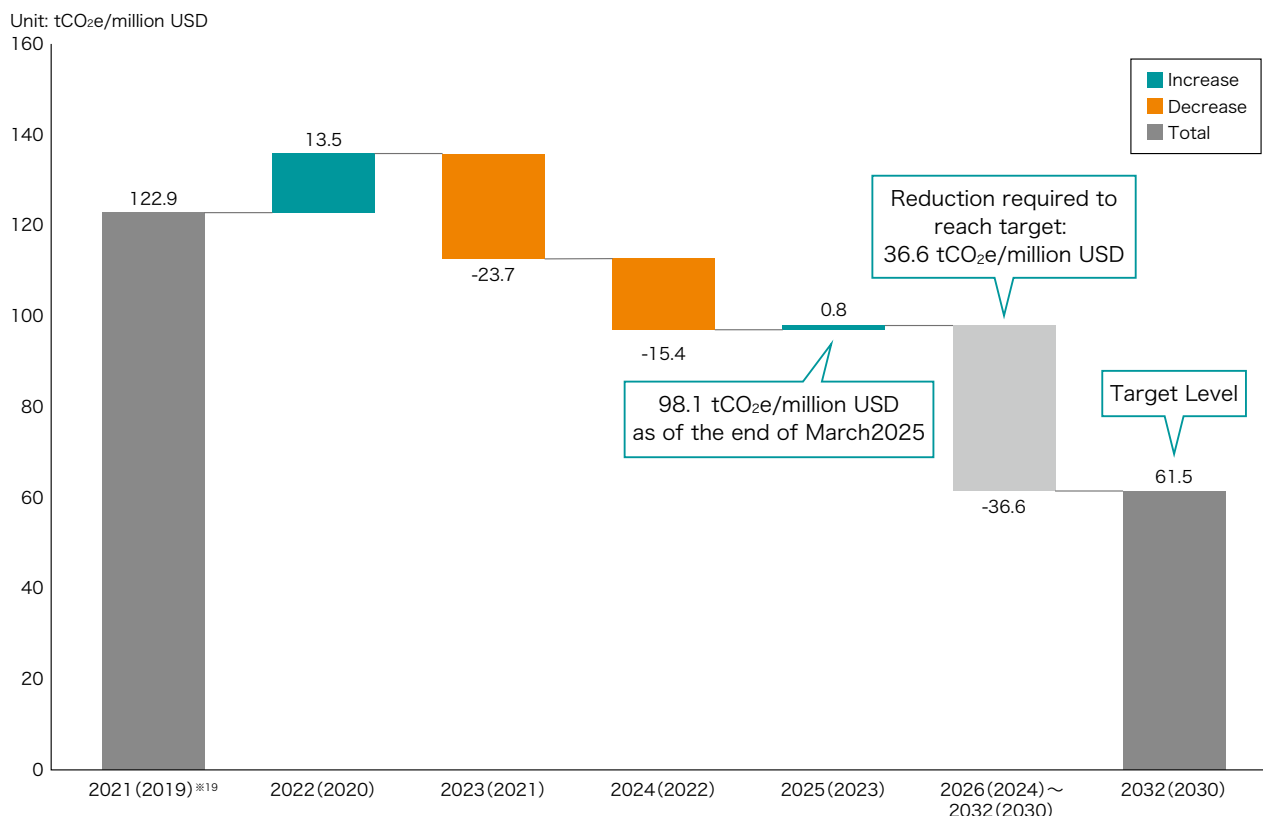
※18 Data of sovereign bond portfolio used for analysis is as of the end of March 2024 and the end of March 2025. The amount as of the end of March 2024 is 161.4 billion USD, which is calculated with the exchange rate at the end of March 2024 (151.41 yen/USD). The amount as of the end of March 2025 is 196.3 billion USD, which is calculated with the exchange rate at the end of March 2025 (149.52 yen/USD).

## **4. Metrics and targets**

As a responsible institutional investor, we are promoting the reduction of GHG emissions by investee companies through our engagement and exercise of voting rights, collaboration with stakeholders such as asset owners and governmental agencies, improving investment strategies, and providing investment opportunities (products) to clients. Our interim target is to halve emissions by 2030 compared to 2019 levels for approximately half of the balance of assets under management for which emissions can be calculated (excluding sovereign bonds, around 43 trillion yen) out of a total of approximately 85 trillion yen as of the end of June 2021. The ultimate goal is to achieve net zero for all assets under management by 2050.

We use WACI as an indicator to measure decarbonization progress in our target portfolio. The 2023 WACI measured in 2025 was 98.1 tCO<sub>2</sub>e/million USD, which was a slight increase of 0.8% compared to the 2022 WACI measured in 2024, but when compared to the base year (2019) WACI of 122.9 tCO<sub>2</sub>e/million USD, this represents a reduction of 20.2%. To reach our commitment of halving GHG emissions from our portfolio by 2030, a further reduction of 36.6 tCO<sub>2</sub>e/million USD is required (Figure 33).

**Figure 33: Progress toward WACI reduction in target portfolio for interim target**

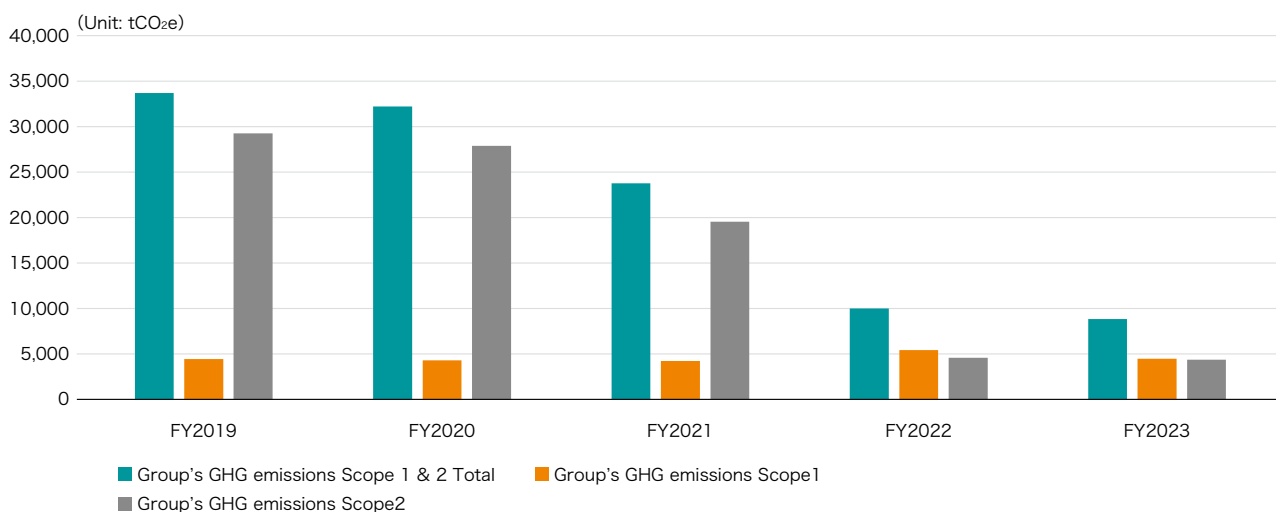


(Source: Created by SMTAM based on ISS data)

\*\*19 The year in parentheses indicates the data year for GHG emissions, two years before the base year of the portfolio balance.

We are working to reduce GHG emissions within the framework set by the Sumitomo Mitsui Trust Group\*\*20 to achieve net-zero GHG emissions (Scope 1+2) for the Group by 2030. Scope 1+2 emissions were 8,840tCO<sub>2</sub>e as of the end of FY2023, a reduction of roughly 74% compared to the end of FY2019.

**Figure 34: Trends in Sumitomo Mitsui Trust Group's GHG emissions (Scope 1+2)**



\*\*20 Scope of calculation: Domestic and overseas offices of the Sumitomo Mitsui Trust Group, Inc. and its consolidated subsidiaries (excluding equity-method affiliates)

# Plans for the Future

Under the supervision of the Board of Directors, we will continue to enhance our efforts and disclosures on climate change issues. This year, in addition to adopting the NGFS scenarios, which are recommended by the UK FCA, we conducted analysis of climate change responses and transitions to a decarbonized economy for each country in our sovereign bond portfolio, which is vital in dialogues with policy authorities. We aim to achieve both the maximization of our clients' investment returns and a meaningful contribution to addressing climate change, and are committed to continuing our tireless efforts to achieve this goal by reducing GHG emissions at investee companies through engagement and the exercise of voting rights, together with policy advocacy and other forms of collaboration with stakeholders, and through optimizing capital allocation via the provision of investment strategies and products that address climate change, engaging with our clients, and enhancing our organizational structures for climate-related responses.

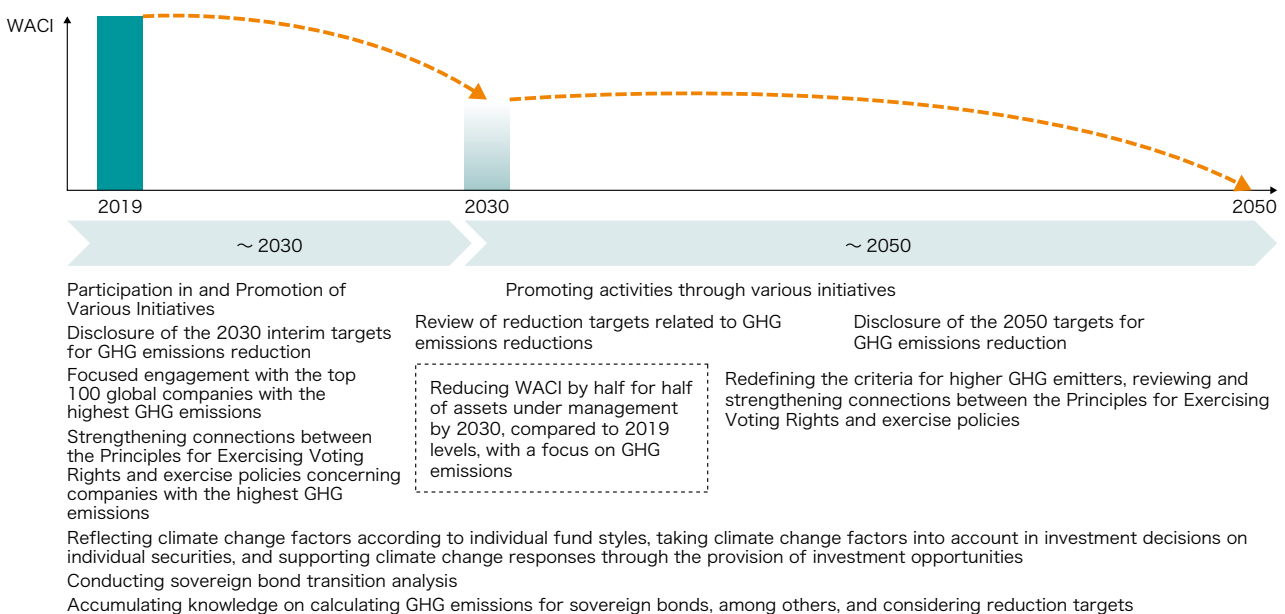
## Our transition plan

A transition plan is defined by the TCFD as “an aspect of an organization’s overall business strategy to address climate-related risks and opportunities that lays out a set of targets and actions supporting its transition toward a low-carbon economy.” It refers to a business strategy that enables companies to achieve carbon neutrality by 2050. This transition plan is also required to be disclosed under IFRS SX, issued by the International Sustainability Standards Board (ISSB), and finalized in June 2023. The requirement applies not only to operating companies but also to financial institutions, including asset management companies.

Our transition plan is as shown in Figure 35. We aim to steadily implement the initiatives outlined thus far to achieve our interim 2030 targets (to halve GHG emissions from our investment portfolio compared to 2019 levels) and our ultimate 2050 goal (to achieve net-zero GHG emissions from our investment portfolio).

**Figure 35: Our transition plan**

Governance	Strategy	Risk Management	Metrics and Targets
<ul style="list-style-type: none"> <li>The Board of Directors sets, approves, and discloses interim 2030 targets for greenhouse gas emissions</li> <li>Establish greenhouse gas emissions-related KPIs for the President's compensation</li> <li>Report progress on the plan to the Sustainability Committee, Executive Committee, and Board of Directors</li> <li>Performance disclosed via TCFD reporting</li> </ul>	<ul style="list-style-type: none"> <li>Participation in climate change initiatives such as CA100+ and AIGCC</li> <li>Monitored engagement and reduction plans for the top 100 global emitters of greenhouse gases (estimated to cover approximately 40% of holdings)</li> <li>Strengthen alignment with voting guidelines and policies</li> <li>Updating knowledge on greenhouse gas emissions calculation methods and disclosure rules</li> </ul>	<ul style="list-style-type: none"> <li>Annual monitoring of carbon budget consumption</li> <li>Measure and monitor transition VaR and physical VaR</li> <li>Discuss the impact on management and the need for plan revisions based on the above. Disclosure if revisions are made</li> </ul>	<ul style="list-style-type: none"> <li>2030 interim greenhouse gas reduction target: Reduce WACI by 50% compared to 2019 levels for 50% of assets under management (approximately ¥43 trillion excluding sovereign bonds, etc., as of end-June 2021)</li> <li>Consider future targets for reducing GHG emissions from sovereign bonds, which are currently excluded</li> </ul>



# Reference

## 1. Our carbon emissions data list

### (1) Data related to asset class

Asset Class	Target Year	Total Portfolio (billion USD)	Portfolio/Reference Index	Carbon Emissions (Scope1+2) (million tCO <sub>2</sub> e)	Total Carbon Emissions (million tCO <sub>2</sub> e)	Carbon Footprint (tCO <sub>2</sub> e/million USD)	Carbon Intensity (tCO <sub>2</sub> e/million USD)	WACI (tCO <sub>2</sub> e/million USD)	Temperature Score (°C)	Transition VaR (%)	Physical VaR (%)
Japanese Equity	2025	158.1	Portfolio	10.2	184.6	64.3	100.4	74.1	1.6	9	1.3
			Reference Index	10.9	190.7	69.2	103.7	77.9			
	2024	158.8	Portfolio	11.2	184.6	70.5	107.1	78.7	1.7	10	1.3
			Reference Index	12.1	192.8	75.9	110.1	82.5			
Japanese Bonds	2025	8.6	Portfolio	1.3	7.5	153.9	258.9	195.1	1.8	18	1.9
			Reference Index	2.5	10.6	295.2	458.0	400.2			
	2024	7.4	Portfolio	1.3	6.9	175.3	289.7	194.5	1.8	19	1.9
			Reference Index	2.4	11.0	330.0	478.9	386.6			
Foreign Equity	2025	163.5	Portfolio	6.4	71.7	38.9	132.3	116.6	1.8	5	0.5
			Reference Index	6.5	72.4	39.9	136.1	118.3			
	2024	163.6	Portfolio	7.1	74.5	43.6	140.8	111.5	1.8	5	0.5
			Reference Index	7.4	75.1	45.0	145.8	114.5			
Foreign Bonds	2025	6.9	Portfolio	0.3	2.5	39.8	159.4	86.6	1.8	3	0.4
			Reference Index	0.4	3.3	53.4	166.6	136.4			
	2024	6.8	Portfolio	0.3	2.2	44.8	192.7	84.0	1.8	3	0.4
			Reference Index	0.4	3.6	62.7	159.1	141.6			
Overall Portfolio	2025	337.0	Portfolio	18.1	266.4	53.8	116.0	98.1	1.7	7	0.9
	2024		Portfolio	19.9	268.2	59.2	123.5	97.3			

### (2) Data related to investment strategy

Investment Strategy	Target Year	Total Portfolio (billion USD)	Portfolio Reference Index	Carbon Emissions (Scope1+2) (million tCO <sub>2</sub> e)	Total Carbon Emissions (million tCO <sub>2</sub> e)	Carbon Footprint (tCO <sub>2</sub> e/million USD)	Carbon Intensity (tCO <sub>2</sub> e/million USD)	WACI (tCO <sub>2</sub> e/million USD)	Temperature Score (°C)	Transition VaR (%)	Physical VaR (%)
Passive Investment Strategy	2025	312.1	Portfolio	16.5	246.1	52.7	114.4	98.6	1.7	4	0.9
	2024		Portfolio	18.1	246.4	58.0	121.8	97.9			
Active Investment Strategy	2025	23.1	Portfolio	1.5	19.0	66.8	134.8	91.7	1.7	6	1.2
	2024		Portfolio	1.7	20.7	75.0	145.4	91.1			

### (3) Sovereign Bond

Fiscal Year	Total Sovereign Portfolio (billion USD)	Scope1: Production Emissions (GHG+CO <sub>2</sub> , excluding forest absorption)	Scope1: Production Emissions (GHG+CO <sub>2</sub> , including forest absorption)	Scope2 (CO <sub>2</sub> only)	Scope3 (CO <sub>2</sub> only)	Export Emissions (CO <sub>2</sub> only)	Consumption Emissions (GHG+CO <sub>2</sub> , excluding forest absorption)	Consumption Emissions (GHG+CO <sub>2</sub> , including forest absorption)
2025	196.3	34,411	33,436	75	13,642	9,084	38,969	38,070
2024	161.4	30,133	29,245	70	11,820	7,892	34,130	33,312

(Unit: 1,000 tCO<sub>2</sub>e (for GHG), 1000tCO<sub>2</sub>(for CO<sub>2</sub>))

Fiscal Year	Production Emissions Intensity (GHG, excluding forest absorption)	Production Emissions Intensity (GHG, including forest absorption)	Consumption Emissions Intensity (GHG, excluding forest absorption)	Consumption Emissions Intensity (GHG, including forest absorption)
2025	175.3	170.3	11.8	11.5
2024	186.7	181.2	12.0	11.7

(Unit: Production Emissions Intensity: tCO<sub>2</sub>e/million USD, Consumption Emissions Intensity: tCO<sub>2</sub>e/person)

## 2. Definition of main terms

Term	Description	Calculation formula
Total Carbon Emissions / Financed Emissions	<ul style="list-style-type: none"> <li>Portfolio GHG total emissions (Unit: CO<sub>2</sub> equivalent tons (tCO<sub>2</sub>e)).</li> <li>GHG emissions for investee companies are based on Scope 1+2+3.</li> </ul>	$\sum_n^i \left[ \frac{\text{Investment market value } i}{\text{Investee company's EVIC } i^{\#}} \times \text{Investee company's GHG emissions } i \right]$
Carbon Footprint	<ul style="list-style-type: none"> <li>Value obtained by total carbon emissions over market value of portfolio (Unit: CO<sub>2</sub> equivalent tons (tCO<sub>2</sub>e)) per million USD (present value of portfolio)</li> <li>GHG emissions for investee companies in total carbon emissions are based on Scope 1+2.</li> </ul>	$\frac{\text{Total Carbon Emissions}}{\text{Market Value of Portfolio}}$
Carbon Intensity	<ul style="list-style-type: none"> <li>Value obtained by dividing total carbon emissions by total sales of each portfolio investee company (Unit: CO<sub>2</sub> equivalent tons (tCO<sub>2</sub>e) per million USD).</li> <li>GHG emissions for investee companies in total carbon emissions are based on Scope 1+2.</li> </ul>	$\sum_n^i \left[ \frac{\text{Investment market value } i}{\text{Investee company's EVIC } i^{\#}} \times \text{Investee company's sales } i \right]$
Weighted Average Carbon Intensity (WACI)	<ul style="list-style-type: none"> <li>Weighted average for carbon emissions per unit sales of each investee company using investment weight of each investee company (Unit: CO<sub>2</sub> equivalent tons (tCO<sub>2</sub>e) per Million USD).</li> <li>GHG emissions for investee companies are based on Scope 1+2.</li> </ul>	$\sum_n^i \left[ \frac{\text{Investment market value } i}{\text{Investment market value } i} \times \frac{\text{Investee company's GHG emissions } i}{\text{Investee company's sales } i} \right]$

※EVIC stands for Enterprise Value Including Cash and expresses corporate value including cash.

EVIC=Market capitalization (Class stocks such as common stocks and preferred stocks) + Interest-bearing debt (Book value) + Controlling stockholder equity (Book value).



# *Natural Capital*

*Taskforce on Nature-related Financial Disclosures*

**TNFD Disclosures**



# Recognition of Nature-related Issues

In the Ministry of the Environment's Annual Report on the Environment, the Sound Material-Cycle Society and Biodiversity (2014 edition), natural capital is defined as "the stock of soil, water, air, forest and other bio-resources created by nature." In addition, according to the World Economic Forum's (WEF) New Nature Economy Report 2020, it is estimated that about 44 trillion USD of economic activities, or more than half of the world's total GDP, depend on natural capital. The WEF also estimates that effective utilization of natural capital has the potential to generate approximately 10 trillion USD in added value per year by 2030 and create jobs for approximately 400 million people. Therefore, not only do economic systems and financial markets derive great benefit from natural capital, but natural capital also serves as the basis for further economic growth.

It is said that economic activity frequently has a negative impact on natural capital, such as pollution problems. The Convention on Biological Diversity (CBD) came into force in 1993 in response to concerns that damage to natural capital will have a negative impact on future economic growth, and growing calls worldwide for the coexistence of natural capital and economic activity. Since then, a total of 15 Conferences of the Parties (COP) have been held among the member countries. In particular, at the 15th Conference of the Parties to the Convention on Biological Diversity (CBD-COP15) held in Montreal, Canada in December 2022, the Kunming-Montreal Global Biodiversity Framework was adopted, replacing the 2010 Aichi Biodiversity Targets. 23 targets were set as goals for 2030. Of particular interest is Target 3, commonly referred to as "30 by 30," which aims to manage and conserve 30% of terrestrial, inland water, and marine areas as spaces where humans and nature coexist, by 2030. This represents a significant step up in ambition from the Aichi Biodiversity Target, which set 17% for terrestrial and 10% for marine areas. Setting these targets is also expected to provide opportunities for companies to consider natural capital and to act upon it.

The 16th Conference of the Parties to the Convention on Biological Diversity (CBD-COP16) was held in Cali, Colombia in November 2024, but ended without reaching an agreement on the establishment of a new biodiversity fund. It resumed in Rome, Italy in February 2025 over the course of three days, ultimately leading to the adoption of a funding roadmap with a 2030 deadline. While the roadmap plans to mobilize 200 billion dollars annually, the specific financing mechanisms behind funding have been deferred for future discussions.

**Figure 1: Evolution of the convention on biological diversity**

Year/Month	Event
1970s to 1980s	As pollution problems became more serious, awareness of the need to protect the global environment grew worldwide.
December 1993	The Convention on Biological Diversity (CBD), which prescribed measures to conserve biodiversity, came into force. Thereafter, a Conference of the Parties (COP) was held once every two years. The number of contracting parties is 196 countries and regions (as of April 2023).
April 2002	The 6th Conference of the Parties to the Convention on Biological Diversity (CBD-COP6) was held in The Hague, Netherlands. As a milestone of the 10th anniversary of the Convention coming into force, the 2010 target (to significantly reduce the present rate of biodiversity loss by the year 2010) was adopted.
October 2010	The 10th Conference of the Parties to the Convention on Biological Diversity (CBD-COP10) was held in Nagoya, Japan. The Aichi Biodiversity Targets (20 specific targets to stop biodiversity loss by 2020, with the aim of realizing a world in harmony with nature by 2050) were adopted to replace the 2010 target.
October 2021, December 2022, October 2023	The 15th Conference of the Parties to the Convention on Biological Diversity (CBD-COP15) was held (Session 1 in Kunming, China; Session 2 in Montreal, Canada; resumed session in Nairobi, Kenya). The Kunming-Montreal Global Biodiversity Framework was adopted, establishing the "30 by 30" target to conserve at least 30% of both land and sea by 2030 as the successor to the Aichi Targets.
November 2024, February 2025	The 16th Conference of the Parties to the Convention on Biological Diversity (CBD-COP16) was held in Cali, Colombia (November 2024), but failed to reach agreement on establishing a new biodiversity fund. It resumed for a three-day session in Rome, Italy, in February 2025, ultimately adopting a funding roadmap with a 2030 deadline. Discussions on the funding mechanism were carried over.

(Source: Compiled by SMTAM from various materials)

In October 2024, World Wide Fund for Nature (WWF) International released the 2024 Living Planet Report: A System in Peril. The report revealed the grave reality that the Living Planet Index (LPI), which measures the health of nature and biodiversity, declined 73% in just 50 years from 1970 to 2020. It states that Earth faces a dangerous tipping point due to the intertwined crises of nature loss and climate change, and that government and private sector action over the next five years leading to 2030 is now more critical than ever. The report also calls for transformation in four areas: nature conservation (approach and policies for critical regions), the food system, the energy system, and green finance.

This growing sense of crisis surrounding natural capital is reflected in the growing number of companies making TNFD disclosures. As of January 2024, the number of TNFD Early Adopters—companies and organizations committed to early disclosure of nature-related risks and opportunities based on TNFD recommendations—reached 320, with 80 Japanese companies representing a quarter of the total. TNFD disclosure, like TCFD disclosure, has clearly gained momentum worldwide.

Based on this recognition, we fulfill our fiduciary duty of maximizing medium- to long-term investment returns and suppressing downside risks while bolstering our initiatives and disclosure on issues involving natural capital at the same time.

# Information Disclosure Based on the TNFD Recommendations

## 1. Natural Capital-related Governance

### ■ (1) Policy related to natural capital

As a Sumitomo Mitsui Trust Group member, we have established policies and related rules regarding sustainability, including natural capital, based on the Group's Sustainability Policy, and are continuously working to develop our organization and systems. In FY2024, we identified ESG/sustainable management, including dealing with natural capital, as one of our materiality items, and made engagement activities with investee companies our main initiative. In addition, regarding our initiatives with investee companies, in our investment management business rules and related rules, we have established rules regarding the concepts and processes, for considering natural capital issues in engagement, the exercise of voting rights, and ESG investment.

### ■ (2) Governance related to natural capital

We recognize that sustainability-related issues, including natural capital, represent risks and opportunities that can significantly impact our operations and investee companies. These issues are managed with the same level of importance as other critical management challenges, with oversight by the Board of Directors. Since 2020, we have formalized the reporting of significant sustainability issues to the Board of Directors by including it in the board of directors' regulations to enable more direct oversight.

The **executive committee**, an executive body comprising members including the President, is responsible for formulating plans and initiatives related to natural capital issues, setting up operational structures, and managing and promoting these initiatives.

Under this framework, our entire company advances sustainability initiatives, including actions regarding natural capital. In particular, in our asset management operations, the Sustainability Committee is responsible for formulating plans and monitoring all sustainability activities, including natural capital responses. Additionally, the Sustainability Committee reviews in advance matters to be discussed at or reported to the **executive committee**.

During the reporting period (January 2025 to December 2025), deliberations and reports were conducted at relevant meeting and committee regarding the Climate Change and Natural Capital Report 2025/26 published in October 2025.

## 2. Natural capital-related strategy

### ■ (1) Common natural capital risks and opportunities

Natural capital, including forests, soil, water resources, and biodiversity, plays a vital role as the foundation of social and economic activity. However, overdevelopment, pollution, and destruction of ecosystems have accelerated the degradation of natural capital, increasing the risk of compromised ecosystem services, such as food and water supply and climate regulation. This could potentially impact the resilience of local communities and the sustainability of the economy. Conserving and restoring natural capital requires enhanced policies, fund mobilization, and international cooperation, and is attracting increasing global attention as an issue of importance comparable to climate change.

The TNFD recommendations define natural capital risk as potential threats to an organization arising from its dependencies on and impacts on nature. More specifically, the recommendations define transition risk as the risk to organizations from inconsistencies among economic actors aiming to protect and restore nature and to reduce negative impacts on nature, and physical risk as the risk to organizations posed by natural degradation and the resulting loss of ecosystem services. Transition risks may be triggered by changes in regulations and policies, investor sentiment, consumer preferences, technology, and legal precedents, and include policy risks, market risks, technology risks, reputational risks, and liability risks. Physical risks may arise from changes in the biotic and abiotic states of nature that support healthy ecosystems and include acute risks from short-term changes in natural conditions and chronic risks from gradual changes.

The recommendations define natural capital opportunities as activities that generate positive outcomes for both organizations and nature through creating positive impacts or mitigating negative impacts on nature. The opportunities are classified into two categories: those related to corporate performance and those related to sustainability performance. Natural capital opportunities may arise when organizations avoid, reduce, mitigate, or manage natural capital risks, or when they actively work to halt and reverse the loss of nature through strategic transformation of business models, products, services, markets, or investments. Figure 2 summarizes these concepts.

**Figure 2: Common natural capital risks and opportunities**

Transition Risk	
Policy	Changes in policy conditions related to creating positive impacts on nature and/or mitigating negative impacts
Market	Changes in overall market dynamics, including shifts in consumer preferences (Example) Assets whose value has declined due to insufficient freshwater required for production processes
Technology	Substitution of products or services through reduced impacts on and/or dependence on nature (Example) Replacement of plastic with biodegradable containers
Reputation	Shift in perception regarding a company's impact on nature
Liability	Compensation liability risks arising directly or indirectly from legal claims
Physical risk	
Acute Risks	Occurrence of short-term events that alter natural conditions (Examples) Oil spills, forest fires, pest outbreaks affecting harvests
Chronic risks	Gradual changes in natural conditions (Examples) Pesticide use, pollution caused by climate change
Opportunities	
Corporate performance	
Market	Access to new markets and regions arising from shifts in consumer and investor preferences
Capital Flows and Fundraising	Capital markets, improved financing terms, and access to financial products related to creating positive impacts on nature and/or mitigating negative impacts
Resource Efficiency	Actions that avoid or reduce impacts on and dependence on nature while creating co-benefits such as improved operational efficiency and cost savings (Example) Micro-irrigation
Products and Services	Creation and provision of products and services for the protection, management, and restoration of nature, including technological innovation
Reputational Capital	Changes in perceptions regarding an organization's actual or perceived impacts on nature
Sustainability Performance	
Sustainable use of natural resources	Replacement of natural resources with recycled, reclaimed, renewable, and/or responsibly sourced organic materials
Protection, restoration, and regeneration of ecosystems	Activities supporting the protection, restoration, and recovery of habitats and ecosystems

(Source: Compiled by SMTAM from TNFD recommendations)

## ■ (2) Approach to natural capital risks and opportunities

We recognize that natural capital risks can impact our business through three channels: (1) deterioration in the value of investee companies, (2) loss of existing clients and missed opportunities to attract potential clients, and (3) decline in business continuity. These factors ultimately affect our financial performance and corporate sustainability.

Likewise, we view natural capital opportunities as ways to fulfill our fiduciary duties. We consider that leveraging these opportunities through strategic actions can lead to the expansion of our assets under management and enhance our business continuity and sustainability.

The TNFD requires disclosing companies to understand the dependency and impact on natural capital related to their business when constructing strategies, and to identify and disclose risks and opportunities. We utilized ENCORE\*1, recommended by TNFD, to analyze our portfolio's dependency and impact on natural capital and identify the risks and opportunities.

## ■ (3) Analyzing dependencies and impacts on natural capital, and identifying the risks and opportunities

ENCORE is a tool jointly developed by the Natural Capital Finance Alliance (NCFA), the United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), and others, to enable financial institutions to understand the extent of a company's dependency and impact on nature. Its unique feature is that it allows companies from a wide range of sectors to easily understand their dependencies and impacts on nature. As shown in Figure 3, the LEAP approach, which is recommended for use in TNFD disclosures, involves identifying the region (L4), environmental assets, ecosystem services, and impact drivers (E1) in the Locate and Evaluate phases, and identifying, measuring, and evaluating the dependencies and impacts (E2-E4). The use of ENCORE is recommended for this process.

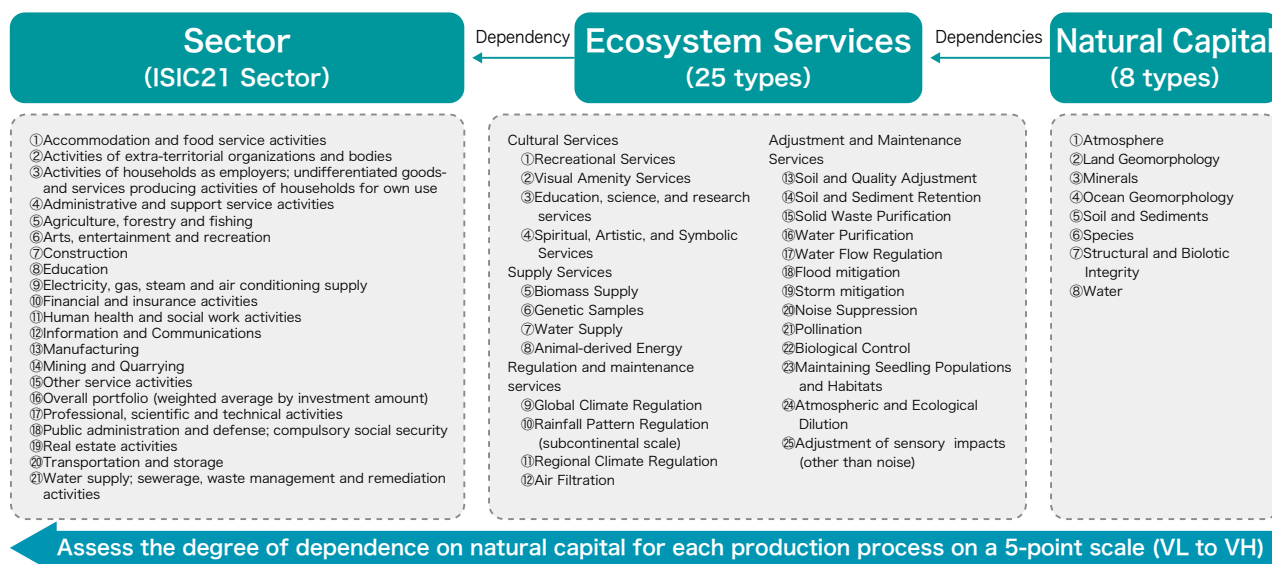
**Figure 3: LEAP Approach**

	Locate The interface with nature	Evaluate Dependencies and Impacts	Assess Risks and Opportunities	Prepare To respond and report
L1	<b>Span of the business model and value chain:</b> What are our organisation's activities by sector and value chain? Where are our direct operations?	<b>E1 Identification of environmental assets, ecosystem services and impact drivers:</b> What are the sectors, business processes or activities to be analysed? What environmental assets, ecosystem services and impact drivers are associated with these sectors, business processes, activities and assessment locations?	<b>A1 Risk and opportunity identification:</b> What are the corresponding risks and opportunities for our organisation?	<b>P1 Strategy and resource allocation plan:</b> What risk management, strategy and resource allocation decisions should be made as a result of this analysis?
L2	<b>Dependency and impact screening:</b> Which of these sectors, value chains and direct operations are associated with potentially moderate and high dependencies and impacts on nature?	<b>E2 Identification of dependencies and impacts:</b> What are our dependencies and impacts on nature?	<b>A2 Adjustment of existing risk mitigation and risk and opportunity management:</b> management processes and elements are we already applying? How can risk and opportunity management processes and associated elements (e.g. risk taxonomy, risk inventory, risk tolerance criteria) be adapted?	<b>P2 Target setting and performance management:</b> How will we set targets and define and measure progress?
L3	<b>Interface with nature:</b> Where are the sectors, value chains and direct operations with potentially moderate and high dependencies and impacts located? Which biomes and specific ecosystems do our direct operations, and moderate and high dependency and impact value chains and sectors, interface with?	<b>E3 Dependency and impact measurement:</b> What is the scale and scope of our dependencies on nature? What is the severity of our negative impacts on nature? What is the scale and scope of our positive impacts on nature?	<b>A3 Risk and opportunity measurement and prioritisation:</b> Which risks and opportunities should be prioritised?	<b>P3 Reporting:</b> What will we disclose in line with the TNFD recommended disclosures?
L4	<b>Interface with sensitive location:</b> Which of our organisation's activities in moderate and high dependency and impact value chains and sectors are located in ecologically sensitive locations? And which of our direct operations are in these sensitive locations?	<b>E4 Impact materiality assessment:</b> Which of our impacts are material?	<b>A4 Risk and opportunity materiality assessment:</b> Which risks and opportunities are material and therefore should be disclosed in line with the TNFD recommended disclosures?	<b>P4 Presentation:</b> Where and how do we present our nature-related disclosures?

(Source: TNFD recommendations)

In the TNFD framework, “dependency” indicates a state in which corporate activities are made possible by the benefits of natural capital through ecosystem services. “Ecosystem services” refer to the benefits, etc., obtained from natural capital that are essential for business operations, such as “provisioning services”—including the supply of raw materials and water—and “regulating services”—including water purification and disaster mitigation. As shown in Figure 4, ENCORE has a system that allows each sector’s relationship of “dependency” on natural capital through “ecosystem services” to be identified. ENCORE was updated in July 2024 to align with the latest TNFD recommendations and expand coverage to more industries. The new version is provided with expanded industry classification, ecosystem classification updates, and improved materiality assessment methods. The analysis in this report uses the new version of ENCORE, in which the industry sector classification has changed from the Global Industry Classification Standard (GICS, 11 major sectors) to the International Standard Industrial Classification (ISIC, 21 major sectors). The number of natural capital categories remains at eight, but several categories have been replaced, making it difficult to compare the results of this analysis with previous results.

Figure 4: Sectoral dependency pathways on natural capital



(Source: Created by SMTAM based on ENCORE)

ENCORE evaluates “dependency” on natural capital using a five-level scale<sup>\*2</sup>. Based on this framework, we quantified the “dependency” on natural capital through “ecosystem services” across 21 industrial sectors on a scale of 1 to 5, and constructed the heatmap shown in Figure 5. The darker the red in a cell, the greater the extent to which companies in that sector depend on the corresponding element of natural capital for their business activities.

By sector, in manufacturing, which represents a large portion (41.1%) of our portfolio, corporate activities were found to have a strong dependency on “structural and biotic integrity” (indicating the extent to which ecosystems maintain their natural state), “species,” and “water” among natural capital categories. Similarly, in information and communication (11.7%) and wholesale and retail trade (9.0%), a strong dependency on “structural and biotic integrity” was also found. From an overall portfolio perspective, the results also indicate that there is a high dependency on “structural and biotic integrity,” “species,” and “water.”

**Figure 5: Sectoral dependency on natural capital**

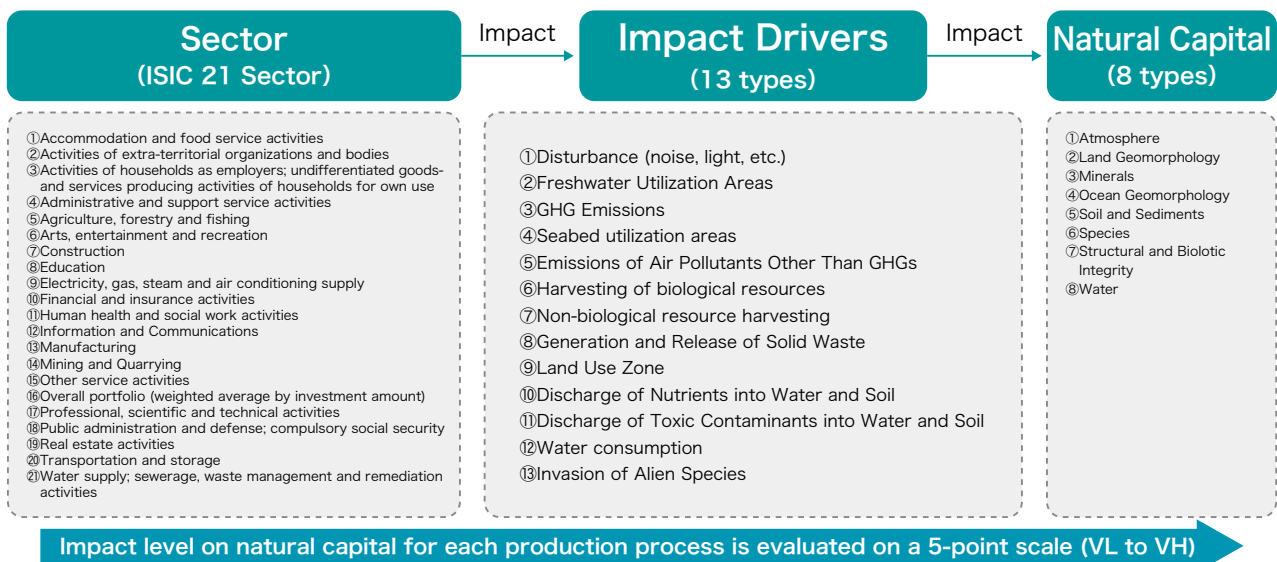
Sector / Natural Capital	Atmosphere	Land Geomorphology	Minerals	Ocean Geomorphology	Soil and Sediment	Species	Structural and Biologic Integrity	Water	Investment Amount Composition Ratio (%)
Manufacturing	Orange	Orange	Green	Orange	Green	Orange	Orange	Orange	41.1%
Finance and Insurance	Green	Green	Green	Green	Green	Green	Green	Green	17.7%
Information and Communications	Orange	Green	Green	Orange	Green	Orange	Orange	Orange	11.7%
Wholesale and Retail Trade; Automobile and Motorcycle Repair	Orange	Orange	Green	Orange	Green	Orange	Orange	Orange	9.0%
Real Estate	Green	Green	Green	Orange	Green	Orange	Orange	Orange	3.8%
Mining and Quarrying	Orange	Green	Green	Orange	Green	Orange	Orange	Orange	3.2%
Transportation and Warehousing	Orange	Orange	Green	Orange	Green	Orange	Orange	Orange	2.5%
Electricity, Gas, Steam, and Air Conditioning Supply	Green	Green	Green	Orange	Green	Orange	Orange	Orange	2.2%
Arts, Entertainment, and Recreation	Orange	Orange	Green	Orange	Green	Orange	Orange	Orange	2.2%
Professional, Scientific, and Technical Services	Orange	Orange	Green	Orange	Green	Orange	Orange	Orange	1.4%
Agriculture, Forestry, and Fishing	Orange	Orange	Green	Orange	Green	Orange	Orange	Orange	1.3%
Accommodation and Food Services	Orange	Orange	Green	Orange	Green	Orange	Orange	Orange	1.3%
Management and Support Services	Orange	Orange	Green	Orange	Green	Orange	Orange	Orange	1.2%
Health and Social Work	Orange	Orange	Green	Orange	Green	Orange	Orange	Orange	0.7%
Construction	Green	Green	Green	Orange	Green	Orange	Orange	Orange	0.5%
Water Supply, Sewage Treatment, Waste Management, and Purification Activities	Green	Green	Green	Orange	Green	Orange	Orange	Orange	0.3%
Education	Orange	Orange	Green	Orange	Green	Orange	Orange	Orange	0.0%
Public Administration and National Defense, Compulsory Social Security	Green	Green	Green	Orange	Green	Orange	Orange	Orange	0.0%
Activities of Extraterritorial Organizations and Bodies	Green	Green	Green	Orange	Green	Orange	Orange	Orange	0.0%
Household activities as employers, and production of non-separable goods and services for household own use	Green	Green	Green	Orange	Green	Orange	Orange	Orange	0.0%
Other service industries	Green	Green	Green	Orange	Green	Orange	Orange	Orange	0.0%
Our entire portfolio (weighted average by investment amount)	Orange	Orange	Green	Orange	Green	Orange	Orange	Orange	100.0%

(The darker the orange in a cell, the greater the "impact"; the darker the green, the smaller the impact.)

(Source: Created by SMTAM based on ENCORE)

In the TNFD framework, "impact" indicates the positive or negative changes that corporate activities have on natural capital through "impact drivers." While companies depend on "ecosystem services," they also change the state of nature by drawing water for factories or using pesticides in agriculture. The greater the "impact," the more natural capital is damaged, leading to larger business risks. As shown in Figure 6, ENCORE defines "impact drivers" as factors that have an "impact" on the state of nature. It sets 13 types of impact drivers and has a mechanism of evaluation of the "impact" of corporate activities on natural capital through these drivers.

**Figure 6: Sectoral impact pathways on natural capital**



(Source: Created by SMTAM based on ENCORE)

Figure 7 illustrates the degree of “impact” on natural capital by corporate activities across sectors. Following the ENCORE approach, which evaluates “impact” on natural capital using a five-level scale<sup>※2</sup>, we quantified impact on a scale of 1 to 5, the same as for “dependency,” and constructed a corresponding heatmap. The darker the red in a cell, the greater the “impact” that companies in that sector have on the applicable element of natural capital.

By sector, in manufacturing, which represents a large portion (41.1%) of our portfolio, corporate activities were found to have a strong “impact” on “structural and biotic integrity,” “species,” “water,” and “soil and sediment” among natural capital categories. From an overall portfolio perspective, “structural and biotic integrity,” “species,” “water,” and “soil and sediment” were also found to receive high impacts compared to other natural capital categories.

**Figure 7: Sectoral impact on natural capital**

Sector / Natural Capital	Atmosphere	Land Geomorphology	Minerals	Ocean Geomorphology	Soil and Sediment	Species	Structural and Biotic Integrity	Water	Investment Amount Composition Ratio (%)
Manufacturing	Orange	Light Green	Light Green	Light Green	Orange	Orange	Orange	Orange	41.1%
Financial and insurance activities	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	17.7%
Information and Communications	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	11.7%
Wholesale and retail trade; repair of motor vehicles and motorcycles	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	9.0%
Real estate activities	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	3.8%
Mining and Quarrying	Orange	Light Green	Light Green	Light Green	Orange	Orange	Orange	Orange	3.2%
Transportation and storage	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	2.5%
Electricity, gas, steam and air conditioning supply	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	2.2%
Arts, entertainment and recreation	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	2.2%
Professional, scientific and technical activities	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	1.4%
Agriculture, forestry and fishing	Orange	Light Green	Light Green	Light Green	Orange	Orange	Orange	Orange	1.3%
Accommodation and food service activities	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	1.3%
Administrative and support service activities	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	1.2%
Human health and social work activities	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	0.7%
Construction	Orange	Light Green	Light Green	Light Green	Orange	Orange	Orange	Orange	0.5%
Water supply; sewerage, waste management and remediation activities	Orange	Light Green	Light Green	Light Green	Orange	Orange	Orange	Orange	0.3%
Education	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	0.0%
Public administration and defence; compulsory social security	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	0.0%
Activities of extra-territorial organizations and bodies	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	0.0%
Activities of households as employers; undifferentiated goods- and services producing activities of households for own use	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	0.0%
Other service activities	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	0.0%
Overall portfolio (weighted average by investment amount)	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	100.0%

(The darker the orange in a cell, the greater the "impact"; the darker the green, the smaller the impact.)

(Source: Created by SMTAM based on ENCORE)

### ■ (4) Strategy

Based on the ENCORE analysis and related findings, we include investee companies with high “dependency” on structural and biotic integrity, species, and water, as well as companies that have a significant “impact” on “structural and biotic integrity,” “species,” “water,” and “soil and sediment,” as targets for engagement. Through this approach, we encourage investee companies to recognize natural capital risks and opportunities and to take appropriate action.

※1 Analysis conducted using ENCORE data as of June 2025.

※2 Five levels: VL, L, M, H, and VH. Each is quantified on a scale of 1 to 5.

## 3. Risk and Impact Management

### ■ (1) Natural capital risk management policy

The Board of Directors of Sumitomo Mitsui Trust Group, Inc., our parent company, has formulated “Action Guidelines for Preserving Biodiversity” as the Group’s basic policy regarding preservation of biodiversity. At

SMTAM, we have established a sustainability risk management policy that includes the concept of natural capital risks in our “Risk Management Policy,” which is determined by resolution of the Board of Directors. This policy clarifies the basic principles of sustainability risk management, defines various sustainability risks, and outlines the significance of sustainability-related risk management. It also specifies the roles and responsibilities of the Board of Directors, **executive committee**, and executive officers, as well as the organizational structure and a Three Lines of Defense system.

In addition, the separately established investment management business rules and other business-related rules stipulate that sustainability-related risks, including natural capital related to our assets under management, must be appropriately managed from the perspective of fiduciary duties, etc. In this way, we have constructed a comprehensive risk management system for corporate risks and risks related to our assets under management, including sustainability-related risks.

## ■ (2) Definition of natural capital risk

We define environmental risks, including natural capital risks, as risks in which either physical risks or transition risks have a cross-cutting impact on existing risk categories, thereby adversely affecting us, or where our own actions exert such impacts, causing adverse effects on our stakeholders. Physical risks refer to risks of physical damage to social infrastructure or natural systems, caused by environmental degradation such as climate change, resource depletion (e.g., water and food), loss of biodiversity, chemical pollution (e.g., soil and air pollution), and deforestation (e.g., desertification). Transition risks refer to risks arising from a rapid transition to an environmentally sustainable economy and society, driven by changes in environmental policies, shifts in financial market orientation and social attitudes toward the environment, and technological innovation.

We define sustainability-related risks in the assets under management, including natural capital risks, as risks in which medium- to long-term environmental, social, and governance issues act as risk drivers, exerting cross-cutting impacts on investment risks. Such risks may adversely affect the assets under management, or actions or characteristics of the assets under management may exert such impacts, thereby influencing investment risks and causing adverse effects on our stakeholders.

Specifically, our approach to natural capital is set out in our ESG Investment Policy as follows. “Natural capital: Economic activities depend greatly on natural capital. Misuse of natural capital, which mainly includes raw materials, makes it impossible to use such resources sustainably, and is also a threat to the continuous prosperity of society. Therefore, it is necessary not just to put a stop to their depletion, but to restore natural capital in order to maintain a sustainable society. We especially recognize the importance of conserving forests that act as a carbon sink, which helps with biodiversity as the foundation of ecosystem services that support society and the economy, and addresses climate change. We also understand that such issues can occur anywhere in the supply chain. We will reflect the status of biodiversity and the sustainable use of natural capital and resources such as forests, water, minerals, and agriculture, forestry, and fisheries into our ESG investments.”

## ■ (3) Identification of natural capital risks and organizational process for our management

In order to manage natural capital risks, the Board of Directors has formulated a risk management policy and risk management plan for sustainability-related risks, including natural capital risks (hereinafter referred to as “sustainability-related risks”), based on the Risk Management Policy. The **executive committee** establishes and reviews systems for monitoring sustainability-related risks, formulates a risk appetite framework for sustainability-related risks, and sets greenhouse gas emissions reduction targets. The management team is aware that neglecting risk management related to sustainability will have a major impact on the achievement of the company’s strategic objectives and takes sustainability-related risks into consideration in its risk management. We have adopted a Three Lines of Defense system for managing sustainability-related risks.

The first line of defense consists of departments directly conducting operations. They are tasked with understanding sustainability-related risks faced by stakeholders, including clients and employees, from a medium- to long-term perspective. In addition, they collaborate with stakeholders to consider approaches

to addressing sustainability-related risks (engagement), identify opportunities related to sustainability, and work to develop products and expand the client base based on those opportunities. These departments take the lead in risk-taking, risk identification, risk evaluation, and risk control, based on our risk appetite and policies for sustainability-related risks. They also accurately report the status of risk management operations to the second line of defense.

The second line of defense formulates management policies for sustainability-related risks within the company, creates risk management plans, and has them adopted by the **executive committee** and Board of Directors. Operating independently from the first line, the second line of defense monitors, checks, and advises on the first line's risk identification, risk evaluation, and risk control for sustainability-related risks, and also supports the first line's control activities.

The third line of defense conducts internal audits as necessary to evaluate the effectiveness of the sustainability-related risk management system, operating independently of the risk management systems of the first and second lines in the company.

Regarding sustainability-related risks in assets under management, including natural capital risks, in addition to the investment risk management in the market front departments as the first line and in the middle office as the second line, stewardship activities are examined and monitored by the Sustainability Committee. The status of consideration of ESG factors, including natural capital risks, in investments is monitored quarterly by the Committee. This report is also submitted to the Committee, which provides governance regarding the disclosure of natural capital-related financial information.

The Sustainability Committee includes not only the investment management department, such as the Stewardship Development Department, but also the Investment Risk Management Department, an independent and specialized department for monitoring. The Committee's deliberations are reported, as necessary, to the **executive committee** for deliberation there, and as necessary the **executive committee** reports to the Board of Directors for deliberation there. In this way, a comprehensive and multi-layered risk management framework is established company-wide. The effectiveness of natural capital risk management is enhanced by these structures, roles, and processes.

#### ■ (4) Contributing to risk management through engagement activities with investee companies, exercise of voting rights, and investment decisions taking natural capital factors into consideration

##### (Identification of natural capital risks as ESG materiality)

Our ESG Investment Policy defines natural capital as one of 12 ESG materiality items. ESG materiality refers to ESG issues, including natural capital, which we consider important in promoting the value enhancement and sustainable growth of our investee companies. We take this ESG materiality into consideration when conducting ESG evaluation of our investee companies and when implementing ESG investments, including engagement activities and the exercise of voting rights.

ESG materiality is reviewed annually by the Sustainability Committee based on ESG regulations of the authorities, and information obtained through participation in various initiatives and dialogue with stakeholders. If it is determined that a revision or deletion is necessary, a resolution is raised at the **executive committee**. Therefore, our engagement, exercise of voting rights, and investment decision-making take into consideration the ESG materiality we have identified, enabling us to identify and respond to natural capital risks.

##### (Engagement)

Our approach to engagement is described in detail in the TCFD disclosure part of this report, so please refer to it. For our engagement initiatives related to natural capital, please refer to the columns below.

### **Case study 1. Engagement with a retail company, requesting the establishment of targets and strengthened efforts for sustainable timber procurement**

The retail company manufactures and sells timber products and is working to improve traceability for sustainable timber procurement. Since international business expansion is a core growth strategy for the company, we asserted that stronger efforts would be necessary with the EU Deforestation Regulation (EUDR) slated to take effect at the end of 2024 and shared our understanding of this challenge with the company.

We referenced the Forest 500 assessment, an indicator referenced by global investors, explaining that the company had received a low rating and communicating the need to establish targets for improving traceability and disclose progress. The company is building a traceability system, although full compliance with the EUDR has not yet been achieved, and it also stated that it intends to pursue best practices from other companies as a future goal. In its subsequent integrated report, the company announced a new environmental vision with 2050 as its goal. As its FY2030 interim target for sustainable timber procurement, it set a goal of 100% timber procured with environmental and social considerations in mind and disclosed its policy for this initiative.

### **Case study 2. Request for the strengthening of initiatives toward sustainable natural rubber procurement using SPOTT assessment**

Our three offices, located in London, New York, and Tokyo, are working together on a global comparison of the natural rubber sector using the SPOTT assessment. Based on the combined assessment results from these three offices, we have begun encouraging tire manufacturers in different regions to enhance efforts toward sustainable natural rubber procurement.

Specifically, we are conducting engagement with a Japanese tire manufacturer. We have identified four concrete issues through comparison with European companies that have advanced in this area, in order to enable in-depth engagement. When we presented issues, such as improving traceability ratios, strengthening efforts to secure supplier commitments on eliminating natural ecosystem degradation, and enhancing human rights protections for rights holders such as indigenous peoples, local communities, and smallholders, the tire manufacturer provided concrete and detailed responses regarding current progress and future plans. We consider that the manufacturer has attained sufficient understanding to address areas where it lags behind peers and expect to see meaningful improvements going forward.

### **Case study 3. Engagement with a semiconductor manufacturer to address water risk**

Semiconductor demand is expected to grow rapidly due to increased use of AI and digitalization, but significant volumes of water are consumed in ultrapure water cleaning during various stages of ultrafine circuit fabrication. Through collaboration with initiatives and independent engagement, we engage with global semiconductor manufacturers.

Specifically, we engaged with a Japanese semiconductor manufacturer as part of a collaborative engagement with Ceres to discuss water risk mitigation and the importance of disclosure with the manufacturer's dedicated teams. In addition, through our individual engagement, we communicated to the manufacturer's management team the importance of collaboration with local governments on water resource conservation given that the manufacturer's semiconductor site is becoming a cluster for other companies' semiconductor facilities, and we also shared concerns regarding corporate-level water risk management and monitoring frameworks. Since early 2025, we have conducted a collaborative engagement with Ceres on possibilities for establishing watershed integrity data through industry-academia cooperation and on water quality conservation. Additionally, we initiated an individual engagement with Apple, a major customer of the Japanese semiconductor manufacturer, to promote water resource management across the value chain.

**Column 2 | Our collaborative engagements regarding natural capital risks**

As shown in Figure 8, we are actively conducting collaborative engagement activities related to natural capital with overseas companies and foreign governments through participation in international initiatives. For example, the Investor Policy Dialogue on Deforestation (IPDD) is an initiative for engagement with governments of countries at high risk of deforestation regarding policies to protect forest resources and is supported by 84 global institutional investors<sup>※3</sup>. Through this initiative, we have consistently called on the governments of Brazil and Indonesia, countries with extensive tropical rainforests, to strengthen policies to restrict unregulated land use and development. The results have included restrictions on slash-and-burn land reclamation in Brazil and the implementation of measures to avoid deforestation through the establishment of sustainable finance guidelines in Indonesia. In 2025, we hosted a public seminar at the Indonesia Stock Exchange (IDX) with over 100 participants from listed Indonesian companies interested in natural capital disclosure. Together with other global investors, we delivered presentations emphasizing the importance of natural capital disclosure, including forest conservation. At the same time, we engaged with Indonesian government agencies to discuss the importance of forest conservation and the role of disclosure and finance.



An open seminar about Nature Capital Disclosure at IDX

Also, at UNFCCC-COP26, the Conference of the Parties to the United Nations Framework Convention on Climate Change, the Financial Sector Deforestation Action (FSDA) was established with the aim of protecting forest resources in the supply chains of soft commodities, such as beef, soybeans, palm oil, paper and pulp, etc. By participating in this initiative, we are conducting collaborative engagement with companies that handle major grains, aiming to reduce and avoid deforestation risks by 2025. Additionally, we are expanding the scope of our engagement activities, such as calling on local financial institutions that have influence over these companies to avoid deforestation risks in their supply chains.

**Figure 8: Our collaborative engagements regarding natural capital**

Initiative Name	Activity Details
<b>IPDD</b> (The Investors Policy Dialogue on Deforestation)	An initiative involving global asset managers that engages with governments in countries with high deforestation risk to promote forest resource protection policies. Recognizing that forest resources play a crucial role in climate change as carbon sinks (carbon dioxide absorption sources), it conducts collaborative engagement with governments of countries like Brazil and Indonesia, which have extensive tropical rainforests, to strengthen policies restricting disorderly land use and development.
<b>FSDA</b> (Financial Sector Deforestation Action)	An initiative aimed at protecting forest resources within the supply chains of soft commodities such as beef, soy, palm oil, and paper/pulp. It engages major grain-handling companies to reduce or avoid forest destruction risks by 2025. It also requests financial institutions with local influence to avoid risks within their supply chains.
<b>Nature Action100</b> (NA100)	A collaborative engagement initiative targeting the Global 100 companies with the greatest dependence on and impact to natural capital. Similar to Climate Action 100+ (CA100+), it aims to halt and reverse the loss of nature and biodiversity by 2030.
<b>FAIRR</b> (Farm Animal Investment Risk and Return)	Focusing on environmental issues, labor issues, antimicrobial resistance, and climate change challenges within the global food sector, we are implementing collaborative engagement to minimize risks across the broad food value chain and promote responses to related business opportunities.

(Source: Compiled by SMTAM from various materials)

At the United Nations Biodiversity Conference (COP15) held in December 2022, the international initiative Nature Action 100 (NA100) was established by NGOs and institutional investors. The aim of NA100 is to halt and reverse the loss of nature and biodiversity by 2030 through collaborative engagement with 100 global companies that have a high dependency or impact on natural capital. Activities began in earnest from September 2023 onwards, and we have been participating from the beginning. Specifically, we have been requiring investee companies in eight major sectors to evaluate their dependency and impact on natural capital, set targets and disclose progress, ensure that their boards of directors manage and oversee natural capital restoration, verify their initiatives, and engage in dialogue with their stakeholders. In addition to our NA100 activities, we are strengthening our initiatives to maintain and restore natural capital.

As demonstrated through ENCORE analysis, our portfolio depends on and impacts natural capital such as species and water. Recently, concerns over declining fishery resources due to overfishing and illegal fishing operations have prompted global momentum to improve supply chain traceability to protect fishery resources and enhance sustainability. In 2023, FAIRR launched a collaborative engagement called Seafood Traceability Engagement, and we joined it in 2025 and have since engaged with fishery companies.

※3 As of the end of June 2025.

### **(Exercise of voting rights)**

Our approach to engagement is described in detail in the TCFD disclosure part of this report, so please refer to it. In our approach to exercising voting rights, we might consider voting against companies with significant ESG issues, including those related to natural capital, if they do not respond to our requests for engagement or if there is no improvement despite ongoing engagement efforts.

### **(Incorporating ESG factors into investment decision-making)**

Our approach and efforts regarding the incorporation of ESG factors into investment decision-making are described in detail in the TCFD disclosure part of this report, so please refer to it.

## **■ (5) Natural capital risks of investee companies and managed portfolio**

We identify and analyze the natural capital risks of investee companies through our own corporate research, our in-house ESG scores, and engagement activities, and incorporate this information into our investment decisions. Regarding the natural capital risks of our portfolio, we identify and analyze them through the analytical functions of ISS, due diligence on foreign investment trust companies included in our fund of funds, etc. These findings are monitored by the Sustainability Committee and are reported to executive committees or the Board of Directors as necessary.

In this way, we have established processes to identify, evaluate, and manage natural capital risks, and monitor them through our integrated risk management process.

## **■ (6) Natural capital risk evaluation in our portfolio**

Since declaring as an Early Adopter, and as a first step in managing the natural capital risks, we have been using the ISS database to quantitatively identify the natural capital risks in our portfolio (our own managed portion of assets under management, excluding Japanese and foreign sovereign bonds). The following is an overview explanation of the analysis.

### **A. Dependency and Impact analysis on natural capital risks in our portfolio**

When analyzing the natural capital risks in our portfolio, while ENCORE analysis allows for understanding the dependency and impact on natural capital by sector, it does not sufficiently evaluate or analyze the investment amount by sector. Therefore, to complement the ENCORE analysis, we utilized the Biodiversity Impact Assessment Tool (BIAT)<sup>\*4</sup> provided by ISS to quantify the natural capital risk of our portfolio (based on the portfolios as of March 31, 2025 and March 31, 2024, analyzed using ISS data as of June 2025 and September 2024).

#### **(a) Dependency analysis**

BIAT classifies investee company revenue into the three ecosystem service functions of provisioning, regulation and maintenance, and cultural, which indicate where companies depend on ecosystems, then measures the degree of dependency on each function as a composition ratio. The provisioning function refers to the materials and labor provided by natural capital, such as animals, plants, and water. The regulation and maintenance function involves natural capital's role in mitigating natural disasters, such as storm and flood damage, and maintaining the natural environment. The cultural function refers to all the non-material benefits that humans receive from ecosystems, such as ecotourism.

Across the whole portfolio, dependency on the regulation and maintenance function was highest at 69%, followed by the provisioning function at 23% and the cultural function at 8%. A comparison with the reference index showed that the composition ratios of Japanese equity and foreign equity were approximately the same as the reference index, while those of Japanese bonds and foreign bonds had relatively large deviations from the reference index (the upper table in Figure 9).

BIAT can also be used to classify these three functions into 22 ecosystem services to obtain ratios on the degree of dependency. The lower chart in Figure 9 analyzes the degree of dependency by ecosystem service for our portfolio in 2025, showing the top six ecosystem services with the largest composition ratios. The ecosystem service with the largest composition ratio was surface water, followed by

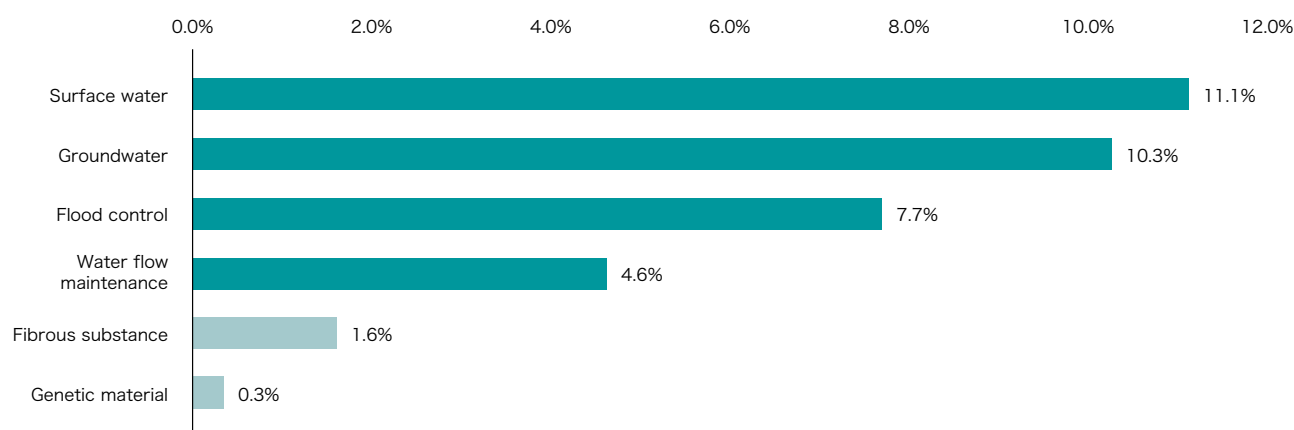
groundwater, flood control, and water flow maintenance. Together, these four categories total 33.7%, revealing that the businesses of investee companies in our portfolio depend heavily on water-related ecosystem services.

**Figure 9: Dependency of our portfolio on ecosystem services by asset and degree of dependency by service**

Dependency on Ecosystem Services

(Unit: %)	Proportion			Reference Composition		
	Provisioning	Regulation & Maintenance	Cultural	Provisioning	Regulation & Maintenance	Cultural
Japanese Equity	24	69	7	2	-1	-1
Japanese Bonds	17	78	5	-4	6	-2
Foreign Equity	22	72	6	1	-1	0
Foreign Bonds	8	89	3	-5	6	-1
Overall Portfolio	23	69	8	-	-	-

Dependency by Ecosystem Service (Unit: %)

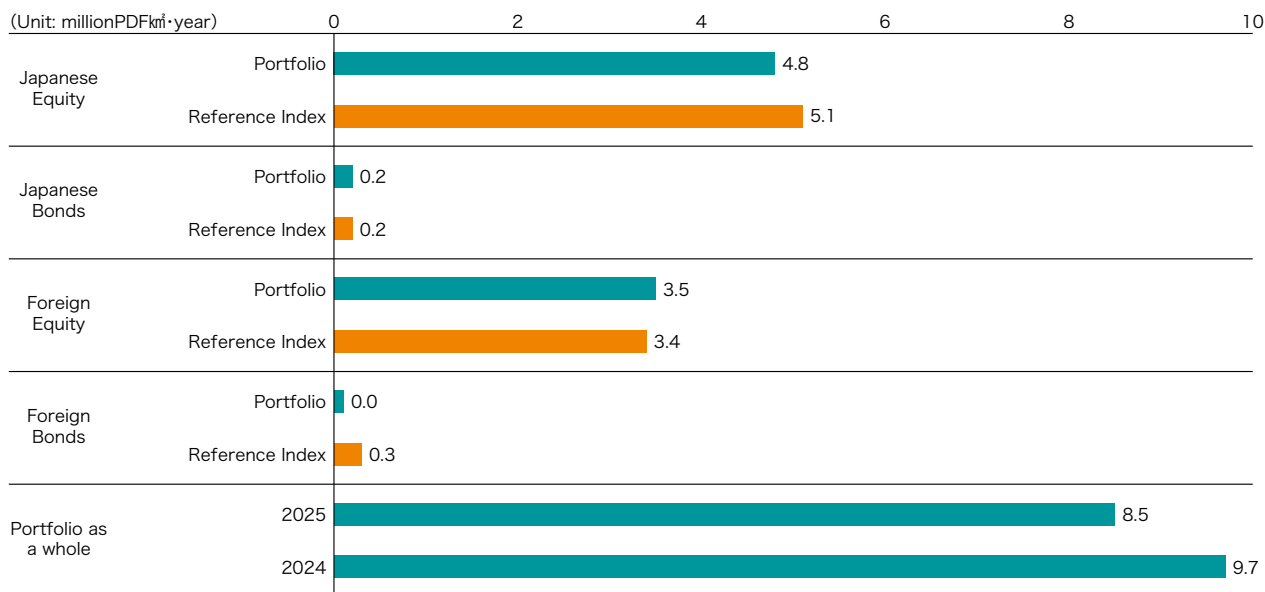


(Source: Created by SMTAM based on BIAT)

**(b) Impact analysis**

Here, we analyze the impact of our equity and bond portfolio on natural capital based on the “Potentially Disappeared Fraction of Species (PDF)<sup>\*\*5</sup>,” one of the indicators used to quantify the natural capital risk of a portfolio. PDF is an indicator for measuring the impact on natural capital in units of km<sup>2</sup>/year. For example, a value of 100 PDF km<sup>2</sup>/year indicates an impact on natural capital in which biodiversity in a 100 km<sup>2</sup> area on Earth may be completely lost within a year. A larger PDF indicates a greater impact on natural capital. Figure 10 shows the impact of our portfolio on natural capital using the PDF indicator. The total impact on natural capital from our entire portfolio as of the end of March 2025 was 8.5 million PDF km<sup>2</sup>/year, showing a slight decrease from 9.7 million PDF km<sup>2</sup>/year in 2024. A primary reason for this is the decline in investment weight in companies with large PDF values, such as grain majors. Also, the impact of the three asset classes other than foreign equity was shown to be the same or lower compared with the reference index.

**Figure 10: Analysis of impact on natural capital (PDF) by asset**<sup>1\*\*5\*\*6</sup>

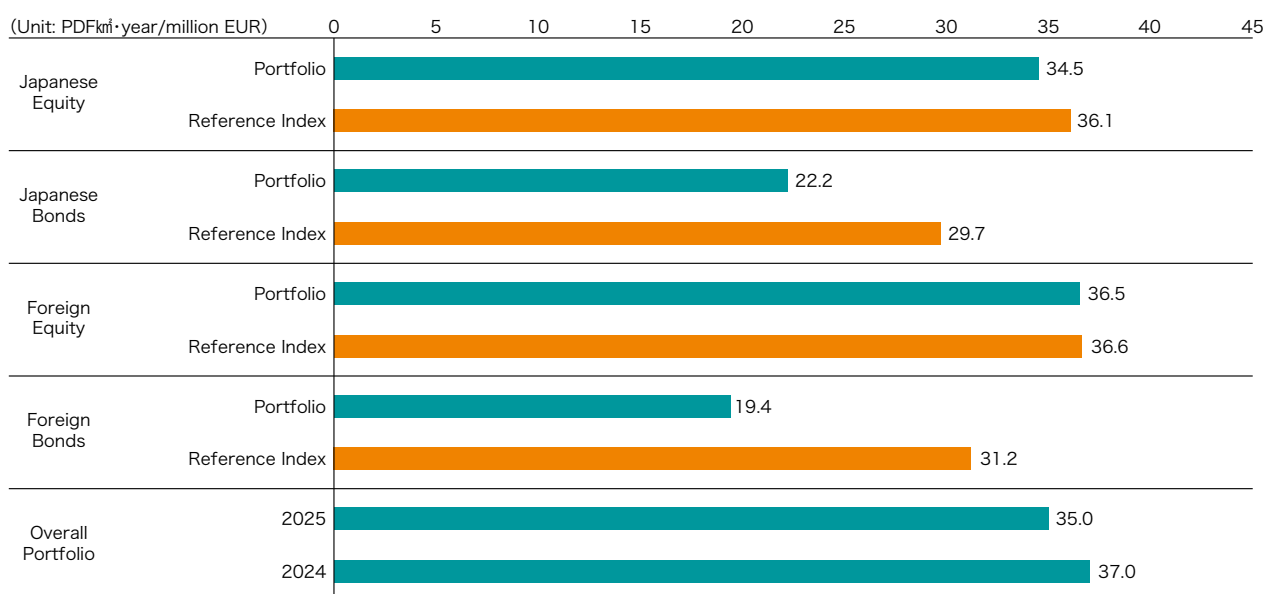


(Source: Created by SMTAM based on BIAT)

The upper chart in Figure 11 shows the analysis results of the impact of our portfolio on natural capital, based on the weighted average PDF intensity. This intensity is calculated from the PDF per unit of sales of each investee company, weighted by the investment weight of the companies in the portfolio. This indicator corresponds to the WACI used in climate change analysis. As of the end of March 2025, the weighted average PDF intensity of our entire portfolio was 35.0 PDF km<sup>2</sup>/year per million euros, down from 37.0 PDF km<sup>2</sup>/year per million euros in 2024. Also, the impact of all asset classes on natural capital was shown to be lower compared with the reference index.

Next, the lower table in Figure 11 shows contribution by sector. The decrease in weighted average PDF intensity was particularly large for consumer staples, materials, information technology, and industrials.

**Figure 11: Weighted average PDF intensity analysis and sectoral contribution analysis by asset**<sup>1\*\*5\*\*6</sup>



(Source: Created by SMTAM based on BIAT)

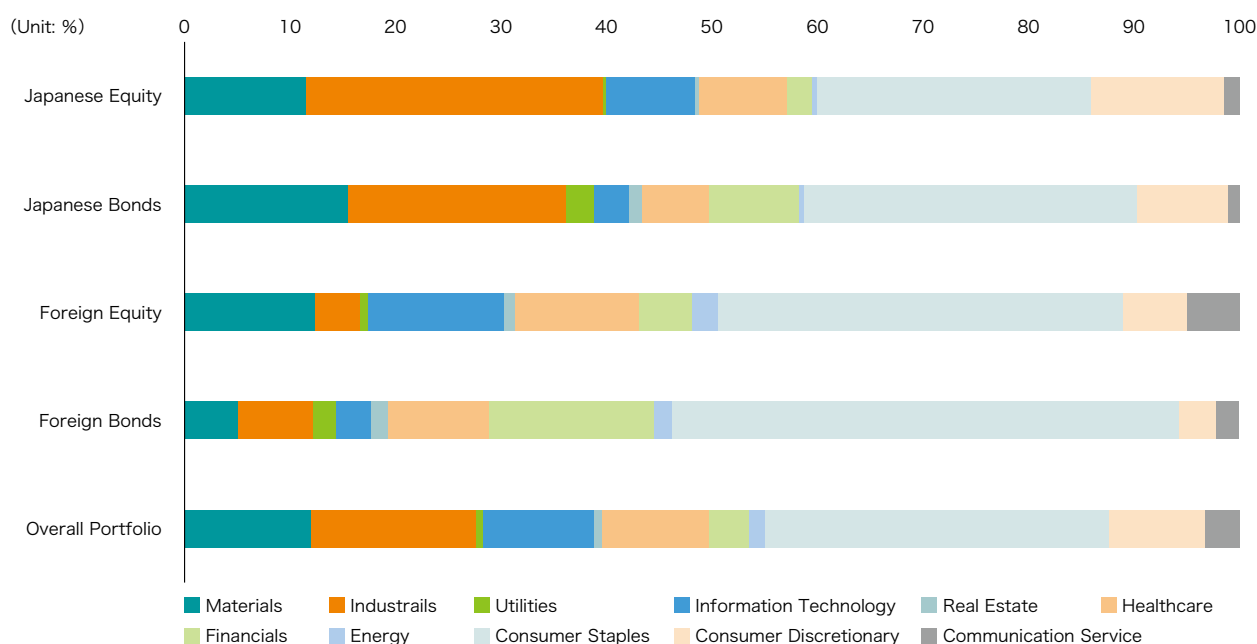
PDF Intensity Contribution Analysis by Sector

Sector	2024	2025	Change
Consumer Staples	12.2	11.4	-0.8
Materials	4.7	4.2	-0.5
Information Technology	4.2	3.7	-0.5
Industrails	5.9	5.5	-0.4
Healthcare	3.7	3.5	-0.2
Other	6.2	6.7	0.5
Total	37.0	35.0	-2.0

(Source: Created by SMTAM based on BIAT)

Figure 12 shows the sectoral composition ratio of the weighted average PDF intensity for each asset class. Across the portfolio, the sectors with higher composition ratios were consumer staples, industrials, and materials, with these three sectors together accounting for 60.3% of the weighted average PDF intensity. When looking at asset classes individually, it is also clear that the impact on natural capital was significant in the three sectors: consumer staples, industrials, and materials. For Japanese equity and domestic bonds, the impact on natural capital by the industrials and material sectors was shown to be relatively large, while for foreign equity and foreign bonds, the impact by the consumer staples sector was relatively large.

Figure 12: Sector composition of weighted average PDF intensity by asset\*\*5



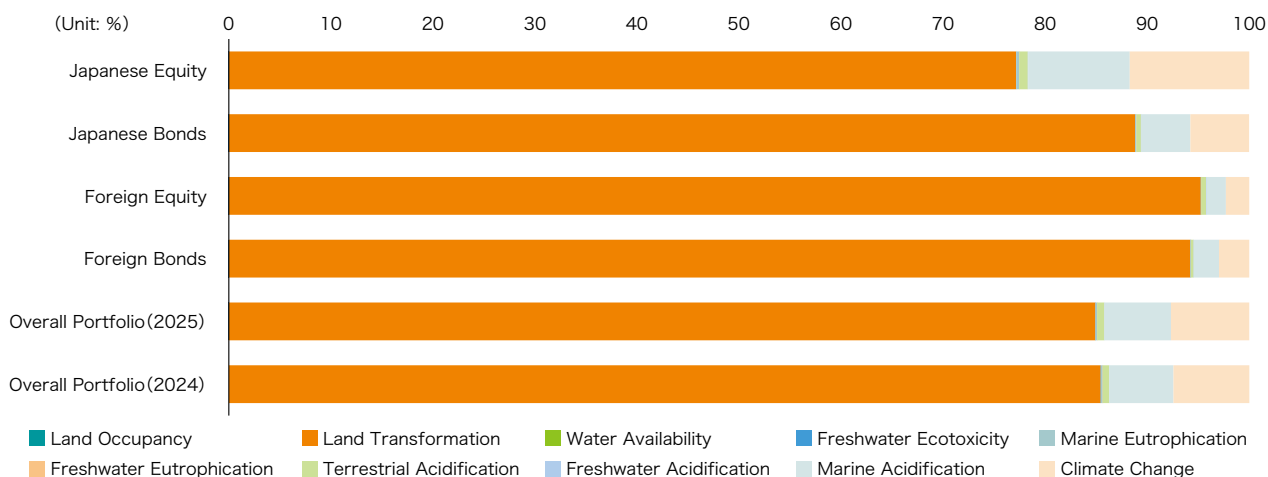
(Source: Created by SMTAM based on BIAT)

The upper chart in Figure 13 illustrates the relative contribution of impact drivers through which our portfolio affects natural capital. BIAT defines ten types of impact drivers that affect natural capital, including land transformation, climate change, and marine acidification. The graph shows the composition of these drivers based on the weighted average PDF intensity, indexed to 100 for the overall portfolio and for each of the four asset classes. A higher percentage indicates a greater contribution to the portfolio's overall impact on natural capital. In the whole portfolio, land transformation was shown to be the greatest impact driver, followed by climate change and marine acidification. Looking at asset classes individually, even though the extent varies (for example, Japanese equity shows relatively greater impacts from climate change and marine acidification), land transformation, climate change, and marine acidification were identified as the

primary impact drivers across all asset classes. In this context, land transformation refers to the development of forests into farmland or urban areas and can be considered synonymous with deforestation. The lower table of Figure 13 presents an analysis by impact driver of the factors behind the year-over-year decrease (see Figure 10) in our portfolio's impact on natural capital (PDF, km<sup>2</sup>/year). The analysis revealed that land transformation contributed most significantly to the reduction, followed by climate change and water-related drivers (marine acidification, marine eutrophication, freshwater acidification, freshwater ecotoxicity).

**Figure 13: Magnitude of impact drivers on natural capital by asset and contribution analysis by impact driver**

Magnitude of Drivers Related to Impact on Natural Capital by Asset



Contribution Analysis by Impact Driver (Unit: PDFkm<sup>2</sup>·year)

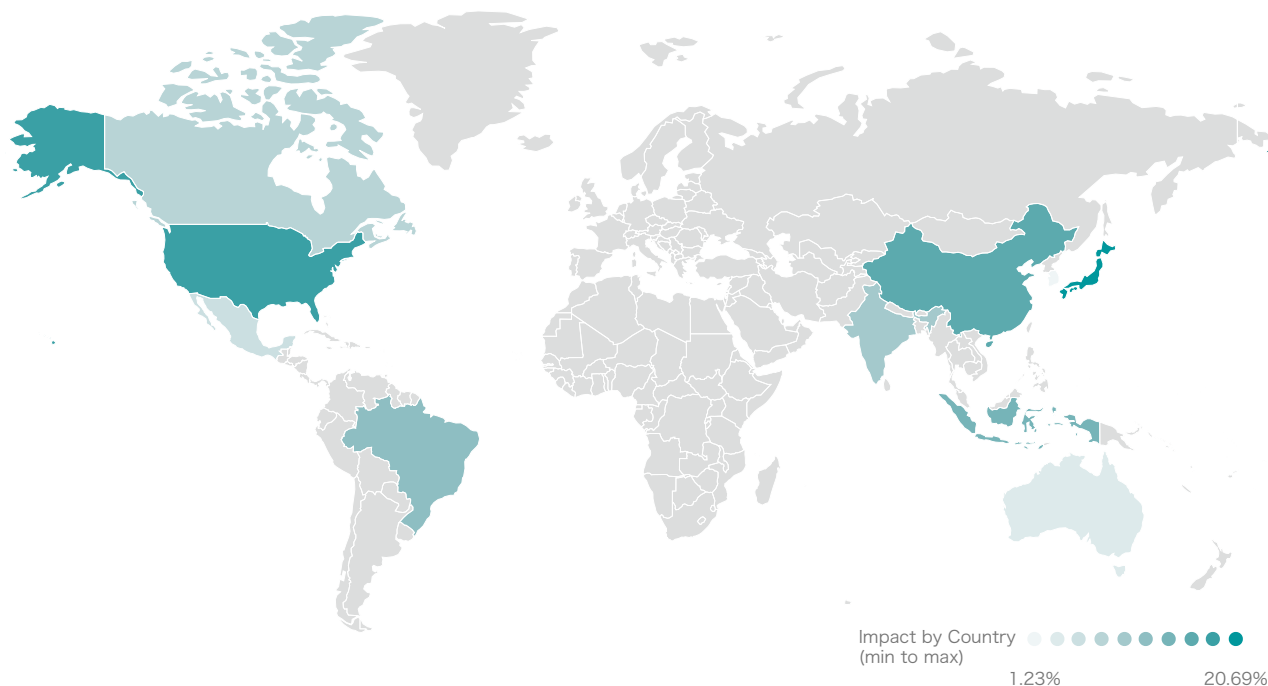
Impact Drivers	2024	2025	Change
Land Occupancy	957	903	-54
Land Transformation	7,648,533	6,650,408	-998,125
Water Availability*	0	0	-0
Freshwater Ecotoxicity*	1,679	1,519	-160
Marine Eutrophication*	13,597	12,237	-1,360
Freshwater Eutrophication*	4	3	-0
Terrestrial Acidification	58,881	54,440	-4,441
Freshwater Acidification*	3,546	3,368	-178
Marine Acidification*	560,638	507,913	-52,725
Climate Change	662,979	600,617	-62,362
Other	756,298	666,640	-89,658
Total (PDF)	9,707,110	8,498,047	-1,209,063

※Water-Related Drivers Total:-54,423

(Source: Created by SMTAM based on BIAT)

Figure 14 shows the ten countries with the highest share in the portfolio's overall PDF: the US, Japan, China, Indonesia, Brazil, Mexico, India, Canada, Australia, South Korea. These countries have a significant impact on the natural capital of our portfolio, with darker colors indicating a greater impact. Despite having a small investment weight in the portfolio, emerging countries such as China, Indonesia, Brazil, Mexico, and India rank high in terms of impact, indicating that the PDF intensity in these countries is high and that corporate activities in those countries have a significant impact on natural capital.

Figure 14: Countries with high impact on natural capital<sup>※5</sup>



(Source: Created by SMTAM based on BIAT)

## B. Analysis results for risk and impact

From the perspective of portfolio management, the sectors in which we have the greatest impact on natural capital have been identified as consumer staples, industrials, and materials. Under GICS classification, industrials and materials correspond to manufacturing under ISIC classification, while consumer staples correspond to wholesale and retail trade. In light of this, the analysis results align with the ENCORE analysis findings. It has also been shown that the main drivers of our portfolio's impact on natural capital are land transformation, such as deforestation, and climate change driven by GHG emissions. Furthermore, the countries with a high impact on natural capital are not only those with large investment amounts, such as Japan and the US, but also emerging countries like China, Indonesia, Brazil, Mexico, and India.

※4 BIAT provides indicators such as PDF based on a vast amount of corporate natural capital data.

※5 An indicator reflecting biodiversity impact (PDF km<sup>2</sup>/year). It is calculated by multiplying the holdings of constituent stocks by their PDF km<sup>2</sup>/year.

※6 The following are the reference indices used:

Japanese Equity: Tokyo Stock Price Index (TOPIX)

Japanese Bonds: NOMURA-BPI Overall (Corporate bonds only)

Foreign Equity: MSCI-ACWI (ex Japan)

Foreign Bonds: Bloomberg Global Overall (excluding Japan) (Corporate bonds only)

## 4. Metrics and targets

We have started managing natural capital risks in our portfolio using tools such as ENCORE and various indicators such as PDF (see reference below), in accordance with the strategies and risk management processes required by the TNFD, and have worked to enhance and enrich our disclosure content by incorporating dependency and impact analysis based on the updated version of ENCORE, as well as by adding supplemental analysis and engagement case studies on the water sector, where high burdens were identified through the dependency and impact analysis. However, we consider these metrics to still be in a developmental stage. Therefore, we will continue discussions and preparations for future disclosures regarding portfolio-related metrics and targets, taking into consideration the core global metrics (proposed by TNFD) and other frameworks.

# Plans for the Future

The damage and loss of natural capital not only negatively impact society and daily life but also lead to economic losses for many industries and companies. As information disclosure regarding natural capital becomes more widespread, institutional investors will increasingly focus on integrating its consideration into corporate valuation, potentially reducing risks associated with natural capital. Also, natural capital significantly affects the corporate value of companies and the value of the investments of institutional investors. Therefore, deepening understanding and dialogue on both sides will be essential to improving future corporate value and investment returns. This is also considered beneficial from the perspective of diversifying investment fields.

As a responsible institutional investor, we are contributing to halting the decline of natural capital and restoring it through the various measures and activities introduced in this document. In doing so, we aim to maintain and improve the medium- to long-term investment returns of our clients (beneficiaries) and commit to disclosing information so that stakeholders can understand these activities. This information disclosure is based on information and methods available at present. However, improvements are expected in analysis methods, data, metrics, and the types and granularity of disclosed information, so we will continue to review and improve these as appropriate. At the same time, we will also continue to explore how to utilize these analysis results in our engagement activities and other efforts.

# Reference

## List of TNFD-related metrics (overall portfolio basis)

Drivers of Natural Change	Indicator	Metrics	Overall Portfolio	Portfolio Coverage (%)
Climate Change	GHG Emissions	GHG Emissions (tCO <sub>2</sub> e) (Scope1 / Enterprise Value (million EUR))	14,489,584	94.0
		GHG Emissions (tCO <sub>2</sub> e) (Scope2 / Enterprise Value (million EUR))	3,806,417	94.0
		GHG Emissions (tCO <sub>2</sub> e) (Scope3 / Enterprise Value (million EUR))	248,503,409	94.0
		GHG Emissions (tCO <sub>2</sub> e) (Scope1+2+3 / Enterprise Value (million EUR))	266,799,411	94.0
Pollution/ Pollution Removal	Total Non-GHG Air Pollutants	Total air emissions (Metric Tonnes) / EVIC* <sup>1</sup> (million EUR)	0.02	5.6
	Wastewater Discharge	COD** <sup>2</sup> Emissions / EVIC* <sup>1</sup> (million EUR)	0.00	2.5
	Waste Generation and Disposal	Hazardous Waste (t) / EVIC* <sup>1</sup> (million EUR)	0.98	26.6
Resource Use/ Replenishment	Water Withdrawal and Consumption from Areas of Water Stress	Freshwater Use Intensity (m <sup>3</sup> / Revenue (million EUR))	311	28.5
		Companies without water management policies (number of issuers)	909	41.1
State of Nature	Risk of species extinction	Companies with controversies affecting threatened species (number of issuers)	9	89.7

※1 EVIC: EVIC: Abbreviation for Enterprise Value Including Cash. EVIC = Market capitalization (common stock, preferred stock, and other classes of stock) + interest-bearing debt (book value) + noncontrolling interest (book value)

※2 COD: The amount of oxidant consumed in the oxidation of organic matter and other substances in water by an oxidant, converted into the amount of oxygen. A typical indicator of water pollution.





**SUMITOMO MITSUI TRUST ASSET MANAGEMENT**

Inquiries

**Sumitomo Mitsui Trust Asset Management Co., Ltd.**  
Stewardship Development Department ([ss\\_office\\_hp@smtam.jp](mailto:ss_office_hp@smtam.jp))  
Please send any inquiries regarding this Stewardship Report to the above email address.