



SMBC Group

# 2020 TCFD Report

The SMBC Group's Climate Change Initiatives

August 2020

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# 1. Approach to climate change

Addressing climate change is one of the foremost global issues of the 21st century. In 2016, the Paris Agreement came into effect, setting the long-term target of keeping global average temperature rise within 2°C above pre-industrial levels. Each country has submitted its own target for reducing greenhouse gas emissions to the United Nations and has since been implementing countermeasures. The Japanese government is also aiming to achieve an 80% reduction in greenhouse gas emissions by 2050, and promotes various measures such as a focus on renewable energy.

The SMBC Group (hereinafter, the “Group”) announced its support for the Task Force on Climate-related Financial Disclosures (TCFD) at the One Planet Summit held in Paris in December 2017. Below we have outlined how the Group's policies on climate change, which are aimed at developing a sustainable society and align to the four basic recommendations put forward by the TCFD: “Governance,” “Strategy,” “Risk Management,” and “Metrics and Targets.”

**<Figure 1-1> Status of measures to address the TCFD recommendations**

Item	Recommended disclosure	Status of initiatives
Governance	Organizational governance of climate-related risks and opportunities	<ul style="list-style-type: none"> <li>Established the Group Environmental Policy</li> <li>Reflected response to climate change in management strategies in the Corporate Sustainability Committee</li> <li>Reported climate-related risks to the Management Committee and the Risk Committee, an internal committee of the Board of Directors</li> </ul>
Strategy	Impacts of climate-related risks and opportunities on business, strategy, and fiscal planning	<ul style="list-style-type: none"> <li>Conducted scenario analysis regarding physical risks and transition risks</li> <li>Calculated carbon-related asset exposure ratio</li> <li>Taking a proactive approach towards green finance (e.g., renewable energy finance and issuance of green bonds) (P.18, Figure 3-7)</li> </ul>
Risk Management	How climate-related risks are identified, assessed, and managed	<ul style="list-style-type: none"> <li>Positioned climate-related risks among Top Risks and conducted scenario analysis</li> <li>Disclosed policies on sectors with high climate change impacts (P.21 Figure 4-3)</li> <li>Assessed environmental and social risk based on the Equator Principles</li> </ul>
Metrics and Targets	Metrics and targets used to assess and manage climate-related risks and opportunities	<ul style="list-style-type: none"> <li>Total of JPY 10 trillion in green financing to be conducted from FY2020 to FY2029</li> <li>CO2 emissions volumes of SMBC to be reduced by 30% from FY2018 by FY2029</li> <li>Outstanding coal-fired thermal power generation loans to be reduced to zero by FY2040 (applicable to project finance)</li> </ul>

**<Figure 1-2> History of measures implemented by the Group**

Item	Status of initiatives
1998	<ul style="list-style-type: none"> <li>• Established environmental policy</li> </ul>
2002	<ul style="list-style-type: none"> <li>• Announced support for the Finance Initiative of the UN Environment Programme</li> </ul>
2006	<ul style="list-style-type: none"> <li>• Adopted the Equator Principles</li> </ul>
2007	<ul style="list-style-type: none"> <li>• Announced support for the UN Global Compact</li> </ul>
2017	<ul style="list-style-type: none"> <li>• Announced support for the TCFD recommendations</li> </ul>
2018	<ul style="list-style-type: none"> <li>• Announced policies on coal-fired power generation, palm oil plantation development, and projects involving deforestation</li> <li>• Established the Corporate Sustainability Committee</li> </ul>
2019	<ul style="list-style-type: none"> <li>• Announced the results of scenario analysis regarding physical risks (First global financial institution in the world to disclose assumed risk)</li> <li>• Signed the Principles for Responsible Banking</li> </ul>
2020	<ul style="list-style-type: none"> <li>• Announced the results of scenario analysis regarding transition risks</li> <li>• Revised Group Mission (Added “We contribute to a sustainable society by addressing environmental and social issues”)</li> <li>• Announced the SMBC Group Statement on Sustainability and SMBC Group GREEN×GLOBE 2030</li> <li>• Released a statement on the “Consideration of ESG risks” (Expanded policies on individual businesses and sectors)</li> </ul>

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## 2. Governance

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

In light of the urgency to act on global environmental and social issues, The Group revised the Group Mission in April 2020 to add the following statement: “We contribute to a sustainable society by addressing environmental and social issues”. This signaled our commitment to making an even greater contribution to the sustainable development of society.

We then established the Group Statement on Sustainability<sup>1</sup>, which laid out the basic principles of how the Group will drive forward its efforts to actualize sustainability. Within the Statement on Sustainability, we outline our aim to realize the SDGs and to resolve social issues. We also commit to engage and cooperate with customers and other stakeholders to contribute to the global transformation to a better society. Moreover, the statement clarifies the Group’s intent to support the spirit of the Paris Agreement and contribute to resolving environmental issues based on the understanding that innovation is essential to resolve environmental issues such as climate change.

Furthermore, we established the Group Environmental Policy<sup>2</sup> recognizing the importance of realizing a sustainable society and continuously making efforts to harmonize environmental preservation and pollution control with corporate activities.

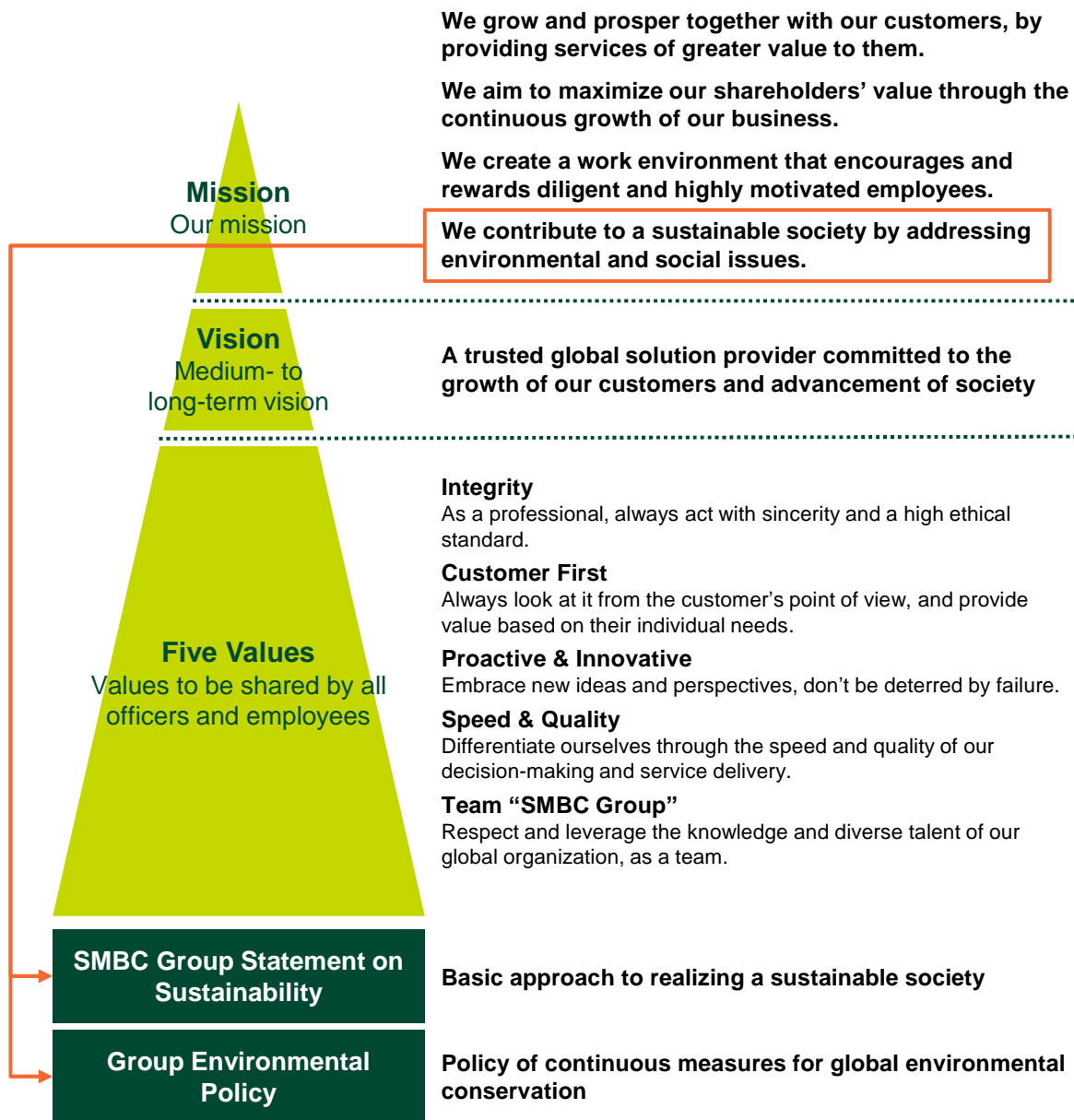
The Group supports disclosing information in line with the TCFD recommendations and initiatively contribute to achievement of sustainability while at the same time acting in compliance with the Group Mission, SMBC Group Statement on Sustainability, and Group Environmental Policy.

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<sup>1</sup> Group website [https://www.smfg.co.jp/english/sustainability/group\\_sustainability/](https://www.smfg.co.jp/english/sustainability/group_sustainability/)

<sup>2</sup> Group website [https://www.smfg.co.jp/english/sustainability/materiality/environment/manage\\_environment/](https://www.smfg.co.jp/english/sustainability/materiality/environment/manage_environment/)

<Figure 2-1> Group Mission, Vision, and Values



### <Figure 2-2> SMBC Group Statement on Sustainability

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

#### **Definition of sustainability**

The Group defines sustainability as “creating a society in which today’s generation can enjoy economic prosperity and well-being and pass it on to future generations.”

#### **Understanding of the Present Situation and Our Role**

As a financial institution, we will engage and act together with customers and other stakeholders to contribute to the global transformation into a better society.

### <Figure 2-3> Group Environmental Policy

#### **Basic concepts**

Recognizing the importance of realizing a sustainable society, SMBC Group is continuously making efforts to harmonize environmental preservation and pollution control with corporate activities, in order to support the economy and contribute to the betterment of society as a whole.

#### **The Group Environmental Policy**

1. We provide environment-friendly financial products, information and solutions which support our clients in their efforts to preserve the eco-system.
2. We devise means to reduce environmental risks posed by our own activities and the society.
3. We are determined to fulfill our social responsibilities through the conservation of resources and energy, and the reduction of waste.
4. We strictly comply with environment-related laws and regulations.
5. We practice the highest level of information disclosure related to the Group's environmental activities and consistently improve our efforts to contribute to environmental preservation by communicating with our staff as well as the third parties.
6. We place high priority on thoroughly educating our staff about our environmental principles to ensure that they conform to these principles in the performance of their work.
7. We actively and effectively implement "environmental management," and make continuous efforts to improve our system to deal with environmental issues by setting goals and targets for every fiscal year and reviewing them as deemed necessary.
8. These policies are disclosed on the Group's website, and the printed version is available upon request

## **(2) Sustainability management**

### **Board of Directors · Risk Committee (oversight)**

The Board of Directors of Sumitomo Mitsui Financial Group is primarily responsible for making decisions on the matters that are within its legally mandated scope of authority such as basic management policies, as well as for overseeing the duties of executive officers and directors. Authority for execution decisions other than those legally required to be made by the Board of Directors are, in principle, delegated to executive officers. The purpose of this delegation is to enhance the oversight function of the Board of Directors and to expedite the execution of duties.

Measures to address the TCFD recommendations are regularly reported to, and overseen by, the Board of Directors.

And the Risk Committee, an internal committee of the Board of Directors, is tasked by the Board of Directors with deliberating on matters relating to business environment and risks facing the Group, operating the Risk Appetite Framework, and implementing risk management systems and other important risk management matters as well as reporting to the Board of Directors on these matters.

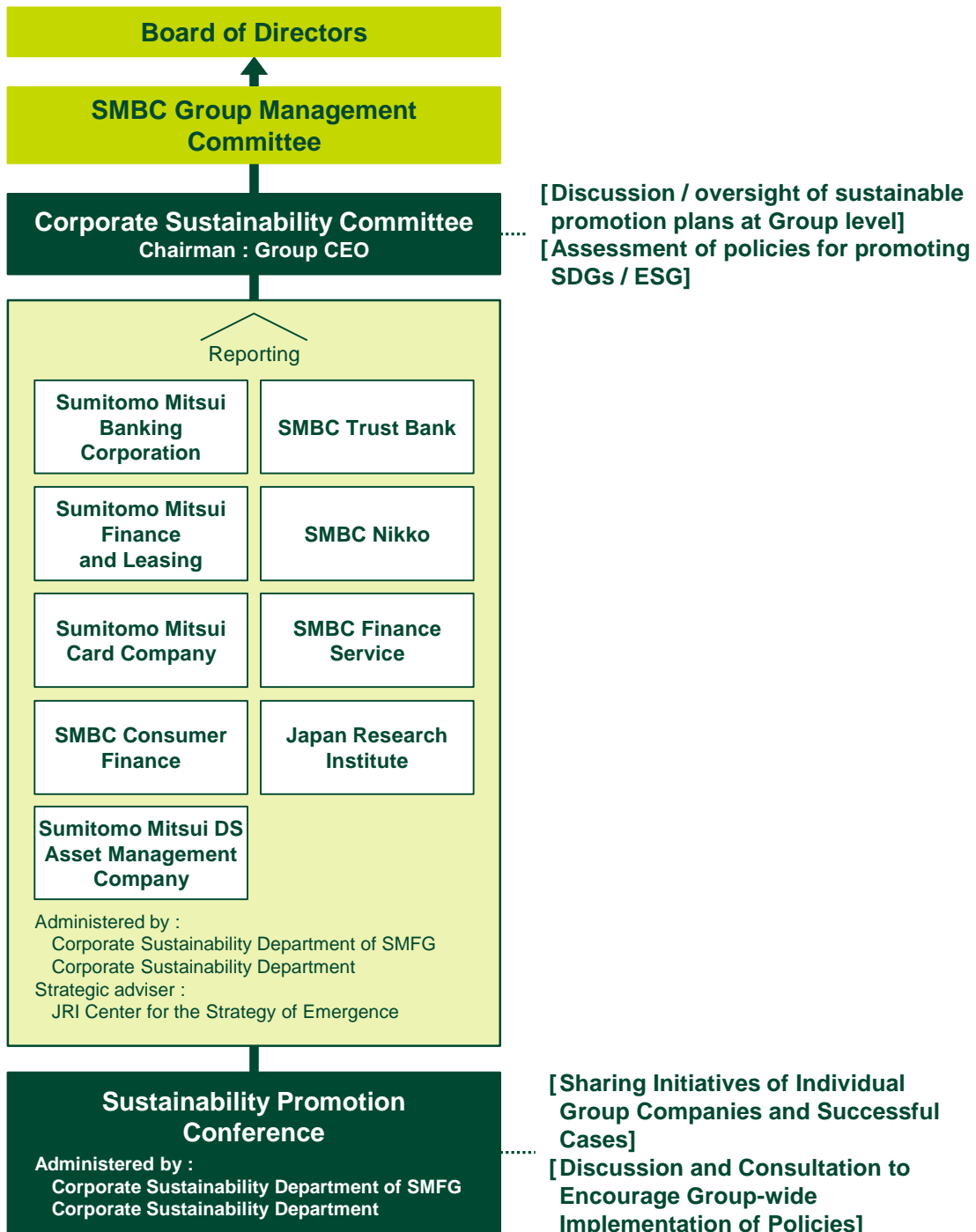
### **Management Committee and Corporate Sustainability Committee (execution)**

Measures developed in response to the TCFD recommendations are reflected in the Group's business strategy based on discussions held at the Group's Management Committee and Corporate Sustainability Committee.

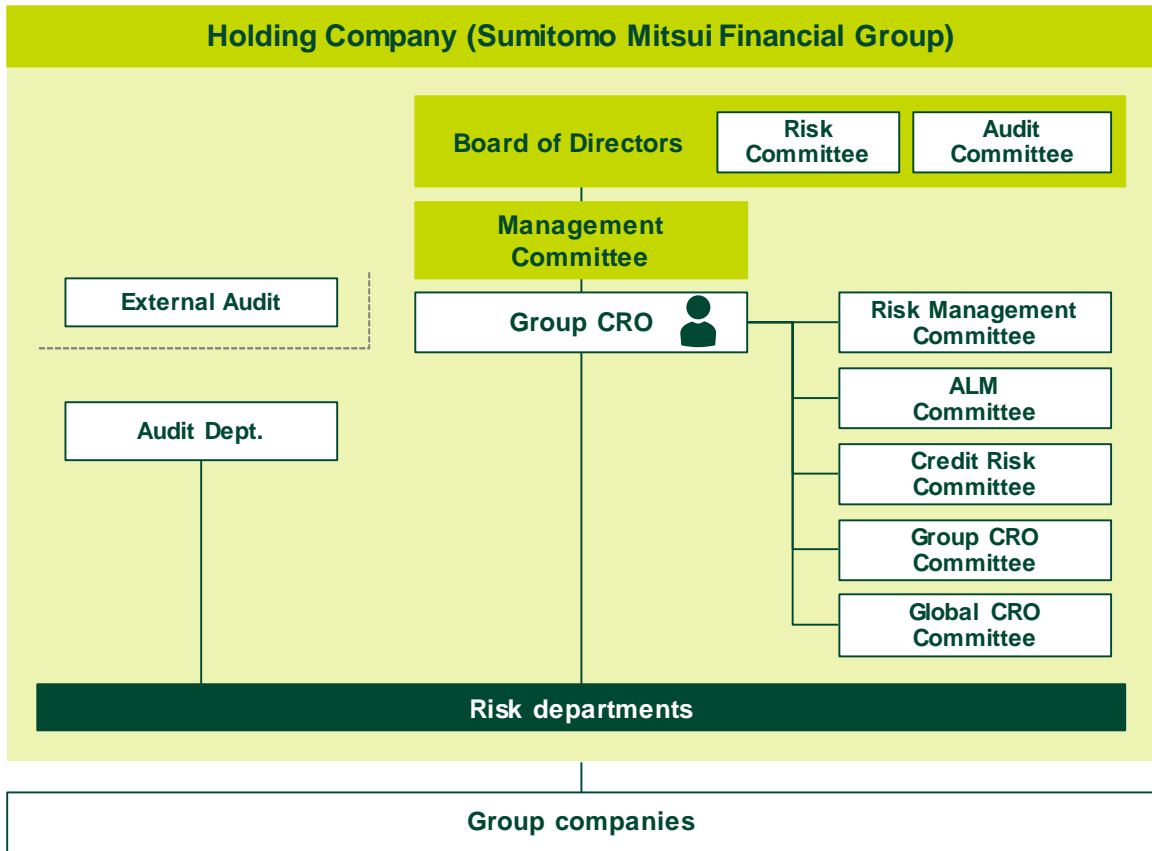
The Management Committee sits under the Board of Directors to serve as the top decision-making body for the execution of business strategy across the Group. The SMFG Corporate Sustainability Department undertakes the planning and execution of activities to promote the SDGs and ESG throughout the entire Group. In addition to being discussed by the Management Committee, specific initiatives are deliberated and decided upon by the Corporate Sustainability Committee. Chaired by the Group CEO, this committee aims to promote sustainability management from a "non-financial perspective" based on a strong commitment from top management, and also discusses the Group's response to climate change.



**<Figure 2-4> System of deliberations and progress management for sustainability promotion and planning**



<Figure 2-5> SMBC Group risk management system



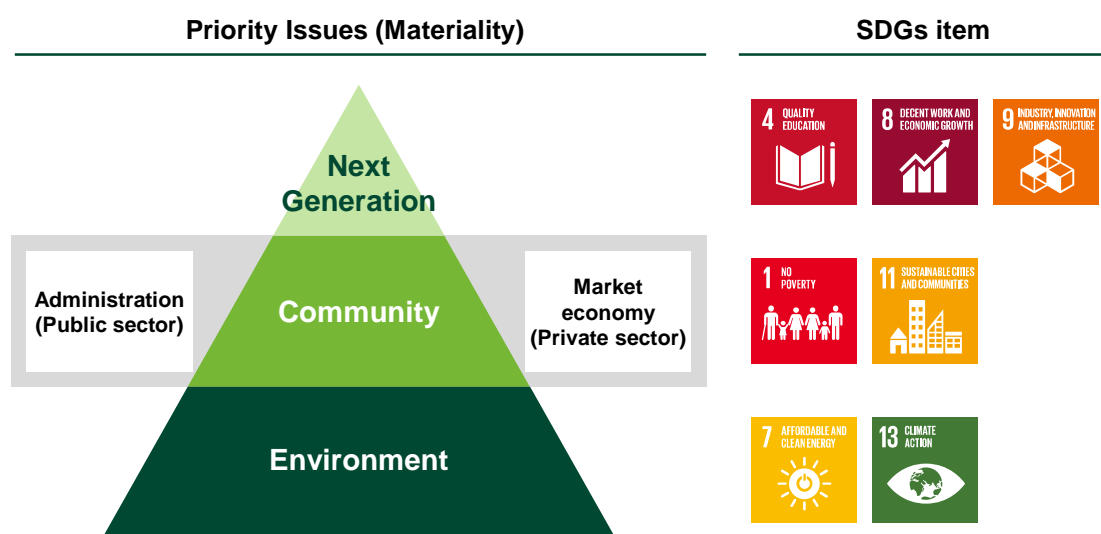
### 3. Strategy

The Group has set Environment, Community, and Next Generation as priority issues in order to contribute to solving social issues. In addition, in light of achieving the SDGs in 2030, the Group is clarifying the items and issues to be addressed.

Of these priority issues, Environment is an irreplaceable asset shared between generations, and serves as a foundation to the society we aim to achieve. Environment also serves as the foundation supporting both Community and Next Generation. Based on this understanding, the Group aims to achieve the goals of Affordable and Clean Energy (SDG 7) and Climate Action (SDG 13).

The Group believes that financial institutions play a crucial role in achieving these goals. In addition to proactively providing financial support to businesses contributing to the realization of the Paris Agreement, we will analyze how climate-related risks may impact our business, report in line with the TCFD recommendations, and build resilience to climate change going forward.

<Figure 3-1> Priority issues to be addressed



- **Environment** : An irreplaceable asset shared between generations, and is the foundation of the society we aim to achieve.
- **Community** : A social safety net that fills the gap between the public sector and the private sector, based on “trust” and “mutual assistance” created by the connections among people, in order to realize the society we aim to achieve.
- **Next Generation** : Intelligent people who create the better society and pass it on to future generations in order to realize the society we aim to achieve.

## (1) Climate-Related Risks

The Group identifies the financial impact of climate change on us by anticipating the changes in the external and business environment due to emergence of climate related problems and identifying risk events based on various transmission channels.

The followings are the outlines of the risk events that we anticipate and its major impacts:

### Physical risks

#### ■ Acute meteorological phenomenon and chronic climate change

The progress of global warming may lead to increase in acute natural disasters such as typhoons and floods, and chronic climate changes such as an increase in precipitation due to a rise in average temperature.

#### 【Anticipated major impacts on the Group】

There are risks that the Group becomes unable to continue its business operations due to a disaster that strikes our head office or branch offices and a risk of the increase in costs due to countermeasures and recoveries.

In addition, there are risks such as an increase in our credit costs and a decrease in deposits associated with deterioration in customer performance and collateral damage due to natural disasters.

### Transition risks

#### ■ Strengthening of policies and regulations, changes in technologies and markets

The transition to a low-carbon society may push for tighter regulations in countries, including stricter carbon emission targets and carbon tax hike, and may also promote transformation in the industrial structure due to the introduction of new technologies and energy sources and changes in consumer preferences.

#### 【Anticipated major impacts on the Group】

An increase in carbon emission control costs and changes in the supply and demand balance for products and services cause deterioration in customer performance due to revenue decline and impairment of existing assets for some customers, and as a result, there is a risk of increase in credit costs of the Group. In addition, it may be necessary to review our business strategies such as the policy on sectors.

#### ■ Reputation for corporate efforts

Companies are required to take measures such as business model transformation and carbon emission reduction that are appropriate for a low-carbon society. Growing demand for disclosure from stakeholders, efforts to address climate change are becoming one of the criteria for evaluation of companies.

### 【Anticipated major impacts on the Group】

Lack of efforts to address climate change and delays in responding to demand for information disclosure may lead to deterioration of the Group's reputation, and, as a result, there is a risk of deterioration of funding environment, etc.

## (2) Climate change scenario analysis

Sumitomo Mitsui Banking Corporation (hereinafter, "SMBC"), the core company of the Group, performs scenario analysis for physical risks and transition risks to estimate the assumed risk. The Group is the first global financial institution in the world to disclose quantitative information based on these analysis.

It is extremely difficult to anticipate potential impacts in climate-related risks due to high uncertainty in timing of occurrence and its scale. Given these circumstances, the current analysis is based on certain assumptions regarding natural disasters and targets of analysis. It does not take into account factors such as sudden technological breakthroughs that resolve climate change, the widespread adoption of business strategies that address sustainability and ESG among companies, nor the potential financial support for companies as they adapt to the transition. Accordingly, the Group will strive to continuously revise and refine the assumptions and parameters of this analysis.

<Figure 3-2> Overview of scenario analysis

	Physical risks	Transition risks
Risk events	Water disasters	Changes in government policy Changes in supply-demand balance
Scenario used	RCP 2.6 (2°C scenario)      RCP 8.5 (4°C scenario)	IEA / Sustainable Development Scenario (2°C scenario)      IEA / Stated Policies Scenario
Target of analysis	Corporate customers	Energy and electricity sectors in carbon-related assets defined by the TCFD
Region	Japan	Global
Analysis period	Up to 2050	
Risk indicators	Credit costs that are expected to increase	
Analysis results	JPY 30 to 40 billion total	JPY 2 to 10 billion per fiscal year

## Physical risks

There are expected risks that the increase in extreme weather caused by climate change will affect the business of the Group's customers. SMBC conducted a climate change scenario analysis on physical risks and assessed the related impacts from 2019 to 2050.

As the majority of natural disasters caused by climate change are floods and storms, the analysis identified risk events as water disasters. The scenarios used were the RCP<sup>3</sup> 2.6 scenario (2°C scenario) and the RCP 8.5 scenario (4°C scenario) based on the Intergovernmental Panel on Climate Change (IPCC) research. The analysis was conducted according to the following three steps.

### Step 1

Regarding the impact of water disasters on customer performance, credit costs are expected to rise out of namely two pathways. One is the impairment of collateral of SMBC's domestic corporate customers and the other is an unfavorable change in their debtor classification due to deterioration in financial position. Collateral and customers subject to scenario analysis are selected from a hazard map (showing assumed flood areas based on assumed maximum rainfall) released by Japan's Ministry of Land, Infrastructure, Transport and Tourism.

### Step 2

The probability of flooding up to 2050 is set for both the 2°C scenario and 4°C scenario by utilizing data provided by a project assessing the risk of flooding due to climate change conducted by MS&AD InterRisk Research & Consulting in collaboration with the University of Tokyo and Shibaura Institute of Technology<sup>4</sup>.

### Step 3

The estimated credit costs are calculated by considering the result in Step 1 and the probability of flooding for each climate change scenario, which is set up in Step 2.

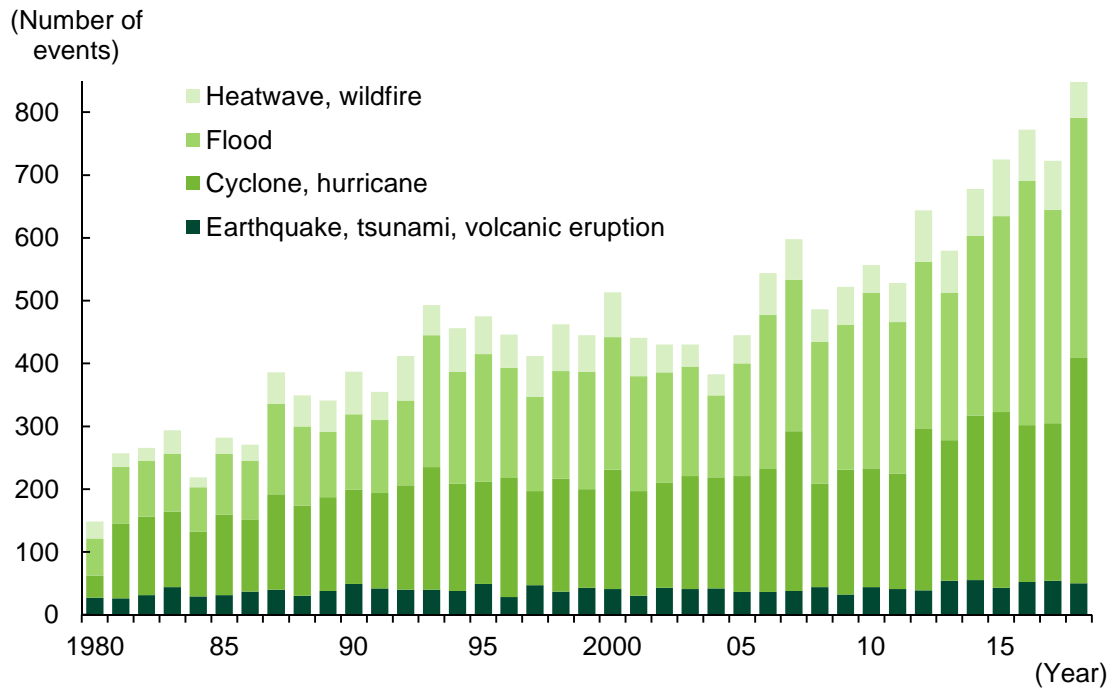
As a result, anticipated credit costs for the period from 2019 to 2050 were approximately JPY 30 to 40 billion in total. This represents additional credit costs of approximately JPY 1 billion in per-year average value terms, and thus the impact of water disasters caused by climate change on SMBC's current single-year finances is considered to be limited.

<sup>3</sup> Representative Concentration Pathways

For example, "RCP 2.6" represents a radiative forcing (the amount of radiation energy entering or leaving the surface of the Earth has relative to the Earth's climate) of 2.6 w/m<sup>2</sup> at the end of the century

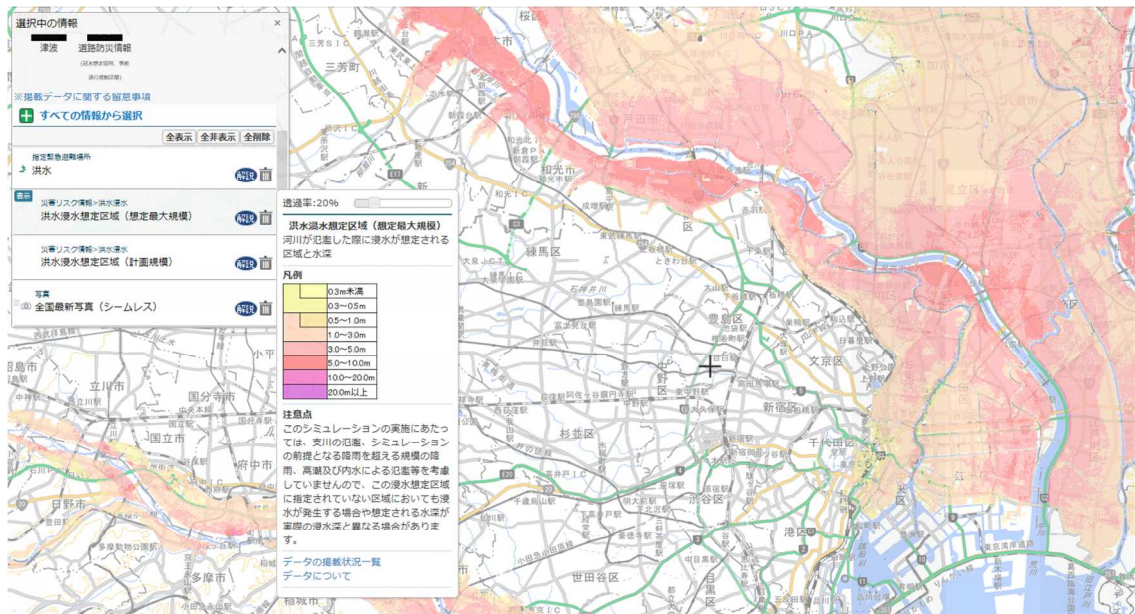
<sup>4</sup> Hirabayashi Y, Mahendran R, Koirala S, Konoshima L, Yamazaki D, Watanabe S, Kim H and Kanae S (2013) Global flood risk under climate change. *Nat Clim Chang.*, 3(9), 816-821. doi:10.1038/nclimate1911

<Figure 3-3> Incidence of natural disasters



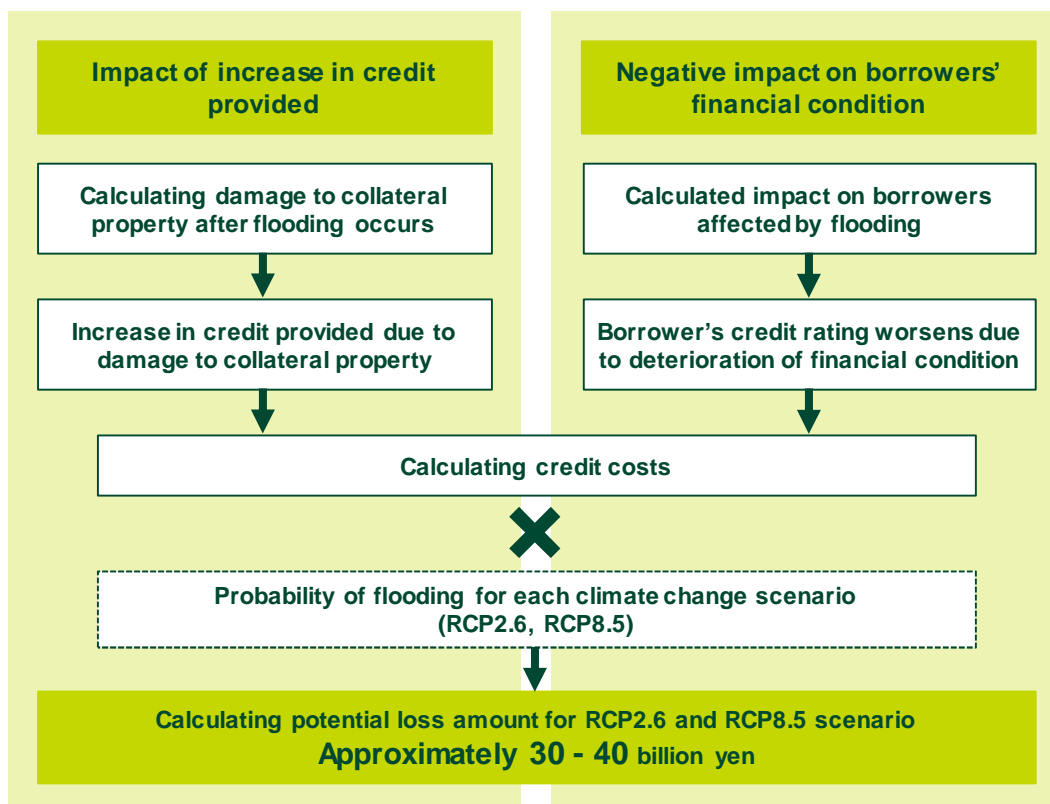
(Source) Munich Re Group

<Figure 3-4> Water disaster hazard map (Tokyo metropolitan area)



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

<Figure 3-5> Analysis process for physical risks



### Transition risks

In the process of transition to a low-carbon society, there are expected risks that business model transformation will affect the businesses of the Group's customers. SMBC conducted climate change scenario analysis related to transition risks and assessed the related impacts from 2020 to 2050. Energy and electricity sectors<sup>5</sup>, which exhaust large amount of CO<sub>2</sub>, are especially vulnerable to transition to a low-carbon society. Therefore, SMBC conducted the analysis for these sectors. The scenarios used in the analysis are the IEA's Stated Policies Scenario<sup>6</sup> and Sustainable Development Scenario (2°C scenario)<sup>7</sup>, amongst others. The analysis was conducted according to the following two steps.

<sup>5</sup> The TCFD's recommendations define energy and electricity sectors as "carbon-related assets". SMBC's carbon-related asset exposure accounts for 6.9% of its loans. With a view to more accurately capturing exposure to transition risk, we have excluded lending to renewable energy and others

<sup>6</sup> A scenario assuming that energy plans currently stated by governments will be implemented

<sup>7</sup> A scenario in which the global average temperature increase from before the Industrial Revolution to 2100 is held to 2°C with a probability of at least 50%



**Step 1**

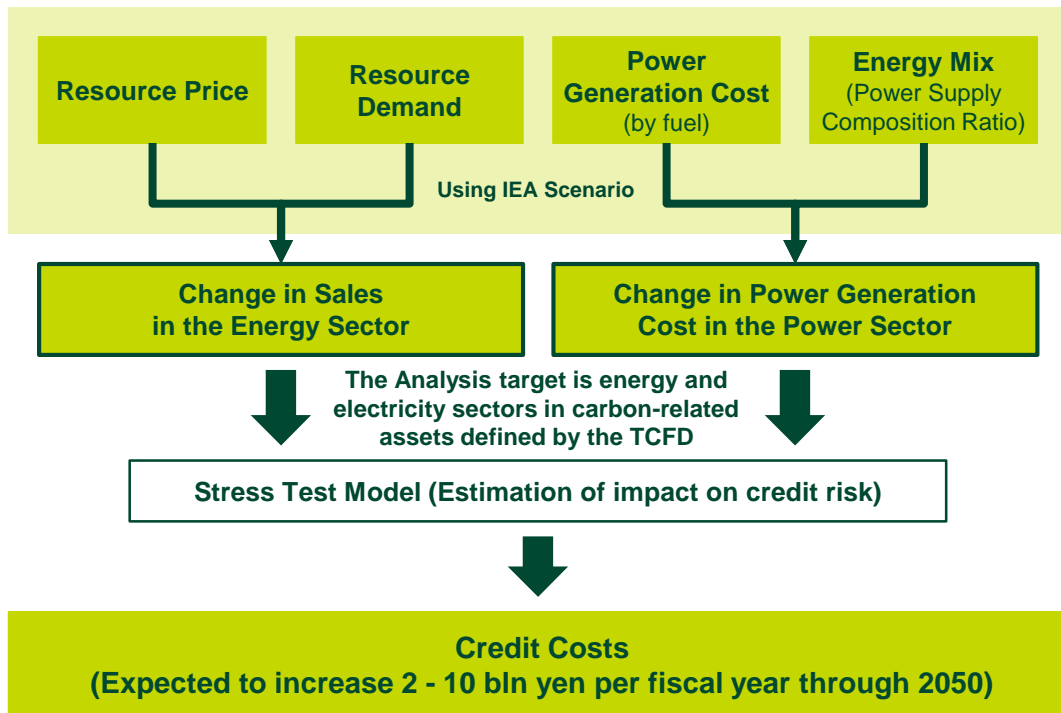
For both the Stated Policies Scenario and the Sustainable Development Scenario, we analyzed the impact on climate change for specific high-risk sectors. For example, for the energy sector we analyzed the impact on customer performance due to falling crude oil and natural gas prices and reduced consumption. Likewise, for the electricity sector we analyzed the impact on customer performance due to rising costs<sup>8</sup> resulting from changes in power generation cost (by fuel type) and in the energy mix.

**Step 2**

We then reflected the results of the analysis in a stress test model which estimates anticipated credit costs for the period from 2020 to 2050

As a result, under the Sustainable Development Scenario, estimated credit costs are expected to exceed by approximately JPY 2 to 10 billion per fiscal year until 2050, compared with the Stated Policies Scenario. After that, we strive to reduce risks through support for our customers' efforts to transition to a low-carbon society.

**<Figure 3-6> Analysis process for transition risks**



<sup>8</sup> Assumes that nuclear power plants in Japan will be restarted in line with the IEA scenario

### (3) Climate-Related Opportunities

Under the SMBC Group GREEN×GLOBE 2030<sup>9</sup>, announced in 2020, the Group established sustainability initiatives based on the concept of “creating the future of the earth and humanity with our customers.” As part of this plan, the Group set a JPY 10 trillion target for green finance initiatives for the 10 years from FY2020 to FY2029. In order to achieve this target, we will work with customers to respond to climate change.

To promote finance initiatives, the Group has established the Sustainable Business Promotion Department within the Planning Department of the Wholesale Business Unit. This new department is working with other business units to provide group-wide solutions for customers’ business strategies. The Sustainable Business Promotion Department is updating its sustainability-related knowledge and network on a global scale and serves as a hub for addressing management issues faced by customers and promoting related products. As part of its efforts to realize a low-carbon society, the Group supports projects that contribute to mitigating climate change, such as renewable energy, green buildings, and the development of cities and communities with strong infrastructure that are resilient to natural disasters and sustainable lifestyles.

Additionally, SMBC Nikko Securities established the SDG Financing Department in September 2018 to provide advice and recommendations related to financing through SDG bonds, including green bonds. The SDG Financing Department also contributes to enhancing customer understanding and creating markets by, for example, holding information sessions and seminars related to SDG bonds and ESG investing and participating in working groups on International Capital Market Association (ICMA) Green Bond Principles and Social Bond Principles. Further, SMBC Nikko Securities participates in the Ministry of Economy, Trade and Industry’s TCFD Consortium as secretariat and assists Japanese companies with the financial aspects of making climate-related financial disclosures by providing green investment guidance, amongst other measures. SMBC Nikko Securities is proactively engaged in sustainability financing centered around green finance to contribute to the realization of a sustainable society through its business activities.

<sup>9</sup> Group website [https://www.smfg.co.jp/english/sustainability/group\\_sustainability/globe2030/](https://www.smfg.co.jp/english/sustainability/group_sustainability/globe2030/)

<Figure 3-7> Definition and scope of green finance

<p><b>Definition</b></p>	<ul style="list-style-type: none"> <li>■ <b>Financing for projects that contribute to the environment (i.e., projects falling within the Green Project categories set forth in International Capital Market Association’s (ICMA) Green Bond Principles)</b></li> </ul> <p><b><u>Green Project categories</u></b></p> <ul style="list-style-type: none"> <li>• Renewable energy</li> <li>• Energy efficiency</li> <li>• Pollution prevention and control</li> <li>• Environmentally sustainable management of living natural resources and land use</li> <li>• Terrestrial and aquatic biodiversity conservation</li> <li>• Clean transportation</li> <li>• Sustainable water and wastewater management</li> <li>• Climate change adaptation</li> <li>• Eco-efficient production technologies and processes</li> <li>• Green buildings that meet environmental standards</li> </ul>
<p><b>Covered financing</b></p>	<ul style="list-style-type: none"> <li>■ <b>Financing in which the proceeds are used for the above projects</b></li> <li>■ <b>Financing based on the concept of supporting and/or promoting the above projects (e.g., assessment/review of environmental initiatives)</b></li> </ul> <p><b><u>Examples of covered financing</u></b></p> <p><b>[SMBC]</b></p> <ul style="list-style-type: none"> <li>• Project finance</li> <li>• Various types of directed credit (ESG/SDG assessment-based financing, (SDG) green/sustainability loans, etc.)</li> <li>• Sustainability-linked loans</li> <li>• Non-recourse loans for green buildings</li> <li>• Fund investment</li> <li>• Trade finance</li> <li>• Other types of financing with a clear use of proceeds</li> </ul> <p><b>[SMBC Nikko Securities]</b></p> <ul style="list-style-type: none"> <li>• Green/sustainability bonds, etc.</li> </ul> <p><b>[Sumitomo Mitsui Finance and Leasing Company]</b></p> <ul style="list-style-type: none"> <li>• Renewable energy/energy efficiency-related leases, hydrogen vehicle leases, and other general environment-related leases</li> </ul>

**<Figure 3-8> Sustainable business promotion structure**



#### **(4) Stakeholder engagement related to climate change**

The Group regularly engages with stakeholders on climate-related issues – stakeholder groups include customers, investors, and environmental NGOs. When engaging with stakeholders, the Group communicates on assumed risk based on scenario analysis, along with the analysis method used and relevant risk management measures. We also discuss support available for customers that aims to contribute to the Paris Agreement and strive to thoroughly understand the approaches that stakeholders are taking with regards to climate change. Through such communication, the Group shares a mutual awareness with stakeholders about its resilience to climate change.

In addition, the Group examines initiatives relating to ESG issues including climate change and holds annual Stakeholder Dialogue sessions to hear opinions from experts. As a result of past dialogue sessions where we discussed matters such as the significance of climate change disclosures, the Group set “environment” as a priority issue to be addressed and Climate Action as an SDG focus area. In this way, the Group reflects recommendations from dialogue sessions in its management strategies.

In addition, in July 2020, we established GREEN x GLOBE Partners (GGP). GGP is a community of people working together to solve environmental and social issues. We will work together with participating companies to create activities to help solve social issues such as climate change.

## 4. Risk management

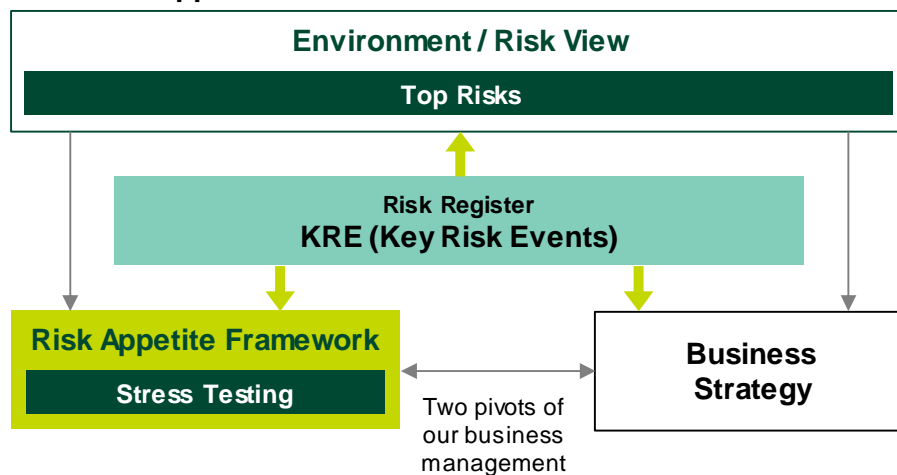
### (1) Risk Appetite Framework

The Group has introduced a Risk Appetite Framework for controlling group-wide risks that clarifies the types and levels of risk that we are willing to take on or are prepared to tolerate in order to grow profits (risk appetite)

Our framework is one of two pivots of our business management alongside business strategies. It functions as a management framework for sharing information on the business environment and risks facing the Group among management and for facilitating appropriate risk taking based thereon.

Risk appetites are decided during the process of formulating business strategies and management policies. These risk appetites are set based on Top Risks that threaten to significantly impact management and on risk analyses (stress testing) that illustrate the impact if a risk should materialize.

<Figure 4-1> Risk Appetite Framework



### (2) Top Risks

The selection of Top Risks involves comprehensive screening of risk factors, evaluation of each risk scenario's possibility of occurrence and potential impact on the business, and discussion by the Management Committee.

The Group first established an understanding of various climate pathways and related impacts on the Group. Thereafter, we positioned climate events as Top Risks, including the occurrence of large-scale disasters due to extreme weather and industry structure transformation in accordance with the transition to a low-carbon society.

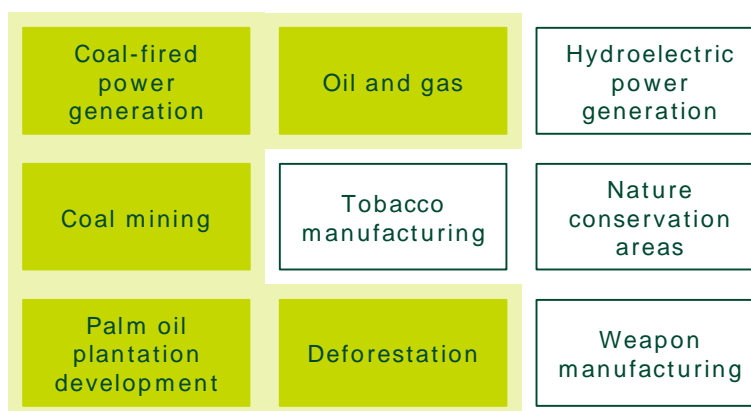
**<Figure 4-2> Top Risks**

Volatile financial and economic environment
Intensification of the international political confrontation
Decline in Japan's social vitality
Ideological and religious conflicts
Pandemics
Large-scale earthquakes
Ceased operation of information systems due to cyber attacks
Climate change
Industry structure changes stemming from technological progress
Legal or compliance-related incidents
Materialization of risks impeding implementation of strategies (lack of human resources, etc)

**(3) Policy on sectors with an impact on climate change**

The Group has introduced policies at its group companies (SMBC, SMBC Trust Bank, Sumitomo Mitsui Finance and Leasing Company, SMBC Nikko Securities) on businesses and sectors that are likely to have a significant impact on the environment and society in line with the business of each group company<sup>10</sup>.

**<Figure 4-3> Businesses and sectors likely to have a significant impact on the environment and society**



(Businesses and sectors likely to have an impact on climate change are outlined in red)

Below we outline the Group's policy on each of the businesses and sectors likely to have an impact on climate change (i.e., coal-fired power generation, oil and gas, coal mining, palm oil plantation development, and deforestation).

<sup>10</sup> Consideration of ESG risks (April 16, 2020) [https://www.smfg.co.jp/news\\_e/e110150\\_01.html](https://www.smfg.co.jp/news_e/e110150_01.html)

<p><b>Coal-fired power generation</b></p>	<p><b>Background</b></p> <p>Since the adoption of the Paris Agreement, efforts to address climate change have been accelerated, and there is a global movement toward decarbonization, including the Japanese government calling for an 80% reduction in greenhouse gas emissions by 2050.</p> <p><b>Policy</b></p> <p>Support for newly planned coal-fired power plants, in principle, is not provided. Exceptions may be considered for those projects which use environmentally friendly technologies such as ultra-supercritical pressure and for those projects which have been provided support before the revision. And the development of technologies which contribute to carbon recycling, such as carbon dioxide capture and storage (CCS) is supported.</p>
<p><b>Oil and gas</b></p>	<p><b>Background</b></p> <p>Oil and gas will continue to be an important source of energy, and measures that contribute to the transition to a low-carbon society are actively supported. On the other hand, as the transition to a low-carbon society progresses, it is important to consider the risk of stranded assets that will cause the value of the assets owned to decline in the future and measures to reduce the environmental impact associated with development, and give proper consideration to the residents of the development area.</p> <p><b>Policy</b></p> <p>The scope of environmental and social risk assessments that take into account the Equator Principles is to be expanded for the following business areas and sectors when considering lending. After identifying and evaluating environmental and social risks, appropriate measures are considered.</p> <ul style="list-style-type: none"> <li>■ <b>Oil sand</b></li> <li>Oil sand (tar sand) has relatively high carbon intensity and large environmental impacts are associated with its development. As such, environmental and social risk assessments are conducted, and close attention is paid to soil and water pollution caused by wastewater, deforestation, and efforts to protect biodiversity and indigenous communities, when considering lending.</li> <li>■ <b>Shale oil and shale gas</b></li> <li>During shale oil and shale gas development, the use of hydraulic fracturing methods is assumed to cause groundwater contamination and induce earthquakes. Whether appropriate mitigation measures have been implemented for these issues is carefully monitored, and environmental and social risk assessments are conducted when considering lending.</li> <li>■ <b>Oil and gas mining projects in the Arctic</b></li> <li>The Arctic Circle (an area north of the 66°33' latitude) is home to rare ecosystems and indigenous people with a unique culture. For mining projects in this region, environmental and social risk assessments are conducted, and close attention is paid not only to environmental considerations but also to measures to protect biodiversity and indigenous communities, when considering lending.</li> <li>■ <b>Oil and gas pipelines</b></li> <li>Pipelines are expected to have a wide range of environmental impacts due to oil spills and deforestation, as well as social impacts on indigenous communities, not only at the time of construction but also when completed. Whether appropriate mitigation measures have been implemented for these issues is carefully monitored, and then environmental and social risk assessments are conducted when considering lending.</li> </ul>

<p><b>Coal mining</b></p>	<p><b>Background</b></p> <p>In addition to the risks of stranded assets associated with the transition to a low-carbon society, it is important to consider human rights with respect to the elimination of illegal labor and child labor in coal mines and biodiversity issues associated with mining.</p> <p><b>Policy</b></p> <p>The scope of environmental and social risk assessment that take into account the Equator Principles is expanded for coal mining businesses when considering lending. Through this, environmental and social risks are identified and evaluated. In addition, support for coal mining projects that are conducted using the Mountain Top Removal (MTR) method is not provided due to a large environmental impact.</p>
<p><b>Palm oil plantation development</b></p>	<p><b>Policy</b></p> <p>For palm oil plantation development projects, whether they have been certified by the Roundtable on Sustainable Palm Oil (RSPO), which is given for palm oil produced with environmental and social consideration, or by an equivalent certifying body is confirmed. Support is only provided after confirming that forest resources and biodiversity are protected when new plantations are developed and that there are no human rights violations, such as child labor. For those customers that have not yet been certified, obtaining certification is encouraged and supported.</p>
<p><b>Deforestation</b></p>	<p><b>Policy</b></p> <p>For projects which involve deforestation, support is provided after confirming that illegal logging and incineration are not carried out and the laws and regulations of each country are observed. For large-scale projects, environmental impacts, such as the destruction of primeval forests and ecosystems, are evaluated in accordance with the Equator Principles when considering lending.</p>

In SMBC's Credit Policy, which contains our overall financing policy, guidelines and rules, we declare that we will cease to provide financial support to borrowers engaged in businesses contrary to public responsibility, or which may have a significant negative impact on the global environment.



#### **(4) Environmental and social risk management based on the Equator Principles**

In January 2006, SMBC adopted the Equator Principles, a set of guidelines developed by private financial institutions for managing environmental and social risks. SMBC's Environmental and Social Risk Analysis Department (ESAD) performs due diligence to assess environmental and social risk in providing financing for large-scale projects that may have significant impacts on society and the environment. In doing so, SMBC requires entities to comply with the TCFD recommendations, while also striving to identify and manage risks.

#### **(5) Obtaining non-financial information**

In addition to customers' financial information, SMBC also obtains non-financial information, such as ESG related information. We use this to understand the potential impact of customers' business activities on the environment and society and qualitatively assess the appropriateness of providing support when making lending decisions. Through dialogue with customers when gathering non-financial information, the Group strives to thoroughly understand customers' approaches to climate change while also sharing mutual awareness about the issue. More specifically, we will proactively support our clients in their initiatives to make environmental and social considerations, and cooperate with clients to address potential risks.

#### **(6) Capacity Building**

With the aim of ensuring all employees have enough knowledge of ESG/SDGs and strengthening communication with customers, the Group will expand our internal training programs and introduce the "Sustainability University", a framework for sustainability training. We believe that this framework will contribute to a better understanding of climate change by increasing awareness of sustainability among all employees, including those on the Executive Committee, and thus contribute to effective management of climate-related risks.

## 5. Metrics and targets

In addition to setting long-term green finance and CO<sub>2</sub> reduction targets for the next 10 years under SMBC Group GREENxGLOBE 2030, the Group also set balance reduction targets for financing of coal-fired power plants.

Metric	Perspective	Target
Green finance	Opportunity	Total of JPY 10 trillion in green financing to be conducted from FY2020 to FY2029
Reduction in CO <sub>2</sub> emissions	Risk management	CO <sub>2</sub> emissions volumes of SMBC to be reduced by 30% from FY2018 by FY2029
Financing for coal-fired power plants	Risk management	Outstanding coal-fired thermal power generation loans to be reduced to zero by FY2040*

\* Project financing is targeted (excludes projects contributing to the transition to a decarbonized society, such as projects that provide carbon recycling technologies)

### (1) Green finance

The Group has a strong market presence in green finance. In project finance for renewable energy, the Group issued approximately JPY 630 billion in FY2019 and maintains a steady top-tier position in IJ Global league tables. In addition, SMBC was selected as Global Bank of the Year for 2019 in “Project Finance International”, a major project finance market journal published by Refinitive, and was awarded Deal of the Year for seven renewable energy deals in 2019.

Further, SMBC Nikko Securities actively engages in the underwriting of SDG bonds, including green bonds. In FY2019, SMBC Nikko Securities served as the lead managing underwriter for 55 SDG bonds, and succeeded in underwriting JPY 288 billion in green bonds and JPY 50.5 billion in sustainability bonds that include green assets in Japan and overseas. The Group also led the green bond market in Japan in FY2019 in terms of both the total issuance amount and number of deals, a distinction that resulted in the Group being awarded the Silver Prize (Minister of the Environment Award), the highest amongst securities firms, at the Ministry of the Environment’s ESG Financing Awards. The Group itself also issues green bonds that comply with the International Capital Market Association (ICMA) and the Ministry of the Environment’s Green Bond Guidelines, thereby contributing to the promotion of environmental businesses and reduction of environmental impacts both in Japan and overseas.

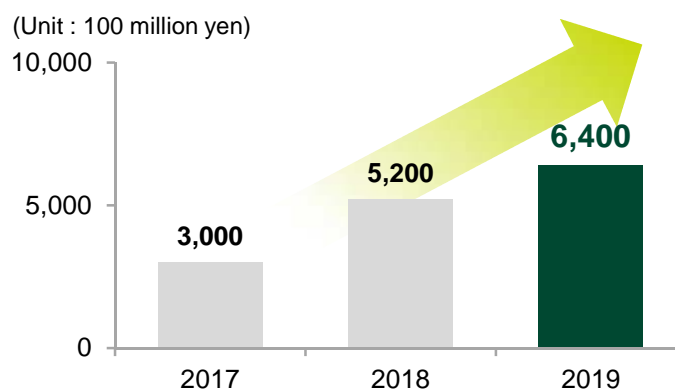
We will continue to work with our customers to resolve issues stemming from climate change in order to achieve our target for green finance.

<Figure 5-1> Top five banks in project finance for renewable energy

	2017	2018	2019
1	Santander	<b>SMBC</b>	Santander
2	MUFG	MUFG	<b>SMBC</b>
3	<b>SMBC</b>	Santander	Credit Agricole
4	Societe Generale	Societe Generale	Natixis
5	NordLB	Groupe BPCE	MUFG

(Source) Base on IJ Global's online data

<Figure 5-2> Change in total amount of project finance for renewable energy



(Green finance targets will be set from fiscal 2020)

## (2) Reduction of CO<sub>2</sub> emissions

SMBC Group's CO<sub>2</sub> emissions in FY2019 fell to 159,788 tons (Scope 1: 13,508 tons, Scope 2: 125,485 tons, Scope 3: 20,766 tons), a reduction of 15,967 tons from FY2018. We will continue our efforts to reduce emissions while implementing energy-saving measures that lead to energy conservation.

<Figure 5-3> Change in group-wide CO<sub>2</sub> emissions

(Unit: t-CO<sub>2</sub>)

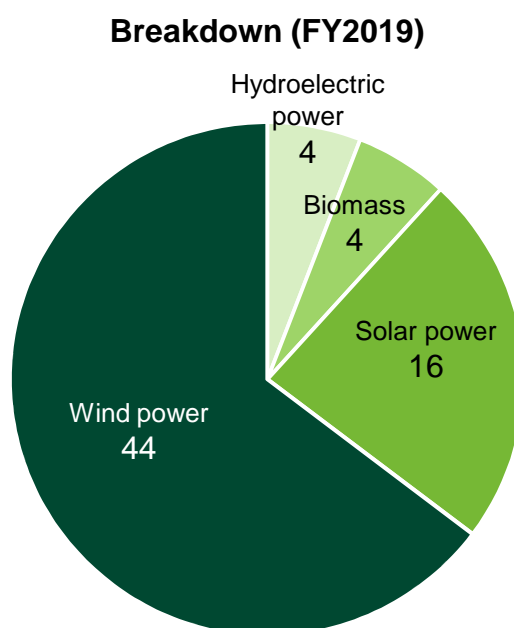
CO <sub>2</sub> measurement items	FY2017	FY2018	FY2019
Scope 1 (direct emissions)	17,120	14,703	13,508
Scope 2 (indirect emissions)	167,426	141,424	125,485
Scope 1 (business trips)	18,944	19,628	20,766
<b>Total</b>	<b>203,490</b>	<b>175,755</b>	<b>159,788</b>

Further, the Group is contributing to CO<sub>2</sub> emissions reductions by supporting renewable energy projects<sup>11</sup>. We contributed to a 17,463,260 ton reduction in CO<sub>2</sub> emissions through renewable energy projects in FY2019.

<Figure 5-4> CO<sub>2</sub> reductions resulting from renewable energy projects

(Unit: t-CO<sub>2</sub>)

	FY2017	FY2018	FY2019
Annual CO <sub>2</sub> reduction	6,201,959	20,122,490	17,463,260



### (3) Financing for coal-fired power plants

The Group set a target of eliminating loans for coal-fired power plants by fiscal 2040. We also support projects contributing to the transition to a decarbonized society, such as projects that provide carbon recycling technologies

We established a policy of not supporting new coal-fired power plants in principle, and we will encourage dialogue with customers that construct coal-fired power plant projects in line with this policy in order to achieve our target.

<sup>11</sup> CO<sub>2</sub> reductions are calculated by determining annual estimated power generation based on the type of renewable energy and generating capacities and facility utilization ratios, etc. at the target facilities in each country and then multiplying that value by the electric power emissions factors of each of the countries. The calculations do not take into account the proportion of financing provided by SMBC with respect to total project costs (financing share). Source: Facility utilization ratios for wind power (overseas) use figures for onshore and offshore wind farms from Wind Europe "Wind energy in Europe in 2019 - Trends and statistics". Solar, hydro, wind power (domestic) and geothermal figures are from the "Report on Analysis of Generation Costs, etc. for Subcommittee on Long-term Energy Supply-demand Outlook" dated May 26, 2015. Figures for biomass power are calculated based on information disclosed by project operators. Emissions factors are from the IEA's "CO<sub>2</sub> Emissions from Fuel Combustion 2019 Edition."

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## 6. Future activities

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As our response to the TCFD recommendations, the Group has strengthened the management of climate-related risks by including in our Top Risks, quantitatively evaluating anticipated future risks with scenario analysis, and discussing countermeasures at the management level. We will formulate and execute business strategies in a forward looking way, by refining the scenario analysis in steps and trying to grasp potential risks. At the same time, we will actively promote green finance in Japan and overseas and make efforts to resolve this issue at a global level.

Additionally, the Group will encourage constructive dialogue with stakeholders including customers and strive for mutual understanding on the approaches we are taking to address climate change, how customers contribute to achieving the goals of the Paris Agreement, their efforts to reduce their own CO2 emissions. Based on this type of dialogue, we will demonstrate leadership to measures against climate change through support for its customers' efforts to transition to a low-carbon society. Going forward, we will continue to make further enhancements to provide consistent and transparent disclosures to our stakeholders in line with the TCFD recommendations. This report will be updated on a yearly basis.