Strengthening our sustainability initiatives
Taking firm action toward a low-carbon society

By promoting sustainability initiatives, we at Mizuho Financial Group, Inc. (President & Group CEO: Tatsufumi Sakai) aim to operate in a way that considers creation of value for our varied stakeholders and improve corporate value through sustainable, stable growth for the entire group, thus contributing to the achievement of the Sustainable Development Goals (SDGs).

Thus far, we have strengthened our stance of advancing sustainability initiatives as an integral part of our group strategy. We recently revised our “Basic Policy on Sustainability Initiatives” (Attachment 1) in order to further drive initiatives in accordance with the expectations of society, our strategy, and the Principles for Responsible Banking1. Also, based on our awareness that climate change is one of the most serious global issues having the potential to impact the stability of financial markets, we have positioned addressing environmental issues and climate change as a key part of our corporate strategy and have bolstered a range of initiatives as a result of numerous discussions at bodies including the Executive Management Committee, Risk Committee, and the Board of Directors.

1. Strengthening environmental and climate change initiatives

(1) Establishing an Environmental Policy (Attachment 2)

We conduct business activities and operations based on the Mizuho Code of Conduct to put the tenets of our Corporate Identity into practice, and the Code of Conduct states: “We will act independently and proactively with the awareness that environmental initiatives represent an essential precondition for the existence and activities of our company.”

Under this approach, we at Mizuho have worked proactively for many years on environmental financing and consulting on environment and energy-related initiatives, and have endeavored to reduce and avoid negative environmental impact as the first bank in Asia to adopt the Equator Principles.

Establishing our Environmental Policy alongside our Human Rights Policy
under the Mizuho Code of Conduct on this occasion clarifies our stance on climate change as well as our environmental awareness and specific actions that we will take on environmental initiatives including those targeting climate change as we work toward transitioning to a low-carbon society. The Environmental Policy clearly states that oversight is provided by the Board of Directors, and in addition to building a strong corporate governance system that promotes environmental initiatives as an integral part of our strategy, Mizuho group companies will establish similar policies to enable us to engage in consistent environmental initiatives on a group-wide basis.

(2) Strengthening support for sustainable businesses (Attachment 3)

Mizuho has established key sustainability areas (materiality) and key performance indicators (monitoring indicators) in order to support sustainable businesses. In light of the indirect impact that we, as a financial group, have through our clients, we strive to deepen our understanding of the issues and needs of clients through proactive engagement, and have strengthened our group-wide support of sustainable businesses in order to aid clients' SDGs and Environmental, Social, and Governance (ESG) initiatives, and sustainability-related innovation and risk reduction including initiatives that address climate change and the transition to a low-carbon society. We also set sustainable finance and environmental finance targets to proactively fulfill our role in directing capital towards environmental protection and the achievement of the SDGs.

<table>
<thead>
<tr>
<th>Sustainable finance &amp; Environmental finance targets:</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2019 – FY2030 total: ¥25 trillion</td>
</tr>
<tr>
<td>(of which the target for environmental finance is ¥12 trillion)</td>
</tr>
</tbody>
</table>

(3) Strengthening the management of climate change risks

a. Management of top risks

Mizuho has continually conducted monitoring of financing and investment from the perspective of environmental and social responsibility in our management of “top risks”, which are risks recognized by management as having major potential impact on the group. We have begun periodic
monitoring of related indicators, and positioned climate change risks as “emerging risks”, which we define as major risks that must be addressed in the next few years despite the fact that materialization of the risk will occur over a medium- to long-term time frame.

b. Environmentally and socially responsible financing and investment

Considering the expectations and perspectives of our stakeholders, for the purpose of strengthening our environmental and societal considerations in making financing and investment decisions, we previously established a policy on initiatives involving sectors which have a high possibility of contributing to adverse environmental and social impacts, but we have now revised the policy to be comprehensive in prohibiting financing and investment in such initiatives regardless of sector, as well as points of caution (“Environmental and Social Management Policy for Financing and Investment Activity”). Additionally, from the perspective of strengthening our response to climate change risks, we conducted revisions, including tightening the policy which states that we will not provide financing for the construction of new coal-fired power generation facilities and adding the coal mining sector, as well as additional clarification of our responses to transition risks in the oil and gas sectors2 (Attachment 4), and based on this policy we set a quantitative target to reduce our outstanding credit balance for coal-fired power generation facilities.

Target to reduce the outstanding credit balance for coal-fired power generation facilities based on our Environmental and Social Management Policy for Financing and Investment Activity:
Reduce the FY2019 amount* by 50% by FY2030, and achieve an outstanding credit balance of zero by FY2050

*The balance at the end of FY2019 is expected to be approximately ¥300 billion.

c. Scenario analysis based on TCFD Recommendations

Based on the Task Force on Climate-related Financial Disclosures (TCFD) Recommendations, we conducted a qualitative evaluation of the opportunities and risks that climate change poses for each sector, and based on the evaluation results and other data, we conducted scenario analysis of the transition risks and physical risks for certain scenarios.

Regarding transition risks, we analyzed potential shifts in Mizuho’s credit
costs for the electric utilities and the energy sector, which have been identified as high risk areas, based on the anticipated impact on their business performance by referencing the forecasted trend of electricity generation by source and production by energy type looking forward to 2050 in the Sustainable Development Scenario (SDS) put forward by the International Energy Agency (IEA). We analyzed the impact on business performance in these sectors using two scenarios: a static scenario which assumes that no attempt is made to transform the present business structure, and a dynamic scenario under which the business structure is transformed. As a result of this analysis we estimate that our credit costs will increase by about ¥120 billion to ¥310 billion by 2050. This range is attributable to the difference between the dynamic scenario and static scenario, and the increase in credit costs could be controlled more over the medium to long term under the scenario which assumes a transformation of the business structure.

Regarding physical risks, we analyzed the direct impact that climate change could have on Mizuho’s credit costs attributable to the loss or damage of mortgaged real estate (buildings) in Japan due to wind and water related damages from typhoons and other storms, and confirmed that impact will be limited. Also, we are currently analyzing how our credit costs could be indirectly impacted in the event that the loss or damage of buildings results in business stagnation impacting the performance of our clients, and we plan to disclose the results of this analysis at a later date.

Through this scenario analysis, we reaffirmed the importance of implementing immediate responses to climate change to contribute to the transition to a low-carbon society over the medium to long term. Further strengthening constructive dialogue (engagement) with our clients regarding their efforts to address climate change and responding with a deep understanding of their challenges and needs will allow us to capture business opportunities and strengthen risk management.3 (Attachment 5)

2. Strengthening disclosure and communication

In addition to disseminating these policies and their revisions to executive officers and employees at each of our group companies, ensuring that they have an understanding of the SDGs and sustainability topics to enable valuable engagement with clients, we will strengthen and enhance communication with
our varied stakeholders.

Also, we will work to enhance our disclosures while utilizing international disclosure frameworks. Our new disclosures going forward include a TCFD Report (scheduled for May), an ESG Data Book (scheduled for July), our implementation status of Sustainability Accounting Standards Board standards (scheduled for September), and our implementation status of the Principles for Responsible Banking (scheduled for December).

Attachment 1: Mizuho’s sustainability initiatives
Attachment 2: Environmental Policy
Attachment 3: Structure for promoting sustainable business and our definition of sustainable finance
Attachment 4: Overview of our Environmental and Social Management Policy for Financing and Investment Activity
Attachment 5: Enhancing our response to the TCFD Recommendations

Notes:
1: See our press release dated Aug. 6, 2019: “Mizuho signs Principles for Responsible Banking”
2: The main changes to our Environmental and Social Management Policy for Financing and Investment Activity are detailed below.
   (See Attachment 4 for the updated version)

<table>
<thead>
<tr>
<th>Item</th>
<th>Before revision</th>
<th>After revision</th>
</tr>
</thead>
</table>
| General                                   | · Policies on Specific Industrial Sectors            | ■ Change to Environmental and Social Management Policy for Financing and Investment Activity
|                                           |                                                     | · In addition to the policy on specific industrial sectors, we changed to a comprehensive policy that covers transactions that are prohibited or require additional due diligence regardless of sector. |
| Transactions prohibited regardless of sector | ■ Added items                                       |                                                                                 |
|                                           | · Projects with an adverse impact on wetlands designated as Wetlands of International Importance under the Ramsar Convention. |                                                                                 |
|                                           | · Projects with an adverse impact on UNESCO World Heritage sites, excluding projects that have received prior consent from the relevant national government and UNESCO. |                                                                                 |
|                                           | · Projects violating the Convention on International Trade in Endangered Species of Wild Fauna and Flora (Washington Convention), excluding cases permitted under any country’s reservation(s) to the convention. |                                                                                 |
|                                           | · Projects involving child labor or forced labor.    |                                                                                 |

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<thead>
<tr>
<th>Item</th>
<th>Before revision</th>
<th>After revision</th>
</tr>
</thead>
</table>
| **Transactions** which require additional due diligence regardless of sector | — | ■ **Added items**  
- Projects with adverse impacts on indigenous people’s local communities.  
- Projects involving land expropriation that causes forced relocation of residents. |
| **Weapons** |  
- We avoid providing financing or investment to any manufacturer of cluster munitions, regardless of the purpose of the funding, in view of the inhumane nature of these weapons. | ■ **Revised to include antipersonnel landmines and biochemical weapons**  
- We avoid providing financing or investment to any manufacturer of cluster munitions, antipersonnel landmines, or biochemical weapons, regardless of the purpose of the funding, in view of the inhumane nature of these weapons. |
| **Coal-fired power generation** |  
- “...financing/investment is in principle limited to technology that is at least as high-efficiency as state-of-the-art ultra-supercritical generators. (However, this excludes business to which Mizuho is already committed as of the start of this policy.)”  
- “…only provide financing or investment...in the case that the project meets international guidelines (e.g. OECD officially supported export credits guidelines), the energy policy and climate change measures of the target country, as well as the energy policy, laws, and regulations of Japan.” | ■ ** Tightening response policy**  
- We do not provide financing or investment which will be used for new construction of coal-fired power plants. (This excludes business to which Mizuho is already committed as of the start of this policy.)  
- However, when a proposed coal-fired power plant is essential to the relevant country’s stable energy supply and will contribute to reduction of greenhouse gas emissions by replacing an existing power plant, we may provide financing or investment for the project, based on careful consideration.  
- We will also continue to support development of innovative, clean, and efficient next-generation technology that will contribute to the expansion of sustainable energy, as well as other initiatives for the transition to a low-carbon society. |
| **Coal mining** | — | ■ **Added sector**  
- Our decisions regarding financing and investment for coal mining projects involve a thorough examination of the impacts on the environment, industrial safety and health, and other areas.  
- We do not provide financing or investment to coal mining projects employing the mountain top removal method.  
- We undertake engagement with clients to confirm their measures for addressing transition risk accompanying climate change. |
| **Oil and gas** |  
- Policy on initiatives in this sector was established but not disclosed.  
- Our decisions regarding financing and investment for oil and gas projects involve a thorough examination of the impacts on the environment and of the potential for conflicts with indigenous peoples or local communities. | ■ **Policy on this sector will now be disclosed**  
■ **Added clarification of the status of response to climate change**  
In addition to the second bullet point at left, the following will be added:  
- We undertake engagement with clients to confirm their measures for addressing transition risk accompanying climate change. |
Our business decisions involve a thorough examination of whether there are any potential conflicts involving indigenous people or local communities, and we take into consideration whether the client/project has received certification.

In addition to the bullet point at left, the following will be added:
- In the event that we identify any unlawful act during the term of a transaction, we urge the client to take immediate remedial measures.
- In the event that the client has not taken appropriate measures to address social issues, we undertake engagement with the client to promote remedial measures and, if the client’s remedial measures are unsatisfactory, we suspend new financing and investment.
- We urge our clients in these sectors to formulate sustainable environmental policy, such as No Deforestation, No Peat, and No Exploitation (NDPE), and to respect Free, Prior, and Informed Consent (FPIC) in relation to local communities.

3: The following is an overview of scenario analysis based on the TCFD Recommendations (see Attachment 5 for details)

<table>
<thead>
<tr>
<th>Item</th>
<th>Before revision</th>
<th>After revision</th>
</tr>
</thead>
</table>
| Palm oil, lumber, and pulp | - Our business decisions involve a thorough examination of whether there are any potential conflicts involving indigenous people or local communities, and we take into consideration whether the client/project has received certification. | - Tighten status confirmation and requests from the perspectives of climate change and human rights. In addition to the bullet point at left, the following will be added:  
- In the event that we identify any unlawful act during the term of a transaction, we urge the client to take immediate remedial measures.  
- In the event that the client has not taken appropriate measures to address social issues, we undertake engagement with the client to promote remedial measures and, if the client’s remedial measures are unsatisfactory, we suspend new financing and investment.  
- We urge our clients in these sectors to formulate sustainable environmental policy, such as No Deforestation, No Peat, and No Exploitation (NDPE), and to respect Free, Prior, and Informed Consent (FPIC) in relation to local communities. |

<table>
<thead>
<tr>
<th>Transition risk</th>
<th>Credit costs</th>
<th>Increase of approx. ¥120 billion to ¥310 billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario</td>
<td>IEA(^1) SDS(^2) / NPS(^3)</td>
<td></td>
</tr>
<tr>
<td>Targeted sectors</td>
<td>Electric utilities and energy sectors (oil, gas, coal) in Japan</td>
<td></td>
</tr>
<tr>
<td>Period</td>
<td>2050 (while the IEA scenario is until 2040, the period for this analysis is until 2050)</td>
<td></td>
</tr>
<tr>
<td>Implications and necessary actions</td>
<td>This analysis reaffirms the importance of addressing this issue starting now in anticipation of medium- to long-term effects as the transition toward a low-carbon society progresses. Further strengthening engagement with clients and responding with a deep understanding of their challenges and needs will allow us to capture business opportunities and strengthen risk management.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical risk</th>
<th>Credit costs</th>
<th>Impact on mortgage lending value: limited impact of business stagnation: under analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario</td>
<td>IPCC(^4) Representative Concentration Pathway (RCP) 8.5 scenario (4°C scenario) / RCP 2.6 scenario (2°C scenario)</td>
<td></td>
</tr>
<tr>
<td>Details</td>
<td>Impact on mortgage lending value and impact of business stagnation</td>
<td></td>
</tr>
<tr>
<td>Target</td>
<td>Japan only, for impact of business stagnation this is based on the location of the client's headquarters (this analysis targeted medium-sized blue chip companies and SMEs)</td>
<td></td>
</tr>
<tr>
<td>Implications and necessary actions</td>
<td>This analysis confirmed that there will not be significant impact on mortgage lending value in Japan. We are currently analyzing the impact of client business stagnation, and will discuss the necessary response based on the results of the analysis.</td>
<td></td>
</tr>
</tbody>
</table>

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1 International Energy Agency (IEA)  
2 Sustainable Development Scenario (SDS): Scenario under which advancement of low-carbon holds the increase in the global average temperatures to below 2°C.  
3 New Policies Scenario (NPS): Scenario which assumes that the measures pledged to under the Paris Agreement are put into place.  
4 Intergovernmental Panel on Climate Change (IPCC)
Mizuho’s sustainability initiatives

1. Basic approach and sustainability promotion structure

We have been making an effort to strengthen our environmental and climate change initiatives. In 2019 we signed the Principles for Responsible Banking, a framework created by the United Nations Environment Programme Finance Initiative. In light of these efforts and other factors, and with the aim of promoting sustainability consistently throughout the Mizuho group, after deliberation at the Executive Management Committee and the Board of Directors, we revised our Basic Policy on Sustainability Initiatives to clarify our fundamental approach as outlined below. Our group companies have updated their own policies in the same manner.

By addressing key sustainability areas from a long-term perspective, Mizuho shall engage in management practices that take into consideration value creation for various stakeholders and shall work to improve our corporate value through the sustainable and steady growth of Mizuho. This in turn will contribute to environmental conservation and the sustainable development and prosperity of the economy, industry, and society both in Japan and around the world.

Mizuho shall implement initiatives for key sustainability areas following the below approaches.

- In regards to the economy, industry, society, and environment, Mizuho shall endeavor to increase its positive impacts and decrease its negative impacts, both direct and indirect.
- Mizuho, as a financial group, shall especially focus on indirect impacts it generates through provision of financial and other services and through dialogue with clients (engagement). It shall provide its clients with multi-faceted support for initiatives addressing the Sustainable Development Goals (SDGs) and Environmental, Social, and Governance (ESG) concerns.
- In the event of a conflict of interest or differences of opinions among stakeholders in regards to impacts and the timeframe for implementation, the group shall make a comprehensive decision by taking into account the circumstances or situation as well as international frameworks, agreements, or consensus and employing a long-term perspective towards harmony with the economy, industry, society, and environment.
### 2. Key sustainability areas (materiality) in FY2020

We have defined key sustainability areas in our 5-Year Business Plan in line with the expectations and requirements of stakeholders and based on the importance and affinity of such initiatives with our strategy, as well as medium- to long-term impact on our corporate value, and each in-house company, unit, and group will establish a strategy incorporating sustainability initiatives. Additionally, we have set targets/KPI based on our key sustainability areas. The key sustainability areas and other items are revised each fiscal year and reflected into our business plan.

<table>
<thead>
<tr>
<th>Business</th>
<th>Example</th>
</tr>
</thead>
</table>
| Declining birthrate and aging population, plus good health and lengthening lifespans | ▪️ Asset formation to prepare for the future  
▪️ Expand services that respond to a society with a declining birthrate and aging population  
▪️ Convenient services in line with diversifying lifestyles |
| Industry development & innovation                                       | ▪️ Smooth business succession  
▪️ Industry transformation  
▪️ Acceleration of innovation  
▪️ Growth in Asian economic zones  
▪️ Creating resilient social infrastructure |
| Sound economic growth                                                   | ▪️ Strengthening capital markets functions  
▪️ Transition to a cashless society  
▪️ Environmentally conscious social programs |
| Environmental considerations                                            | ▪️ Promoting action to address climate change and supporting the transition to a low carbon society |

<table>
<thead>
<tr>
<th>Corporate foundations</th>
<th>Example</th>
</tr>
</thead>
</table>
| Corporate governance                                                    | ▪️ Enhancing corporate governance  
▪️ Risk management, strengthening our IT infrastructure, and compliance  
▪️ Disclosure of information in a fair, timely, and appropriate manner, and holding dialogue with stakeholders |
| Personnel                                                               | ▪️ Talent development and creating workplaces that give employees a sense of purpose |
| Environment & society                                                   | ▪️ Environmental and human rights considerations for investment and lending  
▪️ Addressing climate change  
▪️ Improving financial and economic literacy, and promoting activities that contribute to society based on regional and societal needs |

Open partnerships and collaboration with a diverse range of stakeholders | |

Note: Icons indicate relation to major Sustainable Development Goals (SDGs)
3. Sustainability KPI and targets

Red text indicated newly added targets.

<table>
<thead>
<tr>
<th>Business</th>
<th>Corporate foundations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Industry development &amp; innovation</strong></td>
<td><strong>Diversity &amp; Inclusion</strong></td>
</tr>
<tr>
<td><strong>Environmental considerations</strong></td>
<td>Item</td>
</tr>
<tr>
<td><strong>Sound economic growth</strong></td>
<td>Percentage of management positions filled by women</td>
</tr>
<tr>
<td></td>
<td>(general manager and manager equivalent)*</td>
</tr>
<tr>
<td><strong>Declining birthrate and aging population, plus good health</strong></td>
<td>Percentage of management positions filled by employees hired outside Japan**</td>
</tr>
<tr>
<td><strong>and lengthening lifespans</strong></td>
<td>Percentage of new graduates hired for management track jobs who are female*</td>
</tr>
<tr>
<td></td>
<td>Percentage of paid annual leave taken by employees*</td>
</tr>
<tr>
<td></td>
<td>Percentage of eligible male employees who take childcare leave*</td>
</tr>
<tr>
<td><strong>Industry development &amp; innovation</strong></td>
<td>Item</td>
</tr>
<tr>
<td><strong>Smooth business succession</strong></td>
<td>Percentage of management positions filled by employees hired outside Japan**</td>
</tr>
<tr>
<td></td>
<td>Percentage of new graduates hired for management track jobs who are female*</td>
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<td></td>
<td>Percentage of paid annual leave taken by employees*</td>
</tr>
<tr>
<td></td>
<td>Percentage of eligible male employees who take childcare leave*</td>
</tr>
<tr>
<td>*Japan (FG/BK/TB/SC) **Ex-Japan (BK/TB/SC)</td>
<td></td>
</tr>
<tr>
<td><strong>Environmental Footprint</strong></td>
<td><strong>Environmental Footprint</strong></td>
</tr>
<tr>
<td><strong>CO₂ emissions basic unit (CO₂ emissions/total floor area)</strong></td>
<td><strong>Long-term target: Reduce by 19.0% as of FY2030 compared to FY2009</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Medium-term target: Reduce by 10.5% as of FY2020 compared to FY2009</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Green purchasing ratio target for paper of at least 85% (FG/Core group companies)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Paper recycling ratio target of at least 95% in FY2020 at major offices in Japan</strong></td>
</tr>
<tr>
<td><strong>Financial Education</strong></td>
<td><strong>Total financial education participants of 60,000 or more from FY2019 to FY2023</strong></td>
</tr>
</tbody>
</table>

(We are currently calculating the results for FY2019 and will disclose them on our website in the future.)
Environmental Policy

1. Purpose
   Our commitment to environmentally conscious action is included in the Mizuho Code of Conduct. This Environmental Policy stipulates the objectives that form the basis of our conduct and the specific actions we will take to achieve them. This policy has been established through a resolution of the Board of Directors and applies to all group companies of Mizuho Financial Group, Inc.

2. Our approach to addressing environmental issues
   Environmental issues are becoming more diverse and complex, and are recognized as one of the most pressing global concerns.
   Our economy, industries and society are supported by the varied benefits received from natural capital and ecosystems. We believe that addressing environmental issues which impact such resources is humanity's shared responsibility towards a sustainable society.
   At Mizuho, we recognize that our business activities may have both a direct and indirect impact upon the environment. We also believe that environmental initiatives such as mitigating and adapting to the impact of climate change, preserving biodiversity, and promoting circular economy are essential preconditions for the existence and activities of our company.
   While maintaining a global and long-term perspective of risks and opportunities, we are aiming to enhance our corporate value and contribute to the creation of a sustainable society. We intend to achieve this by proactively implementing environmental initiatives which draw on our capabilities and knowledge as a financial services group.

3. Initiatives facilitated by our business activities
   • We leverage our financial intermediary and consulting capabilities in order to proactively develop and offer financial products and services which support the environmental initiatives of corporations and other clients. In doing so, we aim to maximize positive impacts and avoid or mitigate negative impacts on the environment.
   • We have established an Environmental Management Policy for Financing and Investment Activity which we will revise as needed.
   • Mizuho Bank complies with the Equator Principles in regard to project finance deals and the management of environmental and social risk.
   • In regard to our asset management operations, Mizuho Trust & Banking and Asset Management One engage in dialogue with companies they invest in regarding ESG-related concerns, monitor the companies they entrust asset management operations to, and take other such actions to appropriately fulfill their stewardship responsibilities as responsible institutional investors.

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1 Natural capital: The world’s stock of renewable and non-renewable natural resources (e.g. plants, animals, air, water, land, and metals) which afford humanity all manner of benefits.
2 Equator Principles: A framework adopted by private sector financial institutions for determining, assessing, and managing environmental and social impact in large-scale projects (such as development or construction-related projects).
3 Stewardship responsibilities: The responsibilities of institutional investors to enhance the medium- to long-term investment return for their clients and ultimate beneficiaries by improving and fostering the enterprise value and sustainable growth of investment recipients through constructive engagement, or purposeful dialogue, based on in-depth knowledge of the companies and their respective business environments.
4. Efforts to reduce our environmental impact
   • We are working to reduce the environmental impact of our own business activities, including through the use of sustainable energy and resources, pollution prevention and practicing sustainable procurement.

5. Governance and management framework
   • Our efforts go beyond merely complying with environmental laws and regulations. We support local and international initiatives which aim to contribute to the creation of a sustainable society. In addition, we promote efforts which are aligned to relevant frameworks in each country and region.
   • We incorporate environmental risks and opportunities into our strategy and work to manage them appropriately.
   • Mizuho Financial Group has put in place a framework for ensuring steady implementation of initiatives towards realizing a sustainable society. This includes regular reports to the Board of Directors regarding progress on environmental initiatives and other information. We have also set indicators and goals related to our environmental initiatives and seek continuous improvement through regular progress evaluation and revision.
   • Our group companies implement environmental initiatives under a governance and management framework aligned with their respective business structure and scale.
   • In order to ensure compliance with and full implementation of this Environmental Policy, we will train all executive officers and employees.
   • To ensure transparency, we will proactively disclose updates as appropriate on our environmental initiatives.

6. Stakeholder engagement
   • Mizuho believes in constructive dialogue with our stakeholders through collaboration and cooperation with diverse stakeholders including customers, suppliers, local communities and government organizations.

7. Addressing specific environmental concerns
   Efforts to address climate change:
   • We recognize climate change as one of the most crucial global issues with the potential to impact the stability of financial markets, representing a threat to the environment, society, people’s lifestyles and businesses.
   • At the same time, we believe there are new business opportunities arising from the need to transition to a low-carbon society, such as the field of renewable energy and other businesses and innovations which contribute to mitigating and adapting to the impact of climate change.
   • In light of this, we have included responding to climate change as a key pillar of our business strategy and will take the following actions in order to proactively fulfill our role as a financial services group in the effort to achieve a low-carbon society by 2050.
     We will engage in proactive, constructive dialogue in response to our clients’ individual concerns and needs, and in support of their efforts to introduce climate change countermeasures and transition to a low-carbon society in both the medium and long term.
We will proactively develop and offer financial products and services designed to support clients’ efforts to introduce climate change countermeasures and transition to a low-carbon society.

We understand the importance of climate-related financial disclosures and we utilize the framework under the Recommendations of the TCFD\(^4\) in order to leverage growth opportunities and strengthen risk management as well as disclose information in a transparent manner regarding our progress.

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\(^4\) TCFD: Task Force on Climate-related Financial Disclosures
1. Structure for promoting sustainable business

**Mizuho Financial Group**

- **Retail & Business Banking Company**
- **Corporate & Institutional Company**
- **Global Corporate Company**
- **Global Markets Company**
- **Asset Management Company**
- **Global Products Unit**
- **Research & Consulting Unit**

**Sustainable Business Strategy Meeting**

Discussion on the promotion of sustainable business

**Group companies**

- **Mizuho Bank**
  - Corporate Strategy Advisory Department
  - Sustainability and Engagement Promotion Office
  - New

- **Mizuho International (UK)**
  - Appointment of Sustainability Head
  - New

**Mizuho Bank, Mizuho Trust & Banking, Mizuho Securities**

- Departments in charge of products

**Mizuho Securities**

- Projects Business Division Corporate Finance Dept. Sustainable Finance Office

**Mizuho Bank**

- Project Finance Dept.
  - Sustainable Development Office

**Asset Management One**

- Corporate Sustainability Office
- Investment Division

**Sustainability Promotion Project**

- Task Force on Climate Change Research
  - Mizuho Bank Industry Research Dept., Mizuho Trust & Banking Corporate Strategy Advisory Dept., Mizuho Securities Markets Strategic Intelligence Dept., Mizuho Information & Research Institute Environment and Energy Division 2 / Management & IT Consulting Division, Mizuho Research Institute Research Department / Consulting Division No.2…etc.
2. Mapping out our sustainable solutions

Finance

Mizuho Securities
- Green bonds
- Social bonds
- Sustainability bonds
- Sustainability-linked bonds
- SDG project bonds

Mizuho Bank
- Green loans
- Social financing
- Sustainability loans
- Sustainability-linked loans
- Mizuho Eco Finance
- Mizuho ESG Loans / Private placement bonds

- Project finance for renewable energy
- Mezzanine and equity investment
- Impact investment / Loans
- Social impact bonds

Consulting

Mizuho Research Institute, Mizuho Information & Research Institute, Mizuho Trust & Banking
- SDGs consulting

Mizuho Bank
- ESG consulting
- Providing industry insight/business matching

Support for solving social issues

Mizuho Bank
- Support for entrepreneurs working on the SDGs
- SDG-related open innovation Platform creation
- Cashless payments support
- Public-private partnership projects support
- Business succession support

Mizuho Trust & Banking
- Support for real estate development aligned with ESG factors, real estate brokerage

Asset management and products

Asset Management One
- ESG investment

Mizuho Trust & Banking, Mizuho Securities, Mizuho Bank
- Develop and offer ESG/SDG-related investment products
3. Our definition of sustainable finance

- Our definition of sustainable finance and environmental finance is based on Mizuho’s Key Sustainability Areas

The primary Key Sustainability Areas referenced are as follows:

- Environmental considerations: Promoting action to address climate change and supporting the transition to a low carbon society
- Sound economic growth: Strengthening capital markets functions
- Industrial development & innovation: (1) Smooth business succession, (2) Accelerating innovation, (3) Creating resilient social infrastructure

- Applicable finance areas:
  1. Finance for clients where the intended use of funds is environmental and/or social projects
  2. Financing to support and facilitate clients’ response to ESG/SDG-related areas, including financing requiring clients to meet certain related conditions, and providing consulting and assessment of clients’ response to ESG/SDGs-related areas

- Applicable business areas: Loans, underwriting, investments, asset management
Overview of our Environmental and Social Management Policy for Financing and Investment Activity

1. Our approach under our Environmental and Social Management Policy for Financing and Investment Activity

- Companies are expected to contribute to the sustainable development of society as good corporate citizens. In terms of the social and environmental impact of business decisions and business activity, companies need to consider the expectations of their stakeholders and ensure that their actions are not only aligned with international standards but also transparent and ethical.

- At Mizuho, we understand the importance of our social responsibility and duty to the public and we ensure that our corporate conduct fulfills our responsibilities to the communities in which we operate, giving due consideration to the expectations of a diverse range of stakeholders. This enables us to contribute to sustainable social and economic development as well as be part of the solution to issues affecting society.

- In regards to environmental issues, including climate change, we will endeavor to leverage our financial intermediary and consulting capabilities to maximize beneficial impacts and avoid or mitigate adverse impacts on the environment.

- One of the ways in which we fulfill our social responsibility and duty to the public is to provide financial services such as financing and capital raising support (“financing and investment”) to companies which are taking appropriate measures to address social issues. At the same time, we are also sensitive to the risks involved in engaging in business with companies connected to adverse social impacts such as environmental or human rights issues, or which are not taking appropriate measures to meet stakeholder expectations.

2. Businesses subject to this policy and implementation methods

- In this document, Section 3. (1) Financing and Investment Transactions Prohibited Regardless of Sector lists projects for which we prohibit any financing or investment. Section 3. (2) Financing and Investment Transactions which Require Additional Due Diligence Regardless of Sector and Section 3. (3) Policies on Specific Industrial Sectors describe our practices for determining whether to
engage in transactions with clients/projects in subject sectors, accounting for the
degree to which the client has taken steps to avoid or mitigate risk and other due
diligence as appropriate, based on the characteristics of the services we are
providing.

- In addition, based on this policy, our primary subsidiaries participate in
  engagement with specific clients in each sector with the aim of sharing a medium-
to long-term perspective on opportunities and risks accompanying environmental,
social, and governance (ESG) issues and climate change.

3. Specific policy implementation

(1) Financing and Investment Transactions Prohibited Regardless of Sector

In recognition of the serious risks to and adverse impacts on the environment and
society, we refuse to engage in transactions related to the following types of projects:

- Projects with an adverse impact on wetlands designated as Wetlands of
  International Importance under the Ramsar Convention.
- Projects with an adverse impact on UNESCO World Heritage sites, excluding
  projects that have received prior consent from the relevant national
  government and UNESCO.
- Projects violating the Convention on International Trade in Endangered
  Species of Wild Fauna and Flora (Washington Convention), excluding cases
  permitted under any country's reservation(s) to the convention.
- Projects involving child labor or forced labor

(2) Financing and Investment Transactions which Require Additional Due Diligence
Regardless of Sector

In recognition of the serious risks to and adverse impacts on the environment and
society, we make decisions on financing and investment for the following types of
projects based on a cautious and considered approach aimed at accounting for the
degree to which the client has taken steps to avoid or mitigate risk:

- Projects with adverse impacts on indigenous people's local communities.
- Projects involving land expropriation that causes forced relocation of residents

(3) Policies on Specific Industrial Sectors

For certain sectors such as those listed below, where there is a particularly high
possibility of contributing to adverse environmental or social impacts, our decisions
regarding whether to engage in business transactions take into consideration any applicable international standards or guidelines, whether the client or project has received relevant certifications, and whether there are any potential conflicts with local communities:

1) Weapons
We avoid providing financing or investment which will be used for the manufacture of weapons designed to kill or inflict structural damage during wars or armed conflicts. In addition, we avoid providing financing or investment to any manufacturer of cluster munitions, antipersonnel landmines, or biochemical weapons, regardless of the purpose of the funding, in view of the inhumane nature of these weapons.

2) Coal-fired power generation
Climate change is closely tied to various economic and social issues, and we recognize that addressing climate change is an important issue in the medium to long term. As a financial services group, we are dedicated to holding dialogue with clients and other stakeholders and fulfilling our consulting role, and will proactively address climate change and support the shift to a low-carbon society. These initiatives will also be promoted for the purpose of securing stable energy supplies in countries around the world.

Compared to other forms of power generation, coal-fired power generation produces more greenhouse gases, in addition to producing harmful substances such as sulfur oxide and nitrogen oxide. Therefore, it presents a higher risk of contributing to climate change, air pollution, and other environmental impacts.

In light of this, we do not provide financing or investment which will be used for new construction of coal-fired power plants. (This excludes business to which Mizuho is already committed as of the start of this policy.)

However, when a proposed coal-fired power plant is essential to the relevant country’s stable energy supply and will contribute to reduction of greenhouse gas emissions by replacing an existing power plant, we may provide financing or investment for the project, based on careful consideration.
We will also continue to support development of innovative, clean, and efficient next-generation technology that will contribute to the expansion of sustainable energy, as well as other initiatives for the transition to a low-carbon society.

3) Coal mining
We recognize that coal mining, when not managed properly, entails risk of adverse environmental and social impacts, which may include damage to ecosystems from hazardous waste produced in coal mines, as well as deaths or injuries resulting from mining accidents. Accordingly, our decisions regarding financing and investment for coal mining projects involve a thorough examination of the impacts on the environment, industrial safety and health, and other areas.

We do not provide financing or investment to coal mining projects employing the mountain top removal method, due to the severe impact this method has on the environment.

Further, in light of the fact that coal and other fossil fuels contribute to emissions of greenhouse gases, we undertake engagement with clients to confirm their measures for addressing transition risk accompanying climate change.

4) Oil and gas
We recognize that oil and gas extraction and pipeline construction entail risk of adverse environmental and social impacts, which may include pollution of oceans and waterways from oil spills and gas leaks, as well as violations of the human rights of indigenous peoples. Accordingly, our decisions regarding financing and investment for oil and gas projects involve a thorough examination of the impacts on the environment and of the potential for conflicts with indigenous peoples or local communities.

Further, in light of the fact that oil, gas, and other fossil fuels contribute to emissions of greenhouse gases, we undertake engagement with clients to confirm their measures for addressing transition risk accompanying climate change.

5) Palm oil, lumber, and pulp
While we recognize that palm oil, lumber, pulp, and other forest products are essential commodities for maintaining our lifestyles and infrastructure, we are also aware of the
potential human rights abuses within the production process, such as the violation of indigenous people’s rights or the use of child labor, in addition to environmental issues such as deforestation (including forest burning) and damage to biodiversity. In order to avoid becoming involved in such projects which may inflict human rights abuses or environmental destruction, our business decisions involve a thorough examination of whether there are any potential conflicts involving indigenous people or local communities, and we take into consideration whether the client/project has received certification for the production of sustainable palm oil or whether they have been certified for responsible forest management.

In the event that we identify any unlawful act during the term of a transaction, we urge the client to take immediate remedial measures. In the event that the client has not taken appropriate measures to address social issues, we undertake engagement with the client to promote remedial measures and, if the client’s remedial measures are unsatisfactory, we suspend new financing and investment.

Further, we urge our clients in these sectors to formulate sustainable environmental policy, such as No Deforestation, No Peat, and No Exploitation (NDPE), and to respect Free, Prior, and Informed Consent (FPIC) in relation to local communities.

4. Governance related to this policy

(1) Governance

Relevant governing bodies within Mizuho such as our Executive Management Committee and/or Business Policy Committee will regularly review whether our measures related to the risks, sectors, and other factors covered under this policy are appropriate and sufficient, with consideration to changes in the external environment and the results of implementation. Following these reviews, our governing bodies may revise or otherwise make changes to our measures to enhance their implementation.

Mizuho Bank, Mizuho Trust & Banking, Mizuho Securities, and Mizuho Americas put in place an operational framework for this policy and began implementing it from June 1, 2020.

(2) Education and training
Mizuho will conduct training and professional development exercises to enhance executive officers’ and employees' understanding of environmental and human rights issues. We will also implement educational seminars, training, and awareness building activities for executive officers and employees regarding compliance with the internal regulations and procedures which are relevant to their field of work.

(3) **Stakeholder communication**

As part of our initiatives in this area, we place a strong emphasis on engagement with stakeholders. Our objective in taking this approach is to ensure that our initiatives are aligned with society's standards and expectations.
Enhancing our response to the TCFD Recommendations

Introduction

The Task Force on Climate-related Financial Disclosures (TCFD) is a task force led by representatives of the private sector, established in December 2015 based on recommendations from the Financial Stability Board in order to enhance the availability of corporate information related to climate change. It issued its final recommendations report in 2017. At Mizuho we support the intent and aims of the TCFD Recommendations and are working to engage in initiatives and enhance disclosures in accordance with the recommendations.

In our Environmental Policy established in April 2020, we clearly lay out our stance on climate change initiatives according to the following.

- Efforts to address climate change

  - We recognize climate change as one of the most crucial global issues with the potential to impact the stability of financial markets, representing a threat to the environment, society, people’s lifestyles and businesses.

  - At the same time, we believe there are new business opportunities arising from the need to transition to a low-carbon society, such as the field of renewable energy and other businesses and innovations which contribute to mitigating and adapting to the impact of climate change.

  - In light of this, we have included responding to climate change as a key pillar of our business strategy and will take the following actions in order to proactively fulfill our role as a financial services group in the effort to achieve a low-carbon society by 2050.

    ➢ We will engage in proactive, constructive dialogue in response to our clients’ individual concerns and needs, and in support of their efforts to introduce climate change countermeasures and transition to a low-carbon society in both the medium and long term.

    ➢ We will proactively develop and offer financial products and services designed to support clients’ efforts to introduce climate change countermeasures and transition to a low-carbon society.

    ➢ We understand the importance of climate-related financial disclosures and we utilize the framework under the Recommendations of the TCFD\(^1\) in order to leverage growth opportunities and strengthen risk management as well as disclose information in a transparent manner regarding our progress.

\(^1\) TCFD: Task Force on Climate-related Financial Disclosures
### Executive summary

<table>
<thead>
<tr>
<th>Item</th>
<th>Status of FY2019 initiatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Corporate governance</td>
<td>■ Oversight by the Board of Directors: We established the Environmental Policy and clarified matters regarding the Board of Directors' oversight of the status of environmental initiatives.</td>
</tr>
<tr>
<td></td>
<td>■ Qualitative evaluation of the opportunities and risks posed by climate change: We qualitatively analyzed opportunities, transition risks, and physical risks posed by climate change for each sector over short-, medium-, and long-term time frames.</td>
</tr>
<tr>
<td></td>
<td>■ Scenario analysis: We conducted scenario analysis of transition risks and physical risks.</td>
</tr>
<tr>
<td>2. Strategy</td>
<td>■ Qualitative evaluation of the opportunities and risks posed by climate change: We qualitatively analyzed opportunities, transition risks, and physical risks posed by climate change for each sector over short-, medium-, and long-term time frames.</td>
</tr>
<tr>
<td></td>
<td>■ Scenario analysis: We conducted scenario analysis of transition risks and physical risks.</td>
</tr>
<tr>
<td>3. Risk management</td>
<td>■ Identification of climate change risks and integration with comprehensive risk management</td>
</tr>
<tr>
<td></td>
<td>■ Top risk management: We continued to monitor financing and investment from the perspective of environmental and social responsibility in our management of “top risks”, which are risks recognized by management as having major potential impact on the group. We now position climate change risks as “emerging risks”, which we define as major risks that must be addressed in the next few years despite the fact that materialization of the risks will occur over a medium- to long-term time frame, and we have begun periodic monitoring of related indicators.</td>
</tr>
<tr>
<td></td>
<td>■ Reviewing our policies in light of climate change risks: We managed relevant risks through reviewing our Environmental and Social Management Policy for Financing and Investment Activity (e.g. tightening our policy on coal-fired power generation), conducting due diligence based on the Equator Principles, and through</td>
</tr>
</tbody>
</table>
engagement with clients.

| 4. Indicators and targets | ■ Targets pertaining to risks and opportunities: We set targets on sustainable/environmental finance, reducing our outstanding credit balance for coal-fired power generation, and reducing our environmental impact.  
                         | ■ Monitoring indicators |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

(Underlined sections indicate areas in which we strengthened initiatives)
1. Corporate governance

The Environmental Policy established by Mizuho Financial Group in April 2020 states clearly that the Board of Directors provides oversight regarding matters including the status of environmental initiatives.

Based on the Environmental Policy, reports on the status of responses to TCFD Recommendations will periodically be made to the Board of Directors, which will provide oversight.

Also, as our various climate change initiatives are deeply interrelated with sustainability promotion, risk management, etc., following discussions at the business execution line, e.g. the Risk Management Committee and Executive Management Committee, oversight will be provided by the Risk Committee and Board of Directors in accordance with the structure for advancing and managing each initiative.

### Involvement in FY2019 initiatives for addressing climate change

<table>
<thead>
<tr>
<th>Description</th>
<th>Frequency</th>
<th>Business execution line Risk Management Committee</th>
<th>Executive Management Committee</th>
<th>Supervisory line Risk Committee</th>
<th>Board of Directors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establishment of Environmental Policy to strengthen environmental initiatives</td>
<td>-</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Status of response to TCFD Recommendations</td>
<td>Annually</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Review of management system for responsible investment, financing, and other services</td>
<td>Annually</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>FY2020 top risks, risk appetite policy</td>
<td>Quarterly</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Revision of the fundamental approach to sustainability initiatives</td>
<td>-</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>FY2020 business plan (including key sustainability areas, initiative planning, and targets)</td>
<td>Annually</td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
2. Strategy
(1) Approach to climate change

At Mizuho, we have positioned addressing climate change as a key part of our corporate strategy, and are ascertaining risks and opportunities as we advance initiatives.

Businesses and innovation that contribute to climate change mitigation and adaptation which are necessary for achieving a low-carbon society as envisioned by the Paris Agreement and the SDGs, such as renewable energy businesses, present business opportunities for us at Mizuho.

However, risks concerning the continued medium- to long-term feasibility of business models for industries and companies facing high levels of transition risk may increase if they are slow to address the transition or if their response is not sufficient. Also, risks concerning the ability of companies to continue operating will increase if they are slow to respond to physical risks such as extreme weather conditions, or if their response is not sufficient.

At Mizuho, one way that we fulfill our role as a financial institution is emphasizing the importance of engaging and holding constructive dialogue with our clients and other stakeholders on the topic of working toward a low-carbon society.

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2 Transition risk generally refers to risks stemming from widespread policy, legal, technological, and market changes which occur as the result of transitioning to a low-carbon economy.

3 Physical risk refers to risks such as the loss or damage of assets as a direct result of climate change, as well as impact on business performance due to supply chain disruptions as an indirect result of climate change.
Risks that climate change poses for the Mizuho group

The following are the main transition risks and physical risks that climate change poses for Mizuho as a financial institution:

<table>
<thead>
<tr>
<th>Details</th>
<th>Time frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in credit costs over the medium to long term for sectors with high levels of GHG emissions, as a result of the shift to low-carbon.(^4)</td>
<td>Medium to long term</td>
</tr>
<tr>
<td>Increase in risks such as regulatory risk and reputational risk regarding the financing of fossil fuel projects (e.g. coal-fired power generation) in light of increasing international demand for more drastic responses to climate change.</td>
<td>Short term</td>
</tr>
<tr>
<td>Increase in credit costs attributable to wind and water-related damages from typhoons and other storms, which cause clients’ financial performance to deteriorate as a result of business stagnation, as well as damage to mortgaged real estate.</td>
<td>Short, medium, and long term</td>
</tr>
<tr>
<td>Impact on business continuity due to the loss or damage of Mizuho assets (e.g. data centers) as a result of extreme weather conditions, and increases in management costs.</td>
<td></td>
</tr>
</tbody>
</table>

(2) Scenario analysis

The TCFD Recommendations include a recommendation to conduct scenario analysis for the purpose of increasing the flexibility of plans and resilience of strategy in anticipation of various future climate change-related circumstances.

In accordance with the TCFD Recommendations, we conducted scenario analysis of multiple scenarios including the 2°C scenario. We will continue enhancing our scenario analysis and utilize the results in engagement opportunities.

\(^4\) GHG (greenhouse gases): Gases which cause the greenhouse effect, thought to be the main cause of global warming.
FY2020 approach to scenario analysis

(1) Conduct qualitative evaluation and analysis of transition risks and physical risks by sector.
(2) Determine which transition risks and physical risks will be targeted by scenario analysis based on the results of (1) above.
(3) Set scenarios according to the risks to be analyzed, and conduct scenario analysis.

1 Qualitative evaluation of climate change risks

Focusing on the sectors advised by the TCFD Recommendations, we qualitatively evaluated climate change risks as they will unfold over short-, medium-, and long-term time frames and categorized each risk as high risk (H), medium risk (M) or low risk (L).

- We identified the electric utilities and oil, gas & coal sectors as sectors facing high transition risks.
- We identified the agriculture, food & forestry sector as a sector facing high levels of physical risks.

Table 1: Results of evaluation of transition risks and physical risks by sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>Transition risk</th>
<th>Physical risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric utilities</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>Oil &amp; gas</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>Coal</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>Logistics</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Automobiles</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Metals &amp; mining industry</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Chemical</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Agriculture, food &amp; forestry</td>
<td>M</td>
<td>H</td>
</tr>
<tr>
<td>Steelmaking</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Real estate*</td>
<td>L</td>
<td>H</td>
</tr>
</tbody>
</table>

* In this qualitative evaluation, “real estate” does not indicate impacts on the real estate business but rather on real estate property, broadly speaking (for example, risk of wind or water-related damage to buildings, risk of rising sea levels submerging land, and similar).
2 Sectors selected for scenario analysis

Based on the results of our qualitative evaluation by sector, we selected the following sectors for scenario analysis.

- Transition risk: We selected for scenario analysis the electric utilities sector and the oil, gas & coal sectors, which we identified as being at high risk in our qualitative evaluation.

- Physical risk: Although we identified the agriculture, food & forestry sector as being at high risk in our qualitative evaluation, we determined that our credit exposure in this sector was relatively low. Because of this, we selected for scenario analysis the potential impacts of building loss or damage and business stagnation in the real estate sector, which is subject to physical risk that would cause impacts across multiple industries.

3-1 Implementation of transition risk scenario analysis

- Scenario design

We used the projections in the International Energy Agency (IEA)'s Sustainable Development Scenario (SDS)\(^5\) to anticipate the impacts on our clients’ business performance and to analyze the possible consequences for Mizuho’s credit costs.

In our outlook for impacts on our clients’ business, we employed two scenarios: a static scenario which assumes that no attempt is made to transform the present business structure, and a dynamic scenario under which the business structure is transformed.

Specifically, we divided the sectors above into multiple subsectors according to their business categories and other characteristics. We also incorporated into the outlook the forecasted trend of electricity generation by source and production by energy type looking forward to 2050.

We designed this scenario analysis around particular assumptions and did not take into account our clients’ individual business plans, financing

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\(^5\) Sustainable Development Scenario (SDS): Scenario under which advancement of low-carbon holds the increase in the global average temperatures to below 2°C.
agreements, or other factors.

- Scenario analysis results

Through this analysis, we estimated that our credit costs will increase by ¥120 billion to ¥310 billion by 2050. The range between these amounts reflects the difference between the dynamic and static scenarios. With the dynamic scenario, we confirmed that business structure transformation, while involving some impacts in the short term, would limit the increase in credit costs over the medium to long term. We expect that business structure transformation would lead to lesser or no fossil fuel dependency, which would in turn reduce medium- to long-term carbon costs and improve business performance.

With our analysis, we reaffirmed the importance of implementing immediate responses to climate change to contribute to the transition to a low-carbon society over the medium to long term. We will further strengthen constructive dialogue (engagement) with our clients regarding their efforts to address climate change and respond with a deep understanding of their challenges and needs. In doing so, we will capture business opportunities by providing solutions supporting our clients’ initiatives and also strengthen risk management.

3-2 Implementation of physical risk scenario analysis

- Scenario design

With the Intergovernmental Panel on Climate Change (IPCC)’s Fifth Assessment Report as a base, we collaborated with an insurance consulting firm to calculate the rates at which typhoons and other storms cause wind and water-related building loss or damage. We then analyzed the potential impacts on Mizuho’s credit costs from the loss or damage of mortgaged real estate (buildings) in Japan.

- Scenario analysis results

  - Direct impacts

    While the strength of typhoons that make landfall in Japan will increase, the number/frequency of typhoons will decrease. Because of this and other factors, there will be only a limited impact on Mizuho’s credit
costs from loss or damage of mortgaged real estate (buildings) and consequent loss of value.

- **Indirect impacts**
  - We are currently in the process of analyzing what impacts there would be on Mizuho’s credit costs were damage to buildings by typhoons and other storms to cause stagnation in our clients’ businesses and affect their business performance. We plan to release the results of our analysis at a later date. We will look into necessary measures in line with our results going forward.

**(3) Opportunities posed by climate change**

Based on the results of our qualitative analysis of these sectors, we will proactively participate in engagement (constructive dialogue) with our clients, ascertain their business challenges and needs, and support their efforts to introduce climate change countermeasures and to transition to a low-carbon society from a medium- to long-term perspective. This will enable us to expand our business opportunities.

At Mizuho, we have been holding active discussions across our group about driving forward our sustainability business, and we have enhanced our relevant capabilities group-wide by fortifying our existing teams and by creating brand new teams. In this way, we are proactively focusing on our key sustainability area of promoting action to address climate change and supporting the transition to a low-carbon society, and we are capturing expanding business opportunities.

**(4) Issues going forward**

We recognize that there is no internationally agreed upon methodology for scenario analysis and that each firm and organization is advancing their initiatives by a trial-and-error approach. Our participation in the United Nations Environment Programme Financial Initiative (UNEP FI) pilot project\(^6\) and in the Financial Services Agency of Japan partnership with 2° Investing Initiative\(^7\)

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\(^6\) United Nations Environment Programme Finance Initiative (UNEP FI): The UNEP FI has launched a project to develop TCFD scenario analysis methods, and 28 banks from around the world are currently taking part.

\(^7\) Partnership with 2° Investing Initiative: Japan’s Financial Services Agency has partnered with 2° Investing Initiative to conduct an impact evaluation of climate-related risks to Japan’s financial institutions.
are some of the ways in which we are keeping on top of global trends and striving to improve available methods.

The scenario analysis we have conducted this fiscal year is only a pilot analysis based on particular assumptions (a first fiscal year measure). How to incorporate it fully into our strategy and risk management requires further examination going forward. From next fiscal year onward, we will also be looking into improving our scenario analysis by expanding the sectors and regions under consideration and making other changes.

3. Risk management

(1) Identification of climate change risks and integration with comprehensive risk management

As described in Section 2. Strategy, for financial institutions the main transition and physical risks resulting from climate change are as follows: increase in credit costs over the medium to long term for sectors with high levels of GHG emissions, as a result of the shift to a low-carbon society (credit risk); increase in risks such as regulatory risk and reputational risk regarding the financing of fossil fuel projects (e.g. coal-fired power generation) in light of increasing international demand for more drastic responses to climate change (operational risk); increase in credit costs attributable to wind and water-related damages from typhoons and other storms, which cause clients’ financial performance to deteriorate as a result of business stagnation, as well as damage to mortgaged real estate (credit risk); and impact on business continuity due to the loss or damage of Mizuho assets (e.g. data centers) as a result of extreme weather conditions, and increases in management costs (operational risk). Additional risks include the risk of shareholdings losing value (stock price risk or market risk) and the risk of new obstacles impeding funding (liquidity risk).

By identifying such climate change risks and integrating them into our overall risk management framework, we are ensuring comprehensive risk management.

(2) Our management of top risks

We have in place a “top risk management” system in which we designate risks
with major potential impact on the group as “top risks”. Through this system, we have continually monitored financing and investment from the perspective of environmental and social responsibility.

The TCFD Recommendations point out that “for many organizations, the most significant effects of climate change are likely to emerge over the medium to longer term and their timing and magnitude are uncertain.”

In our top risk management system, we now designate climate change risks as “emerging risks”, which we define as major risks that must be addressed in the next few years despite the fact that materialization of the risks will occur over a medium- to long-term time frame, and we have begun climate change risk monitoring. Going forward, we will design and implement additional risk control measures as necessary, as well as continue reporting on the status of our responses to our Board of Directors.

(3) Review of our climate change policies

From a standpoint of managing credit and reputational risk, we apply both our Environmental and Social Management Policy for Financing and Investment Activity and the Equator Principles to each of our transactions.

- Enhanced implementation based on our Environmental and Social Management Policy for Financing and Investment Activity (previously titled the Policies on Specific Industrial Sectors)

Considering the expectations and perspectives of our stakeholders, for the purpose of strengthening our environmental and societal considerations in making investment and financing decisions, we previously established a policy on initiatives involving sectors which have a high possibility of contributing to adverse environmental and social impacts, but we have now revised the policy to be comprehensive in prohibiting investment and financing in such initiatives regardless of sector, as well as points of caution (“Environmental and Social Management Policy for Financing and Investment Activity”). Additionally, from the perspective of strengthening our response to climate change risks, we conducted revisions, including tightening the policy which states that we will not provide financing for the construction of new coal-fired power generation facilities and adding the coal
mining sector, as well as additional clarification of our responses to transition
risks in the oil and gas sectors, and based on this policy we set a quantitative
target to reduce our outstanding credit balance for coal-fired power
generation facilities.

- Implementation based on the Equator Principles

Released in 2019, the fourth update to the Equator Principles (“EP4”) added
a requirement for financial institutions to have clients conduct climate change
risk assessments as part of due diligence. Aside from this, it also
strengthened various other measures to address climate change. Mizuho
Bank was an early adopter of the Equator Principles, and we continue to
apply them to project finance involving large-scale development or
construction, working with clients to identify, assess, and manage
environmental and social risks and impacts. (Planned effective date: July
2020)

4. Indicators and targets

(1) Targets pertaining to risks and opportunities

In addition to our target of reducing our environmental impact, in April 2020
Mizuho set new targets pertaining to key opportunities and risks presented by
climate change, based on our Environmental Policy.

- Sustainable finance & Environmental finance targets (new)
  FY2019 – FY2030 total: ¥25 trillion (of which the target for environmental
  finance is ¥12 trillion)

- Target to reduce the outstanding credit balance for coal-fired power
generation facilities based on our Environmental and Social Management
Policy for Financing and Investment Activity (new):
  Reduce the FY2019 amount by 50% by FY2030, and achieve an
  outstanding credit balance of zero by FY2050

- Target to reduce our own environmental footprint:
  CO₂ emissions basic unit of electricity used at our offices in Japan (CO₂
  emissions / total floor area)

  Long-term target:
By FY2030 achieve a 19.0% reduction compared to FY2009 levels

Medium-term target:

By FY2020 achieve a 10.5% reduction compared to FY2009 levels

Additionally, in FY2020 we plan to revise our target for reducing our own environmental footprint.

We are also continuing discussions on SBTs, including participating in the SBT road testing for financial institutions where we provided opinions on issues with SBT setting methods.

(2) Monitoring indicators

Monitoring indicator data will be totaled every fiscal year and disclosed on our website.9

- Scope 1 (direct) CO₂ emissions and energy usage
- Scope 2 (indirect) CO₂ emissions and energy usage
- Scope 3 (supply chain): Environmental impact of new large-scale projects (amount of contribution to CO₂ emissions) and environmental conservation (amount of contribution to CO₂ emission reductions)

Lastly: Working toward the future

At Mizuho, under the oversight of the Board of Directors and based on our policy of implementing initiatives in stages by 2022 in accordance with the TCFD Recommendations, we have established an action plan for the continual enhancement of initiatives every year.

8 Science Based Target (SBT)
9 Scope 1, 2: https://www.mizuho-fg.com/csr/mizuhocsr/report/data/index.html#anc01