Mizuho Financial Group, Inc. - Climate Change 2020



C0. Introduction

C_{0.1}

(C0.1) Give a general description and introduction to your organization.

The Mizuho Financial Group is one of the largest financial institutions in the world, offering a broad range of services including banking, trust and securities, and other business related to financial services through its group companies. The group has approximately 57,264 staff working in approximately 800 offices inside and outside Japan, and total assets of over US\$1.97trillion.

The group was created in September 2000 through the establishment of a holding company of our three predecessor banks, The Dai-Ichi Kangyo Bank (DKB), The Fuji Bank (Fuji) and The Industrial Bank of Japan (IBJ). Under the umbrella of the holding company Mizuho Financial Group, our major group companies include Mizuho Bank (MHBK), Mizuho Trust & Banking (MHTB) and Mizuho Securities (MHSC).

MHBK marked a new beginning by merging with Mizuho Corporate Bank on July 1, 2013. The new MHBK will strive to respond to the varying needs of all individual and corporate customers more precisely and expeditiously than ever before by making optimal use of the strengths and advantages that the two banks have cultivated to date.

MHTB is a trust bank with strengths in both the corporate and individual sectors. MHSC is a global full-line securities company that primarily serves individuals, corporations, financial institutions, public sector entities and institutional investors.

Unless otherwise noted these responses cover Mizuho Financial Group, Inc. (MHFG) and the principal banking subsidiaries and certain other core group companies of the Mizuho Financial Group in Japan (Mizuho Bank (MHBK), Mizuho Trust & Banking (MHTB), Mizuho Securities (MHSC), Asset Management One (AMO), Mizuho Research Institute (MHRI), Mizuho Information & Research Institute (MHIR) and Mizuho Private Wealth Management).

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	April 1 2019	March 31 2020	No	<not applicable=""></not>

C0.3

(C0.3) Select the countries/areas for which you will be supplying data.

India

Japan

Thailand

United Kingdom of Great Britain and Northern Ireland

United States of America

Viet Nam

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

JPY

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C-FS0.7

(C-FS0.7) Which organizational activities does your organization undertake?

Bank lending (Bank)

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of	Please explain
individual(s)	
	MHFG positions climate-related issues as a critical matter, and the Board of Directors has ultimate responsibility for sustainability issues, which include climate change. 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. Specifically, its responsibilities include determining strategies, primary action plans, risk management policy and business plans, formulating performance targets, and monitoring implementation and performance. When these are reviewed and instructions are given, climate change is among the considerations, so the responsibilities of the Board of Directors can be said to be linked to climate-related issues. In order to establish the Environmental Policy in April 2020, in FY 2019, the Environmental Policy was approved by the Board of Directors after deliberation by Executive Management Committee and the Risk Committee.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

which climate- mecha related issues are which	hanisms into h climate- ed issues are	Scope of board-level oversight	Please explain
meetings guidin, Reviev guidin, of acti Reviev guidin, manag policie Reviev guidin, plans Setting perfor objecti Monitt implen	ng strategy ewing and ng major plans tition ewing and ng risk agement ies ewing and ng business s ng rrmance titioving ementation performance of	opportunities to our own operations Climate-related risks and opportunities to our bank lending activities Climate-related risks and opportunities to our other products and services we provide to our clients. The impact of our own operations on the climate The impact of our bank lending activities on the climate	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, and reporting to the Board of Directors, oversight is provided by the Risk Committee and Board of Directors in accordance with the structure for advancing and managing each initiative. The main roles of the Board of Directors are making decisions on business execution such as basic management policy and supervising the execution of duties by directors and executive officers. In order to fulfill these roles, the Board of Directors appropriately establishes and supervises the operation of the internal control systems (regarding matters such as risk management, compliance, and internal auditing) and risk governance systems of Mizuho. In addition, the Board of Directors resolves the basic matters relating to Mizuho Financial Group's sustainability, and 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, the business execution line periodically reports on environmental initiatives. Based on the Environmental Policy, the business execution line periodically reports on environmental initiatives, including the status of responses to TCFD Recommendations, to the Board of Directors, which provides oversight. In formulating our FY2019 business plan (resolved by the Board of Directors), we have analyzed opportunities and risks related to social issues, including climate change, and planned out initiatives, and we continue to monitor and manage our progress on a regular basis. As part of our commitment to further strengthening our stance on responsible investing and financing, we established the "Environmental and Social Management Policy for Financing and Investment Activity", which takes in

C1.2

 $(\textbf{C1.2}) \ \textbf{Provide the highest management-level position(s) or committee} (\textbf{s) with responsibility for climate-related issues.}$

• • • •	Reporting line	Responsibility		Frequency of reporting to the board on climate- related issues
		Both assessing and managing climate-related risks and opportunities	Risks and opportunities related to our bank lending activities Risks and opportunities related to our other products and services Risks and opportunities related to our own operations	Quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

■Chief Executive Officer (CEO)

The CEO heads the Executive Management Committee, which is the highest decision-making body at the executive level, and at the same time has ultimate responsibility for climate change-related issues as the chief officer at the executive level for the Group's sustainability promotion system.

Specifically, the Executive Management Committee deliberates on important business execution matters include Mizuho's business policies and strategies, annual and medium- to long-term business plans, risk governance, and risk management.

Regarding climate change initiatives, based on our Environmental Policy, the committee deliberates and reports on setting indicators and targets and on periodic progress assessment and review related to our environmental initiatives. It then reports to the Board of Directors.

Following deliberations by the Executive Management Committee, in fiscal 2018, a response policy (action plan) for TCFD Recommendations was formulated, and in 2019, we deliberated on an environmental policy that included policies on long-term climate change initiatives.

Sustainability initiatives related to the Group that include climate change are compiled by the Strategic Planning Department and regularly reported to the Executive Management Committee, and the committee manages sustainability risks and opportunities, including for climate change. In fiscal 2019, a FY2020 action plan for TCFD Recommendations was formulated after deliberations by the Executive Management Committee.

While not in the reporting year, in fiscal 2019, Mizuho's Board of Directors specified key sustainability areas, including response to climate change, as a part of its medium-term business plan, and created a system for promoting sustainability integrated with strategy going forward. In addition, an action plan for accommodating TCFD Recommendations was formulated, discussed by the Executive Management Committee and reported to the Board of Directors and Audit Committee. We will manage its progress and make regular reports to the Board of Directors.

Based on the Environmental Policy, the business execution line periodically reports on environmental initiatives, including the status of responses to TCFD Recommendations, to the Board of Directors, which provides oversight.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity inventivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target	In the event that climate change and other such factors have a negative impact on business results or reputation, they would become factors impacting remuneration.
Business unit manager	Monetary reward	Other (please specify) (Please see comment field in detail.)	Achievement of environment-related businesses (measures to address climate change), including increased loan balances and new product development, large contract.
Facilities manager	Monetary reward	Emissions reduction project	Development of initiatives to reduce GHG emissions, including achievement of emissions reduction targets.
All employees	Non- monetary reward	Other (please specify) (Please see comment field in detail.)	Noteworthy business achievements such as environment-related businesses or reducing environmental impact and noteworthy achievements related to social contribution activities, which include environmental preservation activities.

C-FS1.4

(C-FS1.4) Does your organization offer its employees an employment-based retirement scheme that incorporates ESG principles, including climate change?

We offer an employment-based retirement scheme that incorporates ESG principles, including climate change.	Comment
Yes, as an investment option for some plans offered	Annual performance reviews for employees assess individual performance and contribution to the organization during the fiscal year, which includes, depending on the department, climate action and environmental business initiatives, and also measure the degree to which the individual has utilized and enhanced their capabilities. The results of these annual performance reviews are reflected in decisions on compensation. Decisions on retirement benefits also reflect reviews of individual performance and organizational contribution.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities? Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	I I	To (years)	Comment
Short- term	0	1	Mizuho sets a fiscal business plan annually. In formulating our FY2019 business plan (resolved by the Board of Directors), we have analyzed opportunities and risks related to social issues, including climate change, and planned out initiatives, and we continue to monitor and manage our progress on a regular basis.
Medium- term	1		Mizuho Financial Group defined climate-related risks and opportunities for each in-house company, unit and group when creating its business plan. Mizuho has identified key sustainability areas including Climate Change as well as included them in our 5–year Business Plan and business plans for specific areas, and we are advancing sustainability initiatives as a unified group. Mizuho set a Medium–term target that Mizuho Financial Group and principal companies reduce CO2 emissions basic unit (CO2 emissions / total floor area) stemming from electricity usage in the domestic facilities by 10.5% as of FY2020 compared to FY2009. In addition, Scope 1 and Scope 2 CO2 emissions and energy usage, environmental impact (CO2 emissions) and environmental benefits (CO2 reductions) related to new large-scale power projects, and amount of green finance and sustainable finance have been set as KPI.
Long- term	5		Mizuho set a long-term target that Mizuho Financial Group and principal companies reduce CO2 emissions basic unit (CO2 emissions / total floor area) stemming from electricity usage in the domestic facilities by 19.0% as of FY2030 compared to FY2009. Mizuho set long-term targets pertaining to key opportunities and risks presented by climate change, based on our Environmental Policy. - Sustainable finance & Environmental finance targets FY2019 – FY2030 total: 25 trillion yen (of which the target for environmental finance is 12 trillion yen). - 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. Our outstanding credit balance as of the end of FY2019 was 299.5 billion yen.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

We have in place a "top risk management" system in which we designate risks with major potential impact on the group as "top risks". Based on assessments of the likelihood, impact, and other characteristics of monitored risks, and after careful deliberation by management, top risks are designated and managed accordingly. With this approach, we endeavor to deepen communication regarding risks, seek to create common perspectives regarding risks, and work to secure consistency in awareness of various types of risks. Probability and impact are assessed based on our quantitative and qualitative criteria.

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.

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.

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 these industries and companies are slow to address the transition or if their response is not sufficient. Similarly, risks concerning both our clients' and our own capacity to continue operating will increase if we are slow to respond to physical risks such as extreme weather conditions, or if our response is not sufficient.

The main transition risks and physical risks that climate change poses for Mizuho as a financial institution are below.

- < Transition risk >
- Increase in credit costs for sectors with high levels of GHG emissions, as a result of the shift to low carbon
- Obstacles to funding and increases in funding costs resulting from climate change-related market turmoil
- · Compliance with regulatory changes reflecting increasing international demand for more drastic responses to climate change
- Reputational damage resulting from financing of fossil fuel projects (e.g. coal-fired power generation)
- < Physical risk >
- Increase in credit costs attributable to wind and water-related damages from typhoons and other storms and to damages from forest fires and other natural disasters, which cause clients' financial performance to deteriorate as a result of business stagnation, as well as to damage to mortgaged real estate
- 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.

Under the definition of carbon-related assets from the TCFD Recommendations, our credit exposure (EXP) in carbon-related sectors came to 7.3% of our total credit exposure as of March 31, 2020. We identified the electric utilities and oil, gas & coal sectors, all of which are carbon-related sectors, as sectors facing high transition risks in our qualitative evaluation.

- Scope 1: Direct CO2 emissions and energy usage
- Scope 2: Indirect CO2 emissions and energy usage
- Scope 3: Business trip-related CO2 emissions and environmental impact of new large-scale power generation projects (amount of contribution to CO2 emissions)
- Environmental conservation associated with new large-scale power generation projects (amount of contribution to CO2 emission reductions)

In addition, we set new targets pertaining to key opportunities and risks presented by climate change.

- Sustainable finance & Environmental finance targets

FY2019 - FY2030 total: 25 trillion yen (of which the target for environmental finance is 12 trillion yen).

Our FY2019 results (preliminary figures not including some investment data still being aggregated) for sustainable finance were \2.4 trillion (of which the results for environmental finance were 1.1 trillion yen).

- 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. Our outstanding credit balance as of the end of FY2019 was 299.5 billion yen.

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

By FY2030 achieve a 19.0% reduction compared to FY2009 levels By FY2020 achieve a 10.5% reduction compared to FY2009 levels

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations

Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term Medium-term Long-term

Description of process

i) ii) Process for managing risks and opportunities

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 on the medium- to long-term impact on our corporate value. Based on this, each in-house company, unit, and group will establish a strategy incorporating sustainability initiatives. Additionally, we have set targets/KPIs based on our key sustainability areas. The key sustainability areas and other items are revised each fiscal year and reflected into our business plan.

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. Specifically, we have identified in our business plan the climate change risks and opportunities each in-house company, unit, and group has defined and reflected them into our key sustainability areas.

"Risks"

We classify and manage the risks that arise in our businesses according to the various kinds of risk, including credit risk, market risk, liquidity risk, and operational risk. In addition to managing each type of risk individually, we have established a risk management structure to identify and evaluate overall risk and to keep risk within limits that are acceptable.

Regarding climate-change related risks, we have also integrated the risks into our overall risk management framework, ensuring comprehensive risk management. 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 on a quarterly basis.

Under the process of our scenario analysis in FY2019, we conducted qualitative evaluation and analysis of transition risks and physical risks by sector and determined targets for transition risks and physical risks. In terms of above process, 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, medium risk, or low risk.

"Opportunities"

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.

Mizuho's opportunities include capturing increased business opportunities to provide financing for renewable energy projects or solutions for clients' efforts to transition to a low-carbon society as well as enhancing our reputation in capital markets and society at large through appropriate initiatives and disclosures.

We have enhanced our capabilities for driving forward sustainable business group-wide. With these capabilities, 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 by facilitating our clients' innovation and risk reduction. In particular, we have fortified our existing teams and created brand new teams for our sustainable business and are coordinating our efforts across the group.

We have established key sustainability areas (materiality) and key performance indicators (monitoring indicators) to promote sustainable business, and we have set sustainable finance and environmental finance definitions and targets to proactively fulfill our role in directing capital towards environmental protection and the achievement of the SDGs.

vi) Case on Transition risks

1,2) In April 2018, we established the Policies on Specific Industrial Sectors for sectors such as coal—fired thermal power, which are of interest to stakeholders.

Based on changes in the outside environment and the results of implementation thus far, 3) the policies were revised in May 2019 for regular annual reviews and more sophisticated operations. In FY2019, following deliberations by the Board of Directors and the Risk Committee ,we revised our 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. Mizuho applies the Equator Principles and conducts operations based on the Policies on Specific Industrial Sectors in "Environmental and Social Management Policy for Financing and Investment Activity". As a part of this, engagement is conducted with some clients included in sectors targeted in connection with carbon-related assets. 4)These efforts have improved our reputation from stakeholder.

v) Case on Physical risks

1,2)With the intensification of abnormal weather events such as typhoons and heavy rains caused by climate change, stores, offices, computer centers, and other facilities in Japan and overseas may constantly suffer damage from disasters such as earthquakes and typhoons. 3)Regarding tangible assets risks, disasters subject to assessment are selected based on which disasters, including climate change, will most affect the Group's operations. Criteria have been established related to management methods and measurement methods for those risks. We decide the facilities for assessment according to disaster kind and assess the risk of buildings, attached equipment and system devices. In order to swiftly take measures to mitigate the risks in the event of an emergency, Mizuho develops appropriate and effective countermeasures and a framework for business continuity management. We established Crisis Management Offices in MHFG, MHBK, MHTB and MHSC that are responsible for responses in the event of emergency and business continuity management. 4)As a result, we are able to control the occurrence of damage.

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	included	Under the Mizuho's risk management system, "Current regulations" are always taken into account when identifying and assessing climate-related risks. For example, in Tokyo, where the headquarters of MHFG and many of its bases are located, the Tokyo Metropolitan Government's "Cap & Trade" system is in place. Therefore, if regulations become stricter as climate change progresses, there is a risk that response costs, such as costs for energy conservation measures and the purchase of emission credits, will increase.
Emerging regulation	sometimes included	Under the Mizuho's risk management system, "emerging regulations" are always taken into account when identifying and assessing climate-related risks. For example, there is a possibility that costs related to addressing further tightening of laws and ordinances related to environmental pollution and GHG emissions could increase. In addition, the Ministry of the Environment's Council has been discussing the introduction of a new carbon tax, but there is a risk that the costs of responding to such new regulations and changes in legislation will increase.
Technology Relevant, sometimes included Under the Mizuho's risk management system, "Technology" is sometimes included evaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specific industrial sevaluated in light of the group's policies on specif		Under the Mizuho's risk management system, "Technology" is always taken into account when identifying and assessing climate-related risks. As specific examples, when examining investment and financing for the construction of new power generation facilities, the impact of environmental and social risks is identified and evaluated in light of the group's policies on specific industrial sectors and Equator Principles, as well as technical trends such as emission control measures. In the event that tabs are not kept on technological innovation to help relieve or adapt to climate change or appropriate financial products and services are not provided, there is a possibility of lost opportunities.
Legal	sometimes included	Under the Mizuho's risk management system, "Legal" is always taken into account when identifying and assessing climate-related risks. As environmental regulations are tightened and ESG investment expands, the Mizuho Group recognizes the risk of lawsuit and penalties arising from climate change due to the delay in responding to these regulations. In support of the TCFD recommendations, MHFG has formulated an action plan based on the recommendations and is working to reduce the risk by actively promoting Information disclosure.
Market	sometimes included	Under the Mizuho's risk management system, "Market" is always taken into account when identifying and assessing climate-related risks. In the event of a drastic change in energy costs or a change in investor preferences due to the strengthening of regulations in response to climate change, there is a risk that credit risk will increase due to a decline in the value of fossil fuel assets. There is a possibility that those risks could result in damage depending on the scale, causing economic decline or worsening of management conditions at many companies, bringing about a negative impact on the Group's business results and financial standing.
Reputation	always included	Under the Mizuho's risk management system, "Reputation" is always taken into account when identifying and assessing climate-related risks. In the event of delay in making changes to systems related to addressing climate change or appropriate action is not taken with respect to demands of the public concerning climate change, there is a risk that the Group could incur damages as a result of decline in reputation. In support of the TCFD recommendations, MHFG has formulated an action plan based on the recommendations and is working to reduce the risk by actively promoting Information disclosure. MHFG will also properly implement its policies for specific sectors and the Equator Principles.
Acute physical	sometimes	Under the Mizuho's risk management system, "Acute physical" is always taken into account when identifying and assessing climate-related risks. There is a possibility that natural disasters arising from worsening climate change could result in damage to branches, computer centers and other facilities in Japan and other countries depending on the scale.
Chronic physical		Under the Mizuho's risk management system, "Chronic physical" is always taken into account when identifying and assessing climate-related risks. Higher average temperatures could increase response costs such as more efficient data center air conditioning equipment and increased energy consumption.

C-FS2.2b

(C-FS2.2b) Do you assess your portfolio's exposure to climate-related risks and opportunities?

	We	Please explain
	assess the	
	portfolio's	
	exposure	
Bank lending (Bank)	· ·	Focusing on the sectors advised by the TCFD Recommendations, we quntitively considerd credit exposure and qualitatively evaluated climate change risks as they will unfold over short-medium-, and long-term time frames and categorized each risk as high risk, medium risk, or low risk. The qualitative assessment was based on 111 documents, including reports by international organizations such as the IEA and intergovernmental organizations, government reports by countries such as the Ministry of the Environment, academic papers, reports by industry organizations, media reports and reports by NGOs, and reports by individual companies in each sector. -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. Under the definition of carbon-related assets from the TCFD Recommendations, our credit exposure (EXP) in carbon-related sectors came to 7.3% of our total credit exposure as of March 31, 2020. We identified the electric utilities and oil, gas & coal sectors, all of which are carbon-related sectors, as sectors facing high transition risks in our qualitative evaluation. Our credit exposure is total of Mizuho Bank and Mizuho Trust & Banking's loans, foreign exchange assets, acceptances and guarantees, and committed lines of credit as of March 31, 2020. Carbon-related sectors are from the industries listed under "Type of industry" in "Types of Industries in Survey of Loans and Bills Discounted by Type of Industry" (Attachment 1 of the Bank of Japan Research and Statistics Department's "Guidelines for Completing the Financial Statistics Survey" (provisional translation)), "petroleum refining", "mining and quarrying of stone and gravel" (coal, oil, and gas mining within this industry), and "electricity, gas, heat supply, and water" (excluding water supply, nuclear power generation, and renewable energy power generation businesses). We selected the electric utilit
,		analysis comes to 40% of the previously mentioned total credit exposure in carbon-related sectors.
Investing (Asset manager)	<not Applicable ></not 	<not applicable=""></not>
Investing (Asset owner)	<not Applicable ></not 	<not applicable=""></not>
Insurance underwriting (Insurance company)	<not Applicable ></not 	<not applicable=""></not>
Other products and services, please specify	Not applicable	

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(C-FS2.2c) Describe how you assess your portfolio's exposure to climate-related risks and opportunities.

	Portfolio coverage	Assessment	Description
Bank lending (Bank)	Minority of the portfolio	Qualitative and quantitative	Focusing on the sectors advised by the TCFD Recommendations, we quntitively considerd credit exposure and qualitatively evaluated climate change risks as they will unfold over short, medium, and long-term time frames and categorized each risk and opportuny as high risk, medium risk, or low risk. The qualitative assessment was based on 111 documents, including reports by international organizations such as the IEA and intergovernmental organizations, government reports by countries such as the Ministry of the Environment, academic papers, reports by industry organizations, media reports and reports by NGOs, and reports by individual companies in each sector. - 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. Under the definition of carbon-related assets from the TCFD Recommendations, our credit exposure (EXP) in carbon-related sectors came to 7.3% of our total credit exposure as of March 31, 2020. We identified the electric utilities and oil, gas & coal sectors, all of which are carbon-related sectors, as sectors facing high transition risks in our qualitative evaluation. We selected the electric utilities sector and the oil, gas & coal sectors, which we identified as being at high risk in our qualitative evaluation. The credit exposure which we selected for analysis comes to 40% of the previously mentioned total credit exposure in carbon-related sectors. Our credit exposure is total of Mizuho Bank and Mizuho Trust & Banking's loans, foreign exchange assets, acceptances and guarantees, and committed lines of credit as of March 31, 2020. Carbon-related sectors are from the industries listed under "Type of industry" in "Types of Industries in Survey of Loans and Bills Discounted by Type of Industry" (Altachment 1 of the Bank of Japan Research and Statistics Department's "Guidelines for Completing the Financial Statistics Survey" (provisional trans
Investing (Asset manager)	<not Applicabl e></not 	<not Applicable></not 	<not applicable=""></not>
Investing (Asset owner)	<not Applicabl e></not 	<not Applicable></not 	<not applicable=""></not>
Insurance underwriting (Insurance company)	<not Applicabl e></not 	<not Applicable></not 	<not applicable=""></not>
Other products and services, please specify	<not Applicabl e></not 	<not Applicable></not 	<not applicable=""></not>

C-FS2.2d

(C-FS2.2d) Do you assess your portfolio's exposure to water-related risks and opportunities?

	We assess the portfolio's exposure	Portfolio coverage	Please explain
Bank lending (Bank)	Yes	Minority of the portfolio	With the Intergovernmental Panel on Climate Change (IPCC)'s Fifth Assessment Report as a base, we collaborated with a general insurance consulting firm to calculate through a Monte Carlo simulation the rates at which typhoons and heavy rains 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 real estate collateral (including mortgaged real estate) in Japan.
Investing (Asset manager)	<not Applicable></not 	<not Applicabl e></not 	<not applicable=""></not>
Investing (Asset owner)	<not Applicable></not 	<not Applicabl e></not 	<not applicable=""></not>
Insurance underwriting (Insurance company)	<not Applicable></not 	<not Applicabl e></not 	<not applicable=""></not>
Other products and services, please specify	Please select	<not Applicabl e></not 	

C-FS2.2e

(C-FS2.2e) Do you assess your portfolio's exposure to forests-related risks and opportunities?

	We assess the portfolio's exposure	Portfolio coverage	Please explain
Bank lending (Bank)	Yes	Unknown	For certain sectors, 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. We identified the palm oil, lumber, and pulp sectors as certain sectors. We determine 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 (constructive dialogue) 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. 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.
Investing (Asset manager)	<not Applicable ></not 	<not Applicabl e></not 	<not applicable=""></not>
Investing (Asset owner)	<not Applicable ></not 	<not Applicabl e></not 	<not applicable=""></not>
Insurance underwriting (Insurance company)	<not Applicable ></not 	<not Applicabl e></not 	<not applicable=""></not>
Other products and services, please specify	Please select	<not Applicabl e></not 	

C-FS2.2f

(C-FS2.2f) Do you request climate-related information from your clients/investees as part of your due diligence and/or risk assessment practices?

	We request climate-related information	Please explain	
Bank lending (Bank)	Yes, for some	Mizuho Bank recognizes that large scale development projects may have adverse impacts on the environment and local communities. To minimize and/or mitigate the environmental and social risks associated with such large scale developments, Mizuho Bank, in collaboration with the project proponents (customers), conducts appropriate environmental and social risks assessment/due-diligence as required under Equator Principles.	
		In the process, we request customers to provide necessary information and to conduct climate change risk assessments related projects based on TCFD recommendation. In addition, based on Specific Measures of our Environmental and Social Management Policy for Financing and Investment Activity, our primary subsidiaries participate in engagement (constructive dialogue) 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.	
Investing (Asset manager)	<not Applicable></not 	<not applicable=""></not>	
Investing (Asset owner)	<not Applicable></not 	<not applicable=""></not>	
Insurance underwriting (Insurance company)	<not Applicable></not 	<not applicable=""></not>	
Other products and services, please specify	Please select		

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business? Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Current regulation

Enhanced emissions-reporting obligations

Primary potential financial impact

Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification

Operational risk

Company-specific description

The Tokyo Metropolitan Basic Environment Ordinance mandates emissions reductions of 8% in the first period (FY2010-14) and 17% in the second period (FY2015-19) and even more 27% in the third period (FY2020-24) against the reference value, and it applies to a total of six offices and information centers at MHBK and MHIR, so in order to meet this requirement, costs will be incurred to invest in facilities, etc., purchase emissions credits and conduct third-party verification of emissions levels.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

104369000

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

In the second period (FY2015-19) of the Tokyo Cap-and-Trafe Program, mandatory emissions reductions at applicable business sites total 18637 tons per year.

Within the framework of this scheme, purchasing the equivalent in emissions credits would cost 104 million yen. Because 5,600 yen/ton ×18637tons. The value of 5,600yen is the price of the Renewable energy credit in October 2019 under the Tokyo Cap-and-Trafe Program. 104 million yen is equivalent to 0.003% of fiscal 2019 ordinary costs. Therefore, the potential impact in our company is small.

Cost of response to risk

9151759000

Description of response and explanation of cost calculation

1,2)The Tokyo Metropolitan Basic Environment Ordinance mandates emissions reductions of 17% in the second period (FY 2015-19) and even more 27% in the third period (FY 2020-24) against the reference value, and it applies to a total of six offices and information centers at MHBK and MHIR, so in order to meet this requirements, costs will be incurred to invest in facilities or purchase emissions credits.

3)The Strategic Planning Department of MHFG periodically monitors compliance with obligations by checking the core group companies' reports and the like, and the results are reported to MHFG's Chief Sustainability Officer. Also, it instructs related companies to carry out simulations, etc. On reduction obligations and receives reports from them. In addition, it deliberates policies including effective countermeasures for reducing CO2 emissions in coordination with related companies.

Moreover, in order to make mandatory reductions under the Tokyo Metropolitan Government's environmental ordinance, MHBK and MHIR have formulated plans for increasing efficiency through operations such as management of air conditioning temperature settings and reduction of number of air conditioning units used, and capital investment such as a renovation of equipment to introduce high–efficiency equipment, primarily in large-scale projects, and they confirm progress and inspect plans on an annual basis.

Conducted by MHFG's Sustainability Office and existing members of Group companies' building management departments. And in order to correspond to reduction duty, we expect about 9.1 billion yen for investments (0.91 million yen/year × 10 years) and 6.4 million yen for third-party verification of emissions levels from FY2010 to FY2019 (0.64 million yen/year × 10 years).

4)As a results, CO2 emissions in fiscal 2019 decreased and costs were reduced

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Current regulation Other, please specify (Policy and legal: Increased pricing of GHG emissions.)

Primary potential financial impact

Other, please specify (Policy and legal: Increased operating costs (e.g., higher compliance costs, increased isurance premiums))

Climate risk type mapped to traditional financial services industry risk classification

Operational risk

Company-specific description

A feed-in tariff scheme for renewable energies was started in 2012 in accordance with the Act on Special Measures Concerning the Procurement of Renewable Electric Energy by Operators of Electric Utilities, which adds a surcharge for the promotion of renewable energies onto regular power rates. In addition, a global warming tax is now levied on gasoline, kerosene, electricity and city gas in the form of a tax rate that will be phased in and tacked onto the petroleum and coal tax. For us, this will result in increased energy costs of 18million yen annually.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

1443000000

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

For electricity, gasoline, kerosene and city gas, the rate is proportional to amounts used, so unless energy savings activities are conducted it is not possible to keep operating costs from rising. If there is no change in the amount of electricity used in FY2009, it is equivalent to costs increasing by 1.4billion yen in FY2019, which accounts for 0.04% of fiscal 2019 ordinary cost. Therefore, the potential impact in our company is small.

Cost of response to risk

Λ

Description of response and explanation of cost calculation

1)For electricity, gasoline, kerosene and city gas, the rate is proportional to amounts used, so unless energy savings activities are conducted it is not possible to keep operating costs from rising. 2)If there is no change in the amount of electricity used in FY2009, it is equivalent to costs increasing by 1.4billion yen in FY2019, which accounts for 0.04% of fiscal 2019 ordinary cost.

Electricity price per 1kWh in FY2019(A)= 5,661billions yen (B)/324millions Wh (C)=17.45 yen/kWh(A)

17.45 yen/kWh(A)×461 million Wh(D)=8.06 billion yen (E)

8.06 billion yen (E) -6.61 billion (F) = 1.4 billion yen

(B): Electricity price in FY2019、(C): Amount of electricity in FY2019、(D): Amount of electricity in FY2009, (E): Value calculated by the electricity cost in FY2019 for the amount of electricity in FY2009, (F): Cost increased in FY2019 if there is no change in the amount of electricity used in FY2009.

3)To achieve the targets set by MHFG (regarding the reduction of CO2 emission), each group company promotes initiatives to reduce the use of resources and energy based on the group's environmental policies. The Sustainability Office receives reports from the group companies on a regular basis and monitors their progress. In addition, to reduce costs, we continue to work to conserve energy by turning off rows of florescent lights, installing LED lighting, and putting restrictions on air conditioning use in the summer and winter, among other measures. MHBK and MHTB regularly post electricity consumption figures for all branches on the bank intranet, which helps motivate the branches to conserve more. Also, to curb gasoline use, we have policies on reducing vehicles and encouraging employees to turn their engines off while at a stop.

4) As a result, CO2 emissions in fiscal 2019 decreased and costs were reduced.

From a personnel standpoint, measures are conducted with existing personnel in charge of building management for the core Group companies, and measures are primarily consist of operational initiatives, so additional costs are not incurred.

Comment

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Other, please specify (Acute physical: Increased severity and frequency of extreme weather events such as cyclones and flood)

Primary potential financial impact

Decreased revenues due to reduced production capacity

Climate risk type mapped to traditional financial services industry risk classification

Credit risk

Company-specific description

Mizuho has approximately 800 sites in Japan as well as offices, etc. in 38 countries/regions overseas.

If the business performance of our customers deteriorates from business stagnation or they are forced to bear unexpectedly large costs for infrastructure facility repair or restoration as a result of their assets or collateral assets being substantially damaged by forest fires or wind and water from typhoons or torrential rains caused by climate change, this could worsen cash flow, etc. and potentially cause our business to be damaged indirectly due to increased credit risk or loan payment deferrals provided as a relief measure.

Time horizon

Long-term

Likelihood

More likely than not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

520000000000

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

- -Scenario: Intergovernmental Panel on Climate Change (IPCC) Representative Concentration Pathway (RCP) 8.5 scenario (4°C scenario) / RCP 2.6 scenario (2°C scenario).
- Details of analysis: We employed a Monte Carlo simulation to calculate the rates at which typhoons and other storms cause wind and water-related building loss or damage. We then analyzed the potential direct (collateral value) and indirect (business stagnation) impacts on Mizuho's credit costs from the loss or damage of mortgaged real estate (buildings) in Japan.
- -Targeted sectors: Japan only, for impact of business stagnation this is based on the location of the client's headquarters (this analysis targeted middle-market firms and SMEs)
- Period: 2050 (while the IEA scenario is until 2040, the period for this analysis is until 2050)
- Credit costs through 2050: Under both the 2°C and 4°C scenarios, we estimated that our credit costs would increase by up to \52 billion by 2050 and the impact on our mortgage lending value is limited.

Cost of response to risk

0

Description of response and explanation of cost calculation

1,2) Mizuho has approximately 800 sites in Japan as well as offices, etc. in 38 countries/regions overseas.

If the business performance of our customers deteriorates from business stagnation or they are forced to bear unexpectedly large costs for infrastructure facility repair or restoration as a result of their assets or collateral assets being substantially damaged by forest fires or wind and water from typhoons or torrential rains caused by climate change, this could worsen cash flow, etc. and potentially cause our business to be damaged indirectly due to increased credit risk or loan payment deferrals provided as a relief measure.

- 3) With credit risk management, portfolio management is conducted in an effort to disperse risk by region, customer, type, industry, etc. Overall credit risk is broken down into credit concentration risk, which occurs as the result of concentrating credit in specific companies or corporate groups, and chain-reaction default risk, which occurs as the result of concentrating credit in specific corporate groups or areas, etc, and risk management is conducted by establishing various guidelines for control of the respective risks. In addition, departments in charge of credit risk management monitor compliance with these guidelines, and report to the Business Policy Committee.
- 4) As a result of above initiatives, we are able to control the occurrence of damage.

Risk, including risk associated with climate change, is managed comprehensively within an existing framework. Expenses specifically for management of this risk are not separated out and managed. Additional cost is 0.

Comment

Operating costs are incurred due to assigning specialized personnel and for research to accurately identify business opportunities, for example, but they are recognized as regular business management costs, so no additional costs are incurred to respond to needs related to climate change problems.

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation Other, please specify (Increase in credit costs for sectors with high levels of GHG emissions, as a result of the shift to low carbon due to policy, leagal. tecgnological and market resks)

Primary potential financial impact

Increased credit risk

Climate risk type mapped to traditional financial services industry risk classification

Credit risk

Company-specific description

There are risks such as increase in credit costs for sectors with high levels of GHG emissions, as a result of the shift to low carbon and compliance with regulatory changes reflecting increasing international demand for more drastic responses to climate change.

Under the definition of carbon-related assets from the TCFD Recommendations, we calcutated our credit exposure (EXP) in carbon-related sectors, it came to 7.3% of our total credit exposure as of March 31, 2020.

In our analysis 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 using International Energy Agency's Sustainable Development Scenario and New Policies Scenario. Through this analysis, we estimated our credit costs through 2050.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

1200000000000

Potential financial impact figure - maximum (currency)

310000000000

Explanation of financial impact figure

Based on international Energy Agency (IEA)'s Sustainable Development Scenario (SDS) / New Policies Scenario (NPS), in our analysis for impacts on our clients' business of electric utilities and oil, gas & coal sectors in Japan, 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.

While the IEA scenario is until 2040, the period for this analysis is until 2050. The result of Credit costs through 2050 is increase of approx. 120 billion yen (dynamic scenario) to 310 billion yen(static scenario).

Cost of response to risk

11598000

Description of response and explanation of cost calculation

1,2) There are risks such as increase in credit costs for sectors with high levels of GHG emissions, as a result of the shift to low carbon and compliance with regulatory changes reflecting increasing international demand for more drastic responses to climate change.

Under the definition of carbon-related assets from the TCFD Recommendations, we calcutated our credit exposure (EXP) in carbon-related sectors, it came to 7.3% of our total credit exposure as of March 31, 2020.

3) Based on the above, in April 2020, for the purpose of strengthening our environmental and societal considerations in making investment and financing decisions. We revised our 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") after internal discussions in FY2019. 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.

Furthermore, 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. Following these reviews, our governing bodies may revise or otherwise make changes to our measures to enhance their implementation. At the same time, they will ensure all of our employees and executive officers are well-informed and trained in regard to the measures.

We managed relevant risks through conducting due diligence based on the Equator Principles, and through engagement with clients.

Regarding training costs for departments involved in deals subject to the Equator Principles, costs are incurred for seminars and business trips to various regions. FY 2019 training costs for departments which need to apply the Equator Principles for their peojects are 11598000 yen.

4) As a result of above initiatives, we are able to control the occurrence of damage.

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business? Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

With reduction targets being set in all countries and regions since the Paris Agreement, Japan has also formulated reduction targets for 2030 and drafted a long-term strategy for 2050. In particular, policies have been put forth for the adoption of renewable energy, utilization of hydrogen, and promotion of the carbon recycle based on carbon capture and storage technologies, and business opportunities are increasing for MHIR, which has strengths in these areas. An increasing number of companies are reconstructing their business strategies in connection with the actualization of these decarbonization policies, and with our strength in environmental strategy consulting for companies, our business opportunities are expanding.

Additionally, since the release of the final proposal of the TCFD, which recommends to companies the disclosure of financial information related to climate risk, our corporate clients have begun to conduct so-called scenario analysis in which climate risk resilience is considered and to disclose the results in their financial reports. We have a track record in scenario analysis and disclosure of non-financial information and occupy a leading position in Japan in this field, which is providing us with many business opportunities.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

1000000000

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

In FY 2018, MHIR received orders for the environment and energy sector increased by approximately ¥1 billion compared to the amount received before the Paris Agreement came into effect (FY2015).

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

1,2)With reduction targets being set in all countries and regions since the Paris Agreement, Japan has also formulated reduction targets for 2030 and drafted a long-term strategy for 2050. In particular, policies have been put forth for the adoption of renewable energy, utilization of hydrogen, and promotion of the carbon recycle based on carbon capture and storage technologies, and business opportunities are increasing for MHIR, which has strengths in these areas. An increasing number of companies are reconstructing their business strategies in connection with the actualization of these decarbonization policies, and with our strength in environmental strategy consulting for companies, our business opportunities are expanding.

3) The Environment and Energy Division1&2 and Global Innovation & Energy Division in MHIR's consulting group is staffed with approximately 130 researchers and consultants to capture business opportunities by utilizing the institute's extensive track record in research and consulting in the field of the environment and energy. The department works to strengthen contract survey and research work for the government.

While not in the reporting year, in the Research & Consulting Unit, to support Mizuho in responding as a united group to clients' varied sustainable business needs, beginning with the SDGs and ESG issues, in 2020 we launched the Sustainability Promotion Project.

In terms of research collaboration, we are focusing on output usable in consulting and coordination among in-house companies, and we have formed a Task Force on Climate Change Research. The Task Force on Climate Change Research is composed of 12 consultants and researchers from Mizuho Research Institute and Mizuho Bank's Industry Research Department and is researching climate change impacts from macroeconomic and industrial perspectives. The task force's work is furthering initiatives that support Mizuho's management and business.

Operational costs are incurred to assign dedicated personnel, conduct research to precisely identify business opportunities, but these costs are recognized as normal business management costs, so additional costs are not incurred from the perspective of accommodating needs associated with the problem of climate change.

4) As a result of these efforts, MHIR has received more orders in the environmental and energy sectors than it did before the Paris Agreement came into effect (FY 2015).

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Mizuho's opportunities include capturing increased business opportunities to provide financing for renewable energy projects or solutions for clients' efforts to transition to a low-carbon society as well as enhancing our reputation in capital markets and society at large through appropriate initiatives and disclosures.

In order to actively engage in "Promoting action to address climate change and supporting the transition to a low carbon society," one of our key sustainability areas, and capture expanding business opportunities, including support of customer innovation and risk reduction, Mizuho established and strengthened promotion organizations related to its sustainability business and is working to coordinate across the Group

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

Time horizon

Long-term

Likelihood

Very likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

1100000000000

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

1.1 trillion yen was the total results defined as environmental finance in FY2019. The applicable business areas of our environmental finance are loans, underwriting, investments, and asset management and the applicable finance areas are "finance for clients where the intended use of funds is environmental projects" and "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".

In particular, we actively finance renewable energy projects for which further growth is expected going forward, and in FY2019 arranged financing of 380.0 billion yen. This included financing for large-scale offshore wind power projects in Japan and Taiwan, an area of increasing vitality, and financial advisory services for participation in a Taiwanese offshore wind power project by JERA Co., Inc.

With the sustainable finance market growing globally, green bonds underwritten by Mizuho Securities totaled 94.8 billion yen in Japan and 285.4 billion yen outside Japan.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

- 1,2) Mizuho's opportunities include capturing increased business opportunities to provide financing for renewable energy projects or solutions for clients' efforts to transition to a low-carbon society as well as enhancing our reputation in capital markets and society at large through appropriate initiatives and disclosures.
- 3) In order to actively engage in "Promoting action to address climate change and supporting the transition to a low carbon society," one of our key sustainability areas, and capture expanding business opportunities, including support of customer innovation and risk reduction, Mizuho established and strengthened promotion organizations related to its sustainability business and is working to coordinate across the Group
- -Sustainable finance & Environmental finance targets: FY2019 FY2030 total: 25 trillion yen (of which the target for environmental finance is 12 trillion yen).

At MHBK, the Environment and Energy Team in the Industry Research Division gathers information on international trends and Japanese government policy and considers business opportunities and initiatives with related departments. In addition to teams for different industrial sectors, the department also has a Strategic Projects Office that is accumulating expertise by handling smart city and other cross-sector infrastructure projects in order to conduct solutions-based sales in line with the needs of major companies. Business planning divisions for small, medium-sized and middle market companies handle development and management of environment-related products and services, and in coordination with MHIR and the Industry Research Division, strategies are conceived depending on the sector, based on external conditions, and company characteristics such as size. Operational costs are incurred to assign dedicated personnel, conduct research to precisely identify business opportunities, develop educational tool for sales reps and sales tool for customers, and provide information related to environmental businesses, but these costs are recognized as normal business management costs, so additional costs are not incurred from the perspective of accommodating needs associated with the problem of climate change.

4) As a result of the above efforts, our transactions of environmental finance have expanded compared to those before the Paris Agreement came into effect.

Comment

Identifier

Opp3

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Due to changing weather patterns and damage-causing tropical low-pressure systems, etc., our customers bear the risk that their facilities and products will be damaged and the risk that business will be impacted due to the difficulty of obtaining goods needed to provide products and services. As customer companies work to hedge these risks, it is thought that new fund demand will be generated and demand will increase for financial derivative products that hedge risk and consulting on hedging risk, etc.

Time horizon

Short-term

Likelihood

Very unlikely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

The problem of climate change is causing changes in demand for risk hedge-related products and services, and if we do not precisely grasp market changes, we will not be able to respond quickly and we will lose revenue opportunities. At present such products and services do not account for a large proportion of our overall business, and the level of impact differs depending on the degree and speed of market change, so calculating financial impact is therefore impossible.

Cost to realize opportunity

0

CDF

Strategy to realize opportunity and explanation of cost calculation

- 1) Due to changing weather patterns and damage-causing tropical low-pressure systems, etc., our customers bear the risk that their facilities and products will be damaged and the risk that business will be impacted due to the difficulty of obtaining goods needed to provide products and services. As customer companies work to hedge these risks, it is thought that new fund demand will be generated and demand will increase for financial derivative products that hedge risk and consulting on hedging risk, etc.
- 2) We may already handle some products and services according to the present customer's needs, but in order to effectively take advantage of opportunities when the market grows, it is necessary to identify customer needs and develop new products and services continuously as well as make proposals to customers that are timely and match their needs by enhancing the product knowledge of employees through online learning, group training, study sessions at sales branches and the like.
- 3) While not in the reporting year, in the Research & Consulting Unit, to support Mizuho in responding as a united group to clients' varied sustainable business needs, beginning with the SDGs and ESG issues, in 2020 we launched the Sustainability Promotion Project. In terms of research collaboration, we are focusing on output usable in consulting and coordination among in-house companies, and we have formed a Task Force on Climate Change Research. This Task Force is composed of 12 employees from Mizuho Research Institute and Mizuho Bank's Industry Research Department and is researching climate change impacts from macroeconomic and industrial perspectives. The task force's work is furthering initiatives that support Mizuho's management and business. In June, the task force published a One Think Tank Report on the true nature and future of climate change issues, discussing the unprecedented changes that interactions between various actors are driving in the business environment.
- 4) As a result, it has been well received by customers.

Such new product development and employee training incurs substantial costs, but such costs are recognized as normal business management costs, so additional costs are not incurred from the perspective of accommodating needs related to the problem of climate change.

Comment

Such new product development and employee training incurs substantial costs, but such costs are recognized as normal business management costs, so additional costs are not incurred from the perspective of accommodating needs related to the problem of climate change.

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?

Yes, and we have developed a low-carbon transition plan

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform its strategy?

Yes, qualitative and quantitative

C3.1b

(C3.1b) Provide details of your organization's use of climate-related scenario analysis.

Climate-
related
scenarios
and models
applied

etails

IFA Process

Sustainable Below is the process we employed to conduct our scenario analysis in FY2019

- development 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 analyze impacts on credit costs.

"Qualitative Analysis"

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, medium risk, or low risk

We identified the electric utilities and oil, gas & coal sectors as sectors facing high transition risks.

"Scope"

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

We selected the electric utilities sector and the oil, gas & coal sectors, which we identified as being at high risk in our qualitative evaluation. The credit exposure which we selected for analysis comes to 40% of the previously mentioned total credit exposure in carbon-related sectors.

■Scenario design

-Transition risk

We used the projections from the Sustainable Development Scenario (SDS) in the International Energy Agency (IEA)'s World Energy Outlook 2018 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.

In the outlook we produced using the projections in the IEA's SDS, while overall power generation in Japan will remain more or less constant through 2050, thermal power generation will fall by approximately 90%, and restarted nuclear power generation and renewable energy will make up the gap. Worldwide demand for oil will also be relatively steady through 2050, but in Japan demand for oil will undergo a notable decline. These predicted shifts in the external environment constitute the assumptions for our analysis.

We designed this scenario analysis around particular assumptions and did not take into account our clients' individual business plans, financing agreements, or other factors.

■Scenario analysis results

Through this analysis, under standards as of March 31, 2020, we estimated that our credit costs will increase by 120 billion yen to 310 billion yen 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.

IEA NPS

Process

Below is the process we employed to conduct our scenario analysis in FY2019.

- 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 analyze impacts on credit costs.

"Qualitative Analysis"

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, medium risk, or low risk. We identified the electric utilities and oil, gas & coal sectors as sectors facing high transition risks

"Scope"

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

We selected the electric utilities sector and the oil, gas & coal sectors, which we identified as being at high risk in our qualitative evaluation. The credit exposure which we selected for analysis comes to 40% of the previously mentioned total credit exposure in carbon-related sectors

■Scenario design

- Transition risk

We used the projections from the Sustainable Development Scenario (SDS) in the International Energy Agency (IEA)'s World Energy Outlook 2018 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.

In the outlook we produced using the projections in the IEA's SDS, while overall power generation in Japan will remain more or less constant through 2050, thermal power generation will fall by approximately 90%, and restarted nuclear power generation and renewable energy will make up the gap. Worldwide demand for oil will also be relatively steady through 2050, but in Japan demand for oil will undergo a notable decline. These predicted shifts in the external environment constitute the assumptions for our analysis.

We designed this scenario analysis around particular assumptions and did not take into account our clients' individual business plans, financing agreements, or other factors

■Scenario analysis results

-Transition risk

Through this analysis, under standards as of March 31, 2020, we estimated that our credit costs will increase by 120 billion yen to 310 billion yen 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.

CDF Page 17 of 49 Climaterelated scenarios and model: applied

Details

RCP 2.6 Process

Below is the process we employed to conduct our scenario analysis in FY2019

- 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 analyze impacts on credit costs

"Qualitative Analysis"

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, medium risk, or low risk.

We identified the agriculture, food & forestry sector as a sector facing high levels of physical risks.

"Scope"

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

- 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 real estate loss or damage in Japan, a physical risk which would cause impacts across multiple industries, as well as the potential impacts of the resulting business stagnation.

■Scenario design

- Physical risk

With the IPCC's Fifth Assessment Report as a base, we collaborated with a general insurance consulting firm to calculate through a Monte Carlo simulation the rates at which typhoons and heavy rains 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 real estate collateral (including mortgaged real estate) in Japan.

■Scenario analysis results

- Physical risk
- (1) Direct impacts

According to the IPCC's Fifth Assessment Report, under global warming, rising sea surface temperatures will lead to an increase in atmospheric moisture, and the strength of typhoons that make landfall in Japan will increase. However, due to the smaller difference in sea and air temperatures, the convection currents (rising air currents) that cause typhoons will be weaker, and the number/frequency of typhoons will decrease. Because of this and other factors, we estimate that 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.

(2) Indirect impacts

To analyze what impacts there would be on Mizuho's credit costs in the event that damage to buildings by typhoons and other storms causes stagnation in our clients' businesses and affects their business performance, we employed two approaches: a bottom-up approach reflecting estimates of the number of days of business stagnation for each individual company and a top-down approach reflecting a certain level of stress on portfolios that were likely to see more days of business stagnation than the average. In addition to an impact analysis using the IPCP Effth Assessment Report's RCP 2.6 scenario assuming a 2°C average temperature rise by 2050, we also conducted an impact analysis using the RCP 8.5 scenario assuming a 4°C average temperature rise by 2050, the worst-case scenario for global warming and physical risk. Under both the 2°C and 4°C scenarios, we estimated that our credit costs would increase by up to 52 billion yen by 2050. With our analysis, we reaffirmed the importance of engagement (constructive dialogue) with our clients to contribute to the transition to a low-carbon society over the medium to long term. Going forward, we will further strengthen 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.

RCP 8.5 ■Proces

Below is the process we employed to conduct our scenario analysis in FY2019.

- 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 analyze impacts on credit costs

"Qualitative Analysis"

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, medium risk, or low risk.

We identified the agriculture, food & forestry sector as a sector facing high levels of physical risks.

"Scope"

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

- 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 real estate loss or damage in Japan, a physical risk which would cause impacts across multiple industries, as well as the potential impacts of the resulting business stagnation.

■Scenario design

- Physical risk

With the IPCC's Fifth Assessment Report as a base, we collaborated with a general insurance consulting firm to calculate through a Monte Carlo simulation the rates at which typhoons and heavy rains 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 real estate collateral (including mortgaged real estate) in Japan.

■Scenario analysis results

- Physical risk
- (1) Direct impacts

According to the IPCC's Fifth Assessment Report, under global warming, rising sea surface temperatures will lead to an increase in atmospheric moisture, and the strength of typhoons that make landfall in Japan will increase. However, due to the smaller difference in sea and air temperatures, the convection currents (rising air currents) that cause typhoons will be weaker, and the number/frequency of typhoons will decrease. Because of this and other factors, we estimate that 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.

(2) Indirect impacts

To analyze what impacts there would be on Mizuho's credit costs in the event that damage to buildings by typhoons and other storms causes stagnation in our clients' businesses and affects their business performance, we employed two approaches: a bottom-up approach reflecting estimates of the number of days of business stagnation for each individual company and a top-down approach reflecting a certain level of stress on portfolios that were likely to see more days of business stagnation than the average. In addition to an impact analysis using the IPCC Fifth Assessment Report's RCP 2.6 scenario assuming a 2°C average temperature rise by 2050, we also conducted an impact analysis using the RCP 8.5 scenario assuming a 4°C average temperature rise by 2050, the worst-case scenario for global warming and physical risk. Under both the 2°C and 4°C scenarios, we estimated that our credit costs would increase by up to 52 billion yen by 2050. With our analysis, we reaffirmed the importance of engagement (constructive dialogue) with our clients to contribute to the transition to a low-carbon society over the medium to long term. Going forward, we will further strengthen 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.

C3.1d

	Have climate-related	Description of influence	
	risks and opportunities influenced your strategy in this area?		
Products and	Yes	1)"Products and services" have impacted as opportunities for our business and its term is from short to long.	
services		2)Climate change is closely tied to various economic and social issues, and Mizuho recognizes it as a significant challenge that must be addressed from a medium- to long-term standpoint.	
		3)For the transition to a decarbonized society, we will actively promote the provision of financial products and services that contribute to the mitigation of, and adaptation to, climate change and will actively capture business opportunities based on international concerns and trends, etc. We have enhanced our capabilities for driving forward sustainable business group-wide. With these capabilities, 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 by facilitating our clients' innovation and risk reduction. In particular, we have fortified our existing teams and created brand new teams for our sustainable business and are coordinating our efforts across the group. We have established key sustainability areas (materiality) and key performance indicators (monitoring indicators) to promote sustainable business, and we have set sustainable finance and environmental finance definitions and following long targets to proactively fulfill our role in directing capital towards environmental protection and the achievement of the SDGs. These actions were discussed and decided at the above-mentioned bodies in FY2019. - Sustainable finance & Environmental finance targets: FY2019 – FY2030 total: 25 trillion yen (of which the target for environmental finance is 12 trillion yen). Our definitions of Environmental finance are as follows. - Definition: Environmental considerations: Promoting action to address climate change and supporting the transition to a low carbon society. - Applicable business areas: Loans, underwriting, investments, asset management	
Cumphi	Yes	4) As a result of these efforts, we have expanded our business.	
Supply chain and/or value chain	Tes	1,2) "Supply chain and/or value chain" has impacted as risks for our business and its term is long.3) For the transition to a decarbonized society, we will actively promote the provision of financial products and services that contribute to the mitigation of, and adaptation to, climate change and will appropriately manage risks based on international concerns and trends, etc.	
		Regarding valuchain, we have also formulated a set of Policies on Specific Industrial Sectors and created a system for identifying environmental and social risks connected to sectors with a high likelihood of causing such negatives impacts (weapons, coal-fired thermal power, palm oil, forest products, etc.), and for making credit decisions based on due diligence related to reducing or avoiding environmental and social risks. Additionally, 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.	
		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. Our outstanding credit balance as of the end of FY2019 was 299.5 billion yen. In addition, to analyze what impacts there would be on Mizuho's credit costs in the event that damage to buildings by typhoons and other storms causes stagnation in our clients' businesses and affects their business performance, we employed two approaches: a bottom-up approach reflecting estimates of the number of days of business stagnation for each individual company and a top-down approach reflecting a certain level of stress on portfolios that were likely to see more days of business stagnation than the average. As results of impact of business stagnation, credit costs through FY 2050 were 52 billion yen at most, under both 2°C and 4°C scenarios.	
		4) As a result of the above efforts, we could control business damage.	
Investment in R&D	Yes	1,2) "Investment in R&D" has impacted as opportunities for our business and its tern is from short to long. Research on climate change-related orders is increasing ye year. Long-term strategies related to fostering industries in line with societal changes by Climate Change Adaptation and Mitigation will be impacted. Changes in the busine environment surrounding energy—technological innovation, deregulation and the spread of next-generation automobiles and loT will cause structural changes in relat industries, and our business strategies will be affected as a result. Led by the Research & Consulting Unit, we strategically work to make policy proposals and foster industries that take into account these structural changes. 3) While not in the reporting year, to support Mizuho in responding as a united group to clients' varied sustainable business needs, beginning with the SDGs and ESG issues, in 2020 we launched the Sustainability Promotion Project. By the collaboration within the research function of the mizuho group, we have formed a Task Force on Climate Change Research. This Task Force is composed of employees from Mizuho Research Institute and Mizuho Bank's Industry Research Department and is researching climate change impacts from macroeconomic and in perspectives.	
		4) As a result of these efforts, we have expanded our business.	
it as a significant challenge that must be addressed from a medium- to long-term standpoint. 3) As a comprehensive financial group, Mizuho will engage with clients and other stakeholders and demonstrate its consulting functions to actively change for the transition to a decarbonized society. Specifically, after deliberation by the Executive Management Committee and the Board of Directors, the Basic Policy on Sustainability Initiatives wa to define our fundamental approach and methods for advancing sustainability initiatives. In order to advance sustainability initiatives integrated with business strategy, we defined key sustainability areas according to the expectations and and based on changes in the external environment, including the Paris Agreement and the related strategies, policies of governments and the initia addition, when formulating our business plan, climate-related risks and opportunities were defined for each in-house company, unit, and group. Additionally, during FY2019, the Board of Directors, Executive Management Committee, Risk Management Committee and Risk Committee deliber and specific actions, the basis of climate change initiatives, as well as clarification of our stance toward climate change initiatives for achieving a de April 2020 we formulated an environmental policy that incorporated these deliberations. We have also formulated a set of Policies on Specific Industrial Sectors and created a system for identifying environmental and social risks connect likelihood of causing such negatives impacts (weapons, coal–fired thermal power, palm oil, forest products, etc.), and for making credit decisions be related to reducing or avoiding environmental and social risks.		3) As a comprehensive financial group, Mizuho will engage with clients and other stakeholders and demonstrate its consulting functions to actively work to address climate change for the transition to a decarbonized society. Specifically, after deliberation by the Executive Management Committee and the Board of Directors, the Basic Policy on Sustainability Initiatives was established in May 2019 to define our fundamental approach and methods for advancing sustainability initiatives. In order to advance sustainability initiatives integrated with business strategy, we defined key sustainability areas according to the expectations and requests of stakeholders and based on changes in the external environment, including the Paris Agreement and the related strategies, policies of governments and the initiatives such as TCFD. In addition, when formulating our business plan, climate-related risks and opportunities were defined for each in-house company, unit, and group. Additionally, during FY2019, the Board of Directors, Executive Management Committee, Risk Management Committee and Risk Committee deliberated on issue awareness and specific actions, the basis of climate change initiatives, as well as clarification of our stance toward climate change initiatives for achieving a decarbonized society, and in April 2020 we formulated an environmental policy that incorporated these deliberations. We have also formulated a set of Policies on Specific Industrial Sectors and created a system for identifying environmental and social risks connected to sectors with a high likelihood of causing such negatives impacts (weapons, coal-fired thermal power, palm oil, forest products, etc.), and for making credit decisions based on due diligence	

C3.1e

(C3.1e) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues	1,2) With reduction targets being set in all countries and regions since the Paris Agreement, Japan has also formulated reduction targets for 2030 and drafted a long-term strategy for 2050. In particular, policies have been put forth for the adoption of renewable energy, utilization of hydrogen, and promotion of the carbon recycle based on carbon capture and storage technologies. An increasing number of companies are reconstructing their business strategies in connection with the actualization of these decarbonization policies, and business opportunities are increasing for environmental finances and MHIR, which has strengths in these areas. 3) Considering this background, we have positioned addressing climate change as a key part of our corporate strategy, and are ascertaining risks and opportunities as we advance initiatives. We have enhanced our capabilities for driving forward sustainable business group-wide. With these capabilities, 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 by facilitating our clients' innovation and risk reduction. In particular, we have fortified our existing teams and created brand new teams for our sustainable business and are coordinating our efforts across the group. We have established key sustainability areas (materiality) and key performance indicators (monitoring indicators) to promote sustainable business, and we have set sustainable finance and environmental finance definitions and targets to proactively fulfill our role in directing capital towards environmental protection. Se also set the new targets as follows: Sustainable finance & Environmental finance targets (new) FY2019 – FY2030 total: 25 trillion yen (of which the target for environmental finance is 12 trillion yen).

C3.1f

(C3.1f) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

C-FS3.2

(C-FS3.2) Are climate-related issues considered in the policy framework of your organization?

Yes, both of the above

C-FS3.2a

	Туре	Portfolio	Description	
		coverage of policy		
Bank lending (Bank)	Credit	Minority of the portfolio	m a standpoint of managing credit and reputational risk, we apply both our Environmental and Social Management Policy for Financing and Investment Activity and the Equaticiples to each of our transactions. sidering the expectations and perspectives of our stakeholders, for the purpose of strengthening our environmental and societal considerations in making investment and noing decisions, we previously established a policy on initiatives involving sectors which have a high possibility of contributing to adverse environmental and social impacts. In 12020, to more thoroughly reflect the tenets of our Human Rights Policy and Environmental Policy, we revised the policy to be comprehensive in prohibiting investment and noing in such initiatives regardless of sector, as well as points of caution ("Environmental and Social Management Policy for Financing and Investment Activity") conducted revisions in April 2020 aftre the deliberation through the Board of Directors, Executive Management Committee, Risk Management Committee and Risk Committee and Fixed Property of the policy of the policy which states that we will not provincing 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 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. certain sectors where there is a particularly high possibility of contributing to adverse environmental or social impacts, our decisions regarding whether to engage in business sactions take into consideration any applicable international standards or guidelines, whether the client or project has received relevant certifications, and whether there are a serial conflicts with local communities. Regarding the climate change-linked sectors of coal-fired power generation; coal mining; oil and gas; and palm oil, lumber, and pulp, we e established the following poli	
			In addition, based on this policy, our primary subsidiaries participate in engagement (constructive dialogue) 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.	
Investing (Asset manager)		<not Applicabl e></not 	<not applicable=""></not>	
Investing (Asset owner)	<not Applic able></not 	<not Applicabl e></not 	:Not Applicable>	
Insurance underwriting (Insurance company)		<not Applicabl e></not 	Not Applicable>	
Other products and services, please specify	Please select	Please select		

C-FS3.2b

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(C-FS3.2b) Describe your exclusion policies related to industries and/or activities exposed or contributing to climate-related risks.

Type of exclusion policy	Portfolio	Application	Description	
Coal	Bank lending	Other, please specify (all of above)	fe recognize that coal mining, when not managed properly, entails risk of adverse environmental and social impacts, which may include damage to ecosystems from azardous waste produced in coal mines, as well as deaths or injuries resulting from mining accidents. Accordingly, our decisions regarding financing and investment for coal inining 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 be all 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. Fix policy was established in fiscal 2020.	
Oil & gas	Bank lending	Other, please specify (all of above)	acognize that oil and gas extraction and pipeline construction entail risk of adverse environmental and social impacts, which may include pollution of oceans and ways 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 gas projects involve a thorough examination of the impacts on the environment and of the potential for conflicts with indigenous peoples or local communities. er, 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 isseing transition risk accompanying climate change.	
Other, please specify (Coal fired power plant)	Bank lending	Other, please specify (all of above)	Elimate 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 nancial services group, we are dedicated to holding dialogue with clients and other stakeholders and fulfilling our consulting role, and will proactively address climate change nd 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. Sompared 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. I 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 ommitted as of the start of this policy.) Solvever, 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 applacing 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 so other initiatives for the transition to a low-carbon society. his policy was established in fiscal 2018	
Other, please specify (Palm oil, lumber, pulp)	Bank lending	Other, please specify (all of above)	This policy was established in fiscal 2018. 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 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. This policy was established in fiscal 2018.	

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Intensity target

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number

Int 1

Year target was set

2013

Target coverage

Country/region

Scope(s) (or Scope 3 category)

Scope 2 (location-based)

Intensity metric

Metric tons CO2e per square meter

Base year

2009

Intensity figure in base year (metric tons CO2e per unit of activity)

254162.71

 $\% \ of \ total \ base \ year \ emissions \ in \ selected \ Scope(s) \ (or \ Scope \ 3 \ category) \ covered \ by \ this \ intensity \ figure$

88.8

Target year

2020

Targeted reduction from base year (%)

Intensity figure in target year (metric tons CO2e per unit of activity) [auto-calculated]

227475 62545

% change anticipated in absolute Scope 1+2 emissions

29.81

% change anticipated in absolute Scope 3 emissions

0

Intensity figure in reporting year (metric tons CO2e per unit of activity)

% of target achieved [auto-calculated]

<Calculated field>

Target status in reporting year

Achieved

Is this a science-based target?

No, but we anticipate setting one in the next 2 years

Please explain (including target coverage)

We do not assume expanding of the total floor area sharply from FY2018. In FY2019, the amount of electricity usage decreased by 29.81% compared to the base year. We foresee that the CO2 emissions in FY2020 become the same level as FY2018 by continuing energy-saving measures.

Target reference number

Int 2

Year target was set

2016

Target coverage

Country/region

Scope(s) (or Scope 3 category)

Scope 2 (location-based)

Intensity metric

Metric tons CO2e per square meter

Base year

2009

Intensity figure in base year (metric tons CO2e per unit of activity)

254162.7°

% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure

88.8

Target year

2030

Targeted reduction from base year (%)

19

Intensity figure in target year (metric tons CO2e per unit of activity) [auto-calculated]

205871.7951

% change anticipated in absolute Scope 1+2 emissions

29.81

% change anticipated in absolute Scope 3 emissions

0

Intensity figure in reporting year (metric tons CO2e per unit of activity)

% of target achieved [auto-calculated]

<Calculated field>

Target status in reporting year

Achieved

Is this a science-based target?

No, but we anticipate setting one in the next 2 years

Please explain (including target coverage)

We do not assume expanding of the total floor area sharply from FY2018. In FY2019, the amount of electricity usage decreased by 29.81% compared to the base year. We foresee that the CO2 emissions in FY2030 become the same level as FY2019 by continuing energy-saving measures.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Other climate-related target(s)

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number

Oth 1

Year target was set

2020

Target coverage

Business activity

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Please select

Target denominator (intensity targets only)

<Not Applicable>

Base year

2019

Figure or percentage in base year

1100

Target year

2030

Figure or percentage in target year

12000

Figure or percentage in reporting year

1100

% of target achieved [auto-calculated]

0

Target status in reporting year

New

Is this target part of an emissions target?

No

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain (including target coverage)

Unit of the base year, target year, and reporting year is billion yen.

Our target is as follow and the progress rate of FY2019 is 9.16%.

"Environmental finance targets during FY2019 - FY2030 is 12 trillion yen." and our FY2019 results for environmental finance was 1.1 trillion yen.

Applicable business areas of the target is Loans, underwriting, investments, and asset management. Applicable finance areas is "finance for clients where the intended use of funds is environmental and/or social projects" and "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" for promoting action to address climate change and supporting the transition to a low carbon society.

Target reference number

Oth 2

Year target was set

2020

Target coverage

Business activity

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Other, please
specify

Other, please specify (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)

Target denominator (intensity targets only)

<Not Applicable>

Base year

2019

Figure or percentage in base year

2995000000000

Target year

2050

Figure or percentage in target year

0

Figure or percentage in reporting year

299500000000

% of target achieved [auto-calculated]

0

Target status in reporting year

New

Is this target part of an emissions target?

NIo

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain (including target coverage)

Unit of the base year, target year, and reporting year is yen. Our target is as follow.

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 is "Reduce the FY2019 amount by 50% by FY2030, and achieve an outstanding credit balance of zero by FY2050".

Our outstanding credit balance as of the end of FY2019 was 299.5 billion yen.

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	
To be implemented*	2	162
Implementation commenced*	2	13
Implemented*	2	4089.61
Not to be implemented	0	

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Other, please specify Other, please specify (Behavioral change)	
---	--

Estimated annual CO2e savings (metric tonnes CO2e)

556

Scope(s)

Scope 2 (market-based)

Voluntary/Mandatory

Mandatory

Annual monetary savings (unit currency - as specified in C0.4)

25000000

Investment required (unit currency - as specified in C0.4)

4132327

Payback period

<1 year

Estimated lifetime of the initiative

3-5 years

Comment

We have conducted these activities on an ongoing basis since 2011. Efforts are redoubled particularly when power demand goes up between July and September and between December and March.

MHBK, MHTB and MHSC conducted electricity conservation initiatives in line with targets set for each power company service area based on the government's electricity reduction request.

In order to avoid large-scale power outages caused by excess power demand and reduce peak afternoon power output, we have taken a variety of measures to reduce electricity consumption, which have included setting appropriate temperatures on air conditioners and using minimal lighting, even at offices not subject to the aforementioned law. At computer centers used by MHBK and MHIR, we have identified operations capable of being shifted to nighttime hours to equalize power consumption throughout the work day, and are reducing power consumption caused by daytime operations in order to help level our power use and reduce costs. These conservation activities were strengthened from July to September and from December to March based on the government request, but we continued them on a voluntary basis throughout the year to conform with societal demand for reduced electricity use.

Initiative category & Initiative type

Energy efficiency in buildings Other, please specify (Introduction of such energy-conserving equipment as air conditioning equipment, LED lightning fixtures, and motion-sensor switches.)

Estimated annual CO2e savings (metric tonnes CO2e)

3533.61

Scope(s)

Scope 2 (market-based)

Voluntary/Mandatory

Mandator

Annual monetary savings (unit currency - as specified in C0.4)

161000000

Investment required (unit currency – as specified in C0.4)

45000000

Payback period

11-15 years

Estimated lifetime of the initiative

11-15 years

Comment

We have conducted this initiative on an ongoing basis since 2002 .Since FY2010 in particular, when reductions became mandatory, it has been continually and systematically promoted.

Installation of energy-efficient cooling machine, lighting and other facilities at large-scale buildings with crude oil equivalent usage of over 1,500 kiloliters annually. Some of buildings that conduct reduction activities are subject to reductions under the Tokyo Metropolitan Government's environmental protection ordinance. We are working continuously in order to attain our voluntary target and the reduction duty of Tokyo.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
regulatory	Efforts are made to reduce greenhouse gas emissions while complying with the revised Energy Savings Act, the Tokyo Metropolitan Government's environmental protection ordinance and other local ordinances and regulations. Under the revised Energy Savings Act, which applies to all business locations of the six group companies, we will track and report energy use and target reductions to energy use at a rate of 1% each year. The Tokyo Metropolitan Government's environmental protection ordinance applies to seven business locations affiliated with two Group companies. As It requires using average emissions for a consecutive three-year period between FY 2002 and FY2007 as the baseline value and reducing CO2 emissions by 8% on average from FY2010 to FY2014 at the first target reriod, and by 17% from FY2015 to FY2019 at the second plan period. Further, the mandatory reduction rate during the third plan period (fiscal 2020-2024) is expected to be raised to 27%. So, to fulfill this requirement and achieve the target, we are conducting facilities investment and operational initiatives. If it is estimated that we will not fulfill the requirement, we offset the difference by purchasing green power certificates, etc. each fiscal year. For facilities investment, we determine investment priorities while considering facilities upgrade items listed in the guidelines to the Tokyo Metropolitan Government's environmental ordinance and the timing of upgrades for facilities in use, among other factors, and make decisions on equipment to install by considering the investment recovery period, which is based on effective service life, energy-saving benefits and the investment amount.
Dedicated budget for other emissions reduction activities	MHBK is conducting the project to expand environmentally conscious branches by applying the Mizuho Environmental Standards when constructing or renovating sales branches. This reduction activity is voluntary, and it was initially conducted on a trial basis with a view to expanding the scope of target setting in the future. Investment benefits have since been verified and reduction benefits confirmed to be as expected, so the standards were formally adopted in FY2011 and LED lighting is used in principle for new lighting installed since fiscal 2014. Moreover, MHTB is planning to convert to LED lighting and implement other measures when some branches of the head office are relocated.
Employee engagement	With respect to electricity savings related to computer use, MHTB verified the costs and electricity savings when computer settings are changed, and it was found that no cost benefits can be anticipated, so we have chosen to continue to conserve electricity through efforts to raise employee awareness.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions? Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

Level of aggregation

Company-wide

Description of product/Group of products

We have established key sustainability areas (materiality) and key performance indicators (monitoring indicators) to promote sustainable business, and we have set sustainable finance and environmental finance definitions to proactively fulfill our role in directing capital towards environmental protection and the achievement of the SDGs

- 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:

- · Finance for clients where the intended use of funds is environmental and/or social projects
- · 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

Outline of sustainable finance and environmental finance:

- · Project finance for renewable energy: Arranging of project financing for wind, solar, geothermal, and small hydro power.
- · Green bonds: Underwriting of green bonds complying with principles and guidelines in and outside Japan.
- · Green loans: Arranging of green loans complying with principles and guidelines in and outside Japan.
- · Other green finance :
- -Arranging of Mizuho Eco Finance, renewable energy-related asset-based lending., Mizuho ESG loans and private placement bonds
- -Investment in green projects, green projects(including mezzanine finance),
- -Loans for green building

Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Other, please specify (Adressing the Avoided Emissions through providing financial servicies regarding renewable energy)

% revenue from low carbon product(s) in the reporting year

1.32

% of total portfolio value

1.32

Asset classes/ product types

Bank lending	Corporate Loans
--------------	-----------------

Comment

Applicable business areas of our sustainable finance and environmental finance are loans, underwriting, investments, asset management.

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).
Scope 1
Base year start April 1 2010
Base year end March 31 2011
Base year emissions (metric tons CO2e) 17119.12
Comment
Scope 2 (location-based)
Base year start April 1 2010
Base year end March 31 2011
Base year emissions (metric tons CO2e) 290536.88
Comment
Scope 2 (market-based)
Base year start April 1 2010
Base year end March 31 2011
Base year emissions (metric tons CO2e) 207932.85
Comment
C5.2
(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions. Act on the Rational Use of Energy Japan Ministry of the Environment, Law Concerning the Promotion of the Measures to Cope with Global Warming, Superceded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment) The Tokyo Cap-and Trade Program Other, please specify (Please see C5.2a in detail.)
C5.2a
(C5.2a) Provide details of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.
<greenhouse associated="" by="" emissions="" fuel="" gas="" use="" vehicles="" with=""></greenhouse>
"Guidelines for creating a "Tokyo automobile environmental management plan" based on Tokyo's environmental protection ordinance
C6. Emissions data
C6.1
(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?
Reporting year
Gross global Scope 1 emissions (metric tons CO2e) 14756.02
Start date <not applicable=""></not>
End date <not applicable=""></not>
Comment

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

Start date April 1st ,2019

End date March 31st ,2020

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based

177148.86

Scope 2, market-based (if applicable)

168522.47

Start date

<Not Applicable>

End date

<Not Applicable>

Comment

Start date April 1st ,2019 End date March 31st ,2020

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source

Greenhouse gases except from gasoline and electricity energy sources at overseas sites

Relevance of Scope 1 emissions from this source

Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source

Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)

Emissions are not relevant

Explain why this source is excluded

Minimal usage. It is less than 1% of the sum of Scope1 and Scope2.

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, calculated

Metric tonnes CO2e

4970.87

Emissions calculation methodology

Calculated for paper used in large quantities by financial institutions

(i) Types and sources of data: Paper volume purchased by main Group companies in fiscal 2017; emissions unit of 1.83t-CO2/t (Source: "General Guidelines on Supply

Chain GHG Emission Accounting Ver 2.3" issued by the Ministry of the Environment and Ministry of Economy, Trade and Industry (Dec 2017))

(ii) Data quality: Good.

Activities data: 100% use of actual figures during reporting period.

Emissions factors: Data for Japan (as the main area of activity); environmental impact unit via inter-industry tables calculated based on basic data from 2005

(iii) Methodologies:

Paper purchase volume (2716 t) multiplied by the emissions unit $\,$ (1.83t-CO2/ t)

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Capital goods

Evaluation status

Relevant, calculated

Metric tonnes CO2e

82.75

Emissions calculation methodology

(i) Types and sources of data

Activities data: The amount of capital investment.

Emission factor: Emissions unit for capital investment amount by financial sector(Source: "General Guidelines on Supply Chain GHG Emission Accounting Ver 2.3" issued by the Ministry of the Environment and Ministry of Economy, Trade and Industry (Dec 2017))

(ii) Data quality: Good.

Activities data: 100% use of actual figures during reporting period

Emissions factors: Data for Japan (as the main area of activity); environmental impact unit via inter-industry tables calculated based on basic data from 2005

(iii) Methodologies:

The amount of capital investment in FY2019 multiplied by emission factor (1.84tCO2/million yen)

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Metric tonnes CO2e

14872.23

Emissions calculation methodology

Calculated about Japan.

Electricity (Japan) : 0.0354kg-CO2e/kWh.

Steam: 0.0319kg-CO2e/MJ.
Heat: 0.0319kg-CO2e/MJ.
Cooling: 0.0319kg-CO2e/MJ.
Clean water: 0.348 kg-CO2e/m3.
Sewage water: 0.479 kg-CO2e/m3.
(i) Types and sources of data:

Activities data: usage for each energy source.

Emission factor: Emission unit data used in Japan's carbon footprint scheme(Source: "General Guidelines on Supply Chain GHG Emission Accounting Ver 2.3" issued by the Ministry of the Environment and Ministry of Economy, Trade and Industry (Dec 2017)).

(ii) Data quality : Good.

Activities data: 100% use of actual figures during reporting period.

Emissions factors: Data for Japan (as the main area of activity); values formulated by the administrative office for a trial carbon footprint scheme that was run under the leadership of the Ministry of Economy, Trade and Industry and others from fiscal 2008 to fiscal 2011; values verified by the CO2 Conversion Unit Data Verification Committee, which is comprised of independent experts.

(iii) Methodologies:

Total of the product of use and emissions unit for each energy source

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO2e

168.45

Emissions calculation methodology

Mizuho delivers documents every day within the Group. Of this, the calculation is on mail cars used by MHBK with Tokyo's 23 wards.

(i) Types and sources of data:

Distance travelled by mail cars and ratios of fuels used in the reporting year (obtained from vendor).

Fuel efficiencies are 10.8 km/l for diesel and 9.8 km/l for LP gas (source: list of vehicle fuel efficiencies from Ministry of Land, Infrastructure, Transport and

Tourism). Emissions factor is 2.58 kg CO2/l for diesel and 1.71 kg CO2/l for liquefied petroleum gas. (Standards in the Tokyo Metropolitan Government's Automobile Environment Management Plan)

(ii) Data quality: Good

Activities data uses actual figures during reporting period provided by vendor and fuel efficiency statistics; emissions factors conform to the region and period.

- -Calculating fuel usage based on distance travelled and ratios of fuels used
- -The fuel usage multiplying by the emissions factor

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Waste generated in operations

Evaluation status

Relevant, calculated

Metric tonnes CO2e

140.65

Emissions calculation methodology

Calculated for waste from 15main offices, which accounts for 58.6% of number of employees of main group companies.

(i) Types and sources of data:

Activities data: The amount of waste by type from main offices

Emission factor

- Paper (burned, recycled): Units for waste types and disposal methods (Source: "General Guidelines on Supply Chain GHG Emission Accounting Ver 2.3" issued by the Ministry of the Environment and Ministry of Economy, Trade and Industry (Dec 2017))
- · Regular waste categories are "burn" and "land fill" (Source: Emission unit data used in Japan's carbon footprint scheme

(ii) Data quality: Very Good.

Activities data: 100% use of actual figures during reporting period.

Emissions factors: Data for Japan (as the main area of activity); values formulated by the administrative office for a trial carbon footprint scheme that was run under the leadership of the Ministry of Economy, Trade and Industry and others from fiscal 2008 to fiscal 2011; values verified by the CO2 Conversion Unit Data Verification Committee, which is comprised of independent experts.

(iii) Methodologies:

Totaled by multiplying the amount of waste by the emissions factor for each category: recycled paper, burned paper, regular waste (burn) and regular waste (landfill).

The amount of recycled paper(t)×0.0472tCO2/t.

The amount of burned paper(t)×0.0837tCO2/t.

The amount of regular waste (burn) (kg)×0.0334kg-CO2e/kg.

The amount of regular waste (landfill) (kg)×0.0379kg-CO2e/kg

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO2e

59379.93

Emissions calculation methodology

Calculated about centrally managed domestic and overseas business trips between January and December 2019 in which air travel was used.

(i) Types and sources of data:

Activities data: Distance between airports on centrally managed business trips that used air travel; compiled using ticket purchase data for business trips and inter-airport distances based on IATA standards.

Emissions factors: 0.11 for domestic flights and 0.083 for international flights

(Source: "General Guidelines on Supply Chain GHG Emission Accounting Ver 2.3" issued by the Ministry of the Environment and Ministry of Economy, Trade and Industry (Dec 2017))

(ii) Data quality: Good.

Activities data: 100% use of actual figures in 2019.

Emissions factors use data based on statistics for Japan, the main aircraft departure point.

(iii) Methodologies:

Totals for domestic and overseas portions calculated by multiplying travel distance by emissions factors

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Employee commuting

Evaluation status

Relevant, calculated

Metric tonnes CO2e

13521.99

Emissions calculation methodology

Calculated for employee commuting.

(i) Types and sources of data:

Activities data: Transport stipends for rail and bus of four Group companies (MHFG, MHBK, MHTB, MHIR) .

Emissions factors: Emissions per unit of transport stipend amount.

Bus $0.00242\,\mathrm{k}\,$ g CO2/JPY, Rail $0.00137\,\mathrm{k}\,$ g CO2/JPY

(Source: "General Guidelines on Supply Chain GHG Emission Accounting Ver 2.3" issued by the Ministry of the Environment and Ministry of Economy, Trade and Industry (Dec 2017))

(ii) Data quality: Good.

Activities data: Uses actual amount of stipends paid during the reporting period (accounts for 81.52% of total number of employees).

Emissions factor: appropriate or better for region, period, reliability, technologies and completeness

(iii) Methodologies:

Total calculated by multiplying rail and bus stipends by the respective emission units; total divided by total number of employees to calculate overall total for main group companies.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

81.52

Upstream leased assets

Evaluation status

Relevant, calculated

Metric tonnes CO2e

2546.61

Emissions calculation methodology

Among MHBK ATM machines, about 40% are leased (including maintenance), and CO2 emissions associated with their use are calculated (remaining about 60% are owned and already reported in Scope 2).

Leased assets also include buildings, vehicles, copy machines, etc., but have already been reported in Scope 1 and 2.

(i) Types and sources of data:

Activities data:

- -Sum of operating hours of leased ATMs.
- ATM's electricity used per hour (Data provided by the ATM Maker).

Emission factor: Emission factor for electricity used in Scope 2 calculations

(ii) Data quality: Good.

Activities data: It is proper about technology, term, and the geographical location.

Emission factor: It is proper about technology, term, and completeness.

(iii) Methodologies:

"Sum of operating hours of leased ATMs" ×"Electricity consumption per hour " × "Emission factor for electricity"

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

We believe there is nothing applicable in this category because documents sent to customers, etc. fall under the category of Transport and delivery (upstream).

Processing of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Mizuho does not sell manufactured products.

Use of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Mizuho does not sell manufactured products.

End of life treatment of sold products

Evaluation status

Not evaluated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Mizuho does not sell manufactured products.

Downstream leased assets

Evaluation status

Relevant, calculated

Metric tonnes CO2e

18764

Emissions calculation methodology

Calculated for 12 lease assets (contracted land trust properties) in Tokyo owned by MHTB, which owns rental real estate

(i) Types and sources of data: CO2 emissions reported by the management companies of land trust properties

(ii) Data quality: Good

Reported CO2 emissions conform in terms of reporting period, region and technology

(iii) Methodologies: Calculated by the property management companies by multiplying energy use by emission factors along the reporting method of the General Guidelines on Specified GHG Emission Accounting and the Tokyo Carbon Reduction Reporting Program stipulated by the Tokyo Metropolitan Government revised environmental protection ordinance. 100%

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Franchises

Evaluation status

Not evaluated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Mizuho does not have franchises.

Other (upstream)

Evaluation status

Not evaluated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Other (downstream)

Evaluation status

Not evaluated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.049

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

183278

Metric denominator

unit total revenue

Metric denominator: Unit total

3731023

Scope 2 figure used

Market-based

% change from previous year

6.8

Direction of change

Decreased

Reason for change

Gross earnings decreased 5.26%, and CO2 emissions fell due to reduction efforts. For this reason, CO2 emissions per unit of revenue decreased from 0.053the previous fiscal year to0.049.

Intensity figure

3.95

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

183278

Metric denominator

full time equivalent (FTE) employee

Metric denominator: Unit total

46443

Scope 2 figure used

Market-based

% change from previous year

8.51

Direction of change

Decreased

Reason for change

The number of employees decreased by 3.49%, and CO2 emissions decreased in conjunction with further reduction efforts, so CO2 emissions per employee decreased from 4.31 the previous fiscal year to 3.95.

Intensity figure

0.1

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

183278

Metric denominator

square meter

Metric denominator: Unit total

1781440.14

Scope 2 figure used

Market-based

% change from previous year

9.6

Direction of change

Decreased

Reason for change

Since t he total floor area in domestic and overseas offices decreased by 2.32% due to consolidation of demostic offices, whereas the total CO2 emission decreased by 11.70%. As a result, our CO2 emissions per m2 decreased from 0.114 of the previous fiscal year to 0.103.

C7. Emissions breakdowns

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)		Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption		<not Applicable ></not 		
Other emissions reduction activities	3938	Decreased	1.9	Continuing on from the previous fiscal year, we worked to reduce emissions through power-saving and energy conservation measures that included installation and appropriate operation of high-efficiency devices, among other measures. FY2019 CO2 emissions reduction: Scope1 1186t, Scope2 2752t, total 3938t. FY2018 CO2 emissions: Scope1+Scope2=207575t. So the each reduction rate is as below: Scope1 1186/207575×100=0.57%, Scope2 2752/207575×100=1.33%
Divestment		<not Applicable ></not 		
Acquisitions		<not Applicable ></not 		
Mergers		<not Applicable ></not 		
Change in output		<not Applicable ></not 		
Change in methodology	16126	Decreased	7.77	FY2018 total CO2 emissions from electricity calcurated by 2018's Actual emissions factors is 170213 tons. FY2019 CO2 emissions calcurated by 2018's Actual emissions factors is 154087 tons. So(154087-170213)/ 207575×100=-7.77% This is equivalent to the reduction in the emission factors of many electric power companies, especially Tokyo Electric Power, which accounts for most of the domestic power consumption.
Change in boundary	55	Decreased	0.03	Branches of Iran and Baharen removed from the scope of sustainability. As a result, CO2 emissions were decreased by 0.03%.
Change in physical operating conditions	4027	Decreased	1.94	Energy consumption decreased due to the elimination of redundant operations after the completion of server relocation and the consolidation of brancees for efficient operations. As a result, CO2 emissions decreased by 1.94%.
Unidentified	107	Increased	0.05	
Other	257	Decreased	0.12	Due to the impact of COVID19, data could not be collected at Singapoer office, resulting in a decrease of 216 tons from the previous year. Also, at offices in Chile and UAE, the amount of energy consumption could not be obtained from the owner, resulting in a decrease of 41 tons from the previous year. (216+41) / 207575×100=0.12%

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	Yes
Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	Yes
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	0	71436.97	71436.97
Consumption of purchased or acquired electricity	<not applicable=""></not>	0	352167.22	352167.22
Consumption of purchased or acquired heat	<not applicable=""></not>	0	6895.72	6895.72
Consumption of purchased or acquired steam	<not applicable=""></not>	0	4276.69	4276.69
Consumption of purchased or acquired cooling	<not applicable=""></not>	0	18352.11	18352.11
Consumption of self-generated non-fuel renewable energy	<not applicable=""></not>	3.69	<not applicable=""></not>	3.69
Total energy consumption	<not applicable=""></not>	3.69	453128.71	453132.4

00		1.00	1000
(:4	$\Delta \cap$	Iditiona	I metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	No third-party verification or assurance

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Underway but not complete for reporting year - previous statement of process attached

Type of verification or assurance

Third party verification/assurance underway

Attach the statement

Scope1_2_1-6Verification Report on Tokyo Emission Trading Scheme (BK_MHIR 6 buildings).pdf

Page/ section reference

Please find following page of each verification report on Tokyo Emission Trading Scheme.

- i) GHG emissions: p1-1, 2-1, 3-1, 4-1, 5-1, 6-1
- ii) Scope: p1-1, 1-12, 2-1, 2-2, 2-3, 3-1, 3-9, 4-1, 4-10, 4-11, 5-1, 5-2, 6-1, 6-9
- iii) Reporting year: p1-1, 2-1, 3-1, 4-1, 5-1, 6-1
- iv) verification standard use: p1-4 to 1-11, 2-6 to 2-11, 3-2 to 3-7, 4-2 to 4-7, 5-4 to 5-9, 6-2 to 6-7
- v) verification opinion: p1-1, 2-1, 3-1, 4-1, 5-1, 6-1

Relevant standard

Tokyo cap-and-trade guideline for verification

Proportion of reported emissions verified (%)

20

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 market-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Underway but not complete for reporting year – previous statement of process attached

Type of verification or assurance

Third party verification/assurance underway

Attach the statement

Scope1_2_1-6Verification Report on Tokyo Emission Trading Scheme (BK_MHIR 6 buildings).pdf

Page/ section reference

 $\label{thm:please find following page of each verification report on Tokyo Emission Trading Scheme. \\$

- i) GHG emissions: p1-1, 2-1, 3-1, 4-1, 5-1, 6-1
- $ii)\ Scope: p1\text{-}1,\ 1\text{-}12,\ 2\text{-}1,\ 2\text{-}2,\ 2\text{-}3,\ 3\text{-}1,\ 3\text{-}9,\ 4\text{-}1,\ 4\text{-}10,\ 4\text{-}11,\ 5\text{-}1,\ 5\text{-}2,\ 6\text{-}1,\ 6\text{-}9}$
- iii) Reporting year: p1-1, 2-1, 3-1, 4-1, 5-1, 6-1
- iv) verification standard use: p1-4 to 1-11, 2-6 to 2-11, 3-2 to 3-7, 4-2 to 4-7, 5-4 to 5-9, 6-2 to 6-7
- v) verification opinion: p1-1, 2-1, 3-1, 4-1, 5-1, 6-1

Relevant standard

Tokyo cap-and-trade guideline for verification

Proportion of reported emissions verified (%)

32

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5? No, we do not verify any other climate-related information reported in our CDP disclosure

C11. Carbon pricing

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

Yes

(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.

Credit origination or credit purchase

Credit purchase

Project type

Energy efficiency: industry

Project identification

Projects to replace boiler and industrial furnace facilities for fuel conversion

Verified to which standard

Other, please specify (J Credit system)

Number of credits (metric tonnes CO2e)

284

Number of credits (metric tonnes CO2e): Risk adjusted volume

284

Credits cancelled

Yes

Purpose, e.g. compliance

Voluntary Offsetting

C11.3

(C11.3) Does your organization use an internal price on carbon?

No, and we do not currently anticipate doing so in the next two years

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our customers

Yes, our investee companies

Yes, other partners in the value chain

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement

Information collection (understanding customer behavior)

Details of engagement

Other, please specify (Included climate change in investee selection/management mechanism.)

% of customers by number

% of customer - related Scope 3 emissions as reported in C6.5

Portfolio coverage (total or outstanding)

Minority of the portfolio

Please explain the rationale for selecting this group of customers and scope of engagement

One way that we fulfill our role as a financial institution is emphasizing the importance of engaging and holding constructive dialogue with our varied stakeholders. Based on our application of the Equator Principles and our Environmental and Social Management Policy for Financing and Investment Activity (Policies on Specific Industrial Sectors), we are participating in engagement about climate change-related business issues with some of our clients in the energy sector and utilities sector once or more a year. In doing so, we are working to reduce climate-related risk for our clients and ourselves by supporting our clients' efforts to transition to a low carbon society. 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. Under the definition of carbon-related assets from the TCFD Recommendations, our credit exposure (EXP) in carbon-related sectors, as sectors facing high transition risks in our qualitative evaluation. The credit exposure which we selected for analysis comes to 40% of the previously mentioned total credit exposure in carbon-related sectors. Through this analysis, under standards as of March 31, 2020, we estimated that our credit costs will increase by 120 billion yen to 310 billion yen by 2050.

Impact of engagement, including measures of success

Institutional investors, shareholders, NGOs, etc. have a strong interest in environmental and social risk, and we are able to connect this to the management of credit risk and reputational risk.

With our analysis, we reaffirmed the importance of engagement (constructive dialogue) with our clients to contribute to the transition to a low-carbon society over the medium to long term. Going forward, we will further strengthen 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.

As results of our initiatives, we have reciebed positive reputation from our stakeholders.

C-FS12.1c

(C-FS12.1c) Give details of your climate-related engagement strategy with your investee companies.

Type of engagement

Information collection (Understanding investee behavior)

Details of engagement

Other, please specify (Asset Management One established its Responsible Investing Department and proceeded with initiatives for active engagement in discussions with its investee companies regarding ESG issues and exercise of its proxy voting rights from 2016.)

% of investees by number

100

% Scope 3 emissions as reported in C-FS14.1a/C-FS14.1b

Portfolio coverage

All of the portfolio

Rationale for the coverage of your engagement

Asset Management One declares its acceptance of the "Principles for Responsible Institutional Investors," known as Japan's Stewardship Code to fulfill its stewardship responsibilities properly as a responsible asset manager. In accordance with the Code. Asset Management One declares as follows:

our company aims to increase clients' medium- to long-term investment returns by conducting constructive "purposeful dialogue" (engagement) with portfolio companies, analyzing companies and making investment decisions, taking into account not only financial information but also non- financial information factors such as ESG (Environment, Society and Governance) factors according to investment strategies.

On October 2, 2015, Asset Management One Co., Ltd and its overseas offices (collectively, "the company") became a signatory to the Montreal Carbon Pledge.

The Montreal Carbon Pledge was launched in September 2014 at PRI in Person in Montreal. By signing the Montreal Carbon Pledge, investors commit to measuring and publicly disclosing the carbon footprint of their equities portfolios on an annual basis.

The total amount of greenhouse gas discharge was about46,000,000 ton. We calculated this amount, based on the number of shares owned by all our equities portfolios (as of Mar,2020).

Impact of engagement, including measures of success

Regarding climate change, with more and more institutional investors withdrawing investment from fossil fuel companies, we hold discussions with companies with low ESG rankings and suggest that active ESG initiatives can be an effective means of reducing risk and increasing corporate value. The response has been positive, with the companies indicating their agreement.

Asset Management One has also participated, since its start in December 2017, in Climate Action 100+, an initiative in which global investors jointly engage with companies worldwide that are large emitters of greenhouse gases, encouraging companies to promote greenhouse gas reduction initiatives, disclose information and strengthen governance, etc.

As a result of engagement by Asset Management One, we have been able to raise awareness of climate change and information disclosure among companies. Specifically, in 2019, we conducted an engagement on climate change with 89 investee companies, which resulted in improvements in corporate value's thinking and information disclosure.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

Mizuho Bank has been actively engaging with stakeholders including non-financial institutions by holding several outreach seminars in the region.

Mizuho Bank has been conducting environmental and social risks assessments based on the Equator Principles, and has also been proactively undertaking initiatives to promote them, and raise awareness regarding environmental and social risks impacts such as climate change issues among businesses and other related parties, including the borrowers. These activities have enabled Mizuho Bank to contribute to balanced economic development via financing and environmental preservation, thus fulfilling its social responsibility as a financial institution.

1,2) Presence of Asian banks in the world has been increasing with the economic growth. For example, Chinese banks have greatly increased their global influence. In recent years, banks in Singapore, Thailand, Malaysia, and other countries have also placed priority on project finance overseas.

However, the number of Asian financial institutions have adopted the Equator Principles (8 financial institutions from Japan, 5 financial institutions from China, 6 financial institutions from Taiwan, and 1 bank each from Korea and India) is still very small compared to those in Europe and Americas.

In recent years, Asian financial institutions have increased their participation in large scale project finance transactions globally. Consequently, Asian banks are anticipated to become more interested in adopting the Principles. To facilitate this, as a Regional Representative of the Equator Principles Associationin Asia-Oceania region,, Mizuho Bank has been proactively conducting meetings in collaboration with multilateral institutions such as IFC, to enhance the understanding of the Equator Principles requirements among banks in Asia. Mizuho Bank has also been actively engaging with stakeholders including non–financial institutions by holding several outreach seminars in the region.

3) Mizuho Bank has been promoting the understanding of the Equator Principles including response to climate change by conducting several outreach events such as proactively holding seminars not only for private financial institutions but also for other stakeholders, including government organizations and private businesses, both in Japan and overseas.

In addition, Mizuho Bank conducts regular training sessions for its employees on environmental and social risks assessment and Equator Principles requirements involved in large—scale project financing.

More than 2,240 participants attended such promotional events undertaken by Mizuho Bank in fiscal years 2014 to 2019 both in Japan and overseas.

In FY 2019, Mizuho bank has held seminars for incorporated administrative agency and private financial institutionss overseas, university professors/students and 84 participants attended both in Japan and overseas.

Regular training sessions were attended by more than 50 employees in three countries including Japan.

4) As a result of those effort such as traning and engagement, we have been able to raise awareness and conduct appropriate operation of Equator principles.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Direct engagement with policy makers

Trade associations

Funding research organizations

C12.3a

(C12.3a) On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Climate finance	Support	From August 2017 to February 2020, the Head of the Responsible Investment Department, Asset Management One's Investment Division participates in the Study Committee on Environmental Information and Corporate Value established by the Ministry of the Environment. The committee engages in discussions on improving the practical abilities of investors with respect to autonomous initiatives related to the environmental component of ESG investment through promoting a better understanding of environmental information by investors, and in February 2019 formulated and published the Report on Environmental Information and Approaches to its Utilization in Corporate Value. In February 2019, we created and published the Report on Environmental Information and Approaches to its Utilization for Corporate Value. In addition, since May 2019, as a member of the TCFD Consortium Planning Committee and as a Green Investment Guidance (GIG) Supporter, we have participated in selection and deliberation, etc. on climate-related information disclosure items to be referenced domestically and internationally, and contributed to their issuance in July 2020.	In formulating the report, we made recommendations on the process of connecting environmental information to raising corporate value and on its materiality.
Climate finance	Support	MHBK participated, from the standpoint of a designated financial institution, etc., in subsidized payment and guarantee schemes for financing related to projects established by the Ministry of Economy, Trade and Industry, the Ministry of the Environment and their affiliated organizations that contribute to energy use rationalization and CO2 emissions reduction, and took part in discussions on development of some of the schemes.	While taking into account the characteristics and circumstances of the business operators subject to financing, MHBK proposes schemes, designed to be effectively utilized for the achievement of goals, from the standpoint of both business operators and financial institutions. For example, the bank proposes loan guarantee schemes that are easy to utilize for both business operators and financial institutions in order to advance geothermal power.
Climate finance	Support	Commissioned by Japan International Cooperation Agency (JICA) to provide support services for strengthening response capabilities related to mobilization and promotion of Green Climate Fund (GCF)	Supported strengthening of internal operational structure (including preparation of manuals) at Japan International Cooperation Agency (JICA) in order for JICA to actively promote projects utilizing Green Climate Fund (GCF)
Climate finance	Support	Commissioned by the Ministry of Economy, Trade and Industry and Ministry of the Environment to provide J-Credit scheme certification program operational services.	Contributed to expanded adoption of renewable energy power generation equipment at small and medium-sized enterprises and households through the operation of a program certifying the CO2 reduction effect and renewable energy value of introducing renewable energy power generation equipment as tradeable J-Credit.
Energy efficiency	Support	Commissioned by the Agency for Natural Resources and Energy of the Ministry of Economy, Trade and Industry for a survey on the status of energy conservation-related programs addressing changes in energy demand brought about by technological innovation.	Supported a quantitative evaluation of the impact of technological innovation such as the digitization and enhancement of distribution on energy demand in Japan and a review of the impact on energy conservation-related programs in Japan.
Other, please specify (Environmental Impact Assessment)	Support	The head of the MHBK Global Project Finance Department's Sustainable Development Office was named as an advising member of the Japan International Cooperation Agency (JICA)'s Advisory Committee of Environmental and Social Considerations in fiscal 2016 and 2017. Advice on surveys, reviews and monitoring wasis provided as necessary for Category A and Category B projects with large impacts on the environment and society under the Equator Principles.	- Advised to the adivisory committee members on how to conduct studies of environmental impact assessment systems in Asia from the practical perspective of a financial institution that has adopted the Equator Principles.
Mandatory carbon reporting	Support	Assetmamagemeny One (AMO), MHIR participated in the Ministry of the Environment's "FY2019Environmental Information Infrastructure Development Project" as a financial institution that reviews such information.	Through a questionnaire, MHTB, AMO, MHIR conveyed information on viewpoints, etc. related to disclose and use of environmental information necessary for expanding the project, from the standpoint of institutional investors, and provided recommendations on utilizing the functions of environmental reporting systems.
Adaptation or resilience	Support	Commissioned by the National Institute for Environmental Studies to assist in creating information content related to the Climate Change Adaptation Information Platform (A-Plat) and Asia Pacific Adaptation Information Platform (AP-Plat).	Promoted collection and organization of information on information platforms (A-Plat, AP-Plat) to promote initiatives for adaptation in Japan and the Asia Pacific region that are being promoted based on the Climate Change Adaptation Act utilizing MHIR's specialized expertise.

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association

Japanese Bankers Association

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The Japanese Bankers Association collected industry opinions and submitted a written opinion regarding the consultation with the Task Force on Climate-related Financial Disclosures (TCFD).

How have you influenced, or are you attempting to influence their position?

We have followed the trends of discussions since the launch of the task force and have participated in discussions on the formulation of the written opinion. In addition, regarding examination of the content of "TCFD Guidance ver2" issued by the TCFD Consortium in July 2020, we sent opinions through Japanese Bankers Association during fiscal 2019.

C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund?

Ν

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

For promotion of integrated Group Sustainability initiatives, our Environmental Policy states that we believes in constructive dialogue with our stakeholders through collaboration and cooperation with diverse stakeholders including customers, suppliers, local communities and government organizations.

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.

Mizuho will develop and offer financial products and services that encourage society to promote low carbon society with environmental considerations. On this basis, we are promoting environmental measures through the environmental businesses of Group companies.

MHBK have industrial research divisions that leverage their industry and sector expertise to create reports that include industry prospects and recommendations as well as other information based on the perspectives of major structural changes, business model changes and new key businesses.

Additionally, The Environment and Energy Division1&2 and Global Innovation & Energy Division in MHIR are commissioned by the Ministry of the Environment, Ministry of Economy, Trade and Industry and other ministries and agencies for specialized surveys and research related to the environment and energy and provide support for policy considerations. We also promote the implementation of various policies in society by providing consulting services for private-sector companies (including consulting on developing business strategies and plans that incorporate environmental and climate-related issues, climate finance, and SBT and TCFD).

While not in the reporting year, we launched a sustainability promotion project in 2020 to consolidate all the specialized expertise dispersed throughout the Mizuho Group, in the areas of the environment and climate change particularly, in order to accommodate the diverse sustainable business needs of customers on a unified Mizuho basis. The project will strengthen and promote sustainable business initiatives, such as enhancing the scope of our response to customers, by deepening intra-unit coordination in research and consulting. Regarding research coordination, we promote initiatives with an awareness of output to consulting and of company coordination, and have launched the Task Force on Climate Change Research. The task force is made up of members of Mizuho Research Institute, Mizuho Bank's Industry Research Division, and other organizations, and it researches the impacts of climate change based on the perspectives of the macro economy and industry, etc. and conducts initiatives that contribute to Mizuho's management and business. In June 2020, we issued a One Think Tank Report, "Climate Change Problem Essence and Outlook: Unprecedented Change in Business Environment from Interactions between Actors," which comprehensively discusses the current state of climate change and related business opportunities.

We believe the information and recommendations provided by MHBK will lead indirectly to increased business opportunities for the Group as Japanese industry is revitalized, etc. Also, MHIR's activities related to government policy and MHBK's utilization of interest subsidy programs are themselves businesses. These activities fit with our strategy for promoting reductions to society's environmental impact through business.

MHFG's Sustainability Office of Strategic Planning Department acquires information from MHIR, which has the most up-to-date information, and considers response measures to promote compliance with reduction obligations as well as reductions to the Group's environmental impact.

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports

Status

Complete

Attach the document

Securities Report 2020_p30.pdf

Page/Section reference

Attached Securities Report 2020 p30 (Japanese text only)

Content elements

Risks & opportunities

Comment

Mentioned "Climate Risks" as "Risks related to business"

Publication

In voluntary communications

Status

Complete

Attach the document

TCFD_report_2020.pdf

Page/Section reference

Attached TCFD report 2020

Content elements

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

Comment

Publication

In voluntary communications

Status

Complete

Attach the document

Integrated Report2020_sustainability.pdf

Page/Section reference

Attached Integrated Report 2020 p57-66 (Japanese text only)

Content elements

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

Comment

Publication

In voluntary communications

Status

Underway - previous year attached

Attach the document

MizuhoFG Website on climate change.pdf

Page/Section reference

We refer to climate change issues on our below website

 $https://www.mizuho-fg.com/csr/index.html?rt_bn=fg_top_gn3$

Please refer to the attached file "MizuhoFG Website on climate change" for details.

Content elements

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

Comment

Publication

In voluntary communications

Status

Underway – previous year attached

Attach the document

Integrated Report2019_sustainability.pdf

Page/Section reference

Fostering Industries with the Aim of Generating Business:

Content elements

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

Comment

The report and the website in English that include initiatives of fiscal 2019 are scheduled to be issued and updated in November 2020.

C-FS12.5

(C-FS12.5) Are you a signatory of any climate-related collaborative industry frameworks, initiatives and/or commitments?

	Industry collaboration Comm	nment
Reporting framework	Equator Principles Principles for Responsible Investment (PRI)	
	Task Force on Climate-related Financial Disclosures (TCFD) UNEP FI Principles for Responsible Banking	
Industry initiative	Principles for Responsible Investment (PRI) UNEP FI Principles for Responsible Banking Climate Action 100+ UNEP FI UNEP FI UNEP FITCFD Pilot	
Commitment	Other, please specify (Japan Climate Initiative, TCFD consortium) Montreal Pledge	

C14. Portfolio Impact

C-FS14.1

(C-FS14.1) Do you conduct analysis to understand how your portfolio impacts the climate? (Scope 3 portfolio impact)

	We conduct analysis on our portfolio's impact on the climate	Disclosure metric	Comment
Bank lending (Bank)	Yes	Category 15 "Investment" total absolute emissions Alternative carbon footprinting and/or exposure metrics (as defined by TCFD	
Investing (Asset manager)	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Investing (Asset owner)	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Insurance underwriting (Insurance company)	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Other products and services, please specify	Please select	<not applicable=""></not>	

C-FS14.1a

(C-FS14.1a) What are your organization's Scope 3 portfolio emissions? (Category 15 "Investments" total emissions)

Category 15 (Investments)

Evaluation status

Relevant, calculated

Scope 3 portfolio emissions (metric tons CO2e)

2159507.43

Portfolio coverage

More than 0% but less than or equal to 10%

Percentage calculated using data obtained from client/investees

100

Emissions calculation methodology

Calculated for top 30 issues on the balance sheet of MHBK, which stated the largest amount of investment stock in fiscal 2019 among the consolidated subsidiaries, for investment stock held for purposes other than pure investment as of March 31, 2020, also disclosed their GHG emissions. It is accounted for about 2.89% of the amount of investment stock stated on the consolidated balance sheet.

(i) Types and sources of data: Number of shares held and number of shares outstanding as of March 31, 2020, and CO2 emissions data for FY2018 announced by companies for which issues are held. CO2 emissions data for the companies collected from the Bloomberg's database. (*FY2019 portion difficult to obtain data until the end of June due to timing of earnings announcements and CO2 data release, so FY2018 data used.)

(ii) Data quality: Good

CO2 emissions data: From annual reports, CSR reports, environmental reports, etc. of the 30 companies available at Bloomberg

(iii) Methodologies: Totaled by calculating FY2018 CO2 emissions per stock issuing company multiplied by the quotient of MHBK held issues divided by number of issues outstanding, for each issue

Please explain

C-FS14.1b

(C-FS14.1b) What is your organization's Scope 3 portfolio impact? (Category 15 "Investments" alternative carbon footprinting and/or exposure metrics)

Metric type

Exposure to carbon-related assets

Metric unit

Percentage portfolio value

Scope 3 portfolio metric

7.3

Portfolio coverage

More than 0% but less than or equal to 10%

Percentage calculated using data obtained from clients/investees

Calculation methodology

Under the definition from the TCFD Recommendations, our credit exposure (EXP) in carbon-related sectors comes to 7.3% of our total credit exposure. The credit exposure which we selected for analysis comes to 40% of the previously mentioned total credit exposure in carbon-related sectors.

- Scope of exposure: Total of Mizuho Bank and Mizuho Trust & Banking's loans, foreign exchange assets, acceptances and guarantees, and committed lines of credit as of March 31, 2020.
- Scope of carbon-related sectors (Numerator): from the industries listed under "Type of industry" in "Types of Industries in Survey of Loans and Bills Discounted by Type of Industry" (Attachment 1 of the Bank of Japan Research and Statistics Department's "Guidelines for Completing the Financial Statistics Survey" (provisional translation)), "petroleum refining", "mining and quarrying of stone and gravel" (coal, oil, and gas mining within this industry), and "electricity, gas, heat supply, and water" (excluding water supply, nuclear power generation, and renewable energy power generation businesses).

Please explain

C-FS14.2

(C-FS14.2) Are you able to provide a breakdown of your organization's Scope 3 portfolio impact?

	Scope 3 breakdown	Comment
Row 1	Yes, by industry	

C-FS14.2b

(C-FS14.2b) Break down your organization's Scope 3 portfolio impact by industry.

Industry	Metric	Metric unit	Scope 3	Please explain
	type		portfolio	
			emissions or	
			alternative	
			metric	
Other,	Exposure	Percentage	7.3	Under the definition from the TCFD Recommendations, our credit exposure (EXP) in carbon-related sectors comes to 7.3% of our total credit exposure.
please	to	portfolio		-Total of Mizuho Bank and Mizuho Trust & Banking's loans, foreign exchange assets, acceptances and guarantees, and committed lines of credit as of March
specify	carbon-	value		31, 2020.
(Energy	related			-From the industries listed under "Type of industry" in "Types of Industries in Survey of Loans and Bills Discounted by Type of Industry" (Attachment 1 of the
and	assets			Bank of Japan Research and Statistics Department's "Guidelines for Completing the Financial Statistics Survey" (provisional translation)), "petroleum refining",
Utiliyies)				"mining and quarrying of stone and gravel" (coal, oil, and gas mining within this industry), and "electricity, gas, heat supply, and water" (excluding water supply,
				nuclear power generation, and renewable energy power generation businesses).

C-FS14.3

(C-FS14.3) Are you taking actions to align your portfolio to a well below 2-degree world?

	We are taking actions to align our portfolio to a well below 2-degree world	Please explain
Bank lending (Bank)	Yes	Based on our application of the Equator Principles and our Environmental and Social Management Policy for Financing and Investment Activity (Policies on Specific Industrial Sectors), we have been participating in dialogue (engagement) with some of our clients in the energy and utility sectors since fiscal year 2018, making us among the first to do this in Japan. 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 the outstanding credit balance for coal-fired power generations facilities: the FY2019 amount by 50% by FY2030, and achieve an outstanding credit balance of zero by FY2050. In 2019, Mizuho Financial Group participated in the SBTi road testing program to challenge enhancing our evaluation system to contribute to the reduction of GHG emissions and we tried to apply SDA for Electricity Generation of Project Finance.
Investing (Asset manager)	<not applicable=""></not>	<not applicable=""></not>
Investing (Asset owner)	<not applicable=""></not>	<not applicable=""></not>
Insurance underwriting (Insurance company)	<not applicable=""></not>	<not applicable=""></not>
Other products and services, please specify	Please select	

C-FS14.3a

(C-FS14.3a) Do you assess if your clients/investees' business strategies are aligned to a well below 2-degree world?

	We assess alignment	Please explain
Bank lending (Bank)		To promote the shift to a low-carbon society alongside our clients, in June 2019 Mizuho Bank and Mizuho Information & Research Institute launched Mizuho Eco Finance (Mizuho Environmentally Conscious Finance). This service evaluates the climate change initiatives of clients, allowing us to provide further support via financing and consulting to companies who are actively engaged in combating climate change. Using an environmental assessment model developed by Mizuho Information & Research Institute featuring a globally accepted environmental verification and evaluation program, Mizuho Bank will provide financing to clients who meet a certain minimum score, and through monitoring by Mizuho Information & Research Institute, we will provide strategic advice to clients to improve and maintain their scores. 10 deals totaling 176.5 billion yen in financing executed as of the end of June 2020.
Investing (Asset manager)	<not Applicable ></not 	<not applicable=""></not>
Investing (Asset owner)	<not Applicable ></not 	<not applicable=""></not>
Insurance underwriting (Insurance company)	<not Applicable ></not 	<not applicable=""></not>
Other products and services, please specify	<not Applicable ></not 	<not applicable=""></not>

C-FS14.3b

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(C-FS14.3b) Do you encourage your clients/investees to set a science-based target?

	We encourage clients/investees to set a science-based target	Please explain
Bank lending (Bank)	No	Based on our application of the Equator Principles and our Environmental and Social Management Policy for Financing and Investment Activity (Policies on Specific Industrial Sectors), we have been participating in dialogue (engagement) with some of our clients in the energy and utility sectors since fiscal year 2018, making us among the first to do this in Japan. Engagement may be promoted with an eye to establishing targets based on scientific grounds in the event the results of scenario analysis show that it will lead to reduction of customer risk and supplementation of business opportunities.
Investing (Asset manager)	<not applicable=""></not>	<not applicable=""></not>
Investing (Asset owner)	<not applicable=""></not>	<not applicable=""></not>
Insurance underwriting (Insurance company)	<not applicable=""></not>	<not applicable=""></not>
Other products and services, please specify	<not applicable=""></not>	<not applicable=""></not>

C15. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Executive officer and General Manager, Strategic Plannning Department	Environment/Sustainability manager

Submit your response

In which language are you submitting your response? English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission
I am submitting my response	Investors	Public

Please confirm below

I have read and accept the applicable Terms