

C0. Introduction

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C0.1

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

The Brother Group started by providing repair services for sewing machines in 1908. Since then, we have been growing by focusing on our own technology development, promoting the diversification of our businesses through applying accumulated core technologies, and continuing to cultivate new markets consistently. The headquarters of Brother group, "Brother Industries, Ltd" is in Japan. Paid-in Capital is 19,209 million yen (As of March 31, 2021) and the sales revenue is 631,812 million yen (fiscal year ending March 31, 2021). The Brother group delivers products and services to customers all over the world with manufacturing facilities and sales facilities in 40 or more countries and regions of the world. The consolidated number of employees is 38,741 / and the non-consolidated number is 3,803 (as of March 31, 2021). We offer products and services with Brother expertise in a wide range of fields such as "communications and printing equipment," "home sewing machines," "industrial sewing machines/machine tools/industrial parts," "Coding & Marking Equipment, Digital Printing Equipment" and "online karaoke/content-delivery systems." In 2018, the Brother Group established the Brother Group Environmental Vision 2050. This environmental vision recognizes environmental issues in society such as climate change, resource depletion, environmental pollution, and destruction of the ecosystem as business risks for the Brother Group and clearly states the Brother Group's continuous commitment to solving these issues over the long term. The Brother Group is committed to reducing CO2 emissions of the entire value chain in all its business operations by 2050 and contributing to creating a carbon-free society, which is a mission for the global community, and it is subject to audit based on ISO 14064 that provides guidelines for measuring and verifying emissions of greenhouse gases (GHGs). We expand the environmental understanding and awareness for all employees and stakeholders by conducting activities such as environmental education and the building of community relationships. We actively disclose our environmental efforts to our customers, local communities, and other interested parties to further foster understanding. As part of our commitment to continuous environmental improvement, as of Apr 1, 2021, 86% of the Brother Group's facilities has received ISO14001 certification.

C0.2

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**(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 2021	March 31 2022	No	<Not Applicable>

C0.3

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**(C0.3) Select the countries/areas in which you operate.**

- Argentina
- Australia
- Austria
- Belgium
- Brazil
- Bulgaria
- Canada
- Chile
- China
- Czechia
- Denmark
- Finland
- France
- Germany
- Hong Kong SAR, China
- Hungary
- India
- Indonesia
- Ireland
- Italy
- Japan
- Malaysia
- Mexico
- Netherlands
- New Zealand
- Norway
- Peru
- Philippines
- Poland
- Portugal
- Republic of Korea
- Romania
- Russian Federation
- Singapore
- Slovakia
- South Africa
- Spain
- Sweden
- Switzerland
- Taiwan, China
- Thailand
- Turkey
- United Arab Emirates
- 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

**C0.8**

**(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?**

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	3830000000

**C1. Governance**

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 individual(s)	Please explain
Chief Operating Officer (COO)	The COO is a Managing Executive Officer overseeing the environmental programs at Brother. This position is the chief executive of the "Environment & Climate Change Strategy Department" and "Law, Environment & General Affairs Department". At the same time, the COO is responsible as chairman of the Brother Environmental Committee. The COO has the authority to settle single-year environmental objectives and medium-term environmental action plans. The Mid-term Environmental Action Plan includes targets for climate change, resource recycling and biodiversity.

C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – all meetings	<ul style="list-style-type: none"> <li>Reviewing and guiding strategy</li> <li>Reviewing and guiding major plans of action</li> <li>Reviewing and guiding risk management policies</li> <li>Setting performance objectives</li> <li>Monitoring implementation and performance of objectives</li> <li>Monitoring and overseeing progress against goals and targets for addressing climate-related issues</li> </ul>	<Not Applicable>	The risk management committee of BIL (BROTHER INDUSTRIES, LTD.) as chaired by the president, manages the activities of the environmental committee. This environmental committee develops the strategy, annual plan (Brother Medium Term Environmental Action Plan) and tracks the performance of the climate change programs as well as evaluates risks associated with the programs. At the Board of Directors meetings, he is responsible for reporting and problem solving as the person in charge of environmental issues. Risks and opportunities in line with the TCFD recommendations will be submitted to the Board of Directors in 2021.

C1.1d

**(C1.1d) Does your organization have at least one board member with competence on climate-related issues?**

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	Yes	Ichiro Sasaki, Representative Director & President of Brother Industries, Ltd. stated the following commitment on the Company's website in October 2021. We quote it below. "The Sustainable Development Goals (SDGs) for 2030, adopted by the United Nations in 2015, has set seventeen goals to realize a sustainable world and has requested corporations to take some actions as well. Moreover, many stakeholders have also requested corporations to conduct business focusing on Environmental, Social and Governance (ESG) standards. Since its foundation, the Brother Group has sought to use its business activities to resolve the issues faced both by its customers and by society as a whole. Based on this approach of contributing to society through business, we respond to social issues with the goal of establishing a society capable of sustainable growth. In particular, we must position climate change as our greatest priority issue. In addition to global moves toward the realization of carbon neutrality by 2050, natural disasters are occurring with increasing frequency around the world. In order to further promote responses to climate change, in February 2020 we expressed our support for the Task Force on Climate-related Financial Disclosures (TCFD), carried out scenario analyses of the opportunities and risks climate change offers and the risks it poses to our business, and disclosed all relevant information. We have also revised our initial CO2 reduction targets from our "Brother Group Environmental Vision 2050," which we drew up in 2018. Our goal now is to achieve carbon neutrality in our business operations and minimize CO2 emissions across our entire value chain by FY2050."	<Not Applicable>	<Not Applicable>

## C1.2

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

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Operating Officer (COO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Half-yearly

## 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).

The COO is a Managing Executive Officer overseeing the environmental programs at Brother. This position is the chief executive of the "Law, Environment and General Affairs Department" and responsible as chairman of the environmental committee. This position provides advice and requests the data from all facilities necessary to evaluate climate change in Brother. The COO makes the final decisions regarding operational changes that can affect the performance of facilities in achieving the groups Environmental Target 2030 objectives. The environmental committee is top management organization in Brother group regarding environmental issues and responsibility for managing our environmental policy, plans and major environmental issues including climate change. Law, Environment & General Affairs Department is collecting all environmental risks and opportunities from group-wide and reports the information to Environmental committee half-yearly.

## 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	We provide incentives for achievement of KPI and voluntary efforts in each department and subsidiary.

## 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 incentivized	Comment
Executive officer	Monetary reward	Emissions reduction target	Regarding the remuneration of officers from the 131st term onward, the policy and decision method regarding the determination of the amount or its calculation method have changed. The remuneration for directors of the Company consists of basic remuneration, annual bonuses, and stock remuneration. Stock remuneration shall be stock remuneration linked to medium-term performance, etc. for directors other than outside directors and non-executive directors. Stock compensation will be variable compensation linked to the degree of achievement of targets such as medium-term strategies and the degree of improvement in shareholder value to contribute to the improvement of corporate value over the medium to long term. 50% of the number obtained by dividing the stock compensation standard amount, which is determined in advance according to the position of each director, by the standard stock price is a fixed point, and 50% is a performance-linked point. And add up cumulatively. Performance-linked points consist of the revenue coefficient, net income coefficient, ESG coefficient, and TSR coefficient (calculated from the TOPIX outperform rate). The ESG coefficient is calculated according to the degree of achievement of the CO2 reduction target in Scope 1 and Scope 2 during the target period.
All employees	Non-monetary reward	Emissions reduction target Energy reduction project Energy reduction target Efficiency project Efficiency target Behavior change related indicator	Annually, all Brother offices globally have opportunities to complete an application for the internal Brother Group award for environmental performance called the "5R Award". The "5R Award" recognizes efforts by group companies and departments in five different categories. This includes activities at business sites (such as manufacturing facilities and offices), eco-consciousness specs in products, environmental activities conducted in and outside the company (such as employee awareness programs, biodiversity activities conducted for ecosystems, and natural communities and habitats among their local communities). From 2020 to 2022, to prevent coronavirus infections, related parties from each base will gather to give presentations and refrain from commending ceremonies by the president. From 1999, the Brother Group has been conducting environmental activities based on the "5Rs," which adds "Refuse" and "Reform" to the "Reduce," "Reuse" and "Recycle" 3Rs as the basis for establishing a sound material-cycle society. In particular, "Reform" is Brother's original idea that creates value by incorporating innovative approaches and ideas for changing the state of waste.
All employees	Non-monetary reward	Behavior change related indicator	Brother Group promotes and provides Employees with the "Brother Eco Point Program". This program awards points to employees for eco-conscious actions by employees such as reuse of cloth bags instead of plastic shopping bags, saving electricity and water, using sustainable alternative travel by to destinations such as walking, bicycle or public transportation, and participating in local clean-up activities. Monetary rewards throughout the year are provided to boost the program, and annual recognition to highest point participants and locations are commended and rewarded. The eco-points collected here will support the funding of biodiversity conservation activities carried out at various locations around the world every year.
Please select	Please select	Please select	

## 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?**

	From (years)	To (years)	Comment
Short-term	0	3	Activities are promoted based on the Brother Group Mid-term Environmental Action Plan (2022-24), which is the plan for the entire group. An annual plan is formulated and implemented to achieve the Medium-Term Environmental Action Plan.
Medium-term	4	10	The Brother Group established a mid-term target for FY2030 as a milestone at the same time as the Brother Group Environmental Vision 2050. In particular, the mid-term target for FY2030 related to reduction of CO2 emissions set out in this vision has been recognized by the international environmental initiative, Science Based Targets initiative, as a target based on scientific evidence to help achieve the Paris Agreement's goal of limiting global warming to well below 2 degrees Celsius. Mid-term target for FY2030 is "[Scope 1 and 2] Achieve 30% reduction from the FY2015 level, [Scope 3] Categories 1, 11 and 12; Achieve 30% reduction from the FY2015 level."
Long-term	11	30	In March 2018, the Brother Group formulated the Brother Group Environmental Vision 2050 as a new long-term target of the Brother Group to contribute to resolving global environmental issues under the slogan "Brother Earth." The vision aims to support the Paris Agreement and contribute toward creating a carbon-free society with zero greenhouse gas emissions. By 2050, the Brother Group will actively reduce CO2 emissions from the entire value chain in all business operations and contribute to creating a carbon-free society that the global community aims to achieve.

C2.1b

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

To identify risks related to climate, the Brother group calculates the CO2 emissions of Scope1, 2 and 3, which is the greenhouse gas emissions of the entire value chain every year. Based on the result of the calculation, we identify the process with high CO2 emissions that are considered business risk. Treating CO2 emissions as a risk related to climate change, we set the CO2 reduction target for fiscal 2030 in line with the goal for the Paris Agreement, a global agreement. This goal is certified as Science Based Targets by SBTi. Aiming at achieving this goal, short-term reduction targets are formulated in the environmental action plan of 3-5 years, and progress management is carried out at the environmental committee which board members participate. We are currently studying how to assess the financial impact to our company due to the risk of climate change.

Based on the "Brother Group Environmental Policy," the Brother Group is promoting initiatives for the conservation of the global environment globally throughout the group, and at a strategic meeting composed mainly of representative directors and executive officers with officers, climate change We evaluate and manage the status of environmental efforts, including deliberations and decisions on important issues related to climate change and climate change response. In addition, the Environmental Committee (chaired by the director in charge of the environment) holds regular meetings twice a year as a decision-making body responsible for environmental risks such as climate change and the environmental issues of the Brother Group. Important environmental risks and environmental issues related to climate change raised by the Environmental Committee are reported to the Risk Management Committee, which is headed by the President and CEO, and the most important issues are reported to the Board of Directors. I am instructed and supervised. The Brother Group has set CO2 emission reduction as one of the important items in the "Brother Group Environmental Vision 2050". We recognize that climate change, which is becoming more serious worldwide, is an important social issue, and we regard it as a business risk for the Brother Group, and we are working to resolve it over the long term and continuously. In 2020, based on TCFD recommendations, we assessed the importance of climate-related risks and opportunities that could impact our businesses from now to the future for our major businesses. For each risk and opportunity, "1.5 degrees Celsius scenario in which global warming countermeasures are progressing and approaching the realization of a carbon-free society", and "The world's global warming countermeasures will not be taken and the temperature will rise further. Based on the 4.0 degrees Celsius scenario, seven key risks and opportunities were identified and their impact on the company's business and finances was assessed. For the 1.5 degrees Celsius and 4.0 degrees Celsius scenarios, we referred to the IEA (International Energy Agency), IPCC (Intergovernmental Panel), Aqeduct (Water Risk Assessment Tool), etc.

The Brother Group has set CO2 emission reduction as one of the important items in the "Brother Group Environmental Vision 2050". Recognizing that climate change, which is becoming more serious worldwide, is an important social issue, and considering important social issues such as climate change, resource depletion, environmental pollution, and ecosystem destruction as business risks for the Brother Group. The "Brother Group Environmental Vision 2050" clarifies that we will work on solving this problem over the long term and continuously. The Brother Group has established a Risk Management Committee headed by the President and Representative Director, and regularly identifies and evaluates company-wide risks, including environmental risks such as climate change, and gives appropriate response instructions. Furthermore, the Environmental Committee, which is established as a subordinate organization of the Risk Management Committee, identifies important issues such as climate change, determines appropriate measures, and implements them. We also set ambitious goals for climate change and regularly monitor progress.

C2.2

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

**Value chain stage(s) covered**

Upstream

**Risk management process**

Integrated into multi-disciplinary company-wide risk management process

**Frequency of assessment**

Annually

**Time horizon(s) covered**

Medium-term

**Description of process**

Scope 3 GHG emissions from purchased goods and services, which is the GHG emissions upstream of the value chain, accounts for 48% of the Brother Group's total emissions in FY2021, and it is subject to the reduction by the Brother Group's CO2 reduction target in FY2030. Since this contribution rate of GHG emissions to reduction targets is high, there is a risk that this delayed reduction will result in failure to reach the target. Therefore, this GHG emissions are an important component of climate change related risk.

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**Value chain stage(s) covered**

Downstream

**Risk management process**

Integrated into multi-disciplinary company-wide risk management process

**Frequency of assessment**

Annually

**Time horizon(s) covered**

Medium-term

**Description of process**

The Scope 3 GHG emissions from use of sold products, which is the GHG emissions downstream of the value chain, accounts for 34% of the Brother Group's total emissions in FY2021, which is the target of the Brother Group's CO2 reduction target in FY2030. Since this contribution rate of GHG emissions to reduction targets is high, there is a risk that this delayed reduction will result in failure to reach the target. Therefore, this GHG emissions are an important component of climate change related risk.

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**Value chain stage(s) covered**

Direct operations

**Risk management process**

Integrated into multi-disciplinary company-wide risk management process

**Frequency of assessment**

Annually

**Time horizon(s) covered**

Short-term  
Medium-term

**Description of process**

In Brother, the Environment Committee (Environmental Management Promotion Committee), which is the decision-making body for environmental problems, decides appropriate measures and measures that can be taken with respect to important aspects related to global climate change and environmental laws and regulations. The Environmental Committee is also responsible to collect data and report against the targets outlined in the Environmental Action Plan. We will identify key issues at that committee and set ambitious targets for climate change, environmental laws and regulations. In addition, through the Environmental Issues Review Committee, we draw up and review specific policies and measures for solving environmental issues related to products on monthly basis. The Environmental Committee then presents the final report to the president and board members of the Risk Management Committee.

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**Value chain stage(s) covered**

Direct operations

**Risk management process**

Integrated into multi-disciplinary company-wide risk management process

**Frequency of assessment**

Annually

**Time horizon(s) covered**

Short-term  
Medium-term

**Description of process**

The Risk Management Committee will cooperate with the environmental management personnel (EMR) in each country/region at the global level. The committee reports risks and opportunities in tackling environmental activities in accordance with the Brother Group's environmental action plan. Prior to the committee, from the management planning department every year, risk assessment sheets are sent to the bases of each country/region. This assessment sheet contains concerns about climate change, environmental law concerns and problems at present, presence of accidents and incidents, compliance with environmental laws, and so on. The environmental department reviews this assessment sheet, extracts risks and opportunities, and reports it to the committee. In addition, the environmental department will conduct hearings directly to the sites as necessary.

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**C2.2a**

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	In Japan, Vietnam, and China where main factories producing our products are located, there are regulations that oblige to reduce energy consumption, so penalties will be given by the government if we cannot comply. Therefore, current legal regulations must always be considered in assessing the risk of the current climate change.
Emerging regulation	Relevant, always included	In the Asian region where our products are located, the environmental regulations including the emission of greenhouse gases are strengthened. Furthermore, when regulations are strengthened and there is an influence on the operation of the production factory, since financial influence is significant, we always gaze at the latest laws and regulations trends according to our environmental management system trends. These scenarios referred to the IEA, IPCC, Aqueduct (Water Risk Assessment Tool), and more.
Technology	Relevant, always included	To achieve the goal of reducing the CO2 emissions of Scope 1, 2 and Scope3 set by the Brother group in FY2030, we must always incorporate new technologies and do not use it for energy saving and resource conservation of facilities and products I believe it will not. Delay in the introduction of new technologies has the risk of relative environmental performance deterioration in the market and the risk of not reaching the CO2 reduction goal, so we must always consider the trend of new technology.
Legal	Relevant, always included	In the Asian region where our products are located, the environmental regulations including the emission of greenhouse gases are strengthened. Furthermore, when regulations are strengthened and there is an influence on the operation of the production factory, since financial influence is significant, we always gaze at the latest laws and regulations trends according to our environmental management system trends.
Market	Relevant, always included	We believe that demand for low-carbon products will increase in the market due to the worldwide interest in climate change. Therefore, we constantly monitor the level of low-carbon products required by the market. To create low-carbon products, the Brother group is committed to the following objectives: Reduce absolute Scope3 GHG emissions from purchased goods and services, use of sold products and end-of-life treatment of sold products 30% by FY2030 from a FY2015 base-year. These scenarios referred to the IEA, IPCC, Aqueduct (Water Risk Assessment Tool), and more.
Reputation	Relevant, always included	Based on the agreement of the Paris Agreement, it is expected that demand for low carbonization to companies will increase worldwide. Therefore, the lack of commitment to low carbon can lead to a loss of stakeholder reputation, and we believe there is a risk that the Brother Group's brand will decrease. As one of the purposes of avoiding this reputation risk, the Brother group has set CO2 reduction targets for FY2030 and clarifies the attitude to tackle low carbon.
Acute physical	Relevant, always included	To minimize the impact on operations due to intense weather such as typhoons and guerrilla torrential rains and the intensification of floods, we have bases in countries and regions with low risk in our production, procurement from the supply chain, transportation of parts and products. Based on the 1.5 degrees Celsius and 4.0 degrees Celsius scenarios, key risks and opportunities were identified and their impact on the company's business and finances was assessed. These scenarios referred to the IEA, IPCC, Aqueduct (Water Risk Assessment Tool), and more.
Chronic physical	Relevant, always included	We are based in countries and regions with low risk of survival due to long-term changes in climate and rainfall patterns that cause sea level rise, drought, and heat waves. These scenarios referred to the IEA, IPCC, Aqueduct (Water Risk Assessment Tool), and more.

**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

**Risk type & Primary climate-related risk driver**

Emerging regulation	Carbon pricing mechanisms
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**Primary potential financial impact**

Increased indirect (operating) costs

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

In 2020, the Government of Japan set new emission reduction targets based on the framework of the Paris Agreement. In the future, as a way to achieve that goal, if it is allocated to each industry and individual company in the form of tax, it may lead to a decrease in Brother's operating income. This is the same overseas. Even in overseas countries and regions where Brother is based, if the government sets new emission reduction targets based on the framework of the Paris Agreement, the government will introduce a program to achieve the reduction targets in the form of carbon tax. It is possible to do.

**Time horizon**

Long-term

**Likelihood**

Likely

**Magnitude of impact**

Medium

**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)**

100000000

**Potential financial impact figure – maximum (currency)**

1000000000

**Explanation of financial impact figure**

In the scenario analysis, we referred to "IEA's World Energy Outlook 2020", "IPCC's Global Warming of 1.5 degree", and others. When calculating the financial impact of the carbon tax, we referred to the figures from 2020 to 2050. If the 2050 carbon tax is not specified, we estimated the 2050 carbon tax using the projected carbon tax figures from 2025 to 2040. The financial impact of the Brother Group's projected CO2 emissions was calculated by multiplying it by a carbon tax that may be levied.

**Cost of response to risk**

268000000

**Description of response and explanation of cost calculation**

Brother has set a medium-term target for CO2 emissions in FY2030 and is developing systematic reductions in CO2 emissions. Currently, carbon tax is not urgently imposed, but it is very important to monitor future trends. Therefore, this is an activity as part of the environmental management system. Since the cost of watching the carbon tax alone cannot be calculated, the cost related to the environmental management system is shown here. We will quote the "Global Environmental Conservation Costs" in the "Business Area Costs" of the FY2021 environmental accounting disclosed on the environmental web.

**Comment****Identifier**

Risk 2

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Market	Changing customer behavior
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**Primary potential financial impact**

Increased indirect (operating) costs

**Climate risk type mapped to traditional financial services industry risk classification**

&lt;Not Applicable&gt;

**Company-specific description**

Brother's industrial equipment was developed through our manufacturing of machine tools needed to make key parts of sewing machines in-house. In 1985, Brother released the CNC Tapping Center. It has been well received by our customers because it is compact in size yet offers high productivity and environmental performance for processing parts needed by the automobile and IT industries. After the launch of our next-generation machine tool brand "SPEEDIO" in 2013, we have released models that can process bigger parts, and models that are capable of lathe turning processing, and peripheral devices around "SPEEDIO" machines, such as a rotary table. In this way, we have been exploiting new markets.

**Time horizon**

Short-term

**Likelihood**

Likely

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

&lt;Not Applicable&gt;

**Potential financial impact figure – minimum (currency)**

1000000000

**Potential financial impact figure – maximum (currency)**

1000000000

**Explanation of financial impact figure**

Using the 1.5 degrees Celsius scenario, we assumed that the shift from vehicles that use internal combustion engines to electric vehicles would reduce the demand for metal processed parts related to internal combustion engines. For scenario analysis, we referred to "Global EV Outlook 2019" and "IEEJ Outlook 2018" regarding the spread of electric vehicles.

**Cost of response to risk**

4795000000

**Description of response and explanation of cost calculation**

It will be necessary to pay for the development of machine tool products and functions to increase the number of new machine tools such as electric vehicle-related parts. R & D expenses for these machine tools alone are not disclosed, so the R & D expenses for the entire machinery business including machine tools are shown. Its value is 4,795 million yen. The figures for R & D expenses are stated in the FY2021 Internal Control Report and Securities Report.

**Comment****Identifier**

Risk 3

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Please select



**Primary potential financial impact**

Decreased revenues due to reduced production capacity

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

According to the IPCC's Fourth Report, the future forecast is that summer precipitation will increase in floods in densely populated "mega-deltas" areas such as South and East Asia. The IPCC report also predicts that cyclones may grow stronger in Southeast Asia in the future. Brother has a major factory in the region with major businesses and is at risk of floods and cyclones.

**Time horizon**

Short-term

**Likelihood**

Likely

**Magnitude of impact**

Medium

**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)**

1000000000

**Potential financial impact figure – maximum (currency)**

10000000000

**Explanation of financial impact figure**

We have assumed flood risk due to the 4 degrees Celsius scenario for factories in China and Asian factories such as Vietnam and the Philippines. If the flood causes paralysis of logistics and transportation, the impact will lead to the suspension of production at the factory. Normally, parts are kept in a warehouse for a certain number of days, and production can be continued. However, if the operation is stopped for the number of days expected in advance, the production will be stopped. We estimated the loss of business opportunities at this time.

**Cost of response to risk**

85000000

**Description of response and explanation of cost calculation**

We have already implemented certain natural disaster countermeasures when the factory is located. In addition, for some models, we are implementing risk management through production at multiple bases. In addition, we are strategically considering parts suppliers and their upstream suppliers, and assume that the risk of production outages due to floods is moderate. Since it is difficult to calculate only the costs related to the procurement of materials and the management of warehouses, we will quote the "upstream / downstream costs" of environmental accounting. This number is in the FY2021 environmental accounting disclosed on the environmental web.

**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?**

Downstream

**Opportunity type**

Products and services

**Primary climate-related opportunity driver**

Development and/or expansion of low emission goods and services

**Primary potential financial impact**

Reduced indirect (operating) costs

**Company-specific description**

The creation of low-carbon products is indispensable for the realization of a low-carbon society. Brother is advancing research and development of low-carbon products as a new business. Brother's fuel cell uses a polymer electrolyte fuel cell (PEFC), which has a proven track record in general applications such as being used in fuel cell vehicle FCVs and ENE-FARM. The polymer electrolyte cell (PEFC) has a low operating temperature and a short start-up time, making it suitable for use in applications with many ON / OFF. Spot coolers are also one of the low carbon products. Recently, as the number of heat stroke patients due to the intense heat of summer is increasing, most of the heat stroke that occurs during work is occurring at work sites such as factories. Brother believes that these on-site measures will become even more important in the future and has developed and released a spot cooler that sends powerful cold air without imposing a burden on the environment. With our unique cooling technology that does not use a refrigerant and compressor, the power consumption is reduced to 180W, which is about 1/4 that of a general spot cooler, and it also contributes to the reduction of energy consumption.

**Time horizon**

Medium-term

**Likelihood**

Likely

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

&lt;Not Applicable&gt;

**Potential financial impact figure – minimum (currency)**

1000000000

**Potential financial impact figure – maximum (currency)**

10000000000

**Explanation of financial impact figure**

We speculate that demand for low-carbon products such as spot coolers and fuel cells will increase as climate change progresses. For the scenario analysis, we used the 1.5 degrees Celsius scenario to predict the market size in Japan and overseas in FY2030.

**Cost to realize opportunity**

2876000000

**Strategy to realize opportunity and explanation of cost calculation**

R & D expenses related to this project are not disclosed to the outside. For that reason, we indicate R & D expenses in "other businesses" in the FY2021 internal control report and securities report. Its value is 2,876 million yen.

**Comment****Identifier**

Opp2

**Where in the value chain does the opportunity occur?**

Downstream

**Opportunity type**

Products and services

**Primary climate-related opportunity driver**

Development and/or expansion of low emission goods and services

**Primary potential financial impact**

Reduced indirect (operating) costs

**Company-specific description**

Brother's industrial equipment was developed through our manufacturing of machine tools needed to make key parts of sewing machines in-house. In 1985, Brother released the CNC Tapping Center. It has been well received by our customers because it is compact in size yet offers high productivity and environmental performance for processing parts needed by the automobile and IT industries. After the launch of our next-generation machine tool brand "SPEEDIO" in 2013, we have released models that can process bigger parts, and models that are capable of lathe turning processing, and peripheral devices around "SPEEDIO" machines, such as a rotary table. In this way, we have been exploiting new markets.

**Time horizon**

Medium-term

**Likelihood**

Likely

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

&lt;Not Applicable&gt;

**Potential financial impact figure – minimum (currency)**

1000000000

**Potential financial impact figure – maximum (currency)**

10000000000

**Explanation of financial impact figure**

In the scenario analysis in the TCFD recommendation, we assumed that the conversion from vehicles using internal combustion engines to electric vehicles would proceed in the case of the 1.5 degrees Celsius scenario. Brother's machine tools are compatible with new processed products such as EV-related parts, and we can expect an increase in demand for machine tools. To estimate the market size, we referred to hydrogen prices in Japan's basic hydrogen strategy and hydrogen market forecast data in the EU.

**Cost to realize opportunity**

4795000000

**Strategy to realize opportunity and explanation of cost calculation**

R & D expenses for these machine tools alone are not disclosed, so the R & D expenses for the entire machinery business including machine tools are shown. Its value is 4,795 million yen. The figures for R & D expenses are stated in the FY2021 Internal Control Report and Securities Report.

### C3. Business Strategy

#### C3.1

##### (C3.1) Does your organization’s strategy include a transition plan that aligns with a 1.5°C world?

**Row 1**

**Transition plan**

No, but our strategy has been influenced by climate-related risks and opportunities, and we are developing a transition plan within two years

**Publicly available transition plan**

<Not Applicable>

**Mechanism by which feedback is collected from shareholders on your transition plan**

<Not Applicable>

**Description of feedback mechanism**

<Not Applicable>

**Frequency of feedback collection**

<Not Applicable>

**Attach any relevant documents which detail your transition plan (optional)**

<Not Applicable>

**Explain why your organization does not have a transition plan that aligns with a 1.5°C world and any plans to develop one in the future**

We feel the need for a climate transition plan. However, although there are partial climate transition plans for some businesses and product groups, there is no information that can be disclosed at this time because they are incomplete as business plans that satisfy the six principles and eight elements.

**Explain why climate-related risks and opportunities have not influenced your strategy**

<Not Applicable>

#### C3.2

##### (C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy	Primary reason why your organization does not use climate-related scenario analysis to inform its strategy	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	Yes, qualitative and quantitative	<Not Applicable>	<Not Applicable>

#### C3.2a

##### (C3.2a) Provide details of your organization’s use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Physical climate scenarios RCP 8.5	Business division	<Not Applicable>	Factories in Vietnam and southern China were included in the scenario analysis as bases that may be subject to physical risks in the Brother Group. In these factories, using the 4 degrees Celsius scenario, it was analyzed that there was a risk of flooding. Therefore, using the number of days of production suspension as a parameter, we estimated fluctuations in factory inventory management, and calculated the impact on sales and profits of the product itself and consumables.
Transition scenarios IEA 2DS	Business division	<Not Applicable>	As a representative of the market risk in the Brother Group, we have identified the degree of impact on machine tools. In the future, if fossil fuel consumption is reduced and the number of automobiles with internal combustion engines decreases due to the increase in pure EV, the decrease in metal processed parts for internal combustion engine-related engines, transmissions, and drive trains will decrease. Climate change impacts business sales as we provide machine tools suitable for processing these automotive parts. On the other hand, it was also estimated how much the sales of machine tools would increase because of the increase in processed parts related to electric vehicles.

#### C3.2b

**(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.**

**Row 1**

**Focal questions**

The market for recycled plastics has grown in recent years. Recycling plastics can reduce GHGs involved in the mining of fossil fuels and the production of plastics, as well as GHGs emitted from combustion or landfills at the time of disposal. At our company as well, in advancing this initiative, how to incorporate it into the climate transition plan is an issue.

**Results of the climate-related scenario analysis with respect to the focal questions**

We have taken up the tightening of environmental regulations as a circular economy and the increasing market demand as one of the transition risks. We assumed the impact of lost sales opportunities due to environmental regulations in the field of telecommunications and printing equipment and delays in responding to market demands. Preliminary survey of regulatory trends and implementation of early response, setting of medium-term resource recycling targets for 2030 and implementation of planned new resource use reduction activities to achieve the targets. Risk countermeasures were to improve the usage rate of recycled plastics in printing equipment and reduce the amount of Styrofoam used.

**C3.3**

**(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.**

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Impacted. We incorporate low-carbon product creation and line up into annual environmental targets and mid- and long-term plans, and the environmental committee manages the progress situation. Product example; Printers, All-in-Ones, Home Sewing Machines, Industrial Sewing Machines, Machine Tools, Reducers and Gears, etc.
Supply chain and/or value chain	Yes	Impacted for some suppliers, facilities, or product lines. When initiating transactions with the supply chain, or periodically, we are requesting the setting and reporting of voluntary targets for GHG reduction.
Investment in R&D	Yes	Impacted for some suppliers, facilities, or product lines. In 2016, Brother succeeded in developing a fuel cell system by making use of miniaturization technology accumulated through the development of printers and multifunction machines, and power control technology cultivated in machine tools and others. We believe that we can contribute to the development of a low carbon society and a decarbonized society.
Operations	Yes	Impacted. We have incorporated the latest energy-saving facilities in establishing a new factory and building a new building. Even in existing buildings, we have budgeted and introduced devices that compatible with functions and energy saving, such as updating to devices with fewer GHGs. In the office, operational standards are set for air conditioner, lighting, and office equipment operation, contributing to energy conservation. At the factory, we reviewed the unnecessary power, updated the equipment, improved the process, contributing to the reduction of GHG.

**C3.4**

**(C3.4) 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 Direct costs	Changes in factory production volumes and changes in consumer trends caused by the effects of climate change will have an impact on Brother's financial plan for revenue. Because of climate change, financial planning concerning Brother's business expenditure, such as product quality control, employee safety and health, and introduction of low GHG emissions equipment, may be affected.

**C4. Targets and performance**

**C4.1**

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

Absolute target

**C4.1a**

**(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.**

**Target reference number**

Abs 1

**Year target was set**

2018

**Target coverage**

Company-wide

**Scope(s)**

Scope 1  
Scope 2

**Scope 2 accounting method**

Market-based

**Scope 3 category(ies)**

<Not Applicable>

**Base year**

2015

**Base year Scope 1 emissions covered by target (metric tons CO2e)**

75333.15

**Base year Scope 2 emissions covered by target (metric tons CO2e)**

125092.7

**Base year Scope 3 emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Total base year emissions covered by target in all selected Scopes (metric tons CO2e)**

200425.85

**Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1**

100

**Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2**

100

**Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)**

<Not Applicable>

**Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes**

100

**Target year**

2030

**Targeted reduction from base year (%)**

30

**Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]**

140298.095

**Scope 1 emissions in reporting year covered by target (metric tons CO2e)**

18724.36

**Scope 2 emissions in reporting year covered by target (metric tons CO2e)**

105099.41

**Scope 3 emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)**

123823.77

**% of target achieved relative to base year [auto-calculated]**

127.398869290896

**Target status in reporting year**

Underway

**Is this a science-based target?**

Yes, and this target has been approved by the Science Based Targets initiative

**Target ambition**

1.5°C aligned

**Please explain target coverage and identify any exclusions**

We targeted all consolidated companies of the Brother group that existed in the base year of 2015. Therefore, the base year data does not include the emissions of Group of DOMINO PRINTING SCIENCE.

**Plan for achieving target, and progress made to the end of the reporting year**

Under the Brother Group Environmental Vision 2050, in the reduction of CO2 emissions, the Brother Group will aim to achieve carbon neutrality\* in all business operations and minimize CO2 emissions from the entire value chain by 2050. In addition, the medium-term target for FY2030—which serves as a milestone—is set as achieving, by FY2030, 65% reduction in CO2 emissions from the Brother Group from the FY2015 level for Scopes 1 and 2, and 30% reduction from the FY2015 level for the stages of product procurement, use, and disposal (categories 1, 11, and 12 of Scope 3), which emit particularly significant amounts of CO2 in the value chain. In order to achieve the medium-term target for reducing CO2 emissions in line with the Brother Group Environmental Vision 2050, the Brother Group is undertaking a number of efforts. These include reducing the use of solvents containing greenhouse gases used in production processes, stepping up energy-saving activities at workplaces (for example, introducing high-efficiency equipment), accelerating the use of renewable energy, and resource and energy conservation in company products, and promoting the recycling of resources. We achieved a 38.2% reduction in Scope1 + 2 (market standard) and a 11.0% reduction in Scope3 in FY2021 compared to the FY2030 target with FY2015 as the base year.

**List the emissions reduction initiatives which contributed most to achieving this target**

<Not Applicable>

**Target reference number**

Abs 2

**Year target was set**

2018

**Target coverage**

Company-wide

**Scope(s)**

Scope 3

**Scope 2 accounting method**

<Not Applicable>

**Scope 3 category(ies)**

Category 1: Purchased goods and services

Category 11: Use of sold products

Category 12: End-of-life treatment of sold products

**Base year**

2015

**Base year Scope 1 emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 2 emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3 emissions covered by target (metric tons CO2e)**

3223487.25

**Total base year emissions covered by target in all selected Scopes (metric tons CO2e)**

2994366.76

**Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1**

<Not Applicable>

**Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2**

<Not Applicable>

**Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)**

100

**Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes**

92.89

**Target year**

2030

**Targeted reduction from base year (%)**

30

**Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]**

2096056.732

**Scope 1 emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 2 emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3 emissions in reporting year covered by target (metric tons CO2e)**

2942351.85

**Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)**

2663672.61

**% of target achieved relative to base year [auto-calculated]**

36.8129197818551

**Target status in reporting year**

Underway

**Is this a science-based target?**

Yes, and this target has been approved by the Science Based Targets initiative

**Target ambition**

1.5°C aligned

**Please explain target coverage and identify any exclusions**

We targeted all consolidated companies of the Brother group that existed in the base year of 2015. Therefore, the base year data does not include the emissions of Group of DOMINO PRINTING SCIENCE.

**Plan for achieving target, and progress made to the end of the reporting year**

Under the Brother Group Environmental Vision 2050, in the reduction of CO2 emissions, the Brother Group will aim to achieve carbon neutrality in all business operations and minimize CO2 emissions from the entire value chain by 2050. In addition, the medium-term target for FY2030 - which serves as a milestone - is set as achieving, by FY2030, 65% reduction in CO2 emissions from the Brother Group from the FY2015 level for Scopes 1 and 2, and 30% reduction from the FY2015 level for the stages of product procurement, use, and disposal (categories 1, 11, and 12 of Scope 3), which emit particularly significant amounts of CO2 in the value chain. In order to achieve the medium-term target for reducing CO2 emissions in line with the Brother Group Environmental Vision 2050, the Brother Group is undertaking a number of efforts. These include reducing the use of solvents containing greenhouse gases used in production processes, stepping up energy-saving activities at workplaces (for example, introducing high-efficiency equipment), accelerating the use of renewable energy, and resource and energy conservation in company products, and promoting the recycling of resources. We achieved a 38.2% reduction in Scope1 + 2 (market standard) and a 11.0% reduction in Scope3 in FY2021 compared to the FY2030 target with FY2015 as the base year.

List the emissions reduction initiatives which contributed most to achieving this target  
<Not Applicable>

## C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?  
No other climate-related targets

## 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	0
To be implemented*	31	401.58
Implementation commenced*	38	953.83
Implemented*	27	1088.61
Not to be implemented	12	63.37

### C4.3b

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

#### Initiative category & Initiative type

Energy efficiency in production processes	Machine/equipment replacement
---	-------------------------------

Estimated annual CO2e savings (metric tonnes CO2e)  
660.85

Scope(s) or Scope 3 category(ies) where emissions savings occur  
Scope 2 (location-based)

Voluntary/Mandatory  
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)  
1644000

Investment required (unit currency – as specified in C0.4)  
8206000

Payback period  
4-10 years

Estimated lifetime of the initiative  
<1 year

#### Comment

We have reduced energy consumption by updating production equipment, air conditioners and humidifiers. This activity planned for the year was completed in FY2021.

#### Initiative category & Initiative type

Energy efficiency in buildings	Lighting
--------------------------------	----------

Estimated annual CO2e savings (metric tonnes CO2e)  
23.19

Scope(s) or Scope 3 category(ies) where emissions savings occur  
Scope 2 (location-based)

Voluntary/Mandatory  
Voluntary

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

537000

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

1205000

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

&lt;1 year

**Comment**

We have reduced energy consumption by replacing fluorescent lamps with LEDs. This activity planned for the year was completed in FY2021.

**Initiative category & Initiative type**

Energy efficiency in production processes	Process optimization
---	----------------------

**Estimated annual CO2e savings (metric tonnes CO2e)**

321.92

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 1

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

7007000

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

55000

**Payback period**

&lt;1 year

**Estimated lifetime of the initiative**

&lt;1 year

**Comment**

At production factories, we have turned off lights during employee's break time and factory holidays and have reduced energy by stopping the machine in process waiting time. We attached timers and controllers as needed. We have reduced energy consumption by patrolling leaks on air piping and maintaining proper condition by periodic cleaning of air conditioning equipment. This activity planned for the year was completed in FY2021.

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

Method	Comment
Compliance with regulatory requirements/standards	We invested in outside consultants for energy efficiencies to meet regulatory requirements.
Dedicated budget for energy efficiency	Implementation for energy reduction projects within facilities.
Internal incentives/recognition programs	Donations from the amount of Eco-point Brother Environmental Programs to external environmental charities.
Internal finance mechanisms	Additional investments as required/needed for potential reduction activities.
Dedicated budget for low-carbon product R&D	We set energy-saving performance targets in each business segment and decide investment in developing new products.
Employee engagement	First place finish in the Drive Less Somerset Employer Challenge Event for 2016 sponsored by NPO "Ride Wise" in the USA. The challenge issued was to see which Somerset Employer could reduce traffic and decrease the most amount of carbon emissions through choosing sustainable transportation options.

**C4.5****(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?**

Yes

**C4.5a**



**(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.**

**Level of aggregation**

Product or service

**Taxonomy used to classify product(s) or service(s) as low-carbon**

No taxonomy used to classify product(s) or service(s) as low carbon

**Type of product(s) or service(s)**

Batteries	Other, please specify ( fuel cell systems)
-----------	--

**Description of product(s) or service(s)**

Toward the development of fuel cell systems, Brother has undertaken many years of fuel cell research while pursuing the potential of hydrogen. There are still many issues in further widening the use of hydrogen. However, the development of this technology was a steady step into the future for Brother.

**Have you estimated the avoided emissions of this low-carbon product(s) or service(s)**

No

**Methodology used to calculate avoided emissions**

<Not Applicable>

**Life cycle stage(s) covered for the low-carbon product(s) or services(s)**

<Not Applicable>

**Functional unit used**

<Not Applicable>

**Reference product/service or baseline scenario used**

<Not Applicable>

**Life cycle stage(s) covered for the reference product/service or baseline scenario**

<Not Applicable>

**Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario**

<Not Applicable>

**Explain your calculation of avoided emissions, including any assumptions**

<Not Applicable>

**Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year**

0

**C5. Emissions methodology**

**C5.1**

**(C5.1) Is this your first year of reporting emissions data to CDP?**

No

**C5.1a**

**(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?**

**Row 1**

**Has there been a structural change?**

No

**Name of organization(s) acquired, divested from, or merged with**

<Not Applicable>

**Details of structural change(s), including completion dates**

<Not Applicable>

**C5.1b**

**(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?**

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	No	<Not Applicable>

**(C5.2) Provide your base year and base year emissions.****Scope 1****Base year start**

April 1 2015

**Base year end**

March 31 2016

**Base year emissions (metric tons CO2e)**

75333.15

**Comment**

To apply to SBTi and to expand the boundary, we tried again to calculate the base year as FY2015. This figure has been verified by a third-party external verifier.

**Scope 2 (location-based)****Base year start**

April 1 2015

**Base year end**

March 31 2016

**Base year emissions (metric tons CO2e)**

122766.05

**Comment**

To apply to SBTi and to expand the boundary, we tried again to calculate the base year as FY2015. This figure has been verified by a third-party external verifier.

**Scope 2 (market-based)****Base year start**

April 1 2015

**Base year end**

March 31 2016

**Base year emissions (metric tons CO2e)**

125092.7

**Comment**

To apply to SBTi and to expand the boundary, we tried again to calculate the base year as FY2015. This figure has been verified by a third-party external verifier.

**Scope 3 category 1: Purchased goods and services****Base year start**

April 1 2015

**Base year end**

March 31 2016

**Base year emissions (metric tons CO2e)**

1474149.134

**Comment**

This figure has been verified by a third-party external verifier.

**Scope 3 category 2: Capital goods****Base year start**

April 1 2015

**Base year end**

March 31 2016

**Base year emissions (metric tons CO2e)**

96858.342

**Comment**

This figure has been verified by a third-party external verifier.

**Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)****Base year start**

April 1 2015

**Base year end**

March 31 2016

**Base year emissions (metric tons CO2e)**

9522.519

**Comment**

This figure has been verified by a third-party external verifier.

**Scope 3 category 4: Upstream transportation and distribution**

**Base year start**

April 1 2015

**Base year end**

March 31 2016

**Base year emissions (metric tons CO2e)**

77535.028

**Comment**

This figure has been verified by a third-party external verifier.

**Scope 3 category 5: Waste generated in operations**

**Base year start**

April 1 2015

**Base year end**

March 31 2016

**Base year emissions (metric tons CO2e)**

3012.057

**Comment**

This figure has been verified by a third-party external verifier.

**Scope 3 category 6: Business travel**

**Base year start**

April 1 2015

**Base year end**

March 31 2016

**Base year emissions (metric tons CO2e)**

5670.312

**Comment**

This figure has been verified by a third-party external verifier.

**Scope 3 category 7: Employee commuting**

**Base year start**

April 1 2015

**Base year end**

March 31 2016

**Base year emissions (metric tons CO2e)**

13299.145

**Comment**

This figure has been verified by a third-party external verifier.

**Scope 3 category 8: Upstream leased assets**

**Base year start**

April 1 2015

**Base year end**

March 31 2016

**Base year emissions (metric tons CO2e)**

5941.939

**Comment**

This figure has been verified by a third-party external verifier.

**Scope 3 category 9: Downstream transportation and distribution**

**Base year start**

April 1 2015

**Base year end**

March 31 2016

**Base year emissions (metric tons CO2e)**

15551.997

**Comment**

This figure has been verified by a third-party external verifier.

**Scope 3 category 10: Processing of sold products**

**Base year start**

April 1 2015

**Base year end**

March 31 2016

**Base year emissions (metric tons CO2e)**

0

**Comment**

This figure has been verified by a third-party external verifier.

**Scope 3 category 11: Use of sold products**

**Base year start**

April 1 2015

**Base year end**

March 31 2016

**Base year emissions (metric tons CO2e)**

1255488.599

**Comment**

This figure has been verified by a third-party external verifier.

**Scope 3 category 12: End of life treatment of sold products**

**Base year start**

April 1 2015

**Base year end**

March 31 2016

**Base year emissions (metric tons CO2e)**

264729.032

**Comment**

This figure has been verified by a third-party external verifier.

**Scope 3 category 13: Downstream leased assets**

**Base year start**

April 1 2015

**Base year end**

March 31 2016

**Base year emissions (metric tons CO2e)**

1729.145

**Comment**

This figure has been verified by a third-party external verifier.

**Scope 3 category 14: Franchises**

**Base year start**

April 1 2015

**Base year end**

March 31 2016

**Base year emissions (metric tons CO2e)**

0

**Comment**

This figure has been verified by a third-party external verifier.

**Scope 3 category 15: Investments**

**Base year start**

April 1 2015

**Base year end**

March 31 2016

**Base year emissions (metric tons CO2e)**

0

**Comment**

This figure has been verified by a third-party external verifier.

**Scope 3: Other (upstream)**

**Base year start**

April 1 2015

**Base year end**

March 31 2016

**Base year emissions (metric tons CO2e)**

0

**Comment**

**Scope 3: Other (downstream)**

**Base year start**

April 1 2015

**Base year end**

March 31 2016

**Base year emissions (metric tons CO2e)**

0

**Comment**

**C5.3**

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**(C5.3) 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

IEA CO2 Emissions from Fuel Combustion

ISO 14064-1

Japan Ministry of the Environment, Law Concerning the Promotion of the Measures to Cope with Global Warming, Superseded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment)

New Zealand - Guidance for Voluntary, Corporate Greenhouse Gas Reporting

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

The Greenhouse Gas Protocol: Scope 2 Guidance

Toitū carbonzero programme

US EPA Emissions & Generation Resource Integrated Database (eGRID)

**C6. Emissions data**

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**C6.1**

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**(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)**

18724.356

**Start date**

<Not Applicable>

**End date**

<Not Applicable>

**Comment**

This figure has been verified by a third-party external verifier.

**C6.2**

---

**(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**

To apply to SBTi and to expand the boundary, we tried again to calculate the base year as FY2015. This data has been revalidated by external verification agencies.

## C6.3

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

#### Reporting year

##### Scope 2, location-based

105316.939

##### Scope 2, market-based (if applicable)

105099.408

#### Start date

<Not Applicable>

#### End date

<Not Applicable>

#### Comment

This figure has been verified by a third-party external verifier.

## 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

Part of group of DOMINO PRINTING SCIENCE is not included in the GHG emission calculation. This group of DOMINO PRINTING SCIENCE is headquartered in the United Kingdom and joined the brother group in FY2015.

#### Relevance of Scope 1 emissions from this source

Emissions are relevant and calculated, but not disclosed

#### Relevance of location-based Scope 2 emissions from this source

Emissions are relevant and calculated, but not disclosed

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

Emissions are relevant and calculated, but not disclosed

#### Explain why this source is excluded

DOMINO PRINTING SCIENCE also has multiple bases globally, and some of the factories and offices cannot connect to Brother's GHG calculation / aggregation system. This situation has been resolved year by year, and it is now possible to aggregate the major bases of group of DOMINO PRINTING SCIENCE.

#### Estimated percentage of total Scope 1+2 emissions this excluded source represents

6

#### Explain how you estimated the percentage of emissions this excluded source represents

DOMINO PRINTING SCIENCE also has multiple bases globally, and some of the factories and offices cannot connect to Brother's GHG calculation / aggregation system. This situation has been resolved year by year, and it is now possible to aggregate the major bases of group of DOMINO PRINTING SCIENCE.

## 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

### Emissions in reporting year (metric tons CO2e)

1404939.054

### Emissions calculation methodology

Average data method  
Spend-based method  
Average product method

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

0

### Please explain

Regarding some products of each business area in FY2021, LCA data will be used for determining emissions for goods and services purchased or acquired by the reporting company. CO2 emissions =  $\Sigma$  ((total sales by products) x (emission factor)). We have changed the emission factor from Ecoleaf or Toshiba EasyLCA to IDEA version 2.3 in the product-related categories (category 1, 11 and 12) of Scope3. At the same time, we changed the calculation method for GHG emissions of reduction gears and gear motors from the input-output table base based on the sales amount to the stacking base.

## Capital goods

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

86955.053

### Emissions calculation methodology

Average data method  
Spend-based method

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

0

### Please explain

To calculate CO2 emissions by multiplying the purchased price and the emission factor based on asset types (buildings, vehicles, machinery, tools, dies, fixtures and equipment, intangible) in FY2021. CO2 emissions =  $\Sigma$  ((acquisition cost of fixed assets) x (emission factor)).

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

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

11837.995

### Emissions calculation methodology

Average data method

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

0

### Please explain

Fuels: The amounts of each fuels (Scope1 reported amounts) are multiplied by emissions unit values from the stage of resource extraction to the transportation stage in FY2021. Electricity and Heat: The amounts of electricity and heat (Scope2 reported amounts) are multiplied by average emissions unit values for resource extraction, production, and transportation of fuel for all power sources in FY2021. CO2 emissions =  $\Sigma$  ((amount of energy consumption) x (emission factor)).

## Upstream transportation and distribution

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

138978.074

### Emissions calculation methodology

Average data method  
Fuel-based method  
Distance-based method

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

26

### Please explain

Ton-kilometer method will be used for determining emissions for Transportation and delivery in FY 2021. CO2 emissions =  $\Sigma$  ((ton-kilometers transported) x (emissions factor by mode such as truck, railroads, ships, and aircrafts)). Domestic BIL (BROTHER INDUSTRIES, LTD.) will use the data of transport emissions report in FY2021 which are provided by domestic/overseas offices and the factories. CO2 emissions =  $\Sigma$  ((transport distance) x (transport weight) x (emission factor)).

## Waste generated in operations

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

2849.42

### Emissions calculation methodology

Average data method  
Waste-type-specific method

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

0

### Please explain

Emissions are estimated by multiplying amounts consigned to waste disposal/recycling companies by emissions unit values "tCO2e/t" based on standard scenarios for each type of waste in FY2021.  $CO_2 \text{ emissions} = \sum ((\text{acceptance amount of processed, recycled waste}) \times (\text{emission factor}))$ .

## Business travel

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

1886.697

### Emissions calculation methodology

Average data method  
Spend-based method  
Average spend-based method

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

0

### Please explain

In the use of public transportation, the emission in FY2021 has been calculated in multiplying the expenses of each transport mode and the emission factor. If the transportation expense is unknown, the transport mode percentage will be set by the inspection of sampling.  $CO_2 \text{ emission} = \sum ((\text{amount of travel expenses}) \times (\text{emission factor}))$ . There is a method to simply calculate the emission amount from the number of employees at the end of FY2021 when each site cannot grasp the transportation allowance. Emissions can be calculated using the formula below.  $CO_2 \text{ emission} = \sum ((\text{employee numbers}) \times (\text{emission factor}))$ .

## Employee commuting

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

14818.78

### Emissions calculation methodology

Average data method  
Spend-based method  
Average spend-based method  
Fuel-based method  
Distance-based method

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

0

### Please explain

In the use of public transportation, the emission in FY2021 has been calculated in multiplying the expenses of each transport mode and the emission factor. If the transportation expense is unknown, the transport mode percentage will be set by the inspection of sampling.  $CO_2 \text{ emission} = \sum ((\text{amount of travel expenses}) \times (\text{emission factor}))$ . Calculate based on fuel economy method:  $CO_2 \text{ emissions} = \sum ((\text{moving distance/fuel consumption}) \times (\text{emission factor}))$ . If we cannot know the data such as transportation expenses payments, travel distance, fuel usage, use the way to calculate based on the numbers of employee and working days in FY2021. Emissions can be calculated using the formula below.  $CO_2 \text{ emissions} = \sum ((\text{employee numbers}) \times (\text{working days}) \times (\text{emission factor}))$ .

## Upstream leased assets

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

4101.044

### Emissions calculation methodology

Average data method  
Lessor-specific method

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

0

### Please explain

The emission in FY2021 has been calculated in multiplying the energy consumption of leased assets which are not included in Scope1 and 2 and the emission factor. If the company has rented a part of whole property, the energy consumption should be calculated using the ration of office area, etc.  $CO_2 \text{ emission} = \sum ((\text{leased asset energy consumption}) \times (\text{emission factor}))$ . If we cannot know energy consumption of leased assets, only when leased asset is building, the emission in FY2021 has been calculated in multiplying total floor space of leased assets and the emission factor.  $CO_2 \text{ emissions} = \sum ((\text{floor space of leased building}) \times (\text{emission factor}))$ .



## Downstream transportation and distribution

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

15366.296

### Emissions calculation methodology

Average data method  
Fuel-based method  
Distance-based method

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

0

### Please explain

The emission in FY2021 is calculated based on ton-kilometer method. We define that transport distance is uniformly 100 km by PCRs ("Product Category Rule" s) of the JEMAI EcoLeaf Environment Label. CO2 emissions =  $\Sigma ((100\text{km}) \times (\text{transport weight}) \times (\text{emission factor}))$ .

## Processing of sold products

### Evaluation status

Not relevant, calculated

### Emissions in reporting year (metric tons CO2e)

0

### Emissions calculation methodology

Average data method

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

0

### Please explain

Not relevant, as we do not sell any intermediate product.

## Use of sold products

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

995115.365

### Emissions calculation methodology

Average product method  
Methodology for direct use phase emissions, please specify (Emissions are calculated based on LCA. LCA data will be used for determining emissions for goods and services purchased or acquired by the reporting company. We use the emission factor of IDEA version2.3.)

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

0

### Please explain

Emissions in FY2021 are calculated based on LCA. LCA data will be used for determining emissions for goods and services purchased or acquired by the reporting company. We use the emission factor of IDEA version 2.3.

## End of life treatment of sold products

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

263618.189

### Emissions calculation methodology

Average product method

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

0

### Please explain

Emissions in FY2021 are calculated based on LCA. LCA data will be used for determining emissions for goods and services purchased or acquired by the reporting company. We use the emission factor of IDEA version 2.3.

## Downstream leased assets

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

1885.886

### Emissions calculation methodology

Average data method  
Lessor-specific method

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

0

### Please explain

The emission in FY2021 has been calculated in multiplying the energy consumption of leased assets which are not included in Scope1 and 2 and the emission factor. If the company has rented a part of whole property, the energy consumption should be calculated using the ration of office area, etc.  $CO_2 \text{ emission} = \sum ((\text{leased asset energy consumption}) \times (\text{emission factor}))$ . If we cannot know energy consumption of leased assets, only when leased asset is building, the emission in FY2021 has been calculated in multiplying total floor space of leased assets and the emission factor.  $CO_2 \text{ emissions} = \sum ((\text{floor space of leased building}) \times (\text{emission factor}))$ .

## Franchises

### Evaluation status

Not relevant, calculated

### Emissions in reporting year (metric tons CO2e)

0

### Emissions calculation methodology

Average data method  
Franchise-specific method

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

0

### Please explain

We collect Scope1 and 2 of the franchises and the calculation method in the Accounting and Reporting System in FY2021.  $CO_2 \text{ emissions} = \sum ((\text{energy consumption of franchises}) \times (\text{emission factor}))$ .

## Investments

### Evaluation status

Not relevant, calculated

### Emissions in reporting year (metric tons CO2e)

0

### Emissions calculation methodology

Average data method  
Investment-specific method

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

0

### Please explain

Emissions in FY2021 from investment can be obtained by the following two methods. 1. Method to obtain from the holding ratio to the total number of issued shares of the investee:  $CO_2 \text{ emissions} = \sum \{(\text{Emissions from each stock investee}) \times (\text{Emission factor})\}$ . Method to obtain from debt ratio to total capital of investee:  $CO_2 \text{ emissions} = \sum \{(\text{Emissions from each bond investment}) \times (\text{Emission factor})\}$ .

## Other (upstream)

### Evaluation status

Please select

### Emissions in reporting year (metric tons 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

Please select

### Emissions in reporting year (metric tons 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

## C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

No

## C6.10

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

**Intensity figure**

1.742e-7

**Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO<sub>2</sub>e)**

105099.41

**Metric denominator**

unit total revenue

**Metric denominator: Unit total**

71093800000

**Scope 2 figure used**

Market-based

**% change from previous year**

5.98

**Direction of change**

Decreased

**Reason for change**

In the consolidated financial results of the Group for the current consolidated fiscal year, in the Printing & Solutions Business, in addition to the positive impact of foreign exchange, consumables remained strong, and sales increased. In Personal & Home Business, sales of sewing machines for side-business purposes continued to be strong, but sales fell below the level of the previous consolidated fiscal year when there was special demand for nesting. In Machinery Business, sales increased significantly as a whole due to factors such as continued strong sales of industrial equipment mainly for China and a recovery in capital investment demand for industrial sewing machines for apparel. Sales of Network & Contents Business decreased due to store closures and shortened business hours. Sales of Domino Business increased due to steady sales of both products and consumables, supported by the resilience of demand for daily necessities. As a result, revenue increased 12.5% year on year to 710,938 million yen. Company-wide sales, which is the denominator, increased by 12.32%. In FY2021, the lockdown caused by coronavirus was smaller and the operation rate was improved in the main production plants compared to FY2020. In addition, demand for products and consumables increased due to the recovery of demand for capital investment, and as a result, GHG emissions increased by 5.80% as Scope 1 + 2. Therefore, we obtained a 5.98% reduction in the rate of change of the basic unit.

## C7. Emissions breakdowns

### C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

### C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO <sub>2</sub> e)	GWP Reference
CO <sub>2</sub>	18517.29	IPCC Fourth Assessment Report (AR4 - 100 year)
CH <sub>4</sub>	53.247	IPCC Fourth Assessment Report (AR4 - 100 year)
N <sub>2</sub> O	28.253	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	13.237	IPCC Fourth Assessment Report (AR4 - 100 year)
PFCs	112.327	IPCC Fourth Assessment Report (AR4 - 100 year)
SF <sub>6</sub>	0	IPCC Fourth Assessment Report (AR4 - 100 year)
NF <sub>3</sub>	0	IPCC Fourth Assessment Report (AR4 - 100 year)

### C7.2

**(C7.2) Break down your total gross global Scope 1 emissions by country/region.**

Country/Region	Scope 1 emissions (metric tons CO2e)
Japan	8303.82
China	1207.35
United States of America	2026.89
United Kingdom of Great Britain and Northern Ireland	1192.04
Taiwan, China	17.95
Philippines	702.87
Viet Nam	335.41
Other, please specify (Rest of world)	4938.03

**C7.3**

**(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.**

By facility

**C7.3b**

**(C7.3b) Break down your total gross global Scope 1 emissions by business facility.**

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
BROTHER INDUSTRIES, LTD.	1746.536	35.118372	136.921982
NISSEI CORPORATION	3836.8	34.920154	137.049682
BROTHER TECHNOLOGY (SHENZHEN) LTD.	479.436	22.6058	114.141051
BROTHER INDUSTRIES (VIETNAM) LTD.	334.58	20.90872	106.393478
ZHUHAI BROTHER INDUSTRIES, CO., LTD.	30.503	22.232624	113.529373
TAIWAN BROTHER INDUSTRIES, LTD.	17.952	23.010871	120.666004
BROTHER MACHINERY XIAN CO., LTD.	549.187	34.341568	108.940175
BROTHER INDUSTRIES SAIGON, LTD.	0.829	10.957413	106.842687
BROTHER INDUSTRIES (PHILIPPINES), INC.	683.859	14.13857	121.112322
Rest of world	11044.676		

**C7.5**

**(C7.5) Break down your total gross global Scope 2 emissions by country/region.**

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Japan	42793.174	37405.034
China	17182.598	17177.516
United States of America	4594.618	4594.618
United Kingdom of Great Britain and Northern Ireland	2190.547	2386.92
Taiwan, China	846	773.373
Philippines	18737.783	24044.498
Viet Nam	17146.245	17146.245
Other, please specify (Rest of world)	1825.975	1571.205

**C7.6**

**(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.**

By facility

**C7.6b**

**(C7.6b) Break down your total gross global Scope 2 emissions by business facility.**

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
BROTHER INDUSTRIES, LTD.	19296.127	16636.874
NISSEI CORPORATION	14169.531	12211.693
BROTHER TECHNOLOGY (SHENZHEN) LTD.	9210.188	9210.188
BROTHER INDUSTRIES (VIETNAM) LTD.	15316.098	15316.098
ZHUHAI BROTHER INDUSTRIES, CO., LTD.	1406.975	1406.975
TAIWAN BROTHER INDUSTRIES, LTD.	821.447	750.928
BROTHER MACHINERY XIAN CO., LTD.	4978.834	4978.834
BROTHER INDUSTRIES SAIGON, LTD.	1816.732	1816.732
BROTHER INDUSTRIES (PHILIPPINES), INC.	18668.104	23955.086
Rest of world	19632.904	18816.001

**C7.9**

**(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?**

Increased

**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)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	21.002	Increased	0.2926	BROTHER INDUSTRIES (SLOVAKIA) s.r.o. introduced a solar power generation system in 2020, and the obtained power is consumed in-house as the factory power. In 2021, the amount of renewable energy increased due to the full-year operation of the photovoltaic power generation system. The increase in power generation was 132.335 MWh and the CO2 reduction was estimated 21.002 t-CO2e. The rate is calculated 0.2926% for Scope1 and 2 reductions. The formula is $21.002 / (124,041.295 - 116,863.468) = 0.2926\%$ . 124,041.295 and 116,863.46 are subtotals of Scope 1 and 2 of FY2021 and FY2020 respectively.
Other emissions reduction activities	211.913	Increased	2.9523	The Brother Group's CO2 emissions are primarily due to the use of electricity and fuel at the plant. The Brother Group continuously implements energy saving measures. In addition to this activity, continuing from last year, in FY2021, we succeeded in drastically reducing the HFCs and PFCs used in our plants by process improvement. These improvements are estimated 211.913 t-CO2e. The rate is calculated 12.67% for Scope1 and 2 reductions. The formula is $211.913 / (124,041.295 - 116,863.468) = 2.95\%$ . 124,041.295 and 116,863.46 are subtotals of Scope 1 and 2 of FY2021 and FY2020 respectively.
Divestment		<Not Applicable>		
Acquisitions		<Not Applicable>		
Mergers		<Not Applicable>		
Change in output	562.461	Increased	7.8361	GHG emissions related to production increased due to a increase in production of machine tools. In Machinery Business, sales increased significantly as a whole due to factors such as continued strong sales of industrial equipment mainly for China and a recovery in capital investment demand for industrial sewing machines for apparel in FY2021. Change in emission at the major plants is estimated 562.461 t-CO2. The rate is calculated 7.8361%. The formula is $562.461 / (124,041.295 - 116,863.468) = 7.8361\%$ . 124,041.295 and 116,863.46 are subtotals of Scope 1 and 2 of FY2021 and FY2020 respectively.
Change in methodology		<Not Applicable>		
Change in boundary	2529.059	Increased	0.3523	DOMINO PRINTING SCIENCE also has multiple bases globally, and some of the factories and offices cannot connect to Brother's GHG calculation / aggregation system. This situation has been resolved year by year, and it is now possible to aggregate the major bases of group of DOMINO PRINTING SCIENCE. DOMINO PRINTING SCIENCE had 9 bases that could be aggregated in FY2020. In FY2021, 12 bases increased to 21 bases.
Change in physical operating conditions	8145.03	Increased	113.4749	To prevent the transmission of the COVID-19 virus in FY2020, we have implemented suspension of operations or restrictions on employee attendance at overseas factories. As a result, the operating rate of the factory decreased, and the energy consumption decreased accordingly. In FY2021, the lockdown caused by coronavirus was smaller and the operation rate was improved in the main production plants compared to FY2020. Change in emission at the two major plants is estimated 8,145.030 t-CO2. The rate is calculated 113.4749%. The formula is $8,145.030 / (124,041.295 - 116,863.468) = 113.4749\%$ . 124,041.295 and 116,863.46 are subtotals of Scope 1 and 2 of FY2021 and FY2020 respectively.
Unidentified		<Not Applicable>		
Other		<Not Applicable>		

**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?**

Location-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	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	No

### 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	82059.28	82059.28
Consumption of purchased or acquired electricity	<Not Applicable>	4561.09	202522.34	207083.43
Consumption of purchased or acquired heat	<Not Applicable>	0	150.13	150.13
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Total energy consumption	<Not Applicable>	4561.09	284731.75	289292.84

### C8.2b

**(C8.2b) Select the applications of your organization's consumption of fuel.**

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	No
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

### C8.2c

**(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.**

**Sustainable biomass**

**Heating value**

Unable to confirm heating value

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

<Not Applicable>

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self- cogeneration or self-trigeneration**

<Not Applicable>

**Comment**

**Other biomass**

**Heating value**

Unable to confirm heating value

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

<Not Applicable>

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self- cogeneration or self-trigeneration**

<Not Applicable>

**Comment**

**Other renewable fuels (e.g. renewable hydrogen)**

**Heating value**

Unable to confirm heating value

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

<Not Applicable>

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self- cogeneration or self-trigeneration**

<Not Applicable>

**Comment**

**Coal**

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

<Not Applicable>

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self- cogeneration or self-trigeneration**

<Not Applicable>

**Comment**

**Oil**

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

38403.01

**MWh fuel consumed for self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

<Not Applicable>

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self- cogeneration or self-trigeneration**

<Not Applicable>

**Comment**

Petroleum includes gasoline, diesel oil, kerosene and heavy oil.

**Gas**

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

43656.27

**MWh fuel consumed for self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

<Not Applicable>

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self- cogeneration or self-trigeneration**

<Not Applicable>

**Comment**

Natural gas includes city gas and LPG.



**Other non-renewable fuels (e.g. non-renewable hydrogen)**

**Heating value**

Unable to confirm heating value

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

<Not Applicable>

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self- cogeneration or self-trigeneration**

<Not Applicable>

**Comment**

**Total fuel**

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

82059.28

**MWh fuel consumed for self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

<Not Applicable>

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self- cogeneration or self-trigeneration**

<Not Applicable>

**Comment**

**C8.2e**

**(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in C6.3.**

**Sourcing method**

Green electricity products from an energy supplier (e.g. green tariffs)

**Energy carrier**

Heat, steam and cooling combined

**Low-carbon technology type**

Low-carbon energy mix, please specify (100% renewable sources (water, wind, solar, geothermal, biomass, biogas, etc.))

**Country/area of low-carbon energy consumption**

Slovakia

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

414.95

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

Slovakia

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

BROTHER INDUSTRIES (SLOVAKIA) s.r.o., a manufacturer of the Brother Group, was certified carbon neutral based on PAS 2060 by DNV. BROTHER INDUSTRIES (SLOVAKIA) s.r.o. is working on reducing CO2 emissions through efforts to save energy in its factory and offices including the utilization of a geothermal exchange system for heating and air conditioning, creating power by installing solar panels, and purchasing CO2-free electricity that does not emit CO2 during power generation. Besides efforts to save energy, the company offset its remaining emissions with carbon credits, purchased through United Nations (UN) Carbon Offset Platform resulting in its Scopes 1 and 2 CO2 emissions being deemed to meet the PAS 2060 standard. The manufacturing facility is the Brother Group's second to be certified after BROTHER INDUSTRIES (U.K.) in the United Kingdom. BROTHER INDUSTRIES (SLOVAKIA) s.r.o. purchases 100% renewable sources (water, wind, solar, geothermal, biomass, biogas, etc.) and has received the certificate.

**Sourcing method**

Green electricity products from an energy supplier (e.g. green tariffs)

**Energy carrier**

Heat, steam and cooling combined

**Low-carbon technology type**

Renewable energy mix, please specify (100% renewable sources (water, wind, solar, geothermal, biomass, biogas, etc.))

**Country/area of low-carbon energy consumption**

United Kingdom of Great Britain and Northern Ireland

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

1369.06

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

United Kingdom of Great Britain and Northern Ireland

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

BROTHER INDUSTRIES (U.K.) LTD. has been certified as a carbon neutral company based on the standard of the British Standards Institution BSI PAS 2060:2014 Standard on November 18, 2021. This is the first carbon neutral company certification among the manufacturing facilities of the Brother Group. BROTHER INDUSTRIES (U.K.) has promoted energy-saving activities within its factory and office and reduced CO2 emissions by switching some company vehicles to hybrid vehicles. In addition, the company has undertaken other efforts such as the purchase of CO2-free electricity which does not generate CO2 during power generation. Furthermore, by using carbon credits to offset the remaining emissions, its Scopes 1 and 2 CO2 emissions were assessed to have met the PAS 2060 standard.

---

**Sourcing method**

Green electricity products from an energy supplier (e.g. green tariffs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Hydropower (capacity unknown)

**Country/area of low-carbon energy consumption**

Canada

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

1103.53

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

Canada

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

BROTHER INTERNATIONAL CORPORATION (CANADA) purchases 100% hydroelectric power and has received the certificate.

---

**Sourcing method**

Green electricity products from an energy supplier (e.g. green tariffs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Hydropower (capacity unknown)

**Country/area of low-carbon energy consumption**

Austria

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

90.13

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

Austria

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

BROTHER CENTRAL AND EASTERN EUROPE GmbH's Austrian headquarter purchase 100% hydroelectric power and have received the certificate.

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C8.2g

**(C8.2g) Provide a breakdown of your non-fuel energy consumption by country.**

**Country/area**

Japan

**Consumption of electricity (MWh)**

374.17

**Consumption of heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

374.17

**Is this consumption excluded from your RE100 commitment?**

<Not Applicable>

---

**Country/area**

Slovakia

**Consumption of electricity (MWh)**

158.05

**Consumption of heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

158.05

**Is this consumption excluded from your RE100 commitment?**

<Not Applicable>

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**C9. Additional metrics**

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**C9.1**

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

**C10. Verification**

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**C10.1**

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**(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	Third-party verification or assurance process in place

**C10.1a**

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**(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**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

AssuranceStatement\_Brother2021\_EN\_1.2\_TRed.pdf

**Page/ section reference**

page 2

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

100

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**C10.1b**

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**(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 location-based

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

AssuranceStatement\_Brother2021\_EN\_1.2\_TRed.pdf

**Page/ section reference**

page 2

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

100

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**C10.1c**

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**(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.**

**Scope 3 category**

- Scope 3: Purchased goods and services
- Scope 3: Capital goods
- Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
- Scope 3: Upstream transportation and distribution
- Scope 3: Waste generated in operations
- Scope 3: Business travel
- Scope 3: Employee commuting
- Scope 3: Upstream leased assets
- Scope 3: Investments
- Scope 3: Downstream transportation and distribution
- Scope 3: Processing of sold products
- Scope 3: Use of sold products
- Scope 3: End-of-life treatment of sold products
- Scope 3: Downstream leased assets
- Scope 3: Franchises

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

AssuranceStatement\_Brother2021\_EN\_1.2\_TRed.pdf

**Page/section reference**

page 2-3

**Relevant standard**

ISAE3000

**Proportion of reported emissions verified (%)**

100

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## C10.2

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**(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

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### C11.1

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**(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?**

Yes

### C11.1a

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**(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.**

Shenzhen pilot ETS

### C11.1b

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(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

**Shenzhen pilot ETS**

**% of Scope 1 emissions covered by the ETS**

100

**% of Scope 2 emissions covered by the ETS**

100

**Period start date**

April 1 2021

**Period end date**

March 31 2022

**Allowances allocated**

14057

**Allowances purchased**

554

**Verified Scope 1 emissions in metric tons CO2e**

578.53

**Verified Scope 2 emissions in metric tons CO2e**

14032.1

**Details of ownership**

Facilities we own and operate

**Comment**

Due to a shortage of 554 tons-CO2 in FY2021, Brother Shenzhen factory will purchase emission credits in FY2022.

C11.1d

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(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

Brother's Shenzhen plant utilizes Shenzhen emissions trading rights trading. The Shenzhen plant receives the carbon strength target of the year from the Shenzhen government. If the factory's CO2 emissions for this year exceed the target (upper limit), we purchase emissions credits from the Shenzhen carbon emissions trading market exceeding the factory, and if the current year's CO2 emissions are the target (upper limit) If less, we will sell the surplus.

C11.2

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

Yes

C11.2a

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(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**

Forests

**Project identification**

A J-VER project to promote thinning of a subdivision of forest by the Gifu Pref Forest Owners Association, called "Gifu Seiryu No Kuni-zukuri Project (Gifu making land of clear stream project)"

**Verified to which standard**

VCS (Verified Carbon Standard)

**Number of credits (metric tonnes CO2e)**

10

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

10

**Credits cancelled**

Yes

**Purpose, e.g. compliance**

Voluntary Offsetting

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C11.3

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

No, but we anticipate doing so in the next two years

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**C12. Engagement**

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**C12.1**

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

Yes, our suppliers

Yes, our customers/clients

Yes, other partners in the value chain

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**C12.1a**

**(C12.1a) Provide details of your climate-related supplier engagement strategy.**

**Type of engagement**

Engagement & incentivization (changing supplier behavior)

**Details of engagement**

Climate change performance is featured in supplier awards scheme

**% of suppliers by number**

0

**% total procurement spend (direct and indirect)**

0

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

0

**Rationale for the coverage of your engagement**

In 2015, Brother's three factories producing industrial sewing machines and other products for the Machinery business, including domestic Kariya Factory, BROTHER MACHINERY XIAN CO., LTD., and BROTHER MACHINERY VIETNAM CO., LTD., launched an awards program to recognize excellent CSR activities with the aim of further promoting CSR activities among their suppliers. This awards program involves investigation over two years. In the first year, it conducts a questionnaire survey and an on-site inspection of suppliers on seven categories, such as compliance, environment-friendliness, and safety. In the second year, it invites these suppliers to present their CSR activities, and then recognizes excellent suppliers among them. This time, the program received entries from more than 30 companies. Among these entries, the most excellent CSR company and three excellent CSR companies were chosen after the evaluation by the representatives of the three Brother factories, from various perspectives, such as environment-friendliness, safety, and continuity. The awards ceremonies were held in March 2017, at Aiden Vietnam Ltd., the company that won the best CSR award, and at the social event for suppliers held in China for the companies which received CSR excellence awards. Brother also presented testimonials to all suppliers who joined this program. This CSR awards program helped Brother know its suppliers' stances toward CSR and their activities, receiving many reports on CSR activities addressed by respective suppliers, including the improvement of working environment, the reduction of waste, and the acquisition of the ISO 14001 certificate and efforts made based on it. The factories intend to continue this program, which reportedly contributed to increasing motivation among the employees of some suppliers by giving them recognition. The three Brother factories will promote expanding and enhancing its suppliers' CSR awareness and their activities through this awards program. The Brother Group will strive to foster relations of mutual trust with its business partners and grow together to speedily deliver superior value to customers.

**Impact of engagement, including measures of success**

The Brother Group puts its "Procurement Policy" and "CSR Procurement Standards" on the website to share its CSR procurement concept with parts and materials suppliers. In addition to green procurement practices which give priority to purchasing environmentally friendly parts and materials, these policy and standards also cover a wide range of fields, from human rights and labour, employees' safety and health, fair trade and ethics, product quality and safety, information security, to social contribution. The Brother Group remains committed to promoting CSR activities together with its suppliers. "Procurement policy" describes the commitment of "promoting green procurement considering the global environment and reducing the environmental impact through product life cycle" and "CSR procurement standards" includes transactions I'm asking you to work positively on "considering the global environment" first.

**Comment**

The ratio to the number of suppliers, the ratio of total procurement costs, and the ratio to Scope3 emissions have not been known.

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**C12.1b**

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

**Type of engagement & Details of engagement**

Education/information sharing	Share information about your products and relevant certification schemes (i.e. Energy STAR)
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**% of customers by number**

0

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

0

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

The Brother Group is committed to reducing environmental impact at all stages of the life cycle of its products. This is the guiding principle of the group's manufacturing activities. The Brother Group Environmental Action Plan 2021 (2019-2021) set ever-higher targets for each of these stages to accelerate efforts. Specific activities included enhancing eco-conscious design processes and green procurement, continuous reduction in environmental impact at manufacturing facilities (such as CO2 emissions and water consumption), reduction in CO2 emissions in logistics (for example, by optimizing packaging), further improvements in energy saving performance during product use, and enhancement in the reusability, recyclability, and collection system for either products or consumables. We conduct various product lifecycle activities such as product design to improve environmental performance, disclosure of environmental label acquisition products, packaging downsizing, collection and recycling of used products and expendable items, along with video on our website It is open to the public. But the ratio to the number of customers and the ratio to Scope3 emissions have not been known.

**Impact of engagement, including measures of success**

EPEAT is an environmental rating for electronic products that is managed and administered by the Green Electronics Council (a non-profit organization). The environmental criteria underlying the EPEAT system are based on the full product lifecycle, from design and production to energy use and recycling. EPEAT criteria consist of required and optional ones; products are ranked Gold, Silver, or Bronze depending on the level of conformity with the optional criteria. In August 2016, the MFC-8950DW was registered as a Bronze product. In December 2017, 9 models including MFC-L2750DWXL were registered as "silver" for the first time as laser products. As of January 2021, 64 models (26 models as "silver", 38 models as "bronze") have been registered in EPEAT.

**C12.1d**

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

The Brother Group has been reviewing delivery routes and adjusting the delivery service frequency, etc. as necessary to increase the efficiency of logistics in Japan. The logistics network was rearranged to unload products shipped from manufacturing facilities outside Japan (including those in China and ASEAN countries) at the Port of Tokyo and the Port of Osaka, which are closely located to large market areas, instead of the Port of Nagoya, which had been used before. In addition, some products are unloaded at the Port of Yokohama, which is close to customers and the group also delivers products from warehouses in Yokohama. Truck transportation was reduced, and delivery distances were significantly reduced by increasing warehousing facilities. As a result of these measures, CO2 emissions were cut by about 38% per shipped weight. The Brother Group has successfully kept CO2 emissions low ever since. Since 2013, a modal shift has been introduced for some product shipments to large customers by switching from trucks to railroad. As a result, CO2 emissions in FY2016 were reduced by 22 tons. Meanwhile, six external warehouses that had been used to store service parts were integrated into one factory, and the logistics and reverse logistics facilities for some products were consolidated to eliminate the need for transport between warehouses. In total logistics, this measure reduced the volume of transport by about 10%. 3PL (third party logistics) is also used in the sales logistics of Brother products. It is noteworthy that sales logistics are undertaken by companies that are committed to reducing CO2 emissions (e.g., use of small hybrid delivery trucks).

**C12.2**

**(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?**

No, but we plan to introduce climate-related requirements within the next two years

**C12.3**

**(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?**

**Row 1**

**Direct or indirect engagement that could influence policy, law, or regulation that may impact the climate**

Yes, we engage indirectly through trade associations

**Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?**

Yes

**Attach commitment or position statement(s)**

Registration slip.pdf

**Describe the process(es) your organization has in place to ensure that your engagement activities are consistent with your overall climate change strategy**

We are engaged in activities such as collecting information on climate change policies and regulations, suggesting opinions, following up on industry activities such as "Low Carbon Society Implementation Plan", reviewing industry long-term efforts, and are participating as a member of the specialized technical committee. The Low Carbon Society Action Plan was taken over as the Carbon Neutrality Action Plan with the new target year of FY2030, and we agreed with this.

**Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate**

<Not Applicable>

**Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate**

<Not Applicable>



## C12.3b

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**(C12.3b) Provide details of the trade associations your organization engages with which are likely to take a position on any policy, law or regulation that may impact the climate.**

**Trade association**

Japan Business Federation (Keidanren)

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

We publicly promote their current position

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

In October 2020, Japan declared the realization of carbon neutrality by 2050. This declaration is specified as the basic principle in the revised "Law Concerning the Promotion of the Measures to Cope with Global Warming (enforced in April 2022)." The government set a FY2030 GHG reduction target as well in line with this level of carbon neutrality, and specific measures are currently under way in earnest to develop Green Growth. In accordance with these domestic and international trends, industries and companies in Japan are working to prevent global warming on a society wide as well as a global level in cooperation with various sectors. Japanese EE industries have participated in The Carbon Neutrality Action Plan formulated by the Keidanren and are aiming to improve the energy efficiency of production processes by an average of 1% annually. Also, for the purpose of contributing to CO2 emission reductions in society through products and services, we have developed guidelines for quantifying CO2 emission reductions and disclose the results of the whole industry annually. Furthermore, in Phase II of the Action Plan, we have added a new challenge target to reduce CO2 emissions by about 46% by FY2030 compared to FY2013, aiming to play a part in achieving Japan's medium-term goal. We will take further actions to carry out these goals. We also support and participate in industry initiatives for quantifying contribution to avoided emissions, through the global value chain promoted by the Japanese government.

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

**Describe the aim of your organization's funding**

<Not Applicable>

**Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

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**Trade association**

Other, please specify (Japan Climate Initiative (JCI))

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

We publicly promote their current position

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

In January 2020, Brother Industries Ltd. registered to participate in the Climate Change Initiative. The Japan Climate Initiative was established in July 2018 as a loose network to strengthen information dissemination and exchange of opinions among companies, local governments, and NGOs that are actively working on climate change countermeasures. Brother Industries, Ltd. has determined that the efforts promoted by the Brother Group for the realization of a carbon-free society are in line with the purpose of JCI, and registered.

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

**Describe the aim of your organization's funding**

<Not Applicable>

**Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

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## C12.4

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**(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, incorporating the TCFD recommendations

**Status**

Complete

**Attach the document**

有価証券報告書2021.pdf

**Page/Section reference**

page17; Initiatives for ESG (including expressed support for TCFD recommendations)/ page25; Environmental risk content, possibility, timing, degree of impact, countermeasures/ page61-63; Corporate governance

**Content elements**

Governance  
Strategy  
Risks & opportunities

**Comment**

We do not issue an English version of the securities report, so we will attach the Japanese version.

**Publication**

In voluntary sustainability report

**Status**

Underway – previous year attached

**Attach the document**

sus-2021-en.pdf

**Page/Section reference**

page3-5; Message from the Management (Environment)/ page45-50; Environmental Policy and Management Structure/ page51-52; "Environmental Vision 2050"/ page53-56; Environmental Action Plan/ page57; Response to Climate Change/ page58-63; Compliance with the TCFD Recommendations and Further Promotion of Climate Change Countermeasures/ page64-70; Reduction of CO2 Emissions

**Content elements**

Governance  
Strategy  
Risks & opportunities  
Emissions figures  
Emission targets

**Comment**

This year's report is currently in production, so we attached last year's version.

**C15. Biodiversity**

**C15.1**

**(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?**

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity	Scope of board-level oversight
Row 1	Yes, executive management-level responsibility	The Brother Group is working to quantify and reduce the environmental impact of business activities on the ecosystem toward achieving the Brother Environmental Vision 2050. In these activities, for the group's main products, a relationship map between business activities and biodiversity was developed to understand the stages in the life cycle of each unit of product where environmental impact occurs and provide customers with products having even less environmental impact. For many years, the Brother Group has been conducting voluntary biodiversity conservation activities at each site. In FY2020, surveys were conducted to organize these conservation activities, and letters of appreciation were given to sites with especially excellent activities or have been continuing activities for a long period of time. In FY2021, to invigorate the activities of all Brother Group companies, the group supported World Oceans Day and encouraged all employees at all sites to join in zero ocean waste activities. The Brother Group will continue to quantify the environmental impact of business activities on the ecosystem, deploy effective environmental impact reduction activities and ecosystem conservation activities, and aim to achieve the medium-term target for FY2030 and the Brother Environmental Vision 2050. The progress of the plan on biodiversity will be reported at the Climate Change Response Subcommittee under the Sustainability Committee or at a strategic meeting consisting of officers.	<Not Applicable>

**C15.2**

**(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?**

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments only	Commitment to Net Positive Gain Commitment to No Net Loss	<Not Applicable>

**C15.3**

**(C15.3) Does your organization assess the impact of its value chain on biodiversity?**

	Does your organization assess the impact of its value chain on biodiversity?	Portfolio
Row 1	No, but we plan to assess biodiversity-related impacts within the next two years	<Not Applicable>

**C15.4**

**(C15.4) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?**

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Education & awareness

**C15.5**

**(C15.5) Does your organization use biodiversity indicators to monitor performance across its activities?**

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	No, we do not use indicators, but plan to within the next two years	Please select

**C15.6**

**(C15.6) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).**

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments Impacts on biodiversity Other, please specify (The biodiversity activities at our bases located in various countries and regions around the world are published on the sustainability site on our website.)	page46-47; Brother Group's Biodiversity Conservation Policy / page51-52; Brother Group Environmental Vision 2050 / page75-78; Biodiversity Conservation sus-2021-en.pdf

**C16. 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.**

**C16.1**

**(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.**

	Job title	Corresponding job category
Row 1	The COO is a Managing Executive Officer overseeing the environmental programs at Brother.	Chief Operating Officer (COO)