

# Welcome to your CDP Water Security Questionnaire 2019

### **W0.** Introduction

#### W<sub>0.1</sub>

#### (W0.1) Give a general description of 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 located in Japan. Paid-in Capital is 19,209 million yen (As of March 31, 2019) and the sales revenue is 683,972 million yen (fiscal year ending March 31, 2019). 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 37,769 and the non-consolidated number is 3,865 (as of March 31, 2019). 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, 2018, 86% of the Brother Group's facilities has received ISO14001 certification.

#### **W0.2**

#### (W0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date
Reporting year	April 1, 2018	March 31, 2019



### W<sub>0.3</sub>

#### (W0.3) Select the countries/regions for which you will be supplying data.

Argentina

Australia

Austria

Belgium

Brazil

Bulgaria

Canada

Chile

China

Czechia

Denmark

Finland

France

Germany

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, Greater China

Thailand

Turkey

**United Arab Emirates** 

United Kingdom of Great Britain and Northern Ireland



United States of America Viet Nam

#### W<sub>0.4</sub>

(W0.4) Select the currency used for all financial information disclosed throughout your response.

JPY

#### **W0.5**

(W0.5) Select the option that best describes the reporting boundary for companies, entities, or groups for which water impacts on your business are being reported.

Companies, entities or groups over which operational control is exercised

#### **W0.6**

(W0.6) Within this boundary, are there any geographies, facilities, water aspects, or other exclusions from your disclosure?

No

### W1. Current state

#### W1.1

(W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Important	Important	(Direct use) In the Brother Group, the high quality water is essential in the production of our consumables (e.g. ink), plastic parts and the implementation of preventive maintenance for manufacturing machines. Our reliance on freshwater in our operation will not change in the future.  (Indirect use) The sufficient quality and quantity water is necessary to be used for cooling and cleaning applications when parts are processed at the supplier. Therefore, both of direct use and indirect use were evaluated as "important". In addition, we take measures against the future water risk of our



			facilities and suppliers, in order to enable continuous procurement, production, and sales. Depending on the future water risks, water dependency will differ in our direct and indirect operations. These activities contribute to our company's growth strategy. As suppliers, as long as they produce raw materials and parts, they will need freshwater for the production process, so we expect the supply chain's reliance on freshwater to remain the same.
Sufficient amounts of recycled, brackish and/or produced water available for use	Not very important	Not very important	In order to ensure the sustainable use of water resources, each Brother Group facilities are recycling water to reduce water intake.  The recycled water is mainly used for management of green spaces and washing of toilets in the workplace thus the amount is not significant for production.  Brackish water contains sodium, so it is not suitable for the activities involved in our operations. In addition, the use of generated water is secured by a third party water source or groundwater intake (renewable) in terms of stable supply and water intake costs. Because of this, it is unimportant, as we have never used it, nor have we planned to use them in the future.  The situation is similar for suppliers. However, given the importance of reducing water intake and water risks, it is important to increase the use of recycled water in the future. We aim to reduce the amount of water intake. Reuse of recycled water is an effective measure, so we plan to increase it in the future.

# W1.2

# (W1.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

	% of sites/facilities/operations	Please explain
Water withdrawals – total volumes	100%	We monitor all facilities' total volume of water withdrawals. Every manufacturing site report monthly and the Sales offices report once a year of their total volume of water consumption and annual reduction plan to the Head office.



		Collection and aggregation of these data are performed using the environmental database system "Eco-track".  Data management is also centrally managed by this system.  All facilities check/monitor the water usage base on the invoice. In case of some company whose water usage fee is included in the rent, we decided the way to allocate the water withdrawals by employee numbers. These facilities impact is negatable compared to total water usage.
Water withdrawals – volumes from water stressed areas	100%	We regularly monitor the total volume of water withdrawals of manufacturing sites, sales offices.
		Every manufacturing site report monthly and the Sales offices report once a year of their total volume of water consumption and annual reduction plan to the Head office.
		Water risk varies by region, so we monitor water stressed areas annually using the WRI Aqueduct tool. We define bases that are included in areas where the risk is "very high" as water-stressed areas, and extract the relevant our manufacturing and sales office facilities.
Water withdrawals – volumes by source	100%	We regularly monitor the water withdrawals volumes by source.
		All manufacturing sites report monthly and the sales offices report once a year basis.
		Collection and aggregation of these data are performed using the environmental database system "Eco-track".  Data management is also centrally managed by this system.
		Water intake is classified into public water sources, underground water sources, and surface water sources (such as rainwater). For example, public and underground water



		withdrawals are measured by bill or flow meter, and rainwater is measured by tank capacity and recovery frequency.
Water withdrawals quality	Not monitored	Brother group is receiving water supply through public organizations and the management organization of the industrial estate. The supply agency conducts water quality inspections. We do not inspect the water quality by ourselves.
Water discharges – total volumes	100%	We regularly monitor the total volume of water discharge of all facilities. Among all facilities in the Brother group, 10% of manufacturing sites constantly measure the amount of wastewater using the water meter. We calculate the figures monthly.
		Since other facilities do not measure the amount of wastewater with the water meter, we think that the same amount as the water intake is drained, and we calculate the amount of wastewater once a year.
		Collection and aggregation of these data are performed using the environmental database system "Eco-track".  Data management is also centrally managed by this system.
Water discharges – volumes by destination	100%	25% of the wastewater from all Brother Group facilities is discharged into rivers and 75% to sewers.
		At 10% manufacturing base of all facilities, wastewater is constantly measured by water meter, and the figures are totalled monthly. Since other facilities do not measure the amount of wastewater with the meter, we consider that the same amount as the water intake is drained, and we calculate the amount of wastewater by drainage once a year.
		Collection and aggregation of these data are performed using the environmental database system "Eco-track".  Data management is also centrally managed by this system.



Water discharges – volumes by treatment method	100%	63% of the wastewater from all facilities in the Brother group is performing wastewater treatment at its own wastewater treatment facility, and the rest are drained to the sewer. At 10% manufacturing base of all facilities, wastewater is constantly measured by water meter, and the figures are calculated monthly. Since other facilities do not measure the amount of wastewater with the meter, we consider that the same amount as the water intake is drained, and we calculate the amount of wastewater by drainage once a year.  Collection and aggregation of these data are performed using the environmental database system "Eco-track".  Data management is also centrally managed by this system.
Water discharge quality – by standard effluent parameters	1-25	We regularly measure the quality of wastewater at 17% of the facilities in all Brother Group facilities.  Collection and aggregation of these data are performed using the environmental database system "Eco-track".  Data management is also centrally managed by this system.  The frequency of measurement varies depending on the facility based on agreement with the administration, but we have requested the external supplier to measure water quality on a weekly or monthly basis, and some items of water quality data are constantly monitored by our company. Other facilities are draining the domestic wastewater into the sewage and it is not necessary to measure the wastewater quality according to the law, so we do not monitor it.
Water discharge quality – temperature	100%	Because the temperature of the discharged water is controlled by the manufacturing site, at the time of discharge it will be lower than the temperature defined by the laws of each country / region. For example, in Japan, a water temperature gauge is used as needed, and it is confirmed to be below 45°C standard defined by the Sewerage Law.



Water consumption – total volume	100%	We regularly measure and monitor the water consumption of all 100% facilities.  Manufacturing site report monthly and the Sale offices report once a year basis. All facilities check/monitor the water usage base on invoice. In case of some company whose water usage fee is included in the rent, we decided the way to allocate the water withdrawals by employee numbers. These facilities impact is negatable compared to total water usage.
		Collection and aggregation of these data are performed using the environmental database system "Eco-track".  Data management is also centrally managed by this system.
Water recycled/reused	1-25	The amount of recycled water is less than 1% of the total water intake and is very small, so it is not measured using the water meter. We calculate the value once a year.  Collection and aggregation of these data are performed using the environmental database system "Eco-track".  Data management is also centrally managed by this system.
The provision of fully- functioning, safely managed WASH services to all workers	100%	Brother Group provides clean safe water with fully-functioning service at every operating location to ensure the health and safety of all our employees. We check this once a year for all facilities.  Collection and aggregation of these data are
		performed using the environmental database system "Eco-track".  Data management is also centrally managed by this system.

# W1.2b

(W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, and how do these volumes compare to the previous reporting year?



	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total withdrawals	1,406.76		We collect total water intake (withdrawals) of Brother group once a year.  Manufacturing sites with a high water intake amount are collecting from the establishments using the environmental database system "Ecotrack" for the intake amount measured on a monthly basis.  We calculate by using the water intake estimated from the number of employees annually for office-based sales base with low water intake.  In the fiscal year under review, production volume in China decreased due to production transfer between our overseas manufacturing facilities by our production strategy. As a result, water consumption during production was decreased.  The total water intake in the reporting year decreased by 2% from last year, but it was not a big change, so we selected "About the same". The selection criteria of Brother is as follows.  Much lower: Under 30%  Lower: -30 to -5%  About the same: Within ± 5%  Higher: +5 to + 30%  Much higher: Over +30%  When calculated based on W = D + C, the sum of emissions and consumption is considered as water withdrawal.
			In fiscal 2017, we established the Brother Group Environmental Vision 2050. As part of the resource circulation, we have advocated "promoting the efficient use of water resources at group our manufacturing and sales office facilities and the appropriate treatment of wastewater". Furthermore, in order to carry out specific activities of the "Brother Group



			Environmental Vision 2050", "the Brother Group mid-term Environmental Action Plan 2021 "will be formulated, and" the water intake at manufacturing bases will be reduced by 3% in FY 2021 compared with FY 2018 (based on sales basis) We are working on water reduction with the goal of As a result, in the mid to long term, the amount of water withdrawal (per unit of sales) is expected to decrease. In the short term, in fiscal 2019, we plan to reduce the amount of water intake (production unit) by 1% compared to fiscal 2018.
Total discharges	1,261.45	About the same	We collect total water consumption of Brother group once a year.  Manufacturing sites with a high water consumption amount are collecting from the establishments using the environmental database system "Eco-track" for the consumption amount measured on a monthly basis.  We calculate by using the water consumption estimated from the number of employees annually for office-based sales base with low water consumption.  In the fiscal year under review, production volume in China decreased due to production transfer between our overseas manufacturing facilities by our production strategy. As a result, the amount of drainage decreased as the amount of water used during production decreased.  The total water discharges in the reporting year decreased by 3% from last year, but it was not a big change, so we selected "About the same". The selection criteria of Brother is as follows.  Much lower: Under 30%  Lower: -30 to -5%  About the same: Within ± 5%  Higher: +5 to + 30%  Much higher: Over + 30%  When calculated based on W = D + C, the sum



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			water withdrawal.
			In fiscal 2017, we established the Brother Group
			• 1
			Environmental Vision 2050. As part of the
			resource circulation, we have advocated
			"promoting the efficient use of water resources
			at group our manufacturing and sales office
			facilities and the appropriate treatment of
			wastewater". Furthermore, in order to carry out
			· 1
			specific activities of the "Brother Group
			Environmental Vision 2050", "the Brother Group
			mid-term Environmental Action Plan 2021 "will
			be formulated, and" the water intake at
			manufacturing bases will be reduced by 3% in
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			term, the amount of water withdrawal (per unit of
			sales) is expected to decrease. In the short
			term, in fiscal 2019, we plan to reduce the
			amount of water intake (production unit) by 1%
			compared to fiscal 2018.
			compared to ficour 2010.
Total	145.31	About the same	We collect total water consumption of Brother
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	145.31	About the same	We collect total water consumption of Brother group once a year.  Manufacturing sites with a high water consumption amount are collecting from the establishments using the environmental database system "Eco-track" for the consumption amount measured on a monthly basis.  For low-consumption of sales office based facilities, we use consumption estimated from the number of employees per year.  The total water consumption in the reporting
	145.31	About the same	We collect total water consumption of Brother group once a year.  Manufacturing sites with a high water consumption amount are collecting from the establishments using the environmental database system "Eco-track" for the consumption amount measured on a monthly basis.  For low-consumption of sales office based facilities, we use consumption estimated from the number of employees per year.  The total water consumption in the reporting year decreased by 5% from last year, but it was
	145.31	About the same	We collect total water consumption of Brother group once a year.  Manufacturing sites with a high water consumption amount are collecting from the establishments using the environmental database system "Eco-track" for the consumption amount measured on a monthly basis.  For low-consumption of sales office based facilities, we use consumption estimated from the number of employees per year.  The total water consumption in the reporting year decreased by 5% from last year, but it was not a big change, so we selected "About the
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	145.31	About the same	We collect total water consumption of Brother group once a year.  Manufacturing sites with a high water consumption amount are collecting from the establishments using the environmental database system "Eco-track" for the consumption amount measured on a monthly basis.  For low-consumption of sales office based facilities, we use consumption estimated from the number of employees per year.  The total water consumption in the reporting year decreased by 5% from last year, but it was not a big change, so we selected "About the same". The selection criteria of Brother is as follows.  Much lower: Under 30%



Environmental Vision 2050. As part of the resource circulation, we have advocated "promoting the efficient use of water resources at group our manufacturing and sales office facilities and the appropriate treatment of wastewater". Furthermore, in order to carry out specific activities of the "Brother Group Environmental Vision 2050", "the Brother Group mid-term Environmental Action Plan 2021 "will be formulated, and" the water intake at manufacturing bases will be reduced by 3% in FY 2021 compared with FY 2018 (based on sales basis) We are working on water reduction	Much higher: Over + 30%
Environmental Vision 2050. As part of the resource circulation, we have advocated "promoting the efficient use of water resources at group our manufacturing and sales office facilities and the appropriate treatment of wastewater". Furthermore, in order to carry out specific activities of the "Brother Group Environmental Vision 2050", "the Brother Group mid-term Environmental Action Plan 2021 "will be formulated, and" the water intake at manufacturing bases will be reduced by 3% in FY 2021 compared with FY 2018 (based on sales basis) We are working on water reduction	of emissions and consumption is considered as
	resource circulation, we have advocated "promoting the efficient use of water resources at group our manufacturing and sales office facilities and the appropriate treatment of wastewater". Furthermore, in order to carry out specific activities of the "Brother Group Environmental Vision 2050", "the Brother Group mid-term Environmental Action Plan 2021 "will be formulated, and" the water intake at manufacturing bases will be reduced by 3% in FY 2021 compared with FY 2018 (based on sales basis) We are working on water reduction with the goal of As a result, in the mid to long term, the amount of water withdrawal (per unit of sales) is expected to decrease. In the short term, in fiscal 2019, we plan to reduce the amount of water intake (production unit) by 1%

# W1.2d

# (W1.2d) Provide the proportion of your total withdrawals sourced from water stressed areas.

	% withdrawn from stressed areas	Comparison with previous reporting year	Identification tool	Please explain
Row 1	8.94	Higher	WRI Aqueduct	Although there are many offices around the world, we have selected the WRI Aqueduct as a tool to assess water stress in all offices by comprehensively evaluating water stress in these areas. We identified bases in China and the Philippines as our bases, particularly facing high water stress. Of all water intake, the ratio of water intake at these sites is about 9% of the total.



This year, the Philippines was added as a new
area with high water stress. Therefore, it has
increased by about 7% compared to the
previous year.
Selection criteria are as follows.
Much lower: Under 30%
Lower: -30 to -5%
About the same: Within ± 5%
Higher: +5 to + 30%
Much higher: Over + 30%

# W1.2h

# (W1.2h) Provide total water withdrawal data by source.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Not relevant			Water is essential because it is used in the production process of the product and as drinking water for employees. However, poor water quality adversely affects product quality and equipment. In addition, rainwater supply is unstable, and direct pumping of water from wetlands, rivers and lakes causes water rights problems for the entire basin and is an unstable source of supply. Therefore, the facilities of the Brother Group do not consume water directly from wetlands, rivers and lakes. There are no plans to use it in the future. On the other hand, for rainwater, we use the stored rainwater for watering trees, etc. from the viewpoint of water recycling. In the



				Brother Group's operations, fresh water surface water is not essential in this way, so "Not applicable" was selected. Such water recycling and water saving activities conducted by Brother manufacturing facilities around the world are consolidated and centrally managed. In this way, a system is in place to develop activities.
Brackish surface water/Seawater	Not relevant			Water is required to manufacture our products and for our employees. Therefore, we believe it is important to keep the cost of water intake as low as possible while using water that can be supplied stably. It is very dangerous to rely on non-renewable ground water as it is an unstable water source and in terms of business continuity. In order to continue the business, the Brother Group facilities use water and groundwater (renewable) taken from the water source of a third party that is a stable water source, and use underground water (non-renewable) to continue the business. I have not. Therefore, "Not applicable" was selected. There are no plans to withdraw non-renewable groundwater either now or in the future.
Groundwater – renewable	Relevant	99.82	About the same	Since we need water to manufacture our products and for our employees, it is important to utilize water that can be supplied stably. If it is difficult to take water from a



			third party water source, pump water from the underground water source. We selected 'related' because the Brother Group's three manufacturing facilities
			in Japan, the Philippines and Slovakia used pumped groundwater (renewable energy). This corresponds to 7% of the Brother Group's total water withdrawal.
			Although it increased by 1% from last year, it was not a big change, so I chose "almost the same."
			We have formulated the Brother Group mid-Term Environmental Action Plan 2021 and are working on water reduction with the goal to reduce water intake volume 3% per unit of sales by 2021 compare to 2018 for Brother Group. For this reason, it is expected that the amount of water withdrawal (per unit of sales) from groundwater (renewable) will decrease in the mid to long term.
Groundwater – non-renewable	Not relevant		As we need water to manufacture our products and for our employees, we believe it is important to minimize the cost of water intake while using water that can be supplied stably. It is very dangerous to rely on non-renewable ground water as it is an unstable water source and in terms of business continuity. In order to continue the business, the



				Brother Group facilities use water and groundwater (renewable) taken from a third party water source that is a stable water source. Therefore, we selected "Not applicable" because we do not use underground water (non-renewable). There are no plans to withdraw non-renewable groundwater either now or in the future.
Produced/Entrained water	Not relevant			In order to manufacture our products and for our employees, we need to use water that can be supplied stably. It is secured by water and groundwater (renewable) taken from third party water sources. For this reason, "Not applicable" was selected because it is not necessary to use "production water / entrained water" at the Brother group's facilities. There are no plans to withdraw "produced water / entrained water" in the future.
Third party sources	Relevant	1,306.94	About the same	In order to manufacture our products and for our employees, we need to use water that can be supplied stably.  Third party water source is public water source, good quality and stable supply.  For this reason, 93% of the Brother Group's total water withdrawal is supplied from a third party, and "related" was selected.  Although it decreased 2% from last year, it was not a big change in the current fiscal year, so we chose



"almost the same."
"almost the same."  We formulated the "Brother Group Mid-Term Environmental Action Plan 2021" to carry out specific activities of the "Brother Group Environmental Vision 2050" and we set a target to reduce water intake volume 3% per unit of sales by 2021 compare to 2018 for Brother Group.
In the mid to long term, it is expected that the water
intake from the water source
of the third party (per unit of sales) will decrease.

# W1.2i

# (W1.2i) Provide total water discharge data by destination.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water	Relevant	312.84	Lower	"Relevant" was chosen because 25% of the total wastewater volume was treated and drained to rivers in compliance with environmental standards.  As the reporting year decreased by 19% compared with the previous year, ""Lower"" was chosen.  Based on "W = D + C", the sum of emissions and consumption is considered as water withdrawal.  We formulated the "Brother Group Mid-Term Environmental Action Plan 2021" to carry out specific activities of the "Brother Group Environmental Vision 2050" and we set a target to



				reduce water intake volume 3% per unit of sales by 2021 compare to 2018 for Brother Group.  In the mid to long term, it is expected that the water intake from the water source of the third party (per unit of sales) will decrease.  The Brother Group drains approximately 90% of the water intake, of which 25% is freshwater surface water. In theory, it should decrease at the same rate as water intake.
Brackish surface water/seawater	Not relevant			We selected "Not relevant" because we have not drained to Brackish surface water / seawater from Brother group facilities. There are no plans for drainage in the future.
Groundwater	Not relevant			We selected "Not relevant" because we are not draining to Groundwater from Brother Group facilities. There are no plans for drainage in the future.
Third-party destinations	Relevant	948.61	About the same	We selected "Relevant" because 75% of the total drainage volume is drained by the sewage treatment company through the sewer system.  Although it increased 4% from last year, it was not a big change in the current fiscal year, so we chose "almost the same".  Based on "W = D + C", the sum of emissions and consumption is considered as water withdrawal. We formulated the "Brother Group Mid-Term Environmental



	Action Plan 2021" to carry out specific activities of the "Brother Group Environmental Vision 2050" and set a target to reduce water intake volume 3% per unit of sales by 2021 compare to 2018 for Brother Group.
	In the mid to long term, it is expected that the water intake from the water source of the third party (per unit of sales) will decrease.  The Brother Group drains approximately 90% of the water intake, of which 75% is the third party's discharge destination.  In theory, it should decrease at the same rate as water intake.

# W1.2j

# (W1.2j) What proportion of your total water use do you recycle or reuse?

	% recycled and reused	Comparison with previous reporting year	Please explain
Row 1	Less than 1%	About the same	In the current fiscal year, recycled water was used for circulating water in the cooling tower. In addition, we installed a rain tank and promoted reuse of water, such as utilizing the stored rainwater for watering trees. In particular, installing a rain tank was our first attempt. Although the ratio to the total water withdrawal amount is flat, in terms of the promotion of our activities aimed at ensuring the sustainable use of water resources, we believe that it is well underway.  We aim to reduce the amount of water withdrawal, and recycling of recycled water is an effective measure, so we plan to gradually increase it in the future. Cases that have been implemented are centrally managed on a network managed by our company so that our facilities around the world can be used as a reference, and a system is in place for deployment to other facilities.



#### W1.4

#### (W1.4) Do you engage with your value chain on water-related issues?

Yes, our suppliers

#### W1.4a

(W1.4a) What proportion of suppliers do you request to report on their water use, risks and/or management information and what proportion of your procurement spend does this represent?

#### Row 1

#### % of suppliers by number

1-25%

#### % of total procurement spend

51-75

#### Rationale for this coverage

Among all suppliers with transactions in the reporting year, we periodically ask CSR questionnaires to Tier 1 suppliers managed by Brother Group's head office department. The questionnaire includes contents to confirm the water intake and the achievement rate of water goals. Suppliers seeking questionnaires are located in 12 countries in Asia including Japan, China, Vietnam and Philippines. For suppliers who are not strong incentives but who responded to the questionnaire, we provide average values calculated from companywide responses so as to make it possible to compare with the other companies about the level of initiatives. We requested responses in the questionnaire and urge further improvement.

#### Impact of the engagement and measures of success

The Information obtained from Tier 1 suppliers is used as a basic information to promote CSR activities including supplier environment.

CSR questionnaire are basically asked to receive answers in the form that makes five self-evaluations.

The best evaluation score is "5" and the lower the point will be worse evaluation. It can be evaluated supplier activity level is higher as the score is higher.

#### Comment

#### W1.4b

(W1.4b) Provide details of any other water-related supplier engagement activity.



#### Type of engagement

Other

#### **Details of engagement**

Other, please specify
Set and improve water target values.

#### % of suppliers by number

1-25

#### % of total procurement spend

51-75

#### Rationale for the coverage of your engagement

Among all suppliers with transactions in the reporting year, we periodically ask CSR questionnaires to Tier 1 suppliers managed by Brother Group's head office department. The questionnaire includes contents to confirm the water intake and the achievement rate of water goals. Suppliers seeking questionnaires are located in 12 countries in Asia including Japan, China, Vietnam and Philippines. For suppliers who are not strong incentives but who responded to the questionnaire, we provide average values calculated from companywide responses so as to make it possible to compare with the other companies about the level of initiatives. We requested responses in the questionnaire and urge further improvement.

#### Impact of the engagement and measures of success

The information obtained from suppliers is used as a basic information to promote CSR activities including Tier 1 supplier environment.

CSR questionnaire are basically asked to receive answers in the form that makes five self-evaluations.

The best evaluation score is "5" and the lower the point will be worse evaluation. It can be evaluated supplier activity level is higher as the score higher.

#### Comment

Those factors are utilized to set targets of Environmental Action Plan to promote reduction by saving and/or recycling of water.

# W2. Business impacts

#### W<sub>2.1</sub>

(W2.1) Has your organization experienced any detrimental water-related impacts?

#### **W2.2**

(W2.2) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?



No

### **W3. Procedures**

#### W3.3

#### (W3.3) Does your organization undertake a water-related risk assessment?

Yes, water-related risks are assessed

#### W3.3a

# (W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.

#### **Direct operations**

#### Coverage

Full

#### Risk assessment procedure

Water risks are assessed in an environmental risk assessment

#### Frequency of assessment

Annually

#### How far into the future are risks considered?

>6 years

#### Type of tools and methods used

Tools on the market International methodologies Other

#### Tools and methods used

WRI Aqueduct
WWF-DEG Water Risk Filter
Environmental Impact Assessment
External consultants

#### Comment

As the water is essential for our operations and for employees, we need to check and evaluate the water risk, quality and quantity of all facilities around the world. We use the WRI Aqueduct that can assess overall water risk as "high risk" and "extremely high risk" among the 15 types of water risk factors. We check all facilities' current and future water risk of 2020, 2030, 2040. We collect the Current "Risk Quality", "Physical Risk Quantity", "Flood Occurrence", "Drought Severity" and Future "Seasonal Variability", "Water Supply" and "Water Demand" to be used for our internal water risk evaluation process.

Start from this year we use WWF Water Risk Filter to evaluate the contamination of



water quality of our facilities which are rated as "high risk" and "extremely high risk" by Aqueduct tool.

We refer WWF "Global Basin Risk Results" for our internal water risk evaluation process.

For internal process, we identify our business sectors with 5% or more of group consolidated sales. We evaluate the actual water risk of facilities where overall water risks are rated as "high" and "extremely high" using WRI Aqueduct and determining substantial water risks.

For the HUANG HE (YELLOW RIVER) where our manufacturing sites are located and rated as "High risk", we reviewed the 2018 State of Ecology & Environment Report released by (CWR) China Water Risk dated 18 June 2019. The YELLOW RIVER has improved markedly across all categories this year since the dip in 2017.

#### Supply chain

#### Coverage

Full

#### Risk assessment procedure

Water risks are assessed in an environmental risk assessment

#### Frequency of assessment

Annually

#### How far into the future are risks considered?

>6 years

#### Type of tools and methods used

Tools on the market International methodologies Databases

#### Tools and methods used

WRI Aqueduct
WWF-DEG Water Risk Filter

#### Comment

As our suppliers are in over 38 countries around the world, all supplier's water risk is necessary to evaluate efficiently not to affect in our supply chain. For this reason, in Brother group, water risk is evaluated for all suppliers.

We use the WRI Aqueduct tool that can assess overall water risk as "high risk" and "extremely high risk" among the 15 types of water risk factors. We check all supplier's current overall water risk and future water stress of 2020, 2030 and 2040.

We collect and evaluate the information of Current "Risk Quality", "Physical Risk Quantity", "Flood Occurrence", "Drought Severity" and Future "Seasonal Variability", "Water Supply" and "Water Demand" to be used for our database in advance.



For internal process, we identify our business sectors with 5% or more of group consolidated sales and we monitor/evaluate the actual water risk of all suppliers where overall water risks are rated "extremely high risk" using WRI Aqueduct tool and determining substantial water risks.

#### Other stages of the value chain

#### Coverage

None

#### Comment

At this moment water risks are not assessed of our value chain, but we believe it is necessary to carry out assessments across the whole value chain.

#### W3.3b

# (W3.3b) Which of the following contextual issues are considered in your organization's water-related risk assessments?

	Relevance & inclusion	Please explain
Water availability at a basin/catchment level	Relevant, always included	As our company have manufacturing sites, sales companies and suppliers are in more than 40 countries around the world, it is necessary to access the water availability and quality at a basin in each area to secure continuity of our products.  Using the WRI Aqueduct tool, we check all facilities" location with ""high"" or ""extremely high"" overall water risk at the current and the future (2020, 2030, 2040) among the 15 types of water risk factors. We assess water risk as part of our environmental risk assessment. In the evaluation result we are checking the "Risk Quality", "Physical Risk Quantity" for the production process and it is necessary to have sufficient quantity and clean water for cooling equipment, molds, parts cleaning and ink manufacturing.
Water quality at a basin/catchment level	Relevant, always included	As our company have manufacturing sites, sales companies and suppliers in more than 40 countries and regions, it is necessary to access the water availability and quality at a basin in each area to secure continuity of our products. Using the WRI Aqueduct tool, we check all facilities" location with "high" or "extremely high" overall water risk at the present and the future (2020,2030,2040). We assess water risk as part of our environmental risk assessment. In the production process it is necessary to have sufficient quantity and clean water for cooling equipment and molds, parts cleaning, ink manufacturing. Start from this year we use WWF Water Risk Filter to



		evaluate the contamination of water quality of our facilities which are rated as "high risk" and "extremely high risk" by Aqueduct tool.  We refer WWF "Global Basin Risk Results" for our internal water risk evaluation process.
Stakeholder conflicts concerning water resources at a basin/catchment level	Relevant, always included	The HUANG HE (Yellow River) basin in which we operate the production facility is rated as high risk in the current and 2020, 2030, 2040 by the WRI Aqueduct tool. Considerations for this, we are in preparation for engaging with local stakeholders about the best management plan for the region. We have reviewed the 2018 State of Ecology & Environment Report released by (CWR) China Water Risk dated 18 June 2019. The YELLOW RIVER has improved markedly across all categories this year since the dip in 2017.  Although we have no conflict with regional stakeholders at present, we constantly monitor the current "Risk Quality", "Physical Risk Quantity" and future "water stress", "seasonal variability", "water supply" and "demand" using WRI Aqueduct tool. We check whether there is a possibility of conflict with water related stakeholders and evaluate the risk. Since the factory of Brother group has acquired ISO14001 in principle, we communicate with external stakeholders in accordance with that system, strive to satisfy the requirements with stakeholders, and make efforts to reduce the amount and quality of wastewater to an environment including water. We conduct business activities so as not to confront with problems.
Implications of water on your key commodities/raw materials	Relevant, always included	Brother Group conducts life cycle assessment (LCA) of products to be sold.  We calculate the amount of water used to manufacture the products for each model and we disclose the information.  We will consider countermeasures when water consumption is particularly high, but at this time we do not recognize when water consumption is high enough to be regarded as risk.  LCA is used for risk assessment.  Water quantity and quality while meeting our current demands do not materially impact the river basins in any location where we operated.  In the production process the enough quantity of clean water is necessary for cooling equipment, molds, parts cleaning, ink manufacturing. However, the amount used is not so



		much. Using WRI Aqueduct, we have forecasted a decrease in the availability of water locally.
Water-related regulatory frameworks	Relevant, always included	Regulations on water have a serious impact on our business, so we are constantly closely watching the latest regulatory situation. In principle, the business offices of the Brother group have acquired ISO 14001 certification. In accordance with the environmental management system, each business office of the group collects the latest legal regulation information of each region and evaluates the impact on business. Currently, there are no water related laws and regulations that will affect the business.
Status of ecosystems and habitats	Relevant, always included	Brother group regulates the Brother Group's biodiversity conservation policy.  In March 2018, Brother Industries, Ltd. (BIL)'s contribution to restoration and conservation of forests through seedling planting activities, Brother eco point program, and Click for the Earth, was recognized as one of the 12th cooperative projects endorsed by the Japan Committee for United Nations Decade on Biodiversity (UNDB-J). To encourage cooperation for biodiversity conservation activities in respective sectors, cooperative projects endorsed by UNDB-J are recognized twice a year from among projects, etc. registered under the Nijyu-maru Project.  Under the Nijyu-maru Project, citizen groups, companies, local governments, etc. declare contributions to the Aichi Biodiversity Targets (Nijyu-maru declaration) within the scope of their efforts and register their declaration. The project is administered by the Japan Committee for IUCN. Starting with the 12th cooperative projects, the Nijyu-maru Project website is interlinked with the project database of the Environment Strategy Liaison Committee's Biodiversity Working Group of the Four Electrical and Electronic Industry Associations of Japan (in which BIL participates as a member company.)
Access to fully- functioning, safely managed WASH services for all employees	Relevant, always included	Brother group stipulates the group regulations provide employees with clean toilets and water supply facilities to provide them. We always comply with all group of companies.
Other contextual issues, please specify	Not considered	



# W3.3c

# (W3.3c) Which of the following stakeholders are considered in your organization's water-related risk assessments?

	Relevance & inclusion	Please explain
Customers	Relevant, always included	Acquisition of environmental label is a requirement based on green procurement standards for our valued customers. In Japan, as one of the requirements for acquiring the Eco Mark, which is an environmental label, we may comply with environmental regulations such as water related water pollution at production plants of products, and pollution prevention agreements with local communities.  In order to ensure the trust of customers, the Brother group has been building a production system that adheres properly to compliance.
Employees	Relevant, always included	We utilize a Brother Group program called Eco point to actively engage employees for the environmental awareness including energy and water savings. We strive to continually improve our water performance through training of employees and raising awareness on a continuous basis.
Investors	Relevant, always included	We factor the concerns of investors into water risk assessment within our operations. We provide and report our environmental activities and the performance data including water consumption to management. In the requirements of institutional investors who make ESG investments, the disclosure of information on water use situation and water risk assessment is required. The information is published on the Brother Website.
Local communities	Relevant, always included	We have a responsibility toward our manufacturing sites' neighbors. We factor the concerns of local communities into water risk assessment to ensure the protection of water quality and water quantity and to mitigate concerns regarding competition of water resources. A strict standard is followed based on the effluent standard of the law in Japan with the local communities. At the Kariya Plant in Japan, we have agreed on management with Kariya City and waste water standards that are stricter than laws and comply with these standards.



NGOs	Relevant, always included	Brother Group's CSR efforts were evaluated by a NGO as a third-party opinion. Based on the proposal of the NGO, we are currently promoting water conservation activities with the goal of reducing water usage. We understand that the information disclosed at CDP Climate Change and CDP Water Security managed by NGO CDP is utilized by institutional investors who are Brother group stakeholders.  For this reason, the Brother group is actively disclosing information on CDP questionnaires.
Other water users at a basin/catchment level	Relevant, always included	We factor the concerns of other water users at a local level into water risk assessment to ensure the protection of water quality, water quantity and sufficient volumes of water are available for all users. Since there is no water service provider in our Slovakia manufacturing site, we use groundwater supplied from River Bebrava.  In order to share groundwater with neighboring users equally, we use groundwater in compliance with the upper limit of usage.
Regulators	Relevant, always included	We factor the concerns of various regulators into water risk assessments to ensure we remain in regulatory compliance. We will continue to engage with regulators to mitigate the risk in all our operating locations. Since the establishment of the Brother group has acquired ISO14001 in principle, it always monitors trends of the latest laws and regulations related to our business in accordance with its environmental management system. We are also monitoring laws and regulations related to water and evaluate the impact on our business.
River basin management authorities	Relevant, always included	We factor the concerns of River basin management authorities into water risk assessments. We engaged with river basin management authorities for the waste water treatment of our manufacturing site at the Kariya" plant in Japan. We will maintain the relationship with the river basin management authorities for our other manufacturing sites should issues need addressing. At the Kariya Plant in Japan, we have agreed on management with Kariya City and waste water standards that are stricter than laws and comply with these standards.
Statutory special interest groups at a local level	Not relevant, explanation provided	Currently, there are no water related statutory special interest groups at a local level in the area where business offices of Brother group were located, so there is no opportunity to participate and we have no engagement with the statutory special interest groups at a local level.



Suppliers	Relevant, always included	Suppliers that the Brother group deals with are mainly to clean parts, cooling and raw material, so water risk is very important. For this reason, we are the concerns of suppliers into water risk assessments. Using WRI Aqueduct tool, we annually forecast the current and future risks of all suppliers.	
Water utilities at a local level	Relevant, always included	We have an Environmental Management Target program for the reduction of energy and water consumption. The group's facilities continuously endeavor to ensure efficient use of water resources and proper treatment of wastewater. We have set targets to reduce water consumption 30% per unit of sales by 2018 compare to 2010. As a result, it was reduced 30.5% and achieved the targets for 2018. We set Environmental Action Plan 2021 continuously to reduce water intake volume 3% per unit of sales by 2021 compare to 2018 for the Brother Group.  We communicate closely with business operators located in areas with high water risk, such as Xian in China, we are evaluating the manifestation of potential water supply and potential risks.	
Other stakeholder, please specify	Relevant, always included	We understand that Institutional investors who are stakeholders actively engaged in ESG investment are interested in corporate water related efforts.  Brother Group makes every effort to solve social issues and disclose information in good faith. This offers an ideal opportunity not only to reduce risks in business operations but also to become a company that gains public trust and that is chosen by customers and investors.  Therefore, we are actively disclosing information through CDP Water Security and our website.  Therefore, we are actively disclosing information through CDP Water Security and our website.	

### W3.3d

(W3.3d) Describe your organization's process for identifying, assessing, and responding to water-related risks within your direct operations and other stages of your value chain.

We assess water risk as part of our environmental risk assessment. It is conducted to identify the overall risk of Brother group's manufacturing sites, sales companies, head office, and suppliers. We recognize the losing business in the case of flood and water shortage along with other factors of overall water risks. For this reason, we use WRI Aqueduct tool that can assess overall water risk as "high risk" and "extremely high risk" among the 15 types of water risk factors. We check all facilities and suppliers' location and their overall water risk and future



water stress of 2020, 2030 and 2040. We prepare their address and location detail in our database to contact immediately if there is an emergency to secure continuity of our products. We regularly conduct survey of water consumption of all facilities and suppliers by adding water management items in CSR questionnaire. We set targets for reducing the amount of water intake volume for Brother Group and implementing water conservation activities, recycling of water, etc. It can be managed to reduce water intake. Those factors are utilized to set targets of Environmental Action Plan. We urge all facilities and suppliers to conform Brother Group basic policies and action guidelines of environmental preservation and to work on reducing environmental impacts including water usage, water quality and water saving activity to report results and progresses of activities to management.

# W4. Risks and opportunities

#### W4.1

(W4.1) Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business?

No

#### W4.1a

# (W4.1a) How does your organization define substantive financial or strategic impact on your business?

We define as substantive financial or strategic impact on our business if the occurrence of obstacles effect on our business sectors with 5% or more of group consolidated sales. The disorder is assumed to be a state in which production capacity cannot be reduced due to natural disasters such as water supply shortages, floods, etc., production cannot be continued, sales capacity is reduced, or sales cannot be sold. In the Brother Industry, facilities or suppliers that may cause substantial changes in business activities are identified annually in the following manner. Direct operation (1) Use WRI Aqueduct to identify facilities that the overall water risk is rated ""Extremely High"" and the facilities of business sectors are identified to 5% or more of consolidated group sales (2) Investigate the form of the relevant business establishment and the actual occurrence of water risk at the business establishment and comprehensively judge the possibility of occurrence of the failure to the business activities. Supply chain (1) Use WRI Aqueduct to identify tier-1 suppliers overall water risk is rated ""Extremely High"" and the facilities of business sectors are identified to 5% or more of consolidated group sales (2) Determine the possibility of occurrence of a failure in business activities comprehensively after additional investigation of the business form of the corresponding supplier and the area where the business office of the supplier is located. As an example, through this assessment evaluation towards our growth strategy we assumed a tsunami may occur at some point after an earthquake, so for certain factories in Japan, where the predicted damage was likely, we reduced the operational foot print and transferred product manufacturing to another factory thus ensuring the viability of future production. This applies to both of direct operations and supply chains.



#### W4.2b

# (W4.2b) Why does your organization not consider itself exposed to water risks in its direct operations with the potential to have a substantive financial or strategic impact?

	Primary reason	Please explain
Row	Risks exist, but	As our company have manufacturing sites, sales companies are in more
1	no substantive	than 40 countries around the world, we used WRI Aqueduct and WWF
	impact	water risk filter to access the water risk, stress and quality in all facilities
	anticipated	comprehensively by evaluating the water stress in those areas. We
		identified bases in China and the Philippines as our bases in particular
		facing "very high" water stress. Of the total volume of water withdrawal, the
		ratio of water intake at these sites is approximately 9% of the total.
		Therefore, we judge that there are no water risks that could have a major
		impact at this time.

#### W4.2c

# (W4.2c) Why does your organization not consider itself exposed to water risks in its value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact?

	Primary reason	Please explain
Row	Risks exist, but no	A supplier assessment was conducted using Aqueduct and no supplier
1	substantive	was rated as "very high" risk. Therefore, based on our current criteria, we
	impact anticipated	have determined that there is no water risk that could have a significant
		impact on our suppliers.
		However, although there is no water risk, in order to promote
		environmental load reduction and efforts to reduce annual water intake
		and it, we survey the suppliers once every three years to evaluate the
		suppliers' environmental efforts. The results are reflected in the supplier's
		evaluation, and improvements are required as needed.

#### W4.3

(W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes, we have identified opportunities, and some/all are being realized

#### W4.3a

(W4.3a) Provide details of opportunities currently being realized that could have a substantive financial or strategic impact on your business.



Efficiency

#### **Primary water-related opportunity**

Cost savings

#### Company-specific description & strategy to realize opportunity

The main products manufactured by the Brother Group are home printers. Although it is not a product that uses a large amount of water, water is used for the production of consumables (inks, etc.), parts cleaning and equipment cooling in the printer production process, etc. We believe that water reduction is essential.

We established the "Brother Group Environmental Vision 2050" in fiscal 2017, and advocate water risk assessment of business sites and promotion of water conservation and recycling as part of the resource circulation among them. Furthermore, in carrying out specific activities of the "Brother Group Environmental Vision 2050", the "Brother Group Mid-term Environmental Action Plan 2021" is formulated, and we set a target to reduce water consumption 30% per unit of sales by 2018 compare to 2010. As a result, it was reduced 30.5% and we achieved the target.

In addition, compared to last year, it was reduced 4.9% (unit of sales basis).

#### Estimated timeframe for realization

1 to 3 years

#### Magnitude of potential financial impact

Low

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

Yes, a single figure estimate

#### Potential financial impact figure (currency)

8,400,000

Potential financial impact figure – minimum (currency)

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

#### **Explanation of financial impact**

In fiscal 2018, we reviewed our overseas manufacturing sites based on our production strategy, and as a result, we were able to make the amount of water used during production a phenomenon. In addition, the following measures were implemented at manufacturing sites.

- · Use recycle water for circulating water of cooling tower
- · Switch from water-cooled chiller to air-cooled chiller
- · Water pressure adjustment of faucet
- · Renovation to water saving restroom
- · Change of water washing method for dirty dishes and filters



- Reducing water consumption of pure manufacturing equipment by reviewing operation of water softener
- Use of rainwater for plant watering

By implementing these measures, we achieved 4.9% (unit of sales basis) reduction compared to fiscal year 2017. This will be approximately 8.4 million Japanese yen in water rate conversion.

#### Type of opportunity

Markets

#### Primary water-related opportunity

Improved community relations

Volunteer work for community

#### Company-specific description & strategy to realize opportunity

The Brother Group believes that it is an opportunity to increase brand value and to gain the trust of the local community by supporting local social contribution activities. In the Mid-term Environmental Action Plan 2021, we are promoting biodiversity conservation activities in accordance with the goals of Aichi Prefecture agreed at COP 10.

In various parts of the world (US, Canada, Peru, China, Japan, Australia, England, Slovakia, Thailand, etc.), we carry out various biodiversity conservation activities such as rainforest conservation and desertification prevention.

Among these, in Thailand, we are supporting the regeneration of mangrove forests. Mangrove forests nurture a wide variety of organisms, recognize the importance of solidifying the coast with complex roots and absorbing the impact of the tsunami, and also playing a role as a breakwater, and are implementing restoration support from a long-term perspective. You

These activities have been recognized as the 12th collaboration project of the United Nations Commission on Biodiversity 10 years (UNDB-J).

#### Estimated timeframe for realization

>6 years

#### Magnitude of potential financial impact

Low

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

Yes, a single figure estimate

#### Potential financial impact figure (currency)

26,000,000

#### Potential financial impact figure - minimum (currency)



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

#### **Explanation of financial impact**

The Brother Group is engaged in various biodiversity conservation activities such as tropical rain forest conservation and desertification prevention all over the world (US, Canada, Peru, China, Japan, Australia, Great Britain, Slovakia, Thailand, etc.). The cost of these activities are approximately 26 million Japanese yen.

#### Type of opportunity

Markets

#### **Primary water-related opportunity**

Improved community relations

Volunteer work for community

#### Company-specific description & strategy to realize opportunity

The Brother Group promotes biodiversity conservation activities in accordance with the goals of Aichi Prefecture agreed at COP 10 in the mid-term environmental action plan. As one of the activities, we are carrying out marine pollution prevention activities. Following the last year, Kaohsiung's coastal cleanup activities were carried out in 2018 to prevent marine pollution at manufacturing sites in Taiwan. The employees and their 214 members participated in the cleaning activities.

#### Estimated timeframe for realization

Current - up to 1 year

#### Magnitude of potential financial impact

Low

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

Yes, a single figure estimate

#### Potential financial impact figure (currency)

140,000

Potential financial impact figure - minimum (currency)

Potential financial impact figure – maximum (currency)

#### **Explanation of financial impact**

It shows the cost of cleanup activity in Kaohsiung coastal, Taiwan.



# **W6.** Governance

## W6.1

#### (W6.1) Does your organization have a water policy?

Yes, we have a documented water policy that is publicly available

### W6.1a

# (W6.1a) Select the options that best describe the scope and content of your water policy.

	Scope	Content	Please explain
Row 1	Companywide	Description of water-related performance standards for direct operations	The Brother group formulated the Brother Group Environmental Vision 2050 to contribute the solution of environmental issues aiming to be resolved with the SDGs, Paris Agreement and Aichi Goal. This includes efforts to reduce the use of natural resources against the shortage of natural resources including water due to climate change, population increase and goals of pollution prevention by waste. In the Mid-term Environmental Action Plan 2018 (2016-2018), we set a target to reduce water consumption 30% per unit of sales by 2018 compare to 2010. As a result, it was reduced 30.5% and we achieved the target. Continuously, we set mid-term Environmental Action Plan 2021 (2019-2021) to reduce water intake volume 3% per unit of sales by 2021 compare to 2018 for Brother Group. The mid-term target aims to achieve efficient use of water resources and ensure proper treatment of wastewater. The group's manufacturing facilities continuously endeavor to ensure efficient use of water resources and proper treatment of wastewater.  Also, according to the company regulations, we provide clean toilets and water supply facilities to all employees.  Our 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.

# W6.2

(W6.2) Is there board level oversight of water-related issues within your organization?  $_{\mbox{\scriptsize Yes}}$ 



### W6.2a

# (W6.2a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for water-related issues.

Position of individual	Please explain
Chief	Water-related targets are included in Brother's Mid-term Environmental Action Plan
Operating	2021. The progress situation is managed by the environmental department
Officer (COO)	supervised by COO. By reporting to the COO from the environmental department on
	a monthly basis, COO monitors the progress of water-related goals.

### W6.2b

### (W6.2b) Provide further details on the board's oversight of water-related issues.

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - all meetings	Monitoring implementation and performance Overseeing major capital expenditures Reviewing and guiding annual budgets Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy Reviewing and guiding corporate responsibility strategy Setting performance objectives	Brother group prepares the mid-term environmental action plan at intervals of 3 to 5 years. The contents are discussed and approved at the meeting body where the board members participate. The environmental action plan contains water-related targets and policies, and board members are considering plans in consideration of business risk opportunities and CSR viewpoints. Progress to the goals of the Environmental Action Plan is reported to the directors based on performance indicators set in advance by the Environment Committee held once every six months, and the directors evaluate and supervise the contents. In addition, the board of directors discuss and approve annually the department budget of the department responsible for the environment regarding the capital investment and necessary expenses necessary to achieve the target of the mid-term environmental action plan.



#### W6.3

(W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).

#### Name of the position(s) and/or committee(s)

Chief Operating Officer (COO)

#### Responsibility

Both assessing and managing water-related risks and opportunities

#### Frequency of reporting to the board on water-related issues

Half-yearly

#### Please explain

General Manager of Environment is responsible for supervising Brother Group's environmental affairs. The Brother group head office has acquired ISO 14001, and the General Manager of Environment is also in charge of the Environmental Management Representative of the environmental management organization. According to the environmental management system, the organization responsible for the environment will consider the risks and opportunities for the environmental aspect including water and report it to the General Manager of Environment. Among them, about major risks and opportunities, General Manager of Environment reports to the Environment Committee, which is held quarterly by board members (including CEO). For the Environment Committee, General Manager of Environment has an obligation to achieve the environmental goals including water listed in the Mid-term Environmental Action Plan, and reports the progress status to the Environment Committee.

#### W6.5

(W6.5) Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?

Yes, trade associations

#### W6.5a

(W6.5a) What processes do you have in place to ensure that all of your direct and indirect activities seeking to influence policy are consistent with your water policy/water commitments?

Our company is participating in electrical / electronic industry group in Japan. We submit opinions of electric and electronic industry when public comments on water related policy are recruited. When industry groups organize opinions, we submit our opinion in accordance with our policies and are involved in the consolidation of opinions within industry groups. If opinions aggregated within the industry are significantly different with our policies, we oppose submitting opinions as industry groups.



### **W6.6**

# (W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report?

No, but we plan to do so in the next two years

# W7. Business strategy

# W7.1

# (W7.1) Are water-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

	Are water- related issues integrated?	Long-term time horizon	Please explain
		(years)	
Long-term business objectives	Yes, water- related issues are integrated	> 30	The Brother Group has established the medium- and long-term "Brother Group Environmental Vision 2050" up to 2050.  The three pillars of CO2 emissions reduction, resource recycling, and biodiversity conservation are the pillars, and "promoting water risk assessment of business sites and water saving and recycling use" will be implemented as an immediate action in resource recycling. To go.  Furthermore, in the "Brother Group Medium-Term Environmental Action Plan 2021" established in fiscal 2018, we are working on water reduction with numerical targets "Reduce water intake at manufacturing sites by 3% in fiscal 2021 compared to fiscal 2018 (based on sales)".
Strategy for achieving long-term objectives	Yes, water- related issues are integrated	11-15	In FY 2017, Brother group formulated Environmental Vision 2050. This vision also includes the vision and goals for water-related issues. In this Environmental Vision, the Brother Group outlines its plan to address the escalation of environmental problems, including climate change, depletion of resources, pollution caused by waste, and disruption of ecosystem (loss of biodiversity), on a long-term basis and in a continuous way, perceiving these problems as serious social challenges as well as our business risks. We have also developed the mid-term targets toward FY2030 as a



			milestone to fulfil the vision.
			The following are the priority items consisting of the Environmental Vision:  1. Reduction of CO2 emissions 2. Resource Circulation 3. Biodiversity Conservation  Water-related issues are mainly incorporated into the vision and goals of resource circulation as below.  Vision: Resource Circulation  - Maximize resource circulation to use natural resources in a sustainable way and minimize environmental impact caused by waste.  Mid-term targets by FY2030: Resource Circulation  - Develop a system to circulate resources in the whole value chain, and reduce the amount of new natural resources used for main products.  - Make continuous efforts to use water resources
Financial planning	Yes, water-related issues are integrated	11-15	efficiently and treat discharged wastewater appropriately at the Group's manufacturing facilities.  The Brother Group has established the medium- and long-term "Brother Group Environmental Vision 2050" up to 2050.  The three pillars of CO2 emissions reduction, resource recycling, and biodiversity conservation are the pillars, and "promoting water risk assessment of business sites and water saving and recycling use" will be implemented as an immediate action in resource recycling. To go.  Furthermore, in the "Brother Group Medium-Term Environmental Action Plan 2021" established in fiscal 2018, we are working on water reduction with numerical targets "Reduce water intake at manufacturing sites by 3% in fiscal 2021 compared to fiscal 2018 (based on sales)".

# W7.2

(W7.2) What is the trend in your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?



#### Row 1

Water-related CAPEX (+/- % change)

179

Anticipated forward trend for CAPEX (+/- % change)

0

Water-related OPEX (+/- % change)

5

Anticipated forward trend for OPEX (+/- % change)

0

#### Please explain

The rates of change for CAPEX and OPEX are based on actual values. CAPEX increased significantly as we changed from a water-cooled chiller to an air-cooled chiller in fiscal 2018. In addition, in fiscal 2019, we plan to invest in facilities for groundwater use, and we estimate the amount of investment similar to that of fiscal 2018. The OPEX for fiscal 2019 is estimated to be the same as for fiscal 2018.

#### W7.3

# (W7.3) Does your organization use climate-related scenario analysis to inform its business strategy?

	Use of climate-related scenario analysis	Comment
Row 1	Yes	

#### W7.3a

(W7.3a) Has your organization identified any water-related outcomes from your climate-related scenario analysis?

Yes

#### W7.3b

# (W7.3b) What water-related outcomes were identified from the use of climate-related scenario analysis, and what was your organization's response?

	Climate- related scenario(s)	Description of possible water- related outcomes	Company response to possible water-related outcomes
Row	Other, please	Analysis of Aqueduct's water risk	We are considering continuation of
1	specify	based on RCP 8.5 has resulted in very	efforts to utilize water efficiently (such
	SSP2	high water stress due to lack of water	as water saving activities) at business
	RCP8.5	resources due to climate change in	establishments located in regions with
		some establishments.	high water stress.



#### W7.4

#### (W7.4) Does your company use an internal price on water?

#### Row 1

#### Does your company use an internal price on water?

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

Please explain

# **W8. Targets**

#### W8.1

# (W8.1) Describe your approach to setting and monitoring water-related targets and/or goals.

	Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row 1	Company- wide targets and goals Activity level specific targets and/or goals Site/facility specific targets and/or goals	Targets are monitored at the corporate level Goals are monitored at the corporate level	In the Brother Group Mid-Term Environmental Action Plan 2018, we set a target of reducing water use at production bases by 30% by fiscal 2018 compared to fiscal 2010 (unit of sales base). In fiscal 2018, we achieved a target of 30.5% reduction.  In fiscal 2018, we formulated the "Brother Group Mid-Term Environmental Action Plan 2021". Among these, we set a new goal to reduce water intake volume 3% per unit of sales by 2021 compare to 2018 for Brother Group.  In this way, we set targets for reducing water intake at each manufacturing site, monitor water intake monthly, and manage the progress of reduction. In addition, in order to comply with compliance, we strive to comply with the standards of each region regarding the quality of wastewater treatment, and establish and manage monitoring standards according to the content of wastewater.

#### W8.1a

(W8.1a) Provide details of your water targets that are monitored at the corporate level, and the progress made.



#### Target reference number

Target 1

#### **Category of target**

Water withdrawals

#### Level

Company-wide

#### **Primary motivation**

Reduced environmental impact

#### **Description of target**

In the Brother group Mid-term Environmental Action Plan 2018 (2016-2018), we set a target to reduce water consumption 30% per unit of sales by 2018 compare to 2010.

#### **Quantitative metric**

% reduction per revenue

#### Baseline year

2010

#### Start year

2010

#### Target year

2018

#### % achieved

100

#### Please explain

We achieved a 30.5% reduction compared to 2010.

We reviewed our overseas production bases based on our production strategy, and as a result, we were able to make the amount of water used during production a phenomenon. In addition, the following measures were implemented at production bases.

- · Use recycle water for circulating water of cooling tower
- · Switch from water-cooled chiller to air-cooled chiller
- · Water pressure adjustment of faucet
- · Renovation to water saving restroom
- · Change of water washing method for dirty dishes and filters
- Reducing water consumption of pure manufacturing equipment by reviewing operation of water softener
- · Use of rainwater for plant watering

By implementing these measures, we reduced 4.9% (unit of sales basis) compared to fiscal year 2017.



#### Target reference number

Target 2

#### **Category of target**

Water withdrawals

#### Level

Site/facility

#### **Primary motivation**

Reduced environmental impact

#### **Description of target**

Water withdrawal volume of each manufacturing sites per the total revenue. Reduction target: Reduce water withdrawals by 1% from FY2017 levels by FY2018 (per unit of group total revenue).

#### **Quantitative metric**

% reduction per revenue

#### Baseline year

2017

#### Start year

2017

#### Target year

2018

#### % achieved

100

#### Please explain

We achieved the reduction rate of -4.9% by the following activities against the 1% reduction target compared to last year.

As a result of reviewing overseas production bases based on production strategies, we were able to make the amount of water used during production a phenomenon.

In addition, the following measures were implemented at production bases.

- · Use recycle water for circulating water of cooling tower
- · Switch from water-cooled chiller to air-cooled chiller
- · Water pressure adjustment of faucet
- · Renovation to water saving restroom
- · Change of water washing method for dirty dishes and filters
- Reducing water consumption of pure manufacturing equipment by reviewing operation of water softener
- · Use of rainwater for plant watering

By implementing these measures, we reduced 4.9% (unit of sales basis) compared to fiscal year 2017.



#### W8.1b

(W8.1b) Provide details of your water goal(s) that are monitored at the corporate level and the progress made.

#### Goal

Other, please specify

Safely manage at work and make water, sewage, and satellite (WASH) services available

#### Level

Company-wide

#### **Motivation**

Reduced environmental impact

#### **Description of goal**

Securing safe water resources is one of the important issues in the world's environmental problems. In order to contribute to the resolution of global environmental issues, the Brother Group is committed to the efficient use and appropriate treatment of water resources at group production bases as the responsibility of companies with production bases in many countries and regions. Make efforts to drain water by In addition to formulating the "Brother Group Environmental Vision 2050" as a new long-term goal for the Brother Group in fiscal 2017, we have set up the "Mid-term target for fiscal 2030" as a milestone and have started activities.

#### Baseline year

2018

#### Start year

2018

#### **End year**

2030

#### **Progress**

At Xi'an, where water resources are not abundant and water risks are relatively high, various water saving measures have been implemented, such as flow control in faucets and toilets and reuse of treated water in wastewater treatment facilities. In addition to this, from 2018, we set up a rainwater recovery tank on the site as an initiative for water circulation and started using it for greening.

In addition, even at manufacturing sites where water risk is not high, we are working to reduce water, such as switching from a water-cooled chiller to an air-cooled chiller in fiscal 2018.



# W9. Linkages and trade-offs

#### W9.1

(W9.1) Has your organization identified any linkages or tradeoffs between water and other environmental issues in its direct operations and/or other parts of its value chain?

Yes

#### W9.1a

(W9.1a) Describe the linkages or tradeoffs and the related management policy or action.

#### Linkage or tradeoff

Tradeoff

#### Type of linkage/tradeoff

Other, please specify
Increased water consumption

#### Description of linkage/tradeoff

In the summer of 2018, Japan has reached a record high heat. In small-scale warehouses without air conditioning equipment, we carried out water sprinkling around the warehouse roof and the warehouse to ensure worker safety. Although the safety of the workers is ensured, as much as 20 tons of water is sprayed daily, and the amount of water used at this facility has increased.

#### Policy or action

The frequency of workers entering a small-scale warehouse is not high, and installing an air conditioner does not seem appropriate for cost effectiveness. Therefore, a small amount of thermal insulation coating on the warehouse roof is being coordinated with related parties.

#### Linkage or tradeoff

Tradeoff

#### Type of linkage/tradeoff

Increased energy use

#### Description of linkage/tradeoff

To ensure compliance with national and regional standards, the quality of wastewater from each plant is managed by setting stricter voluntary standards for water quality. Because of this, wastewater treatment requires much more energy, mainly consuming about 1% of the total electricity consumption at the manufacturing site.



#### Policy or action

We have not exceeded environmental standards, and we have established voluntary standards that are as strict as cost and technology allow.

### W10. Verification

#### W10.1

(W10.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1d)?

No, we are waiting for more mature verification standards and/or processes

# W11. Sign off

#### W-FI

(W-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.

#### W11.1

(W11.1) Provide details for the person that has signed off (approved) your CDP water response.

	Job title	Corresponding job category
Row 1	Managing Executive Officer	Chief Operating Officer (COO)

#### W11.2

(W11.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate's Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].

Yes