# **Bridgestone Corporation - Water Security 2022**



W0. Introduction

## W0.1

(W0.1) Give a general description of and introduction to your organization.

The Bridgestone Group, headquartered in Tokyo, is one of the largest tire and rubber companies. In addition to tires for use in a wide variety of applications, it also manufactures a broad range of diversified products, which include industrial rubber and chemical products and sporting goods. Its products are sold in over 150 nations and territories around the world.

The Corporate Sustainability Division is responsible for answering the 2022 CDP questionnaire. This division coordinates and manages the Group's Environmental Mission Statement compliance, providing environmental support to business sections, Strategic Business Units (SBUs), at a global level.

# 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	January 1 2021	December 31 2021

## W0.3

(W0.3) Select the countries/areas in which you operate.	
Argentina	
Australia	
Belgium	
Brazil	
Canada	
China	
Costa Rica	
France	
Hong Kong SAR, China	
Hungary	
India	
Indonesia	
Italy	
Japan	
Malaysia	
Mexico	
Philippines	
Poland	
Russian Federation	
South Africa	
Spain	
Taiwan, China	
Thailand	
Turkey	
United Kingdom of Great Britain and Northern Ireland	
United States of America	
Viet Nam	

## W0.4

(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? Yes

## W0.6a

## (W0.6a) Please report the exclusions.

Exclusion	Please explain
employees does not consistently exceed 50, and the production	Non-production sites (e.g. offices, stores/shops, warehouses) and the production sites where the number of employees does not consistently exceed 50, most of the water used is for hand washing, toilets, etc., which is very small compared to the amount of water used in large production sites. Therefore, the impact of the excluded sites is estimated to be very small compared to the total water used.

## W0.7

## (W0.7) 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	JP3830800003		

## 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.

	importance		Please explain
Sufficient amounts of good quality freshwater available for use	Important	Important	In our production process, we use water resources for cooling water and steam. Employees also need sufficient water of proper quality for drinking and washing. In addition, sufficient quantity and quality of water also is indispensable throughout the value chain for the production of various raw material and components, such as natural rubber, synthetic rubber, carbon black, cord, and steel belt, among others. Our suppliers use water resources for washing, cooling and steam. Therefore, continuous use of sufficient amounts of freshwater of adequate quality is important for continuing operation of our business (direct operations) and our value chain (indirect operations). At this time, we do not plan to make major changes in production methods for either our direct operations or indirect operations, so we do not believe that there will be any major changes in our future water dependency.
Sufficient amounts of recycled, brackish and/or produced water available for use		·	In our production process, we use recycled water as cooling water. For example, sewage-treated water is used as cooling or steam. Also in our value chain (raw material production sites), recycled water is being utilized as cooling water. Therefore, continuous use of sufficient amount of recycled water is important for continuing operation of our business (direct operations) and our value chain (indirect operations). At this time, we do not plan to make major changes in production methods for either our direct operations or indirect operations, so we do not believe that there will be any major changes in our future water dependency.

# (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 water withdrawal volume by water source at all our facilities on a monthly basis. The monitoring method is based on bills for water purchased from the outside, and measurement meters for water taken in-house. For our company, "facilities" refers to our production sites certified according to ISO-14001 and consistently with 50 employees or more.
Water withdrawals – volumes by source	100%	We monitor water withdrawal volume by water source at all our facilities on a monthly basis. The monitoring method is based on bills for water purchased from the outside, and measurement meters for water taken in-house by water source. For our company, "facilities" refers to our production sites certified according to ISO-14001 and consistently with 50 employees or more.
Entrained water associated with your metals & mining sector activities - total volumes [only metals and mining sector]	<not applicable=""></not>	<not applicable=""></not>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<not applicable=""></not>	<not applicable=""></not>
Water withdrawals quality	100%	Water supplied by third parties, such as city water and industrial water, will be subjected to appropriate water quality analysis by them. For example, in Japan, pH, turbidity, bacteria, heavy metals, etc. are analyzed by the methods specified by the Water Supply Act and ministerial ordinances. Nonetheless, we also conduct our own analysis as necessary according to local regulations and our own standards. When we analyze it, we do it on a monthly basis or as often as required by local regulations. The analysis may be performed by a specialized external organization or it may be done in-house. For our company, "facilities" refers to our production sites certified according to ISO-14001 and consistently with 50 employees or more.
Water discharges – total volumes	Water discharges – total         100%         Because our finished products (tires, etc.) contain almost no water, we discharge most of the water we withdraw. Based	
Water discharges – volumes by destination	100%	Because our finished products (tires, etc.) contain almost no water, we discharge most of the water we withdraw. Based on the monthly water discharge data of our facilities that monitor the data based on bills or in-house measurement meters, we estimate the water discharges (volumes by destination) at all our facilities annually and are working to understand that impact. For our company, "facilities" refers to our production sites certified according to ISO-14001 and consistently with 50 employees or more.
Water discharges – volumes by treatment method	100%	Because our finished products (tires, etc.) contain almost no water, we discharge most of the water we withdraw. Based on the monthly water discharge data of our facilities that monitor the data based on bills or in-house measurement meters, we estimate the water discharges (volumes by treatment method) at all our facilities annually and are working to understand that impact. For our company, "facilities" refers to our production sites certified according to ISO-14001 and consistently with 50 employees or more.
Water discharge quality – by standard effluent parameters	100%	We monitor water discharge quality based on applicable regulations (such as pH, BOD, COD, SS, harmful substances, etc.) by continuous real time monitoring or in-house/third-party sampling analysis at all of our facilities (mostly on a monthly basis), based on the standards of the countries and regions where the facilities are located. Our facilities have implemented water effluent standards of their own that meet or tighten applicable government standards, and endeavor not to exceed government-established limits. For our company, "facilities" refers to our production sites certified according to ISO-14001 and consistently with 50 employees or more.
Water discharge quality – temperature	26-50	We measure and manage the water discharge temperature by continuous real time monitoring or sampling analysis (mostly on a monthly basis), based on the standards of the countries and regions where the facilities are located. In areas where administrative agencies judge that it is unnecessary to measure water discharge temperature, some facilities do not measure it. For our company, "facilities" refers to our production sites certified according to ISO-14001 and consistently with 50 employees or more.
Water consumption – total volume	100%	The monitoring method for water consumption is calculated by subtracting the water discharge volume from the water withdrawals volume at all our facilities yearly and we are working to grasp the impact. For our company, "facilities" refers to our production sites certified according to ISO-14001 and consistently with 50 employees or more.
Water recycled/reused 100% Based on the monthly water recycled/reused data of our facilities that monitor the data measured by flow meter, we estimate the way volumes at all our facilities and are working to understand that impact. The monitoring method for recycled/reused water is calculate flow meters installed on equipment, and to estimate using design values for some equipment. For sites where flow rates cannot be		Based on the monthly water recycled/reused data of our facilities that monitor the data measured by flow meter, we estimate the water recycled/reused volumes at all our facilities and are working to understand that impact. The monitoring method for recycled/reused water is calculated by reading the value of flow meters installed on equipment, and to estimate using design values for some equipment. For sites where flow rates cannot be measured, estimates are made based on the data of sites where flow rate can be measured. For our company, "facilities" refers to our production sites certified according to ISO-14001 and consistently with 50 employees or more.
The provision of fully- functioning, safely managed WASH services to all workers	100%	We recognize access to clean water and sanitation as human rights. We supply all employees with clean water and sanitation at all production facilities. Our method for monitoring: Most sites are supplied clean water purified by public agencies or private water treatment plants. The items to be analyzed and the frequency vary depending on the country rules and vary from once a day to once a month. The water supplied by the public agencies is analyzed by them, and when using the groundwater pumped in-house, we or external analysis organizations analyze the quality. For our company, "facilities" refers to our production sites certified according to ISO-14001 and consistently with 50 employees or more.

# 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	67976.64	About the same	Despite continued efforts to reduce water withdrawals in 2021, total water withdrawals increased by 4.9% from the previous year as the reduced operating hours due to COVID-19 gradually recovered. However, there was no significant change (About the same) in water withdrawals compared to the previous year. For the next few years, we expect a slight increase or decrease in water withdrawals, but not a large increase, due to the fluctuations in production caused by COVID-19 and the decrease in the number of facilities due to business restructuring. (Lower - About the same) From a long-term perspective, since it is expected that the water withdrawals withdrawals withdrawals withdrawals continuously. In particular, we will loce on sites located in water stress areas. Our company-specific explanation for these thresholds is below. Much lower: Less than 49%, Lower: 50% - 85%, About the same: 85% - 115%, Higher: 115% - 150%, Much higher: More than 150%
Total discharges	53299.45	About the same	Despite continued efforts to reduce water withdrawals in 2021, total water withdrawals increased by 4.9% from the previous year as the reduced operating hours due to COVID-19 gradually recovered. The total water discharges reduced by 1.3%, but there was no significant change (About the same) in water discharges compared to the previous year. In this way, the reasons why the increase / decrease in water withdrawal and the increase / decrease in water discharges are not always linked are as follows; Production processes use a lot of water for cooling, which is greatly affected by temperature (evaporation due to cooling), Water taken in as a BCP measure is stored in ponds (stocked instead of discharged), etc. For the next few years, we expect a slight increase or decrease in water withdrawals, but not a large increase, due to the fluctuations in production caused by COVID-19 and the decrease in the number of facilities due to business restructuring. (Lower - About the same) From a long-term perspective, since it is expected that the water discharges will increase as. Our company-specific explanation for these thresholds is below. Much lower: Less than 49%, Lower: 50% - 85%, About the same: 85% - 115%, Higher: 115% - 150%, Much higher: More than 150%
Total consumption	14677.19	Higher	Total water consumption increased by 36.0% from the previous year. It can be said that there was a change (Higher) compared to the previous year. The reasons for the increase in water consumption is as follows; Increased cooling demand due to high temperature (evaporation due to cooling), Water taken in as a BCP measure was stored in ponds (stocked instead of discharged), etc. For the next few years, we expect a slight increase or decrease in water withdrawals, but not a large increase, due to the fluctuations in production caused by COVID-19 and the decrease in the number of facilities due to business restructuring. (Lower - About the same) From a long-term perspective, since it is expected that the water consumption will increase due to the increase in production volume, we promote reduction of water consumption continuously. In particular, we will focus on sites located in water stress areas. Our company-specific explanation for these thresholds is below. Much lower: Less than 49%, Lower: 50% - 85%, About the same: 85% - 115%, Higher: 115% - 150%, Much higher: More than 150%

# W1.2d

## (W1.2d) Indicate whether water is withdrawn from areas with water stress and provide the proportion.

	areas with water stress	withdrawn from areas with	with previous	Identification tool	Please explain
Row 1	Yes		About the same	WRI Aqueduct	The percentage of water withdrawal at facilities located in the water stress areas in 2021 was 4.5%, unchanged from 2020. For our company, "facilities" refers to our production sites certified according to ISO-14001 and with 50 employees or more. In a large group such as a basin, the actual situation may not match the desk analysis, so we determine the facilities located in the water stress area by the following method. 1. Extract facilities located in high or extremely high water stress areas using WRI Aqueduct, a recognized analysis tool used worldwide. 2. Collect local information on each region (e.g. past forught information, information on future water resource security, etc.). 3. Whether the facility uses water for the production process. For the next few years, we expect a slight increase or decrease in water withdrawals, but not a large increase, due to the fluctuations in production caused by COVID-19 and the decrease in the number of facilities due to business restructuring. (Lower - Ahout the same) From a long- term perspective, since it is expected that the water withdrawals will increase due to the increase in production volume, we promote reduction of water withdrawals continuously in water stress areas in particular. Our company-specific explanation for these thresholds is below. Much lower: Less than 49%, Lower: 50% - 85%, About the same: 85% - 115%, Higher: 115% - 150%, Much higher: More than 150%

# W1.2h

	Relevance	Volume (megaliters/year)		Please explain	
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	2920.24	About the same	Since we use water resources for cooling and steam in our production process, we select "Relevant". We cannot produce products such as tires without fresh surface water. This volume is composed of river water and rainwater, most of which is river water. They are sourced from direct measurement. Fresh surface water volume decreased by 2.6% compared with the previous year. The main reason for this decrease is the decrease in production due to the impact of COVID-19. For the next few years, we expect a slight increase or decrease in water withdrawals, but not a large increase, due to the fluctuations in production caused by COVID-19 and the decrease in the number of facilities due to business restructuring. (Lower - About the same) Our company-specific explanation for these thresholds is below. Much lower: Less than 49%, Lower: 50% - 85%, About the same: 85% - 115%, Higher: 115% - 150%, Much higher: More than 150%	
Brackish surface water/Seawater	Relevant	37678.45	About the same	Since we use seawater for cooling water at one site located on seaside, we select "Relevant". We cannot produce raw materials without seawater. This volume is composed of seawater and sourced from direct measurement. Brackish surface water/seawater withdrawal volume was increased by 3.9% compared with the previous year. The main reason for this increase was a recovery in production volume, which had declined due to the impact of COVID-19. For the next few years, we expect a slight increase or decrease in water withdrawals due to the fluctuations in production caused by COVID-19. (About the same) From a long-term perspective, since it is expected that the water withdrawals will increase due to the increase in production volume, we promote reduction of water withdrawals continuously. Our company-specific explanation for these thresholds is below. Much lower: Less than 49%, Lower: 50% - 85%, About the same: 85% - 115%, Higher: 115% - 150%, Much higher: More than 150%	
Groundwater – renewable	Relevant	9086.33	About the same	Since we use groundwater (renewable) for cooling and steam at the sites where groundwater can be used, we select "Relevant". We cannot produce products such as tires without groundwater. This volume is sourced from direct measurement. Groundwater withdrawal volume was increased by 7.2% compared with the previous year. The main reason for this increase was a recovery in production volume, which had decline due to the impact of COVID-19. For the next few years, we expect a slight increase or decrease in water withdrawals due to the fluctuations in production caused by COVID-19 and the decrease in the number of facilities due to business restructuring. (Lower - About the same) Our company-specific explanation for these thresholds is below. Much lower: Less than 49%, Lower: 50% - 85%, About the same: 85% - 115%, Higher: 115% - 150%, Much higher: Wore than 150%	
Groundwater – non-renewable	Not relevant	<not applicable=""></not>	<not Applicable&gt;</not 	Since we do not use non-renewable groundwater that cannot be naturally recharged on the human time-scale, and we use renewable groundwater at shallow depths, we select "Not relevant". Since we have no plan to use non-renewable groundwater, no major change is expected in the future.	
Produced/Entrained water	Not relevant	<not applicable=""></not>	<not Applicable&gt;</not 	We select "Not relevant" since we don't have produced water that enters our boundaries as a result of the extraction, processing, or use of any raw material. Since we have no plan to get produced/entrained water, no major change is expected in the future.	
Third party sources	Relevant	18291.61	About the same	Since we use third party sources of water for cooling and steam in our production, we select "Relevant". We cannot produce products such as tires without it. This item contains the amount of city & industrial water, steam and wastewater recycled by others. This volume is sourced from direct measurement or invoice information. The volume was increased by 7.3% compared with the previous year. The main reason for this increase was a recovery in production volume, which had declined due to the impact of COVID-19. For the next few years, we expect a slight increase or decrease in water withdrawals due to the fluctuations in production caused by COVID-19 and the decrease in the number of facilities due to business restructuring. (Lower - About the same) Our company-specific explanation for these thresholds is below. Much lower: Less than 49%, Lower: 50% - 85%, About the same: 85% - 115%, Higher: 115% - 150%, Much higher: More than 150%	

# 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	10544.09	About the same	If a site is adjacent to a river, it discharges the wastewater to a river after meeting the wastewater standards. Therefore, "Fresh surface water" is closely related to our business, we select "Relevant". Based on the monthly water discharge data of our facilities, we estimate the volume of water discharges at all our sites and are working to understand that impact. The volume was increased by 4.2% compared with the previous year. The reason for this increase was a recovery in production volume due to the impact of COVID-19. For the next few years, we expect a slight increase decrease in water discharge to "Fresh surface water" due to the fluctuations in production caused by COVID-19 and the decrease in the number facilities due to business restructuring. (Lower - About the same) Our company-specific explanation for these thresholds is below. Much lower: Lee than 49%, Lower: 50% - 85%, About the same: 85% - 115%, Higher: 115% - 150%, Much higher: More than 150%	
Brackish surface water/seawater	Relevant	36613.97	About the same	At the facility that uses seawater for cooling, and used seawater is returned to the sea after meeting the wastewater standards. Therefore, "Brackish surface water/seawater" is closely related to our business, we select "Relevant". The volume of water discharge to seawater is sourced from direct measurement. The volume decreased by 4.5% compared with the previous year. The main reason for this decrease is the decrease in production due to the impact of COVID-19. We have defined 85%-115% of the previous year as "About the same", so we chose "About the same". (See threshold below for details) For the next few years, we expect a slight increase or decrease in water discharge to "Brackish surface water/seawater" due to the fluctuations in production caused by COVID-19. (About the same) Our company-specific explanation for these thresholds is below. Much lower: Less that 49%, Lower: 50% - 85%, About the same: 85% - 115%, Higher: 115% - 150%, Much higher: More than 150%	
Groundwater	Not relevant	<not applicable=""></not>	<not Applicable&gt;</not 	Since we do not send wastewater to groundwater directly, we chose "Not relevant". We will not change this direction in the future.	
Third-party destinations	Relevant	same to our business, we select "Relevant". Based on the monthly water discharge data of our fa measurement meters, we estimate the volume at all our sites. It was increased by 10.7% co production fluctuations at the facilities that discharge the water into third-party destinations, we expect a slight increase or decrease in water discharge to "Third-party destinations" due		When a site is located in the inland, it drains the wastewater to a third-party's treatment facility. Therefore, "Third-party destinations" is closely related to our business, we select "Relevant". Based on the monthly water discharge data of our facilities that monitor the data based on bills or in-house measurement meters, we estimate the volume at all our sites. It was increased by 10.7% compared with the previous year. This is mainly due to the production fluctuations at the facilities that discharge the water into third-party destinations, and not to any particular changes. For the next few years, we expect a slight increase or decrease in water discharge to "Third-party destinations" due to the fluctuations in production caused by COVID-19. (Lower - About the same) Our company-specific explanation for these thresholds is below. Much lower: Less than 49%, Lower: 50% - 85%, About the same: 85% - 115%, Higher: 115%, Much higher: More than 150%	

# W1.2j

## (W1.2j) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

	Relevance of treatment level to discharge	Volume (megaliters/year)		% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Not relevant	<not applicable=""></not>	<not Applicable&gt;</not 	<not applicable=""></not>	In our product manufacturing process, we do not expect substances that cannot be treated in the secondary treatment to be mixed into the discharge, so we select "Not relevant".
Secondary treatment	Relevant	3552.16	About the same	1-10	At facilities that clean and process natural rubber, organic wastewater containing nitrogen and other substances is generated, and the wastewater is subjected to secondary treatment such as aerobic and anaerobic treatment. In addition, secondary treatment is also carried out at facilities located in areas where some strict wastewater quality regulations are applied. We monitor water discharge quality based on applicable regulations (such as pH, BOD, COD, SS, harmful substances, etc.) by continuous real time monitoring or in-house/third-party sampling analysis at all of our facilities (mostly o a monthly basis), based on the standards of the countries and regions where the facilities are located. Our facilities have implemented water effluent standards of their own that meet or tighten applicable government standards, and endeavor not to exceed government-established limits. We have defined 85%-115% of the previous year as "About the same", (see threshold below for details) For the next few years, we expect a slight increase or decrease in "Secondary treatment" due to the fluctuations in in production caused by COVID-19 and the decrease in the number of facilities due to business restructuring. (Lower - About the same) Our company-specific explanation for these thresholds is below. Much lower: Less than 49%, Lower: 50% - 85%, About the same: 85% - 115%, Higher: 115% - 150%, Much higher: More than 150%
Primary treatment only	Relevant	15172.8	About the same	91-99	In general, water at tire facilities and diversified products facilities is mainly used for cooling and steam, so the wastewater is not require secondary treatment. Therefore, in accordance with local wastewater regulations, primary treatment such as oil-water separation and sedimentation is performed. We monitor water discharge quality based on applicable regulations (such as pH, BOD, COD, SS, harmful substances, etc.) by continuous real time monitoring or in-house/third-party sampling analysis at all of our facilities (mostly on a monthly basis), based on the standards of the countries and regions where the facilities are located. Our facilities have implemented water effluent standards of their own that meet or tighten applicable government standards, and endeavor not to exceed government-established limits. We have defined 85%-115% of the previous year as "About the same", so we chose "About the same". (See threshold below for details) For the next few years, we expect a slight increase or decrease in "Primary treatment only" due to the fluctuations in production caused by COVID-19 and the decrease in the number of facilities due to business restructuring. (Lower - About the same) Our company-specific explanation for these thresholds is below. Much lower: Less than 49%, Lower: 50% - 85%, About the same: 85% - 115%, Higher: 115% - 150%, Much higher: More than 150%
Discharge to the natural environment without treatment	Relevant	34574.48	About the same	Less than 1%	At facilities that use seawater for cooling, the possibility of water contamination during the process is extremely low, so the used seawater is returned to the sea without any special treatment, after confirming that it meets wastewater standards set by government for pH, effluent temperature, BOD, COD, SS, Oil, heavy metals, etc. Therefore, we select "Relevant". We have defined 85%-115% of the previous year as "About the same", so we chose "About the same". (See threshold below for details) For the next few years, we expect slight increase or decrease in "Discharge to the natural environment without treatment" due to the fluctuations in production caused by COVID-19. (About the same) Our company-specific explanation for these thresholds is below. Much lower: Less than 49%, Lower: 50% - 85%, About the same: 85% - 115%, Higher: 115% 150%, Much higher: More than 150%
Discharge to a third party without treatment	Not relevant	<not applicable=""></not>	<not Applicable&gt;</not 	<not applicable=""></not>	Even if the water is discharged to a wastewater treatment plant in an industrial park, it is treated to meet the water quality acceptance standards of that plant before being discharged. Therefore, we do not discharge water used in the production process to third parties without treatment, so we select "Not relevant".
Other	Not relevant	<not applicable=""></not>	<not Applicable&gt;</not 	<not applicable=""></not>	We select "Not Relevant" because no special wastewater treatment other than the method shown in the example is used.

# W1.3

# (W1.3) Provide a figure for your organization's total water withdrawal efficiency.

		Total water withdrawal efficiency	Anticipated forward trend
3246057 000000	67976.64		"Total water withdrawal efficiency" is expected to improve over the medium to long term due to the expansion of "Solution Business" that generates high added value, in addition to our efforts to reduce water withdrawals and increase water-use efficiency through our innovations and continuous improvement.

## 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 51-75

## % of total procurement spend

76-100

### Rationale for this coverage

In Feb.2018, we issued the "Global Sustainable Procurement Policy" which is applicable to all purchased materials and services, as well as all suppliers globally. The journey towards a "Sustainable society", Bridgestone's goal for 2050 and beyond as our long-term environmental vision including water viewpoint, will not be simple, nor can we achieve it alone. Each of our businesses is supported by many suppliers. Regardless of the size of the supplier or where they operate in any region, we believe that the efforts of each supplier are important. In particular, since the impact of suppliers with high procurement volume is significant and important, we require suppliers with high procurement volume (corresponding to the "76-100%" option on a procurement amount basis) to report on matters related to water management. In terms of the number of suppliers, this corresponds to the "51%-75%" option. The following incentives for suppliers to respond to assessments using EcoVadis were introduced together with the policy; 1. Receive a score card with strengths/weaknesses that they can use for the next activity, 2. Receive an evaluation of gold, silver and bronze that can appeal to outside, 3. Use the EcoVadis assessment to respond to the same request from other customers.

### Impact of the engagement and measures of success

Through a partnership started in 2018 with EcoVadis, we assessed suppliers' current sustainability practices, as well as the possible support needed to improve performance. This activity could be an opportunity for suppliers to confirm and improve their actions for preventing water-related issues further. Details of the type of information requested from suppliers are "water policy", "water management actions", and "water consumption". Based on that information, we have started to assess the sustainability practices of our suppliers and support them for improvement as needed. Details of how success is measured by the ratio of completion of audit by third-party. As of March 31st, 2022, 62% of the Group's Level 1 and 2 tire material suppliers have completed the third-party assessment with EcoVadis.

Comment

### W1.4b

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

Type of engagement Innovation & collaboration

Details of engagement

Educate suppliers about water stewardship and collaboration

% of suppliers by number 1-25

% of total procurement spend 1-25

### Rationale for the coverage of your engagement

Since our headquarters is located in Japan, we hold a "procurement policy briefing session" every year in Japan, focusing on global and non-global suppliers based in Japan. One of the topics of the briefing session is to tackle environmental issues including water, and we educate our suppliers on the importance of managing water usage and preventing illegal drainage. The ratios are calculated by the following formula. % of suppliers by number = Number of companies procured by Japan Tire SBU / Number of companies procured by all SBUs. % of total procurement spend = Procurement spend by Japan Tire SBU / Procurement spend by all SBUs. \* SBU; Strategic Business Unit

### Impact of the engagement and measures of success

With continuous education every year, our suppliers are becoming more aware of the importance of water. As a result, in our past "Green Partner Awards", which recognizes suppliers' environmental efforts, some supplied for their water saving efforts. And, we have not received any reports of serious water problems from our suppliers. The results of supplier activities lead to reduce water withdrawals and water-related issues, which in turn leads to cost savings. And, it is considered that they bring about a virtuous cycle that leads not only to our company, but also to the improvement of evaluation by a third-party organization (e.g. EcoVadis, CDP Water Security). As a measure of success, we use a response rate on our annual original self-check sheet evaluations. We aim to have all requested suppliers respond.

Comment

### W2. Business impacts

## W2.1

(W2.1) Has your organization experienced any detrimental water-related impacts? No

## 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? Yes, fines, enforcement orders or other penalties but none that are considered as significant

## W2.2a

(W2.2a) Provide the total number and financial value of all water-related fines.

## Row 1

Total number of fines

Total value of fines

6852000

% of total facilities/operations associated 0.7

Number of fines compared to previous reporting year

About the same

Comment

There was one case in the reporting year, compared to zero in the previous reporting year. Our criteria are as follows: we cannot calculate the increase/decrease ratio if the prior year being compared is 0. However, since the difference is between 0 and 1, we chose "About the same". Our company-specific explanation for these thresholds is below. Much lower: Less than 49%, Lower: 50% - 85%, About the same: 85% - 115%, Higher: 115% - 150%, Much higher: More than 150%

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.

### Value chain stage

Direct operations

Coverage Full

### **Risk assessment procedure**

Water risks are assessed as part of an established enterprise risk management framework

### Frequency of assessment Annually

How far into the future are risks considered? More than 6 years

# Type of tools and methods used

Tools on the market Other

Tools and methods used WRI Aqueduct Internal company methods

### Contextual issues considered

Water availability at a basin/catchment level Water quality at a basin/catchment level Stakeholder conflicts concerning water resources at a basin/catchment level Implications of water on your key commodities/raw materials Water regulatory frameworks Status of ecosystems and habitats Access to fully-functioning, safely managed WASH services for all employees

#### Stakeholders considered

Customers Employees Investors Local communities NGOs Regulators Suppliers Water utilities at a local level Other water users at the basin/catchment level

### Comment

We performed macro analysis with the WRI Aqueduct. It is one of the most widely utilized tools in the world to assess water risks and is considered to provide highly reliable results. In addition to the timing of tool updates and the frequency of our site closures and our operations' relocating to new sites, we perform water risk assessments at least annually. We also assess regulatory and regional-level demands on a site-by-site basis as necessary.

## Value chain stage

Supply chain Coverage

Partial

Risk assessment procedure Water risks are assessed in an environmental risk assessment

### Frequency of assessment Annually

How far into the future are risks considered? More than 6 years

Type of tools and methods used Tools on the market Other

## Tools and methods used

EcoVadis WRI Aqueduct Internal company methods

## Contextual issues considered

Water availability at a basin/catchment level

# Stakeholders considered

Suppliers

### Comment

Through a partnership started in 2018 with EcoVadis, a leading provider of sustainability, risk and performance ratings for global supply chains, we conducted assessments to suppliers with current sustainability practices including water, and offered support as needed to improve their performance. This activity could be an opportunity for suppliers to confirm and improve their actions for preventing water-related issues further. We also use the WRI Aqueduct to analyze suppliers' water risks from time to time as needed.

## W3.3b

(W3.3b) 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.

### < Direct operations >

We perform macro analyses with the WRI Aqueduct. We have analyzed the change of water stress (2030 and 2040) in each of the three climate-related scenarios. We conduct water risk assessments at least once a year, and also when the tool updated and when new facilities are considered for installation.

We are targeting all Bridgestone Group production sites. In addition, since we own sites that produce our raw materials (e.g., steel codes), we are also analyzing some of the raw material procurement stage of the value chain. Since water usage at non-manufacturing sites such as offices and dealers is very small, they are not covered.

The severity of risk is decided based on the five-rank risk level derived by WRI Aqueduct. Since the method of dealing with risks differs depending on the local situation, we collect various types of information on water resources (e.g., local water use) under the cooperation of municipalities that are closely communicating on a regular basis.

Based on those information, each SBU (Strategic Business Unit) decides how to manage water-related risks (mitigate, transfer, accept, or control risks) by comprehensively considering how to cope with sustainability for the region and for our business, and report the Global Environment Working Group, the Global Sustainability Committee and the Global EXCO (Executive Committee) as necessary.

### < Supply chain >

Through a partnership started in 2018 with EcoVadis, a leading provider of sustainability, risk and performance ratings for global supply chains, we conducted assessments to our major suppliers with current sustainability practices including water, and offered support as needed to improve their performance. This activity could be an opportunity for suppliers to confirm and improve their actions for preventing water-related issues further. For suppliers located in areas where water risk is expected to be particularly high, we also use the WRI Aqueduct to analyze them individually as necessary. The WRI Aqueduct is one of the most widely utilized tools in the world to assess water risks and is considered to provide highly reliable results.

Based on those information, the procurement department decides how to manage water-related risks (mitigation, transfer, accept, or control risks) by comprehensively considering how to cope with sustainability for our business.

### Contextual issues considered;

In direct operations and the supply chain, it is essential to have sufficient water for use as cooling and steam in the manufacturing process and to ensure sanitary conditions for employees. Maintaining good water quality is also important to ensure that cooling does not affect product quality. Without sustainable water use, product manufacturing and raw material procurement will be delayed, which will affect business continuity and growth. Therefore, it is important to comply with water laws and regulations, care for the local ecosystem, and maintain friendly relationships with stakeholders. Furthermore, a work place where all employees can use safe and secure water is an important basis for them to work with peace of mind.

Based on the above, in conducting the water risk assessment, the following contextual issues are considered; water availability/quality, stakeholder conflicts concerning water resources, implications of water on key commodities/raw materials, water regulatory frameworks, status of ecosystems and habitats, and access to fully-functioning, safely managed WASH services for all employees. In the supply chain, we also consider the water availability at a basin/catchment level for the same reasons.

### Stakeholders considered;

In order to continue business in a stable manner, there must be a stable supply of sufficient quality and quantity of water. Adequate access to safe water is fundamental to the health and safety of employees. Water is a limited resource that should be shared locally, and serious conflicts with other water users in the community over water resources could affect the plant's operations. Failure to comply with water withdrawal and effluent water quality regulations may require production to be halted. There is also a risk that wastewater from the sites could affect downstream ecosystems and fisheries. With increasing interest from customers and investors in our water initiatives, adequate disclosure is an important issue. NGOs are valuable stakeholders who can advise us about our activities regarding water, based on their specialized knowledge.

Based on the above, in conducting the water risk assessment, the following stakeholders are considered; customers, employees, investors, local communities, NGOs, regulators, suppliers, water utilities at a local level, other water users at the basin/catchment level. We also consider suppliers in our supply chain for the same reasons in conducting our risk assessment.

### 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?

### i) A definition of substantive financial or strategic impact is given:

We define substantive financial or strategic impact resulting from water risks as any changes, which cause significant impact on our relationships with stakeholders, operation, financial performance and reputation in real terms. Specific examples of the impacts include plant shutdowns, property damage, supply chain disruptions, increasing operation costs, environmental regulation violations, and environmental accidents.

### ii) The measure(s), metric(s) or indicator(s) used to identify substantive change:

When developing a business continuity plan (BCP) for each business or production site, we comprehensively evaluate a combination of four levels of probability of occurrence (Less than 20%, less than 50%, 50% or more, 80% or more) and five levels of business impact, and finally classify risks into four levels to measure their financial and strategic impact. Furthermore, we use the results of risk analysis by WRI Aqueduct to estimate the impact based on objective, universal data.

### iii) The threshold or amount of change in the metric/measure/indicator which indicates substantive change:

We judge risk based on the following rank classification obtained from the analysis result of Aqueduct. At the highest risk level (Extremely high risk), we consider that there is the potential for substantive financial or strategic impact of water risk.

- Low risk (0-0.99)
- Low to medium risk (1.00-1.99)
- Medium to high risk (2.00-2.99)
- High risk (3.00-3.99)
- Extremely high risk (4.00-5.00)

### iv) Whether the definition applies to direct operations, or supply chain, or both:

This definition is applied to direct operations. We conduct an annual risk analysis for the entire group to identify risks. And, we perform analysis for all production sites using WRI Aqueduct once every year.

For suppliers located in areas where water risk is expected to be particularly high, we also use the WRI Aqueduct to analyze them individually as necessary.

### v) At least one example of substantive impact considered:

According to the latest Aqueduct analysis, there were 11 sites corresponding to "Extremely high risk" in India, Indonesia and China. The sites were evaluated as having a risk of not getting enough water in the quality and quantity needed for its operation. However, all of these sites are relatively small within our Group, with the total water withdrawal volume of the 11 sites only accounting for 2.5% of the Group's total, and it has never been any substantive financial or strategic impacts on its business in the past. Therefore, we recognize that water quality and quantity is important to the success of our business, but we do not believe there is an immediate substantive financial or strategic impact in direct operations at this point.

## 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	Please explain
	reason	
Row	w Risks exist, We judge risk based on the following rank classification obtained from the analysis result of Aqueduct. At the highest risk level (Extremely high risk), we consider that there is a sut	
1	but no	financial or strategic impact of water risk. At the moment, this definition is applied to direct operations. We perform analysis on all production sites using Aqueduct once every year. According to
substantive the latest Aqueduct analysis, there were 11 sites corresponding to "Extremely high risk" in India, Indonesia and China. However, all of these sites are relatively small		the latest Aqueduct analysis, there were 11 sites corresponding to "Extremely high risk" in India, Indonesia and China. However, all of these sites are relatively small within our Group, with the
	impact	total water withdrawal volume of the 11 sites only accounting for 2.5% of the Group's total, and it has never been any substantive financial or strategic impacts on its business in the past.
anticipated Therefore, we recognize that water quality and quantity is important to the success of our business, but we do not believe there is an immediate substantive financial or str		Therefore, we recognize that water quality and quantity is important to the success of our business, but we do not believe there is an immediate substantive financial or strategic impact in direct
		operations at this point.

## 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	Please explain
	reason	
Row	Evaluation	Tires, the main products of our Group, are made up of not only natural and synthetic rubber, but also steel cords, fibers, carbon black, various chemicals, and many other raw materials, so it is
1	in	important to identify and prevent the risk of supply chain disruption due to water-related damage such as floods, tsunamis, and mudflows. Therefore, we have distributed our original "BCP Check
	progress	Sheet" to our raw material suppliers, and required them to respond on a factory-by-factory basis, not as a company. We started this project in 2018 for Tier 1 supplier facilities managed by our
		procurement department in Japan, one of the major production and sales regions of our group. The BCP Check Sheet includes water risk as one of the items, and the questions focus on floods
		and tsunamis, which are considered to be relatively high risks in Japan. Specifically, it asks whether the buildings related to product manufacturing are located in the flood/tsunami hazard map
		inundation area defined by the local government, whether there is a risk of damage due to flood/tsunami even if the buildings are not located in the inundation area, and whether countermeasures
		have been implemented. We analyze the BCP Check Sheets collected from our suppliers and request improvements as necessary for supplier facilities with high water risks. By conducting this
		activity every year, we will be able to visualize the status of our suppliers' water risks and their responses to them, and promote improvements.

### 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.

Type of opportunity Markets

### Primary water-related opportunity Improved community relations

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

i) Why this opportunity is considered strategic for the company: Based on our 2050 vision, "Bridgestone continues to provide social value and customer value as a sustainable solutions company", we aim to co-create social and customer value, which require great levels of trust from our stakeholders including improved community relations. Water is one of the important factors, and maintaining and further improving our good relationships with the local communities in which our sites are located regarding water use is an important strategic opportunity for us to continue our business and grow with local communities. ii) Action to realize the opportunity: As water-related situations and issues differ from community to community, actions to realize opportunities will depend on each site. For example, in the effective use of wastewater, it is possible to take measures such as recycling and cascade using the water used in the process. Each site selects appropriate measures, taking into account relevant materials and communication with local governments and other water users. Depending on local circumstances, we work together with them to help resolve water related issues in addition to our individual efforts. By engaging with other water users in the local community, our business may share in the value created from tackling difficult local water challenges in a collective manner. This is an opportunity to influence how water is used locally and help ensure the sustainability of our business locally in the face of water withdrawal for the entire community. In 2019, Bridgestone Argentina S.A.I.C (BSAR), located in a water series area, started a partnership with a nearby cement manufacturer (Loma Negra) to reduce overall water withdrawal in the Llavallol subtro of Buenos Aires. BSAR recycles wastewater generated from its operations, and provides Loma Negra with approximately 200,000 liters per day of filtered water for industrial use. Although this partnership does not directly lead to the reduction of our water withdrawa

### Estimated timeframe for realization

4 to 6 years

Magnitude of potential financial impact

Are you able to provide a potential financial impact figure? Yes, a single figure estimate

Potential financial impact figure (currency) 2400000

Potential financial impact figure – minimum (currency) <Not Applicable>

Potential financial impact figure – maximum (currency) <Not Applicable>

### **Explanation of financial impact**

The main goal of this BSAR project is to achieve environmental contributions that go beyond our own boundaries by collaborating with stakeholders to review processes and business models. BSAR provides cement manufacturer (Loma Negra) with approximately 14,000 cubic meters of water per year with this project, which will reduce the amount of groundwater withdrawal to zero. The approach used to calculate the figure is expressed by the following formula. (Financial impact) = (Recycled water sales income) - (Recycled water manufacturing cost) + (Reduction of drainage cost) + (Other effects (e.g. PR effect)) BSAR does not exchange money with Loma Negra on this project, and there is no substantial change in drainage costs. Therefore, our "Potential financial impact figure" listed is only an original estimation of the PR effects introduced in many media (ex. newspapers, radio programs, etc.). The financial impact is not great, but in the sense of reducing groundwater withdrawal, we think that it has made a great contribution to the community. This project is also an example for other companies to start thinking in possible synergy projects with nearby companies and lead toward a more sustainable society.

## (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
Scope Company- wide	Content Description of business dependency on water Description of business impact on water Description of water-related performance standards for direct operations Description of water-related standards for procurement Company water targets and goals Commitment to align with public policy initiatives, such as the SDGs Commitments beyond regulatory compliance Commitment to stakeholder awareness and education	Please explain We consider water an essential resource for our operations since water is required for cooling and creating steam in our manufacturing processes as well as cultivating and processing natural rubber, an essential raw material. And, we use water with the understanding that our withdrawal of water deprives others, including the natural environment, of some of their access to water, and that failure to maintain appropriate wastewater quality in accordance with local laws/regulations may affect watershed communities and the natural environment. Our water policy is applied company wide since we need to take actions under the common policy on a global level. In addition, the policy requires suppliers to comply with laws and regulations regarding water, and encourage them to identify their water risks and to manage their water usage in a manner consistent with this Policy. Our policy is composed of 'Our Minduset'. Way 'to achive the water access, which is socially equitable and environmentally sustanble. And, this policy commit to respect the international engagements such as the SDGs and the international standards. We aim to resource our group goals, "Socially Equitable" and "Water Cycle Preservation" of the local water cycle where we operate, which constitutes "Our Mindset". We remain committed to socially equitable water access through cooperation with communities and stakeholders in order to address water challenges. We believe access to clean water is a basic human right. Accordingly, we provide safe water to all employees, contractors and visitors. We make every effort to demonstrate, promote and preserve the water -cycle within our communities by promoting water efficiency; stakeholder engagement and continued complicance with regulations. Our Way consists of "Understand", "Improve Locally" and "Maintain". Understand the local water cycle in cooperation with local communities through auter efficiency is and continuous improvement, - Improve the balance in the local water cycle in cooperation with
	such as the SDGs Commitments beyond regulatory compliance Commitment to water-related innovation	
	awareness and	
	Commitment to safely managed Water, Sanitation and Hygiene (WASH) in the workplace Acknowledgement	
	of the human right to water and sanitation Recognition of environmental linkages, for example, due to	
	Company-	Company- wide Description of business dependency on water Description of business impact on water Description of water-related performance standards for direct operations Description of water-related standards for procurement Company water targets and goals Commitment to align with public policy initiatives, such as the SDGs Commitment to water-related innovation Compliance Commitment to stakeholder awareness and education Commitment to stakeholder awareness and education Commitment to safely managed Water, Sanitation and Hygiene (WASH) in the workplace Acknowledgement of the human right to water and sanitation Recognition of environmental linkages, for

# W6.2

(W6.2) Is there board level oversight of water-related issues within your organization? 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	Please explain
of	
individual	
Chief	The Global CEO is a member of the board, and has the highest-level of responsibility for water-related issues, since the Global CEO is responsible for deciding policies and measures or presenting to
Executive	the board and overseeing company-wide management activities about management vision, mid-term strategies, annual policies, etc. including water-related issues. One of the most recent important
Officer	water-related decisions made was the Milestone 2030, which was announced in 2020. In this milestone, we have set water-related key actions and focused target as follows; < Key actions > - Create
(CEO)	and implement water stewardship plans based on the Water Stewardship Policy (policies related to the responsible use of water) - Continuous improvement of water withdrawal intensity - Improve
	supply chain environmental footprint through the Sustainable Procurement Policy - Enhance activities that contribute to improved biodiversity < Focused target > - Execute water stewardship plan at
	manufacturing facilities in water stress areas by 2030

## 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 Scheduled - 1 some meetings	and performance Reviewing and	At Bridgestone, the Global CEO is the highest-level management position. And the highest-level committee associated with the Bridgestone Group global business execution in the Global Executive Committee (E-EXCO) held quarterly, where the Global CEO is also one of the members. The Global Sustainability Committee that is comprised of executive officers in charge of Sustainability and representatives of Strategic Business Units (SBUs) and functions reports water-related issues to the Global EXCO. The reported contents are approved by Global EXCO as reported by Global EXCO and the Board EXCO and the Board through this governance mechanism enables the board to direct actions to achieve the target and to commit further resource: or support to water-related issues as necessary.

## W6.2d

## (W6.2d) Does your organization have at least one board member with competence on water-related issues?

	Board member(s) have competence on water- related issues	water-related issues	board-level competence on	Explain why your organization does not have at least one board member with competence on water-related issues and any plans to address board-level competence in the future
Row 1		Criteria: Previous experience managing an environmental section in charge of water-related issues or working on water-related issues as a facility manager/business manager.	<not applicable=""></not>	<not applicable=""></not>

# 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 Executive Officer (CEO)

## Responsibility

Assessing future trends in water demand Assessing water-related risks and opportunities Managing water-related risks and opportunities

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

Quarterly

## Please explain

i) Water-related topics that are reported to the board In addition to progress towards water withdrawal reduction target, occasional water challenges and responses are reported. In 2021, the progress of "Milestone 2030" including water-related target and actions were discussed at Global Executive Committee (G-EXCO) and then reported to the Board as summary of discussion results. ii) Water-related responsibilities The Global CEO is the highest-level management position. And the highest-level committee associated with the Bridgestone Group global business execution is the G-EXCO held quarterly, where the CEO is one of the members. The Global Sustainability Committee that is comprised of executive officers in charge of Sustainability and representatives of Strategic Business Units reports water-related issues to the G-EXCO. The CEO has ultimate responsibilities to assess internal/external water-related circumstances/trends, issues and risks, and to determine and manage the water target.

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

## W6.4a

(W6.4a) What incentives are provided to C-suite employees or board members for the management of water-related issues (do not include the names of individuals)?

	Role(s) entitled to incentive	Performance indicator	Please explain
Monetary reward         Chief         Other, please         We believe that awareness among our employees of the importance of freshwater supply and its value to the global community is a security. A healthy environment is the foundation of our ecosystem and our society and the water cycle is a critical component in ac growth and the continued health of our communities. We have introduced the "Performance-Based Stock Compensation for Sustain related to sustainability promotion, including environmental issues (CO2, Circular economy, Water, etc.) for executive officers (inclu		We believe that awareness among our employees of the importance of freshwater supply and its value to the global community is a key indicator in advancing water security. A healthy environment is the foundation of our ecosystem and our society and the water cycle is a critical component in achieving and maintaining long-term growth and the continued health of our communities. We have introduced the "Performance-Based Stock Compensation for Sustainability" to evaluate important efforts related to sustainability promotion, including environmental issues (CO2, Circular economy, Water, etc.) for executive officers (including those who concurrently serve as Member of the Board). Efforts will be evaluated for each business year by the Compensation Committee, and our company's shares will be delivered, and money will be paid according to the evaluation.	
Non- monetary reward	Other, please specify (All employees)	Reduction of water withdrawals Reduction in consumption volumes Improvements in efficiency - direct operations Improvements in waste water quality - direct operations Implementation of employee awareness campaign or training program Supply chain engagement Increased access to workplace WASH Implementation of water- related community project	

## 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? No

## W6.6

(W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report? Yes (you may attach the report - this is optional)

# 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 (years)	Please explain
Long- term business objectives	related issues are	> 30	- Which water issues are integrated: We consider water an essential resource for our operations since it is required for cooling and creating steam in our manufacturing processes as well as cultivating and processing natural rubber, an essential raw material. Therefore, we have developed the "Bridgestone Water Stewardship Policy". It is composed of "Our Mindset" and "Our Way" to achieve the water access, which is socially equitable and environmentally sustainable. We aim to ensure "Socially Equitable" and "Water Cycle Preservation" of the local water cycle where we operate. And, in order to reduce the environmental impacts and operational interruptions caused by water-related issues, we have set the long-term environmental vision for 2050 and beyond, that includes water-related initiatives, and milestone for 2030. Based on them, each Strategic Business Unit (SBU) incorporates measures into its business plan Examples of how are they integrated into the plan: We analyze the water risks at all production facilities using WRI Aqueduct. Based on the result, each SBU decides how to manage water risks by comprehensively considering how to cope with sustainability for the region and for its business, and integrates into its business plan. For example, the Izmit plant in Turkey, located in a water stress area, achieved a 46% reduction of water withdrawal (compared to a 2005 baseline) by taking measures to prevent water leakage and reusing water through advanced treatment.
Strategy for achieving long-term objectives	related issues are integrated	5-10	Water is required for cooling and creating steam in our manufacturing processes as well as cultivating and processing natural rubber, an essential raw material. In order to reduce impact on the environment and operational interruptions due to restricted water withdrawal, we have set "Long-term Vision (for 2050 and beyond)" which aims to be "In balance with nature (Contribution> Footprint)". The water withdrawal reduction is positioned as an important indicator of this vision, and milestones for 10 years are set to promote activities. To achieve the milestone, each Strategic Business Unit (SBU) sets a water withdrawal reduction target for each facility and follows the progress status every month. Since water related issues vary greatly depending on the regions/areas, each SBU decides how to manage water risks by comprehensively considering how to cope with sustainability for the region and for its business, and integrates into its business plan. In order to achieve the milestone, we are promoting various measures such as water leakage survey/measures, utilization of recycled water, and recycling based on the situation at each facility. For example, the Sao Paulo plant launched a joint initiative with the local city designed to promote water recycled mater, and recycling based on the situation at each facility. For example, the Sao Paulo plant launched a joint is witched to recycled water supplied from a wastewater treatment company nearby.
Financial planning	Yes, water- related issues are integrated	5-10	Water is required for cooling and creating steam in our manufacturing processes as well as cultivating and processing natural rubber, an essential raw material. In order to reduce impact on the environment and operational interruptions due to restricted water withdrawal, we have set "Long-term Vision (for 2050 and beyond)". The water withdrawal reduction is positioned as an important indicator of this vision, and milestones for 10 years are set to promote activities. To achieve the milestone of reducing water withdrawals, each Strategic Business Unit has secured a budget for necessary research and capital investment, and is working systematically. In addition, we are systematically investing in research to cultivate Guayule, which grows in arid regions, and to extract/purify rubber components. Since, due to the effects of climate change, there is a possibility that natural rubber- which is the main raw material for tires that is mainly collected from Hevea brasiliensis in tropical regions with high precipitation-, cannot be continuously collected. Through these investments, we are concurrently working to reduce the water related impact and create new business opportunities.

## 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)

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

Water-related OPEX (+/- % change)

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

Please explain

## W7.3

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

	Use of scenario analysis	
Row 1		Bridgestone's mission is "Serving Society with Superior Quality." In line with that mission, we have explored a company-wide BCP that will enable us to earn the trust of stakeholders including our customers and business partners and ensure the safety of our employees. As part of that process, we have endeavored to assess our exposure to water risks and other risks in the interest of preventing a variety of crisis scenarios. We have assessed crisis scenarios that could materialize on a site-by-site basis and are currently engaged in a study of countermeasures. For example, we have carried out the analysis and stress testing using AQUEDUCT. We have analyzed the change of water stress (2030 and 2040) in each of the following three climate-related scenarios, which are included into the result of the AQUEDUCT analysis -Optimistic scenario, BAU scenario, and Pessimistic scenario. Details of the Climate-related scenario analysis conducted in parallel are provided in W7.3a.

W7.3a

# (W7.3a) Provide details of the scenario analysis, what water-related outcomes were identified, and how they have influenced your organization's business strategy.

	Type of scenario analysis used	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
Row 1	Climate- related	We conducted our scenario analysis with business projections as of 2030, the target year of the SDCs. < Analytical choices > We selected 4 degree / 1.5 and/or 2 degree scenarios to clarify climate risks widely on overall aspects (including procurement, manufacturing, logistics etc. not limiting to our product/service). We consider the 1.5 and/or 2 scenarios would be appropriate representatives of contrast viewpoints of "low carbon society" and society where climate change actualizes due to increasing of carbon emission. < Parameters > A scenario analysis was conducted to quantitatively estimate the financial impact of risk based on the following parameters and their future projections, as well as qualitative perspectives. 1) Financial information (Sales, cost, operating profit, capital expenditure etc.) 2) Non-financial information (Carbon price/tax, price of renewable energy, material, water etc.) < Assumption > 1) On the 1.5 and/or 2 degree scenario, we assume that degree scenario so the risks to focus is strong rise of social demand and stricter policy. 2) On the 4 degree scenario, we assume that GHG emission will be kept high due to insufficient climate	will end in financial impacts such as increasing of water procurement costs due to more frequent droughts, and these impacts should be managed properly. We have already incorporated the risks into strategy and started action to mitigate them (e.g. Water withdrawal reduction activity with mid-term, development of alternative materials of natural rubber, etc.). However, under the conditions of 4 degree scenario, it is expected that the operation will be suspended due to flooding, disruption of the supply chain, and water supply restrictions due to drought. In particular, natural rubber, which is	As a measure against floods, BCPs have been formulated at each site and prepared according to the area and building conditions. As a measure against drought, we are promoting efforts to use water efficiently, such as the introduction of a water circulation system. For natural rubber, in particular, we are trying to diversify the production area by trying not only the current mainstream Hevea brasiliensis that is produced in the tropical area but also the plant guayule, which can be cultivated in the arid area. Our group has started field evaluation of the seedlings of superior varieties planted at our plantation in Arizona, USA. By analyzing the results of the field evaluation and combining it with the results of improving
		policy and/or social actions. Therefore, the risks to focus are limited to physical impact caused by high temperature, flood, hurricane, drought etc. 3) On both scenarios, we assume that we won't conduct any particular countermeasures for the climate risks.	the main raw material for tires cultivated mainly in the tropics, is concerned about poor harvest due to abnormal weather such as high temperature and drought.	physical properties by optimizing the process and application development, we aim to commercialize guayule rubber as a tire material in the 2020s.

# 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

We are in the stage of collecting and examining information and examples on the effect and impact of internal price on water, and there is no plan to introduce it at this point within next two years.

## W7.5

## (W7.5) Do you classify any of your current products and/or services as low water impact?

	Products and/or services classified as low water impact		Primary reason for not classifying any of your current products and/or services as low water impact	Please explain
Row 1		The criteria for classification as a products/services with low water impact are those that use less water (water quantity) or have less environmental impact (water quality) during the manufacturing and use stages of the products/services compared to conventional products/services.	<not applicable=""></not>	A specific example of products/services that have low water impact is retread tires. Retread tires reuse the resource of tire casing by replacing the worn tread rubber (areas that come into contact with the road surface). Since only the tread of the tire will be newly made, it is possible to reduce the amount of water used during raw material manufacturing and tire manufacturing compared to making a new tire.

## W8. Targets

# W8.1

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

	targets	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row 1	and goals Business level specific targets and/or	nonitored at the corporate level Goals are monitored at the corporate level	< Approach to setting water-related targets > To realize our "Environmental mission statement", we have issued a "Bridgestone Group's Long-term Environment Vision" for the year 2050 and have set a goal to be in balance with nature for 2050 and beyond. We see "water" as one key element in achieving this goal. Given the fact that water is geographically an unevenly distributed resource and that water-related issues differ from region to region, we have analyzed water stress areas using "Aqueduct" and developed our company-wide 2030 target for the reduction of water withdrawal, "Milestone 2030" in 2020, which focus on water stress areas in particular. "Execute water stewardship plans thaed on Water Stewardship Policy (policies related to the responsible use of water), 2. Continuous improvement (*1) of water withdrawal intensity. *1: Continuous improvement is ongoing efforts to improve environmental performance year by year (such as 1% improvement) thorough PDCA cycle. < Approach to monitoring water-related targets > For facilities located in water stress areas, in environmental function regularly high water stress, targets are as the evelopment of Water Stewardship Plans and supports the development of the mas necessary. For facilities that are judged to have particularly high water stress, targets are set in each Water Stewardship Plan, and the progress of the Plans are continuous improvement at facilities outside of water stress areas at the site/facility level, business level, and company-wide level to help drive further water withdrawal reduction activities. We believe that this goal & target, and efforts towards them will definitely contribute to SDGs' Goal 6, "Ensure availability and sustainable management of water and sanitation for all".

## 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**

Increase freshwater availability for users/natural environment within the basin

## **Description of target**

To realize our "Environmental mission statement", we have issued a "Bridgestone Group's Long-term Environment Vision" for the year 2050 and have set a goal to be in balance with nature for 2050 and beyond. In order to achieve this goal, we developed our company-wide 2030 target for the reduction of water withdrawal, "Milestone 2030" in 2020. In this Milestone 2030, "Execute water stewardship plan at manufacturing facilities in water stress areas by 2030" is positioned as a focused target. Specifically, based on the results of analysis using Aqueduct, each facility that is determined to be located in a water stress area is required to develop its "Water Stewardship Plan" and promote activities to reduce water withdrawal based on this plan. The completion rate of development of the plan is set as one of the company-wide management targets. It can contribute to achieving water security in the area where our sites are located and the realization of Goal 6 of SDGs.

### Quantitative metric

Other, please specify (The completion rate of development of the Water Stewardship Plan (= (Number of sites for which planning has been completed) / (Number of sites located in water stress areas)))

**Baseline year** 

2019

Start year 2020

Target year 2030

% of target achieved 19.2

19.2

### Please explain

In our "Milestone 2030", "Execute water stewardship plan at manufacturing facilities in water stress areas by 2030" is positioned as a company-wide focused target. Each facility that is determined to be located in a water stress area is required to develop its "Water Stewardship Plan" and promote activities to reduce water withdrawal based on this plan. The target achievement rate is calculated using the following formula; (Number of sites for which planning has been completed) / (Number of sites located in water stress areas)

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

### Goa

Watershed remediation and habitat restoration, ecosystem preservation

#### Level

Company-wide

# Motivation

Water stewardship

### **Description of goal**

Natural rubber, one of the main raw materials we use, comes from the blessings of biodiversity, we have identified strong correlations between our business operations and biodiversity. Accordingly, our group has laid out a long-term environmental vision for the year 2050 and has set a target to be in balance with nature for 2050 and beyond. The implication of this target is that the quantitative indicators of our contribution to biodiversity should outweigh the quantitative indicators of our impact on biodiversity. This goal is very important for us as it leads to the preservation of biodiversity and also leads to the stable procurement of natural rubber. Activities in water resource conservation and ecosystem protection by our entire group will be important to the achievement of this goal. To implement the goal, for example, our group is reusing/recycling water at many of its manufacturing sites, including operations in areas where there are serious concerns regarding water shortage. It is also using water resources more efficiently by enhancing the production process and using rainwater. And, Bridgestone Americas, Inc. (BSAM) acquired wildlife habitat conservation and environmental education certification from the Wildlife Habitat Council for its 7 Wildlife Habitat Sites in the United States and Mexico. BSAM conserves the natural flora and fauna at each of these sites and provides environmental education opportunities in line with local conditions.

**Baseline year** 

2019

Start year 2019

## End vear

2022

### Progress

We have implemented actions worldwide to protect water resources and ecosystems. For example, we have been conducting waterside nature observation events from 2005, and we launched a project to preserve water-resource forests in Japan in 2010. Currently, we have conducted forest preservation activities in 9 districts (Total 126.59 ha) and held forest preservation events. These progresses are assessed based on the measurable indicators. For example, % of on-site area managed as habitat compared to on-site area, Number of events/participants focused on environmental conservation/education, etc. We recognize these activities were succeeded when KPI scores of the activities are more than 100% compared to those in previous year. Through efforts of this kind, we are working to expand our quantitative contributions to the achievement of our long-term vision "In balance with nature" for 2050 and beyond. Currently, an international index for quantitative evaluation has not been established, so we are using the rate of facilities participating in "The Bridgestone In Harmony with Nature – Promoting Biodiversity Program" is used as an indicator. Through the program, the Group encourages all manufacturing facilities across the globe to promote activities to conserve biodiversity including water-related issues. The threshold of success is a 100% facility participation by 2022. In 2021, 141 manufacturing facilities participated in this program.

### W9. Verification

## W9.1

(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)? Yes

## W9.1a

### (W9.1a) Which data points within your CDP disclosure have been verified, and which standards were used?

Disclosure	Data verified	Verification	Please explain
module		standard	
W1 Current	Water withdrawal data - Fresh surface water (water from	ISAE 3000	We received the assurance of a third-party institution to ensure transparency, completeness, and accuracy of water withdrawal
state	rivers and lakes); W1.2h Row1 - Brackish surface		results (W1.2h). The verification by the third-party is implemented once a year for all production sites of our group that has
	water/seawater; W1.2h Row2 - Groundwater - renewable;		certificated ISO 14001. We regard water withdrawal, which is the starting point of water related issues as the most important
	W1.2h Row3 - Third party sources; W1.2h Row6		indicator among water related indicators, so we are subjecting it to the third-party verification at the present time.

## W10. 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.

### W10.1

(W10.1) Provide details for the person that has signed off (approved) your CDP water response.

	Job title	Corresponding job category
Row 1	Joint Global COO has signed off our CDP water response.	Chief Operating Officer (COO)

## W10.2

(W10.2) 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)]. No