

**Toyo Tire Corporation** 

# 2024 CDP Corporate Questionnaire 2024

## Word version

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#### Important: this export excludes unanswered questions

This document is an export of your organization's CDP questionnaire response. It contains all data points for questions that are answered or in progress. There may be questions or data points that you have been requested to provide, which are missing from this document because they are currently unanswered. Please note that it is your responsibility to verify that your questionnaire response is complete prior to submission. CDP will not be liable for any failure to do so.

Terms of disclosure for corporate questionnaire 2024 - CDP

# Contents

C1. Introduction	4
(1.1) In which language are you submitting your response?	4
(1.2) Select the currency used for all financial information disclosed throughout your response.	4
(1.3) Provide an overview and introduction to your organization.	4
(1.4) State the end date of the year for which you are reporting data. For emissions data, indicate whether you will be providing emissions data for past reporting years.	4
(1.4.1) What is your organization's annual revenue for the reporting period?	5
(1.5) Provide details on your reporting boundary.	5
(1.6) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?	5
(1.7) Select the countries/areas in which you operate	7
(1.8) Are you able to provide geolocation data for your facilities?	8
(1.8.1) Please provide all available geolocation data for your facilities.	
(1.22) Provide details on the commodities that you produce and/or source	14
(1.24) Has your organization mapped its value chain?	15
(1.24.1) Have you mapped where in your direct operations or elsewhere in your value chain plastics are produced, commercialized, used, and/or disposed of?	16
(1.24.2) Which commodities has your organization mapped in your upstream value chain (i.e., supply chain)?	17

# 

(2.1) How does your organization define short-, medium-, and long-term time horizons in relation to the identification, assessment, and management of your environ	nmental
dependencies, impacts, risks, and opportunities?	18
(2.2) Does your organization have a process for identifying, assessing, and managing environmental dependencies and/or impacts?	19
(2.2.1) Does your organization have a process for identifying, assessing, and managing environmental risks and/or opportunities?	20
(2.2.2) Provide details of your organization's process for identifying, assessing, and managing environmental dependencies, impacts, risks, and/or opportunities	20
(2.2.7) Are the interconnections between environmental dependencies, impacts, risks and/or opportunities assessed?	28
(2.3) Have you identified priority locations across your value chain?	29
(2.4) How does your organization define substantive effects on your organization?	30
(2.5) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or	human
health?	33
(2.5.1) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your ad	ctivities.

C3. Disclosure of risks and opportunities
(3.1) Have you identified any environmental risks which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive
effect on your organization in the future?
(3.1.1) Provide details of the environmental risks identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a
substantive effect on your organization in the future
(3.1.2) Provide the amount and proportion of your financial metrics from the reporting year that are vulnerable to the substantive effects of environmental risks

(3.2) Within each river basin, how many facilities are exposed to substantive effects of water-related risks, and what percentage of your total number of facilities does this
represent?
(3.3) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?
(3.5) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?
(3.5.1) Select the carbon pricing regulation(s) which impact your operations
(3.5.3) Complete the following table for each of the tax systems you are regulated by
(3.5.4) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?
(3.6) Have you identified any environmental opportunities which have had a substantive effect on your organization in the reporting year, or are anticipated to have a
substantive effect on your organization in the future?
(3.6.1) Provide details of the environmental opportunities identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have
a substantive effect on your organization in the future
(3.6.2) Provide the amount and proportion of your financial metrics in the reporting year that are aligned with the substantive effects of environmental opportunities70

C4. Governance	3
(4.1) Does your organization have a board of directors or an equivalent governing body?	73
(4.1.1) Is there board-level oversight of environmental issues within your organization?	74
(4.1.2) Identify the positions (do not include any names) of the individuals or committees on the board with accountability for environmental issues and provide details of the individuals of the indindividuals of the individuals of the individuals of the indiv	
board's oversight of environmental issues	74
(4.2) Does your organization's board have competency on environmental issues?	78
(4.3) Is there management-level responsibility for environmental issues within your organization?	
(4.3.1) Provide the highest senior management-level positions or committees with responsibility for environmental issues (do not include the names of individuals) 8	
(4.5) Do you provide monetary incentives for the management of environmental issues, including the attainment of targets?	
(4.5.1) Provide further details on the monetary incentives provided for the management of environmental issues (do not include the names of individuals)	
(4.6) Does your organization have an environmental policy that addresses environmental issues?	37
(4.6.1) Provide details of your environmental policies	37
(4.10) Are you a signatory or member of any environmental collaborative frameworks or initiatives?	
(4.11) In the reporting year, did your organization engage in activities that could directly or indirectly influence policy, law, or regulation that may (positively or negativel impact the environment?	
(4.11.2) Provide details of your indirect engagement on policy, law, or regulation that may (positively or negatively) impact the environment through trade associations other intermediary organizations or individuals in the reporting year.	or
(4.12) Have you published information about your organization's response to environmental issues for this reporting year in places other than your CDP response?	96

C5. Business strategy	99
(5.1) Does your organization use scenario analysis to identify environmental outcomes?	
(5.1.1) Provide details of the scenarios used in your organization's scenario analysis.	100
(5.1.2) Provide details of the outcomes of your organization's scenario analysis.	104
(5.2) Does your organization's strategy include a climate transition plan?	106

(5.3) Have environmental risks and opportunities affected your strategy and/or financial planning?	
(5.3.1) Describe where and how environmental risks and opportunities have affected your strategy	
(5.3.2) Describe where and how environmental risks and opportunities have affected your financial planning.	
(5.4) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?	113
(5.4.1) Quantify the amount and percentage share of your spending/revenue that is aligned with your organization's climate transition	
(5.9) What is the trend in your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anti-	cipated trend for
the next reporting year?	
(5.10) Does your organization use an internal price on environmental externalities?	
(5.10.1) Provide details of your organization's internal price on carbon.	117
(5.11) Do you engage with your value chain on environmental issues?	
(5.11.1) Does your organization assess and classify suppliers according to their dependencies and/or impacts on the environment?	
(5.11.2) Does your organization prioritize which suppliers to engage with on environmental issues?	
(5.11.5) Do your suppliers have to meet environmental requirements as part of your organization's purchasing process?	124
(5.11.6) Provide details of the environmental requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance of the environmental requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance of the environmental requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance of the environmental requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance of the environmental requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance of the environmental requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance of the environmental requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance of the environmental requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance of the environmental requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance of the environmental requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance of the environmental requiremental environmental environment	nce measures in
place	
(5.11.7) Provide further details of your organization's supplier engagement on environmental issues.	
(5.11.9) Provide details of any environmental engagement activity with other stakeholders in the value chain.	
(5.12) Indicate any mutually beneficial environmental initiatives you could collaborate on with specific CDP Supply Chain members.	
(5.13) Has your organization already implemented any mutually beneficial environmental initiatives due to CDP Supply Chain member engagement?	
(5.13.1) Specify the CDP Supply Chain members that have prompted your implementation of mutually beneficial environmental initiatives and provide inf	
initiatives	
C. Environmental Deufermenes - Ocucalidation Annuasch	400
C6. Environmental Performance - Consolidation Approach	
(6.1) Provide details on your chosen consolidation approach for the calculation of environmental performance data	138
212 Eurther information 9 aign off	4 4 4
C13. Further information & sign off	
(13.1) Indicate if any environmental information included in your CDP response (not already reported in 7.9.1/2/3, 8.9.1/2/3/4, and 9.3.2) is verified and/or a	
party?	
(13.1.1) Which data points within your CDP response are verified and/or assured by a third party, and which standards were used?	
(13.2) 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 op	itional and is not

# **C1. Introduction**

# (1.1) In which language are you submitting your response?

Select from:

✓ English

# (1.2) Select the currency used for all financial information disclosed throughout your response.

Select from:

🗹 JPY

# (1.3) Provide an overview and introduction to your organization.

# (1.3.2) Organization type

Select from:

Publicly traded organization

# (1.3.3) Description of organization

Sales: 552,825 million yen Operating Profit: 76,899 million yen Capital: 55,935 million yen Main Business Segments Tire Business: The company's main business, which accounts for approximately 90% of its sales, involves the manufacturing and sales of tires for passenger cars, as well as large vehicles such as SUVs, CUVs, and pickup trucks. Additionally, the company produces and sells tires for trucks, buses, and construction vehicles. Automotive Parts Business: The company also produces automotive rubber products. Business Description As the primary business accounting for about 90% of total sales, the company manufactures and sells tires for various vehicles, including passenger cars and large vehicles such as SUVs, CUVs, and pickup trucks. The company also produces tires for trucks, buses, and construction vehicles. In late 2017, the company transferred its chemical products and rigid urethane businesses. Subsequently, in 2019, the company changed its name to include the word "TIRE," reflecting its commitment to tire production and specialization in the mobility sector. In 2022, the company announced a basic policy focused on sustainability management, setting medium- and long-term CO2 emission reduction targets aimed at achieving carbon neutrality. [Fixed row]

# (1.4) State the end date of the year for which you are reporting data. For emissions data, indicate whether you will be providing emissions data for past reporting years.

End date of reporting year	Alignment of this reporting period with your financial reporting period	Indicate if you are providing emissions data for past reporting years
12/30/2023	Select from: ✓ Yes	Select from: ✓ No

[Fixed row]

# (1.4.1) What is your organization's annual revenue for the reporting period?

552825000000

# (1.5) Provide details on your reporting boundary.

Is your reporting boundary for your CDP disclosure the same as that used in your financial statements?
Select from: ✓ Yes

[Fixed row]

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

**ISIN code - bond** 

# (1.6.1) Does your organization use this unique identifier?

Select from:

🗹 Yes

# (1.6.2) Provide your unique identifier

JP361060BP92

## **ISIN code - equity**

# (1.6.1) Does your organization use this unique identifier?

Select from:

🗹 Yes

(1.6.2) Provide your unique identifier

JP3610600003

## **CUSIP number**

(1.6.1) Does your organization use this unique identifier?

Select from:

🗹 No

# **Ticker symbol**

(1.6.1) Does your organization use this unique identifier?

Select from:

🗹 No

# SEDOL code

(1.6.1) Does your organization use this unique identifier?

Select from:

🗹 No

# LEI number

# (1.6.1) Does your organization use this unique identifier?

Select from:

🗹 Yes

# (1.6.2) Provide your unique identifier

529900Y41RD7VQM9RF75

## **D-U-N-S number**

(1.6.1) Does your organization use this unique identifier?

Select from:

🗹 Yes

# (1.6.2) Provide your unique identifier

690557053

# Other unique identifier

(1.6.1) Does your organization use this unique identifier?

Select from: ✓ No

[Add row]

# (1.7) Select the countries/areas in which you operate.

Select all that apply

China

✓ United States of America

- 🗹 Japan
- ✓ Serbia
- ✓ Malaysia
- 🗹 Thailand

# (1.8) Are you able to provide geolocation data for your facilities?

Are you able to provide geolocation data for your facilities?	Comment
Select from: ✓ Yes, for some facilities	We can provide for 11 manufacturing bases

[Fixed row]

# (1.8.1) Please provide all available geolocation data for your facilities.

# Row 1

# (1.8.1.1) Identifier *TTM* (1.8.1.2) Latitude

4.85

# (1.8.1.3) Longitude

100.74

(1.8.1.4) Comment

# Row 2

(1.8.1.1) Identifier
TAP
(1.8.1.2) Latitude
36.71
(1.8.1.3) Longitude
-86.52
(1.8.1.4) Comment
Toyo Automotive Parts (USA), Inc.
Row 3
(1.8.1.1) Identifier
TNA

(1.8.1.2) Latitude

34.29

(1.8.1.3) Longitude

-84.73

(1.8.1.4) Comment

Toyo Tire North America Manufacturing Inc.

(1.8.1.1) Identifier
TTZ
(1.8.1.2) Latitude
31.97
(1.8.1.3) Longitude
120.47
(1.8.1.4) Comment
TOYO TIRE ZHANGJIAGANG CO.,LTD.
Row 5
(1.8.1.1) Identifier
(1.8.1.1) Identifier
(1.8.1.1) Identifier
(1.8.1.1) Identifier TCT (1.8.1.2) Latitude
(1.8.1.1) Identifier TCT (1.8.1.2) Latitude 13.43

#### TOYO RUBBER CHEMICAL PRODUCTS (THAILAND) LIMITED

a.1.1) Identifier
2.1.2) Latitude
2
a.1.3) Longitude
22
a.1.4) Comment
e Toyo Rubber Co., Ltd.
17
2.1.1) Identifier
2.1.2) Latitude
4
a.1.3) Longitude
91
S.1.4) Comment

#### Hyogo Plant

.8.1.1) Identifier
Z
.8.1.2) Latitude
.08
.8.1.3) Longitude
8.48
.8.1.4) Comment
YO TIRE (ZHUCHENG) CO., LTD.
9 W 9
.8.1.1) Identifier
.8.1.2) Latitude
.8.1.2) Latitude .09
.09

#### Sendai plant

.8.1.1) Identifier
$\mathcal{N}$
.8.1.2) Latitude
5.05
.8.1.3) Longitude
36.59
.8.1.4) Comment
uwana plant
ow 11
.8.1.1) Identifier
AG
.8.1.2) Latitude
3.21
.8.1.3) Longitude
3.57
.8.1.4) Comment

TOYO AUTOMOTIVE PARTS (GUANGZHOU) CO.,LTD. [Add row]

## (1.22) Provide details on the commodities that you produce and/or source.

### Rubber

# (1.22.1) Produced and/or sourced

Select from:

✓ Sourced

## (1.22.2) Commodity value chain stage

Select all that apply

Manufacturing

# (1.22.4) Indicate if you are providing the total commodity volume that is produced and/or sourced

Select from:

 $\blacksquare$  No, the total volume is confidential

# (1.22.11) Form of commodity

Select all that apply

✓ Other, please specify :Natural Rubber

# (1.22.12) % of procurement spend

Select from:

✓ Not applicable

(1.22.13) % of revenue dependent on commodity

#### Select from: ✓ 91-99%

## (1.22.14) In the questionnaire setup did you indicate that you are disclosing on this commodity?

Select from: ✓ No, not disclosing [Fixed row]

# (1.24) Has your organization mapped its value chain?

## (1.24.1) Value chain mapped

Select from:

☑ Yes, we have mapped or are currently in the process of mapping our value chain

## (1.24.2) Value chain stages covered in mapping

Select all that apply

☑ Upstream value chain

# (1.24.3) Highest supplier tier mapped

Select from:

✓ Tier 1 suppliers

# (1.24.4) Highest supplier tier known but not mapped

Select from:

✓ Tier 2 suppliers

# (1.24.6) Smallholder inclusion in mapping

Select from:

## (1.24.7) Description of mapping process and coverage

Reference: "Sustainable Natural Rubber Procurement Policy" (published on our website) As part of our Group's important initiatives to ensure sustainability in natural rubber procurement, we conduct supplier chain mapping for natural rubber, assess social and environmental risks, and have established a framework to implement risk mitigation activities effectively. Specifically, we follow the processes and scope outlined below. 1. Scope of Mapping The entire supply chain of our company is subject to mapping, with a particular focus on natural rubber suppliers. We evaluate whether there are any social and environmental risks in the production processes of the natural rubber supplied by these suppliers, and we identify and implement countermeasures against these risks. 2.Ensuring Traceability, we have set up a system to confirm or control that the raw materials are produced sustainably. 3.Supplier Notification and Contract Reflection We notify all natural rubber suppliers that priority is given to raw materials produced in accordance with GPSNR policy components. A deadline is set to meet the policy requirements, and we ensure that the supplier's terms and contracts reflect these requirements. 4.Risk Response and Improvement Activities If a supplier does not comply with the GPSNR policy components, we work promptly to assess the situation and cooperate in formulating a time-bound corrective action plan to address past or ongoing damages, aiming for rectification. Through these efforts, our company aims to achieve sustainable hatural rubber procurement and minimize risks across the entire value chain. \*GPSNR (Global Platform for Sustainable Natural Rubber) is a platform established by the World Business Council for Sustainable Development's Tire Industry Project and the Sustainable Natural Rubber) is a platform established by the World Business Council for Sustainable Principles for sustainable natural rubber. [Fixed row]

# (1.24.1) Have you mapped where in your direct operations or elsewhere in your value chain plastics are produced, commercialized, used, and/or disposed of?

# (1.24.1.1) Plastics mapping

Select from:

 $\checkmark$  No, but we plan to within the next two years

## (1.24.1.5) Primary reason for not mapping plastics in your value chain

Select from:

✓ Not an immediate strategic priority

## (1.24.1.6) Explain why your organization has not mapped plastics in your value chain

We prioritize traceability and addressing ESG issues in the natural rubber supply chain, which is a key material for our business. Similarly, we recognize that potential

issues such as child labor, waste management, environmental degradation, and biodiversity loss may exist in the plastic supply chain. We are aware of these challenges and plan to explore how to address them in the future. [Fixed row]

# (1.24.2) Which commodities has your organization mapped in your upstream value chain (i.e., supply chain)?

## Rubber

# (1.24.2.1) Value chain mapped for this sourced commodity

Select from:

✓ Yes

# (1.24.2.2) Highest supplier tier mapped for this sourced commodity

Select from:

✓ Tier 1 suppliers

# (1.24.2.3) % of tier 1 suppliers mapped

Select from:

**☑** 100%

# (1.24.2.7) Highest supplier tier known but not mapped for this sourced commodity

Select from:

✓ Tier 2 suppliers [Fixed row]

C2. Identification, assessment, and management of dependencies, impacts, risks, and opportunities

(2.1) How does your organization define short-, medium-, and long-term time horizons in relation to the identification, assessment, and management of your environmental dependencies, impacts, risks, and opportunities?

Short-term

(2.1.1) From (years)	
0	
(2.1.3) To (years)	
5	

## (2.1.4) How this time horizon is linked to strategic and/or financial planning

The time horizon required to address current problems and concerns.

# Medium-term

(2.1.1) From (years)

6

# (2.1.3) To (years)

10

# (2.1.4) How this time horizon is linked to strategic and/or financial planning

The time horizon allocated to matters to be addressed through the formulation of medium-term plans.

# Long-term

# (2.1.1) From (years)

11

# (2.1.2) Is your long-term time horizon open ended?

Select from:

🗹 No

(2.1.3) To (years)

30

# (2.1.4) How this time horizon is linked to strategic and/or financial planning

The time horizon to address projects for which solutions are difficult or which cannot be materialized in the medium-term due to technical considerations. [Fixed row]

# (2.2) Does your organization have a process for identifying, assessing, and managing environmental dependencies and/or impacts?

Process in place	Dependencies and/or impacts evaluated in this process
Select from: ✓ Yes	Select from: Both dependencies and impacts

[Fixed row]

(2.2.1) Does your organization have a process for identifying, assessing, and managing environmental risks and/or opportunities?

Process in hiace	Risks and/or opportunities evaluated in this process	Is this process informed by the dependencies and/or impacts process?
Select from: ✓ Yes	Select from: <ul> <li>Both risks and opportunities</li> </ul>	Select from: ✓ Yes

[Fixed row]

(2.2.2) Provide details of your organization's process for identifying, assessing, and managing environmental dependencies, impacts, risks, and/or opportunities.

Row 1

# (2.2.2.1) Environmental issue

Select all that apply

✓ Water

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

- ✓ Dependencies
- Impacts
- ✓ Risks
- ✓ Opportunities

# (2.2.2.3) Value chain stages covered

Select all that apply

- ✓ Direct operations
- ☑ Upstream value chain
- ☑ Downstream value chain

# (2.2.2.4) Coverage

Select from:

Partial

# (2.2.2.5) Supplier tiers covered

Select all that apply

✓ Tier 1 suppliers

# (2.2.2.7) Type of assessment

Select from:

✓ Qualitative and quantitative

# (2.2.2.8) Frequency of assessment

Select from:

✓ Every three years or more

# (2.2.2.9) Time horizons covered

Select all that apply

✓ Short-term

✓ Medium-term

# (2.2.2.10) Integration of risk management process

#### Select from:

☑ A specific environmental risk management process

## (2.2.2.11) Location-specificity used

Select all that apply

✓ Site-specific

🗹 Local

✓ National

# (2.2.2.12) Tools and methods used

#### Commercially/publicly available tools

✓ WRI Aqueduct

#### International methodologies and standards

☑ IPCC Climate Change Projections

#### Databases

✓ Nation-specific databases, tools, or standards

Regional government databases

#### Other

✓ Scenario analysis

# (2.2.2.13) Risk types and criteria considered

#### Acute physical

- ✓ Drought
- ✓ Flood (coastal, fluvial, pluvial, ground water)
- ✓ Heat waves
- ✓ Heavy precipitation (rain, hail, snow/ice)

#### **Chronic physical**

- ✓ Increased severity of extreme weather events
- ✓ Sea level rise

### Policy

- ✓ Changes to national legislation
- ☑ Other policy, please specify :Carbon pricing mechanism

### Market

- ☑ Availability and/or increased cost of raw materials
- ✓ Changing customer behavior
- ☑ Other market, please specify :Customer's transition to low-emission products

#### Reputation

Other reputation, please specify : Poor reputation in the automotive industry has led to a deterioration in fundraising, sales and recruitment.

#### Liability

✓ Exposure to litigation

# (2.2.2.14) Partners and stakeholders considered

Select all that apply

- ✓ Customers
- Employees
- Regulators
- ✓ Water utilities at a local level

(2.2.2.15) Has this process changed since the previous reporting year?

Select from:

🗹 No

# (2.2.2.16) Further details of process

We evaluate risks and opportunities based on the principles of scenario analysis within the framework of TCFD disclosures. We identify physical risk-prone sites by confirming the water stress level and evaluating the water risks of each region based on the water availability of the water basins and catchment areas near sites in Japan and overseas according to the Aqueduct Water Risk Data. (1) Selecting the target sites - We evaluated the flood damage risks of our manufacturing sites as of April 2023 using Agueduct 3.0. Among sites with a high or medium-high coastal flood risk, we selected the Sendai Plant and Kuwana Plant, which exhibit outstandingly large manufacturing capacity, as high-risk sites. (2) Calculating the current estimated damage - Using the flood-related risk estimation tool provided by the Japan Institute of Country-ology and Engineering, we calculated the current asset values of target sites and the estimated damage to their annual sales (based on the projected scale and estimated maximum scale). - Occurrence probability of the projected scale is assumed to be once every 100 years\*, and once every 1,000 years for the estimated maximum scale. - For the flood depths of the projected scale and estimated maximum scale, we used the values obtained by searching the address of the target sites in the location-specific flood simulation search system of the Geospatial Information Authority of Japan. - We calculated the expected value by multiplying the estimated damages of the projected scale and estimated maximum scale with their respective return period and adding them together. We set this value as the current estimated damage. In calculating the expected value, we implemented a minimum pattern that only uses two points (projected scale and estimated maximum scale), an intermediate pattern that calculates the expected value by estimating the scale of damage based on the probability of occurrence calculated in increments of 1/100 from its linear approximation formula, and a maximum pattern that calculates the same using a logarithmic approximation formula. \*Since it does not exactly represent the probability of occurrence, but rather the probability of annual exceedance (the probability of a flood of a magnitude greater than such flood), it is calculated by multiplying the difference in the return period. (3) Calculating the estimated damage from a rise in 2C and 4C - We calculated the estimated damage of a temperature rise of 2C and 4C based on the future flood frequency factor. - We assume that the occurrence frequency will increase by twofold and fourfold for 2C and 4C scenarios, respectively, and therefore, the return periods of the projected scale and estimated maximum scale will shrink to 1/2 and 1/4, respectively. - Similar to (2), we calculated the expected value by multiplying the estimated damage for 2C and 4C scenarios by their respective return periods and adding them together. We set this value as the estimated damage of a temperature rise of 2C and 4C. This calculation method results in the flood frequency factor becoming proportional to the flood damage amount. (4) We set the difference in (2) and (3) as the increase in the estimated damage amount (increase in risk) of a temperature rise of 2C and 4C. From now on, we plan to develop our business plans while considering the water usability of nearby water basins and catchment areas, even for areas to be newly developed through business expansion.

#### Row 3

## (2.2.2.1) Environmental issue

Select all that apply

✓ Climate change

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

✓ Dependencies

#### ✓ Impacts

✓ Risks

✓ Opportunities

# (2.2.2.3) Value chain stages covered

Select all that apply

- ✓ Direct operations
- ☑ Upstream value chain
- ✓ Downstream value chain

# (2.2.2.4) Coverage

#### Select from:

✓ Partial

(2.2.2.5) Supplier tiers covered

Select all that apply

✓ Tier 1 suppliers

# (2.2.2.7) Type of assessment

Select from:

✓ Qualitative and quantitative

# (2.2.2.8) Frequency of assessment

Select from:

✓ Annually

# (2.2.2.9) Time horizons covered

Select all that apply

#### ✓ Medium-term

✓ Long-term

# (2.2.2.10) Integration of risk management process

Select from:

☑ A specific environmental risk management process

## (2.2.2.11) Location-specificity used

Select all that apply

✓ Site-specific

🗹 Local

✓ National

### (2.2.2.12) Tools and methods used

#### International methodologies and standards

✓ IPCC Climate Change Projections

#### Databases

✓ Nation-specific databases, tools, or standards

Regional government databases

#### Other

External consultants

✓ Scenario analysis

# (2.2.2.13) Risk types and criteria considered

#### Acute physical

✓ Heat waves

✓ Heavy precipitation (rain, hail, snow/ice)

#### **Chronic physical**

✓ Increased severity of extreme weather events

✓ Sea level rise

#### Policy

✓ Carbon pricing mechanisms

✓ Changes to national legislation

#### Market

- ✓ Availability and/or increased cost of raw materials
- ✓ Changing customer behavior

#### Reputation

Other reputation, please specify :Deterioration in fundraising, sales volumes, and recruitment due to deteriorating reputation in the automotive industry

#### Technology

✓ Transition to lower emissions technology and products

#### Liability

Exposure to litigation

# (2.2.2.14) Partners and stakeholders considered

Select all that apply

✓ Customers

- Employees
- ✓ Investors
- ✓ Suppliers
- ✓ Regulators

(2.2.2.15) Has this process changed since the previous reporting year?

✓ Local communities

### (2.2.2.16) Further details of process

We identify, evaluate, and manage environmental dependencies, impacts, risks, and opportunities according to the TCFD principles of governance, strategy, risk management, and metrics and targets. Regarding governance, our Sustainability Committee, chaired by the President and meeting four times a year, reports, deliberates, and approves measures for sustainability issues, including climate matters. In July 2021, we also established the Decarbonization Task Force, led by the Chief Quality, Environment, and Safety Officer, which manages CO2 reduction plans, targets, and KPIs. The progress of these initiatives is periodically confirmed and monitored by the Sustainability Committee. Climate-related matters approved by the Sustainability Committee are reflected in our annual and medium-term business plans and reported to the Board of Directors. We assess the impacts of climate change on our business activities through three processes: (1) selecting scenarios, (2) identifying risks and opportunities, and (3) evaluating their significance. In the 3-4C scenario, we evaluate physical risks, such as natural disasters, classifying them into chronic and acute risks, and estimate their qualitative and quantitative impacts. In the 1.5C transition scenario, we focus on risks like carbon taxing, renewable energy technology, and EV adoption, grouped into policy, technology, market, and reputation risks. For both scenarios, we analyze risks and opportunities using frameworks such as the IEA Stated Policies Scenario, IPCC SSP5-8.5, IEA Sustainable Development Scenario, and IPCC SSP1-2.6. To manage these risks, the Business Administration Headquarters, ESG Promotion Office, and Environmental Health Promotion Department collaborate on identifying and evaluating climate risks. The Decarbonization Task Force monitors global GHG reduction targets, fuel economy regulations, and bans on new gasoline-powered vehicles, ensuring that responsible departments respond to emerging risks. For metrics and targets, we define Scope 1, 2, and 3 emissions targets, with monthly progress reviews and quarterly reporting to the Sustainability Committee. This year, we introduced an internal carbon pricing system to strengthen our approach. We will continue refining scenario analysis to understand the quantitative impacts of risks and opportunities, enabling the development of optimal countermeasures. Through these processes, we ensure a comprehensive approach to identifying, evaluating, and managing environmental dependencies, impacts, risks, and opportunities. [Add row]

## (2.2.7) Are the interconnections between environmental dependencies, impacts, risks and/or opportunities assessed?

## (2.2.7.1) Interconnections between environmental dependencies, impacts, risks and/or opportunities assessed

Select from:

✓ Yes

# (2.2.7.2) Description of how interconnections are assessed

We anticipate a cost increase (approximately 0.5 to 5.7 billion yen per year) due to the introduction of carbon pricing, identified as a transition risk in the scenario analysis, and have already implemented decarbonization and internal carbon pricing as countermeasures. We expect opportunities for sales growth in decarbonized product markets and increased demand for EV tires and recognize that the risks and their countermeasures are organically linked (interrelated) to these opportunities. We also recognize physical risks such as changes in the regions suitable for natural rubber cultivation due to major floods and other climate-related factors, and rising

raw material prices and deteriorating road surfaces due to material degradation. As countermeasures, we expect to create the advantage of securing raw materials by promoting R&D related to alternative raw materials and durability, and increase sales through the expanded needs of highly durable tires, related products. We will continue to constantly study the interrelationships between risks and opportunities, and develop and implement optimal strategies for each moment. [Fixed row]

# (2.3) Have you identified priority locations across your value chain?

## (2.3.1) Identification of priority locations

Select from:

✓ Yes, we have identified priority locations

## (2.3.2) Value chain stages where priority locations have been identified

Select all that apply

✓ Direct operations

## (2.3.3) Types of priority locations identified

#### **Sensitive locations**

☑ Areas of limited water availability, flooding, and/or poor quality of water

# (2.3.4) Description of process to identify priority locations

With WRI Aqueduct, we conduct various water-related risk assessments (material water risk, seasonal variation, flood occurrence, drought severity, etc.) for our sites worldwide. In addition, using data from municipal databases, we assess the current status of water risk based on information such as drought, water prices, and water quality limits for wastewater. As an internal methodology, we conduct a regional water risk assessment (flooding, water shortage, water price, etc.) for each domestic and international site. In addition, we use the Ramsar Site Information Service and the UNESCO World Heritage Database to assess the importance of the area as an ecosystem and habitat for flora and fauna. Although we do not currently extend water risk assessments to the supply chain, TOYO TIRE also operates globally and expects to increase its operations in areas with high water risk, and we recognize that this is a management issue that should be addressed throughout the supply chain.

## (2.3.5) Will you be disclosing a list/spatial map of priority locations?

Select from:

☑ No, we have a list/geospatial map of priority locations, but we will not be disclosing it [Fixed row]

# (2.4) How does your organization define substantive effects on your organization?

# Risks

# (2.4.1) Type of definition

Select all that apply

✓ Qualitative

✓ Quantitative

## (2.4.2) Indicator used to define substantive effect

Select from:

☑ Direct operating costs

# (2.4.3) Change to indicator

Select from:

✓ Absolute increase

# (2.4.5) Absolute increase/ decrease figure

520000000

# (2.4.6) Metrics considered in definition

Select all that apply

✓ Frequency of effect occurring

✓ Time horizon over which the effect occurs

## (2.4.7) Application of definition

In the IPCC Fifth Assessment Report, it was indicated that flood frequency could quadruple if temperatures increase by 4C (double at 2C). In addition, the IPCC Sixth Assessment Report additionally reports that the risk of flooding will increase in monsoon regions of South, Southeast, and East Asia, and that sea levels will continue to rise in all scenarios. Similar results have also been reported by NASA's research. Based on these circumstances, we calculated the financial impact by presuming a certainty of occurrence (assumed to occur once) of soaring natural rubber prices due to flood damages in 2030. To that end, we calculated the estimated damage amount in terms of several patterns based on the damages we incurred (soaring procurement cost) during a major flood in Thailand in 2017, unit price difference in the futures market, etc. as reference values. In summary, we calculated several patterns by applying (i.e., defining) the premise of an occurrence frequency of once a year, time frame of 2030, and certainty of occurrence, and by changing the variation in the unit cost of damage. For its financial impact, we calculated the minimum and maximum patterns, and set their average value as the intermediate pattern. We calculated the impact amount by multiplying our projected procurement volume (kg) for 2030 by the projected rise in unit price (yen/kg). We projected the minimum and maximum patterns by configuring the variation in the winter model of from 2017 to 2022) to the period up to 2030, and established the minimum and maximum patterns by dividing by 12 months the rise in unit price (average increase of 50 yen/kg during that month) of the RSS3 futures during the month in which a major flood occurred in Thailand in 2017. We assumed the maximum based on the actual increase in our natural rubber procurement amount in 2017 (annual average: 56 yen/kg). Minimum: 174,000 tons x 4 yen Approx. 0.7 billion yen. Maximum: 174,000 tons x 56 yen Approx. 9.7 billion yen. Intermediate: (7 97)/2 Approx. 5.2 billion yen.

## **Opportunities**

# (2.4.1) Type of definition

Select all that apply

✓ Qualitative

✓ Quantitative

### (2.4.2) Indicator used to define substantive effect

Select from:

✓ Revenue

# (2.4.3) Change to indicator

Select from:

Absolute increase

## (2.4.5) Absolute increase/ decrease figure

#### 68800000000

#### (2.4.6) Metrics considered in definition

Select all that apply

- Frequency of effect occurring
- ✓ Time horizon over which the effect occurs
- ✓ Likelihood of effect occurring

## (2.4.7) Application of definition

We expect EV tire sales to increase in 2030. We estimated the increase in EV tire sales using the EV share (12%) of all vehicles sold in 2030 predicted by the IEA. We classified the estimated tire sales for 2030 into OE (original equipment, for new vehicles) and RE (replacement tires, for retrofits), and multiplied them by their respective market share to calculate the estimates. We assumed that all OE tires will be for EVs and the RE share is equivalent to the market share. Sales figures were calculated by applying the CAGR of our sales from 2018 to 2022 to 2030. We consider that the occurrence frequency, time frame, and probabilities are already encompassed in the indicators used. However, we recognize the potential risk of reduced demand in certain sectors due to the rising share of EVs. OE tires for EVs Approx. 34 billion x 12% 64.8 billion yen Total: 34 64.8 98.8 billion yen OE tires for EVs Approx. 34 billion x 12% 64.8 billion yen Total: 4 64.8 68.8 billion yen OE tires for EVs Approx. 34 billion x 6% 2 billion x 6% 2 billion yen RE tires for EVs Approx. 540 billion yen

### Risks

# (2.4.1) Type of definition

Select all that apply

🗹 Qualitative

✓ Quantitative

## (2.4.2) Indicator used to define substantive effect

Select from:

✓ Direct operating costs

# (2.4.3) Change to indicator

Select from:

Absolute increase

## (2.4.5) Absolute increase/ decrease figure

490000000

# (2.4.6) Metrics considered in definition

Select all that apply

- ✓ Frequency of effect occurring
- ✓ Time horizon over which the effect occurs
- ✓ Likelihood of effect occurring

# (2.4.7) Application of definition

As a transition risk of the 1.5C scenario, we expect to pay carbon taxes due to the introduction of carbon pricing, and have calculated its financial impact. We used a carbon tax unit price of 130 dollars, which is what is predicted for developed countries in 2030 based on the net-zero scenario presented by the IEA. We calculated three patterns (minimum, intermediate, maximum) for the CO2 emissions liable for carbon tax and used the numerical result (4.9 billion yen) of the intermediate pattern in the response. The minimum pattern (0.5 billion yen) is based on the carbon taxing of the insufficient portion in case there is an insufficiency of 10% in achieving the 2030 CO2 reduction target. The intermediate pattern (4.9 billion yen) is based on the scenario that the increase in CO2 emission from business growth can be decarbonized, but any insufficiency in achieving the target reduction amount will be subject to taxation. The maximum pattern (5.7 billion yen) is based on achieving the target reduction amount, but the CO2 emissions becoming taxed. The exchange rate of 138 yen/dollar at the time of calculation was applied. Our understanding is that the IEA publishes figures that are scientifically calculated based on the occurrence frequency, time frame, and probabilities, and we believe that they already incorporate (include) these perspectives.

(2.5) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or human health?

#### ☑ Yes, we identify and classify our potential water pollutants

## (2.5.2) How potential water pollutants are identified and classified

(1) Policies and processes. Domestically, we measure water quality every month based on the substances specified by the Water Pollution Prevention Act, etc. and check that it satisfies such standards. Overseas, we use various water quality meters once a month to measure and manage the PH levels, other relevant metrics of wastewater discharged from manufacturing sites to ensure that wastewater standards are met to comply with the environmental laws and regulations in each country and region. For sites with mandatory measurement requirements, we request external specialists to measure the total nitrogen and phosphorus concentrations. (2) Other initiatives. At sites with boiler equipment and product cooling equipment, wastewater temperatures are measured once daily. We also withdraw and discharge water according to our targets, promote company-wide water reduction initiatives such as improving equipment to recycle water used in various processes as much as possible, and use recycled water for boiler equipment, cooling towers, product cooling equipment, etc. (3) Measurement standards and metrics (For Kuwana Plant). - Managed metrics: Concentrations of pH, BOD, COD, SS, n-Hex (minerals), nitrogen, phosphorus, fluorine, bacterial count, nitrate nitrogen and nitrite nitrogen, ammonia nitrogen, ammonia, etc. - Standards: Ordinance/regulation values, and regulation values of pollution prevention agreements with municipalities (Ex.) pH 6.0–8.0, BOD 8, SC 10 [Fixed row]

(2.5.1) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities.

Row 1

# (2.5.1.1) Water pollutant category

Select from:

✓ Inorganic pollutants

## (2.5.1.2) Description of water pollutant and potential impacts

We control items regulated by the Water Pollution Control Law. Inorganic pollutants such as sodium hypochlorite affect fish.

# (2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

# (2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

# (2.5.1.5) Please explain

We strictly manage inorganic pollutants based on the Water Pollution Prevention Act. Confirmation method - Every month, we collect wastewater samples and measure their water quality. Depending on the substance, testing may be outsourced to a specialized company. Evaluation - We evaluate whether the values are within the standards set by the Water Pollution Prevention Act and ordinances. (We aim to eliminate outliers). Risk Avoidance Mechanisms • The primary and secondary oil separation tanks are equipped with devices that automatically measure the residual chlorine concentration and pH values, and the wastewater automatically stops when the measured values exceed the threshold values. • Threshold value of pH: An alarm sounds when the pH value is below 6.0 or above 8.4, and the system automatically stops. • If the total residual chlorine concentration is detected to be 0.58 ppm or higher (equivalent to a free chlorine concentration of 0.2 ppm or higher), the water supply and drainage pumps to the new separation tanks are automatically stopped. Drainage method - In the unlikely event that a target substance is detected in a drainage from a sampling investigation, we would drain it via a neutralization treatment, etc. - We make appropriate reports to regulatory authorities.

# Row 2

# (2.5.1.1) Water pollutant category

Select from:

🗹 Oil

## (2.5.1.2) Description of water pollutant and potential impacts

Oil spills can have severe impacts on fish and other ecosystems.

# (2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

## (2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

#### Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

#### (2.5.1.5) Please explain

Management Methods We conduct regular inspections of infrastructure facilities to prevent oil spills and conduct periodic training drills to prevent oil from reaching aquatic environments in the event of an accident. Risk Avoidance Mechanisms · The primary and secondary oil separation tanks are equipped with devices that automatically measure pH values, and the wastewater flow automatically stops when the measured values exceed the threshold value. · Threshold value of pH: An alarm sounds when the pH value is below 6.0 or above 8.4, and the system automatically stops. Targets Zero spills in one year

#### Row 3

#### (2.5.1.1) Water pollutant category

Select from:

#### Nitrates

#### (2.5.1.2) Description of water pollutant and potential impacts

We oversee the management of items regulated by the Water Pollution Control Act. The presence of nitrate and phosphate in rivers and lakes can lead to the phenomenon of eutrophication.

#### (2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

#### (2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

## (2.5.1.5) Please explain

Management Methods - Every month, we collect wastewater samples and measure their water quality to guarantee that nitrates and phosphates derived from domestic

wastewater are correctly treated in septic tanks. Risk Avoidance Mechanisms • The primary and secondary oil separation tanks are equipped with devices that automatically measure pH values, and the wastewater flow automatically stops when the measured values exceed the threshold value. • Threshold value of pH: An alarm sounds when the pH value is below 6.0 or above 8.4, and the system automatically stops. Targets Zero spills in one year [Add row]

# C3. Disclosure of risks and opportunities

(3.1) Have you identified any environmental risks which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?

**Climate change** 

## (3.1.1) Environmental risks identified

Select from:

☑ Yes, both in direct operations and upstream/downstream value chain

# Forests

## (3.1.1) Environmental risks identified

Select from:

☑ Yes, both in direct operations and upstream/downstream value chain

## Water

# (3.1.1) Environmental risks identified

Select from:

☑ Yes, both in direct operations and upstream/downstream value chain

# Plastics

## (3.1.1) Environmental risks identified

Select from:

✓ No

(3.1.2) Primary reason why your organization does not consider itself to have environmental risks in your direct operations and/or upstream/downstream value chain

#### Select from:

✓ Not an immediate strategic priority

#### (3.1.3) Please explain

Our primary objective is to address ESG issues in our supply chain related to climate change and water, which we anticipate will have a notable impact on our company. Similarly, we are aware of potential issues in the plastics supply chain, including child labor, waste, environmental destruction, and impacts on biodiversity. We will consider how to address these issues in the future. IFixed row!

(3.1.1) Provide details of the environmental risks identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.

## Climate change

# (3.1.1.1) Risk identifier

Select from:

✓ Risk1

## (3.1.1.3) Risk types and primary environmental risk driver

#### Acute physical

✓ Flooding (coastal, fluvial, pluvial, groundwater)

# (3.1.1.4) Value chain stage where the risk occurs

Select from:

✓ Upstream value chain

### (3.1.1.6) Country/area where the risk occurs

Select all that apply

🗹 Indonesia

🗹 Thailand

#### (3.1.1.9) Organization-specific description of risk

In the IPCC Fifth Assessment Report, it was indicated that flood frequency could increase fourfold if temperatures increase by 4C (double at 2C). In addition, the IPCC Sixth Assessment Report additionally reports that the risk of flooding will increase in monsoon regions of South, Southeast, and East Asia, and that sea levels will continue to rise in all scenarios. Similar results have also been reported by NASA's research. Based on these circumstances, we believe that there is a high probability of soaring natural rubber prices due to flood damages in 2030. During a major flood that occurred in Thailand in 2017, our annual procurement cost increased by approx. 7.5 billion yen, and the unit price in kg of natural rubber in the futures market temporarily rose from 267 yen to 367 yen. We estimate flood probability via qualitative evaluations based on scientific predictive values, and estimate the damages (amount of risk) by quantitatively using past actual values, etc.

#### (3.1.1.11) Primary financial effect of the risk

Select from:

Increased direct costs

## (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

✓ Medium-term

#### (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

✓ Likely

# (3.1.1.14) Magnitude

Select from:

🗹 High

# (3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

It is assumed that the increased frequency and larger scale of flooding will damage the production areas of natural rubber, the main raw material of tires, resulting in a decrease in the supply of natural rubber and an increase in the percentage of supply of natural rubber of poor quality. It is further assumed that procurement costs will increase to maintain quality, which will directly affect our PL and CF. Furthermore, it is assumed that there will be an increase in R&D expenses as a countermeasure cost. We are planning on taking effective measures to reduce procurement cost to combat soaring natural rubber prices such as by developing fuel-efficient tires, research into durability, braking, and grip for coping with deteriorating road surfaces, and developing synthetic rubber. Durability, etc. against deteriorated road surfaces also lead to longer usage period, reduction of discarded tires, etc., which ultimately contributes to reduction in natural rubber consumption.

#### (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

✓ Yes

#### (3.1.1.21) Anticipated financial effect figure in the medium-term – minimum (currency)

70000000

## (3.1.1.22) Anticipated financial effect figure in the medium-term – maximum (currency)

970000000

#### (3.1.1.25) Explanation of financial effect figure

This is a physical risk pertaining to the 4C scenario that entails significant progression in climate change. The scenario envisions a world in which the cost of procuring natural rubber will rise sharply as floods become more frequent and severe. For its financial impact, we calculated the minimum and maximum patterns, and set their average value as the intermediate pattern. We calculated the impact amount by multiplying our projected procurement volume (kg) for 2030 by the projected rise in unit price (yen/kg). We projected the procurement volume by applying the CAGR (from 2017 to 2022) to the period up to 2030, and set the 2030 value as a fixed value (approx. 173,000 tons), and established the minimum and maximum patterns by configuring the predicted rise in unit price. We assumed the minimum as 4 yen/kg by dividing by 12 months the rise in unit price (average increase of 50 yen/kg during that month) of the RSS3 futures during the month in which a major flood occurred in Thailand in 2017. We assumed the maximum based on the actual increase in our natural rubber procurement amount in 2017 (annual average: 56 yen/kg). Minimum: 174,000 tons x 56 yen Approx. 9.7 billion yen. Intermediate: (7 97)/2 Approx. 5.2 billion yen.

#### (3.1.1.26) Primary response to risk

✓ Increase investment in R&D

#### (3.1.1.27) Cost of response to risk

280000000

#### (3.1.1.28) Explanation of cost calculation

We assume an increase in R&D expenses of approximately 2.8 billion yen for the single year of 2030 compared to 2022. The cumulative amount from 2023 to 2030 is expected to increase by approximately 14.1 billion yen. We set 2022 as the base year because we used the latest fiscal year for which R&D expenses were finalized as of the time of the estimation. We estimated the annual growth rate by applying the CAGR of R&D expenses from 2018 to 2022. The number of fuel-efficient tires manufactured significantly increased between 2019 and 2023. The increase in R&D expenses correlates with the increase in fuel-efficient tire sales, and we assumed that this trend will continue at the same level until 2030. Switching to fuel-efficient tires reduces material consumption per unit, which serves as a countermeasure for the soaring unit price of materials.

#### (3.1.1.29) Description of response

We can reduce natural rubber usage per tire by promoting R&D that aims to reduce tire rolling resistance that directly impacts fuel economy, and increase the percentage of sustainable materials used (recycled rubber, etc.). We believe that increasing R&D expenses will be an effective countermeasure to the rising cost of procuring natural rubber. As a qualitative countermeasure, we have formulated and announced our Sustainable Natural Rubber Procurement Policy based on the Principles of Sustainable Natural Rubber set forth by GPSNR, as well as spread awareness to all suppliers, and commissioned a third-party institution to implement fair and objective CSR evaluations to materialize these ends. We are also considering proactively utilizing each supply chain management initiative. The risks described here assume a world of significant climate change progression. To avoid such scenario and accelerate our proactive environmental investments, we have introduced internal carbon pricing last year, and have started its full-scale operation this year by raising the unit internal carbon price to 10,000 yen. We have not only announced our internal carbon pricing as a countermeasure for the transition risks of the 1.5C scenario, but have also already started its full-scale operation and will continue to do so regardless of the scenario, and have demonstrated a corporate stance to proactively respond to the 1.5C scenario.

#### Forests

# (3.1.1.1) Risk identifier

Select from:

🗹 Risk1

#### Select all that apply Rubber

### (3.1.1.3) Risk types and primary environmental risk driver

#### Market

✓ Lack of availability and/or increased cost of raw materials

#### (3.1.1.4) Value chain stage where the risk occurs

Select from:

✓ Upstream value chain

#### (3.1.1.6) Country/area where the risk occurs

Select all that apply

- Côte d'Ivoire
- 🗹 Indonesia
- ✓ Malaysia
- ✓ Thailand

#### (3.1.1.9) Organization-specific description of risk

The natural rubber supply chain is complex, and there are many small folders. The challenge is to prove that these small folders are not taken from deforested areas. our company is currently working with suppliers to establish a verification system.

# (3.1.1.11) Primary financial effect of the risk

Select from:

✓ Increased direct costs

# (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

#### ✓ Medium-term

#### (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

✓ Virtually certain

#### (3.1.1.14) Magnitude

Select from:

🗹 High

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

As the number of forested areas does not increase, there is a possibility that we will not be able to secure the necessary amount of procurement in the future and that costs will increase. In our company, we will work to increase the yield of natural rubber through GPSNR and other measures and promote recycling.

#### (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

🗹 No

#### (3.1.1.26) Primary response to risk

Agricultural practices

Avoid sourcing from jurisdictions with a high risk of deforestation and conversion of other natural ecosystems

## (3.1.1.27) Cost of response to risk

0

#### (3.1.1.28) Explanation of cost calculation

# (3.1.1.29) Description of response

This is a cost for environmental risk and will continue, but we will work with suppliers to reduce additional costs.

#### Water

# (3.1.1.1) Risk identifier

Select from:

✓ Risk1

# (3.1.1.3) Risk types and primary environmental risk driver

#### Acute physical

✓ Flooding (coastal, fluvial, pluvial, groundwater)

# (3.1.1.4) Value chain stage where the risk occurs

Select from:

✓ Direct operations

#### (3.1.1.6) Country/area where the risk occurs

Select all that apply

🗹 Japan

## (3.1.1.7) River basin where the risk occurs

Select all that apply

✓ Other, please specify :Sea of Japan Coast

## (3.1.1.9) Organization-specific description of risk

A water-related disaster at the two production facilities in Japan could directly impact the company's operations and potentially disrupt the continuity of critical business activities across the value chain, including the supply chain. We assessed the risk of flood damage at the manufacturing facilities as of April 2023 using Aqueduct 3.0. Among the sites with high or medium-high Coastal Flood Risk, the Sendai Plant and Kuwana Plant, which have notably large manufacturing capacities, were identified as high-risk sites.

#### (3.1.1.11) Primary financial effect of the risk

Select from:

✓ Disruption in production capacity

# (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

✓ Long-term

#### (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

✓ About as likely as not

# (3.1.1.14) Magnitude

Select from:

🗹 Low

# (3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

1. Risk calculation and methodologies - See the guidance on physical risk assessment under the TCFD recommendations published by the Ministry of Land, Infrastructure, Transport and Tourism. 2. Flood risk assessment and financial impact calculation flow - We calculated our estimated flood damage based on RCP2.6 (equivalent to rise in 2C) and RCP8.5 (equivalent to rise in 4C) according to flood frequency factor and the following procedure. (1) Selecting the target sites - We evaluated the flood damage risks of our manufacturing sites as of April 2023 using Aqueduct 3.0. Among sites with a high or medium-high coastal flood risk, we selected the Sendai Plant and Kuwana Plant, which exhibit outstandingly large manufacturing capacity, as high-risk sites. (2) Calculating the current estimated damage - Using the flood-related risk estimation tool provided by the Japan Institute of Country-ology and Engineering, we calculated the current asset values of target sites and the estimated damage to their annual sales (based on the projected scale and estimated maximum scale). (Projected scale: 21,695 million yen; estimated maximum scale: 33,487 million yen) - Occurrence probability of the projected scale is assumed to be once every 100 years, and once every 1,000 years for the estimated maximum scale. - For the flood depths of the projected scale and estimated maximum scale, we used the values obtained by searching the address of the target sites in the location-specific flood simulation search system of the Geospatial Information Authority of Japan. - We calculated the expected value by multiplying the estimated damages of the projected scale and estimated maximum scale with their respective return period and adding them together. We set this value as the current estimated damage. In calculating the expected value, we implemented a minimum pattern that only uses two points (projected scale and estimated maximum scale), an intermediate pattern that calculates the expected value by estimating the scale of damage based on the probability of occurrence calculated in increments of 1/100 from its linear approximation formula, and a maximum pattern that calculates the same using a logarithmic approximation formula. - Minimum pattern (current, expected value): 229 million yen - Intermediate pattern (current, expected value): 445 million yen - Maximum pattern (current, expected value): 557 million yen

#### (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

✓ Yes

#### (3.1.1.23) Anticipated financial effect figure in the long-term – minimum (currency)

686000000

#### (3.1.1.24) Anticipated financial effect figure in the long-term – maximum (currency)

1671000000

#### (3.1.1.25) Explanation of financial effect figure

(1)Calculating the estimated damage from a rise in 2C and 4C - We calculated the estimated damage of a temperature rise of 2C and 4C based on the future flood frequency factor. - We assume that the occurrence frequency will increase by two-folds and four-folds for 2C and 4C scenarios, respectively, and therefore, the return periods of the projected scale and estimated maximum scale will shrink to 1/2 and 1/4, respectively. - we calculated the expected value by multiplying the estimated damage for 2C and 4C scenarios by their respective return periods and adding them together. We set this value as the estimated damage of a temperature rise of 2C and 4C. This calculation method results in the flood frequency factor becoming proportional to the flood damage amount. - Minimum pattern: 457 million yen (2C), 915 million yen (4C) - Intermediate pattern: 890 million yen (2C), 1,779 million yen (4C) - Maximum pattern: 1,114 million yen (2C), 2,227 million yen (4C) (2). We set the difference in (1) and the current estimated damage as the increase in the estimated damage amount (increase in risk) of a temperature rise of 2C and 4C. The 4C values were entered in the response column. - Minimum pattern: 228 million yen (2C), 686 million yen (4C) - Intermediate pattern: 445 million yen (2C), 1,334 million yen (4C) - Maximum pattern: 557 million yen (2C), 1,671 million yen (4C) 3. Supplementary calculation logic (1) Damage/loss calculation method (some of it is built into the tool algorithm). - We have calculated damages and losses using the following procedure based on the Manual for Economic Evaluation of Flood Control Investment (Draft) prepared by the Ministry of Land, Infrastructure, Transport and Tourism. Building damage: Calculated by multiplying the price of target assets (calculated at book value) by the damage rate\*. \*The damage rate is set for each flood depth. (2) Future incremental risk assessment - Based on the future flood frequency factor, we estimated the future damages/losses from projected flood level and ca

#### **Policies and plans**

Develop flood emergency plans

## (3.1.1.27) Cost of response to risk

10000000

## (3.1.1.28) Explanation of cost calculation

This year, we took the first steps in assessing water-related risks and calculating their financial impacts. Based on these results, we plan to collaborate with a specialized contractor next fiscal year to develop a more comprehensive and specialized water management plan. We have already held discussions and received estimates from the relevant stakeholders.

#### (3.1.1.29) Description of response

Regarding water-related risk responses, we believe that the measures we can implement independently are limited, and greater collaboration with external partners is necessary, even more so than with climate change. We recognize that the risk of natural disasters, particularly floods, is a management issue that needs to be addressed across the entire value chain. Therefore, we plan to address water risks in cooperation with our value chain partners, including those in our supply chain, within the next two years. Rather than rushing to implement countermeasures on our own at this point, we aim to first improve our understanding of the current situation. This includes working with local municipalities and other companies to devise reasonable and appropriate measures. From this fiscal year through the next, we will reassess the risks at each site from the ground up, evaluate their importance, refine financial impact estimates, and develop long-term, feasible countermeasures.

#### Water

# (3.1.1.1) Risk identifier

Select from:

✓ Risk2

#### (3.1.1.3) Risk types and primary environmental risk driver

Acute physical

#### Drought

#### (3.1.1.4) Value chain stage where the risk occurs

Select from:

Direct operations

## (3.1.1.6) Country/area where the risk occurs

Select all that apply

🗹 China

#### (3.1.1.7) River basin where the risk occurs

Select all that apply

✓ Other, please specify :Yangtze River

#### (3.1.1.9) Organization-specific description of risk

We assessed our water risks using Aqueduct 3.0, a water risk mapping tool developed by the World Resources Institute (WRI). We have identified the risk of deteriorating profits of sites in China with extremely high water stress. The assessment results are as follows. Our score (Toyo Tire (Zhucheng) Co., Ltd. (Shandong Province)) - bws label: Extremely high (80%) - bws score: 5.00 - bws raw: 1.74 \*bws: Baseline Water Stress Indicator explanation 1. bws label: Extremely high (80%) - More than 80% of available water resources are consumed annually. - Extremely high risk of water shortage and competition. 2. bws score: 5.00 - The Aqueduct 3.0 scoring system uses a rating of 0 to 5, where 5.00 indicates the greatest water stress (extremely high risk). 3. bws raw: 1.74 - Approx. 174% is consumed compared to the 2014 baseline. - Already 74% of the baseline volume has been depleted. (Also consistent with depletion data) Current situation (as of April 2023) - Currently in applicable regions, there is an extremely high water stress and more than 80% of available water resources are being consumed. Water shortages and competitions are serious. Projections for 2030 and 2050 Aqueduct 3.0's future projections for 2030, 2050, and 2080 are visualized under three scenarios (optimistic, normal, pessimistic). In Shandong Province, where our Chinese site is located, the high level of water stress is not mitigated under either scenario or timeline.

# (3.1.1.11) Primary financial effect of the risk

Select from:

☑ Decreased revenues due to reduced production capacity

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

#### (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

Likely

# (3.1.1.14) Magnitude

Select from:

🗹 Low

# (3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Analysis of the financial impact of the risks - Water shortage is already intensifying and we anticipate that there is no margin for improvement. - Population growth and climate change may further increase water shortages in the future. The Aqueduct Water Risk Atlas has projected that water demand will be 1.4 times the current level in 2030 if economic development continues as it is. - Given that water is used in the manufacturing process, a water shortage will directly lead to a decrease in production capacity. Based on the assumption that the current production capacity will decrease in line with the degree of water shortage, we have estimated the impact on CF.

## (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

✓ Yes

## (3.1.1.21) Anticipated financial effect figure in the medium-term – minimum (currency)

140000000

(3.1.1.22) Anticipated financial effect figure in the medium-term – maximum (currency)

396000000

(3.1.1.25) Explanation of financial effect figure

Analysis of the financial impact of the risks - Water shortage is already intensifying and we anticipate that there is no margin for improvement. - Population growth and climate change may further increase water shortages in the future. The Aqueduct Water Risk Atlas has projected that water demand will be 1.4 times the current level in 2030 if economic development continues as it is. - Based on the aforementioned, we have configured the following risk scenarios. They are classified according to the degree of water shortage progression. - The 2023 sales of the bases are assumed to be the total sales of the tire business divided proportionally by the number of tires manufactured at the subject bases. (1) Worsening scenario: Water demand increases 1.4 times compared to April 2023 and water shortage ratio becomes 60% (42.5% x 1.4). Revenues decrease by 60%. Sales of the bases: Approx. 6.6 billion yen. 66 0.6 -3.96 billion yen (2) Intermediate scenario: Numerical water shortage ratio of 42.5%. A scenario in which this shortage portion becomes practically unavailable for use. Revenues decrease by 42.5%. Sales of the bases: Approx. 6.6 billion yen 60 0.425 -2.80 billion yen (3) Best case scenario: Numerical water shortage ratio of 42.5%. Half of this shortage becomes a reality. Revenues decrease by 21.25%. Sales of the bases: Approx. 6.6 billion yen

#### (3.1.1.26) Primary response to risk

#### **Policies and plans**

✓ Develop drought emergency plans

#### (3.1.1.27) Cost of response to risk

10000000

# (3.1.1.28) Explanation of cost calculation

This year, we took the first steps in assessing water-related risks and calculating their financial impacts. Based on these results, we plan to collaborate with a specialized contractor next fiscal year to develop a more comprehensive and specialized water management plan. We have already held discussions and received estimates from the relevant stakeholders.

#### (3.1.1.29) Description of response

Estimated countermeasures - Target sites primarily manufacture tires for trucks, etc. Approximately 80% of these tires are shipped to Japan due to extremely low demand for them in China. - One of the objectives for establishing a local plant is to reduce manufacturing cost, but the circumstance is now changing due to rise in labor costs, etc. - On the other hand, we believe it is currently difficult to develop or procure local water alternatives. It may become physically difficult to continue manufacturing. - Since its revenue size is also small (at 1–2% of total revenue), the benefit of continuing to manufacture locally is also relatively small. - Based on these circumstances, a potential risk mitigation strategy against an imminent water shortage is to relocate the manufacturing site. - Specifically, we are expecting to formulate a comprehensive water plan by teaming up with a consulting firm of our specialized unit next year.

#### **Climate change**

# (3.1.1.1) Risk identifier

Select from:

✓ Risk2

#### (3.1.1.3) Risk types and primary environmental risk driver

#### Policy

✓ Carbon pricing mechanisms

#### (3.1.1.4) Value chain stage where the risk occurs

Select from:

✓ Direct operations

#### (3.1.1.6) Country/area where the risk occurs

Select all that apply

🗹 Japan

# (3.1.1.9) Organization-specific description of risk

In the 1.5C scenario, we assume that policy transition risks will have a significant financial impact, and quantitatively calculate the financial impact of the introduction of a carbon tax in Japan. In the "Net Zero by 2050 Roadmap for the Global Energy Sector" announced by the International Energy Agency (IEA) in May 2021, the company adopted a carbon tax (developed countries) that is expected to be imposed on each region. In addition, we have already introduced internal carbon pricing as a risk response, and we are building a system that allows us to efficiently promote decarbonization.

# (3.1.1.11) Primary financial effect of the risk

Select from:

Increased direct costs

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

#### (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

Likely

# (3.1.1.14) Magnitude

Select from:

🗹 High

# (3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

The carbon tax payment is assumed to be paid on additional fuel costs. The scenario is based on the assumption that at least the portion of the target that has not be met will be subject to taxation. We assume that this will have an impact on our company as a direct cost.

#### (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

✓ Yes

#### (3.1.1.21) Anticipated financial effect figure in the medium-term – minimum (currency)

500000000

(3.1.1.22) Anticipated financial effect figure in the medium-term – maximum (currency)

570000000

## (3.1.1.25) Explanation of financial effect figure

The financial impact assumes carbon tax payment. We estimated the carbon tax unit price at 130 dollars, which is what is predicted for developed countries for 2030

based on the net-zero scenario presented by the IEA. We calculated three patterns (minimum, intermediate, maximum) for the CO2 emissions subject to carbon tax and used the numerical result of the intermediate pattern in the response column for the projected values. • The minimum pattern (27,000 t-CO2 x 130 dollars x 138 yen/dollar approx. 0.5 billion yen) is based on the carbon taxing of the insufficient portion in case there is an insufficiency of 10% (as a percentage of reduction target) in achieving the 2030 CO2 reduction target. • The intermediate pattern (270,000 t-CO2 x 130 dollars x 138 yen/dollar approx. 4.9 billion yen) is based on the scenario that the increase in CO2 emission from business growth can be decarbonized, but any insufficiency in achieving the target reduction amount will be subject to taxation. • The maximum pattern (320,000 t-CO2 x 130 dollars x 138 yen/dollar approx. 5.7 billion yen) is based on achieving the target reduction amount, but the CO2 emissions becoming taxed. The exchange rate of 138 yen/dollar at the time of calculation was applied.

#### (3.1.1.26) Primary response to risk

#### Pricing and credits

✓ Implement internal price on carbon

#### (3.1.1.27) Cost of response to risk

#### 270000000

#### (3.1.1.28) Explanation of cost calculation

The internal carbon unit price is set at 10,000 yen/t-CO2. Calculate by multiplying the internal carbon unit price of 10,000 yen by the taxable GHG emissions in the three patterns assumed in the carbon pricing estimation. Enter the middle result in the "Answer" column. · Minimum value (27,000 t-CO2 x 10,000 yen approx. 270 million yen) · Intermediate value (270,000 t-CO2 x 10,000 yen approx. 2.7 billion yen) · Maximum value (320,000 t-CO2 x 10,000 yen approx. 3.2 billion yen)

#### (3.1.1.29) Description of response

We have already introduced internal carbon pricing as a risk response, and are building a system that efficiently promotes decarbonization. We have set an internal carbon pricing (ICP) of 10,000 yen per 1 t-CO2, and are utilizing ICP in making environmental investment decisions to achieve our greenhouse gas reduction target. For example, if only looking at it from a financial, environmental investment perspective, such investment would be regarded as valuable compared to the ICP of 10,000 yen if the marginal cost per t-CO2 reduction is 1,000 yen. (If we assume that a carbon tax of 10,000 yen/t-CO2 is added and each 1,000 yen of environmental investment can eliminate 1 t-CO2, then this cost-saving benefit will accelerate the environmental investment. \*Hence, ICP can be regarded as a reduction in our budget. Both ways of perceiving the situation are essentially the same.) We have started fully utilizing ICP, and anticipate being able to flexibly change our prices if it becomes difficult to achieve greenhouse gas targets, a carbon tax higher than expected becomes implemented, a competitor starts providing superior price compared to ours, etc. To prevent the mechanism from becoming merely a formality, we will ensure effective ICP operation while constantly predicting the current and future efficacies. We assume that the introduction and effective utilization of ICP will greatly promote decarbonization activities, and believe that this will be one of the major drivers for

*materializing carbon neutrality.* [Add row]

(3.1.2) Provide the amount and proportion of your financial metrics from the reporting year that are vulnerable to the substantive effects of environmental risks.

Climate change

(3.1.2.1) Financial metric

Select from:

✓ OPEX

(3.1.2.2) Amount of financial metric vulnerable to transition risks for this environmental issue (unit currency as selected in 1.2)

490000000

(3.1.2.3) % of total financial metric vulnerable to transition risks for this environmental issue

Select from:

✓ 1-10%

(3.1.2.4) Amount of financial metric vulnerable to physical risks for this environmental issue (unit currency as selected in 1.2)

520000000

(3.1.2.5) % of total financial metric vulnerable to physical risks for this environmental issue

Select from:

**√** 1-10%

## (3.1.2.7) Explanation of financial figures

As a transition risk, we expect to pay carbon taxes due to the introduction of carbon pricing, and have calculated its financial impact. We used the carbon tax unit price to 130 dollars, which is what is predicted for developed countries based on the net-zero scenario presented by the IEA. We calculated three patterns and used the numerical result of the intermediate pattern in the response. The minimum pattern (27,000 t-CO2 x 130 dollars x 138 yen/dollar approx. 0.5 billion yen) is based on the carbon taxing of the insufficient portion in case there is an insufficiency of 10% in achieving the 2030 CO2 reduction target. The intermediate pattern (270,000 t-CO2 x 130 dollars x 138 yen/dollar approx. 4.9 billion yen) is based on the scenario that the increase in CO2 emission from business growth can be decarbonized, but any insufficiency in achieving the target reduction amount will be subject to taxation. The maximum pattern (320,000 t-CO2 x 130 dollars x 138 yen/dollar approx. 5.7 billion yen) is based on achieving the target reduction amount, but the CO2 emissions becoming taxed. The exchange rate of 138 yen/dollar at the time of calculation was applied. We are expecting physical risks pertaining to the 4C scenario that entails significant progression in climate change. The scenario envisions a world in which the cost of procuring natural rubber will rise significantly as floods become more frequent and severe. For its financial impact, we calculated the minimum and maximum patterns, and set their average value as the intermediate pattern. We calculated the impact amount by multiplying our projected procurement volume (kg) for 2030 by the projected rise in unit price (yen/kg). We projected the procurement volume by applying the CAGR (from 2017 to 2022) to the period up to 2030, and set the 2030 value as a fixed value (approx. 173,000 tons), and established the minimum and maximum patterns by configuring the predicted rise in unit price. We assumed the minimum as 4 yen/kg by dividing by 12 months the rise in unit price (average increase of 50 yen/kg during that month) of the RSS3 futures during the month in which a major flood occurred in Thailand in 2017. We assumed the maximum based on the actual increase in our natural rubber procurement amount in 2017 (annual average: 56 yen/kg). Minimum: 174,000 tons x 4 yen Approx. 0.7 billion yen. Maximum: 174,000 tons x 56 yen Approx. 9.7 billion yen. Intermediate: (7 97)/2 Approx. 5.2 billion yen.

#### Forests

(3.1.2.2) Amount of financial metric vulnerable to transition risks for this environmental issue (unit currency as selected in 1.2)

0

#### Water

## (3.1.2.1) Financial metric

Select from:

OPEX

(3.1.2.2) Amount of financial metric vulnerable to transition risks for this environmental issue (unit currency as selected in 1.2)

### (3.1.2.3) % of total financial metric vulnerable to transition risks for this environmental issue

Select from:

**✓** 1-10%

(3.1.2.4) Amount of financial metric vulnerable to physical risks for this environmental issue (unit currency as selected in 1.2)

#### 1334000000

(3.1.2.5) % of total financial metric vulnerable to physical risks for this environmental issue

Select from:

Less than 1%

#### (3.1.2.7) Explanation of financial figures

In order to avoid the financial impact of building damage and operational shutdowns caused by flood damage (physical risk) associated with climate change, it is necessary to promote decarbonization. The transition risks associated with this are the same as those outlined in the response to climate change. The figures provided for physical risks are consistent with previous responses and represent the intermediate values as follows: • Minimum pattern: 4C, 686 million yen • Intermediate

pattern: 4C, 1,334 million yen  $\cdot$  Maximum pattern: 4C, 1,671 million yen The financial impact of the transition risk, similar to climate change, is based on the payment of carbon taxes due to the introduction of carbon pricing. We used the intermediate value to calculate this. We used the carbon tax unit price of 130 dollars, as projected for developed countries under the IEA's net-zero scenario. We calculated three scenarios (minimum, intermediate, maximum) for the CO2 emissions subject to carbon tax, and included the numerical result of the intermediate scenario in our response. The minimum scenario (27,000 t-CO2 x 130 dollars x 138 yen/dollar approx. 0.5 billion yen) assumes a 10% shortfall in achieving the 2030 CO2 reduction target, and the shortfall becomes subject to taxation. The intermediate scenario (270,000 t-CO2 x 130 dollars x 138 yen/dollar approx. 4.9 billion yen) assumes that the CO2 emissions increase due to business growth can be decarbonized, but any shortfall in achieving the target reduction will be taxed. The maximum scenario (320,000 t-CO2 x 130 dollars x 138 yen/dollar approx. 5.7 billion yen) assumes the target reduction is achieved, but CO2 emissions will still be taxed. The exchange rate applied for these calculations was 138 yen/dollar at the time of estimation. [Add row]

# (3.2) Within each river basin, how many facilities are exposed to substantive effects of water-related risks, and what percentage of your total number of facilities does this represent?

#### (3.2.1) Country/Area & River basin

#### Japan

✓ Other, please specify :Abukuma River

#### (3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply

✓ Direct operations

(3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

1

(3.2.4) % of your organization's total facilities within direct operations exposed to water-related risk in this river basin

Select from:

✓ 1-25%

#### (3.2.10) % organization's total global revenue that could be affected

Select from:

✓ 11-20%

# (3.2.11) Please explain

In the event of a water-related disaster on the Abukuma River in Japan, our operations could be directly affected, potentially disrupting the continuity of critical business operations throughout the value chain, including the supply chain.

#### Row 2

(3.2.1) Country/Area & River basin

#### Japan

✓ Other, please specify :Inabe River

#### (3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply

Direct operations

## (3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

1

# (3.2.4) % of your organization's total facilities within direct operations exposed to water-related risk in this river basin

Select from:

✓ 1-25%

## (3.2.10) % organization's total global revenue that could be affected

Select from:

✓ 11-20%

# (3.2.11) Please explain

Due to the high frequency of water-related disasters in Japan in recent years, including heavy rainfall, flooding, and tsunamis caused by earthquakes, water risk is a significant concern. Should a water-related disaster occur on the Inabe River, it could directly impact our operations and disrupt the continuity of critical businesses in our value chain, including our supply chain.

#### Row 3

# (3.2.1) Country/Area & River basin

#### China

✓ Other, please specify :Luhe River

## (3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply

Direct operations

# (3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

1

## (3.2.4) % of your organization's total facilities within direct operations exposed to water-related risk in this river basin

Select from:

✓ Less than 1%

#### (3.2.10) % organization's total global revenue that could be affected

Select from:

**✓** 1-10%

# (3.2.11) Please explain

In China, water consumption is increasing along with industrial development, raising concerns about potential water shortages. Water is an indispensable resource for our business, and we cannot continue operations without it. As the only production site for truck and bus tires in China, it is crucial to increase our water recycling rate to mitigate the risk to business continuity. [Add row]

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

Water-related regulatory violations	Comment
Select from: ✓ No	No fine payments

[Fixed row]

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

Select from:

🗹 Yes

# (3.5.1) Select the carbon pricing regulation(s) which impact your operations.

Select all that apply

✓ Japan carbon tax

# (3.5.3) Complete the following table for each of the tax systems you are regulated by.

# Japan carbon tax

# (3.5.3.1) Period start date

12/31/2022

# (3.5.3.2) Period end date

12/30/2023

# (3.5.3.3) % of total Scope 1 emissions covered by tax

138660823

#### (3.5.3.5) Comment

Monetary unit:JPY [Fixed row]

# (3.5.4) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

1. Strategy for Regulatory Compliance In response to the tightening of regulations through carbon pricing (primarily considering carbon taxes), we are rapidly advancing decarbonization across our operations, focusing on the entire life cycle of CO2 emissions to break away from fossil fuel dependency. We prioritize decarbonization in areas that are economically and technically feasible, currently focusing on accelerating Scope 2 reductions by shifting to electricity-based solutions. To expedite and ensure decision-making in environmental investments, we introduced an internal carbon pricing system on a trial basis in 2022 and fully operationalized it in 2023. We have used the TCFD disclosure framework to identify and examine risks, opportunities, and countermeasures, which led to the decision to introduce internal carbon pricing. This framework serves as a tool for scenario analysis, strategy formulation, and implementation. 2. Implementation activities and results As of the end of 2023, we transitioned to 100% renewable energy for electricity purchased at the Sendai Plant, Kuwana Plant, tire plants in the US, and domestic offices and technology bases. We are also promoting electrification of forklifts and have reduced 421 t of CO2 in 2023 by electrifying 17 units. We also plan to increase the ratio of electricity derived from renewable energy sources to more than 90% by 2030, not only domestically but also globally. Instead of solely depending on purchased renewable energy-derived electricity, we are also installing on-site solar panels (owned by us) and promoting additional renewable energy sources for in-house consumption. In the grounds of our Serbian plant that began operation in 2022, we have installed the country's largest solar power generation system (power generation capacity: 8.4 MW), which has contributed to the reduction of 7,100 t-CO2 by generating 10.15 GWh annually. In 2023, we have installed a large solar power generation system (capacity: 14.0 MW) in a 96,000 m2 space on the roof of a tire plant building in Malaysia, which is expected to generate approximately 19,000 MWh annually and reduce 12,000 t-CO2 annually. In Japan, we have installed a solar power generation system at the Fundamental Technology Center at the end of 2023, generating approximately 419,000 kWh per year, which is the largest generated amount among our domestic sites and equivalent to approximately 12% of the electricity used at the center. This is expected to reduce approximately 128 t-CO2 annually. Through these efforts, we are dynamically prioritizing implementable Scope 2 reduction measures. Regarding Scope 1, where immediate decarbonization is technically and economically challenging, we are exploring options such as carbon-neutral fuels (e.g., e-methane) in collaboration with other companies. We continue to switch to lower-emission fuels, install more energy-efficient equipment, and pursue energy-saving measures, such as converting multiple sites from heavy oil to city gas and effectively utilizing waste heat via cogeneration. In terms of Scope 3, particularly in tire life cycle emissions (Scope 3, Category 11), vehicle use contributes significantly to emissions, mainly through rolling resistance. Therefore, we are continuously researching ways to reduce rolling resistance while maintaining other essential tire performance metrics, such as braking (grip) performance. This development is supported by our Nano Balance Technology and our A.T.O.M. manufacturing technology, which significantly contributes to CO2 reduction in production. We recognize the need to reduce CO2 emissions across the tire's entire life cycle and are committed to advancing R&D with this goal. All these strategies are directly linked to ensuring compliance with carbon pricing regulations.

(3.6) Have you identified any environmental opportunities which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?

**Climate change** 

## (3.6.1) Environmental opportunities identified

Select from:

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

#### Forests

#### (3.6.1) Environmental opportunities identified

Select from:

🗹 No

## (3.6.2) Primary reason why your organization does not consider itself to have environmental opportunities

Select from:

Evaluation in progress

## (3.6.3) Please explain

It is assumed we will utilize experts, etc. to evaluate the project in the future.

## Water

# (3.6.1) Environmental opportunities identified

Select from:

✓ Yes, we have identified opportunities, and some/all are being realized *[Fixed row]* 

(3.6.1) Provide details of the environmental opportunities identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.

**Climate change** 

# (3.6.1.1) Opportunity identifier

Select from:

✓ Opp1

(3.6.1.2) Commodity

Select all that apply

✓ Not applicable

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Markets

✓ Expansion into new markets

# (3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Direct operations

# (3.6.1.5) Country/area where the opportunity occurs

Select all that apply

🗹 Japan

## (3.6.1.8) Organization specific description

For the reporting year, the total number of tires we manufactured increased by approximately 1% year-on-year and that of fuel-efficient tires increased by approximately

25%. We take this to mean that the need for fuel efficiency is rapidly accelerating. In addition, it is essential for automakers to be carbon neutral in conjunction with promoting fuel efficiency, and all of them have plans to bring EVs to market in an expansive manner. The global EV data announced by the International Energy Agency (IEA) indicates that EV sales are currently growing dramatically. IEA predicts that in the transition scenario, the EV share of all vehicles will reach 12% in 2030. Compared to engine vehicles, EVs use heavy battery that increases vehicle weight, which necessitates a tire load-bearing capacity that exceeds that of engine vehicles. As a company with an advantage in load-bearing capacity such as with our commercial truck tires, we believe that we have a certain advantage in the EV market. A heavier vehicle results in a longer braking distance, which necessitates grip performance for acceleration, stronger durability (wear resistance), etc. If we also expect a need for tires that suit conditions such as worsening of road surfaces due to the impact of climate change, road surfaces in cold regions, etc., we believe that we have a certain advantage as a company with a track record related to off-roads and icy surfaces.

#### (3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Increased revenues resulting from increased demand for products and services

#### (3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

Medium-term

## (3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

✓ Likely (66–100%)

#### (3.6.1.12) Magnitude

Select from:

🗹 High

# (3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

The expansion of EV market share will also expand the demand for new and replacement EV tires. We recognize that there are also opportunities for us to expand our sales. However, to materialize and maximize the opportunities, we must ensure tire performance for EVs and fuel efficiency (low rolling resistance) and therefore believe that additional R&D is required to materialize these ends. From the aforementioned, we are expecting a financial impact of sales expansion due to the opportunities and increased R&D expenses. We calculated the financial impact based on data such as our track record and EV share prediction (12% in 2030) of the IEA. To confirm

the current likelihood of IEA's predicted value, we estimated the number of EVs in use in 2030 from the current EV sales statistics and divided that by the number of vehicles in use worldwide to estimate the EV share, which suggests that a share of 12% is highly likely. For reference, the likelihood verification process (Fermi estimation) is illustrated below. - Number of four-wheeled vehicles owned worldwide (passenger cars): Approximately 1.1 billion units (as of the end of 2021, according to the Japan Automobile Manufacturers Association) - Number of four-wheeled vehicles sold worldwide (passenger cars): Approximately 10.2 million units (2022), approximately 13.8 million units (2023, IEA) - Assumptions: Over the seven years from 2024 to 2030, 18 million EVs will be sold per year. There is also no change in the total number of vehicles owned. - EV sales from 2022 to 2030: 1,020 1,380 1,800 x 7 150 million units - EV market share: 150 million units 1,100 million units 13.6% \*Since years before 2021 are not considered, even a conservative calculation exceeds IEA's prediction of 12%. We also determined that the likelihood is high because the sales volume assumptions have also been made conservatively (i.e., the difference between 2022 and 2023 is added to the 2024 volume, and assumes that this number will not increase thereafter).

#### (3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

✓ Yes

#### (3.6.1.19) Anticipated financial effect figure in the medium-term - minimum (currency)

3440000000

# (3.6.1.20) Anticipated financial effect figure in the medium-term - maximum (currency)

9880000000

## (3.6.1.23) Explanation of financial effect figures

We expect EV tire sales to increase in 2030. We estimated the increase in EV tire sales using the EV share (12%) of all vehicles sold in 2030 predicted by the IEA. We classified the estimated tire sales for 2030 into OE (original tires, new vehicles) and RE (replacement tires, retrofit), and multiplied them by their respective market share to calculate the estimates. In the maximum scenario, we assumed that all OE tires will be for EVs and the RE share is equivalent to the market share. In the intermediate scenario, we assumed that both the OE and RE shares are equivalent to the market share. In the minimum scenario, we assumed that both the OE and RE shares are equivalent to the market share. In the minimum scenario, we assumed that both the OE and RE shares are half of the market share. We calculated the sales (the parameter) by applying the CAGR of our sales from 2018 to 2022 to the period leading up to 2030. We consider that the occurrence frequency, time frame, and probabilities are already encompassed in the indicators used. There is an issue that certain fields could diminish due to the EV share increase. OE tires for EVs Approx. 34 billion x 100% 34 billion yen RE tires for EVs Approx. 540 billion x 12% 64.8 billion yen Total: 34 64.8 98.8 billion yen OE tires for EVs Approx. 34 billion x 12% 4 billion x 6% 32.4 billion x 12% 64.8 billion yen

#### (3.6.1.24) Cost to realize opportunity

## (3.6.1.25) Explanation of cost calculation

The details are the same as that of the physical risk response cost. Although the risks differ, the calculated values are the same due to having many commonalities in the countermeasures. To add, we expect to implement R&Ds of durability, braking, and grip performance, synthetic rubber, etc. to promote fuel efficiency and combat worsening road surface conditions as a countermeasure against the physical risks. Such R&Ds are also required to materialize EV tire opportunities, and things such as synthetic rubber development are common challenges in terms of securing raw materials. Therefore, we assume an increase in R&D expenses of approximately 2.8 billion yen for the single year of 2030 compared to 2022. The cumulative amount from 2023 to 2030 is expected to increase by approximately 14.1 billion yen. We set 2022 as the base year because we used the latest fiscal year for which R&D expenses were finalized as of the time of the estimation. We estimated the annual growth rate by applying the CAGR of R&D expenses (approx. 3%) from 2018 to 2022.

#### (3.6.1.26) Strategy to realize opportunity

We anticipate a high probability of EV proliferation in the future sooner or later, and recognize that it is important to accurately ride this wave and introduce new products into the market at an appropriate timing to decarbonize and seize business opportunities. This has already been mentioned in other responses, but heavy EV batteries increase vehicle weight, which further necessitates load-bearing capacity, braking performance, etc. compared to engine vehicles. Therefore, we believe it is necessary as a prerequisite to improve the specifications of various tire properties through R&D. Moreover, since we are constantly evaluated relative to competitors in terms of specifications, we will continue to watch competitor trends, add depths to our R&D, and ensure market superiority.

#### Water

## (3.6.1.1) Opportunity identifier

Select from:

✓ Opp1

#### (3.6.1.2) Commodity

Select all that apply

✓ Not applicable

## (3.6.1.3) Opportunity type and primary environmental opportunity driver

#### **Resource efficiency**

Reduced water usage and consumption

#### (3.6.1.4) Value chain stage where the opportunity occurs

Select from:

Direct operations

## (3.6.1.5) Country/area where the opportunity occurs

Select all that apply

🗹 China

🗹 Japan

## (3.6.1.6) River basin where the opportunity occurs

Select all that apply

Unknown

# (3.6.1.8) Organization specific description

As the physical risks of flood risks in Japan and water shortage risks of our Chinese sites, for which we estimated the financial impact, become internally fixated as a common challenge, employees will become more conscious of conserving water and water usage will decrease at our sites in Japan and China, which we regard as an opportunity. Expenses can be reduced in proportion to the amount of water saved. We expect a financial impact equivalent to an expense reduction commensurate to 10% usage reduction in 2030 compared to the 2023 level.

## (3.6.1.9) Primary financial effect of the opportunity

Select from:

Reduced direct costs

# (3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

Medium-term

## (3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

✓ About as likely as not (33–66%)

## (3.6.1.12) Magnitude

Select from:

🗹 Low

(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

• The quantification of water risks will raise the internal awareness of water risks and promote water conservation and water expense reduction, which we regard as

an opportunity. • We expect a financial impact equivalent to an expense reduction commensurate to 10% usage reduction in 2030 compared to the 2023 level. • The amount of expense reduction is directly linked to profits, so the impact is greater than the numbers suggest. If a profit margin of 5% is assumed, the amount in terms of revenue is equivalent to 20 times the expense reduction. (Ex.) 1 billion yen expense reduction equivalent to 20 billion yen increase in revenue

# (3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

Yes

(3.6.1.19) Anticipated financial effect figure in the medium-term - minimum (currency)

1114550

(3.6.1.20) Anticipated financial effect figure in the medium-term - maximum (currency)

3343650

# (3.6.1.23) Explanation of financial effect figures

• Water and sewerage usage in 2023 for the three target sites:83,772 (Limited to those for which charges were incurred, multiplied by 12 for certain single month

results in 2024.)  $\cdot$  We used the pay-per-use unit price in Kuwana City for the unit price: Water 176 yen/m3, sewerage 394 yen/m3 \*The base rate was disregarded and the highest pay-per-use unit price was used.  $\cdot$  Annual water bill of the 3 target sites: 22,291,000 yen \*Estimated value  $\cdot$  Our goal is to reduce water withdrawal volume by 10% in five years. Opportunities were estimated in terms of 5%, 10%, and 15% reduction rate. The 10% has already been achieved at the value specified in the target rate of reduction for the five years through 2023.  $\cdot$  Minimum scenario: 22,291,000 x 0.05 1,114,550 yen  $\cdot$  Intermediate scenario: 22,291,000 x 0.1 2,229,100 yen  $\cdot$  Maximum scenario: 22,291,000 x 0.15 3,343,650 yen

#### (3.6.1.24) Cost to realize opportunity

10000000

#### (3.6.1.25) Explanation of cost calculation

This is the same as the flood damage countermeasures described in Water Risk 1. During this fiscal year, we took the first step in evaluating water risks and calculating financial impacts. Based on these results, we expect to team up with specialists for the coming year and work to formulate a specialized, comprehensive water plan. We have already exchanged opinions and prepared estimates with relevant parties. The opportunity response cost is the annual consultant fee, which is equivalent to the water risk response cost.

#### (3.6.1.26) Strategy to realize opportunity

To optimize operational water usage, we expect to consider drafting a water usage plan, revising work processes, and promoting the use of recycled water. Regarding water-related risk response, the measures that we can take on our own are limited, and we believe that cooperation with the surrounding community is more necessary than with climate change. We recognize that flood risks in particular among natural disasters are a management challenge that should be taken on via the value chain as a whole, and expect to start taking water risk measures within the next two years by collaborating with value chain partners including the supply chain. Rather than immediately taking measures right now on our own, we want to get a better understanding of the current situation slightly more extensively and brainstorm logical and appropriate countermeasures that also incorporate cooperation with surrounding municipalities and companies. From this fiscal year through next year, we expect to once again identify risks at each site from scratch, evaluate their level of importance, elaborate on their financial impact, and examine feasible countermeasures over the long term.

[Add row]

# (3.6.2) Provide the amount and proportion of your financial metrics in the reporting year that are aligned with the substantive effects of environmental opportunities.

#### **Climate change**

#### (3.6.2.1) Financial metric

Select from:

✓ Revenue

(3.6.2.2) Amount of financial metric aligned with opportunities for this environmental issue (unit currency as selected in 1.2)

6880000000

(3.6.2.3) % of total financial metric aligned with opportunities for this environmental issue

Select from:

✓ 11-20%

# (3.6.2.4) Explanation of financial figures

We expect EV tire sales to increase in 2030. We estimated the increase in EV tire sales using the EV share (12%) of all vehicles sold in 2030 predicted by the IEA. We classified the estimated tire sales for 2030 into OE (original tires, new vehicles) and RE (replacement tires, retrofit), and multiplied them by their respective market share to calculate the estimates. We assumed that all OE tires will be for EVs and the RE share is equivalent to the market share. We calculated the sales (the parameter) by applying the CAGR of our sales from 2018 to 2022 to the period leading up to 2030. We consider that the occurrence frequency, time frame, and probabilities are already encompassed in the indicators used. There is an issue that certain fields could diminish due to the EV share increase. OE tires for EVs Approx. 34 billion x 12% 64.8 billion yen Total: 34 64.8 98.8 billion yen OE tires for EVs Approx. 34 billion x 12% 64.8 billion yen Total: 4 64.8 68.8 billion yen OE tires for EVs Approx. 34 billion x 6% 32.4 billion yen Total: 2 32.4 34.4 billion yen \*The values for the intermediate scenario are listed in the response column. The percentage of total sales would be less than 11-20%.

#### Water

# (3.6.2.1) Financial metric

Select from:

OPEX

(3.6.2.2) Amount of financial metric aligned with opportunities for this environmental issue (unit currency as selected in

2229100

#### (3.6.2.3) % of total financial metric aligned with opportunities for this environmental issue

Select from:

✓ Less than 1%

#### (3.6.2.4) Explanation of financial figures

• Water and sewerage usage in 2023 for the three target sites:83,772 (Limited to those for which charges were incurred, multiplied by 12 for certain single month results in 2024.) • We used the pay-per-use unit price in Kuwana City for the unit price: Water 176 yen/m3, sewerage 394 yen/m3 \*The base rate was disregarded and the highest pay-per-use unit price was used. • Annual water bill of the 3 target sites: 22,291,000 yen \*Estimated value • Our goal is to reduce water withdrawal volume by 10% in five years. Opportunities were estimated in terms of 5%, 10%, and 15% reduction rate. The 10% has already been achieved at the value specified in the target rate of reduction for the five years through 2023. • Minimum scenario: 22,291,000 x 0.05 1,114,550 yen • Intermediate scenario: 22,291,000 x 0.1 2,229,100 yen \*Maximum scenario: 22,291,000 x 0.15 3,343,650 yen \*The values for the intermediate scenario are listed in the response column. The percentage of total OPEX will be less than 1%. [Add row]

#### C4. Governance

(4.1) Does your organization have a board of directors or an equivalent governing body?

#### (4.1.1) Board of directors or equivalent governing body

Select from:

Yes

#### (4.1.2) Frequency with which the board or equivalent meets

Select from:

#### ✓ Quarterly

## (4.1.3) Types of directors your board or equivalent is comprised of

Select all that apply

Executive directors or equivalent

✓ Non-executive directors or equivalent

## (4.1.4) Board diversity and inclusion policy

Select from:

✓ Yes, and it is publicly available

# (4.1.5) Briefly describe what the policy covers

[Principle 4-11: Requirements for ensuring the effectiveness of the board of directors and the supervisory board] Supplementary Principle 4-11 (i) The board of directors shall consist of no more than 11 directors to ensure expeditious decision-making and shall consider diversity in gender, age, background, skills and other aspects of the composition of the board of directors to ensure a good overall balance of knowledge, experience and skills to effectively carry out its roles and responsibilities.

## (4.1.6) Attach the policy (optional)

## (4.1.1) Is there board-level oversight of environmental issues within your organization?

	Board-level oversight of this environmental issue	Primary reason for no board-level oversight of this environmental issue	Explain why your organization does not have board- level oversight of this environmental issue
Climate change	Select from: ☑ Yes	Select from:	Rich text input [must be under 2500 characters]
Forests	Select from: ✓ Yes	Select from:	Rich text input [must be under 2500 characters]
Water	Select from: ✓ Yes	Select from:	Rich text input [must be under 2500 characters]
Biodiversity	Select from: ✓ No, but we plan to within the next two years	Select from: ✓ No standardized procedure	We plan to implement the plan formulation, etc. in the future.

[Fixed row]

(4.1.2) Identify the positions (do not include any names) of the individuals or committees on the board with accountability for environmental issues and provide details of the board's oversight of environmental issues.

**Climate change** 

(4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

✓ Chief Executive Officer (CEO)

### (4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

✓ Yes

#### (4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

☑ Board Terms of Reference

 $\blacksquare$  Other policy applicable to the board, please specify :Sustainability Committee Rules

# (4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

☑ Scheduled agenda item in every board meeting (standing agenda item)

## (4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

- ☑ Reviewing and guiding annual budgets
- $\blacksquare$  Overseeing and guiding scenario analysis
- ✓ Overseeing the setting of corporate targets
- ✓ Monitoring progress towards corporate targets
- ☑ Approving corporate policies and/or commitments

- ☑ Reviewing and guiding innovation/R&D priorities
- ☑ Approving and/or overseeing employee incentives
- ✓ Overseeing and guiding major capital expenditures
- ☑ Monitoring the implementation of a climate transition plan
- ${\ensuremath{\overline{\mathrm{v}}}}$  Overseeing and guiding acquisitions, mergers, and divestitures
- ☑ Overseeing and guiding the development of a climate transition plan
- ☑ Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities
- ☑ Other, please specify :Director of Value Chain Engagement

# (4.1.2.7) Please explain

We recognize that climate change opportunities and risks are important issues of a sustainable management. Regarding the important issues of sustainable management such as climate change, we are building a system promoted by a management committee (chaired by the President) to which authority for execution of duties is delegated by the Board of Directors. The agendas to identify climate change impacts, risks, and opportunities, and formulate an action plan (direction, purpose, goals) are discussed by the Sustainability Committee (held four times a year chaired by the President) established under the approval of the management committee

and by the working group (an environmental WG led by an officer in charge of environmental response) under the Sustainability Committee, and are brought up to the management committee. The progress status of the action plan approved by the management committee is managed by the Sustainability Committee and the environmental WG, and is reported to the management committee four times a year. \*The management committee has similar functions as the Board of Directors.

## Forests

# (4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

✓ Chief Executive Officer (CEO)

#### (4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

🗹 Yes

#### (4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

☑ Other policy applicable to the board, please specify :Sustainability Committee Rules

#### (4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

☑ Sporadic – agenda item as important matters arise

#### (4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

- ☑ Approving corporate policies and/or commitments
- ☑ Monitoring compliance with corporate policies and/or commitments
- ✓ Overseeing the setting of corporate targets
- ☑ Monitoring progress towards corporate targets

# (4.1.2.7) Please explain

We recognize that opportunities and risks posed by deforestation are important issues in sustainability management. The Management Committee (chaired by the President), which is entrusted with the authority to execute duties by the Board of Directors, promotes management of deforestation and other important sustainability management issues. The Supply Chain Task Force is established under the Sustainability Committee to identify impacts, risks, and opportunities related to deforestation and to formulate action plans (direction, targets, and targets) to discuss action plans, targets, and KPIs. The Sustainability Committee regularly checks and monitors the progress of the task force's efforts. Matters discussed and approved by the Sustainability Committee are reported or discussed at the Management Committee, and are reflected in the formulation and revision of the annual and medium-term business plans. Matters reported and approved at meetings are reported to the Board of Directors in a timely and appropriate manner.

#### Water

## (4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

✓ Chief Executive Officer (CEO)

### (4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

🗹 Yes

# (4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

☑ Other policy applicable to the board, please specify

## (4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

☑ Scheduled agenda item in every board meeting (standing agenda item)

## (4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

- ☑ Approving corporate policies and/or commitments
- ✓ Overseeing the setting of corporate targets

- ✓ Monitoring progress towards corporate targets
- ☑ Overseeing and guiding the development of a climate transition plan
- ☑ Monitoring the implementation of a climate transition plan

#### (4.1.2.7) Please explain

We recognize that the opportunities and risks posed by water are important issues of a sustainable management. Regarding the important water-related issues such as floods and droughts, we are building a system promoted by a management committee (chaired by the President) to which authority for execution of duties is delegated by the Board of Directors. The agendas to formulate an action plan regarding water issues are discussed by the Sustainability Committee (held four times a year chaired by the President) established under the approval of the management committee and by the working group (an environmental WG led by an officer in charge of environmental response) under the Sustainability Committee, and are brought up to the management committee. The progress status of the action plan approved by the management committee is managed by the Sustainability Committee and the environmental WG, and is reported to the management committee four times a year. \*The management committee has similar functions as the Board of Directors.

#### (4.2) Does your organization's board have competency on environmental issues?

#### **Climate change**

### (4.2.1) Board-level competency on this environmental issue

Select from:

✓ Yes

#### (4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

☑ Engaging regularly with external stakeholders and experts on environmental issues

✓ Having at least one board member with expertise on this environmental issue

#### (4.2.3) Environmental expertise of the board member

#### Academic

Undergraduate education (e.g., BSc/BA in environment and sustainability, climate science, environmental science, water resources management,

## Forests

#### (4.2.1) Board-level competency on this environmental issue

Select from:

✓ Yes

## (4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

 $\blacksquare$  Having at least one board member with expertise on this environmental issue

# (4.2.3) Environmental expertise of the board member

#### Other

☑ Other, please specify :The applicant has experience in promoting sustainability.

#### Water

# (4.2.1) Board-level competency on this environmental issue

Select from:

✓ Yes

## (4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

☑ Engaging regularly with external stakeholders and experts on environmental issues

☑ Having at least one board member with expertise on this environmental issue

## (4.2.3) Environmental expertise of the board member

#### Academic

Undergraduate education (e.g., BSc/BA in environment and sustainability, climate science, environmental science, water resources management, environmental engineering, forestry, etc.), please specify

[Fixed row]

# (4.3) Is there management-level responsibility for environmental issues within your organization?

	Management-level responsibility for this environmental issue	Primary reason for no management-level responsibility for environmental issues	Explain why your organization does not have management-level responsibility for environmental issues
Climate change	Select from: ✓ Yes	Select from:	Rich text input [must be under 2500 characters]
Forests	Select from: ✓ Yes	Select from:	Rich text input [must be under 2500 characters]
Water	Select from: ✓ Yes	Select from:	Rich text input [must be under 2500 characters]
Biodiversity	Select from: ✓ No, but we plan to within the next two years	Select from: ✓ Not an immediate strategic priority	We plan to implement the plan formulation, etc. in the future.

[Fixed row]

(4.3.1) Provide the highest senior management-level positions or committees with responsibility for environmental issues (do not include the names of individuals).

Climate change

(4.3.1.1) Position of individual or committee with responsibility

#### **Executive level**

✓ Chief Executive Officer (CEO)

## (4.3.1.2) Environmental responsibilities of this position

#### Dependencies, impacts, risks and opportunities

- ☑ Assessing environmental dependencies, impacts, risks, and opportunities
- ☑ Managing environmental dependencies, impacts, risks, and opportunities

#### Engagement

☑ Managing value chain engagement related to environmental issues

#### Policies, commitments, and targets

- ☑ Measuring progress towards environmental corporate targets
- ✓ Setting corporate environmental targets

#### Strategy and financial planning

✓ Conducting environmental scenario analysis

## (4.3.1.4) Reporting line

Select from:

Reports to the board directly

#### (4.3.1.5) Frequency of reporting to the board on environmental issues

#### Select from:

✓ Quarterly

### (4.3.1.6) Please explain

To promote sustainability, our Group, through the management committee (chaired by the President) with delegated authority from the Board of Directors, has approved the establishment of a working group (under the Sustainability Committee) that discusses key issues. The action plans discussed by personnel involved in business

organizations who congregate at the working group become deliberated by the Sustainability Committee, approved by the management committee, and implemented to the Group and organization as a whole. We have also established WGs under the Sustainability Committee to discuss the four themes of supply chain, environment, human rights and labor, and SDGs. The agendas to identify climate change impacts, risks, and opportunities, and formulate an action plan (direction, purpose, goals) are discussed by a cross-functional working group (an environmental WG led by an officer in charge of environmental response) established under the approval of the management committee. The progress status of action plans approved by the management committee is managed by the environmental WG and reported to the Sustainability Committee and management committee, which are held four times a year. \*The functions of the management committee and Board of Directors are the same.

#### Forests

## (4.3.1.1) Position of individual or committee with responsibility

#### Executive level

✓ Chief Executive Officer (CEO)

## (4.3.1.2) Environmental responsibilities of this position

#### Dependencies, impacts, risks and opportunities

- ☑ Assessing environmental dependencies, impacts, risks, and opportunities
- ☑ Assessing future trends in environmental dependencies, impacts, risks, and opportunities

#### Policies, commitments, and targets

- ☑ Monitoring compliance with corporate environmental policies and/or commitments
- ☑ Measuring progress towards environmental corporate targets
- ☑ Setting corporate environmental policies and/or commitments
- ✓ Setting corporate environmental targets

# (4.3.1.4) Reporting line

Select from:

Reports to the board directly

(4.3.1.5) Frequency of reporting to the board on environmental issues

✓ Quarterly

#### (4.3.1.6) Please explain

The President and CEO are members of the Board of Directors and have the highest level of responsibility for sustainability issues. In April 2021, the Company established the Sustainability Committee chaired by the President. The Committee meets 4 times a year to report, deliberate, and make decisions on measures and responses to various sustainability issues, including forest-related issues. The Supply Chain Task Force is established under the Sustainability Committee to discuss activity plans, targets, and KPIs. The progress of the Task Force's efforts is regularly checked and monitored by the Sustainability Committee are reported or discussed by the Management Committee and are reflected in the formulation and revision of the Annual Plan and Medium-Term Business Plan. The matters reported and approved by the Sustainability Committee are reported to the Board of Directors in a timely and appropriate manner.

#### Water

## (4.3.1.1) Position of individual or committee with responsibility

#### **Executive level**

✓ Chief Executive Officer (CEO)

## (4.3.1.2) Environmental responsibilities of this position

#### Policies, commitments, and targets

- ☑ Monitoring compliance with corporate environmental policies and/or commitments
- ☑ Measuring progress towards environmental corporate targets
- ✓ Setting corporate environmental targets

# (4.3.1.4) Reporting line

Select from:

✓ Reports to the board directly

(4.3.1.5) Frequency of reporting to the board on environmental issues

✓ Quarterly

#### (4.3.1.6) Please explain

To promote sustainability, our Group, through the management committee (chaired by the President) with delegated authority from the Board of Directors, has approved the establishment of a working group (under the Sustainability Committee) that discusses key issues. The action plans discussed by personnel involved in business organizations who congregate at the working group become deliberated by the Sustainability Committee, approved by the management committee, and implemented to the Group and organization as a whole. We have also established WGs under the Sustainability Committee to discuss the four themes of supply chain, environment, human rights and labor, and SDGs. The agendas to formulate an action plan regarding water issues are discussed by a cross-functional working group (an environmental WG led by an officer in charge of environmental response) established under the approval of the management committee. The progress status of action plans approved by the management committee is managed by the environmental WG and reported to the Sustainability Committee and management committee, which are held four times a year. \*The functions of the management committee and Board of Directors are the same. [Add row]

# (4.5) Do you provide monetary incentives for the management of environmental issues, including the attainment of targets?

#### Climate change

#### (4.5.1) Provision of monetary incentives related to this environmental issue

Select from:

🗹 Yes

(4.5.2) % of total C-suite and board-level monetary incentives linked to the management of this environmental issue

10

#### (4.5.3) Please explain

Climate change items are included in the performance evaluation items for executive officers in charge of the environment, and the system is designed to change the evaluation depending on the achievement of decarbonization targets and other targets. Evaluation criteria for executive officers in 2024

#### Forests

#### (4.5.1) Provision of monetary incentives related to this environmental issue

Select from:

☑ No, and we do not plan to introduce them in the next two years

### (4.5.3) Please explain

There are no plans for incentives.

#### Water

(4.5.1) Provision of monetary incentives related to this environmental issue

Select from:

 $\blacksquare$  No, and we do not plan to introduce them in the next two years

## (4.5.3) Please explain

There are no plans for incentives. [Fixed row]

(4.5.1) Provide further details on the monetary incentives provided for the management of environmental issues (do not include the names of individuals).

## Climate change

## (4.5.1.1) Position entitled to monetary incentive

Board or executive level

☑ Board/Executive board

#### (4.5.1.2) Incentives

Select all that apply

✓ Bonus - % of salary

✓ Salary increase

#### (4.5.1.3) Performance metrics

#### Strategy and financial planning

- ✓ Board approval of climate transition plan
- ✓ Shareholder approval of climate transition plan
- ✓ Achievement of climate transition plan

#### **Emission reduction**

- ☑ Implementation of an emissions reduction initiative
- ☑ Increased share of renewable energy in total energy consumption
- ✓ Reduction in absolute emissions

#### **Resource use and efficiency**

- Energy efficiency improvement
- ✓ Reduction in total energy consumption

## (4.5.1.4) Incentive plan the incentives are linked to

#### Select from:

Short-Term Incentive Plan, or equivalent, only (e.g. contractual annual bonus)

## (4.5.1.5) Further details of incentives

CO2 reduction and energy conservation targets for each site and company are included in the policy and evaluated for the end of the fiscal year.

# (4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

We recognize that the reduction of CO2 emissions, energy conservation and other measures related to climate change are our responsibility to our stakeholders and

society, and that they are social issues that must be achieved. In order to strongly promote these plans, we believe it is important to concentrate the authority to promote these initiatives in the hands of the responsible officers, in addition to making commitments outside the company. In addition, we believe that a system in which evaluation and compensation vary according to the results of these efforts will accelerate their momentum. These mechanisms have been successful in accelerating the implementation of the initiatives, and the targets have been achieved significantly ahead of schedule. [Add row]

## (4.6) Does your organization have an environmental policy that addresses environmental issues?

Does your organization have any environmental policies?
Select from: ✓ Yes

[Fixed row]

# (4.6.1) Provide details of your environmental policies.

#### Row 1

## (4.6.1.1) Environmental issues covered

Select all that apply

✓ Climate change

## (4.6.1.2) Level of coverage

Select from:

✓ Organization-wide

#### (4.6.1.3) Value chain stages covered

Select all that apply

☑ Direct operations

✓ Upstream value chain

✓ Downstream value chain

### (4.6.1.4) Explain the coverage

The Global Policy on the Global Environment is an organization-wide policy that commits to all processes in the value chain. The basic philosophy of the Global Policy on the Global Environment states, "The Toyo Tire Group will continue to fulfill its corporate responsibility for the global environment in the future based on the Toyo Tire SDGs, which aim to solve global-scale social issues, and will strive to realize a sustainable society that shares prosperity and joy with all people involved in our business." In addition, TOYO TIRE has declared in its Action Policy 5 that it will make judgments on preventive environmental conservation in each process of its value chain and engage in business activities accordingly.

#### (4.6.1.5) Environmental policy content

#### **Environmental commitments**

- Commitment to a circular economy strategy
- ☑ Commitment to comply with regulations and mandatory standards
- Commitment to take environmental action beyond regulatory compliance
- Commitment to stakeholder engagement and capacity building on environmental issues

#### **Climate-specific commitments**

✓ Commitment to net-zero emissions

#### Additional references/Descriptions

☑ Reference to timebound environmental milestones and targets

## (4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

Select all that apply

✓ Yes, in line with the Paris Agreement

# (4.6.1.7) Public availability

Select from:

✓ Publicly available

## (4.6.1.8) Attach the policy

4.6.1\_Global Environmental Policy.pdf

Row 2

#### (4.6.1.1) Environmental issues covered

Select all that apply

✓ Water

#### (4.6.1.2) Level of coverage

Select from:

✓ Organization-wide

#### (4.6.1.3) Value chain stages covered

Select all that apply

Direct operations

#### (4.6.1.4) Explain the coverage

There is a group-wide policy on water as well as climate change. The Global Policy on the Global Environment is an organization-wide policy that commits to all processes in the value chain. The basic philosophy of the Global Policy on the Global Environment states, "The Toyo Tire Group will continue to fulfill its corporate responsibility for the global environment in the future based on the Toyo Tire SDGs, which aim to solve global-scale social issues, and will strive to realize a sustainable society that shares prosperity and joy with all people involved in our business." In addition, TOYO TIRE has declared in its Action Policy 5 that it will make judgments on preventive environmental conservation in each process of its value chain and engage in business activities accordingly.

# (4.6.1.5) Environmental policy content

#### **Environmental commitments**

- ☑ Commitment to take environmental action beyond regulatory compliance
- Commitment to stakeholder engagement and capacity building on environmental issues

#### Water-specific commitments

- Commitment to reduce water withdrawal volumes
- ☑ Commitment to safely managed WASH in local communities

#### (4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

Select all that apply

☑ Yes, in line with Sustainable Development Goal 6 on Clean Water and Sanitation

# (4.6.1.7) Public availability

Select from:

Publicly available

# (4.6.1.8) Attach the policy

4.6.1\_Global Environmental Policy.pdf [Add row]

# (4.10) Are you a signatory or member of any environmental collaborative frameworks or initiatives?

#### (4.10.1) Are you a signatory or member of any environmental collaborative frameworks or initiatives?

Select from:

🗹 Yes

#### (4.10.2) Collaborative framework or initiative

Select all that apply

☑ Global Platform on Sustainable Natural Rubber (GPSNR)

- ☑ Task Force on Climate-related Financial Disclosures (TCFD)
- ✓ UN Global Compact
- ✓ Other, please specify :Tire Industry Project (TIP)

#### (4.10.3) Describe your organization's role within each framework or initiative

In February last year, the TOYO TIRE Group declared its commitment to contribute to the realization of a sustainable society through its business activities in its "Sustainability Management Policy" based on its corporate philosophy. In response to the development of the global environmental crisis caused by climate change and related international measures and policies, we have expressed our support for the TCFD recommendations and disclosed information on governance, strategy, risk management, indicators and targets in accordance with the TCFD disclosure framework. In addition, in May of this year, we submitted an application for commitment to the SBT and are awaiting accreditation. We will continue to promote efforts to address climate change and create a sustainable society through active dialogue with our stakeholders.

[Fixed row]

# (4.11) In the reporting year, did your organization engage in activities that could directly or indirectly influence policy, law, or regulation that may (positively or negatively) impact the environment?

(4.11.1) External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the environment

Select all that apply

Ves, we engaged indirectly through, and/or provided financial or in-kind support to a trade association or other intermediary organization or individual whose activities could influence policy, law, or regulation

(4.11.2) Indicate whether your organization has a public commitment or position statement to conduct your engagement activities in line with global environmental treaties or policy goals

Select from:

☑ Yes, we have a public commitment or position statement in line with global environmental treaties or policy goals

## (4.11.3) Global environmental treaties or policy goals in line with public commitment or position statement

Select all that apply

✓ Paris Agreement

✓ Kunming-Montreal Global Biodiversity Framework

### (4.11.5) Indicate whether your organization is registered on a transparency register

Select from:

Unknown

# (4.11.8) Describe the process your organization has in place to ensure that your external engagement activities are consistent with your environmental commitments and/or transition plan

The Tire Industry Project (TIP) has formulated and published a roadmap to promote the tire industry's contribution to the United Nations Sustainable Development Goals (SDGs) and specifically indicates key actions that supports the transition to a low-carbon, resilient, and resource-efficient economy. It also aims to reduce the environmental impact of the overall tire life cycle, and serves to promote the decarbonization of the tire industry through scientific research and provision of guidelines and data based on such research. Recently, it has been promoting scientific research on environmental factors such as tire and road wear particles (TRWP) and human health, accurately evaluating the environmental impact, and providing guidelines and data for implementing effective countermeasures. It is also leading the way in international cooperation and sharing of knowledge to achieve the goals of the Paris Agreement such as by updating these guidelines from time to time and providing specialized knowledge through workshops. We have chosen several members to handle TIP-related matters for each theme, and constantly learn the latest information by participating in events such as the workshops, and verify the congruency between our environmental policies and TIP. [Fixed row]

# (4.11.2) Provide details of your indirect engagement on policy, law, or regulation that may (positively or negatively) impact the environment through trade associations or other intermediary organizations or individuals in the reporting year.

Row 1

# (4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

# (4.11.2.4) Trade association

Global

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

✓ Climate change

✓ Water

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

✓ Yes, we publicly promoted their current position

# (4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

TIP's mission is to predict, understand, and respond to global/environmental, social, and governance-related (ESG) issues related to the tire industry and its value chain. To that end, it commissions independent research of the highest standard and provides effective methods and KPIs for responding to the issues of each field. For example, they have formulated and published a reported called the Sustainability Driven: Accelerating Impact with the Tire Sector SDG Roadmap, and provides scientific research data, etc. that support decarbonization transition plans through regular reports and workshops. Moreover, TIP gathers environmental data from members including our company, discloses them externally, and sets common goals for all members to encourage member initiatives. TIP's support and evocation of our decarbonation efforts to ensure carbon neutrality align with our company's orientation, which we believe will promote our activities. We are also influencing TIP through providing data, participating in workshops, etc. There are also opportunities for the CEO of each company to gather each year, and we believe that we are actively involved as a member.

#### (4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

# (4.11.2.10) Describe the aim of this funding and how it could influence policy, law or regulation that may impact the environment

TIP promotes sustainable procurement practices, has established responsible procurement policies for the entire supply chain, and could affect regulations related to sustainable supply chain management. It also implements KPIs for tracking water usage and reports on the water withdrawal ratio of water-stressed regions. It could therefore impact regulations that aim to promote sustainable water management and efficient usage of water resources. TIP also announces the target ratios for the renewable energy adoption and setting of SBT-based targets by the participating members, and works to reduce CO2 emission. It could also impact global climate policies such as the Paris Agreement. Furthermore, TIP launched the Global Platform for Sustainable Natural Rubber (GPSNR) that promotes sustainable production of natural rubber, responds to risks such as land use change, biodiversity loss, and socio-economic impacts, and is impacting policies that support sustainable agricultural practices and ecosystem protection.

# (4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

✓ Paris Agreement

✓ Kunming-Montreal Global Biodiversity Framework

☑ Sustainable Development Goal 6 on Clean Water and Sanitation

# Row 2

## (4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

#### Global

☑ Other global trade association, please specify :Global Platform for Sustainable Natural Rubber

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

Forests

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

✓ Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

GPSNR is actively responding to the EU EUDR, which has a deep impact on our business. We participate in the EUDR response of GPSNR as a member.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

15000

(4.11.2.10) Describe the aim of this funding and how it could influence policy, law or regulation that may impact the environment Founding are used for guidelines and dialogue within the industry to quickly adapt to the challenging EUDR.

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

Another global environmental treaty or policy goal, please specify :EUDR [Add row]

(4.12) Have you published information about your organization's response to environmental issues for this reporting year in places other than your CDP response?

Select from:

🗹 Yes

(4.12.1) Provide details on the information published about your organization's response to environmental issues for this reporting year in places other than your CDP response. Please attach the publication.

Row 1

# (4.12.1.1) Publication

Select from:

✓ In voluntary sustainability reports

#### (4.12.1.3) Environmental issues covered in publication

Select all that apply

✓ Climate change

✓ Water

✓ Biodiversity

#### (4.12.1.4) Status of the publication

Select from:

✓ Complete

## (4.12.1.5) Content elements

Select all that apply

- ✓ Strategy
- ✓ Governance
- Emission targets
- ✓ Emissions figures
- Risks & Opportunities

# (4.12.1.6) Page/section reference

77

# (4.12.1.8) Comment

We have consistently published our "Annual Report" as a comprehensive tool to convey financial information, business strategies, and overall management details to our stakeholders. In addition, to strengthen our sustainability management, we have issued a "Sustainability Report" to communicate our ESG initiatives. Recently, the importance of disclosing not only financial details but also a company's philosophy, business model, governance practices, and business opportunities/risks has increased to offer a better understanding of the company's future. As a result, in FY2023, we published the "Integrated Report 2023," which integrates both financial and non-financial information. The Integrated Report is a crucial tool for fostering dialogue and understanding with institutional investors, shareholders, and a wide range of stakeholders. To address this, we have identified items that could have a significant impact on the economy, environment, and society and might substantially influence our stakeholders' evaluations and decision-making as materiality issues. Through this approach, we aim to systematically convey and disclose our corporate values by structuring the report around a long-term perspective of value creation. By clearly organizing and verbalizing our values, we intend to deepen our relationships with stakeholders, and we are committed to producing an integrated report that garners even greater recognition from society in the future. [Add row]

Dependencies & Impacts

✓ Content of environmental policies

#### **C5. Business strategy**

### (5.1) Does your organization use scenario analysis to identify environmental outcomes?

#### Climate change

#### (5.1.1) Use of scenario analysis

Select from:

✓ Yes

## (5.1.2) Frequency of analysis

Select from:

Annually

### Forests

## (5.1.1) Use of scenario analysis

Select from:

 $\blacksquare$  No, and we do not plan to within the next two years

## (5.1.3) Primary reason why your organization has not used scenario analysis

Select from:

 $\blacksquare$  No standardized procedure

# (5.1.4) Explain why your organization has not used scenario analysis

Because of the complexity of the supply chain

#### Water

## (5.1.1) Use of scenario analysis

Select from:

✓ No, but we plan to within the next two years

#### (5.1.3) Primary reason why your organization has not used scenario analysis

Select from:

✓ No standardized procedure

#### (5.1.4) Explain why your organization has not used scenario analysis

We plan to implement the plan formulation, etc. in the future. [Fixed row]

## (5.1.1) Provide details of the scenarios used in your organization's scenario analysis.

#### Climate change

#### (5.1.1.1) Scenario used

Climate transition scenarios ✓ IEA NZE 2050

#### (5.1.1.3) Approach to scenario

Select from: ✓ Qualitative and quantitative

#### (5.1.1.4) Scenario coverage

Select from:

✓ Organization-wide

# (5.1.1.5) Risk types considered in scenario

Select all that apply

Policy

✓ Market

Reputation

Technology

#### (5.1.1.6) Temperature alignment of scenario

Select from:

✓ 1.5°C or lower

### (5.1.1.7) Reference year

2019

# (5.1.1.8) Timeframes covered

Select all that apply

✓ 2030

✓ 2050

## (5.1.1.9) Driving forces in scenario

#### Stakeholder and customer demands

✓ Impact of nature service delivery on consumer

#### Regulators, legal and policy regimes

✓ Global regulation

# (5.1.1.10) Assumptions, uncertainties and constraints in scenario

We have implemented the scenario analysis from (1) through (3) in that order and identified highly significant risks and opportunities. (1) Select scenarios to consider and understand the worldview of each scenario. (2) Examine the risks and opportunities of each scenario. (3) Evaluate the significance of the risks and opportunities. Regarding (1): We evaluated the impacts of the climate risks and opportunities of the current scenario (3–4C scenario) and transition scenario (1.5C scenario). We brainstormed the physical risks and the transition risks of the current scenario and transition scenario, respectively. In the current scenario, we assumed a world in which no emissions reduction measures are taken beyond the current level and average temperatures at the end of the 21st century will increase by a maximum of 3– 4C based on the IEA Stated Policies Scenario (STEPS), IPCC SSP5-8.5, etc., as well as classified the physical risks posed by the intensification of natural disasters due to rising temperatures into chronic and acute risks, and qualitative and quantitatively estimated their impact on our business and finance. In the transition scenario, we assumed a world where decarbonization efforts are being advanced to limit the average temperature increase to 1.5C at the end of the 21st century, classified events such as carbon taxing, development of renewable energy technology, and popularization of EVs into the categories of policy, technology, market, and reputation, and qualitatively and quantitatively estimated their impact on our business and finance based on the IEA Sustainable Development Scenario (SDS), IEA Net Zero Emission Scenario by 2050 Case (NZE), IPCC SSP1-2.6, etc. (Quantitative evaluation was conducted for some of them). We also brainstormed and qualitatively and quantitatively evaluated (quantitative evaluation was conducted for some of them). We also brainstormed and qualitatively and current such as this point due to uncertainties such as high probability that the future world will dramatica

#### (5.1.1.11) Rationale for choice of scenario

We chose the 1.5C scenario for the timescales of 2030 and 2050 because we recognize that the materialization of the 1.5C scenario is the most suitable worldview to ensure business sustainability after comprehensively considering factors such as the following: International harmonization to align with the Paris Agreement; technological development and environmental load reduction; and policy aspects such as regulatory strengthening. (1) International harmonization - It is based on the goals of the Paris Agreement and aims to limit global warming to within 1.5C of pre-industrial levels. These goals are recommended to avoid the worst impacts of climate change. (2) Technological development and environmental load reduction - Serves as a guiding principle to promote sustainable growth and efficient usage of resources. We expect that the expansion of renewable energy usage and introduction of emission-reducing technology will become promoted, and initiatives to minimize environmental load will also progress in the tire industry. (3) Regulatory strengthening - There will be a stronger trend for regulations and market demands around the world to require companies to comply with stricter environmental standards. Compliance with the 1.5C scenario will enable companies to meet these regulatory and market expectations.

#### Climate change

#### (5.1.1.1) Scenario used

Physical climate scenarios ✓ RCP 8.5

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

#### Select from:

✓ SSP5

# (5.1.1.3) Approach to scenario

Select from:

✓ Qualitative and quantitative

# (5.1.1.4) Scenario coverage

Select from:

✓ Organization-wide

# (5.1.1.5) Risk types considered in scenario

Select all that apply

✓ Acute physical

Chronic physical

# (5.1.1.6) Temperature alignment of scenario

Select from:

✓ 3.5°C - 3.9°C

## (5.1.1.7) Reference year

2019

# (5.1.1.8) Timeframes covered

Select all that apply

✓ 2030

✓ 2050

(5.1.1.9) Driving forces in scenario

#### Local ecosystem asset interactions, dependencies and impacts

✓ Changes to the state of nature

✓ Number of ecosystems impacted

#### (5.1.1.10) Assumptions, uncertainties and constraints in scenario

In the current scenario, we assumed a world in which no emissions reduction measures are taken beyond the current level and average temperatures at the end of the 21st century will increase by a maximum of 3–4C based on the IEA Stated Policies Scenario (STEPS), IPCC SSP5-8.5, etc., as well as classified the physical risks posed by the intensification of natural disasters due to rising temperatures into chronic and acute risks, and qualitatively and quantitatively estimated their impact on our business and finance. We also brainstormed and qualitatively and quantitatively evaluated (quantitative evaluation was conducted for some of them) the opportunities generated by taking measures, etc. against the risks.

#### (5.1.1.11) Rationale for choice of scenario

We chose the 4C scenario for the timescales of 2030 and 2050 because of the possibility of physical risks becoming enormous to the point of critically impacting business continuity if no countermeasure is taken. We felt the need to ensure business continuity and demonstrate our risk response capacity to affiliates by brainstorming the worst possible risks and considering mitigation strategies in advance. The identification and quantification of risks can lead to business continuity with a plan (e.g., configuring proper investment allocation ratio as a countermeasure). As with the 1.5C scenario, we determined that the 1.5C and 4C scenarios are currently the optimal combination from the viewpoint of sustainability. One perspective is that assuming extreme cases can easily lead to improved adaptive capacity. - The 4C scenario anticipates the worst-case scenario where global warming is not controlled and posits the possibility that physical risks (e.g., soaring natural rubber prices) due to climate change will become more pronounced and significantly impact business continuity. - By considering the 4C scenario, companies can develop adaptation strategies to climate change and prepare for extreme weather conditions and the resulting business impacts. - After identifying risks, investment allocation can be optimized, such as improving the durability of facilities and securing alternative raw materials. [Add row]

# (5.1.2) Provide details of the outcomes of your organization's scenario analysis.

#### **Climate change**

### (5.1.2.1) Business processes influenced by your analysis of the reported scenarios

Select all that apply

- ☑ Risk and opportunities identification, assessment and management
- ✓ Strategy and financial planning

Select from:

✓ Organization-wide

#### (5.1.2.3) Summarize the outcomes of the scenario analysis and any implications for other environmental issues

Financial impacts of risks expected to have a significant impact in the medium to long term and their countermeasures 1. Impacts of climate pattern change on natural rubber procurement [risk] · Financial impacts Impacts of climate pattern change: Changes in areas where natural rubber trees can grow; guality deterioration, etc.; and subsequent increase in natural rubber procurement cost · Impact amount Approximately 0.7 to 9.7 billion yen (medium term: 2030) · Calculation method (Lower limit) Natural rubber procurement volume x increased price of natural rubber -The natural rubber procurement volume is as of 2030 and estimated from past performance. -The increased price of natural rubber was calculated by annualizing the price increases for the months of past major floods (Upper limit) Increase in natural rubber procurement cost x percentage increase in natural rubber procurement volume -Increase in natural rubber procurement cost. Increase in procurement costs in the year of major flood -Percentage increase in natural rubber procurement volume Estimated percentage increase in procurement volume from the year of the major flood to 2030 · Countermeasures -Reduce natural rubber usage per tire by promoting the weight reduction of tires designed to reduce tire rolling resistance. -Reduce natural rubber consumption by continuing to promote initiatives for improving the usage ratio of sustainable raw materials, and by sequentially launching products made of recycled raw materials such as recycled rubber derived from used tires -Ensure stable natural rubber procurement by implementing solutions to the overall supply chain regarding issues surrounding natural rubber production sites (e.g., deforestation, violation of local people's rights). For example, we have formulated and announced our Sustainable Natural Rubber Procurement Policy based on the Principles of Sustainable Natural Rubber set forth by GPSNR, as well as spread awareness to all suppliers, and commissioned a third-party specialized institution to implement fair and objective CSR evaluations to materialize these ends. We are also considering proactively utilizing each supplier's supply chain management initiatives 2.Carbon pricing mechanism [risk] · Financial impacts Rise in CO2 emission cost due to carbon pricing · Impact amount Approximately 0.5 to 5.7 billion yen (medium term: 2030) · Calculation method (Lower limit) Unmet CO2 reduction target x carbon tax -Unmet CO2 reduction target The unmet volume in the case of falling short of our CO2 reduction target by 10% in 2030. -Carbon tax The carbon tax for developed countries as of 2030 announced by the IEA for reaching net zero by 2050 (Upper limit) CO2 emissions x carbon tax -CO2 emission Our target CO2 emission in 2030 -Carbon tax The carbon tax for developed countries as of 2030 announced by the IEA for reaching net zero by 2050 · Countermeasures -Our Group will continue to reduce CO2 by efficiently using energy through business activities and products, both inside and outside the organization. - To reduce CO2, we will procure renewable energy, switch fuel types, and update equipment at our manufacturing sites through internal carbon pricing (ICP). Based on the extraction, selection, and financial assessment of risks and opportunities, we have decided to develop capacities and set targets as follows, which illustrate how these have impacted us Business strategy resilience -The reduction in the natural rubber procurement volume due to expansion of fuel-efficient tires contributes to improved resiliency during times of difficulty procuring natural rubber and rise in procurement costs -The reduction in new rubber procurement volume due to the development and usage expansion of recycled raw materials such as recycled rubber improves resilience to natural rubber procurement difficulties, higher procurement costs, and higher synthetic rubber procurement costs due to higher oil prices Capacity building -By promoting the development of alternative materials to natural rubber and recycling technology (natural and synthetic rubber), we can build the capacity to expand the usage ratio of recycled raw materials -In January 2024, we developed a concept tire that uses 90% sustainable raw materials. The tire uses CO2-derived butadiene rubber, which was successfully developed in collaboration with University of Toyama, as well as recycled carbon blacks, recycled bead wires, recycled steel cords, etc. These processes have been impacted by the scenario analysis Target -CO2 emission per tire: Contribution of 20% reduction in 2030 compared to FY2019 level. -Sustainable raw material ratio shall be set to 40% and 100% for 2030 and 2050, respectively. -CO2 emission reduction

targets: Reduction of 46% by 2030 compared to FY2019 level; carbon neutral by 2050. We formulated the CO2 emission reduction plan to completely eliminate by 2050 the financial impacts of carbon taxes assessed through the scenario analysis. [Fixed row]

## (5.2) Does your organization's strategy include a climate transition plan?

## (5.2.1) Transition plan

Select from:

✓ Yes, we have a climate transition plan which aligns with a 1.5°C world

#### (5.2.3) Publicly available climate transition plan

Select from:

✓ Yes

# (5.2.4) Plan explicitly commits to cease all spending on, and revenue generation from, activities that contribute to fossil fuel expansion

Select from:

🗹 Yes

## (5.2.5) Description of activities included in commitment and implementation of commitment

We have announced the following greenhouse gas (GHG) targets on February 15, 2022, and have also disclosed them in our integrated reports, securities reports, website, etc. Metrics and targets GHG emissions - Scope 1 & 2 GHG emission targets: Reduction of 46% by 2030 compared to FY2019 level; carbon neutral by 2050. - Scope 3 GHG emission target per unit: Reduction of GHG emission per tire by 20% by 2030 compared to 2019 level. In this way, we have declared carbon neutrality by 2050, and recognize that to achieve this, it is essential for business operations to be independent of fossil fuels. We are already ambitiously working toward decarbonization, which in effect would mean less direct and indirect spending on fossil fuels each year. Specific initiative examples are as follows. As of the end of 2023, we transitioned to 100% renewable energy for electricity purchased at the Sendai Plant, Kuwana Plant, tire plants in the US, and domestic offices and technology bases. We are also promoting electrification of forklifts and have reduced 421 t of CO2 in 2023 by electrifying 17 units. We also plan to increase the ratio of electricity derived from renewable energy sources to more than 90% by 2030, not only domestically but also globally. Instead of solely depending on purchased renewable energy-derived electricity, we are also installing on-site solar panels (owned by us) and promoting additional renewable energy sources for in-house consumption. In the

grounds of our Serbian plant that began operation in 2022, we have installed the country's largest solar power generation system (power generation capacity: 8.4 MW), which has contributed to the reduction of 7,100 t-CO2 by generating 10.15 GWh annually. In 2023, we have installed a large solar power generation system (capacity: 14.0 MW) in a 96,000 m2 space on the roof of a tire plant building in Malaysia, which is expected to generate approximately 19,000 MWh annually and reduce 12,000 t-CO2 annually. In Japan, we have installed a solar power generation system at the Fundamental Technology Center at the end of 2023, generating approximately 419,000 kWh per year, which is the largest generated amount among our domestic sites and equivalent to approximately 12% of the electricity used at the center. This is expected to reduce approximately 128 t-CO2 annually. Through these efforts, we are dynamically prioritizing implementable Scope 2 reduction measures.

#### (5.2.7) Mechanism by which feedback is collected from shareholders on your climate transition plan

Select from:

☑ We have a different feedback mechanism in place

#### (5.2.8) Description of feedback mechanism

On February 15, 2022, in conjunction with the announcement of our consolidated financial results for FY2021, we announced our Sustainability Management Policy, which sets specific goals for achieving carbon neutrality, and held a briefing session for the media, analysts, and institutional investors. Subsequently, two small meetings, one for analysts and the other for institutional investors with the president in attendance, were held to provide opportunities for direct feedback. In addition, the IR department collects feedback from analysts and institutional investors through individual interviews and provides feedback to the president and other senior management. We will continue to disclose our progress on a regular basis and receive feedback through dialogue with these layers to brush up our efforts to realize sustainability management.

#### (5.2.9) Frequency of feedback collection

Select from:

✓ More frequently than annually

#### (5.2.10) Description of key assumptions and dependencies on which the transition plan relies

The TOYO TIRE Group declares at the beginning of its Sustainability Policy, "The TOYO TIRE Group will pursue its raison d'etre by solving social issues and creating social value through its business activities, with a strong awareness that all of its corporate activities are linked to society and its future. The company declares, "We will pursue our raison d'etre by solving social issues and creating social value through our business activities. This is the most fundamental concept of our sustainability policy and the part on which we rely. Furthermore, the following five perspectives, which form the core of our thinking, are also set forth, and are the basis of our reliance on them. (1) Pursuit of TOYO TIRE's unique characteristics based on our philosophy (2) Promote a medium- to long-term perspective (3) Contribute to a sustainable society (4) Virtuous circle through value creation (5) Collaboration and cooperation with stakeholders

#### (5.2.11) Description of progress against transition plan disclosed in current or previous reporting period

As a Scope 2 reduction measure, our Group has started switching to renewable energy-derived power for purchased electricity starting from the second half of 2022 primarily at production sites according to sustainability policies. (Regarding major reductions for Scope 1, we are currently examining countermeasures from a mediumto long-term perspective). As of the end of 2023, we transitioned to 100% renewable energy for electricity purchased at the Sendai Plant, Kuwana Plant, tire plants in the US, and domestic offices and technology bases. We aim to continue promoting our initiatives systematically and raise our global ratio of renewable energy-derived electricity to 90% or more by 2030. It was 71.14% at the end of 2023. We are also promoting the introduction of solar power generation systems for in-house consumption. In the grounds of our Serbian plant that began operation in 2022, we have installed the country's largest solar power generation system (power generation capacity: 8.4 MW), which has contributed to the reduction of 7,100 t-CO2 by generating 10.15 GWh annually. In 2023, we have installed a large solar power generation system (capacity: 14.0 MW) in a 96,000 m2 space on the roof of a tire plant building in Malaysia. This is expected to generate approximately 19,000 MWh annually and reduce 12,000 t-CO2 annually. As a Scope 3 initiative, our Group is also aiming to reduce greenhouse gas emission per tire by 20% by 2030 compared to 2019 level. The greenhouse gas emission in the "product use stage" of Category 11 accounts for 80% or more of the total based on the calculation of our Group's greenhouse gas emission in the value chain based on the Tyre LCCO2 Calculation Guidelines Ver. 3.0.1 of The Japan Automobile Tyre Manufacturers Association, Inc. (General Incorporated Association). According to this guideline, the CO2 emission during the usage (when driving) of fuel-efficient tires compared to general-purpose tires can be reduced to 95.4 kg CO2e per tire for PCR (passenger vehicle tires) and 879.0 kg CO2e/tire for TBR (tires for trucks/buses). To improve a tire's fuel efficiency, our engineering department plans to upgrade fuel efficiency per tire model change on a medium to long term basis by promoting R&Ds for reducing rolling resistance and weight and collaborating with the Product Planning Department. As of 2023 for PCR, we have achieved a reduction of 1.5% compared to 2019 level or 94,800 t-CO2e (reduction contribution) due to reduction in rolling resistance.

# (5.2.12) Attach any relevant documents which detail your climate transition plan (optional)

5.2\_sustainability\_management\_policy.pdf

## (5.2.13) Other environmental issues that your climate transition plan considers

Select all that apply

✓ Water

✓ Biodiversity

# (5.2.14) Explain how the other environmental issues are considered in your climate transition plan

In its sustainability policy, the Company cites protection of the water environment as one of its ESG issues, and its initiatives include efficient use of water in its business activities. TIP, in which we participate, has also established KPIs related to water resources and is implementing initiatives to watch water consumption in areas where water resources are depleted. Currently, we have not been able to implement any beneficial initiatives regarding water, but we will strengthen engagement with external parties and consider measures to address this issue in the future. [Fixed row]

# (5.3) Have environmental risks and opportunities affected your strategy and/or financial planning?

# (5.3.1) Environmental risks and/or opportunities have affected your strategy and/or financial planning

Select from:

✓ Yes, both strategy and financial planning

## (5.3.2) Business areas where environmental risks and/or opportunities have affected your strategy

Select all that apply

✓ Products and services

- ✓ Upstream/downstream value chain
- Investment in R&D

✓ Operations

[Fixed row]

# (5.3.1) Describe where and how environmental risks and opportunities have affected your strategy.

# **Products and services**

# (5.3.1.1) Effect type

Select all that apply

Opportunities

# (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

#### ✓ Climate change

# (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

The risks and opportunities of climate change are closely linked to sales and tire performance. Among tire products, demand for fuel-efficient tires with low rolling resistance is increasing, contributing to improved fuel efficiency and reduced CO2 emissions. 2022 sales increased 26% year-on-year, but it should be noted that this increase includes overseas sales and the impact of currency fluctuations. PROXES Comfort IIs, launched in March 2022, are premium comfort tires designed for high environmental performance and quality driving. The pattern design uses our proprietary tire design core technology "T-MODE" and an asymmetric pattern that divides

the functions in the tread pattern. By optimizing the pattern design on the inside and outside of the tire, we succeeded in reducing the acoustic energy of noise caused by the tire pattern by 22% compared to our conventional product (PROXES C1S), contributing to a high level of quietness that ensures a comfortable cabin space. In addition, by hardening the blocks in the tread area, maneuvering stability has been improved and wobble during lane changes has been suppressed, achieving both a high level of ride comfort and maneuvering stability. In material development, we developed fuel-efficient compounds by utilizing our core material design technology, Nanobalance Technology. A new silica dispersant was adopted for more uniform dispersion of silica, which is effective in reducing rolling resistance, wet grip performance, and improving wear resistance, enabling optimization at a h igher dimension. The new silica dispersant is made from sustainable natural materials in line with our corporate policy, "Creation of a sustainable mobility society."

# Upstream/downstream value chain

# (5.3.1.1) Effect type

Select all that apply

🗹 Risks

Opportunities

# (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

✓ Climate change

# (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

The risks and opportunities associated with climate change also have a significant impact on our service to customers. The supply and quality of natural rubber, the raw material for tires, could deteriorate due to heavy rainfall and rising sea levels, causing delays in marine and land transportation. On the other hand, if we develop tires specifically for EVs, which require different performance from gasoline and diesel vehicles, On the other hand, developing tires specifically for EVs, which require different performance from gasoline and opportunity to supply products that meet customers' needs in a timely manner. At the same time, as part of our customer engagement efforts, we are working to visualize CO2 emissions per component and formulate and implement measures to reduce emissions, and are working with our customers to promote initiatives for next-generation vehicles.

## **Investment in R&D**

# (5.3.1.1) Effect type

Select all that apply ✓ Risks

## (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

✓ Climate change

#### (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

New R&D and investments are needed to meet customer needs in response to climate change, such as the demand for more fuel-efficient tires and tires with improved braking performance on wet surfaces. Changes in temperature and heavy rainfall have a significant impact on the tire performance of our products, including wear resistance, fuel efficiency, and braking performance on wet surfaces. We need to quickly improve each performance in response to climate change while keeping tire costs low through research and development. To this end, we have established our proprietary "Nanobalance Technology," a fundamental rubber material development technology that develops ideal rubber materials with high precision, and have continued to supply the market with various fuel-efficient tires that achieve both rolling resistance and grip performance at a high level through continuous technological innovation. As a result, tires introduced to the market in FY2018 have improved fuel efficiency, wear resistance, and wet performance compared to conventional tires. Climate change may inhibit the growth of natural rubber trees, which could significantly affect the harvest of natural rubber, the main raw material of our products, and we are investing in research and development of alternative materials for natural rubber in order to reduce the impact on the stable supply of the main raw material.

# **Operations**

# (5.3.1.1) Effect type

Select all that apply

🗹 Risks

# (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

✓ Climate change

# (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

In response to climate change risk in our business, • This could have an impact on the working environment of our employees, and could lead to a decrease in the workforce due to adverse effects on health and safety. Therefore, activities to reduce the burden on the human body, such as increasing the frequency of air conditioner

use and encouraging employees to drink more water to improve the environment to prevent heat stroke, will have a significant impact. In logistics, we will consolidate delivery bases and switch to rail transportation for delivery as a measure to reduce CO2 emissions. In addition, it is necessary to assume the securing of alternative transportation routes and the conversion of transportation means in the event that the transportation routes for our products are disrupted due to storms, floods, landslides, etc. associated with increased rainfall. [Add row]

(5.3.2) Describe where and how environmental risks and opportunities have affected your financial planning.

#### Row 1

#### (5.3.2.1) Financial planning elements that have been affected

Select all that apply

✓ Direct costs

#### (5.3.2.2) Effect type

Select all that apply

✓ Risks

# (5.3.2.3) Environmental issues relevant to the risks and/or opportunities that have affected these financial planning elements

Select all that apply

✓ Climate change

# (5.3.2.4) Describe how environmental risks and/or opportunities have affected these financial planning elements

1) Managing the work environment temperature of our tire production plants (especially for the vulcanization process) is a major challenge, and we recognize the risk of decreased labor force due to worsening work environment (e.g., negative impact on employee health/safety). We need an initiative for complete automation without relying on human labor, and are working to make equipment improvements. Additionally, we are taking measures to prevent heatstroke as one of our measures to prevent damage to employee health. Each year we invest in heat-related measures to reduce the load on the human body, such as lowering room temperatures through air conditioning and promoting thorough water intake. We are currently calculating quantitative impacts by taking into account various conditions, and no definitive cost has been calculated yet. 2) There is an increasing demand in countries/regions where environmental regulations for mobility are being strengthened such as Europe. There is therefore an increasing need to implement new R&Ds and investments to respond to climate change-related customer needs (e.g., fuel efficient tires, tires with

improved braking performance in rainy weather). Changes in temperature and heavy rainfall have a significant impact on the performance of our products, including wear resistance, fuel efficiency, and grip performance. We therefore need to promptly enhance each feature in response to climate change while suppressing tire costs through R&D, which will increase investments in R&DS for enhancing performance. We are currently calculating quantitative impacts by taking into account various conditions, and no definitive cost has been calculated yet. 3) Production costs will rise due to soaring input prices such as raw materials, energy, and water, and output prices such as waste disposal. In particular, the hindering of the growth of natural rubber trees due to climate change impact could significantly affect the harvest of natural rubber (the main ingredient of our products), disrupt the stable supply of natural rubber, and significantly impact the price configurations and drop in revenues of our products. We are currently calculating quantitative impacts by taking into account various conditions, and no definitive cost has been calculated yet.

# Row 2

# (5.3.2.1) Financial planning elements that have been affected

Select all that apply

✓ Direct costs

# (5.3.2.2) Effect type

Select all that apply

🗹 Risks

(5.3.2.3) Environmental issues relevant to the risks and/or opportunities that have affected these financial planning elements

Select all that apply

✓ Water

# (5.3.2.4) Describe how environmental risks and/or opportunities have affected these financial planning elements

The assessment and financial evaluation of water-related risks and opportunities raised awareness of the water and biodiversity crisis and led to the securing of a budget for a comprehensive planning process with a consulting firm to be conducted in the coming year. [Add row]

# (5.4) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

Identification of spending/revenue that is aligned with your organization's climate transition	Methodology or framework used to assess alignment with your organization's climate transition
Select from: ✓ Yes	Select all that apply <ul> <li>Other methodology or framework</li> </ul>

[Fixed row]

# (5.4.1) Quantify the amount and percentage share of your spending/revenue that is aligned with your organization's climate transition.

Row 1

# (5.4.1.1) Methodology or framework used to assess alignment

Select from:

✓ Other, please specify :Primitive Methodology. Data on environment-related investments and expenses are collected from each site, compiled, and checked for consistency with the plan.

# (5.4.1.5) Financial metric

Select from:

OPEX

# (5.4.1.6) Amount of selected financial metric that is aligned in the reporting year (currency)

3252000000

(5.4.1.7) Percentage share of selected financial metric aligned in the reporting year (%)

100

100

# (5.4.1.9) Percentage share of selected financial metric planned to align in 2030 (%)

100

# (5.4.1.12) Details of the methodology or framework used to assess alignment with your organization's climate transition

Our approach and calculation method (methodology) for environmental accounting is described below. Note that the transition plan is defined around the pivot of CO2 emissions and does not clearly define a budget plan for accounting purposes. Since the CO2 emissions target was substantially achieved in the current fiscal year and there is no room for doubt about greenwashing, the response in the previous section is 100%. In 2025 and 2030, the amount of investment will increase in line with the business expansion and reduction targets, and the costs associated with the transition plan are the following parts of Global environmental protection costs. Purpose of Environmental Accounting The purpose of our environmental accounting is to quantitatively understand the costs and economic effects of environmental conservation, and to support the realization of sustainable management. By doing so, we recognize the importance of promoting the reduction of environmental impacts and the efficient use of resources, as well as providing transparent reporting to our stakeholders. Scope of data collection Nine business sites in Japan: TOYO TIRE Corporation (Head Office, Sendai Plant, Kuwana Plant, Tire Engineering Center, Automotive Parts Engineering Center, and Fundamental Technology Center), Fukushima Rubber Corporation, Ayabe Toyo Tire & Rubber Co. Period covered: One year from January 2023 to December 2023. Environmental Accounting Methodology The Company's environmental accounting conforms to the Environmental Accounting Guidelines (2005 version) issued by the Ministry of the Environment. Based on these guidelines. we accurately calculate environmental conservation costs and their economic effects, and report them in a highly transparent manner. Classification of Environmental Conservation Costs Environmental conservation costs are classified into the following six categories and tabulated. 1. Business Area Costs Pollution prevention costs: Costs associated with air pollution prevention measures and wastewater treatment facilities. Global environmental conservation costs: Costs associated with energy conservation measures and greenhouse gas emission control measures. Resource recycling costs: Costs associated with industrial waste treatment and recycling activities. 2. Upstream/Downstream Costs Upstream/downstream costs: Costs associated with the purchase of environmental goods and the shredding of waste tires. 3. Management activity costs Costs associated with the operation of environmental management systems and environmental impact monitoring activities. 4. Research and development costs R&D costs related to the development of alternative raw materials and fuel-efficient tires. 5. Social activity costs Costs related to greening activities and contributions to environmental protection funds. 6. Environmental damage response costs Costs related to payment of pollution load levy, etc. Methods of calculating environmental costs Depreciation of investments: Investments are included in costs. The amount of investment is included in the cost amount. In cases where the costs cannot be separated, they are prorated in consideration of the ratio of environmental objectives. Calculation of labor costs: Calculated based on the number of environment-related man-hours and average wages. Economic Effects of Environmental Conservation Measures The economic effects of environmental preservation measures are summarized by categories such as energy conservation activities, recycling, and profit from sales, etc. The economic effects in FY2023 are as follows. · Energy conservation activities: 162 million yen · Profit from recycling and sale:12 million yen Summary We emphasize transparency in its entire environmental accounting process. By complying with the Ministry of the Environment's guidelines, we have adopted a standardized methodology and provided accurate and consistent data.

[Add row]

(5.9) 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?

(5.9.1) Water-related CAPEX (+/- % change)
11
(5.9.2) Anticipated forward trend for CAPEX (+/- % change)
0
(5.9.3) Water-related OPEX (+/- % change)
15
(5.9.4) Anticipated forward trend for OPEX (+/- % change)

0

# (5.9.5) Please explain

CAPEX increased 11% over the previous year due to new tank installation and drainage piping work. OPEX increased 15% over the previous year due to the repair of reservoir leaks. The same is expected in the next fiscal year. [Fixed row]

(5.10) Does your organization use an internal price on environmental externalities?

Use of internal pricing of environmental externalities	Environmental externality priced
Select from: ✓ Yes	Select all that apply ✓ Carbon

[Fixed row]

# (5.10.1) Provide details of your organization's internal price on carbon.

Row 1

# (5.10.1.1) Type of pricing scheme

Select from:

✓ Shadow price

# (5.10.1.2) Objectives for implementing internal price

Select all that apply

- ✓ Conduct cost-benefit analysis
- ☑ Drive energy efficiency
- ☑ Drive low-carbon investment
- ${\ensuremath{\overline{\mathrm{v}}}}$  Incentivize consideration of climate-related issues in decision making

# (5.10.1.3) Factors considered when determining the price

Select all that apply

- ✓ Alignment to scientific guidance
- $\checkmark$  Alignment with the price of a carbon tax
- ✓ Scenario analysis

# (5.10.1.4) Calculation methodology and assumptions made in determining the price

The International Energy Agency (IEA) projects that the carbon price for developed countries will reach 130 per ton of CO2 emissions in 2030 and 250 per ton of CO2 emissions in 2050. This is based on a scenario that achieves net zero emissions globally by 2050. Based on this information, we have assumed a shadow price of 130 per ton of CO2 emissions in 2030. Furthermore, we established a hybrid shadow price and implicit carbon price, considering the pricing trends of other industry players and the potential for internal consensus. MCC introduced this pricing on a trial basis in 2022, raising the price in stages to 5,000 yen, 8,000 yen, and 10,000 yen, and officially adopting and operating a price of 10,000 yen per ton in 2023. The appropriateness of this price will be flexibly reviewed in light of future social trends and our progress in decarbonization.

# (5.10.1.5) Scopes covered

Select all that apply

Scope 1

✓ Scope 2

### (5.10.1.6) Pricing approach used – spatial variance

Select from:

Uniform

# (5.10.1.8) Pricing approach used – temporal variance

Select from:

✓ Static

# (5.10.1.10) Minimum actual price used (currency per metric ton CO2e)

10000

## (5.10.1.11) Maximum actual price used (currency per metric ton CO2e)

10000

# (5.10.1.12) Business decision-making processes the internal price is applied to

Select all that apply

#### ✓ Capital expenditure

✓ Operations

# (5.10.1.13) Internal price is mandatory within business decision-making processes

Select from:

✓ Yes, for all decision-making processes

# (5.10.1.14) % total emissions in the reporting year in selected scopes this internal price covers

100

# (5.10.1.15) Pricing approach is monitored and evaluated to achieve objectives

Select from:

🗹 Yes

# (5.10.1.16) Details of how the pricing approach is monitored and evaluated to achieve your objectives

We have set an internal carbon pricing (ICP) of 10,000 yen per 1 t-CO2, and are utilizing ICP in making environmental investment decisions to achieve our greenhouse gas reduction target. For example, if only looking at it from a financial, environmental investment perspective, such investment would be regarded as valuable compared to the ICP of 10,000 yen if the marginal cost per t-CO2 reduction is 1,000 yen. (If we assume that a carbon tax of 10,000 yen/t-CO2 is added and each 1,000 yen of environmental investment can eliminate 1 t-CO2, then this cost-saving benefit will accelerate the environmental investment. \*Hence, ICP can be regarded as a reduction in our budget. Both ways of perceiving the situation are essentially the same.) We have started fully utilizing ICP, and anticipate being able to flexibly change our prices if it becomes difficult to achieve greenhouse gas targets, a carbon tax higher than expected becomes implemented, a competitor starts providing superior price compared to ours, etc. To prevent the mechanism from becoming merely a formality, we will ensure effective ICP operation while constantly predicting the current and future efficacies. We assume that the introduction and effective utilization of ICP will greatly promote decarbonization activities, and believe that this will be one of the major drivers for materializing carbon neutrality. [Add row]

# (5.11) Do you engage with your value chain on environmental issues?

# Suppliers

#### (5.11.1) Engaging with this stakeholder on environmental issues

#### Select from:

#### ✓ Yes

#### (5.11.2) Environmental issues covered

Select all that apply

✓ Climate change

Forests

# Smallholders

# (5.11.1) Engaging with this stakeholder on environmental issues

Select from:

 $\blacksquare$  No, but we plan to within the next two years

# (5.11.3) Primary reason for not engaging with this stakeholder on environmental issues

Select from:

 ${\ensuremath{\overline{\mathsf{V}}}}$  Other, please specify :Because of the complexity of the supply chain

# (5.11.4) Explain why you do not engage with this stakeholder on environmental issues

Direct dialogue is difficult due to the complexity of the supply chain. Therefore, we are currently considering dialogue through Tier1.

# Customers

# (5.11.1) Engaging with this stakeholder on environmental issues

Select from:

Yes

# (5.11.2) Environmental issues covered

Select all that apply

#### Investors and shareholders

#### (5.11.1) Engaging with this stakeholder on environmental issues

Select from:

🗹 Yes

#### (5.11.2) Environmental issues covered

Select all that apply

✓ Climate change

✓ Water

## Other value chain stakeholders

## (5.11.1) Engaging with this stakeholder on environmental issues

Select from:

 $\blacksquare$  No, but we plan to within the next two years

# (5.11.3) Primary reason for not engaging with this stakeholder on environmental issues

Select from:

✓ Not an immediate strategic priority

# (5.11.4) Explain why you do not engage with this stakeholder on environmental issues

We recognize the need to resolve ESG issues in all LCA processes related to tire manufacturing. While it would be ideal to comprehensively resolve issues for all suppliers at once, the reality is that our limited resources limit the areas in which we can be directly involved, and we have no choice but to prioritize engagement with customers and suppliers that have a large impact on the issues that have surfaced. We believe that we have to prioritize engagement with customers, suppliers, and others who have a large impact on the issues that surface. Therefore, for areas where direct involvement is difficult at this time, we are deepening our awareness and understanding of potential issues by participating indirectly in WBCSD TIPs and other events to demonstrate our activities and thinking. We see this as part of our efforts to reach out to the value chain.

# (5.11.1) Does your organization assess and classify suppliers according to their dependencies and/or impacts on the environment?

	Assessment of supplier dependencies and/or impacts on the environment
Climate change	Select from: ✓ No, we do not currently assess the dependencies and/or impacts of our suppliers, but we plan to do so within the next two years
Forests	Select from: ✓ No, we do not currently assess the dependencies and/or impacts of our suppliers, but we plan to do so within the next two years

[Fixed row]

# (5.11.2) Does your organization prioritize which suppliers to engage with on environmental issues?

## Climate change

# (5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

✓ Yes, we prioritize which suppliers to engage with on this environmental issue

## (5.11.2.2) Criteria informing which suppliers are prioritized for engagement on this environmental issue

Select all that apply

✓ Business risk mitigation

- ✓ Material sourcing
- ✓ Procurement spend
- ✓ Product lifecycle
- ✓ Product safety and compliance

# (5.11.2.4) Please explain

The Company emphasizes the following factors as criteria for determining suppliers. Business risk mitigation, material sourcing, procurement costs, product life cycle, and product safety and compliance. We also evaluate suppliers to prioritize environmental issues and prioritize the suppliers involved. In practice, the company engages with automakers on the downstream side and primary suppliers on the upstream side. We recognize the need to address environmental, social, and governance (ESG) issues throughout the life cycle assessment (LCA) process for tire manufacturing, but due to our limited resources, we are prioritizing engagement with high-impact customers and suppliers on the issues that have surfaced. Priority is given to high-impact customer and supplier engagement on issues that have surfaced. For areas where direct engagement is difficult, we are participating in the World Business Council for Sustainable Development (WBCSD) Tire Industry Project (TIP), for example, to indirectly demonstrate our activities while increasing awareness and understanding of potential challenges. We view these efforts as part of our outreach to the entire value chain.

# Forests

### (5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

✓ Yes, we prioritize which suppliers to engage with on this environmental issue

## (5.11.2.2) Criteria informing which suppliers are prioritized for engagement on this environmental issue

Select all that apply

- In line with the criteria used to classify suppliers as having substantive dependencies and/or impacts relating to forests
- ✓ Business risk mitigation
- ✓ Material sourcing
- ✓ Supplier performance improvement
- ✓ Vulnerability of suppliers

## (5.11.2.4) Please explain

We regularly evaluate our suppliers. Based on this, we select suppliers that should be given priority. We also provide guidance for improving suppliers with low ratings. [Fixed row]

# (5.11.5) Do your suppliers have to meet environmental requirements as part of your organization's purchasing process?

#### Climate change

# (5.11.5.1) Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process

Select from:

✓ Yes, environmental requirements related to this environmental issue are included in our supplier contracts

#### (5.11.5.2) Policy in place for addressing supplier non-compliance

Select from:

☑ Yes, we have a policy in place for addressing non-compliance

# (5.11.5.3) Comment

1. Compliance with Laws and Regulations The Sustainable Natural Rubber Procurement Policy requires all business activities to comply with international environmental codes of conduct, international conventions, and the laws and regulations of each country and region. This will ensure that natural rubber suppliers comply with laws and regulations and meet environmental requirements. 2. commitment to healthy, functioning ecosystems The policy requires the production of natural rubber in a manner that does not deforest or damage High Conservation Values (HCVs) and provides for the management of conservation target areas based on the High Conservation Value (HCV) and High Carbon Stock (HCS) approach. This requires suppliers to meet environmental requirements and is reflected in the contract. 3. policy for dealing with noncompliance The procurement policy requires that suppliers promptly develop and implement corrective plans in the event of noncompliance with policy requirements, and the Company has declared that it will cooperate in developing such plans. This establishes a clear policy for dealing with noncompliance and is reflected in our contracts with suppliers.

## Forests

(5.11.5.1) Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process

Select from:

Ves, suppliers have to meet environmental requirements related to this environmental issue, but they are not included in our supplier contracts

## (5.11.5.2) Policy in place for addressing supplier non-compliance

Select from:

 $\blacksquare$  Yes, we have a policy in place for addressing non-compliance

# (5.11.5.3) Comment

The TOYO Group requires its natural rubber suppliers to meet certain environmental requirements based on its "Sustainable Natural Rubber Procurement Policy" (version 1.0) (July 2021). These environmental requirements are included in the contracts with suppliers, and a policy is developed to deal with non-compliance. The following summarizes the relevance of these requirements based on the content of the procurement policy. 1. Approach to legal compliance The "Sustainable Natural Rubber Procurement Policy" requires all business activities to comply with the International Code of Conduct, international treaties, and local laws and regulations. This ensures that natural rubber suppliers comply with laws and regulations and meet environmental requirements. 2. Approach to healthy and functioning ecosystems The policy requires the production of natural rubber in a manner that does not damage deforestation or high conservation value (HCV), and stipulates the management of conservation areas based on high conservation value (HCV) and high carbon stock (HCS) approaches. This requires suppliers to meet environmental requirements, which are reflected in contracts. 3. Policy for dealing with non-compliance The procurement policy requires suppliers to promptly develop and implement corrective plans if they fail to meet policy requirements, and Toyo has declared its cooperation in developing such plans. This establishes a clear policy for dealing with non-compliance, which is reflected in [Fixed row]

# (5.11.6) Provide details of the environmental requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance measures in place.

Climate change

# (5.11.6.1) Environmental requirement

Select from:

☑ Adoption of the UN International Labour Organization Principles

# (5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Other, please specify :To verify performance, regularly monitor the progress of commitments.

## (5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

Select from:

✓ 100%

#### (5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:

**☑** 100%

(5.11.6.7) % tier 1 supplier-related scope 3 emissions attributable to the suppliers required to comply with this environmental requirement

Select from:

✓ 26-50%

(5.11.6.8) % tier 1 supplier-related scope 3 emissions attributable to the suppliers in compliance with this environmental requirement

Select from:

✓ 26-50%

# (5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:

✓ Retain and engage

# (5.11.6.10) % of non-compliant suppliers engaged

Select from:

None

# (5.11.6.11) Procedures to engage non-compliant suppliers

#### Select all that apply

Other, please specify :In the procurement policy, it is stated that if the supplier does not meet the policy requirements, the company will promptly formulate and implement a corrective plan, and that the Company will cooperate in the formulation of the plan.

# (5.11.6.12) Comment

Our company will communicate with suppliers and procure natural rubber in accordance with the following "Sustainable Natural Rubber Procurement Policy" (Version 1.0): 1. Commitment to Legal Compliance 2. Commitment to a Healthy and Functional Ecosystem 3. Commitment to Respect for All Human Rights 4. Commitment to Community Livelihoods 5. Commitment to Improving Production Efficiency 6. Commitment to Effective Implementation of Sustainable Natural Rubber Procurement 7. Commitment to Supply Chain and Traceability 8. Monitoring and Disclosure of Progress in Sustainable Natural Rubber Procurement

# Forests

# (5.11.6.1) Environmental requirement

Select from:

☑ No deforestation or conversion of other natural ecosystems

## (5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

✓ Community-based monitoring

# (5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

#### Select from:

**☑** 100%

# (5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:

**☑** 100%

# (5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:

✓ Suspend and engage

## (5.11.6.10) % of non-compliant suppliers engaged

Select from:

None

# (5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

☑ Developing quantifiable, time-bound targets and milestones to bring suppliers back into compliance

# (5.11.6.12) Comment

Our company will communicate with suppliers and procure natural rubber in accordance with the following "Sustainable Natural Rubber Procurement Policy" (Version 1.0): 1. Commitment to Legal Compliance 2. Commitment to a Healthy and Functional Ecosystem 3. Commitment to Respect for All Human Rights 4. Commitment to Community Livelihoods 5. Commitment to Improving Production Efficiency 6. Commitment to Effective Implementation of Sustainable Natural Rubber Procurement 7. Commitment to Supply Chain and Traceability 8. Monitoring and Disclosure of Progress in Sustainable Natural Rubber Procurement

# Forests

# (5.11.6.1) Environmental requirement

Select from:

✓ No development on peat regardless of depth

# (5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

✓ Community-based monitoring

(5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

#### Select from:

**☑** 100%

# (5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:

**☑** 100%

# (5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:

 $\blacksquare$  Suspend and engage

# (5.11.6.10) % of non-compliant suppliers engaged

Select from:

✓ None

# (5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

☑ Developing quantifiable, time-bound targets and milestones to bring suppliers back into compliance

# (5.11.6.12) Comment

Our company will communicate with suppliers and procure natural rubber in accordance with the following "Sustainable Natural Rubber Procurement Policy" (Version 1.0): 1. Commitment to Legal Compliance 2. Commitment to a Healthy and Functional Ecosystem 3. Commitment to Respect for All Human Rights 4. Commitment to Community Livelihoods 5. Commitment to Improving Production Efficiency 6. Commitment to Effective Implementation of Sustainable Natural Rubber Procurement 7. Commitment to Supply Chain and Traceability 8. Monitoring and Disclosure of Progress in Sustainable Natural Rubber Procurement [Add row]

# (5.11.7) Provide further details of your organization's supplier engagement on environmental issues.

# **Climate change**

# (5.11.7.2) Action driven by supplier engagement

Select from:

✓ No other supplier engagement

# Forests

# (5.11.7.1) Commodity

Select from:

✓ Rubber

## (5.11.7.2) Action driven by supplier engagement

Select from:

☑ No deforestation and/or conversion of other natural ecosystems

## (5.11.7.3) Type and details of engagement

#### **Capacity building**

☑ Support suppliers to set their own environmental commitments across their operations

#### Information collection

☑ Collect environmental risk and opportunity information at least annually from suppliers

# (5.11.7.4) Upstream value chain coverage

Select all that apply

✓ Tier 1 suppliers

# (5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

Select from:

**☑** 100%

# (5.11.7.7) % tier 1 suppliers with substantive impacts and/or dependencies related to this environmental issue covered by engagement

Select from:

✓ None

# (5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

Natural rubber must not have been harvested where forests have been destroyed or High Conservation Value (HCV) degraded since April 1, 2019. These have been achieved 100% at present.

# (5.11.7.10) Engagement is helping your tier 1 suppliers meet an environmental requirement related to this environmental issue

#### Select from:

✓ Yes, please specify the environmental requirement :Natural rubber must not have been harvested where forests have been destroyed or High Conservation Value (HCV) degraded since April 1, 2019.

## (5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

✓ Yes [Add row]

(5.11.9) Provide details of any environmental engagement activity with other stakeholders in the value chain.

#### **Climate change**

# (5.11.9.1) Type of stakeholder

Select from:

✓ Investors and shareholders

## (5.11.9.2) Type and details of engagement

#### **Education/Information sharing**

Z Educate and work with stakeholders on understanding and measuring exposure to environmental risks

#### (5.11.9.3) % of stakeholder type engaged

Select from:

✓ 1-25%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

✓ 1-25%

#### (5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

Reasons for Involvement • The largest share of GHG emissions in the Life Cycle Assessment of tire products is associated with vehicle driving (Category 11) and material purchases (Category 1), and we conduct R&D and information disclosure with these stakeholders in mind, As a result, information is shared with investors and shareholders. In addition, in order to improve the speed of these R&D activities and the accuracy of disclosed information, the company is engaged in communication and collaboration with automobile manufacturers, universities, industry associations, and others. Scope of Involvement • The company is working with automakers to ensure that their sustainability goals are aligned with ours, and is providing tires and auto parts that can contribute to automakers' climate change initiatives. • We have established our own "mobility aerodynamics (aerodynamic simulation) technology" in anticipation of the demand for "tires with excellent aerodynamic characteristics" for even more fuel-efficient automobiles and electric vehicles. Reducing the aerodynamic drag that vehicles must experience when they drive will lead to improve fuel efficiency. • The company is co-developing CO2-derived butadiene rubber with the University of Toyama. • The company always provides investors, shareholders, and end consumers with the latest information in a highly transparent manner through the media, information disclosure at the time of earnings announcements, and information disclosure on its website and in integrated reports.

# (5.11.9.6) Effect of engagement and measures of success

Sustainable raw materials used in products · Rolling resistance in PCR (passenger cars) · Research results on sustainable products · Criteria for success of engagement Sustainable raw materials used in products: 40% by 2030, 100% by 2050 · Reduce GHG emissions per tire by 20% in 2030 compared to 2019 (20% reduction in rolling resistance) · Development and launch of sustainable products and development of new technologies Initiatives and results for the reporting year ·

Sustainable raw material ratio is 26% by 2023. • Rolling resistance reduction by 1.5% compared to 2019 (PCR) • Development of fuel-efficient compounds using "Nano Balance Technology". New silica dispersant is used to optimize these performances at a higher dimension by dispersing silica more uniformly, which is effective in reducing rolling resistance and improving wet performance and wear resistance. In addition, a portion of the silica dispersant is made from environmentally friendly, naturally derived, sustainable raw materials. • In January 2024, we will develop a concept tire that uses 90% sustainable raw materials. This is a dramatic improvement over the previous highest ratio of 50% sustainable raw materials used in our tires.

#### Water

# (5.11.9.1) Type of stakeholder

Select from:

✓ Investors and shareholders

# (5.11.9.2) Type and details of engagement

#### Education/Information sharing

☑ Share information on environmental initiatives, progress and achievements

# (5.11.9.3) % of stakeholder type engaged

Select from:

**☑** 1-25%

# (5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

We have disclosed our water-related targets, progress, and water consumption in our Integrated Report and on our website. In addition, the scenario analysis in the TCFD disclosure identified severe flood damage due to climate change as a major risk. In addition, the company is communicating with external organizations in order to design specific plans related to water in the future, and these are considered as one of the engagement activities.

#### (5.11.9.6) Effect of engagement and measures of success

First, it is assumed that a precise understanding of the current situation will be carried out, leading to the formulation of future plans. The immediate goal is to lead to more effective planning through engagement with external organizations and communication with shareholders, which in itself is considered an effect of engagement. [Add row]

(5.12) Indicate any mutually beneficial environmental initiatives you could collaborate on with specific CDP Supply Chain members.

#### Row 1

# (5.12.1) Requesting member

Select from:

## (5.12.2) Environmental issues the initiative relates to

Select all that apply

✓ Climate change

# (5.12.4) Initiative category and type

#### Communications

Other communications, please specify :An organization called "Kyohokai", which is a group of Toyota Motor Corporation and other related companies that can communicate with each other. One of its policies for this fiscal year is to "strengthen efforts to achieve carbon neutrality".

# (5.12.5) Details of initiative

KYOHOKAI Philosophy: Toyota Motor Corporation and its member companies (we are a member) seek to contribute to the development of the world's economy and society through activities based on global and open partnership. Currently consisting of more than 200 member companies, Kyohokai has established an unwavering cooperative relationship through various activities with the participation of each member company.

# (5.12.6) Expected benefits

Select all that apply

☑ Increased transparency of upstream/downstream value chain

☑ Reduction of own operational emissions (own scope 1 & 2)

# (5.12.7) Estimated timeframe for realization of benefits

✓ 0-1 year

# (5.12.8) Are you able to estimate the lifetime CO2e and/or water savings of this initiative?

Select from:

🗹 No

# (5.12.11) Please explain

Kyohokai is a community centered on Toyota Motor Corporation, where communication among affiliated companies is active. [Add row]

(5.13) Has your organization already implemented any mutually beneficial environmental initiatives due to CDP Supply Chain member engagement?

Environmental initiatives implemented due to CDP Supply Chain member engagement
Select from: ✓ Yes

[Fixed row]

(5.13.1) Specify the CDP Supply Chain members that have prompted your implementation of mutually beneficial environmental initiatives and provide information on the initiatives.

Row 1

(5.13.1.1) Requesting member

Select from:

## (5.13.1.2) Environmental issues the initiative relates to

Select all that apply

✓ Climate change

# (5.13.1.4) Initiative ID

Select from:

🗹 Ini1

## (5.13.1.5) Initiative category and type

#### Other, please specify

☑ Other initiative type, please specify :Kyohokai, a place for communication among members of the automotive supply chain.

# (5.13.1.6) Details of initiative

Initiatives are a forum for communication, but it is possible to envision cases where the external relationships gained from such opportunities can lead to decarbonization.

## (5.13.1.7) Benefits achieved

Select all that apply

☑ Increased transparency of upstream/downstream value chain

#### (5.13.1.8) Are you able to provide figures for emissions savings or water savings in the reporting year?

Select from:

 $\ensuremath{\overline{\mathsf{V}}}$  Yes, emissions savings and water savings

# (5.13.1.9) Estimated savings in the reporting year in metric tons of CO2e

138600

# (5.13.1.10) Estimated water savings in the reporting year in megaliters

196.3

# (5.13.1.11) Please explain how success for this initiative is measured

It is difficult to explain how the Initiative's activities can be clearly linked to our results, but we can say that it contributes to the motivation of our activities.

# (5.13.1.12) Would you be happy for CDP Supply Chain members to highlight this work in their external communication?

Select from:

✓ Yes

[Add row]

# **C6. Environmental Performance - Consolidation Approach**

(6.1) Provide details on your chosen consolidation approach for the calculation of environmental performance data.

#### Climate change

#### (6.1.1) Consolidation approach used

Select from:

✓ Financial control

# (6.1.2) Provide the rationale for the choice of consolidation approach

We collect environmental data using the same boundaries and the same methods as for financial information. For subsidiaries, as with accounting information, we consolidate 100% of the environmental data, regardless of the percentage of equity stake. This is because we are aiming to integrate non-financial and financial information in order to improve our ability to provide information to our stakeholders. We also believe that the organic linkage of non-financial information and financial information will have a positive effect on our business operations, as it will make it easier for us to effectively implement our environmental and sales strategies in the future.

## Forests

## (6.1.1) Consolidation approach used

Select from:

Financial control

# (6.1.2) Provide the rationale for the choice of consolidation approach

We collect environmental data using the same boundaries and the same methods as for financial information. For subsidiaries, as with accounting information, we consolidate 100% of the environmental data, regardless of the percentage of equity stake. This is because we are aiming to integrate non-financial and financial information in order to improve our ability to provide information to our stakeholders. We also believe that the organic linkage of non-financial information and financial information will have a positive effect on our business operations, as it will make it easier for us to effectively implement our environmental and sales strategies in the future.

# (6.1.1) Consolidation approach used

Select from:

✓ Financial control

# (6.1.2) Provide the rationale for the choice of consolidation approach

We collect environmental data using the same boundaries and the same methods as for financial information. For subsidiaries, as with accounting information, we consolidate 100% of the environmental data, regardless of the percentage of equity stake. This is because we are aiming to integrate non-financial and financial information in order to improve our ability to provide information to our stakeholders. We also believe that the organic linkage of non-financial information and financial information will have a positive effect on our business operations, as it will make it easier for us to effectively implement our environmental and sales strategies in the future.

# **Plastics**

# (6.1.1) Consolidation approach used

Select from:

✓ Financial control

# (6.1.2) Provide the rationale for the choice of consolidation approach

We collect environmental data using the same boundaries and the same methods as for financial information. For subsidiaries, as with accounting information, we consolidate 100% of the environmental data, regardless of the percentage of equity stake. This is because we are aiming to integrate non-financial and financial information in order to improve our ability to provide information to our stakeholders. We also believe that the organic linkage of non-financial information and financial information will have a positive effect on our business operations, as it will make it easier for us to effectively implement our environmental and sales strategies in the future.

# Biodiversity

# (6.1.1) Consolidation approach used

Select from:

Financial control

# (6.1.2) Provide the rationale for the choice of consolidation approach

We collect environmental data using the same boundaries and the same methods as for financial information. For subsidiaries, as with accounting information, we consolidate 100% of the environmental data, regardless of the percentage of equity stake. This is because we are aiming to integrate non-financial and financial information in order to improve our ability to provide information to our stakeholders. We also believe that the organic linkage of non-financial information and financial information will have a positive effect on our business operations, as it will make it easier for us to effectively implement our environmental and sales strategies in the future.

[Fixed row]

# C13. Further information & sign off

(13.1) Indicate if any environmental information included in your CDP response (not already reported in 7.9.1/2/3, 8.9.1/2/3/4, and 9.3.2) is verified and/or assured by a third party?

Other environmental information included in your CDP response is verified and/or assured by a third party
Select from: ✓ Yes

[Fixed row]

(13.1.1) Which data points within your CDP response are verified and/or assured by a third party, and which standards were used?

Row 1

## (13.1.1.1) Environmental issue for which data has been verified and/or assured

Select all that apply

✓ Climate change

# (13.1.1.2) Disclosure module and data verified and/or assured

Environmental performance – Climate change

✓ Base year emissions

# (13.1.1.3) Verification/assurance standard

ABNT NBR ISO 14064-3:2007 (Associação Brasileira de Normas Técnicas)

# (13.1.1.4) Further details of the third-party verification/assurance process

The following verification opinion statement has been issued by SGS Japan Inc. Purpose of verification At the request of Toyo Tire Corporation (hereinafter, "Organization"), SGS Japan Inc. (hereinafter, "Company") has verified, according to verification standards (ISO 14064-3:2019 and the Company's verification procedures), the objects of verification created by the Organization (hereinafter, "GHG Statement"). The purpose of this verification work is to independently confirm that appropriate calculations and reportings have been implemented, according to the standards, in the GHG Statement related to the scope of the Organization, and to express a third-party opinion. The Organization is responsible for creating the GHG Statement and reporting fairly. Scope of verification procedure This verification work involved implementing the following procedures at a limited assurance level in accordance with the verification standards. Verification of the calculation system: Asked questions regarding the methods of measurement, tabulation, calculation, and reporting of verification targets; and viewed relevant materials. Verification of quantitative data: Conducted on-site inspection and checked documented evidences at Toyo Tire Japan's Fukuoka office and North Osaka office and Fukushima Rubber Co., Ltd.; implemented analytical procedures and asked questions about other scope of verifications at the headquarters. For the decision criteria, the Greenhouse Gas Emission Calculation and Reporting Manual Ver. 5.0, procedures established by the Organization, the standards of The Japan Rubber Manufacturers Association, and IEA Emission Factors 2023 Edition were used.

#### (13.1.1.5) Attach verification/assurance evidence/report (optional)

13.1.1\_Verification Opinion.pdf

Row 2

## (13.1.1.1) Environmental issue for which data has been verified and/or assured

Select all that apply

✓ Water

## (13.1.1.2) Disclosure module and data verified and/or assured

#### Environmental performance – Water security

- ☑ Water discharges total volumes
- ✓ Water discharges volumes by destination
- ✓ Water withdrawals total volumes

#### (13.1.1.3) Verification/assurance standard

#### Water-related standards

☑ Other water verification standard, please specify :ISO 14064-3:2019 and SGS Japan verification procedures

#### (13.1.1.4) Further details of the third-party verification/assurance process

The following verification opinion statement has been issued by SGS Japan Inc. Purpose of verification At the request of Toyo Tire Corporation (hereinafter, "Organization"), SGS Japan Inc. (hereinafter, "Company") has verified, according to verification standards (ISO 14064-3:2019 and the Company's verification procedures), the objects of verification created by the Organization (hereinafter, "GHG Statement"). The purpose of this verification work is to independently confirm that appropriate calculations and reportings have been implemented, according to the standards, in the GHG Statement related to the scope of the Organization, and to express a third-party opinion. The Organization is responsible for creating the GHG Statement and reporting fairly. Scope of verification Scope 1, Scope 2, water usage, and withdrawal volume. Target period: January 1 to December 31, 2023. See Appendix for detailed scope of verification. Verification of the calculation system: Asked questions regarding the methods of measurement, tabulation, calculation, and reporting of verification targets; and viewed relevant materials. Verification of quantitative data: Conducted on-site inspection and checked documented evidences at Toyo Tire Japan's Fukuoka office and North Osaka office and Fukushima Rubber Co., Ltd.; implemented analytical procedures and asked questions about other scope of verifications at the headquarters. For the decision criteria, the Greenhouse Gas Emission Calculation and Reporting Manual Ver. 5.0, procedures established by the Organization, the standards of The Japan Rubber Manufacturers Association, and IEA Emission Factors 2023 Edition were used.

#### (13.1.1.5) Attach verification/assurance evidence/report (optional)

13.1.1\_Verification Opinion.pdf [Add row]

(13.2) 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.

Additional information	Attachment (optional)
The latest version of the Integrated Report is attached for your reference.	13.2_integrated_report2024_A3.pdf

[Fixed row]

# (13.3) Provide the following information for the person that has signed off (approved) your CDP response.

# (13.3.1) Job title

Corporate Officer, Vice President of Quality Assurance, Environment & Safety Headquarters

# (13.3.2) Corresponding job category

Select from: Other, please specify [Fixed row]