Toyobo Co., Ltd.

2025 CDP Corporate Questionnaire 2025

Word version

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.
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09/11/2025

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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

Manufacture, processing, and sales of various products in the fields of film, life sciences, and environmental and functional materials. Design and sale of plants and equipment. Sales of various technologies and information.
[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
	03/30/2025	*Select from:* ☑ Yes	*Select from:* ☑ No

[Fixed row]

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

422032000000

(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:

☑ No

ISIN code - equity

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ Yes

(1.6.2) Provide your unique identifier

JP3619800000

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:

☑ No

D-U-N-S number

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

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
☑ Japan
☑ Spain
☑ Brazil
☑ Malaysia
☑ United States of America
☑ Thailand
☑ Viet Nam
☑ Indonesia
☑ El Salvador
☑ Saudi Arabia

(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	*N/A*

[Fixed row]

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

Row 1

(1.8.1.1) Identifier

Head Office

(1.8.1.2) Latitude

34.700991

(1.8.1.3) Longitude

135.497431

(1.8.1.4) Comment

N/A

Row 2

(1.8.1.1) Identifier

Tsuruga Research and Production Center

(1.8.1.2) Latitude

35.63963

(1.8.1.3) Longitude

136.066833

(1.8.1.4) Comment

N/A

Row 3

(1.8.1.1) Identifier

Iwakuni Production Center

(1.8.1.2) Latitude

34.127845

(1.8.1.3) Longitude

132.206358

(1.8.1.4) Comment

N/A

Row 4

(1.8.1.1) Identifier

Research Center

(1.8.1.2) Latitude

35.111069

(1.8.1.3) Longitude

135.915363

(1.8.1.4) Comment

N/A

Row 5

(1.8.1.1) Identifier

Takasago Plant

(1.8.1.2) Latitude

34.770719

(1.8.1.3) Longitude

134.766135

(1.8.1.4) Comment

N/A

Row 6

(1.8.1.1) Identifier

Inuyama Plant

(1.8.1.2) Latitude

35.371942

(1.8.1.3) Longitude

136.923248

(1.8.1.4) Comment

N/A

Row 7

(1.8.1.1) Identifier

Utsunomiya Plant

(1.8.1.2) Latitude

36.607086

(1.8.1.3) Longitude

140.036376

(1.8.1.4) Comment

N/A
[Add 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 4+ suppliers

(1.24.7) Description of mapping process and coverage

We identified main value chain activities to find out our primary activities. Then we identified supplier for each activities to understand the overall value creation for our organization.
[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:

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

(1.24.1.2) Value chain stages covered in mapping

Select all that apply

☑ Upstream value chain

☑ Downstream value chain

☑ End-of-life management

(1.24.1.4) End-of-life management pathways mapped

Select all that apply

☑ Preparation for reuse

☑ Recycling

☑ Incineration

☑ Landfill

[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

We define less than 5 years as the short term. We create annual plans (goals), review them, and cycle through the PDCA cycle.

Medium-term

(2.1.1) From (years)

5

(2.1.3) To (years)

10

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

We define between 5 and 10 years as the medium term, with a particular emphasis on the 2030s. In 2022, we formulated the Sustainability Vision 2030 and set sustainability goals for the fiscal year 2031. These goals include a target to reduce GHG emissions (Scope 1 and 2) by 46% compared to the fiscal year 2013.

Long-term

(2.1.1) From (years)

10

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

Select from:
☑ Yes

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

We define over 10 years as the long term, with a particular emphasis on the fiscal year 2050. In the Sustainability Vision 2030, the goal for the fiscal year 2050 includes achieving carbon neutrality.
[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 place	Risks and/or opportunities evaluated in this process	Is this process informed by the dependencies and/or impacts process?
	Select from: ☑ Yes	*Select from:* ☑ Both risks and opportunities	*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

☑ Climate change

☑ Water

☑ Plastics

☑ Biodiversity

(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

☑ Risks

(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:
☑ Full

(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:
☑ More than once a year

(2.2.2.9) Time horizons covered

Select all that apply
☑ Short-term
☑ Medium-term
☑ Long-term

(2.2.2.10) Integration of risk management process

Select from:
☑ Integrated into multi-disciplinary organization-wide risk management process

(2.2.2.11) Location-specificity used

Select all that apply

☑ Not location specific

(2.2.2.12) Tools and methods used

Enterprise Risk Management

☑ Enterprise Risk Management

International methodologies and standards

☑ IPCC Climate Change Projections

☑ ISO 14001 Environmental Management Standard

Databases

☑ Nation-specific databases, tools, or standards

Other

☑ Materiality assessment

☑ Partner and stakeholder consultation/analysis

☑ Scenario analysis

(2.2.2.13) Risk types and criteria considered

Acute physical

☑ Drought

☑ Tornado

☑ Landslide

☑ Heat waves

☑ Subsidence

☑ Cyclones, hurricanes, typhoons

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

☑ Flood (coastal, fluvial, pluvial, ground water)

☑ Storm (including blizzards, dust, and sandstorms)

Chronic physical

☑ Heat stress

☑ Water quality at a basin/catchment level

☑ Water stress
☑ Sea level rise
☑ Coastal erosion
☑ Temperature variability
☑ Precipitation or hydrological variability
☑ Increased severity of extreme weather events
☑ Changing temperature (air, freshwater, marine water)
☑ Changing precipitation patterns and types (rain, hail, snow/ice)

Policy

☑ Carbon pricing mechanisms
☑ Changes to national legislation
☑ Poor coordination between regulatory bodies
☑ Poor enforcement of environmental regulation
☑ Increased difficulty in obtaining operations permits
☑ Lack of mature certification and sustainability standards

Market

☑ Availability and/or increased cost of certified sustainable material
☑ Availability and/or increased cost of raw materials
☑ Changing customer behavior
☑ Uncertainty in the market signals

Reputation

☑ Increased partner and stakeholder concern and partner and stakeholder negative feedback
☑ Negative press coverage related to support of projects or activities with negative impacts on the environment (e.g. GHG emissions, deforestation & conversion, water stress)
☑ Stakeholder conflicts concerning water resources at a basin/catchment level
☑ Stigmatization of sector

Technology

☑ Dependency on water-intensive energy sources
☑ Transition to lower emissions technology and products

Liability

☑ Exposure to litigation
☑ Non-compliance with regulations

(2.2.2.14) Partners and stakeholders considered

Select all that apply

☑ Customers

☑ Employees

☑ Investors

☑ Local communities

☑ Suppliers

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

Select from:

☑ No

(2.2.2.16) Further details of process

At our group's main factories, Tsuruga, Iwakuni, and Inuyama factories, each located near rivers or coastlines and in low-lying areas, there are risks of water damages. Furthermore, these three factories rely on groundwater and river water for their water supply, which accounts for over 70% of the group's total water intake. Additionally, these three factories are the main facilities for the film business, which accounts for approximately 40% of the group's revenue. In case of water disasters, there is a possibility of significant impact on our business and financial situation. Climate-related risks, opportunities, impacts, and dependencies are included in our risk management activities, and our group has established a "Risk Management Committee" to centrally manage risks including climate change challenges for the entire group. The specific process is as follows: "Risk & Opportunities": The Risk Management Committee Secretariat extracts risk categories based on various scenarios. For major data not obtained directly from our company, methodologies and databases such as IPCC AR6, IEA NZE 2050 & RCP 8.5 scenarios are used to grasp information on trends in carbon taxes from relevant organizations, investors, and consultants in anticipation of future regulatory changes. Afterward, the members of the Risk Management Committee (executive officers) mainly identify risks in their departments by considering environmental changes such as violations in other companies and regulatory changes according to the risk categories. "Dependency & Impacts": Using online tools such as UNEP-WCMC's "ENCORE," we identify the impact and dependency of our corporate activities, including upstream and downstream in the supply chain, on the environment. Using SBTN's "High Impact Commodity List (HICL)," we identify the materials used in our production activities that have a significant impact on the environment. We also use the Aqueduct Water Risk Atlas developed by WRI to identify water risks at the locations of our business sites. In addition, the IBAT developed by UNEP-WCMC is used to identify the status of biodiversity at production sites. The risks, opportunities, and dependencies identified by the Risk Management Committee are evaluated based on the axis of impact and likelihood, and major risks that should be prioritized for the entire company are extracted. The allocation is calculated by multiplying the total points of impact in each area by the likelihood. Impact: Evaluated as "corresponding to significant damage," "corresponding to moderate damage," or "corresponding to minor damage" for "scope of impact," "duration of business interruption," "human casualties," "reputation," and "financials" on a three-point scale (1-3 points). Likelihood: Evaluated as "frequently occur," "occur often," or "rarely occur" on a three-point scale (1-3 points). The Risk Management Committee Secretariat designates responsible departments for each risk and opportunity, and conducts prioritization. The risk responsible departments consider and implement

risk reduction measures, and report the response status to the Risk Management Committee. The Risk Management Committee then reports the progress to the Board of Directors and assigns responsible departments for each risk to prioritize actions under the supervision of the Board of Directors.

Row 2

(2.2.2.1) Environmental issue

Select all that apply

☑ Climate change

☑ Water

☑ Plastics

(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

☑ 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:

☑ Full

(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:

☑ More than once a year

(2.2.2.9) Time horizons covered

Select all that apply

☑ Short-term

☑ Medium-term

☑ Long-term

(2.2.2.11) Location-specificity used

Select all that apply

☑ Not location specific

(2.2.2.12) Tools and methods used

International methodologies and standards

☑ Environmental Impact Assessment

☑ IPCC Climate Change Projections

☑ ISO 14001 Environmental Management Standard

Other

☑ Partner and stakeholder consultation/analysis

☑ Scenario analysis

(2.2.2.14) Partners and stakeholders considered

Select all that apply

☑ Customers

☑ Employees

☑ Investors

☑ Local communities

☑ Suppliers

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

Select from:

☑ No

(2.2.2.16) Further details of process

At our group's main factories, Tsuruga, Iwakuni, and Inuyama factories, each located near rivers or coastlines and in low-lying areas, there are risks of water damages. Furthermore, these three factories rely on groundwater and river water for their water supply, which accounts for over 70% of the group's total water intake. Additionally, these three factories are the main facilities for the film business, which accounts for approximately 40% of the group's revenue. In case of water disasters, there is a possibility of significant impact on our business and financial situation. Climate-related risks, opportunities, impacts, and dependencies are included in our risk management activities, and our group has established a "Risk Management Committee" to centrally manage risks including climate change challenges for the entire group. The specific process is as follows: "Risk & Opportunities": The Risk Management Committee Secretariat extracts risk categories based on various scenarios. For major data not obtained directly from our company, methodologies and databases such as IPCC AR6, IEA NZE 2050 & RCP 8.5 scenarios are used to grasp information on trends in carbon taxes from relevant organizations, investors, and consultants in anticipation of future regulatory changes. Afterward, the members of the Risk Management Committee (executive officers) mainly identify risks in their departments by considering environmental changes such as violations in other companies and regulatory changes according to the risk categories. "Dependency & Impacts": Using online tools such as UNEP-WCMC's "ENCORE," we identify the impact and dependency of our corporate activities, including upstream and downstream in the supply chain, on the environment. Using SBTN's "High Impact Commodity List (HICL)," we identify the materials used in our production activities that have a significant impact on the environment. We also use the Aqueduct Water Risk Atlas developed by WRI to identify water risks at the locations of our business sites. In addition, the IBAT developed by UNEP-WCMC is used to identify the status of biodiversity at production sites. The risks, opportunities, and dependencies identified by the Risk Management Committee are evaluated based on the axis of impact and likelihood, and major risks that should be prioritized for the entire company are extracted. The allocation is calculated by multiplying the total points of impact in each area by the likelihood. Impact: Evaluated as "corresponding to significant damage," "corresponding to moderate damage," or "corresponding to minor damage" for "scope of impact," "duration of business interruption," "human casualties," "reputation," and "financials" on a three-point scale (1-3 points). Likelihood: Evaluated as "frequently occur," "occur often," or "rarely occur" on a three-point scale (1-3 points). The Risk Management Committee Secretariat designates responsible departments for each risk and opportunity, and conducts prioritization. The risk responsible departments consider and implement risk reduction measures, and report the response status to the Risk Management Committee. The Risk Management Committee then reports the progress to the

Board of Directors and assigns responsible departments for each risk to prioritize actions under the supervision of the Board of Directors.

Row 3

(2.2.2.1) Environmental issue

Select all that apply

☑ Climate change

☑ Water

☑ Plastics

☑ Biodiversity

(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

☑ Impacts

(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:

☑ Full

(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:

☑ More than once a year

(2.2.2.9) Time horizons covered

Select all that apply

☑ Short-term

☑ Medium-term

☑ Long-term

(2.2.2.11) Location-specificity used

Select all that apply

☑ Site-specific

☑ Local

☑ Sub-national

☑ National

(2.2.2.12) Tools and methods used

Commercially/publicly available tools

☑ Encore tool

☑ WRI Aqueduct

☑ CBD – Convention on Biological Diversity

☑ IBAT – Integrated Biodiversity Assessment Tool

☑ TNFD – Taskforce on Nature-related Financial Disclosures

☑ LEAP (Locate, Evaluate, Assess and Prepare) approach, TNFD

International methodologies and standards
☑ IPCC Climate Change Projections

Databases
☑ Nation-specific databases, tools, or standards

Other
☑ Partner and stakeholder consultation/analysis
☑ Scenario analysis

(2.2.2.14) Partners and stakeholders considered

Select all that apply
☑ Customers
☑ Employees
☑ Investors
☑ Local communities
☑ Suppliers

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

Select from:
☑ Yes

(2.2.2.16) Further details of process

At our group's main factories, Tsuruga, Iwakuni, and Inuyama factories, each located near rivers or coastlines and in low-lying areas, there are risks of water damages. Furthermore, these three factories rely on groundwater and river water for their water supply, which accounts for over 70% of the group's total water intake. Additionally, these three factories are the main facilities for the film business, which accounts for approximately 40% of the group's revenue. In case of water disasters, there is a possibility of significant impact on our business and financial situation. Climate-related risks, opportunities, impacts, and dependencies are included in our risk management activities, and our group has established a "Risk Management Committee" to centrally manage risks including climate change challenges for the entire group. The specific process is as follows: "Risk & Opportunities": The Risk Management Committee Secretariat extracts risk categories based on various scenarios. For major data not obtained directly from our company, methodologies and databases such as IPCC AR6, IEA NZE 2050 & RCP 8.5

scenarios are used to grasp information on trends in carbon taxes from relevant organizations, investors, and consultants in anticipation of future regulatory changes. Afterward, the members of the Risk Management Committee (executive officers) mainly identify risks in their departments by considering environmental changes such as violations in other companies and regulatory changes according to the risk categories. "Dependency & Impacts": Using online tools such as UNEP-WCMC's "ENCORE," we identify the impact and dependency of our corporate activities, including upstream and downstream in the supply chain, on the environment. Using SBTN's "High Impact Commodity List (HICL)," we identify the materials used in our production activities that have a significant impact on the environment. We also use the Aqueduct Water Risk Atlas developed by WRI to identify water risks at the locations of our business sites. In addition, the IBAT developed by UNEP-WCMC is used to identify the status of biodiversity at production sites. The risks, opportunities, and dependencies identified by the Risk Management Committee are evaluated based on the axis of impact and likelihood, and major risks that should be prioritized for the entire company are extracted. The allocation is calculated by multiplying the total points of impact in each area by the likelihood. Impact: Evaluated as "corresponding to significant damage," "corresponding to moderate damage," or "corresponding to minor damage" for "scope of impact," "duration of business interruption," "human casualties," "reputation," and "financials" on a three-point scale (1-3 points). Likelihood: Evaluated as "frequently occur," "occur often," or "rarely occur" on a three-point scale (1-3 points). The Risk Management Committee Secretariat designates responsible departments for each risk and opportunity, and conducts prioritization. The risk responsible departments consider and implement risk reduction measures, and report the response status to the Risk Management Committee. The Risk Management Committee then reports the progress to the Board of Directors and assigns responsible departments for each risk to prioritize actions under the supervision of the Board of Directors.

Row 4

(2.2.2.1) Environmental issue

Select all that apply

☑ Climate change

☑ Water

☑ Plastics

☑ Biodiversity

(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

(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:
☑ Full

(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:
☑ More than once a year

(2.2.2.9) Time horizons covered

Select all that apply
☑ Short-term
☑ Medium-term
☑ Long-term

(2.2.2.11) Location-specificity used

Select all that apply
☑ Site-specific

☑ Local
☑ Sub-national
☑ National

(2.2.2.12) Tools and methods used

Commercially/publicly available tools
☑ Encore tool
☑ WRI Aqueduct
☑ CBD – Convention on Biological Diversity
☑ IBAT – Integrated Biodiversity Assessment Tool
☑ TNFD – Taskforce on Nature-related Financial Disclosures
☑ LEAP (Locate, Evaluate, Assess and Prepare) approach, TNFD

International methodologies and standards
☑ IPCC Climate Change Projections

Databases
☑ Nation-specific databases, tools, or standards

Other
☑ Partner and stakeholder consultation/analysis
☑ Scenario analysis

(2.2.2.14) Partners and stakeholders considered

Select all that apply
☑ Customers
☑ Employees
☑ Suppliers
☑ Local communities
☑ Other water users at the basin/catchment level
☑ Other commodity users/producers at a local level

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

Select from:

☑ Yes

(2.2.2.16) Further details of process

At our group's main factories, Tsuruga, Iwakuni, and Inuyama factories, each located near rivers or coastlines and in low-lying areas, there are risks of water damages. Furthermore, these three factories rely on groundwater and river water for their water supply, which accounts for over 70% of the group's total water intake. Additionally, these three factories are the main facilities for the film business, which accounts for approximately 40% of the group's revenue. In case of water disasters, there is a possibility of significant impact on our business and financial situation. Climate-related risks, opportunities, impacts, and dependencies are included in our risk management activities, and our group has established a "Risk Management Committee" to centrally manage risks including climate change challenges for the entire group. The specific process is as follows: "Risk & Opportunities": The Risk Management Committee Secretariat extracts risk categories based on various scenarios. For major data not obtained directly from our company, methodologies and databases such as IPCC AR6, IEA NZE 2050 & RCP 8.5 scenarios are used to grasp information on trends in carbon taxes from relevant organizations, investors, and consultants in anticipation of future regulatory changes. Afterward, the members of the Risk Management Committee (executive officers) mainly identify risks in their departments by considering environmental changes such as violations in other companies and regulatory changes according to the risk categories. "Dependency & Impacts": Using online tools such as UNEP-WCMC's "ENCORE," we identify the impact and dependency of our corporate activities, including upstream and downstream in the supply chain, on the environment. Using SBTN's "High Impact Commodity List (HICL)," we identify the materials used in our production activities that have a significant impact on the environment. We also use the Aqueduct Water Risk Atlas developed by WRI to identify water risks at the locations of our business sites. In addition, the IBAT developed by UNEP-WCMC is used to identify the status of biodiversity at production sites. The risks, opportunities, and dependencies identified by the Risk Management Committee are evaluated based on the axis of impact and likelihood, and major risks that should be prioritized for the entire company are extracted. The allocation is calculated by multiplying the total points of impact in each area by the likelihood. Impact: Evaluated as "corresponding to significant damage," "corresponding to moderate damage," or "corresponding to minor damage" for "scope of impact," "duration of business interruption," "human casualties," "reputation," and "financials" on a three-point scale (1-3 points). Likelihood: Evaluated as "frequently occur," "occur often," or "rarely occur" on a three-point scale (1-3 points). The Risk Management Committee Secretariat designates responsible departments for each risk and opportunity, and conducts prioritization. The risk responsible departments consider and implement risk reduction measures, and report the response status to the Risk Management Committee. The Risk Management Committee then reports the progress to the Board of Directors and assigns responsible departments for each risk to prioritize actions under the supervision of the Board of Directors.
[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

Similar to the process mentioned in C2.2.2, we utilized the online tool "ENCORE" developed by UNEP-WCSC and others to understand the mutual relationships between our company's production activities, including the upstream of the supply chain, and their impact and dependence on the environment. We have identified that "water, air, soil," "biodiversity," and "GHG" are critical factors interrelated in all aspects. As part of the LEAP E, we identified environmental assets and ecosystem services and understood their levels of dependence and impact. We analyzed the relationship with existing activities, considering the risks and opportunities we receive from nature as "dependence" and the impact and opportunities we bring to nature as "impact." For instance, at our main factory, the Tsuruga Plant, we depend on groundwater for over half of our total water intake (dependence). The Tsuruga Plant participates in the "Tsuruga City Water Environment Improvement Council," which consists of the Tsuruga City government, citizens, experts, and other businesses, to minimize the impact on the natural environment. Specifically, we have set an upper limit target for annual groundwater intake and strive to comply with it to maintain a balance in groundwater resources, considering water resource conservation and biodiversity (impact). Within the Tsuruga Plant, we have established a system to reuse recyclable water resources, such as cooling water, and consistently practice water-saving measures. As a result, we have achieved our goals for 17 consecutive years. Excessive water use can strain local water resources and lead to environmental degradation if not managed properly (risk). The depletion of water resources or stricter local water use regulations can pose significant operational risks. However, implementing water recycling and efficient management systems not only reduces operational costs but also enhances TOYOBO's environmental stewardship, which can improve corporate reputation and compliance (opportunities).
[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

☑ Upstream value chain

(2.3.3) Types of priority locations identified

Sensitive locations

☑ Areas important for biodiversity

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

Locations with substantive dependencies, impacts, risks, and/or opportunities

☑ Locations with substantive dependencies, impacts, risks, and/or opportunities relating to water

☑ Locations with substantive dependencies, impacts, risks, and/or opportunities relating to biodiversity

(2.3.4) Description of process to identify priority locations

Direct operations: As the "Locate" in LEAP approach, we evaluated the water stress of all business sites and identified areas with high water stress using Aqueduct Water Risk Atlas developed by WRI. Using IBAT developed by UNEP, we conducted surveys to determine if there are any endangered species or natural environments (World Heritage Sites, IUCN Protected Area Management Categories I-VI, Ramsar Convention wetlands) that should be conserved within a 1km radius of all our group's production sites (domestic and overseas). Through this survey, we identified areas of importance for biodiversity located near our production sites. The results of these two analyses, together with the level of importance to our business, were used to identify priority areas. Upstream in the supply chain: Using SBTN's "High Impact Commodity List (HICL)," we identified the materials used in our production activities that have a significant impact on the environment. Additionally, we investigated and identified the origin of some of these identified fuels and raw materials. Water security: Using Aqueduct, a tool published by the World Resources Institute (WRI) that allows for the comparison of water stress levels worldwide using the same evaluation criteria, we assessed the geographical water stress of all facilities. Forest: Using SBTN's "High Impact Commodity List (HICL)," we identified the materials used in our production activities that have a significant impact on the environment. Additionally, we investigated and identified the origin of some of these identified raw materials, asking our suppliers.

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

Select from:

☑ Yes, we will be disclosing the list/geospatial map of priority locations

(2.3.6) Provide a list and/or spatial map of priority locations

CDP2025_2.3_List of priority locations.pdf
[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:

☑ Other, please specify :Ordinary profit

(2.4.3) Change to indicator

Select from:

☑ % decrease

(2.4.4) % change to indicator

Select from:

☑ 1-10

(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 consider events that have had a strategically significant impact in past fiscal years on a quarterly basis in the short, medium, and long term, and define substantial impact as having a financial impact of 1% or more on income generated from ordinary business activities (ordinary income).

Opportunities

(2.4.1) Type of definition

Select all that apply

☑ Qualitative

☑ Quantitative

(2.4.2) Indicator used to define substantive effect

Select from:

☑ Other, please specify :Ordinary profit

(2.4.3) Change to indicator

Select from:

☑ % increase

(2.4.4) % change to indicator

Select from:

☑ 1-10

(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 consider events that have had a strategically significant impact in past fiscal years on a quarterly basis in the short, medium, and long term, and define substantial impact as having a financial impact of 1% or more on income generated from ordinary business activities (ordinary income).
[Add row]

(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?

(2.5.1) Identification and classification of potential water pollutants

Select from:

☑ Yes, we identify and classify our potential water pollutants

(2.5.2) How potential water pollutants are identified and classified

They are identified in accordance with laws and regulations related to water quality and some chemical substances (Water Pollution Control Law, PRTR Law, etc.) and divided into living environment items such as COD (chemical oxygen demand) and SS (particulate suspended solids), and hazardous substances such as cadmium and lead. Some business sites have additional substances to be monitored in accordance with local ordinances. Under the "Toyobo Group Fundamental Policy on the Global Environment," we are striving to properly manage chemical substances throughout the product lifecycle in order to protect the global environment, ensure occupational and product safety, and comply with chemical substance regulations around the world. In order to properly manage chemical substances, our group has established a management system for each business site, and each solution division supervises the activities of the business sites and group companies under its jurisdiction. In addition, based on domestic and overseas laws and regulations, customer requests, and other factors, the group has established the "TOYOBO Chemical Substance Management Classification" and classified the chemical substances handled into five levels, with management details defined for each rank. Substances of ranks A and B, which are rated as high-risk, are subject to screening based on risk assessment, and may be handled only when risk avoidance measures have been taken and the risk is deemed acceptable.
[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:

☑ Other synthetic organic compounds

(2.5.1.2) Description of water pollutant and potential impacts

(1) Water pollutant: Acetaldehyde (2) Potential impact: Acetaldehyde, which is generated as a byproduct during the polymerization of polymers, is highly soluble in water. It can cause contamination of rivers through industrial wastewater, potentially impacting the ecosystem when aquatic organisms ingest it. Contamination of drinking water and well water can also lead to significant human intake, resulting in liver damage. Additionally, due to its high volatility and tendency to evaporate at relatively low temperatures, there is a theory that it contributes to the formation of photochemical smog.

(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

☑ Beyond compliance with regulatory requirements

☑ Industrial and chemical accidents prevention, preparedness, and response

(2.5.1.5) Please explain

Acetaldehyde is an organic compound that is produced as a byproduct during the polymerization of our company's polymers and is present in the direct wastewater from our operations. To prevent its discharge into public water bodies, both direct and indirect measures are taken. As a direct measure, we have installed devices to trap acetaldehyde near the source, and the wastewater is further treated in wastewater treatment facilities before being discharged into public water areas. Additionally, as an indirect measure, water quality monitoring is conducted before the discharge into public water bodies. The concentration of acetaldehyde in the wastewater after treatment is used as an indicator, and we have set a self-imposed limit (0.3mg/L) that is stricter than the legal standard (allowable limit of 0.5mg/L) as a basis for monitoring. This monitoring is conducted on a monthly basis.

Row 2

(2.5.1.1) Water pollutant category

Select from:

☑ Other synthetic organic compounds

(2.5.1.2) Description of water pollutant and potential impacts

(1) Water Pollutant: 1,4-Dioxane (2) Potential Impact: When industrial wastewater flows into rivers, it can easily persist in the water due to its resistance to decomposition. Ingestion of this water can lead to acute symptoms such as headaches and nausea, as well as chronic symptoms like central nervous system disorders and liver damage. Additionally, there is a potential for it to impact the ecosystem when aquatic organisms come into contact with it.

(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

☑ Industrial and chemical accidents prevention, preparedness, and response

(2.5.1.5) Please explain

1,4-Dioxane is an organic compound that is produced as a byproduct during the polymerization of our company's polymers and is present in the direct wastewater from our operations. To prevent its discharge into public water bodies, both direct and indirect measures are taken. As a direct measure, we have installed devices to trap 1,4-Dioxane near the source, and the wastewater is further treated in wastewater treatment facilities before being discharged into public water areas. Additionally, as an indirect measure, water quality monitoring is conducted before the discharge into public water bodies. The concentration of 1,4-Dioxane in the wastewater after treatment is used as an indicator, and we have set a self-imposed limit that is stricter than the legal standard (allowable limit of 0.5ppm) as a basis for monitoring. This monitoring is conducted on a monthly basis.
[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?

	Environmental risks identified
Climate change	*Select from:* ☑ Yes, both in direct operations and upstream/downstream value chain
Water	*Select from:* ☑ Yes, both in direct operations and upstream/downstream value chain
Plastics	*Select from:* ☑ Yes, both in direct operations and upstream/downstream value chain

[Fixed 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:

☑ 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

Our group's main factories, the Tsuruga Research and Production Center, Iwakuni Production Center, and Inuyama Plant, are all located near rivers and in low-lying areas, making them susceptible to flood risks. These three factories are also the mother factories of our Film and Functional Materials business, which accounts for approximately 40% of our group's revenue. In the event of a disaster, there is a possibility of significant impact on our business and financial situation. We anticipate that flood risks will increase further due to changes in rainfall patterns if climate change continues to progress.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Decreased asset value or asset useful life leading to write-offs, asset impairment or early retirement of existing assets

(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

In the medium term （assuming the 2030s）, there is a possibility that the assets owned by our group may decrease due to water damage. Specifically, there is a possibility that the "buildings and equipment, etc." of the three factories located near rivers and in low-lying areas （Tsuruga Plant, Iwakuni Plant, and Inuyama Factory） may be damaged by flooding. This could not only result in damage to the group's assets but also have a negative impact on performance and cash flow due to production stoppage.

(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)

7600000000

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

65400000000

(3.1.1.25) Explanation of financial effect figure

The estimated amount of asset reduction （damage to buildings and equipment, etc.） due to water damage in the 2030s has been calculated based on book value. The maximum amount is approximately 65.4 billion yen （total damage for the three factories）, and the minimum amount is approximately 7.6 billion yen （damage for the Iwakuni Plant only）. The calculation for the asset reduction due to water damage for the three factories is estimated by multiplying the damage rate※ published by the Ministry of Land, Infrastructure, Transport and Tourism by the book value of the buildings and equipment, etc. for the three factories. The assumed scale of water damage in the 2030s is based on the maximum anticipated flooding level in the hazard maps of each municipality. （※Damage rate from water damage when flooded according to the Ministry of Land, Infrastructure, Transport and Tourism's "Manual for Economic Assessment of River Improvement" （April 2024）） 【Values used for calculation】 Book value and damage rate for buildings and equipment, etc. （damage rate in parentheses） [Tsuruga Plant： 35.3

billion yen （damage rate when flooded： 94%）] [Iwakuni Plant： 13.4 billion yen （damage rate when flooded： 57%）] [Inuyama Factory： 26.2 billion yen （damage rate when flooded： 94%）] 【Calculation formula】 [Maximum amount] （approximately 65.4 billion yen）=（"Asset reduction due to water damage for the three factories" ）=（1）+（2）+（3） [Minimum amount] （approximately 7.6 billion yen）=（"Asset reduction due to water damage for the Iwakuni Plant" ）=（1） 【Details of Calculation】 （1）Flood damage："Book value of buildings and equipment, etc. for Tsuruga Plant" × "Damage rate" ＝28.2 billion yen × 94% ＝33.2 billion yen （2）Flood damage："Book value of buildings and equipment, etc. for Iwakuni Plant" × "Damage rate" ＝13.4 billion yen × 57% ＝7.6 billion yen （3）Flood damage："Book value of buildings and equipment, etc. for Inuyama Factory" × "Damage rate" ＝29.3 billion yen × 94% ＝24.6 billion yen

(3.1.1.26) Primary response to risk

Infrastructure, technology and spending

☑ Increase environment-related capital expenditure

(3.1.1.27) Cost of response to risk

6507600000

(3.1.1.28) Explanation of cost calculation

The combined cost of tangible and intangible measures is designated as the risk management cost. 【Tangible】 During the reporting year, a new facility capable of efficiently analyzing and manufacturing research reagents was completed at the Tsuruga site and began operation in April 2025. In designing this facility, measures were taken such as installing important equipment such as power equipment on the second floor in accordance with our Group's "Flood Disaster Prevention Guidelines." The investment in this facility was 6.5 billion yen, which is designated as flood disaster prevention expenses. 【Intangible】 The cost of labor for participants in disaster prevention training is 7.6 million yen. 【Calc.】 "Cost of response to risk： 6.5076 billion yen" = Tangible Measures cost （1） + Intangible Measures cost （2） 【Details】 （1）"6.5 billion yen" （2）"7.6 million yen" =（Participants：3,030 people） x （Cost per unit time per participant, approx. 2,500 yen） x（Training time： 1 hour）

(3.1.1.29) Description of response

Our company group considers the risk of water-related disasters at our factories as an important climate-related risk and implements both tangible and intangible measures to address it. As part of our tangible measures, we are gradually strengthening flood measures such as relocating and raising production equipment and power facilities. In terms of intangible measures, we conduct education and training aimed at minimizing water-related disasters. Additionally, we established new "Flood Disaster Prevention Guidelines" to clarify the basic policy regarding flood disaster prevention measure. 【Tangible Measures】： During the reporting year, a new facility capable of efficiently analyzing and manufacturing research reagents was completed at the Tsuruga site and began operation in April 2025. In designing this facility, measures were taken such as installing important equipment such as power equipment on the second floor in accordance with our Group's "Flood Disaster Prevention Guidelines.". 【Intangible Measures】： (1) As part of our non-structural measures, we continuously conduct education and training to minimize

water-related damage. Our company has established a rule that requires everyone to participate in disaster prevention education and training at least once a year. (2) During the reporting year under review, we established new "Flood Disaster Prevention Guidelines" to clarify the basic policy regarding flood disaster prevention measures at our Group production bases. We are prioritizing and implementing flood disaster prevention measures for newly planned production facilities and power facilities (installation on higher ground/raising, etc.), as well as additional installation of waterproof doors and enclosure walls for existing facilities.

Water

(3.1.1.1) Risk identifier

Select from:

☑ Risk4

(3.1.1.3) Risk types and primary environmental risk driver

Policy

☑ Introduction of regulatory standards for previously unregulated contaminants

(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

(3.1.1.9) Organization-specific description of risk

Our group uses water in the manufacturing process for purposes such as product cooling and others. As a result, factory wastewater is generated, and proper treatment is required. If government regulations on factory wastewater are strengthened in the future, there is a risk of constraints on our group's production due to an increase in monitored substances and the need for increased treatment and recovery of substances. Additionally, there is a possibility of incurring additional costs related to water treatment facilities, which could potentially have a negative impact on our performance.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Increased capital expenditures

(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:

☑ Unlikely

(3.1.1.14) Magnitude

Select from:

☑ Medium-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

Impact on Financial Condition: The addition of regulated substances may require our group to report new emissions or transfers, potentially resulting in additional costs. For example, the introduction of new measurement devices or analytical methods, the creation of reports, and the employment of staff with specialized knowledge may be necessary. This could increase the burden on our group's financial condition. Impact on Performance: The addition of regulated substances may impose constraints on emissions or transfers related to the company's business activities. For example, if the discharge of new substances is prohibited, changes to the company's manufacturing processes or product designs may be necessary. This could lead to increased production costs and a potential decline in product competitiveness. Impact on Cash Flow: The addition of regulated substances may require our group to invest in facility renovations or environmental measures to comply with legal requirements for emissions and transfers. This could place a burden on the company's cash flow. Additionally, the addition of regulated substances may necessitate fundraising to accommodate increased environmental cost, potentially affecting the company's cash flow and borrowing capacity.

(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)

300000000

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

1800000000

(3.1.1.25) Explanation of financial effect figure

Our company group's six domestic factories account for approximately 90% of our company group's total wastewater discharge. We have calculated the financial impact in the event of an additional regulated substance being added. Based on past trends, we have determined that an investment of 300 million yen will be required for monitoring and capturing the additional regulated substance in the wastewater. In order to calculate the minimum financial impact, we assumed a scenario where one of our company group's facilities used the regulated substance. On the other hand, to calculate the maximum financial impact, we assumed a scenario where all six of our company group's facilities used the regulated substance. 【Calculation Formula】 (Minimum Value: 300 million yen) = (Investment amount of 300 million yen) x (Number of facilities subject to regulation: 1 facility) (Maximum Value: 1.8 billion yen) = (Investment amount of 300 million yen) x (Number of facilities subject to regulation: 6 facilities)

(3.1.1.26) Primary response to risk

Infrastructure, technology and spending

☑ Improve pollution abatement and control measures

(3.1.1.27) Cost of response to risk

67000000

(3.1.1.28) Explanation of cost calculation

In our group, we have a centralized monitoring of environmental regulations as part of our headquarters function. We also have environmental management

departments in each manufacturing site to gather information and communicate with various government agencies. Additionally, each headquarters and each factory (major wastewater discharge site) have one staff member, and 0.5 management personnel dedicated to these tasks. The labor costs per person were calculated using the average annual salary disclosed in the securities report in the reporting year (JPY 6.42 million). 【Calculation】 (Risk response cost: approximately 67 million yen) = (1) Labor costs at headquarters + (2) Labor costs at major wastewater discharge sites 【Detailed Calculation】 (1) Labor costs at headquarters: （JPY 6.42 million/person）x （1.5 persons）= 9.63 million yen (2) Labor costs at six major wastewater discharge sites: （JPY 6.42 million/person）x （1.5 persons）x （6 sites） = 57.78 million yen

(3.1.1.29) Description of response

In our group, as part of our headquarters function, we have a concentrated monitoring of environmental regulations. Additionally, we have environmental management departments in each manufacturing site to gather information and communicate with various government agencies. This enables us to establish a system that can promptly respond to environmental regulations.

Plastics

(3.1.1.1) Risk identifier

Select from:

☑ Risk5

(3.1.1.3) Risk types and primary environmental risk driver

Technology

☑ Transition to increasing recycled content

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Downstream value chain

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ Indonesia

☑ Japan

(3.1.1.9) Organization-specific description of risk

Our plastic film business, which is a core business of our group, accounts for approximately 40% of the group's total revenue and utilizes raw materials that include petroleum-derived resources. In the ongoing societal transition towards decarbonization, we anticipate an increasing demand from society, including our customers, to reduce the use of petroleum-derived resources and seek alternatives. We recognize this as a significant climate-related risk. For example, if we fail to promote the reduction and substitution of petroleum-derived resources, it is conceivable that our group's products may no longer be purchased, resulting in a significant decline in the majority of our group's revenue.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Decreased revenues due to reduced demand for products and services

(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

Our plastic film business aims to achieve sales of 220 billion yen in the fiscal year 2031. Additionally, we have set a target to increase the Greenification ratio of the film products we sell to 60%. Greenification refers to the application of technologies and initiatives that contribute to reducing the use of petroleum-derived resources,

making them low-carbon or decarbonized products. The actual Greenification ratio of the plastic film business in the reporting year (fiscal year 2025) was 14%. We calculated the risk component for two scenarios: the "Stagnation Scenario," where the Greenification ratio remains at the current 14% without progressing, and the "Greenification Scenario," where the greenification ratio progresses as planned to 60%. In the Stagnation Scenario, the risk component is defined as the 86% that is not greenified (calculation: 100% - 14%). On the other hand, in the Greenification Scenario, the risk component is defined as the 40% that is not greenified (calculation: 100% - 60%). The projected sales amount exposed to the risks in the Stagnation Scenario and Greenification Scenario are estimated to be 189.2 billion yen and 88 billion yen, respectively. It is believed that the research and development investment related to green films corresponds to the cost of responding to the risks in the reporting year (fiscal year 2025). This is included in the research and development expenses for the film segment, which amounts to 4.4 billion yen.

(3.1.1.26) Primary response to risk

Diversification

☑ Develop new products, services and/or markets

(3.1.1.29) Description of response

"Greenification of film products in product development" was defined in our announced "Sustainable Vision 2030" in 2022, aiming to achieve "Greenification" in 60% of film products by fiscal year 2031, through technologies and initiatives that reduce the use of petroleum-derived resources. Reducing the use of petroleum-derived resources in plastic film products not only makes them low-carbon/decarbonized products but also reduces risks and acquires business opportunities by promoting the "Greenification" of film products. The actual "Greenification" ratio of the film business in the reporting year (FY2025) was 14%. Specific initiatives for "Greenification" include the following: - Development of films using biomass materials, - Development of thin and lightweight film materials (increased strength), - Environmentally conscious design to facilitate the recycling of used films (mono-materialization) and - Development of films using recycled materials and the technology development for recycling itself *"Mono-materialization" refers to the process of replacing products, mainly packaging materials, that are composed of multiple materials with a single material (monomaterial).*

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

Our group has self-generated power facilities using coal as fuel, making us an energy-intensive company. More than 90% of our group's GHG emissions (Scope 1, 2) come from emissions from our domestic offices and factories in Japan. Therefore, policies such as taxation on GHG emissions or energy use that are related to GHG emissions or their causes in Japan have a significant impact on our group's operating costs. Furthermore, we have set a target of achieving operating profit of 49.8 billion yen or more in fiscal year 2031. The annual cost associated with the aforementioned carbon price accounts for more than 40% of the operating profit target, and we recognize that it has a significant impact on our group.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Increased indirect [operating] 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

☑ Short-term

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

Select from:

☑ Very 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

Japanese government has announced that starting from the fiscal year 2029, it will impose a fossil fuel levy on importers and other businesses involved in the importation of fossil fuels, based on the amount of carbon dioxide derived from the imported fuels. This is expected to result in general companies using energy derived from fossil fuels effectively paying the levy. We anticipate that this will have a significant impact on our group's operating costs and put pressure on our group's profits. Our company group assumed two scenarios for Scope 1 and 2 emissions in fiscal year 2031： a business as usual （BAU） scenario without any special measures to reduce GHG emissions, based on the actual results of 900,000 tons of CO2 in fiscal year 2021, and a low-carbon scenario that reduces GHG emissions according to a transition plan. In the BAU scenario, it was estimated that Scope 1 and 2 emissions would increase to approximately 1.3 million tons of CO2 due to sales expansion. On the other hand, in the low-carbon scenario, Scope 1 and 2 emissions would be 655,000 tons of CO2. Assuming a carbon price of 15,000 yen/ton of CO2 in fiscal year 2031, the annual cost would be approximately 20 billion yen in the BAU scenario and approximately 10 billion yen in the low-carbon scenario. The carbon price for fiscal year 2031 in Japan was determined with reference to the values from IEA WEO 2024. For 2030, it is set at $140 per ton of CO2 for advanced economies with net zero emissions pledges （Net Zero Emissions by 2050 Scenario, IEA WEO 2024）.

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

Select from:

☑ Yes

(3.1.1.19) Anticipated financial effect figure in the short-term – minimum (currency)

10000000000

(3.1.1.20) Anticipated financial effect figure in the short-term – maximum (currency)

20000000000

(3.1.1.25) Explanation of financial effect figure

The carbon-related costs for our company group in the fiscal year 2031 ranged from approximately 10 billion yen to 20 billion yen. For the fiscal year 2031, we considered two scenarios： the Business as Usual (BAU) scenario, which assumes no specific greenhouse gas (GHG) emission reduction measures compared to the actual emissions of 900,000 tons of CO2 in the fiscal year 2021, and the Low Carbonization scenario, which follows a transition plan to reduce GHG emissions. In the BAU scenario, it was estimated that Scope 1 and 2 emissions would increase to approximately 1.3 million tons of CO2 due to sales expansion. On the other hand,

in the Low Carbonization scenario, Scope 1 and 2 emissions would be 655,000 tons of CO2. Assuming a carbon price of 15,000 yen per ton of CO2 for the fiscal year 2031, the annual costs would be approximately 20 billion yen for the BAU scenario and approximately 10 billion yen for the Low Carbonization scenario. 【Calculation formula】 ● Minimum amount （approximately 10 billion yen） : 〔Carbon-related costs in the Low Carbonization scenario 〕 （Scope 1 and 2 emissions in the Low Carbonization scenario : 655,000 tons of CO2） × （carbon price of 15,000 yen per ton of CO2 for the fiscal year 2031） = 9.825 billion yen ● Maximum amount （approximately 20 billion yen） : 〔Carbon-related costs in the BAU scenario 〕 （Scope 1 and 2 emissions in the BAU scenario : approximately 1.3 million tons of CO2） × （carbon price of 15,000 yen per ton of CO2 for the fiscal year 2031） = 19.5 billion yen

(3.1.1.26) Primary response to risk

Compliance, monitoring and targets

☑ Establish organization-wide targets

(3.1.1.27) Cost of response to risk

77050000

(3.1.1.28) Explanation of cost calculation

The cost of risk mitigation for the reporting year amounted to 77.05 million yen. GHG reduction measures are considered as risk response measures, with the following three main initiatives : （1）Energy reduction and energy efficiency improvement, （2）Fuel conversion, and （3）Utilizing renewable energy. 【Calc.】 77.05 million yen = （（1） : 45 ）+ （（2） : 16.05）+ （（3） : 16 ）million yen 【Details】 （1） Investment in the recovery and utilization of waste heat and cold and the others amounts to approx. 45 million yen. （2）Fuel conversion is planned for Tsuruga and Inuyama site in the near future. In the reporting year, personnel costs (2.5 full-time staff) associated with the consideration of this fuel conversion are recorded as expenses. Personnel costs are calculated using data in the securities report. "Personnel costs (2.5 full-time staff): 16.05 million yen" = (JPY 6.42 million/person) x (2.5 persons) （3）PV facilities were installed at the Inuyama plant, with an investment cost of 16 milion yen.

(3.1.1.29) Description of response

Our company group has set a GHG reduction target for Scope 1 and 2 emissions of 27.0% compared to fiscal year 2021 for fiscal year 2031. To achieve this target, we have created a transition plan towards decarbonization （or roadmap to carbon neutrality） in 2022. At the same time, we have also formulated and disclosed a medium-term management plan, the 2025 Medium-Term Management Plan, which includes the investment plan for the medium term. The cumulative investment in environmental-related activities from FY2023 to 2026, in accordance with the transition plan, is included in the Safety, Disaster Prevention, and Environmental Investments of medium-term management plan （17 billion yen）.

Climate change

(3.1.1.1) Risk identifier

Select from:

☑ Risk3

(3.1.1.3) Risk types and primary environmental risk driver

Market

☑ Changing customer behavior

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Downstream value chain

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ Indonesia

☑ Japan

(3.1.1.9) Organization-specific description of risk

Our Film business, which is a core business of our group, accounts for approximately 40% of the group's total revenue and utilizes raw materials that include petroleum-derived resources. In the ongoing societal transition towards decarbonization, we anticipate an increasing demand from society, including our customers, to reduce the use of petroleum-derived resources and seek alternatives. We recognize this as a significant climate-related risk. For example, if we fail to promote the reduction and substitution of petroleum-derived resources, it is conceivable that our group's products may no longer be purchased, resulting in a significant decline in the majority of our group's revenue.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Decreased revenues due to reduced demand for products and services

(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

Our film business aims to achieve sales of 220 billion yen in the fiscal year 2031. Additionally, we have set a target to increase the greenification ratio of the film products we sell to 60%. Greenification refers to the application of technologies and initiatives that contribute to reducing the use of petroleum-derived resources, making them low-carbon or decarbonized products. The actual greenification ratio of the film business in the reporting year （fiscal year 2024） was 13%. We calculated the risk component for two scenarios： the "Stagnation Scenario," where the greenification ratio remains at the current 13% without progressing, and the "Greenification Scenario," where the greenification ratio progresses as planned to 60%. In the Stagnation Scenario, the risk component is defined as the 87% that is not greenified （calculation： 100% - 13%）. On the other hand, in the Greenification Scenario, the risk component is defined as the 40% that is not greenified （calculation： 100% - 60%）. The projected sales amount exposed to the risks in the Stagnation Scenario and Greenification Scenario are estimated to be 191.4 billion yen and 88 billion yen, respectively. It is believed that the research and development investment related to green films corresponds to the cost of responding to the risks in the reporting year （fiscal year 2024）. This is included in the research and development expenses for the film segment, which amounts to 4.1 billion yen.

(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)

88000000000

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

189200000000

(3.1.1.25) Explanation of financial effect figure

The risk amount in terms of sales for the film business in the fiscal year 2031 ranged from approximately 88 billion yen to 189.2 billion yen. In the Stagnation Scenario, where the greenification ratio remains at the current 14%, the risk component is defined as the 86% that is not greenified （calculation： 100% - 14%）. On the other hand, in the Greenification Scenario, where the greenification ratio progresses as planned to 60%, the risk component is defined as the 40% that is not greenified （calculation： 100% - 60%）. It should be noted that our film business aims to achieve sales of 220 billion yen in the fiscal year 2031. 【Calculation】 ● Minimum amount （approximately 88 billion yen）： ［Risk amount in the Greenification Scenario ］ （Sales of the film business in the fiscal year 2031： 220 billion yen） × （Risk component： 40%） ● Maximum amount （approximately 189.2 billion yen）： ［Risk amount in the Stagnation Scenario ］ （Sales of the film business in the fiscal year 2031： 220 billion yen） × （Risk component： 86%）

(3.1.1.26) Primary response to risk

Diversification

☑ Develop new products, services and/or markets

(3.1.1.27) Cost of response to risk

4400000000

(3.1.1.28) Explanation of cost calculation

Our group defines the greening of technologies and initiatives that reduce the use of petroleum-derived resources as part of our “Sustainable Vision 2030” and has set a goal to achieve greening in 60% of film products by the fiscal year 2031. As of the fiscal year 2025, the greening ratio stands at 14%. Film products that reduce the use of petroleum-derived resources are also low-carbon/decarbonized products, and by promoting the greening of film products, we aim to reduce risks and acquire and expand business opportunities. The cost for achieving the greening of film products in the reporting year （FY2025） is the research and development investment for greening films, which amounts to 4.4 billion yen, corresponding to the research and development expenses of the film segment. 【Calculation】 “Cost of response to risk： 4.4 billion yen” ＝ (Total research and development expenses：14.3 billion yen) × (Allocation rate to the plastic film business segment：31%)

(3.1.1.29) Description of response

“Greenification of film products in product development” was defined in our announced “Sustainable Vision 2030” in 2022, aiming to achieve "Greenification" in 60% of film products by fiscal year 2031, through technologies and initiatives that reduce the use of petroleum-derived resources. Reducing the use of petroleum-derived resources in film products not only makes them low-carbon/decarbonized products but also reduces risks and acquires business opportunities by promoting the "Greenification" of film products. The actual "Greenification" ratio of the film business in the reporting year （FY2025） was 14%. Specific initiatives for “Greenification” include the following： ・Development of films using biomass materials, ・Development of thin and lightweight film materials （increased strength）, ・Environmentally conscious design to facilitate the recycling of used films （mono-materialization） and ・Development of films using recycled materials and the technology development for recycling itself *“Mono-materialization” refers to the process of replacing products, mainly packaging materials, that are composed of multiple materials with a single material (monomaterial).*

Water

(3.1.1.1) Risk identifier

Select from:

☑ Risk7

(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

☑ Kiso

☑ Other, please specify

(3.1.1.9) Organization-specific description of risk

Our group's main factories, the Tsuruga Research and Production Center, Iwakuni Production Center and Inuyama Plant, are all located near rivers and in low-lying areas, making them susceptible to flood risks. These three factories are also the mother factories of our Film and Functional Materials business, which accounts for approximately 40% of our group's revenue. In the event of a disaster, there is a possibility of significant impact on our business and financial situation. We anticipate that flood risks will increase further due to changes in rainfall patterns if climate change continues to progress.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Decreased asset value or asset useful life leading to write-offs, asset impairment or early retirement of existing assets

(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

In the medium term （assuming the 2030s）, there is a possibility that the assets owned by our group may decrease due to water damage. Specifically, there is a possibility that the "buildings and equipment, etc." of the three factories located near rivers and in low-lying areas （Tsuruga Plant, Iwakuni Plant, and Inuyama

Factory） may be damaged by flooding. This could not only result in damage to the group's assets but also have a negative impact on performance and cash flow due to production stoppage. 【River basin where the risk occurs】 ■ Tsuruga Plant：Shono River ■ Iwakuni Plant：Monzen River ■ Inuyama Factory：Kiso River

(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)

7600000000

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

65400000000

(3.1.1.25) Explanation of financial effect figure

The estimated amount of asset reduction (damage to buildings and equipment, etc.) due to water damage in the 2030s has been calculated based on book value. The maximum amount is approximately 65.4 billion yen (total damage for the three factories), and the minimum amount is approximately 7.6 billion yen (damage for the Iwakuni Plant only). The calculation for the asset reduction due to water damage for the three factories is estimated by multiplying the damage rate※ published by the Ministry of Land, Infrastructure, Transport and Tourism by the book value of the buildings and equipment, etc. for the three factories. The assumed scale of water damage in the 2030s is based on the maximum anticipated flooding level in the hazard maps of each municipality. （※Damage rate from water damage when flooded according to the Ministry of Land, Infrastructure, Transport and Tourism's "Manual for Economic Assessment of River Improvement" (April 2024））
【Values used for calculation】 Book value and damage rate for buildings and equipment, etc. (damage rate in parentheses) [Tsuruga Plant：35.3 billion yen (damage rate when flooded：94%）] [Iwakuni Plant：13.4 billion yen (damage rate when flooded：57%）] [Inuyama Factory：26.2 billion yen (damage rate when flooded：94%）] 【Calculation formula】 [Maximum amount] (approximately 65.4 billion yen）=（"Asset reduction due to water damage for the three factories"）=（1）+（2）+（3） [Minimum amount] (approximately 7.6 billion yen）=（"Asset reduction due to water damage for the Iwakuni Plant"）=（1）
【Details of Calculation】 （1）Flood damage："Book value of buildings and equipment, etc. for Tsuruga Plant" × "Damage rate" ＝28.2 billion yen × 94% ＝33.2 billion yen （2）Flood damage："Book value of buildings and equipment, etc. for Iwakuni Plant" × "Damage rate" ＝13.4 billion yen × 57% ＝7.6 billion yen （3）Flood damage："Book value of buildings and equipment, etc. for Inuyama Factory" × "Damage rate" ＝29.3 billion yen × 94% ＝24.6 billion yen

(3.1.1.26) Primary response to risk

Infrastructure, technology and spending

☑ Increase environment-related capital expenditure

(3.1.1.27) Cost of response to risk

6507600000

(3.1.1.28) Explanation of cost calculation

The combined cost of tangible and intangible measures is designated as the risk management cost. 【Tangible】During the reporting year, a new facility capable of efficiently analyzing and manufacturing research reagents was completed at the Tsuruga site and began operation in April 2025. In designing this facility, measures were taken such as installing important equipment such as power equipment on the second floor in accordance with our Group's "Flood Disaster Prevention Guidelines." The investment in this facility was 6.5 billion yen, which is designated as flood disaster prevention expenses. 【Intangible】The cost of labor for participants in disaster prevention training is 7.6 million yen. 【Calc.】"Cost of response to risk：6.5076 billion yen" = Tangible Measures cost （1） + Intangible Measures cost （2） 【Details】 （1）"6.5 billion yen" （2）"7.6 million yen" =（Participants：3,030 people） x （Cost per unit time per participant, approx. 2,500 yen） x（Training time：1 hour）

(3.1.1.29) Description of response

Our company group considers the risk of water-related disasters at our factories as an important climate-related risk and implements both tangible and intangible measures to address it. As part of our tangible measures, we are gradually strengthening flood measures such as relocating and raising production equipment and power facilities. In terms of intangible measures, we conduct education and training aimed at minimizing water-related disasters. Additionally, we established new "Flood Disaster Prevention Guidelines" to clarify the basic policy regarding flood disaster prevention measure. ●Tangible Measures：During the reporting year, a new facility capable of efficiently analyzing and manufacturing research reagents was completed at the Tsuruga site and began operation in April 2025. In designing this facility, measures were taken such as installing important equipment such as power equipment on the second floor in accordance with our Group's "Flood Disaster Prevention Guidelines." ●Intangible Measures：(1) As part of our non-structural measures, we continuously conduct education and training to minimize water-related damage. Our company has established a rule that requires everyone to participate in disaster prevention education and training at least once a year. (2) During the reporting year under review, we established new "Flood Disaster Prevention Guidelines" to clarify the basic policy regarding flood disaster prevention measures at our Group production bases. We are prioritizing and implementing flood disaster prevention measures for newly planned production facilities and power facilities (installation on higher ground/raising, etc.), as well as additional installation of waterproof doors and enclosure walls for existing facilities.
[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:

☑ Assets

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

0

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

Select from:

☑ Less than 1%

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

7600000000

(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

The vulnerable assets in terms of physical risk, as mentioned in Risk 1 of section 3.1.1, with a minimum value of 7.6 billion yen, were considered among the assets (buildings and equipment, etc.) at risk of water damage. To calculate the proportion, this asset is divided by the total assets (buildings and equipment, etc.) of our group at the reporting year (fiscal year 2025). 【Calculation】 ("% of total financial metric vulnerable to physical risks for this environmental issue": 6%) = (Assets at risk from water damage: 7.6 billion yen) / (Total assets (buildings and equipment) at the reporting year: 137.4 billion yen)

Water

(3.1.2.1) Financial metric

Select from:

☑ Assets

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

300000000

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

Select from:

☑ Less than 1%

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

7600000000

(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

Transition Risk: The vulnerable asset cost in terms of transition risk, as mentioned in Risk 4 of section 3.1.1, with a minimum value of 300 million yen, was considered among the increased capital costs due to strengthened wastewater regulations in the fiscal year 2031. To calculate the proportion, this asset cost is divided by the total assets (buildings and equipment, etc.) of our group at the reporting year (fiscal year 2025). 【Calculation】 ("% of total financial metric vulnerable to transition risks for this environmental issue": 0.22%) = (Increase in capital costs due to strengthened drainage regulations: 300 million yen) / (Total assets (buildings and equipment) at the reporting date: 137.4 billion yen) Physical Risk: The vulnerable assets in terms of physical risk, as mentioned in Risk 1 of section 3.1.1, with a minimum value of 7.6 billion yen, were considered among the assets (buildings and equipment, etc.) at risk of water damage. To calculate the proportion, this asset is divided by the total assets (buildings and equipment, etc.) of our group at the reporting year (fiscal year 2025). 【Calculation】 ("% of total financial metric vulnerable to physical risks for this environmental issue": 6%) = (Assets at risk from water damage: 7.6 billion yen) / (Total assets (buildings and equipment) at the reporting year: 137.4 billion yen)

Climate change

(3.1.2.1) Financial metric

Select from:

☑ Revenue

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

88000000000

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

Select from:

☑ 11-20%

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

0

(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

The vulnerable sales amount in terms of transition risk, as mentioned in Risk 3 of section 3.1.1, with a minimum value of 88 billion yen, was considered among the sales decrease due to changes in customer behavior in the fiscal year 2031. To calculate the proportion, this sales amount is divided by the sales target of our group for the fiscal year 2031 (600 billion yen). 【Calculation】 ("% of total financial metric vulnerable to transition risks for this environmental issue": 15%) = (Decrease in sales due to changes in customer behavior: 88 billion yen) / (Sales target for fiscal year 2031: 600 billion yen)
[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?

Row 1

(3.2.1) Country/Area & River basin

Japan
☑ Kiso

(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:
☑ Unknown

(3.2.11) Please explain

We do not disclose the percentage contribution of each factory for the strategic reason.

Row 2

(3.2.1) Country/Area & River basin

Japan

☑ Other, please specify :Shono 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:

☑ Unknown

(3.2.11) Please explain

We do not disclose the percentage contribution of each factory for the strategic reason.

Row 3

(3.2.1) Country/Area & River basin

Japan
☑ Other, please specify :Monzen 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:
☑ Unknown

(3.2.11) Please explain

We do not disclose the percentage contribution of each factory for the strategic reason.
[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	*N/A*

[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:

☑ No, but we anticipate being regulated in the next three years

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

The Japanese government has indicated plans to fully introduce the Greenhouse Gas Emissions Trading System (GX-ETS) from the fiscal year 2027. Our group recognizes the possibility of being regulated starting from April 1, 2026. The GHG emissions (known as Scope 1 and 2) in our group's business activities are mainly emitted from three locations within Japan: the Tsuruga Research and Production Center, the Iwakuni Production Center, and the Inuyama Plant. Our own power plants are the main sources of emissions. Therefore, the transition to low-carbon and decarbonization of these three locations' power plants will be a crucial element of our strategy. As part of a transition plan, we formulated and published the Scope 1 and 2 reduction plan ("Roadmap to Carbon Neutrality") in 2022. Our group plans to achieve a 27.0% reduction in Scope 1 and 2 emissions by the fiscal year 2031 compared to the fiscal year 2021. The main reduction measures in this plan are as follows: - Reduction of energy consumption (energy efficiency) - Fuel conversion (phasing out coal) - Introduction of renewable energy Furthermore, based on this, our group introduced the Internal Carbon Pricing (ICP) system in 2022 to serve as a reference for investment decisions. We utilize the ICP system to make facility investments aligned with the transition plan. During the reporting year, we achieved full-scale operation of the LNG-fired power plant at the Iwakuni Production Center (shifting away from coal), installation of additional solar power generation equipment at the Inuyama Plant, and installation of new solar power generation equipment at our overseas subsidiary in Thailand, TOYOBO SAHA SAFETY WEAVE CO., LTD.

(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?

	Environmental opportunities identified
Climate change	*Select from:* ☑ Yes, we have identified opportunities, and some/all are being realized
Water	*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

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Products and services

☑ Shift in consumer preferences

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Downstream value chain

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

☑ Indonesia

☑ Japan

(3.6.1.8) Organization specific description

The film business, which is a core business of our group, accounts for approximately 40% of the group's total sales. The raw materials used in this business include petroleum-derived resources. In the ongoing societal transition towards decarbonization, it is anticipated that there will be increasing demands from society, including our customers, for the reduction and substitution of petroleum-derived resources. Alongside climate-related risks, there is also an increasing demand for low-carbon/decarbonized materials and products, presenting business opportunities. For example, if we proactively promote the reduction and substitution of petroleum-derived resources ahead of other companies, we can respond quickly to societal demands and customer requests, potentially leading to increased purchases of our group's products. We recognize that this could result in expanding market share in existing markets and acquiring business opportunities in new areas.

(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

☑ The opportunity has already had a substantive effect on our organization in the reporting year

(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

(3.6.1.13) Effect of the opportunity on the financial position, financial performance and cash flows of the organization in the reporting period

In our “Sustainable Vision 2030” announced in 2022, we defined technologies and initiatives that contribute to reducing the use of petroleum-derived resources as “Greenification” and set a target to increase the ”Greenification” ratio of the film products we sell to 60% by fiscal year 2031. The plastic film products that reduce the use of petroleum-derived resources are not only low-carbon/decarbonized products but also contribute to the greening of our film products, aiming to reduce risks and seize business opportunities. The ”Greenification” rate for the reporting year (FY2025) reached 14%. The sales revenue for the plastic film business in fiscal year 2025 amounted to 166.8 billion yen, with 23.3 billion yen (166.8 billion yen × 14%) attributed to opportunity acquisition in the reporting year.
Furthermore, ”Greenification” refer to the following efforts: - the development of films using biomass materials, the development of thin and lightweight film materials (enhanced strength), - environmentally conscious design for easy recycling of used films (mono-materialization), - the development of films using recycled materials, and - the technological development of film recycling itself. <<*“Mono-materialization” refers to the process of replacing products, mainly packaging materials, that are composed of multiple materials with a single material (monomaterial).>>*

(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

Our group’s plastic film business aims to achieve sales of 220 billion yen in the fiscal year 2031. Additionally, we have set a goal to increase the “Greenification” ratio of the plastic film products we sell at that time to 60%. The “Greenification” refers to the application of technologies and initiatives that contribute to reducing the use of petroleum-derived resources, making it a low-carbon/decarbonized product. The actual the “Greenification” ratio for the plastic film business in the reporting year （FY2025） was 14%. For the fiscal year 2031, we calculated the opportunity acquisition portion of the film business’s sales for two scenarios. The first scenario, referred to as the “stagnation scenario,” assumes that the “Greenification” does not progress beyond the current 14% and stagnates. The second scenario, referred to as the “ Greenification scenario,” assumes that the “Greenification” ratio progresses as planned and reaches 60%. In the “stagnation scenario,” the opportunity acquisition portion is defined as the 14% achieved through the “Greenification”. On the other hand, in the “Greenification scenario,” the opportunity acquisition portion is defined as the 60% achieved through the “Greenification”. The financial impact of opportunities on sales amounts for each scenario was approximately 30.8 billion yen for the "stagnation scenario" and approximately 132 billion yen for the “Greenification scenario". Additionally, we consider the research and development investment in green film as the corresponding expense for risk management in the reporting year （FY2025）. This investment is included in the research and development expenses of the film segment, totaling 4.4 billion yen.

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

Select from:
☑ Yes

(3.6.1.16) Financial effect figure in the reporting year (currency)

23300000000

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

30800000000

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

132000000000

(3.6.1.23) Explanation of financial effect figures

The financial impact due to opportunities in the plastic film business sales for the reporting year (fiscal year 2025) amounted to 23.3 billion yen. In fiscal year 2031, the financial impact due to opportunities in the film business sales ranged from approximately 132 billion yen to approximately 30.8 billion yen. For fiscal year 2031, two scenarios were considered: the "Stagnation Scenario," where the progress of greening remains at the current level of 14%, and the "Greening Scenario," where the greening ratio progresses as planned to 60%. In the "Stagnation Scenario," the 14% achieved through greening was defined as the opportunity gain. On the other hand, in the "Greening Scenario," the 60% achieved through greening was defined as the opportunity gain. It should be noted that our group's film business aims for sales of 220 billion yen in fiscal year 2031. 【Calculation Formula】 [Financial impact in the reporting year]: ●Opportunity gain in the reporting year (23.3 billion yen): (Plastic film business sales in fiscal year 2025: 166.8 billion yen) x (Opportunity gain: 14%) [Estimated financial impact in the medium term]: ●Minimum value (approximately 30.8 billion yen): Opportunity gain in the Stagnation Scenario = (Film business sales in fiscal year 2031: 220 billion yen) x (Opportunity gain: 14%) ●Maximum value (approximately 132 billion yen): Opportunity gain in the Greening Scenario = (Film business sales in fiscal year 2031: 220 billion yen) x (Opportunity gain: 60%)

(3.6.1.24) Cost to realize opportunity

4400000000

(3.6.1.25) Explanation of cost calculation

Our group has defined technologies and initiatives that contribute to the reduction of petroleum-derived resource consumption as "greenification" in our "Sustainable Vision 2030" plan. We have set a target to achieve greenification in 60% of our plastic film products by the fiscal year 2031. As of the fiscal year 2025, the proportion of greenified film products is 14%. Greenified film products not only reduce the consumption of petroleum-derived resources but also contribute to low-carbon and decarbonized product offerings. By promoting the greenification of film products, we aim to reduce risks and acquire/expand business opportunities. The cost to realize the greenification of film products in the reporting year (fiscal year 2025) represents the research and development investment related to greenified films. The research and development expenses for the plastic film business in the reporting year amount to 4.4 billion yen, which is 31% of the total research and development expenses. This information is also disclosed in our annual securities report. 【Calculation formula】 ●"Cost to realize opportunity: 4.4 billion yen" = (Total research and development expenses: 14.3 billion yen) × (Allocation ratio to the plastic film business: 31%)

(3.6.1.26) Strategy to realize opportunity

“Greenification of plastic film products in product development” was defined in our announced “Sustainable Vision 2030” in 2022, aiming to achieve ”Greenification” in 60% of plastic film products by fiscal year 2031, through technologies and initiatives that reduce the use of petroleum-derived resources. Reducing the use of petroleum-derived resources in plastic film products not only makes them low-carbon/decarbonized products but also reduces risks and acquires business opportunities by promoting the ”Greenification” of plastic film products. The actual ”Greenification" ratio of the film business in the reporting year （FY2025） was 14%. ■ Specific initiatives for “Greenification” include the following： ・Development of films using biomass materials, ・Development of thin and lightweight film materials （increased strength）, ・Environmentally conscious design to facilitate the recycling of used films （mono-materialization） and ・Development of films using recycled materials and the technology development for recycling itself *“Mono-materialization” refers to the process of replacing products, mainly packaging materials, that are composed of multiple materials with a single material (monomaterial).*

Water

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp5

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Products and services

☑ Reduced impact of product use on water resources

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Downstream value chain

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

☑ Oman

☑ China

☑ India

☑ Saudi Arabia

☑ United States of America

☑ Japan

☑ Qatar

(3.6.1.6) River basin where the opportunity occurs

Select all that apply

☑ Unknown

(3.6.1.8) Organization specific description

Our group recognizes that the progression of climate change increases the risk of water scarcity and drought worldwide. In the future, there will be challenges in securing not only industrial water but also domestic water in many regions, and we predict a growing demand for freshwater and freshwater recycling. Our group began its seawater desalination business using Reverse Osmosis (RO) membranes, which were developed using spinning technology in the 1970s. The RO membranes have excellent durability and chlorine resistance due to their material properties. They particularly excel in desalinating seawater, which is prone to microbial growth, in closed sea areas, contributing to a stable supply of freshwater in the Middle East Gulf countries. Furthermore, we have also applied this technology to develop and sell BC membranes that can concentrate solutions with high efficiency. In the reporting year (FY2025), our membranes were adopted by a major Chinese battery recycling plant in the process of recovering lithium from used lithium-ion batteries. We also expect sales to expand in applications such as concentrating lithium from salt-lake brine, treating and recycling factory wastewater, and converting to zero-discharge (ZLD) systems.

(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

☑ The opportunity has already had a substantive effect on our organization in the reporting year

(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

(3.6.1.13) Effect of the opportunity on the financial position, financial performance and cash flows of the organization in the reporting period

Our group's environmental and functional materials business is involved in the water treatment membrane-related projects. The sales revenue for the environmental and functional materials business in the fiscal year 2025 was 110.8 billion yen, and this opportunity has had an impact on that figure.

(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

Our group's environmental and functional materials business is involved in water treatment membrane-related projects. In the environmental and functional materials business, we anticipate an increasing demand for freshwater and freshwater recycling. In addition to our seawater desalination project using RO (Reverse Osmosis) membranes, we are also conducting research and development on energy-efficient next-generation seawater desalination plants using our unique FO (Forward Osmosis) membranes. We also expect to expand our sales through the use of BC (Brine Concentration) membranes for wastewater treatment and recycling, zero liquid discharge (ZLD) processes, and the recovery of valuable materials (such as lithium) in battery recycling plants. In the fiscal year 2025, the sales revenue for the environmental and functional materials business was 110.8 billion yen, and this opportunity has had an impact on that figure. Furthermore, our sales revenue target for the environmental and functional materials business in the fiscal year 2031 is set at 250 billion yen, with water treatment membrane-related businesses including RO membranes, FO membranes, and BC membranes contributing to a part of this target.

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

Select from:

☑ Yes

(3.6.1.16) Financial effect figure in the reporting year (currency)

110800000000

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

110800000000

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

250000000000

(3.6.1.23) Explanation of financial effect figures

The financial impact of opportunities on the sales of the environmental and functional materials business, which includes the water treatment membrane business, in the reporting year (FY2025) amounted to 110.8 billion yen. For the FY2031, the financial impact of opportunities on the sales of the environmental and functional materials business reaches a maximum of approx. 250 billion yen and a minimum of approx. 110.8 billion yen. The environmental and functional materials business within our group includes the water treatment membrane business. We anticipate increasing demand for freshwater and freshwater recycling in the environmental and functional materials business. In addition to seawater desalination using RO (Reverse Osmosis) membranes, we are also conducting research and development on energy-efficient next-generation seawater desalination plants using our proprietary FO (Forward Osmosis) membranes. Furthermore, we expect sales growth through the utilization of BC (Brine Concentration) membranes for wastewater treatment and recycling, zero liquid discharge (ZLD), and recovery of valuable substances (such as lithium) in battery recycling plants. The sales revenue for the reporting year in the environmental and functional materials business amounted to 110.8 billion yen, and this opportunity has an impact on that figure. Additionally, the sales revenue target for the FY2031 in the environmental and functional materials business is set at 250 billion yen, with the water treatment membrane-related business, including RO, FO, and BC membranes, contributing to that goal. This is considered as the growth scenario and represents the maximum financial impact. Conversely, the stagnant scenario assumes no sales revenue growth from FY2025 and represents the minimum financial impact. 【Calculation formula】 ● Financial impact in the reporting year (110.8 billion yen): = (Sales revenue of the environmental and functional materials business in FY2025) ● Financial impact expected in the medium term: ・Minimum value (approx. 110.8 billion yen): (Sales revenue in the reporting year: 110.8 billion yen) × (1 + Sales revenue growth rate under the stagnant scenario) ・Maximum value (approx. 250 billion yen): (Sales revenue in the reporting year: 110.8 billion yen) × (1 + Sales revenue growth rate under the growth scenario) 【Details of the calculation formula】 ● Sales revenue growth rate; ・Under the stagnant scenario: 0 (0%) ・Under the growth scenario: 1.26 (126%)

(3.6.1.24) Cost to realize opportunity

3800000000

(3.6.1.25) Explanation of cost calculation

The research and development expenses related to the environmental and functional materials business, which includes the water treatment membrane business, were considered as costs to realize opportunities. The research and development expenses for the environmental and functional materials business in the reporting year (fiscal year 2025) amount to 3.8 billion yen, which is 27% of the total research and development expenses. This information is also disclosed in our financial report. 【Calculation formula】 ● "Cost to realize opportunity: 3.8 billion yen" = (Total research and development expenses: 14.3 billion yen) × (Allocation ratio to the environmental and functional materials business: 27%)

(3.6.1.26) Strategy to realize opportunity

In our “Sustainable Vision 2030” plan, which we announced in 2022, our group set a target to produce water equivalent to the amount needed for 10 million people through seawater desalination using membranes by the fiscal year 2031. This goal aims to acquire business opportunities through solving social issues. As a specific initiative, our company and Mitsubishi Corporation have established a new joint venture company called TOYOBO MC Corporation, which is engaged in the planning, development, manufacturing, and sales of functional materials, including water treatment membranes. The business of this joint venture began on April 1, 2023. By leveraging Mitsubishi Corporation’s connections with customers and partners, we aim to promote global business expansion for our group’s products that contribute to reducing environmental impact, including water treatment membrane-related products. In the reporting year（FY2025）, we have started selling RO membranes in India. In India, the demand for water is rapidly increasing due to population growth and urbanization. By introducing spiral-wound RO membranes to the Indian market, we will contribute to the conservation of water resources around the world.

Climate change

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp3

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Products and services

☑ Reduced impact of product use on water resources

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Downstream value chain

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

☑ Oman

☑ China

☑ India

☑ Japan

☑ Qatar

☑ Saudi Arabia

☑ United States of America

(3.6.1.8) Organization specific description

Our group recognizes that the progression of climate change increases the risk of water scarcity and drought worldwide. In the future, there will be challenges in securing not only industrial water but also domestic water in many regions, and we predict a growing demand for freshwater and freshwater recycling. Our group began its seawater desalination business using Reverse Osmosis (RO) membranes, which were developed using spinning technology in the 1970s. The RO membranes have excellent durability and chlorine resistance due to their material properties. They particularly excel in desalinating seawater, which is prone to microbial growth, in closed sea areas, contributing to a stable supply of freshwater in the Middle East Gulf countries. Furthermore, we have also applied this technology to develop and sell BC membranes that can concentrate solutions with high efficiency. In the reporting year （FY2025）, our membranes were adopted by a major Chinese battery recycling plant in the process of recovering lithium from used lithium-ion batteries. We also expect sales to expand in applications such as concentrating lithium from salt-lake brine, treating and recycling factory wastewater, and converting to zero-discharge (ZLD) systems.

(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

☑ The opportunity has already had a substantive effect on our organization in the reporting year

(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

(3.6.1.13) Effect of the opportunity on the financial position, financial performance and cash flows of the organization in the reporting period

Our group's environmental and functional materials business is involved in the water treatment membrane-related projects. The sales revenue for the environmental and functional materials business in the fiscal year 2025 was 110.8 billion yen, and this opportunity has had an impact on that figure.

(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

Our group's environmental and functional materials business is involved in water treatment membrane-related projects. In the environmental and functional materials business, we anticipate an increasing demand for freshwater and freshwater recycling. In addition to our seawater desalination project using RO (Reverse Osmosis) membranes, we are also conducting research and development on energy-efficient next-generation seawater desalination plants using our unique FO (Forward Osmosis) membranes. We also expect to expand our sales through the use of BC (Brine Concentration) membranes for wastewater treatment and recycling, zero liquid discharge (ZLD) processes, and the recovery of valuable materials (such as lithium) in battery recycling plants. In the fiscal year 2025, the sales revenue for the environmental and functional materials business was 110.8 billion yen, and this opportunity has had an impact on that figure. Furthermore, our sales revenue target for the environmental and functional materials business in the fiscal year 2031 is set at 250 billion yen, with water treatment membrane-related businesses including RO membranes, FO membranes, and BC membranes contributing to a part of this target.

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

Select from:

☑ Yes

(3.6.1.16) Financial effect figure in the reporting year (currency)

110800000000

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

110800000000

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

250000000000

(3.6.1.23) Explanation of financial effect figures

The financial impact of opportunities on the sales of the environmental and functional materials business, which includes the water treatment membrane business, in the reporting year (FY2025) amounted to 110.8 billion yen. For the FY2031, the financial impact of opportunities on the sales of the environmental and functional materials business reaches a maximum of approx. 250 billion yen and a minimum of approx. 110.8 billion yen. The environmental and functional materials business

within our group includes the water treatment membrane business. We anticipate increasing demand for freshwater and freshwater recycling in the environmental and functional materials business. In addition to seawater desalination using RO (Reverse Osmosis) membranes, we are also conducting research and development on energy-efficient next-generation seawater desalination plants using our proprietary FO (Forward Osmosis) membranes. Furthermore, we expect sales growth through the utilization of BC (Brine Concentration) membranes for wastewater treatment and recycling, zero liquid discharge (ZLD), and recovery of valuable substances (such as lithium) in battery recycling plants. The sales revenue for the reporting year in the environmental and functional materials business amounted to 110.8 billion yen, and this opportunity has an impact on that figure. Additionally, the sales revenue target for the FY2031 in the environmental and functional materials business is set at 250 billion yen, with the water treatment membrane-related business, including RO, FO, and BC membranes, contributing to that goal. This is considered as the growth scenario and represents the maximum financial impact. Conversely, the stagnant scenario assumes no sales revenue growth from FY2025 and represents the minimum financial impact. 【Calculation formula】 ● Financial impact in the reporting year (110.8 billion yen): = (Sales revenue of the environmental and functional materials business in FY2025) ● Financial impact expected in the medium term: ・Minimum value (approx. 110.8 billion yen): (Sales revenue in the reporting year: 110.8 billion yen) × (1 + Sales revenue growth rate under the stagnant scenario) ・Maximum value (approx. 250 billion yen): (Sales revenue in the reporting year: 110.8 billion yen) × (1 + Sales revenue growth rate under the growth scenario) 【Details of the calculation formula】 ● Sales revenue growth rate; ・Under the stagnant scenario: 0 (0%) ・Under the growth scenario: 1.26 (126%)

(3.6.1.24) Cost to realize opportunity

3800000000

(3.6.1.25) Explanation of cost calculation

The research and development expenses related to the environmental and functional materials business, which includes the water treatment membrane business, were considered as costs to realize opportunities. The research and development expenses for the environmental and functional materials business in the reporting year (fiscal year 2025) amount to 3.8 billion yen, which is 27% of the total research and development expenses. This information is also disclosed in our financial report. 【Calculation formula】 ● "Cost to realize opportunity: 3.8 billion yen" = (Total research and development expenses: 14.3 billion yen) × (Allocation ratio to the environmental and functional materials business: 27%)

(3.6.1.26) Strategy to realize opportunity

In our "Sustainable Vision 2030" plan, which we announced in 2022, our group set a target to produce water equivalent to the amount needed for 10 million people through seawater desalination using membranes by the fiscal year 2031. This goal aims to acquire business opportunities through solving social issues. As a specific initiative, our company and Mitsubishi Corporation have established a new joint venture company called TOYOBO MC Corporation, which is engaged in the planning, development, manufacturing, and sales of functional materials, including water treatment membranes. The business of this joint venture began on April 1, 2023. By leveraging Mitsubishi Corporation's connections with customers and partners, we aim to promote global business expansion for our group's products that contribute to reducing environmental impact, including water treatment membrane-related products. In the reporting year（FY2025）, we have started selling RO membranes in India. In India, the demand for water is rapidly increasing due to population growth and urbanization. By introducing spiral-wound RO membranes to the Indian market, we will contribute to the conservation of water resources around the world.

Climate change

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp7

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Products and services

☑ Increased sales of existing products and services

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Downstream value chain

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

☑ China
☑ Japan
☑ Canada
☑ Mexico
☑ Poland
☑ Taiwan, China
☑ Republic of Korea
☑ United States of America
☑ Czechia
☑ Hungary
☑ Romania
☑ Bulgaria
☑ Slovakia

(3.6.1.8) Organization specific description

Our group has a wide range of products, equipment, and solutions that contribute to the reduction of greenhouse gas (GHG) emissions through the replacement of conventional technologies. One of these is the VOC recovery system, which removes volatile organic compounds (VOCs) emitted from factories such as those in the

EV, semiconductor, pharmaceutical, and printing industries, using energy-efficient methods and enabling the recovery and reuse of organic solvents. Our group has been developing and selling VOC recovery systems since the 1970s, utilizing activated carbon fiber (K-filter) as the VOC adsorbent. In the latest VOC recovery systems, we have adopted a method of desorbing VOCs using heated nitrogen, allowing for the circulation and reuse of nitrogen. These systems are highly compact, consume minimal operating energy, and can recover high-quality organic solvents with low impurities. They have been recognized for their high GHG reduction effectiveness compared to conventional combustion methods. Moreover, the K-filter has the advantage of being able to recover low-boiling-point VOCs such as methylene chloride. Taking advantage of this characteristic, its adoption has been spreading worldwide in the separator manufacturing process for lithium batteries used in EVs, where methylene chloride is generated in large quantities.

(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

☑ The opportunity has already had a substantive effect on our organization in the reporting year

(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

(3.6.1.13) Effect of the opportunity on the financial position, financial performance and cash flows of the organization in the reporting period

Our group's Environmental and Functional Materials business has a wide range of products, equipment, and solutions that contribute to the reduction of greenhouse gas emissions, including VOC recovery systems, in the reporting year. The sales revenue of the Environmental and Functional Materials business in the reporting year (FY2024) amounted to 110.8 billion yen, and this figure is influenced by this opportunity.

(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

In the reporting year, our group's Environmental and Functional Materials business has a wide range of products, equipment, and solutions that contribute to the reduction of greenhouse gas emissions, including VOC recovery systems. The sales revenue of the Environmental and Functional Materials business in the reporting year (FY2025) amounted to 110.8 billion yen, and this figure is influenced by this opportunity. In the future, we plan to expand the application of next-generation batteries, such as solid-state batteries, and in production facilities for semiconductors, among others. We also predict an increased demand for solutions that contribute to greenhouse gas reduction, as there is a shift away from the incineration method for flammable VOCs from the perspective of achieving a decarbonized society. Furthermore, the sales revenue target for the Environmental and Functional Materials business in FY2031 is set at 250 billion yen. We believe that the sales of solutions that contribute to the reduction of greenhouse gas emissions, including VOC recovery systems, will drive the growth of the Environmental and Functional Materials business.

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

Select from:

☑ Yes

(3.6.1.16) Financial effect figure in the reporting year (currency)

110800000000

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

110800000000

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

250000000000

(3.6.1.23) Explanation of financial effect figures

The financial impact due to opportunities in the sales revenue of the environmental and functional materials business, which has a wide range of solutions contributing to the reduction of greenhouse gas (GHG) emissions, including VOC recovery systems, was 110.8 billion yen in the reporting year. In the FY2031, the financial impact due to opportunities in the sales revenue of the environmental and functional materials business, which has a wide range of solutions contributing to the reduction of GHG emissions, was estimated to be a maximum of approx. 250 billion yen and a minimum of approx. 110.8 billion yen. The environmental and functional materials business, responsible for the development of VOC recovery systems, plans to advance the application of next-generation batteries such as solid-state batteries and the production of semiconductors in various factories. Additionally, considering the realization of a decarbonized society, there is an anticipated

increase in demand for replacing the incineration method of combustible VOCs, and there are plans to actively expand solutions that contribute to GHG reduction. In the FY2025, the sales revenue for the environmental and functional materials business was 110.8 billion yen, and this opportunity has had an impact on that figure. Furthermore, the sales revenue target for the environmental and functional materials business in the FY2031 is set at 250 billion yen, which includes businesses contributing to the reduction of GHG emissions, including VOC recovery systems. This is considered as the growth scenario and represents the maximum value of the financial impact. On the other hand, the stagnation scenario assumes no growth in sales revenue from the FY2025 and represents the minimum value of the financial impact. 【Calculation formula】 ● Financial impact in the reporting year (110.8 billion yen): = (Sales revenue of the environmental and functional materials business in FY2024) ● Financial impact expected in the medium term: ・Minimum value (approx. 110.8 billion yen): (Sales revenue in the reporting year: 110.8 billion yen) × (1 + Sales revenue growth rate under the stagnant scenario) ・Maximum value (approx. 250 billion yen): (Sales revenue in the reporting year: 110.8 billion yen) × (1 + Sales revenue growth rate under the growth scenario) 【Details of the calculation formula】 ● Sales revenue growth rate; ・Under the stagnant scenario: 0 (0%) ・Under the growth scenario: 1.26 (126%)

(3.6.1.24) Cost to realize opportunity

3800000000

(3.6.1.25) Explanation of cost calculation

The research and development expenses related to the environmental and functional materials business, which has a wide range of products, facilities, and solutions contributing to the reduction of greenhouse gas (GHG) emissions, including VOC recovery systems, were considered as costs to realize opportunities. In the reporting year (fiscal year 2025), the research and development expenses for the environmental and functional materials business amounted to 3.8 billion yen, which is 27% of the total research and development expenses, and this information is also disclosed in the financial report. 【Calculation Formula】 "Cost to realize opportunity: 3.8 billion yen" = (Total research and development expenses: 14.3 billion yen) × (Allocation rate to the environmental and functional materials business: 27%)

(3.6.1.26) Strategy to realize opportunity

In April 2023, we started the business of the joint venture company "TOYOBO MC Corporation" in the functional materials field, which is a joint venture between Toyobo and Mitsubishi Corporation. Leveraging Mitsubishi Corporation's overseas presence and connections with end-users, we aim to stay ahead of mega-trends, expand our overseas presence, and strengthen our solution-providing capabilities. Furthermore, in our group's "Sustainable Vision 2030," we have set a processing volume target of 7 billion Nm3/year for VOC recovery systems for lithium-ion battery separators by the fiscal year 2030. As of the end of the reporting year, the processing volume has reached 5.4 billion Nm3/year, and we will continue to acquire and expand business opportunities through the resolution of societal challenges. As part of our future strategy, we will advance the application of next-generation batteries such as solid-state batteries and expand their usage in semiconductor production facilities. Additionally, considering the realization of a decarbonized society, we anticipate an increase in demand for replacing the incineration method of combustible VOCs, and we actively promote solutions that contribute to reducing greenhouse gas emissions.

Climate change

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp2

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Energy source

☑ Use of low-carbon energy sources

(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

Our group has self-generated power facilities using coal as fuel, making us an energy-intensive company. More than 90% of our group's GHG emissions (Scope 1, 2) come from emissions from our domestic offices and factories in Japan. Therefore, policies such as taxation on GHG emissions or energy use that are related to GHG emissions or their causes in Japan have a significant impact on our group's operating costs. Furthermore, we have set a target of achieving operating profit of 49.8 billion yen or more in fiscal year 2031. The annual cost associated with the aforementioned carbon price accounts for more than 40% of the operating profit target, and we recognize that it has a significant impact on our group.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Reduced indirect (operating) 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:

☑ Very likely (90–100%)

(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

Japanese government has announced that starting from the fiscal year 2029, it will impose a fossil fuel levy on importers and other businesses involved in the importation of fossil fuels, based on the amount of carbon dioxide derived from the imported fuels. This is expected to result in general companies using energy derived from fossil fuels effectively paying the levy. We anticipate that this will have a significant impact on our group's operating costs and put pressure on our group's profits. Our company group assumed two scenarios for Scope 1 and 2 emissions in fiscal year 2031： a business as usual （BAU） scenario without any special measures to reduce GHG emissions, based on the actual results of 900,000 tons of CO2 in fiscal year 2020, and a low-carbon scenario that reduces GHG emissions according to a transition plan. In the BAU scenario, it was estimated that Scope 1 and 2 emissions would increase to approximately 1.3 million tons of CO2 due to sales expansion. On the other hand, in the low-carbon scenario, Scope 1 and 2 emissions would be 655,000 tons of CO2. Assuming a carbon price of 15,000 yen/ton of CO2 in fiscal year 2031, the annual cost would be approximately 20 billion yen in the BAU scenario and approximately 10 billion yen in the low-carbon scenario. To achieve this low-carbon scenario, our group has created and disclosed a transition plan in 2022. By progressing with the reduction of Scope 1 and 2 emissions according to this transition plan, the annual cost associated with carbon pricing is expected to be approximately 10 billion yen. Compared to the BAU scenario, this represents a cost reduction effect of approximately 10 billion yen. The carbon price for fiscal year 2031 in Japan was determined with reference to the values from IEA WEO 2024. For 2030, it is set at $140 per ton of CO2 for advanced economies with net zero emissions pledges （Net Zero Emissions by 2050 Scenario, IEA WEO 2024）.

(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)

8200000000

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

10000000000

(3.6.1.23) Explanation of financial effect figures

In FY2031, our group's potential opportunity acquisition (i.e., reduction in indirect OPEX) ranged from approx. 10 billion yen to 8 billion yen. Our group has disclosed "Sustainable Vision 2030", which includes the transition plan by FY2031 to carbon neutrality in 2050. In this transition plan, our goals for FY2031 include reducing GHG emissions (Scope 1 and 2) to 655,000 tons of CO2 through energy reduction, energy efficiency improvement, production efficiency enhancement, fuel conversion, and the introduction of renewable energy. The maximum value for potential opportunity acquisition is based on the assumption that GHG emissions (Scope 1 and 2) reduction progresses as planned in line with the transition plan by FY2031. This is referred to as the "low-carbon scenario." The minimum value for potential opportunity acquisition is calculated under the assumption that GHG emissions remain flat after FY2025. Specifically, emissions are projected to stay at the FY2025 level of 784,000 tons of CO_2. This scenario is referred to as the "low-carbon stagnation scenario." These scenarios are compared to the BAU scenario, which represents the situation without implementing specific GHG emission reduction measures from FY2021 (actual emissions: 900,000 tons of CO2). The difference between these scenarios represents the potential opportunity acquisition (reduction in indirect OPEX). The calculations are as follows: 【Calculation Formula】 ● Maximum potential opportunity acquisition: Approx. 10 billion yen = (Carbon cost burden in BAU scenario: Approx. 20 billion yen) - (Carbon cost burden in low-carbon scenario: Approx. 10 billion yen) ● Minimum potential opportunity acquisition: Approx. 8.2 billion yen = (Carbon cost burden in BAU scenario: Approx. 20 billion yen) - (Carbon cost burden in low-carbon stagnation scenario: Approx. 11.8 billion yen) 【Detailed Calculation】 ● Carbon cost burden in BAU scenario: "GHG emissions in 2030: Approx. 1.3 million tons of CO2" × "Carbon price per ton of CO2 in 2030: 15,000 yen" = Approx. 20 billion yen ● Carbon cost burden in low-carbon stagnation scenario: "GHG emissions in 2030: Approx. 784,000 tons of CO2" × "Carbon price per ton of CO2 in 2030: 15,000 yen" = Approx. 11.8 billion yen *GHG emissions at the FY2025 level ● Carbon cost burden in low-carbon scenario: "GHG emissions in 2030: Approx. 655,000 tons of CO2" × "Carbon price per ton of CO2 in 2030: 15,000 yen" = Approx. 10 billion yen*

(3.6.1.24) Cost to realize opportunity

77050000

(3.6.1.25) Explanation of cost calculation

The cost to realize opportunities in the reporting year (FY2025) amounted to 77.05 million yen. GHG reduction measures fall under the category of opportunity realization measures, and the following three are the main initiatives: (1) Energy reduction and energy efficiency improvement (including production efficiency enhancement), (2) Fuel conversion (coal phase-out), (3) Optimization of electricity, including renewable energy. 【Calc.】77.05 million yen = (1): 45) + (2): 16.05) + (3): 16) million yen 【Details】 (1) Investment in the recovery and utilization of waste heat and cold and the others amounts to approx. 45 million yen. (2) Fuel conversion is planned for Tsuruga and Inuyama site in the near future. In the reporting year, personnel costs (2.5 full-time staff) associated with the consideration of this fuel conversion are recorded as expenses. Personnel costs are calculated using data in the securities report. "Personnel costs (2.5 full-time staff): 16.05 million yen" = (JPY 6.42 million/person) x (2.5 persons) (3) PV facilities were installed at the Inuyama plant, with an investment cost of 16 milion

yen.

(3.6.1.26) Strategy to realize opportunity

Our group has created and disclosed a transition plan in 2022 to realize this opportunity for decarbonization scenarios. The cumulative investment from 2022 to 2025, in line with the transition plan including energy reduction and energy efficiency measures, productivity improvement, fuel conversion, and introduction of renewable energy, is included in the "Safety, Disaster Prevention, and Environmental Investment" for the 2025 mid-term management plan, amounting to approximately 17 billion yen. The main reduction measures and their contribution rates to the overall reduction are as follows： （1） Energy reduction and energy efficiency （including productivity improvement） ： approximately 30% （2） Fuel conversion （transition away from coal） ： approximately 40% （3） Optimization of electricity, including renewable energy ： approximately 30% Furthermore, to monitor the progress of this transition plan, we have set short-term and medium-term reduction targets for Scope 1 and Scope 2 emissions. For the short-term targets, we have set indicators such as the "GHG emissions per unit of sales reduction rate in Scope 1 and Scope 2" with the 2020 fiscal year as the base year, and targets for the 2026 and 2027 fiscal years. For the medium-term targets, we have set indicators such as the "reduction rate of Scope 1 and Scope 2 emissions" with the 2020 fiscal year as the base year, and a target for the 2031 fiscal year.
[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)

141600000000

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

Select from:
☑ 21-30%

(3.6.2.4) Explanation of financial figures

The minimum values of the sales increase resulting from the increased demand for the products and services mentioned in Opp1, 3, and 7 in 3.6.1 were considered as the sales amounts aligning with the opportunity in FY2031 (30.8 billion yen + 110.8 billion yen). Please note that there is overlap in the sales amounts of Opp5 and 7, so a total amount of 110.8 billion yen was used for Opp5 and 7. The ratio was calculated by dividing this sales amount by the sales target for our company group in FY2031 (600 billion yen). 【Calculation】 ("% of total financial metric aligned with opportunities for this environmental issue": 23.6%) = (Increase in sales due to increased demand for products and services: 30.8 billion yen + 110.8 billion yen) / (Sales target for fiscal year 2031: 600 billion yen)

Water

(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)

110800000000

(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

The minimum value (110.8 billion yen) of the sales increase resulting from the increased demand for the products and services mentioned in Opp5 in 3.6.1 was considered as the sales amount aligning with the opportunity in FY2031. The ratio was calculated by dividing this sales amount by the sales target for our company group in FY2031 (600 billion yen). 【Calculation】 ("% of total financial metric aligned with opportunities for this environmental issue": 18%) = (Increase in sales due to increased demand for products and services: 110.8 billion yen) / (Sales target for fiscal year 2031: 600 billion yen)
[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:

☑ More frequently than quarterly

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

Select all that apply

☑ 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

The Board of Directors is comprised of the Chair of the Board, outside directors, and directors who also serve as executive officers, in order to have a balanced structure with the expertise and skills necessary to appropriately provide strategic direction and made decisions on important business operations, and the independence necessary to strengthen supervision of management, while also ensuring diversity in terms of professional background, gender, age, etc. Based on the concepts of (1) ensuring timeliness and accuracy in decision-making, (2) ensuring transparency in management, and (3) emphasizing fairness, the Articles of Incorporation stipulate that the Board of Directors must have no more than 14 members, and that the ratio of outside directors be at least one-third of members.

(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
Climate change	*Select from:* ☑ Yes
Water	*Select from:* ☑ Yes
Biodiversity	*Select from:* ☑ Yes

[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

☑ Director on board

☑ 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

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

Select from:

☑ Scheduled agenda item in some board meetings – at least annually

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

Select all that apply

☑ Reviewing and guiding annual budgets
☑ Overseeing and guiding scenario analysis
☑ Overseeing the setting of corporate targets
☑ Monitoring progress towards corporate targets
☑ Approving corporate policies and/or commitments
☑ Overseeing reporting, audit, and verification processes
☑ Monitoring the implementation of a climate transition plan
☑ Overseeing and guiding the development of a business strategy
☑ Overseeing and guiding acquisitions, mergers, and divestitures
☑ Monitoring supplier compliance with organizational requirements
☑ Monitoring compliance with corporate policies and/or commitments
☑ Overseeing and guiding the development of a climate transition plan
☑ Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities
☑ Overseeing and guiding public policy engagement
☑ Reviewing and guiding innovation/R&D priorities
☑ Approving and/or overseeing employee incentives
☑ Overseeing and guiding major capital expenditures
☑ Monitoring the implementation of the business strategy

(4.1.2.7) Please explain

Our group has introduced an executive officer system under the form of a company with Board of Corporate Auditors. The executive officer system is stipulated in the

articles of incorporation, and the board of directors supervises the execution of duties by executive officers. By clearly separating "decision-making and supervision" by the board of directors and "execution of duties" by executive officers, we have established a governance structure that enables prompt decision-making and efficient execution of business. The role of the board of directors is to receive reports on the progress of medium- to long-term themes, including sustainability, and the execution status of each business, and to provide proper supervision. This governance mechanism contributes to the swift decision-making of response measures to environmental issues, such as climate change, which require a long-term perspective and involve volatility, uncertainty, complexity, and ambiguity. The environmental issues here include addressing climate change, challenges related to wastewater treatment directly related to operations, challenges related to water intake, and challenges related to biodiversity. The President and CEO reports the top policies and important matters regarding environmental issues deliberated in the "Sustainability Committee," one of the company-wide committees, to the board of directors. The Board of Directors receives the reports, oversees and approves the most important policies, implementation plans and the progress of activities. This governance mechanism has helped identify material issues. We have set "A decarbonized and circular society" and "Clean water areas, air, and soil, and the preservation of biodiversity" as the areas in which our group contributes to solving social issues through business. To ensure progress in our efforts related to materiality, we have assigned responsible officers for each material issue and established goals and KPIs. Specifically, we set "Reduction of Scope 1 and 2 emissions" as an indicator for the realization of "A decarbonized and circular society", and indicators such as "Reduction of VOC emissions" and "Reduction of discharge of hazardous substances into water" for the realization of "Clean water areas, air, and soil, and the preservation of biodiversity". In the reporting year (fiscal year 2025), the Board of Directors resolved to include "climate change-related indicators" in the sustainability indicators that are evaluation items for the executive compensation system, and is accelerating efforts to reduce GHG emissions. The climate change-related indicators will be the reduction rate of GHG emissions (Scope 1, 2) compared to the previous year, and will be applied to remuneration paid from July 2025 onwards, which will be based on the results of fiscal 2024.

Water

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

Select all that apply

☑ Director on board

☑ 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

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

Select from:

☑ Scheduled agenda item in some board meetings – at least annually

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

Select all that apply

☑ Reviewing and guiding annual budgets

☑ Overseeing and guiding scenario analysis

☑ Overseeing the setting of corporate targets

☑ Monitoring progress towards corporate targets

☑ Approving corporate policies and/or commitments

☑ Overseeing reporting, audit, and verification processes

☑ Monitoring the implementation of a climate transition plan

☑ Overseeing and guiding the development of a business strategy

☑ Overseeing and guiding acquisitions, mergers, and divestitures

☑ Monitoring supplier compliance with organizational requirements

☑ Monitoring compliance with corporate policies and/or commitments

☑ Overseeing and guiding the development of a climate transition plan

☑ Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities

☑ Overseeing and guiding public policy engagement

☑ Reviewing and guiding innovation/R&D priorities

☑ Approving and/or overseeing employee incentives

☑ Overseeing and guiding major capital expenditures

☑ Monitoring the implementation of the business strategy

(4.1.2.7) Please explain

Our group has introduced an executive officer system under the form of a company with Board of Corporate Auditors. The executive officer system is stipulated in the articles of incorporation, and the board of directors supervises the execution of duties by executive officers. By clearly separating "decision-making and supervision" by the board of directors and "execution of duties" by executive officers, we have established a governance structure that enables prompt decision-making and efficient execution of business. The role of the board of directors is to receive reports on the progress of medium- to long-term themes, including sustainability, and the execution status of each business, and to provide proper supervision. This governance mechanism contributes to the swift decision-making of response measures to environmental issues, such as climate change, which require a long-term perspective and involve volatility, uncertainty, complexity, and ambiguity. The environmental issues here include addressing climate change, challenges related to wastewater treatment directly related to operations, challenges related to water intake, and challenges related to biodiversity. The President and CEO reports the top policies and important matters regarding environmental issues deliberated in the "Sustainability Committee," one of the company-wide committees, to the board of directors. The Board of Directors receives the reports, oversees and approves the most important policies, implementation plans and the progress of activities. This governance mechanism has helped identify material issues. We have set "A

decarbonized and circular society" and "Clean water areas, air, and soil, and the preservation of biodiversity" as the areas in which our group contributes to solving social issues through business. To ensure progress in our efforts related to materiality, we have assigned responsible officers for each material issue and established goals and KPIs. Specifically, we set "Reduction of Scope 1 and 2 emissions" as an indicator for the realization of "A decarbonized and circular society", and indicators such as "Reduction of VOC emissions" and "Reduction of discharge of hazardous substances into water" for the realization of "Clean water areas, air, and soil, and the preservation of biodiversity". In the reporting year (fiscal year 2025), the Board of Directors resolved to include "climate change-related indicators" in the sustainability indicators that are evaluation items for the executive compensation system, and is accelerating efforts to reduce GHG emissions. The climate change-related indicators will be the reduction rate of GHG emissions (Scope 1, 2) compared to the previous year, and will be applied to remuneration paid from July 2025 onwards, which will be based on the results of fiscal 2024.

Biodiversity

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

Select all that apply

☑ Director on board

☑ 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

(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

☑ Reviewing and guiding annual budgets
☑ Overseeing and guiding scenario analysis
☑ Overseeing the setting of corporate targets
☑ Monitoring progress towards corporate targets
☑ Approving corporate policies and/or commitments
☑ Overseeing reporting, audit, and verification processes
☑ Monitoring the implementation of a climate transition plan
☑ Overseeing and guiding the development of a business strategy
☑ Overseeing and guiding acquisitions, mergers, and divestitures
☑ Monitoring supplier compliance with organizational requirements
☑ Monitoring compliance with corporate policies and/or commitments
☑ Overseeing and guiding the development of a climate transition plan
☑ Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities
☑ Overseeing and guiding public policy engagement
☑ Reviewing and guiding innovation/R&D priorities
☑ Approving and/or overseeing employee incentives
☑ Overseeing and guiding major capital expenditures
☑ Monitoring the implementation of the business strategy

(4.1.2.7) Please explain

Our group has introduced an executive officer system under the form of a company with Board of Corporate Auditors. The executive officer system is stipulated in the articles of incorporation, and the board of directors supervises the execution of duties by executive officers. By clearly separating "decision-making and supervision" by the board of directors and "execution of duties" by executive officers, we have established a governance structure that enables prompt decision-making and efficient execution of business. The role of the board of directors is to receive reports on the progress of medium- to long-term themes, including sustainability, and the execution status of each business, and to provide proper supervision. This governance mechanism contributes to the swift decision-making of response measures to environmental issues, such as climate change, which require a long-term perspective and involve volatility, uncertainty, complexity, and ambiguity. The environmental issues here include addressing climate change, challenges related to wastewater treatment directly related to operations, challenges related to water intake, and challenges related to biodiversity. The President and CEO reports the top policies and important matters regarding environmental issues deliberated in the "Sustainability Committee," one of the company-wide committees, to the board of directors. The Board of Directors receives the reports, oversees and approves the most important policies, implementation plans and the progress of activities. This governance mechanism has helped identify material issues. We have set "A decarbonized and circular society" and "Clean water areas, air, and soil, and the preservation of biodiversity" as the areas in which our group contributes to solving social issues through business. To ensure progress in our efforts related to materiality, we have assigned responsible officers for each material issue and established goals and KPIs. Specifically, we set "Reduction of Scope 1 and 2 emissions" as an indicator for the realization of "A decarbonized and circular society", and indicators such as "Reduction of VOC emissions" and "Reduction of discharge of hazardous substances into water" for the realization of "Clean water areas, air, and soil, and the preservation of biodiversity". In the reporting year (fiscal year 2025), the Board of Directors resolved to include "climate change-related indicators" in the sustainability indicators that are evaluation items for the executive compensation system, and is accelerating efforts to reduce GHG emissions. The climate change-related indicators will be the reduction rate of GHG emissions (Scope 1, 2) compared to the previous year, and will be applied to remuneration paid from July 2025 onwards, which will be based on the results of fiscal 2024.
[Fixed row]

(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

☑ Consulting regularly with an internal, permanent, subject-expert working group

☑ Integrating knowledge of environmental issues into board nominating process

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

(4.2.3) Environmental expertise of the board member

Experience

☑ Executive-level experience in a role focused on environmental issues

☑ Management-level experience in a role focused on environmental issues

☑ Staff-level experience in a role focused on environmental issues

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

☑ Consulting regularly with an internal, permanent, subject-expert working group

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

(4.2.3) Environmental expertise of the board member

Experience

☑ Executive-level experience in a role focused on environmental issues

☑ Management-level experience in a role focused on environmental issues

☑ Staff-level experience in a role focused on environmental issues

[Fixed row]

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

	Management-level responsibility for this environmental issue
Climate change	*Select from:* ☑ Yes
Water	*Select from:* ☑ Yes
Biodiversity	*Select from:* ☑ Yes

[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 engagement in landscapes and/or jurisdictions

☑ Managing public policy engagement related to environmental issues

☑ Managing supplier compliance with environmental requirements

☑ Managing value chain engagement related to environmental issues

Policies, commitments, and targets

☑ Monitoring compliance with corporate environmental policies and/or commitments

☑ Measuring progress towards environmental corporate targets

☑ Measuring progress towards environmental science-based targets

☑ Setting corporate environmental policies and/or commitments

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Developing a climate transition plan

☑ Implementing a climate transition plan

☑ Conducting environmental scenario analysis

☑ Managing annual budgets related to environmental issues

☑ Implementing the business strategy related to environmental issues

☑ Developing a business strategy which considers environmental issues
☑ Managing environmental reporting, audit, and verification processes
☑ Managing acquisitions, mergers, and divestitures related to environmental issues
☑ Managing major capital and/or operational expenditures relating to environmental issues
☑ Managing priorities related to innovation/low-environmental impact products or services (including R&D)

Other
☑ Providing employee incentives related to environmental performance

(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:
☑ Half-yearly

(4.3.1.6) Please explain

The Chief Executive Officer (CEO) and President serves as the highest-ranking executive responsible for climate change-related issues. A "Sustainability Committee" is established with the CEO as the chairman to deliberate on top-level policies for addressing climate change-related challenges. The CEO regularly reports the progress of initiatives aligned with the policies to the Board of Directors, and the Board of Directors approves the top-level policies and implementation plans while overseeing the progress of activities.

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

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

Engagement

☑ Managing engagement in landscapes and/or jurisdictions

☑ Managing public policy engagement related to environmental issues

☑ Managing supplier compliance with environmental requirements

☑ Managing value chain engagement related to environmental issues

Policies, commitments, and targets

☑ Monitoring compliance with corporate environmental policies and/or commitments

☑ Measuring progress towards environmental corporate targets

☑ Measuring progress towards environmental science-based targets

☑ Setting corporate environmental policies and/or commitments

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Developing a climate transition plan

☑ Implementing a climate transition plan

☑ Conducting environmental scenario analysis

☑ Managing annual budgets related to environmental issues

☑ Implementing the business strategy related to environmental issues

☑ Developing a business strategy which considers environmental issues

☑ Managing environmental reporting, audit, and verification processes

☑ Managing acquisitions, mergers, and divestitures related to environmental issues

☑ Managing major capital and/or operational expenditures relating to environmental issues

☑ Managing priorities related to innovation/low-environmental impact products or services (including R&D)

Other

☑ Providing employee incentives related to environmental performance

(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:

☑ Annually

(4.3.1.6) Please explain

The Chief Executive Officer (CEO) and President serves as the highest-ranking executive responsible for climate change-related issues. A "Sustainability Committee" is established with the CEO as the chairman to deliberate on top-level policies for addressing climate change-related challenges. The CEO regularly reports the progress of initiatives aligned with the policies to the Board of Directors, and the Board of Directors approves the top-level policies and implementation plans while overseeing the progress of activities.

Biodiversity

(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 engagement in landscapes and/or jurisdictions
☑ Managing public policy engagement related to environmental issues
☑ Managing supplier compliance with environmental requirements
☑ Managing value chain engagement related to environmental issues

Policies, commitments, and targets
☑ Monitoring compliance with corporate environmental policies and/or commitments
☑ Measuring progress towards environmental corporate targets
☑ Measuring progress towards environmental science-based targets
☑ Setting corporate environmental policies and/or commitments
☑ Setting corporate environmental targets

Strategy and financial planning
☑ Developing a climate transition plan
☑ Implementing a climate transition plan
☑ Conducting environmental scenario analysis
☑ Managing annual budgets related to environmental issues
☑ Implementing the business strategy related to environmental issues
☑ Developing a business strategy which considers environmental issues
☑ Managing environmental reporting, audit, and verification processes
☑ Managing acquisitions, mergers, and divestitures related to environmental issues
☑ Managing major capital and/or operational expenditures relating to environmental issues
☑ Managing priorities related to innovation/low-environmental impact products or services (including R&D)

Other
☑ Providing employee incentives related to environmental performance

(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:

☑ As important matters arise

(4.3.1.6) Please explain

The Chief Executive Officer (CEO) and President serves as the highest-ranking executive responsible for climate change-related issues. A "Sustainability Committee" is established with the CEO as the chairman to deliberate on top-level policies for addressing climate change-related challenges. The CEO regularly reports the progress of initiatives aligned with the policies to the Board of Directors, and the Board of Directors approves the top-level policies and implementation plans while overseeing the progress of activities.
[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

0

(4.5.3) Please explain

Starting with July 2025, executives, including directors, will be given monetary incentives based on the reduction in GHG emissions (Scope 1 and 2) from the previous fiscal year as an indicator of climate change response. The percentage of the total reduction will be between 4.3% and 5%.

Water

(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

0

(4.5.3) Please explain

N/A
[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

☑ Director on board

(4.5.1.2) Incentives

Select all that apply

☑ Bonus - % of salary

(4.5.1.3) Performance metrics

Strategy and financial planning

☑ Achievement of climate transition plan

Emission reduction

☑ Reduction in absolute emissions

(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

We have set a one-year period for the indicators (reduction in Scope 1 and 2 emissions). The reduction in indicators (Scope 1 and 2 emissions) by 2.9% compared to the previous year's same period is set as a condition for the incentive.

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

We have set a one-year period for the indicators (reduction in Scope 1 and 2 emissions). A reduction of 2.9% in the indicators (Scope 1 and 2 emissions) compared to the previous year's same period is set as a condition for the incentive. The 2.9% reduction aligns with our climate change transition plan and is directly related to the key performance indicator (KPI) of the plan, which aims to achieve a 27.0% reduction in GHG emissions (Scope 1 and 2) by the fiscal year 2031 compared to the fiscal year 2021.

Water

(4.5.1.1) Position entitled to monetary incentive

Board or executive level

☑ Chief Technology Officer (CTO)

(4.5.1.2) Incentives

Select all that apply

☑ Bonus - % of salary

(4.5.1.3) Performance metrics

Targets

☑ Progress towards environmental targets

Pollution

☑ Improvements in wastewater quality – direct operations

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

☑ The incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

(4.5.1.5) Further details of incentives

We have set the period until fiscal year 2031 for the indicator (discharge of harmful substances into water bodies). The goal is to achieve an 80% reduction in the indicator (discharge of harmful substances into water bodies) compared to the fiscal year 2015.

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

We have set the period until fiscal year 2031 for the indicator (discharge of harmful substances into water bodies). The goal is to achieve an 80% reduction in the indicator (discharge of harmful substances into water bodies) compared to the fiscal year 2015. This is a Materiality KPI in our Sustainable Vision and is directly related to our transition plan (Sustainable Vision). Additionally, the achievement of this KPI in the fiscal year 2031 is planned to have an impact on performance evaluations, including incentives for the Chief Technical Officer (CTO).
[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

☑ Water

☑ Biodiversity

(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

(4.6.1.4) Explain the coverage

The following environmental policy applies to the entire organization. 【TOYOBO Group Fundamental Policy on the Global Environment】 1. Environmental philosophy： We are striving to contribute to society through technologies friendly to both people and the environment, protect the global environment, and to leave a better planet and a more prosperous society to future generations. 2. Environmental activity policy： (1)Development of technologies By devoting all of our efforts, the Toyobo group is developing technologies (products and manufacturing processes) that are friendly to both people and the environment, and we are promoting environmental measures. (2)Environmental protection At every stage, from product development through to design, manufacture, sale, disposal, and collection, we are forecasting, evaluating, and reducing their impact on the environment, working towards its protection. (3)Contribute to society with the aim of bringing about a better global environment, as well as using our business activities, as a good corporate citizen we will actively support and participate in environmental protection and biodiversity conservation activities throughout society and in local regions. ■3. Code of conduct： (1)Think: Technical development and evaluation (2)Value: Environmental protection and reuse (3)Participate: Disclose technologies and share information (4)Protect: Environmental compliance and auditing (5)Train: Internal and external systems

(4.6.1.5) Environmental policy content

Environmental commitments

☑ 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

☑ Commitment to not funding climate-denial or lobbying against climate regulations

Water-specific commitments

☑ Commitment to control/reduce/eliminate water pollution

☑ Commitment to reduce water withdrawal volumes

☑ Commitment to safely managed WASH in local communities

☑ Commitment to the conservation of freshwater ecosystems

☑ Commitment to water stewardship and/or collective action

(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

☑ Yes, in line with the Kunming-Montreal Global Biodiversity Framework

☑ 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

CDP2025_4.6.1_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

☑ Science-Based Targets Initiative (SBTi)

☑ Task Force on Climate-related Financial Disclosures (TCFD)

☑ UN Global Compact

☑ Other, please specify :CLOMA (Clean Ocean Material Alliance), J4CE (Japan Partnership for Circular Economy),

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

【SBTi】：In December 2022, the Toyobo group's targets of reducing GHG emissions by fiscal 2031 have been validated by the Science Based Targets (SBT) initiative. 【TCFD】：We express our support for the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and strive to disclose climate-related information based on these recommendations. 【UN Global Compact】：We report on the progress and achievements in the four areas defined by

the UN Global Compact (human rights, labor, environment, and anti-corruption) as well as governance. 【CLOMA】 : CLOMA is an organization established in Japan with the aim of reducing plastic waste flowing into the ocean and promoting effective utilization through resource circulation. We work on the development and dissemination of alternative materials in collaboration with material manufacturers, processors, and users who participate in the organization. 【J4CE】 : J4CE is a partnership aimed at promoting further understanding and efforts towards a circular economy and strengthening public-private collaboration. Through participation in the organization, we aim to share information and form networks related to the circular economy and accelerate efforts towards achieving a "decarbonized society and circular society". 【APR】 : APR, or the Association of Plastic Recyclers, is an international industry organization that represents the recycling industry for plastics. We are supporting circular economy through unique certification programs to ensure high-quality recycled plastics, testing methods to evaluate recyclability, and educational activities.
[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

☑ Yes, we engaged directly with policy makers

(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

☑ Sustainable Development Goal 6 on Clean Water and Sanitation

(4.11.4) Attach commitment or position statement

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

Select from:

☑ No

(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

Our group supports the "Paris Agreement" and aims to achieve carbon neutrality by fiscal year 2050, in line with the global target of limiting the temperature increase to 1.5C. This includes promoting engagement activities with various stakeholders of our group that align with the goals of the Paris Agreement. In the confirmation process, we ensure that there are no contradictions between our policy and the organizations we collaborate with during contract renewals for each collaborative activity. For significant policy decisions related to environmental issues of our group, they are deliberated upon by the Sustainability Committee, and policy decisions are made by the board of directors to ensure alignment with our transition plan. If any inconsistencies with the transition plan are identified, mechanisms are in place for the Sustainability Committee or the board of directors to make necessary corrections.
[Fixed row]

(4.11.1) On what policies, laws, or regulations that may (positively or negatively) impact the environment has your organization been engaging directly with policy makers in the reporting year?

Row 1

(4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

Our group is participating in the GX League, which was established by the Japanese government to work towards achieving carbon neutrality by 2050 and driving social transformation. The GX League provides a collaborative platform for companies that aim to achieve sustainable growth in the present and future society, in collaboration with government and academia. This approach includes the design of the Emissions Trading System (GX-ETS).

(4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

☑ Climate change

(4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

Financial mechanisms (e.g., taxes, subsidies, etc.)

☑ Carbon taxes

☑ Emissions trading schemes

☑ Subsidies for low-carbon, non-renewable energy projects

☑ Subsidies for renewable energy projects

(4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

☑ National

(4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

☑ Japan

(4.11.1.6) Your organization’s position on the policy, law, or regulation

Select from:

☑ Support with no exceptions

(4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

☑ Ad-hoc meetings

☑ Regular meetings

☑ Discussion in public forums

☑ Responding to consultations

☑ Submitting written proposals/inquiries

☑ Participation in voluntary government programs

☑ Participation in working groups organized by policy makers

(4.11.1.9) Funding figure your organization provided to policy makers in the reporting year relevant to this policy, law, or

regulation (currency)

0

(4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

Our group has set GHG emission reduction targets that align with the Paris Agreement (Scope 1,2) and is developing a transition plan accordingly. Over 90% of our group's GHG emissions (Scope 1,2) are generated by our domestic offices and factories in Japan. Therefore, GHG emission-related taxation policies such as emission trading handled by GX League have a significant impact on our group's operational costs. Through participation in GX League, we aim to quickly understand the Japanese government's "carrot and stick policy" and provide feedback to policy makers in order to avoid leaning too heavily on either side. The successful engagement with policy makers is expected to contribute to the steady and smooth progress of our group's transition plan. The success of the engagement is quantified by the annual reduction rate of GHG emissions (Scope 1,2).

(4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

☑ Yes, we have evaluated, and it is aligned

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

Select all that apply

☑ Paris Agreement

Row 2

(4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

Our group has joined the 30by30 Alliance, established by the Japanese government with the goal of halting and reversing biodiversity loss by 2030. We are collaborating with other members of the alliance towards the objective of effectively conserving over 30% of land and sea as healthy ecosystems by 2030.

(4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

☑ Water

(4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

Environmental protection and management procedures

☑ Environmental registries

☑ Restoration/ rehabilitation

(4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

☑ National

(4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

☑ Japan

(4.11.1.6) Your organization’s position on the policy, law, or regulation

Select from:

☑ Support with no exceptions

(4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

☑ Participation in voluntary government programs

☑ Responding to consultations

☑ Submitting written proposals/inquiries

(4.11.1.9) Funding figure your organization provided to policy makers in the reporting year relevant to this policy, law, or regulation (currency)

0

(4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

Our group supports and actively participates in the "30by30" initiative, which aligns with the "Kunming-Montreal Biodiversity Framework." We have joined the 30by30 Alliance established by the Japanese government and collaborate with policymakers to promote the 30by30 objective. Our group has owned company-owned forests with the aim of achieving domestic self-sufficiency in chemical fiber materials since the 1950s. However, with changes in the composition of our chemical fiber business, the mission of raw material supply has ended, and we have proceeded with the sale of some of our mountain forests, while retaining some forested areas. We believe that proper management of the remaining forests contributes to climate change mitigation and the conservation of biodiversity. The management objectives for our company-owned forests state: "We will engage in sustainable forest management that maintains the function as a water source conservation forest while conducting forestry activities, emphasizing continuity with the surrounding rich deciduous forests, and aiming for coexistence between humans and nature." We consider obtaining OECM (Other Effective area-based Conservation Measures) certification for our company-owned forests as a measure of the success of our engagement. One area in Aya-cho, Miyazaki Prefecture, was designated as a potential OECM areas by the Japanese government, and in the reporting year (FY2024), it was registered in the international database as an OECM.

(4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

☑ Yes, we have evaluated, and it is aligned

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

Select all that apply

☑ Kunming-Montreal Global Biodiversity Framework

☑ Sustainable Development Goal 6 on Clean Water and Sanitation

[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 mainstream reports, in line with environmental disclosure standards or frameworks

(4.12.1.2) Standard or framework the report is in line with

Select all that apply

☑ GRI

☑ IFRS

☑ TCFD

(4.12.1.3) Environmental issues covered in publication

Select all that apply

☑ Climate change

☑ Water

(4.12.1.4) Status of the publication

Select from:

☑ Complete

(4.12.1.5) Content elements

Select all that apply

☑ Governance

☑ Risks & Opportunities
☑ Strategy
☑ Emissions figures
☑ Emission targets

(4.12.1.6) Page/section reference

Governance: pages 25, Risks & Opportunities: pages 26-30, Strategy: pages 26-30, Metrics and Targets: pages 31-32, Emissions figures: pages 31, Emission targets: pages 31

(4.12.1.7) Attach the relevant publication

CDP2025_4.12.1_Mainstream report.pdf

(4.12.1.8) Comment

N/A
[Add row]

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:
☑ More than once a year

Water

(5.1.1) Use of scenario analysis

Select from:
☑ Yes

(5.1.2) Frequency of analysis

Select from:
☑ More than once a year
[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

☑ Liability

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 1.5°C or lower

(5.1.1.7) Reference year

2020

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2040

☑ 2050

(5.1.1.9) Driving forces in scenario

Stakeholder and customer demands

☑ Consumer sentiment

Regulators, legal and policy regimes

☑ Global regulation

☑ Global targets

☑ Methodologies and expectations for science-based targets

Macro and microeconomy

☑ Domestic growth

☑ Globalizing markets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

IEA WEO 2024 uses the IEA NZE 2050 scenario qualitatively and quantitatively. 【Society Image (Analysis Results)】 Bold policies, regulations, and technological innovations are being pursued to achieve efforts to limit the rise in average global temperature by the end of this century to 1.5 degrees Celsius and achieve sustainable social development. Various international goal-setting is being carried out in the environmental field, and achieving these goals becomes the driving force for countries and companies. Governments and international organizations are introducing stricter environmental regulations, strengthening requests for reducing environmental burdens on companies, increasing environmental awareness in society as a whole, and consumers are increasingly inclined to choose sustainable products and services. Therefore, the intensity of the driving forces is assumed to be "high". Specific assumptions for the society image include the introduction of carbon taxes, rising fuel prices, and the expansion of related markets through the expansion of renewable energy. The transition to a decarbonized society is likely to have a significant impact on businesses. 【Uncertainties that could affect the results of scenario analysis】 If the progress of renewable energy, battery technology, and the adoption of EV vehicles is slower than predicted, the realization of the transition scenario becomes uncertain and can have an impact. 【Analysis period】 Although the analysis targets until 2050, considering the financial impact, the 2030s are analyzed as a priority. 【Target markets for analysis】 The following markets, which are important for our group and heavily affected by climate change, are targeted: the renewable energy market (including wind power), the battery-related

market (materials for batteries, equipment for battery manufacturing plants, etc.), and the battery recycling market (equipment for recycling plants, etc.). 【Other sub-scenarios】 In order to confirm the demand for plastics under the transition scenario, the "Global Ambition scenario" from the "OECD Global Plastics Outlook" is used as a sub-scenario.

(5.1.1.11) Rationale for choice of scenario

【Scenario selection reasons (parameters)】 Our group has a transition plan that aligns with the Paris Agreement (1.5-degree target). In the TCFD scenario analysis of our group, the IEA NZE 2050 scenario, which is consistent with the transition plan and has a significant impact when transition risks and opportunities become apparent, is selected. Additionally, the selection of the IEA NZE 2050 scenario is also based on its alignment with the Paris Agreement (1.5-degree target). 【Analysis case: FY2031】 Advanced economies with net zero emissions pledges: $140/tonne-CO2 (Net Zero Emissions by 2050 Scenario, IEA WEO 2024). Taking this value into consideration, the assumed carbon price per tonne-CO2 for Japan in FY2031 is 15,000 yen.

Water

(5.1.1.1) Scenario used

Water scenarios

☑ WRI Aqueduct

(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

(5.1.1.7) Reference year

2020

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2040

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Changes to the state of nature

Direct interaction with climate

☑ On asset values, on the corporate

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

RCP 8.5 scenario and Aqueduct are used qualitatively and quantitatively. 【Society Image (Analysis Results)】 Each country's policies, including the proposed commitments under the Paris Agreement, are implemented, but the average global temperature rises by about 4 degrees Celsius by the end of this century. The society is likely to be highly affected by climate change, such as temperature rise. Physical changes such as natural state changes and changes in ecosystem services become driving forces. Based on the RCP 8.5 scenario, climate change progresses, and the impact on the natural environment becomes significant. With the increase in physical risks such as temperature rise and extreme weather events, the destruction of infrastructure, business interruptions, difficulties in procuring resources (especially natural resources), and increased insurance premiums are expected to have a serious impact on the asset value and financial condition of companies. Therefore, the severity of the driving force is assumed to be "high". Specific assumptions for the society image include coastal flooding due to sea-level rise, increased occurrence and frequency of flood damage due to heavy rainfall, changes in the distribution and composition of forests due to temperature rise and changes in precipitation patterns, and increased risk of forest fires. 【Uncertainties that could affect the results of scenario analysis】 The prediction of the occurrence probability of extreme weather events is uncertain, and if natural disasters (such as typhoons, floods, droughts) occur more frequently and with greater intensity than predicted, the risks to businesses are expected to increase significantly, and timely response may be challenging.

(5.1.1.11) Rationale for choice of scenario

【Scenario selection reasons】 Considering the need to examine the impact when physical risks become apparent, the 4-degree scenario (RCP 8.5) is adopted as the physical scenario. In Aqueduct, the "Pessimistic Scenario" is referenced to analyze the maximum impact when physical risks become apparent. Aqueduct provides a comprehensive assessment of water risks and has become the de facto standard for water risk assessment tools, which is another reason for its selection. 【Analysis case 】 ■Sea-level rise in East Asia: 0.1m rise from 2021 to 2040, 0.3m rise from 2041 to 2060. Taking these values into consideration, scenario analysis is conducted on water-related disasters at our domestic sites (factories). Additionally, the scale of water-related disasters in Japan in the 2030s is based on the maximum assumed flooding in hazard maps of each local government. 【Analysis period】 Although the analysis targets until 2050, the 2030s are analyzed as a priority considering the financial impact.

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:

☑ 4.0°C and above

(5.1.1.7) Reference year

2020

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2040

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Changes to the state of nature

☑ Changes in ecosystem services provision

Direct interaction with climate

☑ On asset values, on the corporate

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

RCP 8.5 scenario and Aqueduct are used qualitatively and quantitatively. 【Society Image (Analysis Results)】 Each country's policies, including the proposed commitments under the Paris Agreement, are implemented, but the average global temperature rises by about 4 degrees Celsius by the end of this century. The society is likely to be highly affected by climate change, such as temperature rise. Physical changes such as natural state changes and changes in ecosystem services become driving forces. Based on the RCP 8.5 scenario, climate change progresses, and the impact on the natural environment becomes significant. With the increase in physical risks such as temperature rise and extreme weather events, the destruction of infrastructure, business interruptions, difficulties in procuring

resources (especially natural resources), and increased insurance premiums are expected to have a serious impact on the asset value and financial condition of companies. Therefore, the severity of the driving force is assumed to be "high". Specific assumptions for the society image include coastal flooding due to sea-level rise, increased occurrence and frequency of flood damage due to heavy rainfall, changes in the distribution and composition of forests due to temperature rise and changes in precipitation patterns, and increased risk of forest fires. 【Uncertainties that could affect the results of scenario analysis】 The prediction of the occurrence probability of extreme weather events is uncertain, and if natural disasters (such as typhoons, floods, droughts) occur more frequently and with greater intensity than predicted, the risks to businesses are expected to increase significantly, and timely response may be challenging.

(5.1.1.11) Rationale for choice of scenario

【Scenario selection reasons】 Considering the need to examine the impact when physical risks become apparent, the 4-degree scenario (RCP 8.5) is adopted as the physical scenario. In Aqueduct, the "Pessimistic Scenario" is referenced to analyze the maximum impact when physical risks become apparent. Aqueduct provides a comprehensive assessment of water risks and has become the de facto standard for water risk assessment tools, which is another reason for its selection. 【Analysis case】 ■Sea-level rise in East Asia: 0.1m rise from 2021 to 2040, 0.3m rise from 2041 to 2060. Taking these values into consideration, scenario analysis is conducted on water-related disasters at our domestic sites (factories). Additionally, the scale of water-related disasters in Japan in the 2030s is based on the maximum assumed flooding in hazard maps of each local government. 【Analysis period】 Although the analysis targets until 2050, the 2030s are analyzed as a priority considering the financial impact.

Water

(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:

☑ 4.0°C and above

(5.1.1.7) Reference year

2020

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2040

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Changes to the state of nature

Direct interaction with climate

☑ On asset values, on the corporate

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

RCP 8.5 scenario and Aqueduct are used qualitatively and quantitatively. 【Society Image (Analysis Results)】 Each country's policies, including the proposed commitments under the Paris Agreement, are implemented, but the average global temperature rises by about 4 degrees Celsius by the end of this century. The society is likely to be highly affected by climate change, such as temperature rise. Physical changes such as natural state changes and changes in ecosystem services become driving forces. Based on the RCP 8.5 scenario, climate change progresses, and the impact on the natural environment becomes significant. With the increase in physical risks such as temperature rise and extreme weather events, the destruction of infrastructure, business interruptions, difficulties in procuring resources (especially natural resources), and increased insurance premiums are expected to have a serious impact on the asset value and financial condition of companies. Therefore, the severity of the driving force is assumed to be "high". Specific assumptions for the society image include coastal flooding due to sea-level rise, increased occurrence and frequency of flood damage due to heavy rainfall, changes in the distribution and composition of forests due to temperature rise and changes in precipitation patterns, and increased risk of forest fires. 【Uncertainties that could affect the results of scenario analysis】 The prediction of the occurrence probability of extreme weather events is uncertain, and if natural disasters (such as typhoons, floods, droughts) occur more frequently and with greater intensity than predicted, the risks to businesses are expected to increase significantly, and timely response may be challenging.

(5.1.1.11) Rationale for choice of scenario

【Scenario selection reasons】 Considering the need to examine the impact when physical risks become apparent, the 4-degree scenario (RCP 8.5) is adopted as the physical scenario. In Aqueduct, the "Pessimistic Scenario" is referenced to analyze the maximum impact when physical risks become apparent. Aqueduct provides a comprehensive assessment of water risks and has become the de facto standard for water risk assessment tools, which is another reason for its selection. 【Analysis case】 ■Sea-level rise in East Asia: 0.1m rise from 2021 to 2040, 0.3m rise from 2041 to 2060. Taking these values into consideration, scenario analysis is conducted on water-related disasters at our domestic sites (factories). Additionally, the scale of water-related disasters in Japan in the 2030s is based on the maximum assumed flooding in hazard maps of each local government. 【Analysis period】 Although the analysis targets until 2050, the 2030s are analyzed as a priority considering the financial impact.
[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

☑ Resilience of business model and strategy

☑ Target setting and transition planning

(5.1.2.2) Coverage of analysis

Select from:

☑ Organization-wide

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

【Results of Climate-Related Scenario Analysis in terms of Physical Climate Scenarios (RCP 8.5, etc.)】 ■1) [Risk] Dealing with the risk of damage to buildings and facilities due to water-related disasters (floods, high tides, etc.): Our group recognizes that climate change, such as temperature rise, has a high potential to physically impact our business, as we have production bases. Specifically, scenario analysis has revealed the risk of water-related disasters at our main factories in Tsuruga, Iwakuni, and Inuyama. ●[[Action (action in relation to business process)]] Based on the aforementioned results, we have decided to invest in measures to address the risk of water-related disasters, including relocating or raising production and power facilities. These costs are included in the approximately 17 billion yen investment in "safety, disaster prevention, and environmental investments" from 2022 to 2025. ■2) [Opportunity] Dealing with the increasing demand for seawater desalination: Our group recognizes that as climate change progresses, there is an increasing risk of water shortages and droughts worldwide. The results of the scenario analysis have revealed that in the future, not only industrial water but also the securing of domestic water will become a challenge in many regions, and the demand for seawater desalination will increase. ●[Action (action in relation to business process)] In our "Sustainable Vision 2030" announced in May 2022, our group set a goal to produce 10 million people's worth of tap water equivalent through seawater desalination using membranes by FY2031. In the reporting year（FY2025）, we have started selling RO membranes in India. In India, the demand for water is rapidly increasing due to population growth and urbanization. By introducing spiral-wound RO membranes to the Indian market, we will contribute to the conservation of water resources around the world. 【Results of Climate-Related Scenario Analysis in terms of Transition Scenarios (IEA NZE 2050)】 ■1) [Risk] Dealing with the introduction of carbon pricing: Our group recognizes the possibility of the government introducing carbon pricing for GHG-emitting companies due to the transition to a decarbonized society. Based on the scenario analysis, we assumed a carbon price of 15,000 yen/ton-CO2 for the fiscal year 2031, referring to "IEA NZE 2050." In the scenario for the fiscal year 2031, GHG emissions increase along with sales expansion, resulting in an annual cost of several hundred billion yen due to carbon pricing if no significant GHG reduction measures are taken (as disclosed in detail in Risk 2 of 3.1.1 and Opp2 of 3.6.1). ●[[Action (action in relation to business process)]] Under the resolution of the Board of Directors, our group announced the "Sustainable Vision 2030," including the transition plan (roadmap to carbon neutrality) until FY2031, in May 2022. This transition plan aims to reduce GHG emissions (Scope 1 and 2) to 655,000 tons-CO2 by FY2031 through energy reduction, energy efficiency improvement, fuel conversion, and renewable energy adoption. As disclosed in Risk 2 of 3.1.1 and Opp2 of 3.6.1, this plan also affects indirect costs and capital allocation. For example, capital allocation includes facility investments in line with the "roadmap to carbon neutrality" within the approximately 18 billion yen investment in "safety, disaster prevention, and environmental investments" for the mid-term management plan until 2025. ■2) [Risk/Opportunity] Dealing with the increasing demand for reducing and substituting petroleum-derived resources and the increasing demand for low-carbon/decarbonized materials and products: Our group recognizes that in the future social transition toward decarbonization, there will be an increasing demand from society, including customers, for reducing and substituting petroleum-derived resources, which is considered a significant climate-related risk. At the same time, we recognize that there is an increasing demand for low-carbon/decarbonized materials and products, presenting business opportunities. The scenario analysis has confirmed the reduction in primary plastic production from raw materials and the expansion of recycled plastic production, referring to the "Global Ambition scenario" in the "OECD Global Plastics Outlook". ●[[Action (action in relation to business process)]] In our "Sustainable Vision 2030" announced in May 2022 under the resolution of the Board of Directors, we defined technologies and initiatives that contribute to reducing the use of petroleum-derived resources as "Greenification" and set a goal to achieve "Greenification" in 60% of film products by FY2031. As disclosed in Risk 3 of 3.1.1 and Opp1 of 3.6.1, approximately 130 billion yen of the target sales for the film business in FY2031, which is approximately 220 billion yen, reflects "climate-related opportunities".

Water

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

Select all that apply

☑ Strategy and financial planning

(5.1.2.2) Coverage of analysis

Select from:

☑ Organization-wide

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

【Results of Climate-Related Scenario Analysis in terms of Physical Climate Scenarios (RCP 8.5 and Aqueduct)】 ■1) [Risk] Dealing with the risk of damage to buildings and facilities due to water-related disasters (floods, high tides, etc.): Our group recognizes that climate change, such as temperature rise, has a high potential to physically impact our business, as we have production bases. Specifically, considering the analysis results from Aqueduct, scenario analysis has revealed the risk of water-related disasters at our main factories in Tsuruga, Iwakuni, and Inuyama. ●[[Action (action in relation to business process)]] Based on the aforementioned results, we have decided to invest in measures to address the risk of water-related disasters, including relocating or raising production and power facilities. These costs are included in the approximately 17 billion yen investment in "safety, disaster prevention, and environmental investments" from the fiscal year 2023 to 2026. ■2) [Opportunity] Dealing with the increasing demand for freshwater: Our group recognizes that as climate change progresses, there is an increasing risk of water shortages and droughts worldwide. The results of the scenario analysis have revealed that in the future, there will be challenges in securing not only industrial water but also domestic water, leading to an increasing demand for freshwater and freshwater recycling. ●[[Action (action in relation to business process)]] In our "Sustainable Vision 2030" announced in May 2022, our group set a goal to produce tap water equivalent to 10 million people through seawater desalination using membranes by the fiscal year 2031. In the reporting year（FY2025）, we have started selling RO membranes in India. In India, the demand for water is rapidly increasing due to population growth and urbanization. By introducing spiral-wound RO membranes to the Indian market, we will contribute to the conservation of water resources around the world.
[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

Fuel conversion (away from coal) : We are also implementing a transition toward low-carbon energy use, by switching to fuels with lower carbon contents for our in-house electricity generating equipment and installing additional gas co-generation system equipment. We began by renewing our in-house thermal power generation plant at the Iwakuni Production Center, converting the fuel from coal to liquefied natural gas and RPF (Refuse derived paper and plastics densified Fuel). Major reductions in GHG emissions, approximately 80 thousand tonnes CO2, are expected from the operation. We also added a gas co-generation system at Inuyama Plant and started operation in August 2023. It has improved the energy-efficiency of Inuyama Plant as a whole. We are carrying out GHG reduction measures including fuel conversion at other business sites as well.

(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

We collect opinions from shareholders regarding overall management, including the medium-term management plan and Sustainable Vision 2030, during the question and answer session at the annual general meeting of shareholders. The medium-term management plan includes our group's transition plan to carbon neutrality (refer to page 44), and shareholders can provide feedback on this transition plan. Additionally, our group's transition plan is included in the main financial report, the "Securities Report" (refer to page 23). We are attaching our group's medium-term management plan and securities report.

(5.2.9) Frequency of feedback collection

Select from:

☑ Annually

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

【Major premise】 It is assumed that the market value of low-carbon products will increase. It is predicted that in the future, the display of a product's carbon footprint will become mandatory. Based on this assumption, the plan is to enhance market competitiveness by developing and providing low-carbon products. 【Dependency conditions】 The successful implementation of the transition plan is dependent on the absence of unexpected performance deterioration within our group. Ensuring the stability of performance in the face of economic conditions and fluctuations in market demand is a critical factor in executing the transition plan. Furthermore, the transition plan beyond 2030 is also dependent on the availability of low-carbon and decarbonized raw materials and energy sources. We anticipate the development and supply of new technologies and energy sources, and plan to improve our products and processes based on these advancements to achieve a transition to a decarbonized society. 【Resource allocation】 Starting from the fiscal year 2025, GX Promotion Department will be established within our group's headquarters to accelerate the implementation of the transition plan. By establishing this department, resources such as specialized knowledge, personnel, and budget will be appropriately allocated to effectively promote the transition plan. Additionally, as part of specific investment plans, investments will be made in initiatives aligned with the transition plan, such as energy reduction, energy efficiency improvement, production efficiency enhancement, fuel conversion, and renewable energy introduction in facilities and factories during the period from FY2023 to FY2026. This is planned as part of the "Safety, Disaster Prevention, and Environmental Investment Amount: Approximately 17 billion yen" in the 2025 Mid-Term Business Plan.

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

Our transition plan consists of three main elements: (1) energy reduction and energy efficiency improvement, (2) Fuel conversion (away from coal), and (3) utilization of renewable energy and power optimization. In the reporting year (FY2025), we confiremed efforts in line with the transition plan were totally completed at our group's Iwakuni Plant (Iwakuni City, Yamaguchi Prefecture), which is a major source of Scope 1 and Scope 2 emissions. The Iwakuni Plant, whichi had its own power generation facilities with coal, accounts for approximately 20% of our group's total Scope 1 and Scope 2 emissions before transission in FY2023. Our group renovated the self-owned thermal power plant at the Iwakuni Plant in October 2023. The reporting year (FY2025) is the first time that the effort fully contributed our group's GHG emissions. By converting the fuel from coal to liquefied natural gas (LNG) and solid fuel called RPF mainly made from recycled paper and waste plastics, the annual greenhouse gas (GHG) emissions at the plant reduced by approximately 80,000 tons, equivalent to over 40% of the previous emissions. Additionally the newly constructed self-owned thermal power plant not only underwent fuel conversion from coal to LNG and RPF but also introduced energy-saving control technology to effectively utilize high-temperature exhaust gas and the heat of LNG generated by the power generation facilities, significantly reducing environmental impact. In addition, we introduced solar power generation at two locations in the reporting year (FY2025), which is the reporting year. Specifically, we installed additional solar power generation at our Inuyama Factory and newly installed solar power generation at our overseas subsidiary, TOYOBO SAHA SAFETY WEAVE CO., LTD. The total amount of electricity generated by solar power generation, including these, was 1,487 MWh.

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

5.2_2025 Medium-Term Management Plan.pdf

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

Select all that apply

☑ No other environmental issue considered

[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

☑ 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

☑ Water

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

【Plastic Film Business】 [Risk/Opportunity] (Disclosed in Risk 3 of 3.1.1 and Opp 1 of 3.6.1) The film business, which is the main business of our group, accounts for about 40% of the group's total revenue. It is expected that there will be an increasing demand from society, including customers, to reduce the use of petroleum-derived resources and promote alternatives in the ongoing social changes (transition) towards decarbonization. We recognized this as an important climate-related risk. At the same time, we also recognize that there is a growing demand for low-carbon/decarbonized materials and products, presenting business opportunities. Currently, about 90% of the film business's revenue relies on petroleum-derived resources. Under the resolution of the Board of Directors, our "Sustainable Vision 2030" announced in fiscal year 2023 defines technologies and initiatives that contribute to the reduction of petroleum-derived resource usage as "Greenification". Our goal is to achieve "Greenification" in 60% of film products by fiscal year 2031. Film products that reduce the usage of petroleum-derived resources are also low-carbon/decarbonized products, and by promoting "Greenification" of film products, we aim to reduce risks and seize business opportunities. Out of the target revenue for the film business in fiscal year 2031, which is approximately 220 billion yen, about 130 billion yen is expected to come from the acquisition of these opportunities.

【Water Treatment Membrane Business】 [Opportunity] (Disclosed in Opp 3 and Opp 5 of 3.6.1) Our group recognizes that the risks of water shortages and droughts are increasing worldwide due to climate change. In the future, there will be challenges in securing not only industrial water but also domestic water, and we predict that the demand for seawater desalination will continue to rise. Our group's flagship water treatment membrane, the hollow fiber reverse osmosis module "HOLLOSEP®," has a unique feature of being resistant to fouling. It especially excels in desalination of seawater, which is prone to microbial growth, in closed-off areas such as the Middle East region. "HOLLOSEP®" with excellent chlorine resistance can directly supply chlorine-treated raw water to the module, thereby inhibiting microbial growth within the module at a relatively low cost and contributing to the improvement of the operating rate of desalination facilities due to its ease of maintenance. Under the resolution of the Board of Directors, our "Sustainable Vision 2030" announced in fiscal year 2023 sets a goal to produce water equivalent to drinking water for 10 million people through seawater desalination using membranes by fiscal year 2031, aiming to acquire business opportunities through solving social issues. In the reporting year, we have started selling RO membranes in India. In India, the demand for water is rapidly increasing due to population growth and urbanization.

Upstream/downstream value chain

(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

[Risk] (Disclosed in Risk 3 of 3.1.1 and Opp 1 of 3.6.1) The plastic film business, which is the main business of our group, accounts for about 40% of the group's total revenue. Currently, about 90% of the film business's revenue relies on petroleum-derived resources, and there are challenges in the supply chain due to the difficulty of securing raw materials (petroleum-derived resources) as we transition to a decarbonized society. Under the resolution of the Board of Directors, our "Sustainable Vision 2030" announced in fiscal year 2023 defines technologies and initiatives that contribute to the reduction of petroleum-derived resource usage as "Greenification". Our goal is to achieve "Greenification" in 60% of plastic film products by fiscal year 2031.

Investment in R&D

(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

[Risk/Opportunity] (Disclosed in Risk 3 of 3.1.1 and Opp 1 of 3.6.1) The plastic film business, which is the main business of our group, accounts for about 40% of the group's total revenue. It is expected that there will be an increasing demand from society, including customers, to reduce the use of petroleum-derived resources and promote alternatives in the ongoing social changes (transition) towards decarbonization. This is recognized as an important climate-related risk. At the same time, we also recognize that there is a growing demand for low-carbon/decarbonized materials and products, presenting business opportunities. Under the resolution of the Board of Directors, our "Sustainable Vision 2030" announced in fiscal year 2023 defines technologies and initiatives that contribute to the reduction of petroleum-derived resource usage as "Greenification". Our goal is to achieve "Greenification" in 60% of film products by fiscal year 2031. We will invest in research and development that leads to "Greenification". *"Greenification": Initiatives include the development of films using biomass materials, the development of thin and lightweight film materials (improving strength), environmentally conscious design to facilitate film recycling (mono-materialization*), the development of films using recycled materials, and the technological development of film recycling itself. *"Mono-materialization" refers to the process of replacing products, mainly packaging materials, that are composed of multiple materials with a single material (mono-material).*

Operations

(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

[Risk and Opportunity] (Disclosed in Risk2 of 3.1.1 and Opp2 of 3.6.1) The GHG emissions (Scope 1, 2) of our group in the fiscal year 2021 amounted to approximately 0.9 million tons of CO2. In the scenario without any specific GHG reduction measures, the GHG emissions would increase to about 1.3 million tons of CO2 by the fiscal year 2031, due to sales expansion. Assuming a carbon price of 15,000 yen per ton of CO2 in the fiscal year 2031, the annual cost due to this carbon price would be approximately 20 billion yen. Our group considers the increase in GHG emissions (Scope 1, 2) as a significant climate-related risk, and under the resolution of the Board of Directors, we have announced the "Sustainable Vision 2030," which includes a transition plan (roadmap to carbon neutrality) to the fiscal year 2031. In this roadmap, we aim to reduce the GHG emissions (Scope 1, 2) to 655,000 tons of CO2 by the fiscal year 2031 through energy reduction, energy efficiency improvement, production efficiency improvement, fuel conversion, and introduction of renewable energy. The annual cost due to the carbon price at that time would be approximately 10 billion yen, resulting in a cost reduction effect of approximately 10 billion yen compared to the scenario without any specific GHG reduction measures.
[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

☑ Revenues

(5.3.2.2) Effect type

Select all that apply

☑ Risks

☑ Opportunities

(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

【Plastic Film Business】 [Risk/Opportunity] (Disclosed in Risk 3 of 3.1.1 and Opp 1 of 3.6.1) The plastic film business, which is the main business of our group, accounts for about 40% of the group's total revenue. It is expected that there will be an increasing demand from society, including customers, to reduce the use of petroleum-derived resources and promote alternatives in the ongoing social changes (transition) towards decarbonization. We recognized this as an important climate-related risk. At the same time, we also recognize that there is a growing demand for low-carbon/decarbonized materials and products, presenting business opportunities. Currently, about 90% of the film business's revenue relies on petroleum-derived resources. Under the resolution of the Board of Directors, our "Sustainable Vision 2030" announced in fiscal year 2023 defines technologies and initiatives that contribute to the reduction of petroleum-derived resource usage as "Greenification". Our goal is to achieve "Greenification" in 60% of film products by fiscal year 2031. Film products that reduce the usage of petroleum-derived resources are also low-carbon/decarbonized products, and by promoting "Greenification" of film products, we aim to reduce risks and seize business opportunities. Out of the target revenue for the film business in fiscal year 2031, which is approximately 220 billion yen, about 130 billion yen is expected to come from the acquisition of these opportunities.

Row 2

(5.3.2.1) Financial planning elements that have been affected

Select all that apply

☑ Revenues

(5.3.2.2) Effect type

Select all that apply

☑ Risks

☑ Opportunities

(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

☑ Water

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

【Water Treatment Membrane Business】[Opportunity] (Disclosed in Opp 3, Opp5 and Opp 6 of 3.6.1) Our group recognizes that the risks of water shortages and droughts are increasing worldwide due to climate change. In the future, there will be challenges in securing not only industrial water but also domestic water, and we predict that the demand for seawater desalination will continue to rise. In our environmental and functional materials business, we anticipate an increasing demand for freshwater and freshwater recycling. In addition to our seawater desalination project using RO (Reverse Osmosis) membranes, we are also conducting research and development on energy-efficient next-generation seawater desalination plants using our unique FO (Forward Osmosis) membranes. We also expect to expand our sales through the use of BC (Brine Concentration) membranes for wastewater treatment and recycling, zero liquid discharge (ZLD) processes, and the recovery of valuable materials (such as lithium) in battery recycling plants. In the fiscal year 2025, the sales revenue for the environmental and functional materials business was 110.8 billion yen, and this opportunity has had an impact on that figure. In the reporting year （FY2025）, our membranes were adopted by a major Chinese battery recycling plant in the process of recovering lithium from used lithium-ion batteries. We also expect sales to expand in applications such as concentrating lithium from salt-lake brine, treating and recycling factory wastewater, and converting to zero-discharge (ZLD) systems.Furthermore, our sales revenue target for the environmental and functional materials business in the fiscal year 2031 is set at 250 billion yen, with water treatment membrane-related businesses including RO membranes, FO membranes, and BC membranes contributing to a part of this target.Under the resolution of the Board of Directors, our “Sustainable Vision 2030” announced in fiscal year 2023 sets a goal to produce water equivalent to drinking water for 10 million people through seawater desalination using membranes by fiscal year 2031. In the reporting year（FY2025）, we have started selling RO membranes in India. In India, the demand for water is rapidly increasing due to population growth and urbanization. By introducing spiral-wound RO membranes to the Indian market, we will contribute to the conservation of water resources around the world.
[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* ☑ Other methodology or framework

[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 :Taxonomy of our own products according to our company standards

(5.4.1.5) Financial metric

Select from:

☑ Revenue/Turnover

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

86300000000

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

30.7

(5.4.1.8) Percentage share of selected financial metric planned to align in 2025 (%)

35

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

40

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

Since 1998, our group has been operating the “Eco-Review System” as a system to evaluate the environmental impact of products from an environmental conservation perspective. Products that meet certain criteria in the Eco-Review System are certified as “Eco-Partner System Products”. Eco-Partner System Products are low-carbon products that contribute to reducing environmental impact and CO2 emissions. To determine whether a product qualifies as an Eco-Partner System Product, we use our own taxonomy criteria. We are committed to expanding the sales ratio of these products in order to promote their environmental benefits and contribution to reducing carbon emissions.
[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)

0

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

0

(5.9.3) Water-related OPEX (+/- % change)

0

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

0

(5.9.5) Please explain

【CAPEX】 As stated in Risk 4 of 3.1.1, the addition of new regulatory substances is identified as a risk in the future. However, there are no additional new regulation regarding to facility investments in the next reporting year. Additionally, as stated in Risk 7 of 3.1.1, flood risks at our main plants are mentioned. However, we have been conducting annual facility investments, primarily for new facilities, and relocating electrical system facilities to higher ground. Similar flood control measures will be implemented in the next reporting year. Therefore, changes are not anticipated for the next fiscal year in CAPEX. 【OPEX】 Although Risk 4 of 3.1.1, there are no additional of the substances requiring facility investments in the next reporting year. Monitoring and capturing of regulated substances will continue and Similar flood control measures will be implemented in the next reporting year. Therefore, changes are not anticipated for the next fiscal year in OPEX.
[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
☑ 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
☑ Scenario analysis

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

We assumed a future "carbon value" of 10,000 yen/t-CO2 based on current EU-ETS prices and forecasts of carbon prices by the IEA, among others.

(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:
☑ Evolutionary

(5.10.1.9) Indicate how you expect the price to change over time

We will monitor the EU-ETS and domestic credit unit prices in Japan and conduct annual reviews of the carbon price unit. Our group believes that the future carbon

price unit will increase from 10,000 yen/t-CO2 in the reporting year (fiscal year 2024) and assume a carbon price unit of 15,000 yen/t-CO2 in fiscal year 2031. This price is based on the values from the IEA WEO 2023 for advanced economies with net zero emissions pledges, which is set at $140/t-CO2 in 2030.

(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

☑ Product and R&D

(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 will monitor the EU-ETS and domestic credit unit prices in Japan and conduct annual reviews of the carbon price unit. Our group believes that the future carbon price unit will increase from 10,000 yen/t-CO2 in the reporting year (fiscal year 2024) and assume a carbon price unit of 15,000 yen/t-CO2 in fiscal year 2031. This price is based on the values from the IEA WEO 2023. Our group utilized the Internal Carbon Pricing (IPC) system for fuel conversion at our Iwakuni plant (operational

in the reporting year), as well as the introduction of solar power at our Research Institute (operational in the reporting year) and Utsunomiya factory (operational in the reporting year).
[Add row]

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

	Engaging with this stakeholder on environmental issues	Environmental issues covered
Suppliers	*Select from:* ☑ Yes	*Select all that apply* ☑ Climate change ☑ Water
Customers	*Select from:* ☑ Yes	*Select all that apply* ☑ Climate change ☑ Water
Investors and shareholders	*Select from:* ☑ Yes	*Select all that apply* ☑ Climate change
Other value chain stakeholders	*Select from:* ☑ Yes	*Select all that apply* ☑ Climate change ☑ Water

[Fixed row]

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

Climate change

(5.11.1.1) Assessment of supplier dependencies and/or impacts on the environment

Select from:

☑ Yes, we assess the dependencies and/or impacts of our suppliers

(5.11.1.2) Criteria for assessing supplier dependencies and/or impacts on the environment

Select all that apply

☑ Contribution to supplier-related Scope 3 emissions

☑ Dependence on water

☑ Dependence on ecosystem services/environmental assets

(5.11.1.3) % Tier 1 suppliers assessed

Select from:

☑ 1-25%

(5.11.1.4) Define a threshold for classifying suppliers as having substantive dependencies and/or impacts on the environment

We plan to define high-risk suppliers from a macro perspective using ENCORE. Among the 271 economic activities covered by ENCORE, we will assess environmental dependencies and impacts across the supply chain by analyzing suppliers' relevant activities. This analysis will identify those highly dependent on ecosystem services or causing significant environmental impact. Based on these findings, we will prioritize suppliers for further assessment and engagement to enhance sustainability.

(5.11.1.5) % Tier 1 suppliers meeting the threshold for substantive dependencies and/or impacts on the environment

Select from:

☑ None

Water

(5.11.1.1) Assessment of supplier dependencies and/or impacts on the environment

Select from:

☑ Yes, we assess the dependencies and/or impacts of our suppliers

(5.11.1.2) Criteria for assessing supplier dependencies and/or impacts on the environment

Select all that apply

☑ Dependence on water

☑ Dependence on ecosystem services/environmental assets

(5.11.1.3) % Tier 1 suppliers assessed

Select from:

☑ 1-25%

(5.11.1.4) Define a threshold for classifying suppliers as having substantive dependencies and/or impacts on the environment

We plan to define high-risk suppliers from a macro perspective using ENCORE. Among the 271 economic activities covered by ENCORE, we will assess environmental dependencies and impacts across the supply chain by analyzing suppliers' relevant activities. This analysis will identify those highly dependent on ecosystem services or causing significant environmental impact. Based on these findings, we will prioritize suppliers for further assessment and engagement to enhance sustainability.

(5.11.1.5) % Tier 1 suppliers meeting the threshold for substantive dependencies and/or impacts on the environment

Select from:

☑ None

[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

☑ In line with the criteria used to classify suppliers as having substantive dependencies and/or impacts relating to climate change

☑ Business risk mitigation

(5.11.2.4) Please explain

Our group has established "CSR Procurement Guidelines" that include environmental requirements, and compliance with these guidelines is included as a contractual condition. The "CSR Procurement Guidelines" request the maintenance and enhancement of environmental activities, such as "conservation of water and energy," "reduction of emissions of pollutants into air, water, and soil," "waste reduction," "emission reduction of greenhouse gases," and "promotion of biodiversity conservation and nature protection." To monitor the progress of these initiatives, our group conducts a "CSR Procurement Survey" as a program to assess and rate each supplier. For suppliers with lower ratings, we engage directly with them to encourage behavioral changes and transformation within their operations.

Water

(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 water

☑ Business risk mitigation

(5.11.2.4) Please explain

Our group has established "CSR Procurement Guidelines" that include environmental requirements, and compliance with these guidelines is included as a contractual condition. The "CSR Procurement Guidelines" request the maintenance and enhancement of environmental activities, such as "conservation of water and energy," "reduction of emissions of pollutants into air, water, and soil," "waste reduction," "emission reduction of greenhouse gases," and "promotion of biodiversity conservation and nature protection." To monitor the progress of these initiatives, our group conducts a "CSR Procurement Survey" as a program to assess and rate each supplier. For suppliers with lower ratings, we engage directly with them to encourage behavioral changes and transformation within their operations.
[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

Our group has established “CSR Procurement Guidelines” that include environmental requirements, and compliance with these guidelines is included as a contractual condition. The “CSR Procurement Guidelines” request the maintenance and enhancement of environmental activities, such as “conservation of water and energy,” “reduction of emissions of pollutants into air, water, and soil,” “waste reduction,” “emission reduction of greenhouse gases,” and “promotion of biodiversity conservation and nature protection.” To monitor the progress of these initiatives, our group conducts a “CSR Procurement Survey” as a program to assess and rate each supplier. For suppliers with lower ratings, we engage directly with them to encourage behavioral changes and transformation within their operations.

Water

(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

Our group has established “CSR Procurement Guidelines” that include environmental requirements, and compliance with these guidelines is included as a contractual condition. The “CSR Procurement Guidelines” request the maintenance and enhancement of environmental activities, such as “conservation of water and energy,” “reduction of emissions of pollutants into air, water, and soil,” “waste reduction,” “emission reduction of greenhouse gases,” and “promotion of biodiversity conservation and nature protection.” To monitor the progress of these initiatives, our group conducts a “CSR Procurement Survey” as a program to assess and rate each supplier. For suppliers with lower ratings, we engage directly with them to encourage behavioral changes and transformation within their operations.
[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:
☑ Regular environmental risk assessments (at least once annually)

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply
☑ Supplier self-assessment

(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:

☑ 76-99%

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

Select from:
☑ 100%

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

Select from:
☑ 100%

(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:
☑ 1-25%

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply
☑ Providing information on appropriate actions that can be taken to address non-compliance

(5.11.6.12) Comment

Our group has established "CSR Procurement Guidelines" that include environmental requirements, and compliance with these guidelines is included as a contractual condition. The "CSR Procurement Guidelines" request the maintenance and enhancement of environmental activities, such as "conservation of water and energy," "reduction of emissions of pollutants into air, water, and soil," "waste reduction," "emission reduction of greenhouse gases," and "promotion of biodiversity conservation and nature protection." To monitor the progress of these initiatives, our group conducts a "CSR Procurement Survey" as a program to assess and rate

each supplier. For suppliers with lower ratings, we engage directly with them to encourage behavioral changes and transformation within their operations.

Water

(5.11.6.1) Environmental requirement

Select from:

☑ Regular environmental risk assessments (at least once annually)

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Supplier self-assessment

(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:

☑ 76-99%

(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:

☑ 1-25%

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

☑ Providing information on appropriate actions that can be taken to address non-compliance

(5.11.6.12) Comment

Our group has established “CSR Procurement Guidelines” that include environmental requirements, and compliance with these guidelines is included as a contractual condition. The “CSR Procurement Guidelines” request the maintenance and enhancement of environmental activities, such as “conservation of water and energy,” “reduction of emissions of pollutants into air, water, and soil,” “waste reduction,” “emission reduction of greenhouse gases,” and “promotion of biodiversity conservation and nature protection.” To monitor the progress of these initiatives, our group conducts a “CSR Procurement Survey” as a program to assess and rate each supplier. For suppliers with lower ratings, we engage directly with them to encourage behavioral changes and transformation within their operations.
[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:

☑ Adaptation to climate change

(5.11.7.3) Type and details of engagement

Capacity building

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

(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:

☑ 76-99%

(5.11.7.6) % of tier 1 supplier-related scope 3 emissions covered by engagement

Select from:

☑ 76-99%

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

To reduce Scope 3 emissions in Category 1 (purchased goods and services), procuring environmentally friendly materials is essential. Our group conducts a CSR procurement survey targeting Tier 1 suppliers with whom we have direct transactions. In total, 476 suppliers, representing 90% of our transaction volume, are asked to respond to a survey that includes climate-related topics such as GHG reduction targets. This supplier engagement program operates on a two-year cycle. In the first year, suppliers respond to the survey, and based on their answers, we assign scores out of 100. Suppliers scoring 61 or above are classified as "excellent," while those scoring 60 or below are designated as "priority engagement suppliers." For suppliers below the threshold, we conduct individual interviews to clarify and correct any discrepancies. In the second year, priority engagement suppliers are further categorized into C and D ranks, and engagement activities are tailored accordingly. In FY2025, the second year of the current cycle, we provided all suppliers with feedback in the form of evaluation scores and radar charts to help them identify strengths and weaknesses. For areas of weakness, we requested continued improvement. D-rank suppliers, identified as high risk, were asked to take corrective actions and agreed to comply with our CSR Procurement Guidelines. The success of the program is measured by how many priority engagement suppliers are elevated to excellent status. Through these efforts, nearly all Tier 1 suppliers have agreed to our CSR guidelines, including GHG reduction initiatives, and have worked to improve their weaknesses. This has raised awareness of climate change issues among suppliers and led to behavioral changes. As a result, engaged suppliers were reclassified as preferred suppliers, and the program was deemed successful. Ultimately, this initiative has contributed to reducing climate-related risks in our procurement activities and enhancing the sustainability of our supply chain.

(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 :Adaptation to climate change

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

Select from:

☑ Yes

Water

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ Total water withdrawal volumes reduction

(5.11.7.3) Type and details of engagement

Capacity building

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

(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:

☑ 76-99%

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

To reduce Scope 3 emissions in Category 1 (purchased goods and services), procuring environmentally friendly materials is essential. Our group conducts a CSR procurement survey targeting Tier 1 suppliers with whom we have direct transactions. In total, 476 suppliers, representing 90% of our transaction volume, are asked to respond to a survey that includes water-related inquiries such as setting targets for reducing water intake and wastewater/sludge. This supplier engagement program operates on a two-year cycle. In the first year, suppliers respond to the survey, and based on their answers, we assign scores out of 100. Suppliers scoring 61 or above are classified as "excellent," while those scoring 60 or below are designated as "priority engagement suppliers." For suppliers below the threshold, we conduct individual interviews to clarify and correct any discrepancies. In the second year, priority engagement suppliers are further categorized into C and D ranks, and engagement activities are tailored accordingly. In FY2025, the second year of the current cycle, we provided all suppliers with feedback in the form of evaluation scores and radar charts to help them identify strengths and weaknesses. For areas of weakness, we requested continued improvement. D-rank suppliers, identified as high risk, were asked to take corrective actions and agreed to comply with our CSR Procurement Guidelines. The success of the program is measured by how many priority engagement suppliers are elevated to excellent status. Through these efforts, nearly all Tier 1 suppliers have agreed to our CSR guidelines, including water scarcity and have worked to improve their weaknesses. This has raised awareness of water scarcity issues among suppliers and led to behavioral changes. As a result, engaged suppliers were reclassified as preferred suppliers, and the program was deemed successful. Ultimately, this initiative has contributed to reducing water-related risks in our procurement activities and enhancing the sustainability of our supply chain.

(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 :Total water withdrawal volumes reduction

(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:

☑ Customers

(5.11.9.2) Type and details of engagement

Innovation and collaboration

☑ Collaborate with stakeholders on innovations to reduce environmental impacts in products and services

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 100%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☑ 76-99%

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

In 2022, our group announced the "Sustainable Vision 2030," which includes a goal to generate a "reduction contribution" that exceeds the total GHG emissions of our entire value chain. Under the certification of the Science Based Targets initiative (SBTi), we have committed to reducing Scope 3 emissions by 12.5% by FY2031 compared to FY2021. Within our Scope 3 emissions, Category 11 (use of sold products) accounts for over 50%, making customer collaboration essential to achieving our SBTi target. The final products included in Category 11 are VOC recovery devices, urine sediment analysis devices, and fully automated genetic analysis devices. Among these, VOC recovery devices represent over 90% of Category 11 emissions, making their environmental impact a key focus. To reduce emissions, we are transitioning our VOC recovery device lineup from the conventional steam desorption type to the nitrogen desorption type, which achieves approximately 80% GHG reduction. We actively promote the adoption of nitrogen desorption recovery devices to customers, emphasizing their environmental benefits. In addition, we provide ongoing technical support for all VOC recovery devices sold, including troubleshooting and consultations. This technical engagement allows us to gather customer feedback, improve operational efficiency, and enhance product performance, further contributing to GHG reduction. Through these efforts, we aim to foster technological innovation with our customers, reduce environmental impact, and support the achievement of our climate goals. This engagement is a core component of our climate transition strategy and reflects our commitment to collaborative decarbonization.

(5.11.9.6) Effect of engagement and measures of success

FY2031 compared to FY2021. To accomplish this, we are focused on increasing the proportion of nitrogen desorption recovery devices within our VOC recovery device sales portfolio. We monitor the following indicator to evaluate the effectiveness of our customer engagement: - Sales ratio of nitrogen desorption recovery devices compared to steam desorption types. This metric allows us to track progress toward our climate goals and assess the impact of our engagement activities. By promoting low-carbon technologies and encouraging the adoption of environmentally superior products, we aim to reduce emissions associated with product use and contribute to the overall decarbonization of our value chain.

Water

(5.11.9.1) Type of stakeholder

Select from:

☑ Other value chain stakeholder, please specify :Our customers and people suffering from water scarcity

(5.11.9.2) Type and details of engagement

Innovation and collaboration

☑ Collaborate with stakeholders on innovations to reduce environmental impacts in products and services

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 100%

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

Our group recognizes that the progression of climate change increases the risk of water scarcity and drought worldwide. In the future, securing not only industrial water but also domestic water will become increasingly difficult in many regions, leading to a growing demand for seawater desalination. To address this challenge, we have developed the "HOLLOSEP® RO Membrane," a hollow fiber reverse osmosis membrane with strong resistance to fouling and chlorine. This makes it particularly effective in closed-off areas such as the Middle East, where seawater is prone to microbial growth. The membrane allows for the direct supply of chlorinated feedwater, suppressing microbial activity at a relatively low cost. Its ease of maintenance also contributes to improved operational efficiency in desalination facilities. Since 2012, we have collaborated with Trevi Systems Inc., a U.S.-based company, to develop energy-efficient seawater desalination systems. Trevi Systems plans to construct a desalination plant in Hawaii with a capacity of 6,000 m³/day. Our group will supply the "HOLLOSEP® FO Membrane" to support this project, contributing to the development of low-energy desalination technologies and helping to address global water scarcity. In the reporting year, FY2025, we also began selling RO membranes in India, where water demand is rapidly increasing due to population growth and urbanization. By introducing spiral-wound RO membranes to the Indian market, we aim to support sustainable water resource management in one of the world's most water-stressed regions. Through these initiatives, we are working closely with customers to promote technological innovation that mitigates the environmental impacts of climate change. Our engagement focuses on providing advanced membrane technologies that support water security and climate resilience on a global scale.

(5.11.9.6) Effect of engagement and measures of success

As part of our "Sustainable Vision 2030," our group has set a target to produce the equivalent of potable water for 10 million people annually through seawater desalination using our membrane technologies by FY2030. As of FY2025, we have achieved production equivalent to the water needs of 5.2 million people, indicating steady progress toward our goal. This figure is calculated based on the total volume of desalinated water produced using our membranes, converted into the average daily water consumption per person. This metric serves as a key performance indicator for our engagement with customers in the water treatment sector. It reflects both the environmental impact of our products and the effectiveness of our collaborative efforts to expand the adoption of sustainable water technologies. By continuing to promote the use of our RO and FO membranes in regions facing water stress, we aim to contribute to global water security and climate adaptation, while supporting people suffering from water scarcity.

Climate change

(5.11.9.1) Type of stakeholder

Select from:

☑ Customers

(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:

☑ 100%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☑ 100%

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

Our group engages with customers across multiple environmental initiatives to address climate change through both technological innovation and transparent information sharing. These efforts are aligned with our "Sustainable Vision 2030" and our SBTi-certified target to reduce Scope 3 emissions (Categories 1 and 11) by 12.5% by FY2031 compared to FY2021. As for transparency we engage with customers by sharing progress and achievements related to our climate goals. We disclose updates annually through CDP and our corporate website, including Scope 3 emissions data and reduction strategies. This transparency helps customers understand the environmental impact of our products and supports their own sustainability efforts. Beside the transparency, our major initiative for technological innovation involves in reducing GHG emissions from VOC recovery devices, which account for over 90% of our Category 11 emissions. We are transitioning our product lineup from steam desorption to nitrogen desorption recovery devices, which can reduce GHG emissions by approximately 80%. We actively promote this technology to customers and provide technical support to improve operational efficiency and environmental performance. Another key initiative for technological innovation focuses on water resource conservation. We collaborate with customers to deploy advanced membrane technologies such as the "HOLLOSEP® RO Membrane" and "HOLLOSEP® FO Membrane" for seawater desalination. These technologies are designed to be energy-efficient and resistant to fouling, contributing to water security in regions facing scarcity. Our partnership with Trevi Systems Inc. and market expansion into India further support global water sustainability. Through these multifaceted engagements—spanning innovation, support, and disclosure—we aim to build long-term partnerships with customers that contribute to the decarbonization and resilience of the entire value chain.

(5.11.9.6) Effect of engagement and measures of success

Our customer engagement strategy is evaluated through both technological adoption and information transparency. The primary success metric is the annual disclosure of progress toward our SBTi-certified Scope 3 reduction target. We publish updates via CDP and our corporate website, providing clear data on emissions and reduction efforts. In the VOC recovery domain, we track the sales ratio of nitrogen desorption recovery devices as an indicator of customer adoption and

environmental impact. In the water sector, we measure the volume of desalinated water produced using our membranes, with a goal of supplying potable water equivalent for 10 million people annually by FY2030. As of FY2024, we have reached 5.2 million people. These metrics reflect the effectiveness of our engagement in promoting low-carbon technologies and supporting climate resilience. By combining innovation with transparent communication, we aim to empower customers and accelerate progress toward shared environmental goals.

Water

(5.11.9.1) Type of stakeholder

Select from:

☑ Customers

(5.11.9.2) Type and details of engagement

Innovation and collaboration

☑ Collaborate with stakeholders on innovations to reduce environmental impacts in products and services

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 100%

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

Our group recognizes that the progression of climate change increases the risk of water scarcity and drought worldwide. In the future, securing not only industrial water but also domestic water will become increasingly difficult in many regions, leading to a growing demand for seawater desalination. To address this challenge, we have developed the "HOLLOSEP® RO Membrane," a hollow fiber reverse osmosis membrane with strong resistance to fouling and chlorine. This makes it particularly effective in closed-off areas such as the Middle East, where seawater is prone to microbial growth. The membrane allows for the direct supply of chlorinated feedwater, suppressing microbial activity at a relatively low cost. Its ease of maintenance also contributes to improved operational efficiency in desalination facilities. Since 2012, we have collaborated with Trevi Systems Inc., a U.S.-based company, to develop energy-efficient seawater desalination systems. Trevi Systems plans to construct a desalination plant in Hawaii with a capacity of 6,000 m³/day. Our group will supply the "HOLLOSEP® FO Membrane" to support this project, contributing to the development of low-energy desalination technologies and helping to address global water scarcity. In the reporting year, FY2025, we also began selling RO membranes in India, where water demand is rapidly increasing due to population growth and urbanization. By introducing spiral-wound RO membranes to the Indian market, we aim to support sustainable water resource management in one of the world's most water-stressed regions. Through these initiatives, we are working closely with customers to promote technological innovation that mitigates the environmental impacts of climate change. Our engagement focuses on providing advanced membrane technologies that support water security and climate resilience on a global scale.

(5.11.9.6) Effect of engagement and measures of success

As part of our "Sustainable Vision 2030," our group has set a target to produce the equivalent of potable water for 10 million people annually through seawater desalination using our membrane technologies by FY2030. As of FY2025, we have achieved production equivalent to the water needs of 5.2 million people, indicating steady progress toward our goal. This figure is calculated based on the total volume of desalinated water produced using our membranes, converted into the average daily water consumption per person. This metric serves as a key performance indicator for our engagement with customers in the water treatment sector. It reflects both the environmental impact of our products and the effectiveness of our collaborative efforts to expand the adoption of sustainable water technologies. By continuing to promote the use of our RO and FO membranes in regions facing water stress, we aim to contribute to global water security and climate adaptation, while supporting our customers in achieving their own environmental goals.

Climate change

(5.11.9.1) Type of stakeholder

Select from:

☑ Other value chain stakeholder, please specify :Our customers and people suffering from water scarcity

(5.11.9.2) Type and details of engagement

Innovation and collaboration

☑ Collaborate with stakeholders on innovations to reduce environmental impacts in products and services

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 100%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☑ None

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

Our group recognizes that the progression of climate change increases the risk of water scarcity and drought worldwide. In the future, securing not only industrial

water but also domestic water will become increasingly difficult in many regions, leading to a growing demand for seawater desalination. To address this challenge, we have developed the "HOLLOSEP® RO Membrane," a hollow fiber reverse osmosis membrane with strong resistance to fouling and chlorine. This makes it particularly effective in closed-off areas such as the Middle East, where seawater is prone to microbial growth. The membrane allows for the direct supply of chlorinated feedwater, suppressing microbial activity at a relatively low cost. Its ease of maintenance also contributes to improved operational efficiency in desalination facilities. Since 2012, we have collaborated with Trevi Systems Inc., a U.S.-based company, to develop energy-efficient seawater desalination systems. Trevi Systems plans to construct a desalination plant in Hawaii with a capacity of 6,000 m³/day. Our group will supply the "HOLLOSEP® FO Membrane" to support this project, contributing to the development of low-energy desalination technologies and helping to address global water scarcity. In the reporting year, FY2025, we also began selling RO membranes in India, where water demand is rapidly increasing due to population growth and urbanization. By introducing spiral-wound RO membranes to the Indian market, we aim to support sustainable water resource management in one of the world's most water-stressed regions. Through these initiatives, we are working closely with customers to promote technological innovation that mitigates the environmental impacts of climate change. Our engagement focuses on providing advanced membrane technologies that support water security and climate resilience on a global scale.

(5.11.9.6) Effect of engagement and measures of success

As part of our "Sustainable Vision 2030," our group has set a target to produce the equivalent of potable water for 10 million people annually through seawater desalination using our membrane technologies by FY2030. As of FY2025, we have achieved production equivalent to the water needs of 5.2 million people, indicating steady progress toward our goal. This figure is calculated based on the total volume of desalinated water produced using our membranes, converted into the average daily water consumption per person. This metric serves as a key performance indicator for our engagement with customers in the water treatment sector. It reflects both the environmental impact of our products and the effectiveness of our collaborative efforts to expand the adoption of sustainable water technologies. By continuing to promote the use of our RO and FO membranes in regions facing water stress, we aim to contribute to global water security and climate adaptation, while supporting people suffering from water scarcity.

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

☑ Share information on environmental initiatives, progress and achievements

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 100%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☑ None

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

Our group engages with investors and shareholders to promote climate-related transparency and accountability across our value chain. This engagement is grounded in our "Sustainable Vision 2030" and our SBTi-certified Scope 3 reduction target. We disclose annual progress through CDP and our corporate website, including Scope 3 emissions data and reduction strategies. These disclosures help stakeholders assess our climate performance and align their investment decisions with environmental goals. In addition, we actively communicate the environmental benefits of our product innovations—such as VOC recovery devices and membrane technologies for water conservation—through our website.

(5.11.9.6) Effect of engagement and measures of success

We evaluate the effectiveness of our engagement with investors and shareholders through transparent disclosure of progress toward our Scope 3 reduction target, which is certified by SBTi and tracked in accordance with its guidance. While certain performance indicators—such as the sales ratio of nitrogen desorption VOC recovery devices—are monitored internally to assess customer adoption and environmental impact, we focus our public disclosures on aggregate progress toward our climate goals. Additionally, we report the volume of desalinated water produced using our membrane technologies, aligned with our goal to supply potable water equivalent for 10 million people annually by FY2030. These indicators reflect the environmental contribution of our product portfolio and the broader impact of our collaborative decarbonization efforts.
[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	Primary reason for not implementing environmental initiatives	Explain why your organization has not implemented any environmental initiatives
	Select from: ☑ No, but we plan to within the next two years	*Select from:* ☑ Not an immediate strategic priority	*N/A*

[Fixed row]

C6. Environmental Performance - Consolidation Approach

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

	Consolidation approach used	Provide the rationale for the choice of consolidation approach
Climate change	*Select from:* ☑ Financial control	*We have chosen a financial management approach to ensure alignment with the scope and consolidation of our annual securities report.*
Water	*Select from:* ☑ Financial control	*We have chosen a financial management approach to ensure alignment with the scope and consolidation of our annual securities report.*
Plastics	*Select from:* ☑ Financial control	*We have chosen a financial management approach to ensure alignment with the scope and consolidation of our annual securities report.*
Biodiversity	*Select from:* ☑ Financial control	*We have chosen a financial management approach to ensure alignment with the scope and consolidation of our annual securities report.*

[Fixed row]

C7. Environmental performance - Climate Change

(7.1) Is this your first year of reporting emissions data to CDP?

Select from:
☑ No

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

(7.1.1.1) Has there been a structural change?

Select all that apply
☑ Yes, a divestment

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

Toyobo Kankyo Techno Co., Ltd., Kureha Tech Co., Ltd. and Toyobo Kureha America Co., Ltd.

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

On April 17, 2024, Toyobo MC Corporation completed the divestiture of Toyobo Kankyo Techno Co., Ltd., and on August 26, 2024, divested Kureha Tech Co., Ltd. Additionally, Toyobo Kureha America Co., Ltd. was divested during the same fiscal year. These structural changes resulted in the exclusion of all three entities from the consolidated reporting boundary. As a result, Toyobo Group no longer holds ownership or operational control over their emissions activities, and their GHG emissions are not included in the current reporting year's data.
[Fixed row]

(7.1.2) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

(7.1.2.1) Change(s) in methodology, boundary, and/or reporting year definition?

Select all that apply

☑ Yes, a change in boundary

(7.1.2.2) Details of methodology, boundary, and/or reporting year definition change(s)

On April 17, 2024, Toyobo MC Corporation completed the divestiture of Toyobo Kankyo Techno Co., Ltd., and on August 26, 2024, divested Kureha Tech Co., Ltd. and Toyobo Kureha America Co., Ltd. While these entities were excluded from the consolidated boundary after the respective dates, GHG emissions (Scope 1 and 2) from Kureha Tech and Toyobo Kureha America up to August 25, 2024, are included in our reporting year's emissions data, as they were under our operational control during that period.
[Fixed row]

(7.1.3) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in 7.1.1 and/or 7.1.2?

(7.1.3.1) Base year recalculation

Select from:

☑ No, because the impact does not meet our significance threshold

(7.1.3.3) Base year emissions recalculation policy, including significance threshold

Toyobo Group applies a materiality threshold of 5% to determine whether base year GHG emissions (Scope 1 and 2) should be recalculated. This threshold is based on the GHG Protocol Corporate Standard, which recommends recalculation when structural changes significantly affect the emissions profile. In FY2024, Toyobo MC Corporation divested three subsidiaries: Toyobo Kankyo Techno Co., Ltd. (April 17, 2024), Kureha Tech Co., Ltd., and Toyobo Kureha America Co., Ltd. (both on August 26, 2024). Despite these structural changes, we did not recalculate our base year emissions (FY2021), as the combined Scope 1 and 2 emissions from these entities in the base year accounted for less than 1% of the Group's total emissions—well below our 5% threshold. This approach ensures consistency in our emissions reporting while maintaining relevance and comparability over time. Scope 3 emissions were not materially impacted by these divestitures and therefore did not require recalculation.

(7.1.3.4) Past years' recalculation

Select from:

☑ No

[Fixed row]

(7.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

Select all that apply

☑ Act on the Rational Use of Energy

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

☑ The GHG Indicator: UNEP Guidelines for Calculating Greenhouse Gas Emissions for Businesses and Non-Commercial Organizations

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

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

	Scope 2, location-based	Scope 2, market-based	Comment
	Select from: ☑ We are reporting a Scope 2, location-based figure	*Select from:* ☑ We are reporting a Scope 2, market-based figure	*Our company calculates Scope 2 emissions of the Toyobo group (TOYOBO CO., Ltd. on a non-consolidated basis and its domestic and overseas subsidiaries)*

[Fixed row]

(7.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

Select from:

☑ No

(7.5) Provide your base year and base year emissions.

Scope 1

(7.5.1) Base year end

03/31/2021

(7.5.2) Base year emissions (metric tons CO2e)

717873

(7.5.3) Methodological details

【Scope】 All of the Toyobo group (TOYOBO CO., Ltd. on a non-consolidated basis and its domestic and overseas subsidiaries) 【Measurement Method】 Scope 1 emissions are calculated based on a methodology aligned with the GHG Protocol. 【Emission Factors】 Data from the emission factor database provided by the Japanese government (Ministry of the Environment) 【Inputs】 Activity data includes fuel consumption and energy usage. For non-energy-related GHG emissions, activity data includes refrigerant refill volumes, estimated emissions from sanitary wastewater, and other wastewater-related parameters. 【Assumptions】 Emissions from the production of electricity and steam sold to other companies are included in Scope 1. The calculation scope of non-energy-related GHG emissions covers Toyobo alone and its group companies in Japan. 【Reason for Choosing this Calculation Method】 The most rational calculation method was chosen based on the GHG Protocol using available data, to ensure consistency with international standards such as the Science Based Targets initiative (SBTi).

Scope 2 (market-based)

(7.5.1) Base year end

03/31/2021

(7.5.2) Base year emissions (metric tons CO2e)

183798

(7.5.3) Methodological details

【Scope】 All of the Toyobo group (TOYOBO CO., Ltd. on a non-consolidated basis and its domestic subsidiaries) 【Measurement Method】 Scope 2 emissions are

calculated based on a methodology aligned with the GHG Protocol. 【Emission Factors】 Emission factors are referenced from data provided by the Ministry of the Environment of Japan. This includes purchased electricity, steam, and chilled water. 【Inputs】 Activity data includes electricity, purchased steam, and chilled water consumption at each site. 【Reason for Choosing this Calculation Method】 The most rational calculation method was chosen based on the GHG Protocol using available data, to ensure consistency with international standards such as the Science Based Targets initiative (SBTi).

Scope 3 category 1: Purchased goods and services

(7.5.1) Base year end

03/31/2021

(7.5.2) Base year emissions (metric tons CO2e)

1028485

(7.5.3) Methodological details

【Scope】 All of the Toyobo group (TOYOBO CO., Ltd. on a non-consolidated basis and its domestic and overseas subsidiaries) 【Measurement Method】 Direct measurement of greenhouse gas (GHG) emissions through the purchase amount of raw materials and services, and indirect measurement using emission factors. 【Calculation Method Details】 The purchase amount of goods and services obtained from the purchase system of Toyobo Co., Ltd. is extracted by category. The extracted purchase amount is multiplied by emission factors provided by the Japanese government (Ministry of the Environment) to calculate emissions. The emissions for the entire group are then calculated by converting them based on the ratio of sales between Toyobo Co., Ltd. and the entire group. 【Emission Factors】 Emission factors from the emission factor database provided by the Japanese government (Ministry of the Environment) are used for calculating greenhouse gas emissions through the supply chain (purchaser price-based). 【Reason for Choosing this Calculation Method】 The most rational calculation method was chosen based on the GHG Protocol using available data, to ensure consistency with international standards such as the Science Based Targets initiative (SBTi). 【Assumptions】 The emissions for the entire group are estimated based on the ratio of sales between Toyobo Co., Ltd. and the entire group. 【Other Considerations】 The calculated emissions include raw materials, work-in-progress, sub-materials, products that were purchased, and services. The calculation does not include emissions from the procurement and transportation of products.

Scope 3 category 2: Capital goods

(7.5.1) Base year end

03/30/2021

(7.5.2) Base year emissions (metric tons CO2e)

104365

(7.5.3) Methodological details

【Scope】 All of the Toyobo group (TOYOBO CO., Ltd. on a non-consolidated basis and its domestic and overseas subsidiaries) 【Measurement Method】Direct measurement of investment amount in facilities and indirect measurement of greenhouse gas emissions through emission factors 【Calculation Method Details】The investment amount in facilities of Toyobo Co., Ltd. is calculated by multiplying it with the emission factors provided by the Japanese government (Ministry of the Environment). Furthermore, the emission amount of the entire group is calculated by converting it based on the capital goods ratio of Toyobo Co., Ltd. and the entire group. The subject facilities include assets approved by fixed asset investment, such as buildings, structures, vehicles, etc. 【Emission Factors】The emission factor database provided by the Japanese government (Ministry of the Environment) is used (Emission Factor Database for calculating greenhouse gas emissions through supply chains, etc.) 【Reason for Choosing this Calculation Method】 The most rational calculation method was chosen based on the GHG Protocol using available data, to ensure consistency with international standards such as the Science Based Targets initiative (SBTi). 【Assumptions】 The emissions for the entire group are estimated based on the capital goods ratio between TOYOBO CO., Ltd. on a non-consolidated basis and the entire group.

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

(7.5.1) Base year end

03/30/2021

(7.5.2) Base year emissions (metric tons CO2e)

54323

(7.5.3) Methodological details

【Scope】 All of the Toyobo group (TOYOBO CO., Ltd. on a non-consolidated basis and its domestic and overseas subsidiaries) 【Measurement Method】Direct measurement of purchased energy quantity and indirect measurement of greenhouse gas emissions through emission factors 【Calculation Method Details】The energy quantity purchased by our group is calculated by multiplying it with the emission factors provided by IDEA and the Japanese government (Ministry of the Environment). The relevant energy sources include electricity, gas, heavy oil, coal, LNG, etc. 【Emission Factors】The emission factor database provided by IDEA and the Japanese government (Ministry of the Environment) is used (Emission Factor Database for calculating greenhouse gas emissions through supply chains, etc.) 【Reason for Choosing this Calculation Method】 The most rational calculation method was chosen based on the GHG Protocol using available data, to ensure consistency with international standards such as the Science Based Targets initiative (SBTi).

Scope 3 category 4: Upstream transportation and distribution

(7.5.1) Base year end

03/30/2021

(7.5.2) Base year emissions (metric tons CO2e)

54977

(7.5.3) Methodological details

【Scope】 All of the Toyobo group (TOYOBO CO., Ltd. on a non-consolidated basis and its domestic and overseas subsidiaries) 【Measurement Method】 Direct measurement of the quantity of purchased raw materials and the quantity of shipped products, and indirect measurement of greenhouse gas emissions through emission factors 【Calculation Method Details】 Calculated based on the Ton-Kilometer method specified in Japan's Energy Conservation Law. The quantity of materials purchased by Toyobo Co., Ltd. and the quantity of shipped products are converted into mass. This mass is multiplied by the estimated transportation distance and the emission factors provided by the Japanese government (Ministry of the Environment) to calculate the emissions. Furthermore, the emission amount of the entire group is calculated by converting it based on the sales ratio of Toyobo Co., Ltd. and the entire group. 【Emission Factors】 The emission factor database provided by IDEA and the Japanese government (Ministry of the Environment) is used (Emission Factor Database for calculating greenhouse gas emissions through supply chains, etc.) 【Reason for Choosing this Calculation Method】 The most rational calculation method was chosen based on the GHG Protocol using available data, to ensure consistency with international standards such as the Science Based Targets initiative (SBTi). 【Assumption】 The transportation distance uses average logistics values from two points of origin and destination. Additionally, the emission amount of the entire group is estimated based on the sales ratio of TOYOBO CO., Ltd. on a non-consolidated basis and the entire group.

Scope 3 category 5: Waste generated in operations

(7.5.1) Base year end

03/30/2021

(7.5.2) Base year emissions (metric tons CO2e)

34869

(7.5.3) Methodological details

【Scope】 All of the Toyobo group (TOYOBO CO., Ltd. on a non-consolidated basis and its domestic and overseas subsidiaries) 【Measurement Method】 Direct measurement of the weight of waste generated for each waste disposal method and indirect measurement of greenhouse gas emissions through emission factors

【Calculation Method Details】The weight of waste generated by Toyobo Co., Ltd. for each waste disposal method is calculated by multiplying it with the emission factors provided by the Japanese government (Ministry of the Environment). Furthermore, the emission amount of the entire group is calculated by converting it based on the sales ratio of Toyobo Co., Ltd. and the entire group. The waste items include ash, dust, sludge, waste oil, waste liquid, metal scraps, etc. 【Emission Factors】The emission factor database provided by the Japanese government (Ministry of the Environment) is used (Emission Factor Database for calculating greenhouse gas emissions through supply chains, etc.). However, we use IDEA for incineration and landfill disposal. 【Reason for Choosing this Calculation Method】 The most rational calculation method was chosen based on the GHG Protocol using available data, to ensure consistency with international standards such as the Science Based Targets initiative (SBTi). 【Assumption】The emission amount of the entire group is estimated based on the sales ratio of TOYOBO CO., Ltd. on a non-consolidated basis and the entire group.

Scope 3 category 6: Business travel

(7.5.1) Base year end

03/30/2021

(7.5.2) Base year emissions (metric tons CO2e)

733

(7.5.3) Methodological details

【Scope】 All of the Toyobo group (TOYOBO CO., Ltd. on a non-consolidated basis and its domestic and overseas subsidiaries) 【Measurement Method】Direct measurement of the cost of transportation for each mode of transportation used and indirect measurement of greenhouse gas emissions through emission factors 【Calculation Method Details】The cost of transportation for each mode used by Toyobo Co., Ltd. is extracted from the accounting system. The extracted cost is multiplied by the emission factors provided by the Japanese government (Ministry of the Environment) related to business travel to calculate the emissions. Furthermore, the emission amount of the entire group is calculated by converting it based on the ratio of the number of employees of Toyobo Co., Ltd. and the entire group. The transportation costs considered include those for domestic and overseas business travel, such as railways and aircraft. 【Emission Factors】The emission factor database provided by the Japanese government (Ministry of the Environment) is used (Emission Factor Database for calculating greenhouse gas emissions through supply chains, etc.) 【Reason for Choosing this Calculation Method】 The most rational calculation method was chosen based on the GHG Protocol using available data, to ensure consistency with international standards such as the Science Based Targets initiative (SBTi). 【Assumption】The emission amount of the group companies is estimated based on the ratio of the number of employees of TOYOBO CO., Ltd. on a non-consolidated basis and the group companies.

Scope 3 category 7: Employee commuting

(7.5.1) Base year end

03/30/2021

(7.5.2) Base year emissions (metric tons CO2e)

5275

(7.5.3) Methodological details

【Scope】 All of the Toyobo group (TOYOBO CO., Ltd. on a non-consolidated basis and its domestic and overseas subsidiaries) 【Measurement Method】 Direct measurement of the number of employees in each residential area of the company and indirect measurement of greenhouse gas emissions using emission factors 【Details of calculation method】 The total number of employees in each residential area of Toyobo Co., Ltd. and its affiliated companies (both domestic and overseas group companies) is calculated by multiplying the emission factors related to commuting provided by the Japanese government (Ministry of the Environment) and totaling them 【Emission Factors】 Emission factors provided by the Japanese government (Ministry of the Environment) are used from the emission factor database (emission factors for calculating greenhouse gas emissions through the supply chain) 【Reason for Choosing this Calculation Method】 The most rational calculation method was chosen based on the GHG Protocol using available data, to ensure consistency with international standards such as the Science Based Targets initiative (SBTi).

Scope 3 category 8: Upstream leased assets

(7.5.1) Base year end

03/30/2021

(7.5.3) Methodological details

The emissions from assets such as office equipment, which are categorized as upstream lease assets, are calculated and included in Scope 1 and 2 emissions in accordance with Japan's greenhouse gas emissions calculation and reporting system. There are no emissions that should be accounted for in Scope 3 Category 8 according to our assessment.

Scope 3 category 9: Downstream transportation and distribution

(7.5.1) Base year end

03/30/2021

(7.5.3) Methodological details

The emissions from transportation to the shipping destinations are indeed included in Category 4. However, due to the various processing conditions at the product shipping destinations, it is not feasible to calculate the emissions beyond the shipping destinations. Therefore, these emissions are not accurate as of this timing. We may disclose in the future.

Scope 3 category 10: Processing of sold products

(7.5.1) Base year end

03/30/2021

(7.5.3) Methodological details

We have conducted a preliminary estimation and determined that the emissions in this category are sufficiently small and negligible compared to other Scope 3 categories within our group. As a basis for this determination, the following rough calculations were made: ■Preliminary estimation results: For products in our group that undergo common processing (such as assembly), we used emission factors such as those provided by IDEA to calculate the GHG emissions. The results showed that the emissions in this category were sufficiently small and negligible compared to other Scope 3 categories within our group. This is because these products do not require a significant amount of energy, unlike processes such as chemical synthesis. ■Other important points: Our group's products are highly diverse and have numerous applications. The processing stages also vary greatly. These emissions are not accurate as of this timing. We may disclose in the future.

Scope 3 category 11: Use of sold products

(7.5.1) Base year end

03/31/2021

(7.5.2) Base year emissions (metric tons CO2e)

1288352

(7.5.3) Methodological details

【Scope】 All of the Toyobo group (TOYOBO CO., Ltd. on a non-consolidated basis and its domestic and overseas subsidiaries) 【Measurement Method】 Direct measurement of the types, quantity, and destination countries of the products sold, and indirect measurement of greenhouse gas emissions using emission factors 【Details of calculation method】 For eligible products sold by our group, we calculate the GHG emissions by multiplying the emission factors for each utility type by the utility consumption during operation, and further multiplying it by the operating rate and service life. The eligible products include urine sediment examination devices, fully automated genetic analyzers, and VOC (Volatile Organic Compounds) recovery devices,, which are final products sold by Toyobo Co., Ltd. and Toyobo MC Co., Ltd. The service life of each product is assumed to be 15 years for VOC recovery devices and 5 years for urine sediment examination devices and fully

automated genetic analyzers. 【Emission Factors】Emission factors provided by IEA, IDEA, and the Japanese government (Ministry of the Environment) are used. 【Reason for Choosing this Calculation Method】 The most rational calculation method was chosen based on the GHG Protocol using available data, to ensure consistency with international standards such as the Science Based Targets initiative (SBTi). 【Assumptions】 None

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

(7.5.1) Base year end

03/30/2021

(7.5.2) Base year emissions (metric tons CO2e)

143336

(7.5.3) Methodological details

【Scope】 All of the Toyobo group (TOYOBO CO., Ltd. on a non-consolidated basis and its domestic and overseas subsidiaries) 【Measurement Method】Direct measurement of sales revenue and indirect measurement of greenhouse gas emissions using emission factors 【Details of calculation method】The physical quantity of products sold by Toyobo Co., Ltd. is converted to mass. Emission factors for different disposal methods provided by the Japanese government (Ministry of the Environment) are multiplied by the mass of the sold products to calculate emissions. The emissions are then extrapolated for the entire group based on the sales ratio of Toyobo Co., Ltd. and the group as a whole. 【Emission Factors】Emission factors provided by the Japanese government (Ministry of the Environment) are used. 【Reason for Choosing this Calculation Method】 The most rational calculation method was chosen based on the GHG Protocol using available data, to ensure consistency with international standards such as the Science Based Targets initiative (SBTi). 【Assumptions】 It is assumed that the emissions for the entire group are estimated based on the sales ratio of TOYOBO CO., Ltd. on a non-consolidated basis and the group as a whole. Additionally, it is assumed that all products sold by our group are eventually disposed of.

Scope 3 category 13: Downstream leased assets

(7.5.3) Methodological details

Not applicable Due to different business conditions

Scope 3 category 14: Franchises

(7.5.3) Methodological details

Not applicable Due to different business conditions

Scope 3 category 15: Investments

(7.5.3) Methodological details

Negligible Our emission is negligibly small.
[Fixed row]

(7.6) What were your organization’s gross global Scope 1 emissions in metric tons CO2e?

Reporting year

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

614816

(7.6.3) Methodological details

【Scope】All of the Toyobo group (TOYOBO CO., Ltd. on a non-consolidated basis and its domestic and overseas subsidiaries) 【Measurement Method】Scope 1 emissions are calculated based on a methodology aligned with the GHG Protocol. 【Emission Factors】Emission factors are referenced from data provided by the following organizations: • For purchased gas in Japan: Ministry of the Environment • For other sources of CO_2 emissions: Ministry of the Environment and Ministry of Economy, Trade and Industry of Japan 【Inputs】Activity data includes fuel consumption and energy usage. For non-energy-related GHG emissions, activity data includes refrigerant refill volumes, estimated emissions from sanitary wastewater, and other wastewater-related parameters. 【Assumptions】Emissions from the production of electricity and steam sold to other companies are included in Scope 1. The calculation scope of non-energy-related GHG emissions covers Toyobo and its domestic group companies. 【Reason for Choosing this Calculation Method】 The most rational calculation method was chosen based on the GHG Protocol using available data, to ensure consistency with international standards such as the Science Based Targets initiative (SBTi).
[Fixed row]

(7.7) What were your organization’s gross global Scope 2 emissions in metric tons CO2e?

Reporting year

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

160099

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e)

169372

(7.7.4) Methodological details

【Scope】 All of the Toyobo group (TOYOBO CO., Ltd. on a non-consolidated basis and its domestic and overseas subsidiaries) 【Measurement Method】 Scope 2 emissions are calculated based on a methodology aligned with the GHG Protocol. 【Emission Factors】 Emission factors are referenced from data provided by the following organizations: • For purchased electricity in Japan: Ministry of the Environment • For purchased electricity overseas: International Energy Agency (IEA) • For purchased steam and chilled water (both domestic and overseas): Ministry of the Environment of Japan 【Inputs】 Activity data includes electricity, purchased steam, and chilled water consumption at each site. 【Reason for Choosing this Calculation Method】 The most rational calculation method was chosen based on the GHG Protocol using available data, to ensure consistency with international standards such as the Science Based Targets initiative (SBTi).
[Fixed row]

(7.8) Account for your organization’s gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

(7.8.1) Evaluation status

Select from:
☑ Relevant, calculated

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

1880565

(7.8.3) Emissions calculation methodology

Select all that apply
☑ Spend-based method

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

0

(7.8.5) Please explain

【Scope】 All of the Toyobo group (TOYOBO CO., Ltd. on a non-consolidated basis and its domestic and overseas subsidiaries) 【Measurement Method】 Direct measurement of greenhouse gas (GHG) emissions through the purchase amount of raw materials and services, and indirect measurement using emission factors. 【Calculation Method Details】 The purchase amount of goods and services obtained from the purchase system of Toyobo Co., Ltd. is extracted by category. The extracted purchase amount is multiplied by emission factors provided by the Japanese government (Ministry of the Environment) to calculate emissions. The emissions for the entire group are then calculated by converting them based on the ratio of sales between Toyobo Co., Ltd. and the entire group. 【Emission Factors】 Emission factors from the emission factor database provided by the Japanese government (Ministry of the Environment) are used for calculating greenhouse gas emissions through the supply chain (purchaser price-based). 【Reason for Choosing this Calculation Method】 The most rational calculation method was chosen based on the GHG Protocol using available data, to ensure consistency with international standards such as the Science Based Targets initiative (SBTi). 【Assumptions】 The emissions for the entire group are estimated based on the ratio of sales between Toyobo Co., Ltd. and the entire group. 【Third-Party Certification Status】 No third-party certification has been obtained. 【Other Considerations】 The calculated emissions include raw materials, work-in-progress, sub-materials, products that were purchased, and services. The calculation does not include emissions from the procurement and transportation of products.

Capital goods

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

121559

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Asset-specific method

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

0

(7.8.5) Please explain

【Scope】 All of the Toyobo group (TOYOBO CO., Ltd. on a non-consolidated basis and its domestic and overseas subsidiaries) 【Measurement Method】 Direct measurement of investment amount in facilities and indirect measurement of greenhouse gas emissions through emission factors 【Calculation Method Details】 The investment amount in facilities of Toyobo Co., Ltd. is calculated by multiplying it with the emission factors provided by the Japanese government (Ministry of the Environment). Furthermore, the emission amount of the entire group is calculated by converting it based on the capital goods ratio of Toyobo Co., Ltd. and the entire group. The subject facilities include assets approved by fixed asset investment, such as buildings, structures, vehicles, etc. 【Emission Factors】 The emission factor database provided by the Japanese government (Ministry of the Environment) is used (Emission Factor Database for calculating greenhouse gas emissions through supply chains, etc.) 【Reason for Choosing this Calculation Method】 The most rational calculation method was chosen based on the GHG Protocol using available data, to ensure consistency with international standards such as the Science Based Targets initiative (SBTi). 【Assumptions】 The emissions for the entire group are estimated based on the capital goods ratio between TOYOBO CO., Ltd. on a non-consolidated basis and the entire group. 【Third-Party Certification Status】 No third-party certification obtained.

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

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

114431

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

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

0

(7.8.5) Please explain

【Scope】 All of the Toyobo group (TOYOBO CO., Ltd. on a non-consolidated basis and its domestic and overseas subsidiaries) 【Measurement Method】 Direct measurement of purchased energy quantity and indirect measurement of greenhouse gas emissions through emission factors 【Calculation Method Details】 The energy quantity purchased by our group is calculated by multiplying it with the emission factors provided by IDEA and the Japanese government (Ministry of the Environment). The relevant energy sources include electricity, gas, heavy oil, coal, LNG, etc. 【Emission Factors】 The emission factor database provided by IDEA and the Japanese government (Ministry of the Environment) is used (Emission Factor Database for calculating greenhouse gas emissions through supply chains, etc.) 【Reason for Choosing this Calculation Method】 The most rational calculation method was chosen based on the GHG Protocol using available data, to ensure consistency with international standards such as the Science Based Targets initiative (SBTi). 【Third-Party Certification Status】 Third-party certification has been obtained.

Upstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

47965

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Distance-based method

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

0

(7.8.5) Please explain

【Scope】 All of the Toyobo group (TOYOBO CO., Ltd. on a non-consolidated basis and its domestic and overseas subsidiaries) 【Measurement Method】 Direct measurement of the quantity of purchased raw materials and the quantity of shipped products, and indirect measurement of greenhouse gas emissions through emission factors 【Calculation Method Details】 Calculated based on the Ton-Kilometer method specified in Japan's Energy Conservation Law. The quantity of materials purchased by Toyobo Co., Ltd. and the quantity of shipped products are converted into mass. This mass is multiplied by the estimated transportation distance and the emission factors provided by the Japanese government (Ministry of the Environment) to calculate the emissions. Furthermore, the emission amount

of the entire group is calculated by converting it based on the sales ratio of Toyobo Co., Ltd. and the entire group. 【Emission Factors】The emission factor database provided by IDEA and the Japanese government (Ministry of the Environment) is used (Emission Factor Database for calculating greenhouse gas emissions through supply chains, etc.) 【Reason for Choosing this Calculation Method】 The most rational calculation method was chosen based on the GHG Protocol using available data, to ensure consistency with international standards such as the Science Based Targets initiative (SBTi). 【Assumption】The transportation distance uses average logistics values from two points of origin and destination. Additionally, the emission amount of the entire group is estimated based on the sales ratio of TOYOBO CO., Ltd. on a non-consolidated basis and the entire group. 【Third-Party Certification Status】No third-party certification obtained.

Waste generated in operations

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

61131

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Waste-type-specific method

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

0

(7.8.5) Please explain

【Scope】 All of the Toyobo group (TOYOBO CO., Ltd. on a non-consolidated basis and its domestic and overseas subsidiaries) 【Measurement Method】Direct measurement of the weight of waste generated for each waste disposal method and indirect measurement of greenhouse gas emissions through emission factors 【Calculation Method Details】The weight of waste generated by Toyobo Co., Ltd. for each waste disposal method is calculated by multiplying it with the emission factors provided by the Japanese government (Ministry of the Environment). Furthermore, the emission amount of the entire group is calculated by converting it based on the sales ratio of Toyobo Co., Ltd. and the entire group. The waste items include ash, dust, sludge, waste oil, waste liquid, metal scraps, etc. 【Emission Factors】The emission factor database provided by the Japanese government (Ministry of the Environment) is used (Emission Factor Database for calculating greenhouse gas emissions through supply chains, etc.). However, we use IDEA for incineration and landfill disposal. 【Reason for Choosing this Calculation

Method】 The most rational calculation method was chosen based on the GHG Protocol using available data, to ensure consistency with international standards such as the Science Based Targets initiative (SBTi). 【Assumption】The emission amount of the entire group is estimated based on the sales ratio of TOYOBO CO., Ltd. on a non-consolidated basis and the entire group. 【Third-Party Certification Status】No third-party certification obtained.

Business travel

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

7381

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

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

0

(7.8.5) Please explain

【Scope】 All of the Toyobo group (TOYOBO CO., Ltd. on a non-consolidated basis and its domestic and overseas subsidiaries) 【Measurement Method】Direct measurement of the cost of transportation for each mode of transportation used and indirect measurement of greenhouse gas emissions through emission factors 【Calculation Method Details】The cost of transportation for each mode used by Toyobo Co., Ltd. is extracted from the accounting system. The extracted cost is multiplied by the emission factors provided by the Japanese government (Ministry of the Environment) related to business travel to calculate the emissions. Furthermore, the emission amount of the entire group is calculated by converting it based on the ratio of the number of employees of Toyobo Co., Ltd. and the entire group. The transportation costs considered include those for domestic and overseas business travel, such as railways and aircraft. 【Emission Factors】The emission factor database provided by the Japanese government (Ministry of the Environment) is used (Emission Factor Database for calculating greenhouse gas emissions through supply chains, etc.) 【Reason for Choosing this Calculation Method】 The most rational calculation method was chosen based on the GHG Protocol using available data, to ensure consistency with international standards such as the Science Based Targets initiative (SBTi). 【Assumption】The emission amount of the group companies is estimated based on the ratio of the number of employees of TOYOBO CO., Ltd. on a non-consolidated basis and the group

companies. 【Third-Party Certification Status】No third-party certification obtained.

Employee commuting

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

4438

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Distance-based method

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

0

(7.8.5) Please explain

【Scope】All of the Toyobo group (TOYOBO CO., Ltd. on a non-consolidated basis and its domestic and overseas subsidiaries) 【Measurement Method】Direct measurement of the number of employees in each residential area of the company and indirect measurement of greenhouse gas emissions using emission factors 【Details of calculation method】The total number of employees in each residential area of Toyobo Co., Ltd. and its affiliated companies (both domestic and overseas group companies) is calculated by multiplying the emission factors related to commuting provided by the Japanese government (Ministry of the Environment) and totaling them 【Emission Factors】Emission factors provided by the Japanese government (Ministry of the Environment) are used from the emission factor database (emission factors for calculating greenhouse gas emissions through the supply chain) 【Reason for Choosing this Calculation Method】The most rational calculation method was chosen based on the GHG Protocol using available data, to ensure consistency with international standards such as the Science Based Targets initiative (SBTi). 【Third-Party Certification Status】No third-party certification obtained.

Upstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

The emissions from assets such as office equipment, which are categorized as upstream lease assets, are calculated and included in Scope 1 and 2 emissions in accordance with Japan's greenhouse gas emissions calculation and reporting system. There are no emissions that should be accounted for in Scope 3 Category 8 according to our assessment.

Downstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

The emissions from transportation to the shipping destinations are indeed included in Category 4. However, due to the various processing conditions at the product shipping destinations, it is not feasible to calculate the emissions beyond the shipping destinations. Therefore, these emissions are excluded from the calculation.

Processing of sold products

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

We have conducted a preliminary estimation and determined that the emissions in this category are sufficiently small and negligible compared to other Scope 3 categories within our group. As a basis for this determination, the following rough calculations were made: Preliminary estimation results: For products in our group that undergo common processing (such as assembly), we used emission factors such as those provided by IDEA to calculate the GHG emissions. The results showed that the emissions in this category were sufficiently small and negligible compared to other Scope 3 categories within our group. This is because these

products do not require a significant amount of energy, unlike processes such as chemical synthesis. Other important points: Our group's products are highly diverse and have numerous applications. The processing stages also vary greatly. Therefore, it is essential to note that these calculations are based on assumptions and should be considered as preliminary estimations.

Use of sold products

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

1458089

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Methodology for direct use phase emissions, please specify ::For eligible products sold by our group, we calculate the GHG emissions by multiplying the emission factors for each utility type by the utility consumption during operation, and further multiplying it by the operating rate and service life.

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

0

(7.8.5) Please explain

【Scope】 All of the Toyobo group (TOYOBO CO., Ltd. on a non-consolidated basis and its domestic and overseas subsidiaries) 【Measurement Method】Direct measurement of the types, quantity, and destination countries of the products sold, and indirect measurement of greenhouse gas emissions using emission factors 【Details of calculation method】For eligible products sold by our group, we calculate the GHG emissions by multiplying the emission factors for each utility type by the utility consumption during operation, and further multiplying it by the operating rate and service life. The eligible products include urine sediment examination devices, fully automated genetic analyzers, and VOC (Volatile Organic Compounds) recovery devices,, which are final products sold by Toyobo Co., Ltd. and Toyobo MC Co., Ltd. The service life of each product is assumed to be 15 years for VOC recovery devices and 5 years for urine sediment examination devices and fully automated genetic analyzers. 【Emission Factors】Emission factors provided by IEA, IDEA, and the Japanese government (Ministry of the Environment) are used. 【Reason for Choosing this Calculation Method】 The most rational calculation method was chosen based on the GHG Protocol using available data, to ensure consistency with international standards such as the Science Based Targets initiative (SBTi). 【Assumptions】 None 【Third-Party Certification Status】Third-party

certification has been obtained. Other important points: For utility types that do not have emission factors in the emission factor databases provided by IEA, IDEA, and the Japanese government (Ministry of the Environment), we have adopted our own calculated emission factors.

End of life treatment of sold products

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

300278

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

☑ Average product method

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

0

(7.8.5) Please explain

【Scope】 All of the Toyobo group (TOYOBO CO., Ltd. on a non-consolidated basis and its domestic and overseas subsidiaries) 【Measurement Method】 Direct measurement of sales revenue and indirect measurement of greenhouse gas emissions using emission factors 【Details of calculation method】 The physical quantity of products sold by Toyobo Co., Ltd. is converted to mass. Emission factors for different disposal methods provided by the Japanese government (Ministry of the Environment) are multiplied by the mass of the sold products to calculate emissions. The emissions are then extrapolated for the entire group based on the sales ratio of Toyobo Co., Ltd. and the group as a whole. 【Emission Factors】 Emission factors provided by the Japanese government (Ministry of the Environment) are used. 【Reason for Choosing this Calculation Method】 The most rational calculation method was chosen based on the GHG Protocol using available data, to ensure consistency with international standards such as the Science Based Targets initiative (SBTi). 【Assumptions】 It is assumed that the emissions for the entire group are estimated based on the sales ratio of TOYOBO CO., Ltd. on a non-consolidated basis and the group as a whole. Additionally, it is assumed that all products sold by our group are eventually disposed of. 【Third-Party Certification Status】 No third-party certification obtained.

Downstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

In our group's business, there are no downstream lease assets.

Franchises

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

In our group's business, there are no franchises.

Investments

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Since our group belongs to the manufacturing industry, it does not fall under this category.

Other (upstream)

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Since our group belongs to the manufacturing industry, it does not fall under this category.

Other (downstream)

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Since our group belongs to the manufacturing industry, it does not fall under this category.
[Fixed row]

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

	Verification/assurance status
Scope 1	*Select from:* ☑ Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	*Select from:* ☑ Third-party verification or assurance process in place

	Verification/assurance status
Scope 3	*Select from:* ☑ Third-party verification or assurance process in place

[Fixed row]

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

Row 1

(7.9.1.1) Verification or assurance cycle in place

Select from:
☑ Annual process

(7.9.1.2) Status in the current reporting year

Select from:
☑ Complete

(7.9.1.3) Type of verification or assurance

Select from:
☑ Limited assurance

(7.9.1.4) Attach the statement

CDP2025_7.9.1-3_assurance statement.pdf

(7.9.1.5) Page/section reference

Page 1: Cover Letter Pages 2–3: Assurance Report Pages 4–5: Excerpts from TOYOBO REPORT 2025

(7.9.1.6) Relevant standard

Select from:
☑ ISAE3000

(7.9.1.7) Proportion of reported emissions verified (%)

100
[Add row]

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

Row 1

(7.9.2.1) Scope 2 approach

Select from:
☑ Scope 2 market-based

(7.9.2.2) Verification or assurance cycle in place

Select from:
☑ Annual process

(7.9.2.3) Status in the current reporting year

Select from:
☑ Complete

(7.9.2.4) Type of verification or assurance

Select from:

☑ Limited assurance

(7.9.2.5) Attach the statement

CDP2025_7.9.1-3_assurance statement.pdf

(7.9.2.6) Page/ section reference

Page 1: Cover Letter Pages 2–3: Assurance Report Pages 4–5: Excerpts from TOYOBO REPORT 2025

(7.9.2.7) Relevant standard

Select from:

☑ ISAE3000

(7.9.2.8) Proportion of reported emissions verified (%)

100
[Add row]

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

Row 1

(7.9.3.1) Scope 3 category

Select all that apply

☑ Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

☑ Scope 3: Use of sold products

(7.9.3.2) Verification or assurance cycle in place

Select from:

☑ Annual process

(7.9.3.3) Status in the current reporting year

Select from:

☑ Complete

(7.9.3.4) Type of verification or assurance

Select from:

☑ Limited assurance

(7.9.3.5) Attach the statement

CDP2025_7.9.1-3_assurance statement.pdf

(7.9.3.6) Page/section reference

Page 1: Cover Letter Pages 2–3: Assurance Report Pages 4–5: Excerpts from TOYOBO REPORT 2025

(7.9.3.7) Relevant standard

Select from:

☑ ISAE3000

(7.9.3.8) Proportion of reported emissions verified (%)

100
[Add row]

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

Select from:
☑ Decreased

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

Change in renewable energy consumption

(7.10.1.1) Change in emissions (metric tons CO2e)

250

(7.10.1.2) Direction of change in emissions

Select from:
☑ Decreased

(7.10.1.3) Emissions value (percentage)

0.003

(7.10.1.4) Please explain calculation

【Calculation method for emissions change】In the reporting year, the reduction in Scope 2 emissions due to increased use of renewable electricity was 250 tCO_2. This figure was calculated based on the increase in solar power generation within the Toyobo Group, which rose from 896 MWh in the previous year to 1,487 MWh in the reporting year. The difference of approximately 591 MWh was multiplied by the national average emissions factor of 0.423 tCO_2/MWh, as provided by Japan's Ministry of the Environment. The reduction rate was calculated as follows: (250 ÷ 830,000) × 100 = approximately 0.03% 【Relation to the change factor】 This reduction is attributed to the installation of new solar power generation equipment at the Inuyama Plant, which contributed to the overall increase in renewable electricity generation within the Toyobo Group. 【Data source and reliability】 Emissions were calculated in accordance with the GHG Protocol Corporate Standard, using the national average emissions factor published by Japan's Ministry of the Environment. 【Additional information】This change primarily reflects renewable energy adoption at domestic manufacturing sites, particularly the Inuyama Plant.

Other emissions reduction activities

(7.10.1.1) Change in emissions (metric tons CO2e)

40374

(7.10.1.2) Direction of change in emissions

Select from:

☑ Decreased

(7.10.1.3) Emissions value (percentage)

4.8

(7.10.1.4) Please explain calculation

【Calculation method for emissions change】In the reporting year, Scope 1 and Scope 2 emissions were reduced by 40,374 tCO_2 through various energy-saving and fuel-switching initiatives. This reduction corresponds to approximately 4.8% of the previous year's total emissions of 830,000 tCO_2, calculated as: (40,374 ÷ 830,000) × 100 = 4.8% 【Relation to the change factor】The reduction was primarily driven by the commissioning of a new power plant in the second half of FY2024, which implemented fuel decarbonization measures (coal phase-out), resulting in a significant decrease in Scope 1 emissions. Additionally, all manufacturing sites carried out continuous energy-saving activities, including insulation improvements, heat recovery, and upgrades to energy-efficient equipment, contributing to reductions in both Scope 1 and Scope 2 emissions. 【Data source and reliability】 Emissions were calculated in accordance with the GHG Protocol Corporate Standard, based on internal operational data. 【Additional information】 These reductions reflect group-wide initiatives across Toyobo's manufacturing operations, with notable impact from the newly commissioned power plant and ongoing energy efficiency improvements.

Divestment

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

N/A

Acquisitions

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:
☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

N/A

Mergers

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

N/A

Change in output

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

N/A

Change in methodology

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:
☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

N/A

Change in boundary

(7.10.1.1) Change in emissions (metric tons CO2e)

1672

(7.10.1.2) Direction of change in emissions

Select from:
☑ Decreased

(7.10.1.3) Emissions value (percentage)

0.2

(7.10.1.4) Please explain calculation

【Calculation method for emissions change】 In the reporting year, changes to the organizational boundary—including the addition, consolidation, and removal of facilities, as well as adjustments to the reporting scope (cut-off criteria)—resulted in a net reduction of 1,672 tCO_2 in Scope 1 and Scope 2 emissions. This corresponds to a 0.2% decrease compared to the previous year's total emissions of 830,000 tCO_2, calculated as: (1,672 ÷ 830,000) × 100 = 0.2% 【Relation to the change factor】 The emissions reduction reflects structural changes in the reporting boundary, including facility additions and closures, as well as refinements to the

scope of emissions included in the inventory. These adjustments were made to better align with operational control and data availability. 【Data source and reliability】 Emissions were calculated in accordance with the GHG Protocol Corporate Standard, and the boundary changes were documented and reviewed internally. The emissions data are subject to third-party verification. 【Additional information】 The net reduction includes both increases and decreases in emissions resulting from boundary changes across multiple sites and operational units.

Change in physical operating conditions

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:
☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

N/A

Unidentified

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:
☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

N/A

Other

(7.10.1.1) Change in emissions (metric tons CO2e)

4335

(7.10.1.2) Direction of change in emissions

Select from:
☑ Decreased

(7.10.1.3) Emissions value (percentage)

0.5

(7.10.1.4) Please explain calculation

【Calculation method for emissions change】 In the reporting year, despite a 1.9% increase in revenue compared to the previous year, total Scope 1 and Scope 2 emissions were reduced by 4,335 tCO_2 through continuous optimization of production processes. This reduction was estimated by analyzing the total change in emissions between the previous year and the reporting year (46,631 tCO_2), and subtracting the reductions attributed to renewable energy (250 tCO_2), other emissions reduction activities (40,374 tCO_2), and boundary changes (1,672 tCO_2). The remaining reduction of 4,335 tCO_2 is attributed to improvements in production efficiency. Reduction rate: (4,335 ÷ 830,000) × 100 = approximately 0.5% 【Relation to the change factor】 The Toyobo Group continuously promotes optimization of production processes through the PDCA cycle. These efforts enabled emissions reductions even as business activity increased, demonstrating improved operational efficiency. 【Data source and reliability】 Emissions were calculated in accordance with the GHG Protocol Corporate Standard, based on internal operational and financial data. 【Additional information】 This reduction reflects group-wide process improvements, including operational streamlining across manufacturing sites. [Fixed row]

(7.10.2) Are your emissions performance calculations in 7.10 and 7.10.1 based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Select from:
☑ Market-based

(7.12) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

Select from:
☑ No

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

Select from:
☑ Yes

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

Row 1

(7.15.1.1) Greenhouse gas

Select from:
☑ CO2

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

612398

(7.15.1.3) GWP Reference

Select from:
☑ IPCC Sixth Assessment Report (AR6 - 100 year)

Row 2

(7.15.1.1) Greenhouse gas

Select from:

☑ CH4

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

349

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Sixth Assessment Report (AR6 - 100 year)

Row 3

(7.15.1.1) Greenhouse gas

Select from:

☑ N2O

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

1782

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Sixth Assessment Report (AR6 - 100 year)

Row 4

(7.15.1.1) Greenhouse gas

Select from:

☑ HFCs

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

286

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Sixth Assessment Report (AR6 - 100 year)

[Add row]

(7.16) Break down your total gross global Scope 1 and 2 emissions by country/area.

Brazil

(7.16.1) Scope 1 emissions (metric tons CO2e)

625

(7.16.2) Scope 2, location-based (metric tons CO2e)

1384

(7.16.3) Scope 2, market-based (metric tons CO2e)

1384

China

(7.16.1) Scope 1 emissions (metric tons CO2e)

288

(7.16.2) Scope 2, location-based (metric tons CO2e)

2015

(7.16.3) Scope 2, market-based (metric tons CO2e)

2015

El Salvador

(7.16.1) Scope 1 emissions (metric tons CO2e)

10809

(7.16.2) Scope 2, location-based (metric tons CO2e)

1970

(7.16.3) Scope 2, market-based (metric tons CO2e)

1970

Indonesia

(7.16.1) Scope 1 emissions (metric tons CO2e)

5237

(7.16.2) Scope 2, location-based (metric tons CO2e)

23777

(7.16.3) Scope 2, market-based (metric tons CO2e)

23777

Japan

(7.16.1) Scope 1 emissions (metric tons CO2e)

591559

(7.16.2) Scope 2, location-based (metric tons CO2e)

104298

(7.16.3) Scope 2, market-based (metric tons CO2e)

113571

Malaysia

(7.16.1) Scope 1 emissions (metric tons CO2e)

1594

(7.16.2) Scope 2, location-based (metric tons CO2e)

15813

(7.16.3) Scope 2, market-based (metric tons CO2e)

15813

Saudi Arabia

(7.16.1) Scope 1 emissions (metric tons CO2e)

83

(7.16.2) Scope 2, location-based (metric tons CO2e)

1382

(7.16.3) Scope 2, market-based (metric tons CO2e)

1382

Spain

(7.16.1) Scope 1 emissions (metric tons CO2e)

49

(7.16.2) Scope 2, location-based (metric tons CO2e)

198

(7.16.3) Scope 2, market-based (metric tons CO2e)

198

Thailand

(7.16.1) Scope 1 emissions (metric tons CO2e)

4561

(7.16.2) Scope 2, location-based (metric tons CO2e)

8981

(7.16.3) Scope 2, market-based (metric tons CO2e)

8981

United States of America

(7.16.1) Scope 1 emissions (metric tons CO2e)

10

(7.16.2) Scope 2, location-based (metric tons CO2e)

12

(7.16.3) Scope 2, market-based (metric tons CO2e)

12

Viet Nam

(7.16.1) Scope 1 emissions (metric tons CO2e)

1

(7.16.2) Scope 2, location-based (metric tons CO2e)

270

(7.16.3) Scope 2, market-based (metric tons CO2e)

270
[Fixed row]

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

Select all that apply
☑ By facility

(7.17.2) Break down your total gross global Scope 1 emissions by business facility.

Row 1

(7.17.2.1) Facility

Tsuruga Research and Production Center

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

260030

(7.17.2.3) Latitude

35.63963

(7.17.2.4) Longitude

136.066833

Row 2

(7.17.2.1) Facility

Iwakuni Production Center

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

105390

(7.17.2.3) Latitude

34.127845

(7.17.2.4) Longitude

132.206358

Row 3

(7.17.2.1) Facility

Inuyama Plant

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

123211

(7.17.2.3) Latitude

35.371942

(7.17.2.4) Longitude

136.923248

Row 4

(7.17.2.1) Facility

Research Center

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

3724

(7.17.2.3) Latitude

35.111069

(7.17.2.4) Longitude

135.915363

Row 5

(7.17.2.1) Facility

Utsunomiya Plant

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

55829

(7.17.2.3) Latitude

36.607086

(7.17.2.4) Longitude

140.036376

Row 6

(7.17.2.1) Facility

Takasago Plant

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

8126

(7.17.2.3) Latitude

34.770719

(7.17.2.4) Longitude

134.766135

Row 7

(7.17.2.1) Facility

Other domestic bases in Japan

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

6636

(7.17.2.3) Latitude

0

(7.17.2.4) Longitude

0

Row 8

(7.17.2.1) Facility

Domestic group companies in Japan

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

28614

(7.17.2.3) Latitude

0

(7.17.2.4) Longitude

0

Row 9

(7.17.2.1) Facility

Overseas group companies

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

23256

(7.17.2.3) Latitude

0

(7.17.2.4) Longitude

0
[Add row]

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

Select all that apply
☑ By facility

(7.20.2) Break down your total gross global Scope 2 emissions by business facility.

Row 1

(7.20.2.1) Facility

Tsuruga Research and Production Center

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

28734

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

33692

Row 2

(7.20.2.1) Facility

Iwakuni Production Center

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

11285

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

13873

Row 3

(7.20.2.1) Facility

Inuyama Plant

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

13383

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

13320

Row 4

(7.20.2.1) Facility

Utsunomiya Plant

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

11111

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

11322

Row 5

(7.20.2.1) Facility

Takasago Plant

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

4115

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

4076

Row 6

(7.20.2.1) Facility

Research Center

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

8299

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

8221

Row 7

(7.20.2.1) Facility

Other domestic bases in Japan

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

9046

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

9348

Row 8

(7.20.2.1) Facility

Domestic group companies in Japan

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

18325

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

19719

Row 9

(7.20.2.1) Facility

Overseas group companies

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

55801

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

55801
[Add row]

(7.22) Break down your gross Scope 1 and Scope 2 emissions between your consolidated accounting group and other entities included in your response.

Consolidated accounting group

(7.22.1) Scope 1 emissions (metric tons CO2e)

614815

(7.22.2) Scope 2, location-based emissions (metric tons CO2e)

160099

(7.22.3) Scope 2, market-based emissions (metric tons CO2e)

169372

(7.22.4) Please explain

N/A

All other entities

(7.22.1) Scope 1 emissions (metric tons CO2e)

0

(7.22.2) Scope 2, location-based emissions (metric tons CO2e)

0

(7.22.3) Scope 2, market-based emissions (metric tons CO2e)

0

(7.22.4) Please explain

N/A
[Fixed row]

(7.23) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

Select from:
☑ No

(7.27) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Row 1

(7.27.1) Allocation challenges

Select from:
☑ Customer base is too large and diverse to accurately track emissions to the customer level

(7.27.2) Please explain what would help you overcome these challenges

In the midst of increasing complexity in the manufacturing process, it is necessary to establish rules and data to allocate appropriate emission levels for each customer and product.
[Add row]

(7.28) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

	Do you plan to develop your capabilities to allocate emissions to your customers in the future?	Describe how you plan to develop your capabilities
	Select from: ☑ Yes	*Understanding internal data and developing rules*

[Fixed row]

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

Select from:

☑ More than 5% but less than or equal to 10%

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

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	*Select from:* ☑ Yes
Consumption of purchased or acquired electricity	*Select from:* ☑ Yes
Consumption of purchased or acquired heat	*Select from:* ☑ No
Consumption of purchased or acquired steam	*Select from:*

	Indicate whether your organization undertook this energy-related activity in the reporting year
	☑ Yes
Consumption of purchased or acquired cooling	*Select from:* ☑ Yes
Generation of electricity, heat, steam, or cooling	*Select from:* ☑ Yes

[Fixed row]

(7.30.1) Report your organization’s energy consumption totals (excluding feedstocks) in MWh.

Consumption of fuel (excluding feedstock)

(7.30.1.1) Heating value

Select from:
☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

0

(7.30.1.3) MWh from non-renewable sources

2401679

(7.30.1.4) Total (renewable + non-renewable) MWh

2401679.00

Consumption of purchased or acquired electricity

(7.30.1.1) Heating value

Select from:

☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

2227

(7.30.1.3) MWh from non-renewable sources

360394

(7.30.1.4) Total (renewable + non-renewable) MWh

362621.00

Consumption of purchased or acquired steam

(7.30.1.1) Heating value

Select from:

☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

0

(7.30.1.3) MWh from non-renewable sources

9458

(7.30.1.4) Total (renewable + non-renewable) MWh

9458.00

Consumption of purchased or acquired cooling

(7.30.1.1) Heating value

Select from:
☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

0

(7.30.1.3) MWh from non-renewable sources

2120

(7.30.1.4) Total (renewable + non-renewable) MWh

2120.00

Consumption of self-generated non-fuel renewable energy

(7.30.1.1) Heating value

Select from:
☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

1487

(7.30.1.4) Total (renewable + non-renewable) MWh

1487.00

Total energy consumption

(7.30.1.1) Heating value

Select from:
☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

3714

(7.30.1.3) MWh from non-renewable sources

2773651

(7.30.1.4) Total (renewable + non-renewable) MWh

2777365.00
[Fixed row]

(7.30.6) Select the applications of your organization’s consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	*Select from:* ☑ Yes
Consumption of fuel for the generation of heat	*Select from:* ☑ Yes
Consumption of fuel for the generation of steam	*Select from:*

	Indicate whether your organization undertakes this fuel application
	☑ Yes
Consumption of fuel for the generation of cooling	*Select from:* ☑ No
Consumption of fuel for co-generation or tri-generation	*Select from:* ☑ No

[Fixed row]

(7.30.7) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.8) Comment

N/A

Other biomass

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.8) Comment

N/A

Other renewable fuels (e.g. renewable hydrogen)

(7.30.7.1) Heating value

Select from:

☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.8) Comment

N/A

Coal

(7.30.7.1) Heating value

Select from:

☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

1029560

(7.30.7.3) MWh fuel consumed for self-generation of electricity

617736

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.5) MWh fuel consumed for self-generation of steam

411824

(7.30.7.8) Comment

N/A

Oil

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

289614

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

289614

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.8) Comment

N/A

Gas

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

944134

(7.30.7.3) MWh fuel consumed for self-generation of electricity

488423

(7.30.7.4) MWh fuel consumed for self-generation of heat

56810

(7.30.7.5) MWh fuel consumed for self-generation of steam

398901

(7.30.7.8) Comment

N/A

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

(7.30.7.1) Heating value

Select from:

☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

138372

(7.30.7.3) MWh fuel consumed for self-generation of electricity

83023

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.5) MWh fuel consumed for self-generation of steam

55349

(7.30.7.8) Comment

N/A

Total fuel

(7.30.7.1) Heating value

Select from:

☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

2401680

(7.30.7.3) MWh fuel consumed for self-generation of electricity

1189182

(7.30.7.4) MWh fuel consumed for self-generation of heat

346424

(7.30.7.5) MWh fuel consumed for self-generation of steam

866074

(7.30.7.8) Comment

N/A
[Fixed row]

(7.30.9) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

Electricity

(7.30.9.1) Total Gross generation (MWh)

406553

(7.30.9.2) Generation that is consumed by the organization (MWh)

406553

(7.30.9.3) Gross generation from renewable sources (MWh)

1487

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

1487

Heat

(7.30.9.1) Total Gross generation (MWh)

346424

(7.30.9.2) Generation that is consumed by the organization (MWh)

346424

(7.30.9.3) Gross generation from renewable sources (MWh)

0

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

0

Steam

(7.30.9.1) Total Gross generation (MWh)

867686

(7.30.9.2) Generation that is consumed by the organization (MWh)

867686

(7.30.9.3) Gross generation from renewable sources (MWh)

0

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

0

Cooling

(7.30.9.1) Total Gross generation (MWh)

0

(7.30.9.2) Generation that is consumed by the organization (MWh)

0

(7.30.9.3) Gross generation from renewable sources (MWh)

0

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

0
[Fixed row]

(7.30.14) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in 7.7.

Row 1

(7.30.14.1) Country/area

Select from:
☑ Japan

(7.30.14.2) Sourcing method

Select from:
☑ Purchase from an on-site installation owned by a third party (on-site PPA)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Solar

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

1277

(7.30.14.6) Tracking instrument used

Select from:

☑ Contract

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

Select from:

☑ Japan

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

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

2023

(7.30.14.10) Comment

N/A

Row 2

(7.30.14.1) Country/area

Select from:

☑ Brazil

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

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

2227

(7.30.14.6) Tracking instrument used

Select from:

☑ I-REC

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

Select from:

☑ Brazil

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

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

2018

(7.30.14.10) Comment

Generation facility name: Central Eólica Babilônia I S.A Certificate issuer: Instituto Totum Certificate ID range: 0000-0221-2940-1357.000000 to 0000-0221-2940-3583.999999
[Add row]

(7.30.16) Provide a breakdown by country/area of your electricity/heat/steam/cooling consumption in the reporting year.

Brazil

(7.30.16.1) Consumption of purchased electricity (MWh)

18603

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

2853

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

21456.00

China

(7.30.16.1) Consumption of purchased electricity (MWh)

3021

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

1171

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

1411

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

5603.00

El Salvador

(7.30.16.1) Consumption of purchased electricity (MWh)

17712

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

44002

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

61714.00

Indonesia

(7.30.16.1) Consumption of purchased electricity (MWh)

28771

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

6091

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

25508

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

60370.00

Japan

(7.30.16.1) Consumption of purchased electricity (MWh)

244514

(7.30.16.2) Consumption of self-generated electricity (MWh)

405066

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

4317

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

1110779

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

1764676.00

Malaysia

(7.30.16.1) Consumption of purchased electricity (MWh)

25156

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

7044

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

32200.00

Saudi Arabia

(7.30.16.1) Consumption of purchased electricity (MWh)

2226

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

336

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

2562.00

Spain

(7.30.16.1) Consumption of purchased electricity (MWh)

1162

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

196

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

1358.00

Thailand

(7.30.16.1) Consumption of purchased electricity (MWh)

18664

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

21928

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

40592.00

United States of America

(7.30.16.1) Consumption of purchased electricity (MWh)

34

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

49

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

83.00

Viet Nam

(7.30.16.1) Consumption of purchased electricity (MWh)

531

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

4

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

535.00
[Fixed row]

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

Row 1

(7.45.1) Intensity figure

1.86

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

784188

(7.45.3) Metric denominator

Select from:
☑ unit total revenue

(7.45.4) Metric denominator: Unit total

422032

(7.45.5) Scope 2 figure used

Select from:

☑ Market-based

(7.45.6) % change from previous year

7

(7.45.7) Direction of change

Select from:

☑ Decreased

(7.45.8) Reasons for change

Select all that apply

☑ Change in renewable energy consumption

☑ Other emissions reduction activities

☑ Change in revenue

(7.45.9) Please explain

The reduction in emissions intensity during the reporting year was primarily driven by the following three factors: Change in Renewable Energy Consumption The installation of new solar power generation equipment at the Inuyama Plant led to an increase of approximately 591 MWh in renewable electricity consumption across the Toyobo Group compared to the previous year. Other Emissions Reduction Activities In the second half of FY2024, a newly commissioned power plant implemented fuel-switching measures, including the phase-out of coal, resulting in a significant reduction in Scope 1 emissions. Additionally, all manufacturing sites carried out continuous energy-saving initiatives such as insulation improvements, heat recovery, and the adoption of energy-efficient equipment, contributing to reductions in both Scope 1 and Scope 2 emissions. Impact of Sales Growth The company recorded net sales of ¥422.0 billion in the reporting year, representing a 1.9% increase compared to the previous year. This growth in sales expanded the denominator in the emissions intensity calculation (tCO_2/¥), which also contributed to the improvement in emissions intensity. These efforts reflect Toyobo Group's commitment to decarbonization and energy efficiency across its manufacturing operations and have significantly contributed to the reduction in emissions intensity.
[Add row]

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

Row 1

(7.52.1) Description

Select from:

☑ Waste

(7.52.2) Metric value

0.4

(7.52.3) Metric numerator

Total landfill waste volume

(7.52.4) Metric denominator (intensity metric only)

Total amount of waste

(7.52.5) % change from previous year

0

(7.52.6) Direction of change

Select from:

☑ No change

(7.52.7) Please explain

Our group believes that effective waste utilization is crucial for promoting a circular economy and reducing GHG emissions throughout the entire value chain. Therefore, we have been working towards the goal of reducing the annual landfill ratio of waste to less than 1% of the total waste volume. Through thorough implementation of reduction, reuse, and recycling practices, we have maintained a landfill ratio of less than 1% in the reporting year. The landfill waste total includes landfill disposal volume, thermal recycling residue after simple incineration, on-site landfill disposal volume, and on-site landfill disposal volume after intermediate processing.
[Add row]

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

Select all that apply

☑ Absolute target

(7.53.1) Provide details of your absolute emissions targets and progress made against those targets.

Row 1

(7.53.1.1) Target reference number

Select from:

☑ Abs 2

(7.53.1.2) Is this a science-based target?

Select from:

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

(7.53.1.3) Science Based Targets initiative official validation letter

CDP2024_7.53.1_SBTi-official-validation-letter .pdf

(7.53.1.4) Target ambition

Select from:

☑ Well-below 2°C aligned

(7.53.1.5) Date target was set

12/08/2022

(7.53.1.6) Target coverage

Select from:

☑ Organization-wide

(7.53.1.7) Greenhouse gases covered by target

Select all that apply

☑ Carbon dioxide (CO2)

(7.53.1.8) Scopes

Select all that apply

☑ Scope 3

(7.53.1.10) Scope 3 categories

Select all that apply

☑ Scope 3, Category 1 – Purchased goods and services

☑ Scope 3, Category 11 – Use of sold products

(7.53.1.11) End date of base year

03/30/2021

(7.53.1.14) Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

1028485

(7.53.1.24) Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

1288352

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

2316837.000

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

2316837.000

(7.53.1.35) Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

100

(7.53.1.45) Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

100

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

100

(7.53.1.53) Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

(7.53.1.54) End date of target

03/30/2031

(7.53.1.55) Targeted reduction from base year (%)

12.5

(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

2027232.375

(7.53.1.59) Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons

CO2e)

1880565

(7.53.1.69) Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

1458089

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

3338654.000

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

3338654.000

(7.53.1.78) Land-related emissions covered by target

Select from:

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.1.79) % of target achieved relative to base year

-352.83

(7.53.1.80) Target status in reporting year

Select from:

☑ Underway

(7.53.1.82) Explain target coverage and identify any exclusions

In Category 1 and Category 11 in Scope3, there are no exclusions, and all items are included within the scope of the targets. The base year for measurement is the 2021 fiscal year, starting from April 2020 and ending in March 2021. Additionally, the target year is the 2031 fiscal year, starting from April 2030 and ending in March 2031.

(7.53.1.83) Target objective

As described in Opp1 and Opp7 of section 3.6.1, achieving this goal will lead to an increase in sales through business opportunity acquisition.

(7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year

The target in line with the well-below 2 goal has obtained certification from SBTi. Progress is reviewed annually, and if it is determined that achieving the target is difficult, the target will be reviewed with the approval of the highest senior management-level positions with responsibility for environmental issues. 【Category 1】 The plan is to reduce Category 1 by reducing the amount of raw materials used and transitioning to low-carbon and decarbonized materials. Specifically, in the "film business" which accounts for over 40% of the amount spent on raw material purchases, technologies and initiatives that contribute to reducing the use of petroleum-derived resources are defined as "green" and the goal is set to achieve "Greenification" in 60% of film products by FY2031. The actual achievement in the reporting year was 14%. Film products that reduce the use of petroleum-derived resources are also low-carbon/decarbonized products, and by promoting "Greenification" of film products, the company aims to reduce risks and acquire business opportunities. In addition to the achievement rate, the use of indicators such as the amount of biomass raw materials and recycled materials will be monitored. 【Category 11】 The plan is to reduce Category 11 through energy efficiency in "VOC recovery devices," "urine sediment examination devices," and "fully automated genetic analysis devices" operating at sales locations (customer bases, etc.). Specifically, for the "VOC recovery devices" which account for over 90% of Category 11, the company plans to switch to "nitrogen desorption recovery devices" that contribute to approximately 80% reduction in GHG emissions compared to the current mainstay "steam desorption recovery devices" in the company's product lineup. In addition to the achievement rate, the sales composition ratio of VOC recovery devices will be monitored as an indicator used other than the target achievement rate.

(7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

☑ Yes

Row 2

(7.53.1.1) Target reference number

Select from:

☑ Abs 3

(7.53.1.2) Is this a science-based target?

Select from:

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

(7.53.1.3) Science Based Targets initiative official validation letter

CDP2024_7.53.1_SBTi-official-validation-letter .pdf

(7.53.1.4) Target ambition

Select from:

☑ Well-below 2°C aligned

(7.53.1.5) Date target was set

12/08/2022

(7.53.1.6) Target coverage

Select from:

☑ Organization-wide

(7.53.1.7) Greenhouse gases covered by target

Select all that apply

☑ Methane (CH4)

☑ Nitrous oxide (N2O)

☑ Carbon dioxide (CO2)

☑ Perfluorocarbons (PFCs)

☑ Hydrofluorocarbons (HFCs)

☑ Sulphur hexafluoride (SF6)

☑ Nitrogen trifluoride (NF3)

(7.53.1.8) Scopes

Select all that apply

☑ Scope 1

☑ Scope 2

(7.53.1.9) Scope 2 accounting method

Select from:

☑ Market-based

(7.53.1.11) End date of base year

03/30/2021

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

717872

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

183798

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

0.000

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

901670.000

(7.53.1.33) Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100.0

(7.53.1.34) Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100.0

(7.53.1.53) Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100.0

(7.53.1.54) End date of target

03/30/2031

(7.53.1.55) Targeted reduction from base year (%)

27

(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

658219.100

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

614815

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

169372

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

784187.000

(7.53.1.78) Land-related emissions covered by target

Select from:

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.1.79) % of target achieved relative to base year

48.26

(7.53.1.80) Target status in reporting year

Select from:

☑ Underway

(7.53.1.82) Explain target coverage and identify any exclusions

In Scope 1 and Scope 2, there are no exclusions, and all items are included within the scope of the targets. The base year for measurement is the 2021 fiscal year, starting from April 2020 and ending in March 2021. Additionally, the target year is the 2031 fiscal year, starting from April 2030 and ending in March 2031.

(7.53.1.83) Target objective

As described in Risk2 of section 3.1.1 and Opp2 of section 3.6.1, achieving this goal will lead to a reduction in indirect operating expenses (OPEX).

(7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year

The target in line with the well-below 2 goal has obtained certification from SBTi. Progress is reviewed annually, and if it is determined that achieving the target is difficult, the target will be reviewed with the approval of the highest senior management-level positions with responsibility for environmental issues. Our group considers the increase in GHG emissions (Scope 1, 2) as a significant climate-related risk and has announced the "Sustainable Vision 2030" including the "Roadmap to Carbon Neutrality" until FY2031, in 2022. In this roadmap, the goal is to reduce GHG emissions (Scope 1, 2) to 655,000 tons of CO2 by FY2031 through energy efficiency, improved production efficiency, fuel conversion, and the introduction of renewable energy. In addition to the achievement rate, indicators such as energy consumption and progress in sales are monitored. The main reduction measures and their respective contribution rates to the overall reduction are as follows: (1) Energy conservation (including improved production efficiency): approximately 30% (2) Fuel conversion (coal phase-out, etc.): approximately 40% (3) Optimization of electricity, including the use of renewable energy: approximately 30% In the reporting year, efforts are being made in all of the above measures: (1) Implementation of the recovery and utilization of waste heat, as well as rationalization of manufacturing processes (2) Upgrading and fully operating the new in-house power generation facility at the Iwakuni plant (shifting away from the coal to liquefied natural gas and RPF). (3) Gradually introducing solar power generation systems to our factories and other buildings. In the reporting year, we installed additional systems at our Inuyama Factory and also installed a new system at our factory in Thailand. As a result, the amount of electricity generated by solar power generation in the reporting year was 1,487 MWh.

(7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

☑ Yes

Row 3

(7.53.1.1) Target reference number

Select from:

☑ Abs 4

(7.53.1.2) Is this a science-based target?

Select from:

☑ Yes, we consider this a science-based target, but we have not committed to seek validation of this target by the Science Based Targets initiative within the next two years

(7.53.1.4) Target ambition

Select from:

☑ 1.5°C aligned

(7.53.1.5) Date target was set

05/25/2022

(7.53.1.6) Target coverage

Select from:

☑ Organization-wide

(7.53.1.7) Greenhouse gases covered by target

Select all that apply

☑ Methane (CH4)

☑ Nitrous oxide (N2O)

☑ Carbon dioxide (CO2)

☑ Perfluorocarbons (PFCs)

☑ Hydrofluorocarbons (HFCs)

☑ Sulphur hexafluoride (SF6)

☑ Nitrogen trifluoride (NF3)

(7.53.1.8) Scopes

Select all that apply

☑ Scope 1
☑ Scope 2

(7.53.1.9) Scope 2 accounting method

Select from:
☑ Market-based

(7.53.1.11) End date of base year

03/30/2021

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

717872

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

183798

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

0.000

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

901670.000

(7.53.1.33) Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

(7.53.1.34) Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

(7.53.1.53) Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

(7.53.1.54) End date of target

03/30/2051

(7.53.1.55) Targeted reduction from base year (%)

100

(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

0.000

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

614815

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

169372

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

784187.000

(7.53.1.78) Land-related emissions covered by target

Select from:

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.1.79) % of target achieved relative to base year

13.03

(7.53.1.80) Target status in reporting year

Select from:

☑ Underway

(7.53.1.82) Explain target coverage and identify any exclusions

Our company has set a target to achieve net-zero Scope 1,2 emissions by the fiscal year 2051 across the entire group. The Scope 12 emissions for the fiscal year 2021 were approximately 900,000 tons of CO2, so reductions to that extent are necessary. As measures, we plan to promote energy-saving initiatives through business improv) and, enhance production efficiency, implement fuel conversion (phasing out coal), consider the introduction of carbon-free fuels, adopt/relocate renewable energy sources (such as solar power and small-scale hydroelectric power), and decarbonize electricity. By achieving a 46% reduction by the fiscal year 2031 through these measures, we aim to further transition to carbon-free fuels such as hydrogen and ammonia, electrify production processes, procure carbon-free electricity, and introduce carbon offset measures like CCUS and forest absorption to achieve net-zero emissions by the fiscal year 2051. Furthermore, the target year which starts in April 2050 and ends in March 2051 is expressed as the year 2051 following the reporting rules.

(7.53.1.83) Target objective

Increased sales through indirect OPEX reductions and business opportunities acquisition.

(7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year

Our company has set a target to achieve net-zero Scope 1 and 2 emissions by FY2051 across the entire group. The Scope 1 and 2 emissions for FY2021 were approximately 900,000 tCO_2, so reductions to that extent are necessary. Measures include promoting energy-saving initiatives through business improvements, enhancing production efficiency, implementing fuel conversion (phasing out coal), considering the introduction of carbon-free fuels, adopting/relocating renewable energy sources (such as solar power and small-scale hydroelectric power), and decarbonizing electricity. By achieving a 46% reduction by FY2031 through these measures, we aim to further transition to carbon-free fuels, electrify production processes, procure carbon-free electricity, and introduce carbon offset measures like CCUS and forest absorption to achieve net-zero emissions by FY2051. In the reporting year, we continued implementing energy-saving measures, improving production efficiency, fully operating LNG-based in-house power generation at the Iwakuni plant, and expanding solar PV installations, generating 1,487 MWh.

(7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

☑ No

[Add row]

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

Select all that apply

☑ Targets to reduce methane emissions

☑ Net-zero targets

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

Row 1

(7.54.2.1) Target reference number

Select from:

☑ Oth 1

(7.54.2.2) Date target was set

03/30/2021

(7.54.2.3) Target coverage

Select from:

☑ Country/area/region

(7.54.2.4) Target type: absolute or intensity

Select from:

☑ Absolute

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

Waste management

☑ Other waste management, please specify :Reduction of VOC emissions

(7.54.2.7) End date of base year

03/30/2015

(7.54.2.8) Figure or percentage in base year

224.3

(7.54.2.9) End date of target

03/30/2031

(7.54.2.10) Figure or percentage at end of date of target

89.7

(7.54.2.11) Figure or percentage in reporting year

52.7

(7.54.2.12) % of target achieved relative to base year

127.4888558692

(7.54.2.13) Target status in reporting year

Select from:

☑ Achieved and maintained

(7.54.2.15) Is this target part of an emissions target?

No, it is not part of emissions, but it is indirectly related to greenhouse gases.

(7.54.2.16) Is this target part of an overarching initiative?

Select all that apply

☑ No, it’s not part of an overarching initiative

(7.54.2.18) Please explain target coverage and identify any exclusions

This target applies to our consolidated factories located in Japan, and does not apply to offices, or overseas bases.

(7.54.2.19) Target objective

This target aims to reduce environmental impact and mitigate health effects on local communities. The reduction of VOC emissions contributes to the suppression of photochemical smog precursors, thereby improving air quality. Additionally, controlling VOC emissions leads to improved energy efficiency in manufacturing processes and reduces GHG emissions associated with combustion treatment, indirectly contributing to climate change mitigation. This target is positioned as one of the materiality indicators toward achieving our corporate vision, and supports the development of a sustainable production system as part of our environmental management policy and climate change strategy.

(7.54.2.21) List the actions which contributed most to achieving this target

Each factory mainly implemented measures such as installing VOC treatment equipment (recovery and decomposition equipment, etc.) to directly reduce emissions, which contributed greatly to reducing VOC emissions and achieving the target.
[Add row]

(7.54.3) Provide details of your net-zero target(s).

Row 1

(7.54.3.1) Target reference number

Select from:
☑ NZ1

(7.54.3.2) Date target was set

05/25/2022

(7.54.3.3) Target Coverage

Select from:

☑ Organization-wide

(7.54.3.4) Targets linked to this net zero target

Select all that apply

☑ Abs3

(7.54.3.5) End date of target for achieving net zero

03/30/2051

(7.54.3.6) Is this a science-based target?

Select from:

☑ Yes, we consider this a science-based target, but we have not committed to seek validation of this target by the Science Based Targets initiative within the next two years

(7.54.3.8) Scopes

Select all that apply

☑ Scope 1

☑ Scope 2

(7.54.3.9) Greenhouse gases covered by target

Select all that apply

☑ Methane (CH4)

☑ Nitrous oxide (N2O)

☑ Carbon dioxide (CO2)

☑ Perfluorocarbons (PFCs)

☑ Hydrofluorocarbons (HFCs)

☑ Sulphur hexafluoride (SF6)

☑ Nitrogen trifluoride (NF3)

(7.54.3.10) Explain target coverage and identify any exclusions

Our company has set a target to achieve net-zero Scope 1+2 emissions by the fiscal year 2051 across the entire group. The Scope 1+2 emissions for the fiscal year 2021 were approximately 900,000 tons of CO2, so reductions to that extent are necessary. As measures, we plan to promote energy-saving initiatives through business improvements, enhance production efficiency, implement fuel conversion (phasing out coal), consider the introduction of carbon-free fuels, adopt/relocate renewable energy sources (such as solar power and small-scale hydroelectric power), and decarbonize electricity. By achieving a 46% reduction by the fiscal year 2031 through these measures, we aim to further transition to carbon-free fuels such as hydrogen and ammonia, electrify production processes, procure carbon-free electricity, and introduce carbon offset measures like CCUS and forest absorption to achieve net-zero emissions by the fiscal year 2051. Furthermore, the target year which starts in April 2050 and ends in March 2051 expressed as the year 2051 following the reporting rules.

(7.54.3.11) Target objective

Increased sales through indirect OPEX reductions and business opportunities acquisition.

(7.54.3.12) Do you intend to neutralize any residual emissions with permanent carbon removals at the end of the target?

Select from:

☑ Yes

(7.54.3.13) Do you plan to mitigate emissions beyond your value chain?

Select from:

☑ Yes, and we have already acted on this in the reporting year

(7.54.3.14) Do you intend to purchase and cancel carbon credits for neutralization and/or beyond value chain mitigation?

Select all that apply

☑ Yes, we plan to purchase and cancel carbon credits for beyond value chain mitigation

☑ Yes, we plan to purchase and cancel carbon credits for neutralization at the end of the target

(7.54.3.15) Planned milestones and/or near-term investments for neutralization at the end of the target

In our company group, we have created and disclosed a transition plan for achieving carbon neutrality by 2022 as an intermediate goal. The cumulative investment amount from 2022 to 2025, in line with the transition plan including energy reduction and efficiency improvement in offices and factories (production facilities), production efficiency improvement, fuel conversion, and introduction of renewable energy, is included in the "safety, disaster prevention, and environmental investment amount" of the 2025 mid-term business plan, which is approximately 17 billion yen. The main reduction measures and their respective contributions to the overall reduction are as follows: (1) Energy reduction and efficiency improvement (including production efficiency improvement): approximately 30% (2) Fuel conversion (phasing out coal): approximately 40% (3) Optimization of electricity, including renewable energy: approximately 30% Furthermore, to monitor the progress of this transition plan, short-term and mid-term reduction targets for Scope 1 and 2 emissions have been set. The short-term target is based on the "GHG

emissions intensity reduction rate per unit of sales in Scope 1 and 2," with the base year as 2020 and targets set for the fiscal years 2026 and 2027. The mid-term target is based on the "reduction rate in Scope 1 and 2," with the base year as the fiscal year 2021 and a target set for the fiscal year 2031.

(7.54.3.16) Describe the actions to mitigate emissions beyond your value chain

Our company group supports and actively participates in the "30by30" initiative, which aligns with the Kunming- Montreal Biodiversity Framework. We have also joined the 30by30 Alliance established by the Japanese government and are collaborating with policymakers to promote the "30by30" goal. Since the 1950s, our company group has owned company-owned forests with the aim of achieving self-sufficiency in chemical fiber raw materials. However, due to changes in the composition of the chemical fiber business and the completion of the mission of raw material supply, we have sold off some of the mountain forests, leaving only a portion of them. We believe that proper management of the remaining forests contributes to climate change mitigation and biodiversity conservation. For the management purposes of the company-owned forests, we have set the goal of conducting sustainable forest management that emphasizes the continuity with the surrounding rich deciduous forests, while maintaining their function as water source conservation and security forests and engaging in forestry activities. We aim for coexistence between humans and nature. The OECM (Other Effective area-based Conservation Measures) certification of our company group's company-owned forests is considered an indicator of the success of our engagement. In 2023, one area (Aya-cho, Miyazaki Prefecture) was certified as a "Nature and Coexistence Site" by the Japanese government. In the reporting year, registered as an "OECM" in the international database.

(7.54.3.17) Target status in reporting year

Select from:

☑ Underway

(7.54.3.19) Process for reviewing target

N/A
[Add row]

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

Select from:

☑ Yes

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

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e
Under investigation	*1*	*`Numeric input*
To be implemented	*2*	*2600*
Implementation commenced	*0*	*0*
Implemented	*2*	*24500*
Not to be implemented	*0*	*`Numeric input*

[Fixed row]

(7.55.2) Provide details on the initiatives implemented in the reporting year in the table below.

Row 1

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in buildings
☑ Motors and drives

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

400

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

Select all that apply
☑ Scope 2 (location-based)
☑ Scope 2 (market-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in 1.2)

11000000

(7.55.2.6) Investment required (unit currency – as specified in 1.2)

13000000

(7.55.2.7) Payback period

Select from:

☑ 4-10 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 11-15 years

(7.55.2.9) Comment

N/A

Row 2

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in production processes

☑ Machine/equipment replacement

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

23300

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

Select all that apply

☑ Scope 1

☑ Scope 2 (location-based)

☑ Scope 2 (market-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in 1.2)

8000000

(7.55.2.6) Investment required (unit currency – as specified in 1.2)

10000000

(7.55.2.7) Payback period

Select from:

☑ 4-10 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 16-20 years

(7.55.2.9) Comment

N/A

Row 3

(7.55.2.1) Initiative category & Initiative type

Low-carbon energy consumption

☑ Solar PV

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

800

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

Select all that apply

☑ Scope 2 (location-based)

☑ Scope 2 (market-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in 1.2)

10000000

(7.55.2.6) Investment required (unit currency – as specified in 1.2)

180000000

(7.55.2.7) Payback period

Select from:

☑ 4-10 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 11-15 years

(7.55.2.9) Comment

N/A
[Add row]

(7.55.3) What methods do you use to drive investment in emissions reduction activities?

Row 1

(7.55.3.1) Method

Select from:

☑ Internal price on carbon

(7.55.3.2) Comment

To promote low-carbon investment and measures, we have internally established a carbon pricing system where we set a unique carbon price and convert CO2 emissions into costs. This system is used as an incentive for energy-saving initiatives, as well as a means to identify revenue opportunities, risks, and guidelines for investment decision-making. By utilizing this system as one of the criteria for investment decisions, we are accelerating investments that contribute to reducing CO2 emissions, including investments in low-carbon and decarbonization facilities, as well as development facilities.

Row 2

(7.55.3.1) Method

Select from:

☑ Dedicated budget for energy efficiency

(7.55.3.2) Comment

We are implementing energy reduction projects by identifying energy-saving initiatives and prioritizing them based on their expected effectiveness. These projects are being gradually implemented, starting with those that are expected to have the greatest impact.

Row 3

(7.55.3.1) Method

Select from:

☑ Dedicated budget for low-carbon product R&D

(7.55.3.2) Comment

We are conducting research and investigation on potential research and development projects related to low-carbon products that are relevant to our company's products, services, and surrounding technologies. We are considering these projects based on their potential for significant impact, starting with those that show the most promise.
[Add row]

(7.73) Are you providing product level data for your organization's goods or services?

Select from:

☑ No, I am not providing data

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

Select from:

☑ Yes

(7.74.1) Provide details of your products and/or services that you classify as low-carbon products.

Row 1

(7.74.1.1) Level of aggregation

Select from:

☑ Group of products or services

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

Select from:

☑ Other, please specify :Our company group certifies products received evaluations above a certain standard in the environmental assessment during the product design phase as “Eco-Partnership System products”. This certification is based on our own taxonomy criteria.

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

Other

☑ Other, please specify :Material for seawater desalination plant (Reverse Osmosis membrane)

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

The seawater desalination plant material (RO membrane) manufactured and sold by our company is one of the “ECO-PARTNER SYSTEM" product and is a low-carbon product that offers advantages in terms of environmental considerations. It achieves a large water production volume at low running costs and has a low CO2 emissions footprint due to its energy-efficient nature. The RO membrane has the property of not allowing non-water impurities such as ions and salts to pass through at a molecular level. It functions as a semi-permeable membrane that separates fresh water from salts and other substances. While the evaporation method, which involves evaporating seawater to produce distilled water, requires heating for water production, our RO membrane does not require heating. Instead, it utilizes the phenomenon of reverse osmosis to remove salts from seawater, making seawater desalination possible with lower energy consumption compared to the evaporation method. Therefore, the introduction of our RO membrane contributes to reducing CO2 emissions.

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

Select from:

☑ Yes

(7.74.1.6) Methodology used to calculate avoided emissions

Select from:

☑ Guidelines for Assessing the Contribution of Products to Avoided Greenhouse Gas Emissions (ILCA)

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

Select from:

☑ Cradle-to-grave

(7.74.1.8) Functional unit used

When comparing the method of removing salt through the RO membrane (RO membrane method) and the method of evaporating seawater to produce distilled water (evaporation method), both methods produce water with the same functionality. The functional unit is defined as the lifetime water production of a single RO membrane element, which is 116,000 m3 of water. The users who benefit from using the produced water are the water consumers.

(7.74.1.9) Reference product/service or baseline scenario used

The CO2 emissions generated when producing 116,000 m3 of distilled water using the evaporation method (method of evaporating seawater to produce distilled water) were used as the benchmark.

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

Select from:

☑ Cradle-to-grave

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

1084

(7.74.1.12) Explain your calculation of avoided emissions, including any assumptions

The avoided emissions of low-carbon products, calculated from the difference in CO2 emissions between water production using low-carbon products (RO membrane method) and standard products (Evaporation method), is approximately 1,084 tons of CO2 per RO membrane element. This is the avoided emissions when producing the same amount of freshwater (116,000 cubic meters) with each product. These results were calculated by using an attributional approach, which considers the entire lifecycle of water production (desalination) with each product, from raw material acquisition to product disposal (raw material procurement, plant manufacturing, product use (desalination), disposal). ■Databases used: Evaporation method (Baseline): IDEA, publicly available data from the industry RO membrane method: IDEA, publicly available data from the industry ■Methodology adopted: Our company has developed its own guidelines based on the "Guidelines for Assessing the Contribution of Products to Avoided Greenhouse Gas Emissions (ILCA)" and calculated the reduction contribution using the calculation method based on those guidelines. ■Conditions: The low-carbon product (RO membrane) is manufactured in Japan and transported to a seawater desalination plant in Saudi Arabia for use.

The disposal of the low-carbon product (RO membrane) is assumed to be landfill in the same country. The standard product (Evaporation method) involves evaporating seawater in Saudi Arabia using fuel combustion and recovering freshwater. The waste generated in this process is not taken into consideration.

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

30.7
[Add row]

(7.79) Has your organization retired any project-based carbon credits within the reporting year?

Select from:
☑ No

C9. Environmental performance - Water security

(9.1) Are there any exclusions from your disclosure of water-related data?

Select from:

☑ No

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

Water withdrawals – total volumes

(9.2.1) % of sites/facilities/operations

Select from:

☑ 76-99

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

We have installed flow meters on the water supply pipes to constantly measure the amount of water being drawn.

(9.2.4) Please explain

Our company constantly monitors the amount of withdrawals. The environmental managers at each location record the values from the flow meters daily and report the monthly data to the environmental management supervisor. The monthly data reported by the managers at each location is then compiled and reported once a year as the total annual water withdrawal to the headquarters office.

Water withdrawals – volumes by source

(9.2.1) % of sites/facilities/operations

Select from:

☑ 76-99

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

We have installed flow meters on the water supply pipes, specifically for each water source, to constantly measure the amount of water being drawn.

(9.2.4) Please explain

Our company constantly monitors the water withdrawal for each water source. The environmental managers at each location record the values from the flow meters installed for each water source on a daily basis and report the monthly data to the environmental management supervisor. The monthly data reported by the managers at each location is then compiled and reported once a year as the water withdrawal for each water source to the headquarters office.

Water withdrawals quality

(9.2.1) % of sites/facilities/operations

Select from:

☑ 76-99

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

The environmental managers at each location take samples of water, categorized by water source, on a daily or monthly basis and conduct water quality tests for the

water being drawn.

(9.2.4) Please explain

Our company constantly monitors the water quality of the water withdrawal. The environmental managers at each location take samples, categorized by water source, on a daily or monthly basis and conduct water quality tests. The tests are conducted in accordance with relevant laws and regulations at each location and our company's internal standards, focusing on parameters such as COD, nitrogen and phosphorus concentrations, pH, and turbidity. The test results are recorded and reported to the environmental management supervisor monthly. The monthly data reported by the managers at each location is then compiled and reported once a year as water quality results for each water source to the headquarters office. In case any issues arise with water quality, the managers at each location are promptly notified, and there are established mechanisms for addressing those issues.

Water discharges – total volumes

(9.2.1) % of sites/facilities/operations

Select from:

☑ 76-99

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

We have installed flow meters on the drainage pipes to constantly measure the amount of wastewater discharges.

(9.2.4) Please explain

Our company constantly monitors the amount of wastewater being discharged. The environmental managers at each location record the values from the flow meters daily and report the monthly data to the environmental management supervisor. The monthly data reported by the managers at each location is then compiled and reported once a year as the total annual discharge volume to the headquarters office.

Water discharges – volumes by destination

(9.2.1) % of sites/facilities/operations

Select from:

☑ 76-99

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

We have installed flow meters for each discharge destination to constantly measure the amount of wastewater discharges.

(9.2.4) Please explain

Our company constantly monitors the amount of wastewater discharges to different discharge destinations. The environmental managers at each location record the values from the flow meters installed for each discharge destination on a daily basis and report the monthly data to the environmental management supervisor. The monthly data reported by the managers at each location is then compiled and reported once a year as the discharge volume for each discharge destination to the headquarters office.

Water discharges – volumes by treatment method

(9.2.1) % of sites/facilities/operations

Select from:

☑ 76-99

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

We have installed flow meters for each method of wastewater treatment to constantly measure the amount of wastewater treatmant.

(9.2.4) Please explain

Our company constantly monitors the amount of wastewater discharges based on the treatment methods. The environmental managers at each location record the values from the flow meters installed at each wastewater treatment facility on a daily basis and report the monthly data to the environmental management supervisor. The monthly data reported by the managers at each location is then compiled and reported once a year as the discharge volume for each treatment method to the headquarters office.

Water discharge quality – by standard effluent parameters

(9.2.1) % of sites/facilities/operations

Select from:

☑ 76-99

(9.2.2) Frequency of measurement

Select from:

☑ Daily

(9.2.3) Method of measurement

The environmental managers at each location take samples of wastewater, categorized by water source, on a daily or monthly basis and conduct water quality tests.

(9.2.4) Please explain

Our company constantly monitors the amount of wastewater discharges based on the treatment methods. The environmental managers at each location record the values from the flow meters installed at each wastewater treatment facility on a daily basis and report the monthly data to the environmental management supervisor. The monthly data reported by the managers at each location is then compiled and reported once a year as the discharge volume for each treatment method to the headquarters office.

Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)

(9.2.1) % of sites/facilities/operations

Select from:

☑ 76-99

(9.2.2) Frequency of measurement

Select from:

☑ Monthly

(9.2.3) Method of measurement

The environmental managers at each location take monthly samples of wastewater and oder testing of water quality (nitrates, phosphates, pesticides, and other priority toxic substances) to an external measurement agencies.

(9.2.4) Please explain

Our company constantly monitors the water quality of wastewater discharges. The environmental managers at each location take samples, categorized by discharge destination, monthly and conduct water quality tests. The tests are conducted in accordance with relevant laws and regulations at each location and our company's internal standards, including nitrates, phosphates, pesticides, and other priority hazardous substances. The test results are recorded and reported to the environmental management supervisor every month. The monthly data reported by the managers at each location is then compiled and reported once a year as water quality results for each discharge destination to the headquarters office. In the case of water quality that violates regulations, the managers at each location are promptly notified, and there are established mechanisms for addressing such issues.

Water discharge quality – temperature

(9.2.1) % of sites/facilities/operations

Select from:

☑ 76-99

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

The environmental managers at each location take samples of wastewater and measure them using calibrated thermometers on a monthly basis.

(9.2.4) Please explain

Our company constantly monitors the temperature of wastewater discharges. The environmental managers at each location take samples, categorized by discharge destination, and conduct temperature tests. We ensure and record that the water temperature is below 40 and report the monthly data to the environmental management supervisor. The monthly data reported by the managers at each location is then compiled and reported once a year as temperature results for each discharge destination to the headquarters office. In case of water temperatures that violate regulations, the managers at each location are promptly notified, and there are established mechanisms for addressing such issues.

Water consumption – total volume

(9.2.1) % of sites/facilities/operations

Select from:

☑ 76-99

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

We have installed flow meters on the water supply pipes to constantly measure the amount of water witdrawals. We then subtract the continuously measured volume of wastewater, obtained from the flow meters installed on the drainage pipes, from the constantly measured volume of water being drawn. This allows us to calculate the water consumption.

(9.2.4) Please explain

We constantly monitor the water withdrawals and discharges at our company, so we calculate the water consumption by subtracting the discharge from the intake. The environmental management staff at each location calculate the water consumption based on the monthly data of intake and discharge and report it to the managers of each location. Based on this monthly data, each location reports the annual water consumption to the headquarters annually.

Water recycled/reused

(9.2.1) % of sites/facilities/operations

Select from:

☑ 76-99

(9.2.2) Frequency of measurement

Select from:

☑ Yearly

(9.2.3) Method of measurement

Environmental management personnel at each site record the amount of recycled water on a daily basis using flow meters installed on the cooling equipment.

(9.2.4) Please explain

We constantly monitor the amount of recycled water. Environmental management personnel at each site record the amount of recycled water on a daily basis using flow meters installed on cooling equipment. The recorded data is compiled monthly and reported to the managers of each site. Based on this monthly data, each site reports its annual recycled water volume to the headquarters office annually.

The provision of fully-functioning, safely managed WASH services to all workers

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Yearly

(9.2.3) Method of measurement

Health and safety managers at each site conduct annual surveys and interviews with employees to gauge their satisfaction with the provision of safe and hygienic water and sewage infrastructure.

(9.2.4) Please explain

Health and safety managers at each site conduct annual employee surveys and interviews to investigate employee satisfaction regarding the provision of safe and hygienic water and sewage infrastructure. The results of the surveys and interviews at each site are reported to the managers of each site. Based on these results,

each site reports annually to the headquarters office on the status of employee WASH service provision.
[Fixed row]

(9.2.2) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, how do they compare to the previous reporting year, and how are they forecasted to change?

Total withdrawals

(9.2.2.1) Volume (megaliters/year)

85497

(9.2.2.2) Comparison with previous reporting year

Select from:
☑ Lower

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:
☑ Facility closure

(9.2.2.4) Five-year forecast

Select from:
☑ About the same

(9.2.2.5) Primary reason for forecast

Select from:
☑ Investment in water-smart technology/process

(9.2.2.6) Please explain

Our company has set a goal to increase sales to 600 billion yen by fiscal year 2031. As a result, there will be an increase in production activities in the future. However, our company group's water usage is primarily for cooling purposes and does not involve using water resources as raw materials. Therefore, we do not anticipate an increase in water intake proportional to the increase in production activities. Additionally, we have implemented a system to recycle and reuse cooling water, which helps to suppress any increase in water intake.

Total discharges

(9.2.2.1) Volume (megaliters/year)

83172

(9.2.2.2) Comparison with previous reporting year

Select from:

☑ Lower

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

☑ Facility closure

(9.2.2.4) Five-year forecast

Select from:

☑ About the same

(9.2.2.5) Primary reason for forecast

Select from:

☑ Investment in water-smart technology/process

(9.2.2.6) Please explain

Our company has set a goal to increase sales to 600 billion yen by fiscal year 2031. As a result, there will be an increase in production activities in the future. However, the water usage of our company group is primarily for cooling purposes and does not involve using water resources as raw materials. Therefore, we do not anticipate an increase in water intake proportional to the increase in production activities. Additionally, we have implemented a system to recycle and reuse cooling

water, which helps to suppress any increase in water intake. As a result, we do not expect an increase in wastewater discharge either.

Total consumption

(9.2.2.1) Volume (megaliters/year)

2325

(9.2.2.2) Comparison with previous reporting year

Select from:
☑ About the same

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:
☑ Increase/decrease in business activity

(9.2.2.4) Five-year forecast

Select from:
☑ About the same

(9.2.2.5) Primary reason for forecast

Select from:
☑ Investment in water-smart technology/process

(9.2.2.6) Please explain

Our company calculate the total consumption (2,325 ML/year) by subtracting the total discharge (83,172 ML/year) from the total water intake (85,497 ML/year). As the water usage of our company group is primarily for cooling purposes and does not involve using water resources as raw materials, the total consumption is considered to be a discrepancy due to factors such as evaporation. Our company group has set a goal to increase sales to 600 billion yen by fiscal year 2031. Although an increase in production activities is expected, since we do not use water resources as raw materials, we do not expect any change in total water usage.
[Fixed row]

(9.2.4) Indicate whether water is withdrawn from areas with water stress, provide the volume, how it compares with the previous reporting year, and how it is forecasted to change.

(9.2.4.1) Withdrawals are from areas with water stress

Select from:

☑ Yes

(9.2.4.2) Volume withdrawn from areas with water stress (megaliters)

89

(9.2.4.3) Comparison with previous reporting year

Select from:

☑ Lower

(9.2.4.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in efficiency

(9.2.4.5) Five-year forecast

Select from:

☑ About the same

(9.2.4.6) Primary reason for forecast

Select from:

☑ Increase/decrease in efficiency

(9.2.4.7) % of total withdrawals that are withdrawn from areas with water stress

0.10

(9.2.4.8) Identification tool

Select all that apply

☑ WRI Aqueduct

(9.2.4.9) Please explain

The World Resources Institute (WRI) has released a tool called "AQUEDUCT" that allows for the evaluation of geographical water stress across all facilities and factories of the Toyobo Group using the same evaluation criteria, enabling global comparisons. The evaluation is conducted annually, with additional assessments carried out when there are changes such as new factory constructions. According to the water stress assessment conducted using "AQUEDUCT," there were one facility each in Thailand and Saudi Arabia located in areas with high water stress. However, both facilities are situated within industrial estates that are appropriately managed under the regulations of their respective countries, ensuring proper management of water intake and discharge in terms of quantity and quality (with risk mitigation measures implemented within feasible limits). Furthermore, considering that these facilities account for only about 0.1% of the total water intake of our company group, it is determined that there is currently no significant potential for adverse financial or strategic impacts. Our company group has set a goal to increase sales to 600 billion yen by fiscal year 2031. As a result, there may be an increase in production activities in the future. However, as the water usage of our company group is primarily for cooling purposes and does not involve using water resources as raw materials, we do not anticipate an increase in water intake proportional to the increase in production activities. Additionally, we have implemented a system to recycle and reuse cooling water, which helps to suppress any increase in water intake.
[Fixed row]

(9.2.7) Provide total water withdrawal data by source.

Fresh surface water, including rainwater, water from wetlands, rivers, and lakes

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

53886

(9.2.7.3) Comparison with previous reporting year

Select from:

☑ About the same

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in efficiency

(9.2.7.5) Please explain

Our company obtains freshwater from nearby rivers and lakes for water intake at each location. The primary water usage of our company group is for cooling purposes, and it is essential to intake water from rivers and lakes with stable water quality. As the production volume at the relevant locations remained similar to the previous reporting year, the volume of freshwater intake from surface water sources also remained nearly the same.

Brackish surface water/Seawater

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

Our company does not use brackish water and seawater in the manufacturing of our products. Additionally, we have not used brackish water and seawater at any of our locations before. Therefore, water intake from these sources is not relevant to our business.

Groundwater – renewable

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

27008

(9.2.7.3) Comparison with previous reporting year

Select from:

☑ Lower

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

☑ Facility closure

(9.2.7.5) Please explain

Our company obtains groundwater for water intake at some of our locations. The primary water usage of our company group is for cooling purposes, and for certain process water, it is essential to extract water from stable groundwater sources. However, due to the consolidation and closure of some bases, groundwater usage has decreased slightly.

Groundwater – non-renewable

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

Our company does not use non-renewable groundwater in the manufacturing of our products. Additionally, we have not used non-renewable groundwater at any of our locations before. Therefore, water intake from these sources is not relevant to our business.

Produced/Entrained water

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

Our company does not use produced/entrained water in the manufacturing of our products. Additionally, we have not used produced/entrained water at any of our locations before. Therefore, water intake from these sources is not relevant to our business.

Third party sources

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

4603

(9.2.7.3) Comparison with previous reporting year

Select from:

☑ About the same

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in efficiency

(9.2.7.5) Please explain

Our company uses water provided by third parties near each site (such as tap water and industrial water). Some of the process water and water for employee toilets and handwashing require a stable water source from a third-party, such as tap water or industrial water. Since the production volume and number of employees at the relevant sites were similar to the previous reporting year, the amount of water drawn from third-party sources was also almost the same.
[Fixed row]

(9.2.8) Provide total water discharge data by destination.

Fresh surface water

(9.2.8.1) Relevance

Select from:

☑ Relevant

(9.2.8.2) Volume (megaliters/year)

33921

(9.2.8.3) Comparison with previous reporting year

Select from:

☑ Lower

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

☑ Facility closure

(9.2.8.5) Please explain

Our company tracks the amount of wastewater at each site and accumulates it as the total wastewater discharged, taking into account the discharge destination. In addition to complying with regulations set by national and local government environmental regulations and environmental conservation agreements, we have established and managed stricter voluntary management standards when necessary. Therefore, we have built and operated wastewater treatment systems to ensure that the discharged water meets both regulatory and voluntary standards. However, due to the consolidation and closure of some bases, the amount of wastewater discharged into surface water (mainly rivers) has decreased slightly.

Brackish surface water/seawater

(9.2.8.1) Relevance

Select from:

☑ Relevant

(9.2.8.2) Volume (megaliters/year)

47780

(9.2.8.3) Comparison with previous reporting year

Select from:

☑ About the same

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in efficiency

(9.2.8.5) Please explain

Our company tracks the amount of wastewater at each site and accumulates it as the total wastewater discharged, taking into account the discharge destination. In addition to complying with regulations set by national and local government environmental regulations and environmental conservation agreements, we have established and managed stricter voluntary management standards when necessary. Therefore, we have built and operated wastewater treatment systems to ensure that the discharged water meets both regulatory and voluntary standards. Since the production volume at the relevant sites was similar to the previous reporting year, the amount of wastewater discharged into surface water (mainly marine areas) was also almost the same.

Groundwater

(9.2.8.1) Relevance

Select from:

☑ Not relevant

(9.2.8.5) Please explain

Our company tracks the amount of wastewater at each site and accumulates it as the total wastewater discharged. We do not discharge wastewater into groundwater areas, and there is no relevance between our business and wastewater discharge into groundwater areas.

Third-party destinations

(9.2.8.1) Relevance

Select from:
☑ Relevant

(9.2.8.2) Volume (megaliters/year)

1471

(9.2.8.3) Comparison with previous reporting year

Select from:
☑ Higher

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:
☑ Increase/decrease in efficiency

(9.2.8.5) Please explain

Our company tracks the amount of wastewater at each site and accumulates it as the total wastewater discharged. In addition to complying with regulations set by national and local government environmental regulations and environmental conservation agreements, we have established and managed stricter voluntary management standards when necessary. Therefore, we have built and operated wastewater treatment systems to ensure that the discharged water meets both regulatory and voluntary standards. In the reporting year, the production volume at the relevant sites increased compared to the previous reporting year, resulting in an increase in wastewater discharged to third-party discharge points (mainly sewage). For discharges to a Third-party, they do not include water supplied to other organizations for their use.
[Fixed row]

(9.2.9) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

Tertiary treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Not relevant

(9.2.9.6) Please explain

In our company, tertiary treatment refers to a series of processes including activated carbon adsorption, ion exchange, electrodialysis, and reverse osmosis. These processes are carried out after primary treatment (screening, natural settling) and secondary treatment (activated sludge process, sedimentation). It is important to note that our production processes do not involve the use of hazardous substances. Hence, the wastewater treated through secondary treatment meets our self-imposed standards, which are stricter than the regulatory wastewater discharge limits. Consequently, there is no relevance between our business and tertiary treatment.

Secondary treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

77629

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☑ About the same

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

☑ 91-99

(9.2.9.6) Please explain

Approximately 90% of our total wastewater is collected at the wastewater treatment facility for secondary treatment, which involves processes such as activated sludge and sedimentation. After undergoing secondary treatment, we confirm that the treated wastewater meets self-imposed standards that are stricter than the regulatory wastewater discharge limits before discharging it into rivers and marine areas. For example, in the case of wastewater from a biopharmaceutical plant that produces pharmaceutical intermediates from microorganisms, there is a high concentration of organic matter that is easily decomposed by microorganisms. Therefore, at our biopharmaceutical plant, we perform primary treatment to remove insoluble solids through screening and natural settling, followed by biological treatment to effectively decompose the organic matter.

Primary treatment only

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

4072

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☑ About the same

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

☑ 1-10

(9.2.9.6) Please explain

Approximately 5% of our total wastewater is collected at the wastewater treatment facility for primary treatment. After undergoing primary treatment processes such as screening and natural settling, we confirm that the treated wastewater meets self-imposed standards that are stricter than the regulatory wastewater discharge limits before discharging it into rivers and marine areas. For example, in the case of a plastic processing plant, the wastewater mainly consists of the cooling water used in the manufacturing process. As a result, the water quality is similar to that of the intake water, and the primary treatment, which involves removing insoluble solids through screening and natural settling, is sufficient to meet the standards.

Discharge to the natural environment without treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Not relevant

(9.2.9.6) Please explain

Our company does not have any sites where wastewater is directly discharged into the natural environment without undergoing primary or secondary treatment. Therefore, untreated discharge into the natural environment did not occur throughout the reporting year, and we have determined that there is no relevance in this regard.

Discharge to a third party without treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

1471

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☑ Higher

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

☑ 1-10

(9.2.9.6) Please explain

Our company discharges wastewater to a sewage treatment plant managed by an industrial park management company and to public sewage as a third party. At our base within the industrial park, after confirming that the discharge meets the wastewater standards agreed upon with the industrial park, it is discharged to the sewage treatment plant managed by the industrial park management company. At the treatment plant, wastewater from factories that do not handle hazardous substances within the industrial park is treated collectively up to secondary treatment. In addition, although the amount is small, water used in toilets and handwashing has a high load, so it is discharged to public sewage and treated efficiently. In the reporting year, the discharge to third-party outlets (mainly sewage) also increased due to an increase in production volume at the relevant bases compared to the previous reporting year.

Other

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Not relevant

(9.2.9.6) Please explain

Our company does not have any sites where wastewater is discharged after undergoing any additional treatment beyond primary, secondary, and tertiary treatment. [Fixed row]

(9.2.10) Provide details of your organization’s emissions of nitrates, phosphates, pesticides, and other priority substances to water in the reporting year.

(9.2.10.1) Emissions to water in the reporting year (metric tons)

233

(9.2.10.2) Categories of substances included

Select all that apply

☑ Nitrates

☑ Phosphates

(9.2.10.4) Please explain

We measure the total nitrogen, including nitrates, and the total phosphorus, including phosphates, as well as pesticides, which are substances regulated by the Water Pollution Control Law in Japan, at least once a year. We discharge 187 tons of nitrates as total nitrogen and 46 tons of phosphates as total phosphorus. There is zero discharge of pesticides. Nitrates and phosphates are substances contained in the culture media and buffering solutions used in our bio-business for cultivating microorganisms. Although they are treated by the wastewater treatment facilities of our factory, the trace amounts of them might be discharged into public water areas.
[Fixed row]

(9.3) In your direct operations and upstream value chain, what is the number of facilities where you have identified substantive water-related dependencies, impacts, risks, and opportunities?

Direct operations

(9.3.1) Identification of facilities in the value chain stage

Select from:

☑ Yes, we have assessed this value chain stage and identified facilities with water-related dependencies, impacts, risks, and opportunities

(9.3.2) Total number of facilities identified

3

(9.3.3) % of facilities in direct operations that this represents

Select from:

☑ 100%

(9.3.4) Please explain

Our group's main factories, the Tsuruga Research and Production Center, Iwakuni Production Center and Inuyama Plant, are all located near rivers and in low-lying areas, making them susceptible to flood risks. These three factories are also the mother factories of our plastic film business, which accounts for approximately 40% of our group's revenue. In the event of a disaster, there is a possibility of significant impact on our business and financial situation.

Upstream value chain

(9.3.1) Identification of facilities in the value chain stage

Select from:

☑ No, we have not assessed this value chain stage for facilities with water-related dependencies, impacts, risks, and opportunities, but we are planning to do so in the next 2 years

(9.3.4) Please explain

We plan to utilize TNFD disclosure information from key suppliers to carry out such assessments and identify relevant issues.
[Fixed row]

(9.3.1) For each facility referenced in 9.3, provide coordinates, water accounting data, and a comparison with the previous reporting year.

Row 1

(9.3.1.1) Facility reference number

Select from:

☑ Facility 1

(9.3.1.2) Facility name (optional)

Factory 1

(9.3.1.3) Value chain stage

Select from:

☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☑ Risks

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Japan

☑ Other, please specify :Shono River

(9.3.1.8) Latitude

35.63963

(9.3.1.9) Longitude

136.066833

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.13) Total water withdrawals at this facility (megaliters)

19471

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

☑ About the same

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

904

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

18567

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

0

(9.3.1.21) Total water discharges at this facility (megaliters)

18838

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ About the same

(9.3.1.23) Discharges to fresh surface water

7601

(9.3.1.24) Discharges to brackish surface water/seawater

11237

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

0

(9.3.1.27) Total water consumption at this facility (megaliters)

633

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ Lower

(9.3.1.29) Please explain

【Withdrawals and discharges】 Water is withdrawn from groundwater within the premises and nearby rivers, primarily for use as cooling water, and after appropriate wastewater treatment, it is discharged into rivers and the sea. The amount of water withdrawn and discharged is the same as the previous reporting year. The amount of water withdrawn by water source and the amount of wastewater discharged by discharge location are directly measured using flow meters. 【Consumption】 Our company calculates consumption by subtracting the total amount of wastewater discharged from the total water intake. Since the water usage of our company group is mainly for cooling purposes and does not involve using water resources as raw materials, the total consumption is considered to be a discrepancy due to factors such as evaporation. Calculation formula: Consumption (633 ML) = Water intake (19,471 ML) - Wastewater discharge (18,838 ML) 【Water risk】 The factory is located near a river and in a low-lying area, making it susceptible to water-related risks. Our company group considers water-related risks at the factory as significant risks and has implemented both hard and soft measures to address them. Hard measures include gradually enhancing flood prevention measures such as relocating or elevating production and power facilities. In addition, soft measures involve conducting education and training aimed at minimizing water-related risks.

Row 2

(9.3.1.1) Facility reference number

Select from:

☑ Facility 2

(9.3.1.2) Facility name (optional)

Factory 2

(9.3.1.3) Value chain stage

Select from:

☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☑ Risks

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Japan

☑ Other, please specify :Nishiki River

(9.3.1.8) Latitude

34.127845

(9.3.1.9) Longitude

132.206358

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.13) Total water withdrawals at this facility (megaliters)

36451

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

☑ About the same

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

36451

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

0

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

0

(9.3.1.21) Total water discharges at this facility (megaliters)

35314

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:
☑ About the same

(9.3.1.23) Discharges to fresh surface water

0

(9.3.1.24) Discharges to brackish surface water/seawater

35298

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

16

(9.3.1.27) Total water consumption at this facility (megaliters)

1137

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ Lower

(9.3.1.29) Please explain

【Withdrawals and discharges】 Water is taken from nearby rivers, primarily for use as cooling water, and after appropriate wastewater treatment, it is discharged into the sea. The amount of water withdrawn and discharged is the same as the previous reporting year. The amount of water withdrawn by water source and the amount of wastewater discharged by discharge location are directly measured using flow meters. For discharges to a Third-party, it is stated that this does not include water supplied to other organizations for their use. 【Consumption】 Our company calculates consumption by subtracting the total amount of wastewater discharged from the total water intake. Since the water usage of our company group is mainly for cooling purposes and does not involve using water resources as raw materials, the total consumption is considered to be a discrepancy due to factors such as evaporation. Calculation formula: Consumption (1,137 ML) = Water intake (36,451 ML) - Wastewater discharge (35,314 ML) 【Water risk】 The factory is located near a river and in a low-lying area, making it susceptible to water-related risks. Our company group has implemented both hard and soft measures to address them. Hard measures include gradually enhancing flood prevention measures such as relocating or elevating production and power facilities. In addition, soft measures involve conducting training aimed at minimizing water-related risks.

Row 3

(9.3.1.1) Facility reference number

Select from:

☑ Facility 3

(9.3.1.2) Facility name (optional)

Factory 3

(9.3.1.3) Value chain stage

Select from:

☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☑ Risks

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Japan

☑ Kiso

(9.3.1.8) Latitude

35.371942

(9.3.1.9) Longitude

136.923248

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.13) Total water withdrawals at this facility (megaliters)

5337

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

☑ Lower

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

5337

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

0

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

0

(9.3.1.21) Total water discharges at this facility (megaliters)

5338

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ Lower

(9.3.1.23) Discharges to fresh surface water

5338

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

0

(9.3.1.27) Total water consumption at this facility (megaliters)

0

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ About the same

(9.3.1.29) Please explain

【Withdrawals and discharges】 Water is withdrawn from nearby rivers, primarily for use as cooling water, and after appropriate wastewater treatment, it is discharged into the rivers. The amount of water withdrawn and discharged is approximately 10% lower than in the previous reporting. The amount of water withdrawn by water source and the amount of wastewater discharged by discharge location are directly measured using flow meters. 【Consumption】 Our company calculates consumption by subtracting the total amount of wastewater discharged from the total water intake. Since the water usage of our company group is primarily for

cooling purposes and does not involve using water resources as raw materials, the total consumption is considered to be a discrepancy due to factors such as evaporation. It should be noted that the negative value obtained by subtracting wastewater discharge from water intake is less than 1% of the water intake, and is therefore considered as an error. Calculation formula: Consumption (0 ML) = Water intake (5,337 ML) - Wastewater discharge (5,338 ML) = -1 ML 【Water risk】 The factory is located near a river and in a low-lying area, making it susceptible to water-related risks. Our company group has implemented both hard and soft measures to address them. Hard measures include gradually enhancing flood prevention measures such as relocating or elevating production and power facilities. In addition, soft measures involve conducting education and training.
[Add row]

(9.3.2) For the facilities in your direct operations referenced in 9.3.1, what proportion of water accounting data has been third party verified?

Water withdrawals – total volumes

(9.3.2.1) % verified

Select from:
☑ Not verified

(9.3.2.3) Please explain

We are currently evaluating the possibility of implementation within the next two years.

Water withdrawals – volume by source

(9.3.2.1) % verified

Select from:
☑ Not verified

(9.3.2.3) Please explain

We are currently evaluating the possibility of implementation within the next two years.

Water withdrawals – quality by standard water quality parameters

(9.3.2.1) % verified

Select from:

☑ Not verified

(9.3.2.3) Please explain

We are currently evaluating the possibility of implementation within the next two years.

Water discharges – total volumes

(9.3.2.1) % verified

Select from:

☑ Not verified

(9.3.2.3) Please explain

We are currently evaluating the possibility of implementation within the next two years.

Water discharges – volume by destination

(9.3.2.1) % verified

Select from:

☑ Not verified

(9.3.2.3) Please explain

We are currently evaluating the possibility of implementation within the next two years.

Water discharges – volume by final treatment level

(9.3.2.1) % verified

Select from:
☑ Not verified

(9.3.2.3) Please explain

We are currently evaluating the possibility of implementation within the next two years.

Water discharges – quality by standard water quality parameters

(9.3.2.1) % verified

Select from:
☑ Not verified

(9.3.2.3) Please explain

We are currently evaluating the possibility of implementation within the next two years.

Water consumption – total volume

(9.3.2.1) % verified

Select from:
☑ Not verified

(9.3.2.3) Please explain

We are currently evaluating the possibility of implementation within the next two years.
[Fixed row]

(9.4) Could any of your facilities reported in 9.3.1 have an impact on a requesting CDP supply chain member?

Select from:
☑ This is confidential

(9.5) Provide a figure for your organization’s total water withdrawal efficiency.

(9.5.1) Revenue (currency)

422032000000

(9.5.2) Total water withdrawal efficiency

4936219.98

(9.5.3) Anticipated forward trend

Our group has set a goal to increase sales to 600 billion yen by the FY2031. As a result, our production activities are expected to increase in the future. However, our water usage purpose is for cooling purposes, and we do not use water resources as raw materials. Therefore, we do not plan to increase the amount in proportion to our production activities. As a result, we expect an improvement in the overall water intake efficiency.
[Fixed row]

(9.13) Do any of your products contain substances classified as hazardous by a regulatory authority?

	Products contain hazardous substances
	Select from: ☑ Yes

[Fixed row]

(9.13.1) What percentage of your company’s revenue is associated with products containing substances classified as hazardous by a regulatory authority?

Row 1

(9.13.1.1) Regulatory classification of hazardous substances

Select from:

☑ Water Pollution Prevention Act (Japan Regulation)

(9.13.1.2) % of revenue associated with products containing substances in this list

Select from:

☑ 21-40

(9.13.1.3) Please explain

Antimony is designated as a “specified substance” under Japan’s Water Pollution Control Law due to its potential environmental impact when discharged in large quantities into public water areas. It is commonly used as a catalyst in the production of PET resin, and trace amounts may be present in the films produced by our group. However, these antimony compounds do not leach into water. The percentage of sales is calculated based on the total sales of our group and the sales of the film business. To reduce environmental impact, Toyobo has developed TOYOBO ESTER® GS, a packaging film made primarily of PET resin produced using the proprietary TOYOBO GS Catalyst®, an aluminum-based catalyst that does not require heavy metals such as antimony. This catalyst offers superior thermal stability, making the PET resin suitable for recycling and reuse. TOYOBO ESTER® GS maintains the same functionality as conventional PET films and is used in food, medical, and industrial packaging. Amid growing environmental awareness, Toyobo plans to expand the use of the TOYOBO GS Catalyst® across its film products to promote recycling and reduce the environmental burden of PET film products. As the adoption of antimony-free PET resin increases, we anticipate a gradual decrease in the sales ratio of products containing antimony.
[Add row]

(9.14) Do you classify any of your current products and/or services as low water impact?

(9.14.1) Products and/or services classified as low water impact

Select from:

☑ Yes

(9.14.2) Definition used to classify low water impact

By utilizing our freshwater production technology, specifically our seawater desalination membranes: We contribute to resolving freshwater shortages through the use of these products by our customers. Definition: We define our products and solutions as services that contribute to the prevention of freshwater resource depletion while minimizing the impact on water.

(9.14.4) Please explain

We recognize that the progression of climate change increases the risk of water scarcity and drought worldwide. In the future, we anticipate challenges in securing not only industrial water but also domestic water, leading to an increasing demand for freshwater and water recycling. Our group ventured into seawater desalination business utilizing reverse osmosis (RO) membranes developed using spinning technology in the 1970s. RO membranes can extract freshwater from solutions such as seawater by utilizing osmotic pressure, and their material characteristics provide excellent durability and resistance to chlorine disinfection. This characteristic makes them particularly strong in seawater desalination, especially in closed-sea areas prone to microbial growth. We contribute to the stable supply of freshwater in the Gulf countries in the Middle East. We help prevent the depletion of freshwater resources in water-stressed regions and minimize the impact on water resources. [Fixed row]

(9.15) Do you have any water-related targets?

Select from:
☑ Yes

(9.15.1) Indicate whether you have targets relating to water pollution, water withdrawals, WASH, or other water-related categories.

	Target set in this category	Please explain
Water pollution	*Select from:* ☑ Yes	*Rich text input [must be under 1000 characters]*
Water withdrawals	*Select from:* ☑ Yes	*Rich text input [must be under 1000 characters]*
Water, Sanitation, and Hygiene (WASH) services	*Select from:*	*Rich text input [must be under 1000 characters]*

	Target set in this category	Please explain
	☑ Yes	
Other	*Select from:* ☑ No, and we do not plan to within the next two years	*There are no plans to set any additional goals at this time.*

[Fixed row]

(9.15.2) Provide details of your water-related targets and the progress made.

Row 1

(9.15.2.1) Target reference number

Select from:

☑ Target 1

(9.15.2.2) Target coverage

Select from:

☑ Organization-wide (direct operations only)

(9.15.2.3) Category of target & Quantitative metric

Water pollution

☑ Reduction in concentration of pollutants

(9.15.2.4) Date target was set

04/17/2022

(9.15.2.5) End date of base year

03/30/2015

(9.15.2.6) Base year figure

45.2

(9.15.2.7) End date of target year

03/30/2031

(9.15.2.8) Target year figure

9

(9.15.2.9) Reporting year figure

14.3

(9.15.2.10) Target status in reporting year

Select from:

☑ Revised

(9.15.2.11) % of target achieved relative to base year

85

(9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

☑ Sustainable Development Goal 6

(9.15.2.13) Explain target coverage and identify any exclusions

The target applies to TOYOBO CO., Ltd. on a non-consolidated basis and its domestic subsidiaries, which account for approximately 99% of the total wastewater discharged by our group. The scope of coverage includes the three factories identified for flood risk listed in question 9.3.

(9.15.2.14) Plan for achieving target, and progress made to the end of the reporting year

In the reporting year, we were able to reduce the discharge to 14.3 tons, which is approximately a 68% reduction from the standard (45.2 tons), towards our target of 9 tons for fiscal year 2031. The definition of pollutants is based on the targeted chemical substances under Japan's law (PRTR system) at the baseline year. Due to the addition of regulated substances, we have added substances to the target reduction and set a new target for the reporting year.

(9.15.2.16) Further details of target

Due to the addition of regulated substances, we have added substances to the target reduction and set a new target for the reporting year.

Row 2

(9.15.2.1) Target reference number

Select from:

☑ Target 2

(9.15.2.2) Target coverage

Select from:

☑ Site/facility

(9.15.2.3) Category of target & Quantitative metric

Water withdrawals

☑ Reduction of water withdrawals from groundwater

(9.15.2.4) Date target was set

03/30/1999

(9.15.2.5) End date of base year

03/30/1999

(9.15.2.6) Base year figure

150

(9.15.2.7) End date of target year

05/30/2031

(9.15.2.8) Target year figure

150

(9.15.2.9) Reporting year figure

150

(9.15.2.10) Target status in reporting year

Select from:

☑ Achieved

(9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

☑ Sustainable Development Goal 6

(9.15.2.13) Explain target coverage and identify any exclusions

In Tsuruga City, where our Tsuruga Research and Production Center is located, we have been working together with other businesses that utilize the local groundwater since fiscal year 1999 to establish a maximum limit for groundwater pumping. This plant is a priority area as indicated in question 9.3. Our aim is to promote sustainable groundwater usage. Our company has actively participated in this initiative and implemented water-saving activities in the past, resulting in a reduction of groundwater usage at our plant. All businesses utilizing the local groundwater in the area have adhered to the daily pumping limit that has been set. The

target specifically applies to our Tsuruga plant.

(9.15.2.15) Actions which contributed most to achieving or maintaining this target

In our group, we continuously optimize production processes while following the PDCA (Plan-Do-Check-Act) cycle. Despite a sales increase of approximately 1.9% from the previous reporting year to the current reporting year, we have managed to keep the water usage at an equivalent level through process improvements.

(9.15.2.16) Further details of target

【Unit of Measurement】: Megaliters (ML) 【Standard】: The daily volume of water pumped by all operators operating in the area in base year. 【Goal】: The target daily volume of water to be pumped by all operators operating in the area. 【Reporting Year】: The daily volume of water pumped by all operators operating in the area in the reporting year.

Row 3

(9.15.2.1) Target reference number

Select from:

☑ Target 3

(9.15.2.2) Target coverage

Select from:

☑ Organization-wide (direct operations only)

(9.15.2.3) Category of target & Quantitative metric

Water, Sanitation, and Hygiene (WASH) services

☑ Increase in the proportion of employees using safely managed sanitation services, including a hand-washing facility with soap and water

(9.15.2.4) Date target was set

03/31/2023

(9.15.2.5) End date of base year

03/30/2023

(9.15.2.6) Base year figure

100

(9.15.2.7) End date of target year

03/30/2025

(9.15.2.8) Target year figure

100

(9.15.2.9) Reporting year figure

100

(9.15.2.10) Target status in reporting year

Select from:

☑ Achieved

(9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

☑ Sustainable Development Goal 6

(9.15.2.13) Explain target coverage and identify any exclusions

This is a statement indicating that providing safe and well-managed sanitation services, including handwashing facilities with soap and water, to all employees is considered as a performance indicator. It further states that this indicator was achieved during the reporting year.

(9.15.2.15) Actions which contributed most to achieving or maintaining this target

Our company group has set a goal to increase sales to 600 billion yen by fiscal year 2031. With this goal in mind, there may be possibilities of adding production

bases and increasing the number of employees. However, we will continue to provide all employees with safely managed sanitation services, including a hand-washing facility with soap and water.

(9.15.2.16) Further details of target

【Unit of Measurement】: Percentage (%) Standard: The rate of providing safely managed hygiene services, including handwashing facilities with soap and water in base year. 【Goal】: The target rate of providing safely managed hygiene services, including handwashing facilities with soap and water. 【Reporting Year】: The rate of providing safely managed hygiene services, including handwashing facilities with soap and water in the reporting year.

Row 4

(9.15.2.1) Target reference number

Select from:

☑ Target 4

(9.15.2.2) Target coverage

Select from:

☑ Organization-wide (direct operations only)

(9.15.2.3) Category of target & Quantitative metric

Water pollution

☑ Reduction in concentration of pollutants

(9.15.2.4) Date target was set

01/15/2025

(9.15.2.5) End date of base year

03/30/2024

(9.15.2.6) Base year figure

719

(9.15.2.7) End date of target year

03/30/2031

(9.15.2.8) Target year figure

144

(9.15.2.9) Reporting year figure

423

(9.15.2.10) Target status in reporting year

Select from:
☑ Underway

(9.15.2.11) % of target achieved relative to base year

51

(9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply
☑ Sustainable Development Goal 6

(9.15.2.13) Explain target coverage and identify any exclusions

The target applies to TOYOBO CO., Ltd. on a non-consolidated basis and its domestic subsidiaries, which account for approximately 99% of the total wastewater discharged by our group. The scope of coverage includes the three factories identified for flood risk listed in question 9.3.

(9.15.2.14) Plan for achieving target, and progress made to the end of the reporting year

In the reporting year, we were able to reduce the discharge to 423 tons, which is approximately a 41% reduction from the standard (719 tons), towards our target of

144 tons for fiscal year 2031. Going forward, we plan to continue implementing measures such as introducing new water treatment facilities to work towards our target year.

(9.15.2.16) Further details of target

The target for the fiscal year 2031 is to reduce the amount of pollutants discharged into public water bodies from our factories by 80%, from the baseline year (FY2024) of 719 tons to 144 tons. The definition of pollutants is based on the targeted chemical substances under Japan's law (PRTR system) at the baseline year. Although we had a similar target up until the previous fiscal year, due to the addition of regulated substances, we have added substances to the target reduction and set a new target for the reporting year. 【Unit of Measurement】: Tons 【Standard】: The amount of pollutants discharged from factories into public water bodies in base year. 【Goal】: The target amount of pollutants to be discharged from our factories into public water bodies. The target for the fiscal year 2031 is to reduce the amount of pollutants discharged into public water bodies from factories by 80%, from the baseline year (FY2024) of 719 tons to 144 tons. The definition of pollutants is based on the targeted chemical substances under Japan's law (PRTR system) at the baseline year. 【Reporting Year】: The amount of pollutants discharged from factories into public water bodies in the reporting year. The target achievement rate is 41%, which is sufficient progress toward the target achievement rate by FY2031.
[Add row]

C10. Environmental performance - Plastics

(10.1) Do you have plastics-related targets, and if so what type?

(10.1.1) Targets in place

Select from:

☑ Yes

(10.1.2) Target type and metric

Plastic goods/products

☑ Increase the proportion of plastic goods/products which are reusable

☑ Increase the proportion of post-consumer recycled content in plastic goods/products

(10.1.3) Please explain

Our group has defined technologies and initiatives that contribute to the reduction of petroleum-derived resource consumption as "Greenification" in our "Sustainable Vision 2030" plan. We have set a target to achieve Greenification in 60% of our film products by the fiscal year 2031. As of the reporting year, the proportion of greenified film products is 14%. 【Specific initiatives for "Greenification" include the following】: ・Development of films using biomass materials ・Development of thin and lightweight film materials (increased strength) ・Environmentally conscious design to facilitate the recycling of used films (mono-materialization) ・Development of films using recycled materials and the technology development for recycling itself
[Fixed row]

(10.2) Indicate whether your organization engages in the following activities.

Production/commercialization of plastic polymers (including plastic converters)

(10.2.1) Activity applies

Select from:

☑ Yes

(10.2.2) Comment

N/A

Production/commercialization of durable plastic goods and/or components (including mixed materials)

(10.2.1) Activity applies

Select from:

☑ Yes

(10.2.2) Comment

N/A

Usage of durable plastics goods and/or components (including mixed materials)

(10.2.1) Activity applies

Select from:

☑ Yes

(10.2.2) Comment

N/A

Production/commercialization of plastic packaging

(10.2.1) Activity applies

Select from:

☑ Yes

(10.2.2) Comment

N/A

Production/commercialization of goods/products packaged in plastics

(10.2.1) Activity applies

Select from:
☑ No

(10.2.2) Comment

N/A

Provision/commercialization of services that use plastic packaging (e.g., food services)

(10.2.1) Activity applies

Select from:
☑ No

(10.2.2) Comment

N/A

Provision of waste management and/or water management services

(10.2.1) Activity applies

Select from:
☑ Yes

(10.2.2) Comment

N/A

Provision of financial products and/or services for plastics-related activities

(10.2.1) Activity applies

Select from:
☑ No

(10.2.2) Comment

N/A

Other activities not specified

(10.2.1) Activity applies

Select from:
☑ No

(10.2.2) Comment

N/A
[Fixed row]

(10.3) Provide the total weight of plastic polymers sold and indicate the raw material content.

	Total weight of plastic polymers sold during the reporting year (Metric tons)	Raw material content percentages available to report	Please explain
	0	*Select all that apply*	*We are unable to provide data due to the need to ensure accuracy and*

	Total weight of plastic polymers sold during the reporting year (Metric tons)	Raw material content percentages available to report	Please explain
		☑ None	*therefore consider it non-disclosure.*

[Fixed row]

(10.4) Provide the total weight of plastic durable goods and durable components produced, sold and/or used, and indicate the raw material content.

	Total weight during the reporting year (Metric tons)	Raw material content percentages available to report	Please explain
Durable goods and durable components sold	*0*	*Select all that apply* ☑ None	*We are unable to provide data due to the need to ensure accuracy and therefore consider it non-disclosure.*
Durable goods and durable components used	*0*	*Select all that apply* ☑ None	*We are unable to provide data due to the need to ensure accuracy and therefore consider it non-disclosure.*

[Fixed row]

(10.5) Provide the total weight of plastic packaging sold and/or used and indicate the raw material content.

	Total weight during the reporting year (Metric tons)	Raw material content percentages available to report	Please explain
Plastic packaging sold	*0*	*Select all that apply* ☑ None	*We are unable to provide data due to the need to ensure accuracy and therefore consider it non-disclosure.*

[Fixed row]

(10.5.1) Indicate the circularity potential of the plastic packaging you sold and/or used.

	Percentages available to report for circularity potential	Please explain
Plastic packaging sold	*Select all that apply* ☑ None	*We are unable to provide data due to the need to ensure accuracy and therefore consider it non-disclosure.*

[Fixed row]

(10.6) Provide the total weight of waste generated by the plastic you produce, commercialize, use and/or process and indicate the end-of-life management pathways.

Production of plastic

(10.6.1) Total weight of waste generated during the reporting year (Metric tons)

0

(10.6.2) End-of-life management pathways available to report

Select all that apply

☑ Preparation for reuse
☑ Recycling
☑ Incineration
☑ Landfill

(10.6.3) % prepared for reuse

0

(10.6.4) % recycling

0

(10.6.7) % incineration

0

(10.6.8) % landfill

0

(10.6.12) Please explain

We are unable to provide data due to the need to ensure accuracy and therefore consider it non-disclosure.

Commercialization of plastic

(10.6.1) Total weight of waste generated during the reporting year (Metric tons)

0

(10.6.2) End-of-life management pathways available to report

Select all that apply
☑ Preparation for reuse

☑ Recycling
☑ Incineration
☑ Landfill

(10.6.3) % prepared for reuse

0

(10.6.4) % recycling

0

(10.6.7) % incineration

0

(10.6.8) % landfill

0

(10.6.12) Please explain

We are unable to provide data due to the need to ensure accuracy and therefore consider it non-disclosure.

Usage of plastic

(10.6.1) Total weight of waste generated during the reporting year (Metric tons)

0

(10.6.2) End-of-life management pathways available to report

Select all that apply
☑ Preparation for reuse
☑ Recycling

☑ Incineration
☑ Landfill

(10.6.3) % prepared for reuse

0

(10.6.4) % recycling

0

(10.6.7) % incineration

0

(10.6.8) % landfill

0

(10.6.12) Please explain

We are unable to provide data due to the need to ensure accuracy and therefore consider it non-disclosure.

Processing of plastic waste

(10.6.1) Total weight of waste generated during the reporting year (Metric tons)

0

(10.6.2) End-of-life management pathways available to report

Select all that apply
☑ Preparation for reuse
☑ Recycling
☑ Incineration

☑ Landfill

(10.6.3) % prepared for reuse

0

(10.6.4) % recycling

0

(10.6.7) % incineration

0

(10.6.8) % landfill

0

(10.6.12) Please explain

We are unable to provide data due to the need to ensure accuracy and therefore consider it non-disclosure.
[Fixed row]

C11. Environmental performance - Biodiversity

(11.2) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

(11.2.1) Actions taken in the reporting period to progress your biodiversity-related commitments

Select from:

☑ Yes, we are taking actions to progress our biodiversity-related commitments

(11.2.2) Type of action taken to progress biodiversity- related commitments

Select all that apply

☑ Land/water protection

☑ Land/water management

☑ Species management

☑ Law & policy

[Fixed row]

(11.3) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
	Select from: ☑ Yes, we use indicators	*Select all that apply* ☑ Response indicators

[Fixed row]

(11.4) Does your organization have activities located in or near to areas important for biodiversity in the reporting year?

Legally protected areas

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☑ Yes

(11.4.2) Comment

At all domestic and overseas production sites of our group, by using IBAT, we have conducted surveys to determine whether there are areas important for biodiversity such as the World Natural Heritage sites, IUCN Protected Area Management Categories I-VI, the Ramsar sites, and Key Biodiversity Areas within 1 km around the site.

UNESCO World Heritage sites

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☑ No

(11.4.2) Comment

N/A

UNESCO Man and the Biosphere Reserves

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☑ Yes

(11.4.2) Comment

At all domestic and overseas production sites of our group, by using IBAT, we have conducted surveys to determine whether there are areas important for biodiversity such as the World Natural Heritage sites, IUCN Protected Area Management Categories I-VI, the Ramsar sites, and Key Biodiversity Areas within 1 km around the site.

Ramsar sites

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:
☑ Yes

(11.4.2) Comment

At all domestic and overseas production sites of our group, by using IBAT, we have conducted surveys to determine whether there are areas important for biodiversity such as the World Natural Heritage sites, IUCN Protected Area Management Categories I-VI, the Ramsar sites, and Key Biodiversity Areas within 1 km around the site.

Key Biodiversity Areas

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:
☑ Yes

(11.4.2) Comment

At all domestic and overseas production sites of our group, by using IBAT, we have conducted surveys to determine whether there are areas important for biodiversity such as the World Natural Heritage sites, IUCN Protected Area Management Categories I-VI, the Ramsar sites, and Key Biodiversity Areas within 1 km around the site.

Other areas important for biodiversity

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☑ No

(11.4.2) Comment

N/A
[Fixed row]

(11.4.1) Provide details of your organization’s activities in the reporting year located in or near to areas important for biodiversity.

Row 1

(11.4.1.2) Types of area important for biodiversity

Select all that apply

☑ Legally protected areas

☑ Ramsar sites

☑ Key Biodiversity Areas

(11.4.1.3) Protected area category (IUCN classification)

Select from:

☑ Category IV-VI

(11.4.1.4) Country/area

Select from:

☑ Japan

(11.4.1.5) Name of the area important for biodiversity

Lake Biwa

(11.4.1.6) Proximity

Select from:

☑ Adjacent

(11.4.1.8) Briefly describe your organization’s activities in the reporting year located in or near to the selected area

Our Research Center is located adjacent to Lake Biwa, the largest freshwater lake in Japan, and serves as the central hub for research and development activities of our company group, comprising the “Corporate R&D Department” responsible for long-term basic research and new business creation, the “Divisional R&D Departments” conducting research and development directly related to each business, and the “Otsu Pharmaceutical Plant” engaged in contract manufacturing of pharmaceutical products.

(11.4.1.9) Indicate whether any of your organization’s activities located in or near to the selected area could negatively affect biodiversity

Select from:

☑ Yes, but mitigation measures have been implemented

(11.4.1.10) Mitigation measures implemented within the selected area

Select all that apply

☑ Abatement controls

☑ Restoration

(11.4.1.11) Explain how your organization’s activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

【Abatement controls】 At this base, there is wastewater discharged into the river basin, which has the potential to have a negative impact on biodiversity. We comply with environmental regulations and conservation agreements set by the Japanese government and Shiga Prefecture, where Lake Biwa is located.

【Restoration】 Our company group supports the "Biwako 100 Site Survey" conducted by Shiga Prefecture and the Bioproduction Research Institute at Ryukoku University. This survey is a citizen participation initiative to investigate the habitat conditions of organisms in Lake Biwa. Once a year, volunteer groups and local companies sample the lake water at 100 locations along the entire shore of Lake Biwa, obtaining and accumulating essential data for biodiversity conservation, such as the distribution of organisms and the spread of invasive species, through the analysis of environmental DNA (DNA derived from bodily fluids or feces released by organisms). Our Research Center is involved in this survey and is considering obtaining longitudinal data through regular sampling of Lake Biwa water within our premises. Additionally, we are discussing collaborative efforts between our company and the Bioproduction Research Institute, utilizing environmental DNA analysis technology. In fiscal 2024, we conducted a biological survey at the Research Center. Based on the results of this survey, in fiscal 2025, we also started extermination of designed invasive alien species in the Research Center.

Row 2

(11.4.1.2) Types of area important for biodiversity

Select all that apply

☑ Legally protected areas

☑ UNESCO Man and the Biosphere Reserves

☑ Key Biodiversity Areas

(11.4.1.3) Protected area category (IUCN classification)

Select from:

☑ Category Ia-III

(11.4.1.4) Country/area

Select from:

☑ Japan

(11.4.1.5) Name of the area important for biodiversity

Aya Biosphere Reserve

(11.4.1.6) Proximity

Select from:

☑ Up to 5 km

(11.4.1.8) Briefly describe your organization’s activities in the reporting year located in or near to the selected area

Since the 1950s, our company group has owned company-owned forests with the aim of achieving self-sufficiency in chemical fiber raw materials. However, due to changes in the composition of the chemical fiber business and the completion of the mission of raw material supply, we have sold off some of the mountain forests, leaving only a portion of them. We believe that proper management of the remaining forests contributes to climate change mitigation and biodiversity conservation. Our company-owned forest in Aya Town is located approximately 2 km from the buffer zone of the Aya Biosphere Reserve.

(11.4.1.9) Indicate whether any of your organization’s activities located in or near to the selected area could negatively affect biodiversity

Select from:

☑ Yes, but mitigation measures have been implemented

(11.4.1.10) Mitigation measures implemented within the selected area

Select all that apply

☑ Biodiversity offsets

(11.4.1.11) Explain how your organization’s activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

【Biodiversity offsets】 Our group supports and actively works toward the “30by30” target, one of the global targets of the Kunming-Montreal Biodiversity Framework. We have joined the “30by30 Alliance” established by the Japanese government and are working to promote the “30by30” target through collaboration with policymakers. Since the 1950s, our company group has owned company-owned forests with the aim of achieving self-sufficiency in chemical fiber raw materials. However, due to changes in the composition of the chemical fiber business and the completion of the mission of raw material supply, we have sold off some of the mountain forests, leaving only a portion of them. We believe that proper management of the remaining forests contributes to climate change mitigation and biodiversity conservation. For the management purposes of the company-owned forests, we have set the goal of conducting sustainable forest management that emphasizes the continuity with the surrounding rich deciduous forests, while maintaining their function as water source conservation and security forests and engaging in forestry activities. We aim for coexistence between humans and nature. The OECM (Other Effective area-based Conservation Measures) certification of our company group’s company-owned forests is considered an indicator of the success of our engagement. One area (Aya-cho, Miyazaki Prefecture) was certified as a “Nature and Coexistence Site” by the Japanese government and, in the reporting year (fiscal year 2025), registered as an “OECM” in the international database. We will manage Aya-no-Mori in a sustainable manner to maintain the forest’s function of alleviating the effects of floods and droughts in the region by adjusting the amount of water flowing through the river, in addition to protecting the habitats of rare animals.
[Add 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

☑ Electricity/Steam/Heat/Cooling consumption

☑ Fuel consumption

☑ Year on year change in absolute emissions (Scope 1 and 2)

(13.1.1.3) Verification/assurance standard

General standards

☑ ISAE 3000

☑ ISAE 3410, Assurance Engagements on Greenhouse Gas Statements

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

Once a year

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

CDP2025_13.1.1_assurance statement.pdf
[Add row]

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

(13.3.1) Job title

Representative Director

(13.3.2) Corresponding job category

Select from:

☑ Director on board

[Fixed row]

(13.4) Please indicate your consent for CDP to share contact details with the Pacific Institute to support content for its Water Action Hub website.

Select from:

☑ No