Asahi Kasei Corporation

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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Contents

C1. Introduction

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

Select from:

☑ Japanese

(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

The Asahi Kasei Group operates in three business areas: "Materials," which includes textiles, chemicals, and electronic devices; "Homes," which includes housing and building materials; and "Healthcare," which includes pharmaceuticals and medical devices. Our group mission is to "contribute to the lives and livelihoods of people around the world." We strive to improve resource and energy efficiency with our superior production technologies, and provide products and services that meet our customers' needs
[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.

(1.4.1) End date of reporting year

03/31/2025

(1.4.2) Alignment of this reporting period with your financial reporting period

Select from:

☑ Yes

(1.4.3) Indicate if you are providing emissions data for past reporting years

Select from:

☑ Yes

(1.4.4) Number of past reporting years you will be providing Scope 1 emissions data for

Select from:

☑ 5 years

(1.4.5) Number of past reporting years you will be providing Scope 2 emissions data for

Select from:

☑ 5 years

(1.4.6) Number of past reporting years you will be providing Scope 3 emissions data for

Select from:

☑ 5 years

[Fixed row]

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

3037312000000

(1.5) Provide details on your reporting boundary.

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

[Fixed row]

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

ISIN code - bond

(1.6.1) Does your organization use this unique identifier?

Select from:
☑ Yes

(1.6.2) Provide your unique identifier

JP3111200006

ISIN code - equity

(1.6.1) Does your organization use this unique identifier?

Select from:
☑ Yes

(1.6.2) Provide your unique identifier

JP3111200006

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
☑ India
☑ Italy
☑ Japan
☑ Spain
☑ Sweden
☑ Austria
☑ Czechia
☑ Germany
☑ Morocco
☑ Taiwan, China
☑ Republic of Korea
☑ United States of America
☑ Brazil
☑ Canada
☑ France
☑ Mexico
☑ Poland
☑ Romania
☑ Thailand
☑ Viet Nam
☑ Australia
☑ Singapore

(1.14) In which part of the chemicals value chain does your organization operate?

Bulk inorganic chemicals

☑ Chlorine and Sodium hydroxide
☑ Hydrogen
☑ Nitric acid

Bulk organic chemicals
☑ Adipic acid
☑ Aromatics
☑ Polymers

Other chemicals
☑ Specialty inorganic chemicals
☑ Specialty organic chemicals

(1.15) Which real estate and/or construction activities does your organization engage in?

Select all that apply
☑ New construction or major renovation of buildings
☑ Buildings management

(1.24) Has your organization mapped its value chain?

(1.24.1) Value chain mapped

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

(1.24.2) Value chain stages covered in mapping

Select all that apply
☑ Upstream value chain

(1.24.3) Highest supplier tier mapped

Select from:
☑ Tier 1 suppliers

(1.24.4) Highest supplier tier known but not mapped

Select from:

☑ Tier 2 suppliers

(1.24.7) Description of mapping process and coverage

As part of our supplier-focused initiatives, we conduct a CSR procurement survey to identify potential risks related to CSR and sustainability. We prioritize efforts to reach out to suppliers identified as high-risk through the survey, and support their improvement activities through individual interviews. This survey covers Tier 1 suppliers that account for over 85% of the purchasing amount of the Purchasing & Logistics Management Department, as well as some Tier 2 suppliers. As part of our item-focused initiatives, we implement SCRM (Supply Chain Risk Management) activities company-wide. We organize events that lead to procurement risks into risk categories, carefully examine each procurement item to see if it meets the relevant conditions, and then work to reduce the risk of any items that are found to be at risk.
[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)

1

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

We defined short term as one year.

Medium-term

(2.1.1) From (years)

1

(2.1.3) To (years)

5

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

Mid-term business plans are prepared for a maximum period of five years.

Long-term

(2.1.1) From (years)

5

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

Select from:
☑ No

(2.1.3) To (years)

30

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

We defined long- term as one year.
[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

☑ Water

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

Select all that apply

☑ Dependencies

☑ Impacts

☑ Risks

☑ Opportunities

(2.2.2.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

(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:

☑ Annually

(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

☑ Site-specific

☑ Local

(2.2.2.12) Tools and methods used

Commercially/publicly available tools

☑ WRI Aqueduct

Databases

☑ Regional government databases

Other

☑ External consultants

☑ Internal company methods

☑ Scenario analysis

☑ Other, please specify : Tsunami risk assessment

(2.2.2.13) Risk types and criteria considered

Acute physical

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

Chronic physical

☑ Water availability at a basin/catchment level

☑ Water stress

☑ Water quality at a basin/catchment level

Policy

☑ Limited or lack of river basin management

☑ Limited or lack of transboundary water management

☑ Mandatory water efficiency, conservation, recycling, or process standards

☑ Regulation of discharge quality/volumes

☑ Statutory water withdrawal limits/changes to water allocation

Market

☑ Inadequate access to water, sanitation, and hygiene services (WASH)

Reputation

☑ Stakeholder conflicts concerning water resources at a basin/catchment level

Technology

☑ Dependency on water-intensive energy sources

(2.2.2.14) Partners and stakeholders considered

Select all that apply

☑ Customers

☑ Employees

☑ Suppliers

☑ Regulators

☑ Local communities

☑ Water utilities at a local level

☑ Other water users at the basin/catchment level

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

Select from:

☑ No

(2.2.2.16) Further details of process

The Asahi Kasei Group first uses WRI Aqueduct to gain an overall understanding of which business sites may be exposed to water risks. We are currently using

Aqueduct to investigate water stress forecasts for 2030 and 2040. We utilize WRI Aqueduct because it is a tool that allows us to easily assess various water risks associated with global business activities. Aqueduct's assessment results (risk levels) are indicated on a five-point scale: "low," "low-medium," "medium-high," "high," and "extremely high." However, rather than simply using the Aqueduct assessment results, we adjust them based on information obtained from each business site to arrive at a final assessment result. Regarding water risks in the supply chain, we conduct a CSR procurement survey with major suppliers and interview them about their efforts to efficiently use water resources and manage wastewater. We are working to identify and manage current and future risks in the supply chain. While it is unlikely that Asahi Kasei Group factories will suffer serious drought damage in the near future, if it is anticipated that sufficient high-quality freshwater will become unavailable in the regions where we operate from 2040 onward due to global population and economic growth, we may be forced to review our business strategies. If such water risks are predicted to occur, they will be discussed at management-level meetings for each business area. If it is determined that there is a possibility that the Asahi Kasei Group's business strategies will be affected, they will be discussed at the Management Meeting and reflected in our strategies as necessary.

Row 2

(2.2.2.1) Environmental issue

Select all that apply

☑ Climate change

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

Select all that apply

☑ Dependencies

☑ Impacts

☑ Risks

☑ Opportunities

(2.2.2.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

(2.2.2.4) Coverage

Select from:

☑ 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:

☑ Annually

(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

☑ Site-specific

(2.2.2.12) Tools and methods used

Enterprise Risk Management
☑ Internal company methods

International methodologies and standards
☑ Life Cycle Assessment

Other
☑ Desk-based research
☑ External consultants
☑ Internal company methods
☑ Materiality assessment
☑ Scenario analysis

(2.2.2.13) Risk types and criteria considered

Acute physical
☑ Flood (coastal, fluvial, pluvial, ground water)
☑ Heat waves
☑ Landslide
☑ Storm (including blizzards, dust, and sandstorms)
☑ Other acute physical risk, please specify :地震

Chronic physical
☑ Heat stress
☑ Temperature variability

Policy
☑ Carbon pricing mechanisms
☑ Changes to national legislation
☑ Poor enforcement of environmental regulation

Market

☑ Availability and/or increased cost of certified sustainable material

☑ Availability and/or increased cost of raw materials

☑ Changing customer behavior

Reputation

☑ Increased partner and stakeholder concern and partner and stakeholder negative feedback

Technology

☑ Transition to lower emissions technology and products

Liability

☑ Non-compliance with regulations

(2.2.2.14) Partners and stakeholders considered

Select all that apply

☑ Customers

☑ Employees

☑ Investors

☑ Regulators

☑ 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

We are currently using the TCFD framework to determine our risks and opportunities and what substantive financial or strategic impacts they may have on us. We have assumed two scenarios for climate change and the resulting societal changes: a +4°C scenario and a +1.5°C scenario. In the +4°C scenario, temperatures rise

sharply, accompanied by stronger typhoons, heavier rains, stronger winds, and more rapid increases in temperature. In the +1.5°C scenario, temperatures rise more slowly as regulations on CO2 emissions are strengthened and policies promoting more climate-friendly alternatives, such as electric vehicles, are promoted. We are discussing the impacts of both risks and opportunities, and our members include members from our three core business areas—Materials, Homes, and Healthcare—as well as the Corporate Division. We then held more comprehensive discussions at the Executive Committee and the Board of Directors to determine the risks and opportunities.
[Add row]

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

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

Select from:
☑ Yes

(2.2.7.2) Description of how interconnections are assessed

The internal secretariat, centered on the Sustainability Promotion Department and the Corporate Planning Department, requests each business division to conduct an assessment of the interrelationships regarding environmental impact, risks, and opportunities, and the internal secretariat compiles the assessment results. Furthermore, after discussions with the management of each business division and corporate division, the results of the assessment are compiled for the entire company group. Disclosure policies and content are then proposed or reported to the Management Committee and the Board of Directors for discussion.
[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
☑ Downstream value chain

(2.3.3) Types of priority locations identified

Sensitive locations

☑ 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

(2.3.4) Description of process to identify priority locations

Direct Operations: Asahi Kasei operates the Moriyama Plant, one of its large-scale direct operations. The Moriyama Plant is located approximately 5 km from Lake Biwa, and the Yasu River and waterways flowing around the plant flow into the lake. Lake Biwa is designated as a KBA and protected area (wildlife protection area, quasi-national park, and Ramsar Convention wetland), and is classified as an IUCN Category IV or V site. Given this, the Moriyama Plant is a high-risk site located near such a conservation-critical area. A map of the plant is attached. Downstream Value Chain: In light of the recent increase in the severity of flooding in Asahi Kasei's housing business, we have identified "areas facing significant flood impacts" as one of our downstream priority areas. To identify specific priority areas, we are developing a flood damage estimation system that utilizes data on housing locations after construction. This system is being used to predict flood risks. Based on flood risk areas on hazard maps published by local governments and the location information of homes we have supplied, we identify properties expected to suffer damage and set them as priority areas for flood prevention, working with owners to implement advance flood prevention measures. In addition, we link the location data of homes owned by our company with images of estimated flood conditions from our partner companies, which generate and distribute real-time flood damage estimates in the event of a disaster and flood depth estimates based on information posted on social media and weather information, to estimate flood damage in the event of a disaster and promote the efficiency of responses after a disaster.

(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

Moriyama plant.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:

☑ Revenue

(2.4.3) Change to indicator

Select from:

☑ Absolute decrease

(2.4.5) Absolute increase/ decrease figure

10000000000

(2.4.6) Metrics considered in definition

Select all that apply

☑ Time horizon over which the effect occurs

☑ Likelihood of effect occurring

(2.4.7) Application of definition

While the Group achieves stable business operations through its wide-ranging businesses, these diverse businesses are subject to various inherent risks, including different market and financial risks, which could have a significant impact on the Group's financial position, results of operations, and relationships with stakeholders. For example, natural disasters or other force majeure events could disrupt the supply of raw materials for products, resulting in production stoppages lasting several months, or unexpected factors such as factory accidents could result in a supply stoppage of the Group's products, severely impacting important customers and consumers. While it is difficult to quantify the significant impact of these risks, examples include a significant decrease in revenue of 10 to 20 billion yen due to a

prolonged shutdown caused by a disaster, personal injuries resulting in loss of life or threatening the safety of many people, a loss of social credibility, and damage to the brand value. Climate change risks include losses due to damage to our own production or supply chain, and increased manufacturing and raw material costs due to stricter regulations. For us, a "significant financial or strategic impact on our business" means a significant impact on factory operations, results of operations, and relationships with stakeholders. For example, if severe drought or flooding were to hit our factories or major suppliers, it could disrupt their operations and have a significant impact on our business performance. Furthermore, if harmful substances were to be discharged from our factories into rivers or the ocean, affecting people's health or the fishing industry, it could have a significant adverse effect on our relationships with stakeholders. Therefore, this definition applies not only to impacts caused by our own operations, but also to impacts caused by the operations of our suppliers.

Opportunities

(2.4.1) Type of definition

Select all that apply

☑ Qualitative

☑ Quantitative

(2.4.2) Indicator used to define substantive effect

Select from:

☑ Revenue

(2.4.3) Change to indicator

Select from:

☑ Absolute increase

(2.4.5) Absolute increase/ decrease figure

10000000000

(2.4.6) Metrics considered in definition

Select all that apply

☑ Time horizon over which the effect occurs

☑ Likelihood of effect occurring

(2.4.7) Application of definition

For the century since our founding, we have continued to develop our business by tackling social issues and transforming ourselves as we go. As climate change forces a major transformation of the entire social system, we are working to achieve a carbon-neutral society by 2050 and sustainably enhance our corporate value by transforming our business portfolio and constantly improving productivity. We are promoting business portfolio transformation to provide value. Under our Medium-Term Management Plan, which begins in fiscal 2025, we plan to make expansion-related investments of approximately ¥670 billion over three years in key growth and strategic development areas, including hydrogen, separators (and other energy and infrastructure), electronics, overseas housing, and healthcare. Centered on these areas, we aim to increase our Group's operating profit from ¥211.9 billion in fiscal 2024 to ¥270 billion in fiscal 2027. As part of the ¥670 billion expansion investment, we plan to make approximately ¥100 billion in greenhouse gas reduction-related investments over the three years leading up to fiscal 2027. In addition, with the aim of incorporating new technologies and collaborating on climate change-focused initiatives, we have established a "Care for Earth Investment Framework" ($100 million over the five years from 2023 to 2027) in our CVC activities, and are investing in environmental startups. We recognize that our business development direction can provide business opportunities for a variety of products and services related to climate change mitigation and adaptation.
[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

The Asahi Kasei Group classifies chemical substances according to their type and level of hazard, based on international standards such as the REACH Regulation and GHS classification. In Japan, the Water Pollution Control Act restricts 28 substances that are highly toxic to living organisms and the environment. We recognize that these substances are a top priority in preventing water pollution worldwide, and that their management and reduction efforts are necessary. The Asahi Kasei Group takes great care in handling chemicals used in product manufacturing and has established its own wastewater management guidelines. These guidelines specify and manage wastewater that is subject to health items (hazardous substances), living environment items, and designated substances specified in the Water Pollution Control Act, as well as substances that have an environmental impact or emit a foul odor, as well as substances that are not specified in the Water Pollution Control Act but require consideration. Furthermore, to prevent legal violations, we manage wastewater quality using voluntary standards that are stricter than general local regulations and manufacturing facilities. Furthermore, in the unlikely event of an accident, we have thorough measures in place to completely prevent the leakage of chemical substances, and as a result, we have not violated any laws or regulations for many years.
[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

Our factories use some potentially harmful chemicals, but we comply with legal regulations and give due consideration to the environment when it comes to emissions. We have established voluntary management standards that are stricter than regulatory standards, and we have achieved zero environmental problems (water quality, air, etc.) in fiscal 2024. In order to reduce adverse effects on human health and the aquatic ecosystem, we strive to minimize the release of harmful chemicals into the environment.

(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

☑ Water recycling

(2.5.1.5) Please explain

At the Moriyama Factory, all water used is drawn from underground aquifers. This water is mainly used for heat exchange as cooling water for equipment and facilities, but we are promoting the reuse of the water we draw. In this way, we recover and recycle used water, and we measure and evaluate the results of this initiative.

[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

[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

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

☑ China

☑ Japan

☑ Republic of Korea

☑ Singapore

☑ United States of America

(3.1.1.9) Organization-specific description of risk

In Japan, the Global Warming Countermeasure Tax was enacted in fiscal year 2012, with the tax rate per unit quantity set at 289 yen/t-CO2 emissions. The GX Promotion Act came into effect in fiscal year 2023, establishing a fossil fuel surcharge starting in fiscal year 2028 and a paid auction system for power generation companies starting in fiscal year 2033. Furthermore, a 2025 amendment to the GX Promotion Act mandated participation in an emissions trading scheme for businesses with annual direct emissions of 100,000 tons or more. Discussions are currently underway regarding the specific system design, with the scheme expected to begin operation in fiscal year 2026. While the details of the system have yet to be finalized, it is unclear what the burden on our company will be. However, it is highly likely that our costs will increase in the medium to long term. We consider the Net Zero Emissions (NZE) scenario, the IEA's most aggressive scenario for achieving the 1.5°C target, as one of our scenarios, and the specific risk amounts are as described in (3.1.16). Our GHG emissions for fiscal 2024 will be 3.19 million t-CO2e, which is roughly the same as fiscal 2023 emissions.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Increased direct costs

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

Select all that apply

☑ Medium-term

☑ Long-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:

☑ Medium-high

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

As described in 3.1.1.25, if the current business portfolio and greenhouse gas emissions remain unchanged, and the carbon cost is set at 15,000 yen/t-CO2 based on the CO2 price level in 2030 in the IEA's NZE scenario, the maximum tax burden could be approximately 48 billion yen per year.

(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)

0

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

48000000000

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

0

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

48000000000

(3.1.1.25) Explanation of financial effect figure

Asahi Kasei strongly recognizes the need to more proactively pursue large-scale measures to reduce greenhouse gas emissions. Without such measures, we will continue to incur additional annual tax burdens on fossil fuels, which are primarily used to generate our own electricity and steam. Given the global trend toward decarbonization, Japan's carbon tax rate is currently low at ¥289/t-CO2. However, according to the IEA's NZE scenario, limiting global temperature rise to below 1.5°C and achieving the Paris Agreement goals requires each country to set its carbon tax level at around $140/t-CO2. We estimated the potential economic impact of our group's annual GHG emissions (3.19 million t-CO2) and found that if we set the carbon cost at ¥15,000/t-CO2, based on the CO2 price level in 2030 in the IEA's NZE scenario, this could result in an annual tax burden of up to ¥48 billion. Total potential financial impact of CO2 emissions: 48 billion yen ((3.19 million t-CO2) x 15,000 yen/t-CO2)

(3.1.1.26) Primary response to risk

Policies and plans

☑ Develop a climate transition plan

(3.1.1.27) Cost of response to risk

48000000000

(3.1.1.28) Explanation of cost calculation

Current situation: Domestic companies using fossil fuels are required to pay petroleum and coal taxes and global warming countermeasure taxes. Furthermore, under the GX Promotion Act, a phased introduction of carbon pricing is planned, including a fossil fuel surcharge from fiscal 2028 onward and paid auctions for power generation companies from fiscal 2033 onward. Asahi Kasei recognizes the need to take appropriate measures to address this issue. Issue: Asahi Kasei covers approximately 50% of the group's total energy consumption through in-house power generation (including steam; the same applies below), and purchases the fossil fuels used for in-house power generation from external sources. Given the high likelihood that the burden on fossil fuels will increase in the future, we must avoid the potential risk of increased costs. From an economic perspective, the cost of addressing this risk must be kept within the carbon pricing cost. Based on the IEA's 2030 CO2 price level in the NZE scenario and assuming a carbon cost of 15,000 yen/t-CO2, the cost would be approximately 48 billion yen.

(3.1.1.29) Description of response

Countermeasures: To mitigate these risks, Asahi Kasei is actively promoting a shift to fuels with lower CO2 emissions. In 2012, we upgraded one of our coal-fired

power plants in the Nobeoka area to a facility capable of using wood biomass fuel. Currently, we generate electricity almost exclusively from wood biomass fuel, which we supply to our factories. In 2022, we completely replaced another coal-fired power plant with a liquefied natural gas (LNG) turbine power plant, which generates significantly less CO2 per fuel source. Furthermore, we began renovations of our Gokasegawa and Mamihara hydroelectric power plants in 2018, with the Gokasegawa and Mamihara power plants restarting operations in 2022 and 2025, respectively. We are also gradually upgrading other hydroelectric power plants, and will continue to utilize renewable energy over the long term. Results: As a result, the Asahi Kasei Group's biomass-fired electricity generation increased to 45,183 MWh and its hydroelectric power generation increased to 70,716 MWh. (Method of calculating management costs) The funds required for the renewal of the Gokasegawa and Mamihara hydroelectric power plants in Kyushu were covered by 10 billion yen in green bonds issued in 2020. Furthermore, to cover the funds for the renewal of five hydroelectric power plants, including Mizugasaki and Kawahashiri, a 20 billion yen green bond will be issued in 2023.

Water

(3.1.1.1) Risk identifier

Select from:

☑ Risk4

(3.1.1.3) Risk types and primary environmental risk driver

Policy

☑ Increased difficulty in obtaining water withdrawal permits

(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

☑ Singapore

(3.1.1.7) River basin where the risk occurs

Select all that apply

☑ Other, please specify : There are no specific rivers that apply as Singapore has few large rivers and chronic water shortages are a risk.

(3.1.1.9) Organization-specific description of risk

The products produced at the two factories in Singapore are part of the Asahi Kasei Group's core business in the Materials sector. Therefore, stable operation of the two factories in Singapore is important to the Asahi Kasei Group's business plans. Chemical factories require large amounts of water, especially for cooling. However, Singapore, with its small land area and few major rivers, suffers from chronic water shortages. While the country receives a supply of high-quality water from neighboring Malaysia, there is a risk that the water supply may become unstable due to political instability or other factors.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Decreased revenues due to reduced production capacity

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

Select all that apply

☑ Long-term

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

Select from:

☑ Very unlikely

(3.1.1.14) Magnitude

Select from:

☑ Low

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

Asahi Kasei operates two factories in Singapore, which receives a supply of high-quality water from neighboring Malaysia, and uses industrial water there. As Malaysia's economic development continues in the future, domestic demand for industrial water could increase, potentially destabilizing Singapore's water supply in the long term. If such a situation were to occur, the supply of industrial water to Jurong Island could be cut off, halting operations at our two factories on the island and incurring profit losses due to reduced production.

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

Select from:

☑ Yes

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

1300000000

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

3900000000

(3.1.1.25) Explanation of financial effect figure

In calculating the financial impact, we assumed that the supply of industrial water to Jurong Island would be completely halted due to changes in political unrest or other factors, and that operations at our two factories on the island would be suspended for a maximum of three months and a minimum of one month. We also took into account general market conditions and statistics in terms of the production volume and unit prices of major products at the subject business locations.

(3.1.1.26) Primary response to risk

Engagement

☑ Engage with regulators/policy makers

(3.1.1.27) Cost of response to risk

0

(3.1.1.28) Explanation of cost calculation

The collection of knowledge and information is not separate from our normal business operations and does not make sense to separate, so no identifiable costs are incurred.

(3.1.1.29) Description of response

Gathering knowledge and information is the first step in business operations, not just regarding water risks. Singapore is a country where environmental regulations are likely to be rapidly strengthened, with the introduction of a carbon tax in 2019 being one example. We recognize that information gathering and analysis are fundamental steps in detecting and minimizing water risks. For example, we supplied our Microza hollow fiber filtration membranes for water treatment to the Changi NEWater Plant, Singapore's largest wastewater reclamation plant. Based on this track record, we work closely with Singapore's Ministry of Sustainability and Environment, providing timely access to information on Singapore's water administration (such as water price trends, plans to improve water self-sufficiency, and trends in Malaysia, a water importer). We also constantly monitor the Ministry of Sustainability and Environment's website and external information sources. We also lobby domestically and internationally regarding water-related regulations through the Japan Chemical Industry Association.

Climate change

(3.1.1.1) Risk identifier

Select from:

☑ Risk2

(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

☑ Thailand

(3.1.1.9) Organization-specific description of risk

Due to the increasing scale of floods caused by climate change, the Asahi Kasei Group faces increasing risks, such as flood damage to facilities, loss of product inventory, and opportunity losses due to production suspensions. In fiscal 2011, the Asahi Kasei Group's Thailand base, which produces plastic compounds, was hit by flood damage, forcing the suspension of operations for six months. The resulting losses included a loss of 2.7 billion yen in revenue during the six months during

the suspension of operations. A risk assessment conducted at the Asahi Kasei Group's domestic and overseas bases and offices enabled us to narrow down the necessary countermeasures. If countermeasures were not taken, there is a risk that we would incur similar losses in the event of a new flood, and we believe this scale is appropriate in terms of the anticipated impact.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Decreased revenues due to reduced production capacity

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

Select all that apply

☑ Short-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:

☑ 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

As mentioned above, the risk of flood damage in Thailand is one of the environmental risks that could affect our financial position. However, because we have taken measures to mitigate this risk, we do not expect it to have a significant impact on our financial position at any particular point in the future.

(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)

400000000

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

2700000000

(3.1.1.25) Explanation of financial effect figure

If no countermeasures are taken, there is a risk that we will incur the same amount of losses due to new flooding. We have conducted a study to estimate the scope of potential damage in major areas where physical risk is anticipated, including through third-party surveys. As a result, based on assumptions taking into account the frequency of disasters and the possibility of simultaneous occurrence in major operating areas, we have arrived at a maximum damage estimate of approximately 2.7 billion yen and a minimum damage estimate of approximately 400 million yen. We believe that this scale is appropriate as the anticipated impact.

(3.1.1.26) Primary response to risk

Policies and plans

☑ Develop flood emergency plans

(3.1.1.27) Cost of response to risk

950000000

(3.1.1.28) Explanation of cost calculation

Situation: Due to increased flooding caused by climate change, the risk of flooding at facilities is increasing, particularly in Thailand, and we recognize the need to take appropriate measures. Issue: The aforementioned plastic compound factory in Thailand manufactures engineering plastic compound products using a process in which additives are blended into plastic raw materials at high temperatures. Extruders are the main production equipment at this factory, and several are installed on the first floor of the facility. We need to reduce the risk of sales loss due to flood damage to facilities. Regarding risk response costs, we believe it is reasonable to take measures within the scope of the expected financial impact. We have implemented measures equivalent to approximately 950 million yen against flood risk.

(3.1.1.29) Description of response

Countermeasures) In anticipation of future flood damage, the following countermeasures were implemented. 1) The power distribution panel, transformer, and extruder control panel on the first floor of the facility were relocated to the second floor, and modifications were made so that the main extruder unit can be

disassembled and lifted by crane in the event of future flooding. 2) A monitoring system for the upstream river was established, enabling flooding conditions to be predicted 10 days in advance. Results) Thanks to these measures, it is expected that even in the event of future flooding on a scale greater than that of fiscal 2011, damage to the facility's equipment will be avoided, and the equipment outage period will likely be limited to a few weeks. (Method of calculating management costs) The above countermeasures, including the relocation of the power distribution panel, transformer, and extruder control panel, cost 950 million 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

☑ Japan

(3.1.1.9) Organization-specific description of risk

The energy-efficient housing market is steadily expanding in developed countries. Driven by economic and climate change concerns, consumers and building material manufacturers are increasingly interested in homes and building materials that exceed regulatory standards. In recent years, interest in energy efficiency has steadily increased due to improvements in building insulation performance and the spread of net-zero energy houses (ZEH). Furthermore, improving the thermal environment through insulation not only prevents heat shock but also contributes to the health of residents, mitigating various illnesses. Failure to sell products with sufficient insulation performance can lead to sluggish sales and a negative impact on corporate image. In particular, in the Japanese market, HEAT20 (Japan's High-Insulation Housing Research Association, 20 Years Ahead), a group of volunteer members established in 2009, has set insulation performance standards that exceed

those of ZEH. In order to meet these standards, insulation material manufacturers must strengthen their competitiveness. If Asahi Kasei does not develop and sell high-quality products ahead of its competitors, it could damage its sales and corporate image.

(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:

☑ Unlikely

(3.1.1.14) Magnitude

Select from:

☑ Medium

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

As we develop and sell products that meet the standards proposed by HEAT20, we do not anticipate any significant impact on our financial position at the selected future point in time. However, as described below (in 3.1.1.25), we have calculated the potential financial impact if we fall behind our competitors in the development and supply of energy-efficient building materials and ZEH products.

(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)

0

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

9600000000

(3.1.1.25) Explanation of financial effect figure

If Asahi Kasei falls behind its competitors in the development and supply of energy-efficient building materials and ZEH products, a decline in sales will be inevitable, leading not only to a decline in profit margins but also to a tarnishment of its brand image. The potential financial impact was estimated based on the following assumptions: Housing-related sales in 2024 will be 1,035.9 billion yen, with a profit margin of 9.3%. A 10% decrease in sales could result in a single-year profit decrease of 9.6 billion yen. A profit decrease of 9.6 billion yen: (1,035.9 billion yen x 9.3% (profit margin) x 10% (sales decrease)).

(3.1.1.26) Primary response to risk

Infrastructure, technology and spending

☑ Other infrastructure, technology and spending, please specify : Stay ahead of the competition and develop and deliver high-quality products to our customers.

(3.1.1.27) Cost of response to risk

3800000000

(3.1.1.28) Explanation of cost calculation

Situation) As the insulation performance of buildings improves, interest in energy conservation is growing. If we are unable to sell products with sufficient insulation performance, not only will our products not sell, but it will also lead to a decline in our corporate image. Challenge) To avoid damaging our brand image, we need to develop products that meet the HEAT20 standard, which exceeds the ZEH (Net Zero Energy House) regulations. Research and development costs for the high-performance insulation material "Neomazeus" are covered by housing and building materials research and development costs. Of the group's total research and development costs of 110.6 billion yen, research and development costs for housing and building materials account for 3.8 billion yen.

(3.1.1.29) Description of response

Countermeasures: To avoid the risk of declining sales due to an inability to meet market demand, we have focused on being at the forefront of innovation. Our

proprietary "Neoma Foam" insulation material boasts extremely low thermal conductivity, excellent fire resistance, low gas emissions, no ozone-depleting gases, ease of installation, and outstanding quality, safety, and efficiency. Furthermore, our proprietary "Neoma Zeus" (equivalent to HEAT 20 G1) outperforms Neoma Foam by 10%. Results: As a result, our insulation business performed smoothly without a competitive disadvantage resulting in sales declines. Furthermore, thanks to sales of environmentally friendly homes, including ZEHs, and the expansion of our overseas business, residential sales are expected to increase 67% from ¥619 billion in fiscal 2016 to ¥1,035.8 billion in fiscal 2024. (Calculation method for "management costs")

Water

(3.1.1.1) Risk identifier

Select from:

☑ Risk6

(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

☑ Thailand

(3.1.1.7) River basin where the risk occurs

Select all that apply

☑ Chao Phraya

(3.1.1.9) Organization-specific description of risk

Due to the increasing scale of floods caused by climate change, the Asahi Kasei Group faces increasing risks, such as flood damage to facilities, loss of product inventory, and opportunity losses due to production suspensions. In fiscal 2011, the Asahi Kasei Group's Thailand base, which produces plastic compounds, was hit by flood damage, forcing the suspension of operations for six months. The resulting losses included a loss of 2.7 billion yen in revenue during the six months during the suspension of operations. A risk assessment conducted at the Asahi Kasei Group's domestic and overseas bases and offices enabled us to narrow down the necessary countermeasures. If countermeasures were not taken, there is a risk that we would incur similar losses in the event of a new flood, and we believe this scale is appropriate in terms of the anticipated impact.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Decreased revenues due to reduced production capacity

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

Select all that apply

☑ Short-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:

☑ 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

As mentioned above, the risk of flood damage in Thailand is one of the environmental risks that could affect our financial position. However, because we have taken measures to mitigate this risk, we do not expect it to have a significant impact on our financial position at any particular point in the future.

(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)

400000000

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

2700000000

(3.1.1.25) Explanation of financial effect figure

If no countermeasures are taken, there is a risk that we will incur the same amount of losses due to new flooding. We have conducted a study to estimate the scope of potential damage in major areas where physical risk is anticipated, including through third-party surveys. As a result, based on assumptions taking into account the frequency of disasters and the possibility of simultaneous occurrence in major operating areas, we have arrived at a maximum damage estimate of approximately 2.7 billion yen and a minimum damage estimate of approximately 400 million yen. We believe that this scale is appropriate as the anticipated impact.

(3.1.1.26) Primary response to risk

Policies and plans

☑ Develop flood emergency plans

(3.1.1.27) Cost of response to risk

950000000

(3.1.1.28) Explanation of cost calculation

Situation: Due to increased flooding caused by climate change, the risk of flooding at our facilities is increasing, particularly in Thailand, and we recognize the need to take appropriate measures. Issue: The aforementioned plastic compound factory in Thailand manufactures engineering plastic compound products using a process in which additives are blended into plastic raw materials at high temperatures. Extruders are the main production equipment at this factory, and several are installed on the first floor of the facility. We need to reduce the risk of sales loss due to flood damage to our facilities. Regarding risk response costs, we believe it is reasonable to take measures within the scope of the expected financial impact. We have decided to implement measures equivalent to approximately 950 million yen against the risk of flooding.

(3.1.1.29) Description of response

Countermeasures) In anticipation of future flood damage, the following countermeasures were implemented. 1) The power distribution panel, transformer, and extruder control panel on the first floor of the facility were relocated to the second floor, and modifications were made so that the main extruder unit can be disassembled and lifted by crane in the event of future flooding. 2) A monitoring system for the upstream river was established, enabling flooding conditions to be predicted 10 days in advance. Results) Thanks to these measures, it is expected that even in the event of future flooding on a scale greater than that of fiscal 2011, damage to the facility's equipment will be avoided, and the equipment outage period will likely be limited to a few weeks. (Method of calculating management costs) The above countermeasures, including the relocation of the power distribution panel, transformer, and extruder control panel, cost 950 million yen.
[Add row]

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

Climate change

(3.1.2.1) Financial metric

Select from:
☑ OPEX

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

48000000000

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

Select from:
☑ 1-10%

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

25000000000

(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

As described in 3.1.1.25 of Risk 1 in 3.1.1, the potential impact of our Group's annual GHG emissions (3.19 million t-CO2) is 48 billion yen per year. The impact percentage is approximately 2%, calculated by dividing 48 billion yen by OPEX of 2,825,391 million yen = (cost of sales: 2,079,051 million yen + selling, general and administrative expenses: 746,340 million yen). Regarding physical risks, if operations were to be suspended for one month in the Kyushu region, our main production base, the estimated impact of reduced sales of products manufactured at this base would be less than 1%, calculated by dividing the estimated impact of reduced sales of products manufactured at this base by OPEX of 2,825,391 million yen for fiscal year 2024 (cost of sales: 2,079,051 million yen + selling, general and administrative expenses: 746,340 million yen).

Water

(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)

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)

2700000000

(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

Transition risks) Currently being analyzed and calculated. Physical risks) As described in 3.1.1.25 of Risk 6 in 3.1.1, we estimate damages from the floods in Thailand to be 2.7 billion yen. The impact ratio is less than 1% of 2.7 billion yen divided by consolidated sales for fiscal year 2023 of 2,784.9 billion yen. As described in 3.1.1.25 of Risk 6 in 3.1.1, we estimate damages from the floods in Thailand to be 2.7 billion yen. The impact ratio is less than 1% of 2.7 billion yen divided by consolidated sales for fiscal year 2024 of 2,825,391 million yen = (Cost of sales: 2,079,051 million yen + Selling, general and administrative expenses: 746,340 million 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

Thailand

☑ Chao Phraya

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

Select all that apply

☑ Direct operations

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

1

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

Select from:

☑ Less than 1%

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

Select from:

☑ Less than 1%

(3.2.11) Please explain

Using Aqueduct, we identified eight of our directly operated facilities that are at high risk of flooding in river basins.

Row 2

(3.2.1) Country/Area & River basin

China

☑ Yangtze River (Chang Jiang)

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

Select all that apply

☑ Direct operations

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

1

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

Select from:

☑ Less than 1%

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

Select from:

☑ Less than 1%

(3.2.11) Please explain

Using Aqueduct, we identified eight of our directly operated facilities that are at high risk of flooding in river basins.

Row 3

(3.2.1) Country/Area & River basin

India

☑ Other, please specify : Mithi River

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

Select all that apply

☑ Direct operations

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

1

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

Select from:

☑ Less than 1%

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

Select from:

☑ Less than 1%

(3.2.11) Please explain

Using Aqueduct, we identified eight of our directly operated facilities that are at high risk of flooding in river basins.

Row 4

(3.2.1) Country/Area & River basin

Republic of Korea

☑ Other, please specify :Oehwanggang

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

Select all that apply

☑ Direct operations

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

1

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

Select from:

☑ Less than 1%

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

Select from:

☑ Less than 1%

(3.2.11) Please explain

Using Aqueduct, we identified eight of our directly operated facilities that are at high risk of flooding in river basins.

Row 5

(3.2.1) Country/Area & River basin

China

☑ Other, please specify: JinJiang

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

Select all that apply

☑ Direct operations

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

1

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

Select from:

☑ Less than 1%

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

Select from:

☑ Less than 1%

(3.2.11) Please explain

Using Aqueduct, we identified eight of our directly operated facilities that are at high risk of flooding in river basins.

Row 6

(3.2.1) Country/Area & River basin

Sweden

☑ Other, please specify: Stomnesjon

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

Select all that apply

☑ Direct operations

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

1

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

Select from:

☑ Less than 1%

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

Select from:

☑ Less than 1%

(3.2.11) Please explain

Using Aqueduct, we identified eight of our directly operated facilities that are at high risk of flooding in river basins.

Row 7

(3.2.1) Country/Area & River basin

United States of America

☑ Other, please specify :Lake Ontario

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

Select all that apply

☑ Direct operations

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

1

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

Select from:

☑ Less than 1%

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

Select from:

☑ Less than 1%

(3.2.11) Please explain

Using Aqueduct, we identified eight of our directly operated facilities that are at high risk of flooding in river basins.

Row 8

(3.2.1) Country/Area & River basin

Viet Nam

☑ Other, please specify :song Bac Hung Hai

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

Select all that apply

☑ Direct operations

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

1

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

Select from:

☑ Less than 1%

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

Select from:

☑ Less than 1%

(3.2.11) Please explain

Using Aqueduct, we identified eight of our directly operated facilities that are at high risk of flooding in river basins.
[Add row]

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

	Water-related regulatory violations	Comment
	Select from: ☑ No	*No fines, administrative guidance, or other penalties were imposed on us for violations of water-related regulations in fiscal 2024。*

[Fixed row]

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

Select from:

☑ Yes

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

Select all that apply

☑ Japan carbon tax

☑ Korea ETS

(3.5.2) Provide details of each Emissions Trading Scheme (ETS) your organization is regulated by.

Korea ETS

(3.5.2.1) % of Scope 1 emissions covered by the ETS

12.7

(3.5.2.2) % of Scope 2 emissions covered by the ETS

0

(3.5.2.3) Period start date

01/01/2024

(3.5.2.4) Period end date

12/31/2024

(3.5.2.5) Allowances allocated

395188

(3.5.2.6) Allowances purchased

0

(3.5.2.7) Verified Scope 1 emissions in metric tons CO2e

334298

(3.5.2.8) Verified Scope 2 emissions in metric tons CO2e

0

(3.5.2.9) Details of ownership

Select from:

☑ Facilities we own and operate

(3.5.2.10) Comment

Allocated emission allowances: 395,188 t-CO2e: 379,894 t-CO2e (Korean ETS emission allowances allocated in 2024) and 15,294 t-CO2e (Korean ETS emission allowances carried over from 2023)
[Fixed row]

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

Japan carbon tax

(3.5.3.1) Period start date

04/01/2024

(3.5.3.2) Period end date

03/31/2025

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

21

(3.5.3.4) Total cost of tax paid

150000000

(3.5.3.5) Comment

We have included a tax to combat global warming.
[Fixed row]

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

Asahi Kasei has set targets for its offices and factories, including improving productivity, energy intensity, and renewable energy utilization rates, and is promoting strategies to reduce energy costs and carbon tax burdens. We view green transformation, centered on climate change initiatives, as an important management issue and have positioned it as one of the core themes of our management strategy. As part of this effort, we have established internal carbon pricing (ICP). The ICP price is set based on the IEA's carbon price forecasts, market prices, and our own carbon neutrality cost outlook. Effective July 2023, the ICP price was revised from ¥10,000 (US$100)/CO2-t to ¥15,000 (US$140)/CO2-t, bringing it at the same level as the IEA's carbon tax price forecast of US$140/CO2-t in 2030 under the World Economic Outlook (WEO) Net Zero scenario. We use ICP prices to evaluate the profitability of capital investments and make investment decisions, further promoting actions toward regulatory compliance associated with carbon neutrality.

(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

☑ 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

☑ Canada

☑ Japan

☑ Republic of Korea

☑ United States of America

(3.6.1.8) Organization specific description

Rising consumer awareness of climate change is expected to drive consumer preference for electric vehicles (EVs). Asahi Kasei is developing high-performance

lithium-ion battery separators for EVs and believes that a full-scale market transition from gasoline-powered vehicles to EVs will create significant business opportunities. Asahi Kasei's lithium-ion battery separator, "Hipore," is a polyolefin film used in a wide range of high-tech fields. While at first glance it appears to be a general-purpose plastic film, it actually contains numerous micropores. "Hipore" is a high-performance microporous membrane with a wide range of thicknesses and highly uniform pore sizes. Asahi Kasei was the world's first company to successfully mass-produce current battery separators and has accumulated technology and know-how cultivated over many years of business activities. In addition to product design capabilities and post-processing know-how that contribute to improved battery performance, we possess separator development and evaluation capabilities based on battery evaluation technology, as well as high productivity and stable product supply capabilities. For all of these reasons, we believe we have a significant advantage in this field.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Increased revenues resulting from increased demand for products and services

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

Select all that apply

☑ Medium-term

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

Select from:

☑ Very likely (90–100%)

(3.6.1.12) Magnitude

Select from:

☑ Medium-high

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

The Hipore business, one of our most important businesses, is primarily targeting North America, Japan, and South Korea, where the EV market is expected to expand, and we are pursuing growth with the aim of capturing a market share of 30% or more in North America, where significant growth is expected in the mid- to long-term. At the management briefing in May 2024, we announced our business outlook for sales of 160 billion yen and an operating profit margin of 20% or more in fiscal year 2031, based on a "North American expansion strategy that utilizes rapid decision-making and a variety of means."

(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)

33600000000

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

160000000000

(3.6.1.23) Explanation of financial effect figures

As described in (3.6.1.14) of this section, the Hipore business, one of our most important businesses, primarily targets North America, Japan, and South Korea, where the EV market is expected to expand, and is pursuing growth with the aim of capturing a market share of 30% or more in North America, which is expected to see significant growth in the medium to long term. The Hipore business's sales for fiscal year 2022 were 33.6 billion yen, but at the management briefing held in May 2024, the company forecast sales of 160 billion yen and an operating profit margin of 20% or more for fiscal year 2031, thanks to a "North American expansion strategy that utilizes rapid decision-making and a variety of means."

(3.6.1.24) Cost to realize opportunity

220000000000

(3.6.1.25) Explanation of cost calculation

Our Hipore business has announced that it will make the following two capital investments to capture the North American and Japanese markets, where the EV market is expected to expand: 1) Expanding coating facilities in the United States, Japan, and South Korea with a total investment of approximately 40 billion yen (announced in October 2023), and 2) Building an integrated film-forming and coating production plant in Canada with a total investment of approximately 180 billion yen (announced in April 2024). With regard to 2), we will receive investment from the Development Bank of Japan Inc. and Honda Motor Co., Ltd., as well as subsidies from the Canadian federal government and the Ontario provincial government, and will pursue a production scale sufficient to meet market expansion while controlling investment risk.

(3.6.1.26) Strategy to realize opportunity

As mentioned above, our Hipore business will pursue a sufficient production scale to meet market expansion while controlling investment risk through vertical

collaboration and external funding. We expect the North American electric vehicle (xEV) market to grow over the medium to long term, and we are looking ahead to investments in not only the first phase mentioned above, but also the second and third phases. Our strategy is to accurately capture inquiries from automakers and battery manufacturers and reliably meet their demand. Through investments up to the third phase, we aim to capture a market share of over 30% in North America. In the future, we will develop various solutions in our "energy storage" business, centered on our separator business, by utilizing the battery-related technologies we have cultivated to date.

Water

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp4

(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

☑ Indonesia

☑ Republic of Korea

☑ Singapore

☑ Thailand

(3.6.1.6) River basin where the opportunity occurs

Select all that apply

☑ Chao Phraya

☑ Han-Gang (Han River)

☑ Yangtze River (Chang Jiang)

(3.6.1.8) Organization specific description

Droughts caused by climate change are becoming a serious problem in every region of the world. For example, water shortages have become a chronic problem in China, to the point that local governments have ordered manufacturing facilities to suspend operations during times of shortage. However, these situations present business opportunities for products and services that contribute to water conservation. The Asahi Kasei Group is highly competitive in filtration membrane manufacturing technology, leveraging its proprietary technologies. For example, "Microza" is a modular hollow filtration membrane for filtration systems developed by Asahi Kasei. The lineup includes several types of hollow fiber membranes and a variety of organic polymers. Liquids are filtered through the pores (voids) in the hollow fiber wall structure. Microza membranes feature a narrow pore size distribution, providing excellent and stable filtration performance. Microza, developed by the Asahi Kasei Group, is used in more than 1,600 plants worldwide and boasts a global tap water treatment market share of approximately 20-30%.

(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

☑ Short-term

☑ Medium-term

☑ Long-term

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

Select from:

☑ Virtually certain (99–100%)

(3.6.1.12) Magnitude

Select from:

☑ Medium

(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 short term, sales of materials, including filtration membranes, are expected to increase. This forecast assumes that the company will focus on high-value-added businesses in the materials sector and aim to secure profits. The global market for microfiltration (MF) and ultrafiltration (UF) systems is expanding against the backdrop of serious water quality issues, water shortages, and strengthened global wastewater regulations. Asahi Kasei is a leading global supplier of MF/UF membranes, and its MF/UF systems business is expected to reach a scale of 20 to 30 billion yen over the medium term. From a long-term perspective, we expect to continue to capture significant business opportunities worth 20 to 30 billion yen over the medium term and beyond, including Microza, which not only contributes to the efficient use of water resources but also to climate change and resource recycling.

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

Select from:

☑ Yes

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

1366000000000

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

1366000000000

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

20000000000

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

30000000000

(3.6.1.21) Anticipated financial effect figure in the long-term - minimum (currency)

20000000000

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

30000000000

(3.6.1.23) Explanation of financial effect figures

We forecast short-term sales of ¥1,366 billion in fiscal year 2025 for our Materials segment (including our membrane filtration business). The global market for microfiltration (MF) and ultrafiltration (UF) systems is expanding, projected to reach approximately ¥96.3 billion by 2030, against the backdrop of serious water quality issues, water shortages, and tightening global wastewater regulations. We are the world's leading supplier of MF/UF membranes, and our Microza membranes are used in over 1,000 factories worldwide, boasting a market share of over 20%. Based on this same market share, the MF/UF system business is estimated to reach approximately ¥20-30 billion (¥96.3 billion x 20-30%) in the medium term. We have also begun introducing Microza membranes to replace distillation equipment, which generates large amounts of CO2, in the production of environmentally friendly water for injection (WFI). Microza membranes are also being used as a replacement for diatomaceous earth filtration, which generates large amounts of waste. Furthermore, it is widely used around the world in processes to further purify treated water discharged from sewage treatment plants and industrial wastewater and recycle it as industrial water, making a significant contribution to solving water resource issues, one of the SDGs. Contributing to the global environment from such a multifaceted perspective is expected to become increasingly important in the future, once a certain level of progress has been made in addressing each individual environmental aspect. From a longer-term perspective, Microza can contribute not only to the effective use of water resources, but also to climate change countermeasures and resource recycling. For this reason, we expect to be able to secure business opportunities in the long term that are on par with those in the medium term, and the business scale is estimated to be 20 to 30 billion yen, based on a simple calculation similar to that in the medium term.

(3.6.1.24) Cost to realize opportunity

13100000000

(3.6.1.25) Explanation of cost calculation

(Method of calculating opportunity realization costs) Research and development expenses for fiscal 2024 in the Environmental Solutions Business segment, to which filtration membranes belonged until fiscal 2024, are 13.1 billion yen. These expenses consist of personnel costs, material costs, and depreciation costs. Research and development in the Chemicals Business area focuses on the environment, resources, and energy fields.

(3.6.1.26) Strategy to realize opportunity

As mentioned in Section 3.6.1.23, the global market for microfiltration (MF) and ultrafiltration (UF) systems is expanding against the backdrop of serious water quality issues and water shortages. Many countries are facing water shortages and the need for water quality improvement is increasing, driving the adoption of membrane filtration and water filtration/reclamation systems. In particular, the adoption of Microza has steadily expanded in many countries facing water shortages and increasing water quality needs. Asahi Kasei is strategically capturing this market opportunity. By expanding orders for large-scale water treatment facilities around the world, particularly in Asian countries where the number and scale of projects is expected to steadily increase, Asahi Kasei will contribute to resolving a wide range of environmental issues related to water resources. In addition to its traditional markets of Japan and the United States, Asahi Kasei will continue to shift its business

focus to regions facing water shortages, such as China, South Korea, Singapore, Thailand, Indonesia, and the Middle East. For example, the Singaporean government, facing water shortages, is promoting a water reclamation policy called "NEWater," which recycles and reuses treated wastewater. Many of these wastewater treatment plants use Asahi Kasei's Microza filtration membranes, with an adoption rate exceeding 60%. This is a result of the high recognition of Asahi Kasei's membranes' chemical resistance and long lifespan, and represents an opportunity to significantly contribute to Singapore's water security. We are also working on contributing to the global environment from a multifaceted perspective, aiming for long-term business development. Furthermore, in April 2024, we began selling a membrane system that produces sterilized water for the preparation of injectable drugs. This membrane system, which uses our hollow fiber Microza membranes, was developed as an alternative to the conventional distillation method for producing sterilized water, reducing CO2 emissions by reducing the amount of steam generated. We expect this new system will enable our customers to reduce CO2 emissions while providing a stable supply of highly safe sterilized water to the pharmaceutical industry.

Climate change

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp2

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Products and services

☑ Development of new products or services through R&D and innovation

(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

☑ Italy

☑ Japan

☑ France

☑ Germany

☑ United States of America

☑ United Kingdom of Great Britain and Northern Ireland

☑ Australia

(3.6.1.8) Organization specific description

Hydrogen is expected to play an important role in realizing a decarbonized society. In our new medium-term management plan, "2027 ~Trailblaze Together~," we have positioned hydrogen-related businesses as a strategic growth area and will continue to invest heavily in them as a growth driver toward 2030. In particular, we are accelerating the commercialization of our Aqualyzer™ alkaline water electrolysis system, a core strength of ours, with the goal of securing multiple commercial projects and demonstrating a 100MW-class system by fiscal 2027. Building on our operational track record with 10MW-class systems, we are further improving durability and reliability and ensuring scalability through modularization. In addition, in 2025, we will deliver the first 1MW-class containerized system, the Aqualyzer™-C3, in Europe and begin operational demonstrations in cold regions. This will enable us to establish a framework to meet a wide range of customer needs, from decentralized to large-scale systems. Furthermore, we are leveraging the ion exchange membrane technology we have cultivated in our salt electrolysis business to promote the development of high-efficiency cells. We aim to achieve sales of 100 billion yen in our hydrogen-related business by 2030, and contribute to the realization of a carbon-neutral society through the spread of green hydrogen.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Increased revenues through access to new and emerging markets

(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

☑ Long-term

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

Select from:

☑ Likely (66–100%)

(3.6.1.12) Magnitude

Select from:

☑ High

(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the

organization in the selected future time horizons

This is expected to increase dramatically to 10 GW by 2025 and 85 GW by 2030. The European REPowerEU initiative, Japan's Hydrogen Society Promotion Act, and related policies in various countries have increased certainty for hydrogen projects, encouraging previously stagnant investment decisions. As part of a NEDO-commissioned project, Asahi Kasei installed a 10 MW large-scale water electrolysis system at the Fukushima Hydrogen Energy Research Field (FH2R), which has been operational since 2020. This is one of the largest operational water electrolysis systems in the world. Furthermore, we are planning a large-scale demonstration project with multiple partners, including a NEDO Green Innovation Fund project, to establish commercial technologies and systems. The economic ripple effect (global market size estimate) of the Green Innovation Fund project is expected to reach approximately 400 billion yen in total by 2030 and 4.4 trillion yen annually by 2050. Asahi Kasei aims to achieve annual sales of 100 billion yen in this market by around 2030. This figure was presented at the Materials Area Briefing held in December 2023.

(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)

12000000000

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

12000000000

(3.6.1.21) Anticipated financial effect figure in the long-term - minimum (currency)

100000000000

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

100000000000

(3.6.1.23) Explanation of financial effect figures

The installed capacity of water electrolysis equipment is expected to increase dramatically from 1 GW in 2022 to 10 GW in 2025 and 85 GW in 2030. Europe's REPowerEU initiative, Japan's Hydrogen Society Promotion Act, and related policies in various countries have increased certainty for hydrogen projects, encouraging previously stagnant investment decisions. As part of a NEDO-commissioned project, Asahi Kasei installed a 10 MW large-scale water electrolysis system at the

Fukushima Hydrogen Energy Research Field (FH2R), which has been operational since 2020. This is one of the largest operational water electrolysis systems in the world. Furthermore, we are planning a large-scale demonstration project to establish commercial technologies and systems through NEDO Green Innovation Fund projects and in collaboration with several partners. The economic ripple effect (global market size estimate) of the Green Innovation Fund project is expected to reach approximately 400 billion yen in total by 2030 and 4.4 trillion yen annually by 2050. Asahi Kasei calculated its 2025 sales in this market in proportion to the expected global installed capacity. The company aims to achieve annual sales of 100 billion yen by around 2030. This figure was announced at the Materials Area Briefing held in December 2024.

(3.6.1.24) Cost to realize opportunity

75000000000

(3.6.1.25) Explanation of cost calculation

Situation: We are developing a strategy to accelerate the business development of our technologically superior alkaline water electrolysis system. We will promote commercialization using the 75 billion yen budget provided by the Green Innovation Fund project. Challenge: To commercialize the hydrogen production process, it is essential to meet the different needs of each customer for water electrolysis systems. It is also essential to build the production capacity and supply chain to meet the rapidly increasing demand for water electrolysis systems.

(3.6.1.26) Strategy to realize opportunity

Countermeasures) To address this issue, Asahi Kasei leverages its in-house R&D and production technology capabilities to provide water electrolysis systems that meet customer needs. We also collaborate with related companies and industry associations to promote the standardization of water electrolysis systems and associated equipment. We are a steering committee member of the Hydrogen Council, an international hydrogen initiative, and through its activities, we promote collaboration with various companies and organizations across the supply chain. We also serve as a steering committee member of the Hydrogen Value Chain Association (JH2A), a general incorporated association that brings together industry, government, and academia to promote the practical application of hydrogen technology. In addition to working to resolve issues related to the practical application of hydrogen technology, we also participate in discussions on the direction of JH2A's activities as a steering committee member. Through these industry associations, we aim to consolidate and share opinions across the industry and foster the development of both international and domestic green hydrogen markets and water electrolysis industries. We plan to build a cooperative framework, including partnerships both within and outside the Asahi Kasei Group, to ensure production capacity, supply chain structure, and scale that can meet market demand. Results) Based on the business foundation we have cultivated in the salt electrolysis business, we will first focus on the sale of electrolysis equipment and operation and maintenance services. We are positioning the European and US markets as priority markets, where policies and potential partners are highly mature. We will also participate in promising projects in Japan.

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

☑ 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

☑ Japan

(3.6.1.8) Organization specific description

Against the backdrop of global warming caused by climate change, consumer interest in housing and living environments is growing, and there is a demand for energy-efficient buildings and measures to mitigate the risk of severe wind and flood damage. Asahi Kasei sees this as an opportunity to supply housing that meets these needs. Since the founding of Asahi Kasei Homes in 1972, we have built up experience and a track record in the housing business through our Hebel Haus brand of detached homes. We also boast industry-leading performance in the condominium reconstruction business. Furthermore, we are pursuing contributions to the entire lifecycle of housing and business activities, focusing on environmental decarbonization and strengthening disaster resilience, through initiatives such as promoting ZEH (Net Zero Energy Houses), promoting renewable energy through membership in the RE100 initiative (with a target of achieving this by fiscal 2023), and obtaining Science-Based Target (SBT) certification.

(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

☑ Short-term

☑ 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:

☑ Medium-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

In order to achieve carbon neutrality by 2050, housing-related legislation has been revised, and based on this, a housing performance labeling system and high-performance grades such as insulation performance have been newly established and made mandatory, and the spread of ZEH housing is being promoted throughout society. Asahi Kasei Homes has steadily increased its ZEH ratio by developing specifications that comply with these systems and grades and promoting them. The company has set a target of a ZEH ratio of 90% by fiscal 2025, and achieved an actual result of 91% in fiscal 2024. Simply multiplying custom home sales in fiscal 2024 (approximately 420 billion yen) by the ZEH ratio comes to approximately 382 billion yen.

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

Select from:

☑ Yes

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

382000000000

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

382000000000

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

382000000000

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

382000000000

(3.6.1.23) Explanation of financial effect figures

In order to achieve carbon neutrality by 2050, housing-related legislation has been revised, and based on this, a housing performance labeling system and high-performance grades for insulation performance and other features have been newly established and made mandatory, and the spread of ZEH housing is being promoted throughout society. Asahi Kasei Homes has steadily increased its ZEH ratio by developing and promoting specifications that comply with these systems and grades. The company has set a target of a ZEH ratio of 90% by fiscal 2025, and achieved a result of 91% in fiscal 2024. Simply multiplying the ZEH ratio by the actual sales of custom-built homes in fiscal 2024 (approximately 420 billion yen) comes to approximately 382 billion yen.

(3.6.1.24) Cost to realize opportunity

3800000000

(3.6.1.25) Explanation of cost calculation

Research and development expenses in the housing business area will be 3.8 billion yen in fiscal 2024. Asahi Kasei Homes has steadily increased the ZEH ratio by developing and promoting specifications that comply with these systems and grades, and will continue to work on this in the future.

(3.6.1.26) Strategy to realize opportunity

Asahi Kasei Homes leases the roofs of Hebel Maison apartment complexes sold in urban areas from their owners and installs solar panels and storage batteries on them. This allows Asahi Kasei Homes to procure renewable energy from the facilities and supply it to Hebel Maison residents and the Asahi Kasei Group. In fiscal 2023, these efforts were recognized and the company received the Energy Conservation Grand Prize Judging Committee Special Award. Through these efforts, Asahi Kasei Homes will not only reduce its own greenhouse gas emissions, but also those of society as a whole, contributing to the realization of carbon neutrality.
[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)

138200000000

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

Select from:

☑ 1-10%

(3.6.2.4) Explanation of financial figures

FY2024 sales for Energy & Infrastructure, which includes LIB separator "Hipore," are expected to be 138.2 billion yen, equivalent to 4.6% of the total of 3,037.3 billion yen.

Water

(3.6.2.1) Financial metric

Select from:

☑ CAPEX

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

63100000000

(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 actual capital investment amount for the Environmental Solutions Business, including the Microza water treatment membrane business, for fiscal year 2024 will be approximately 63.1 billion yen. This is equivalent to approximately 29.9% of Asahi Kasei's total capital investment amount for fiscal year 2024 of 211 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

☑ Non-executive directors or equivalent

☑ Independent non-executive directors or equivalent

(4.1.4) Board diversity and inclusion policy

Select from:

☑ Yes, and it is publicly available

(4.1.5) Briefly describe what the policy covers

The selection policy for director candidates applies to all individuals elected as directors. When selecting director candidates, we select individuals who possess the excellent insight and abilities appropriate for a director position. For internal directors, we select candidates who are deemed to have specialized knowledge, experience, and abilities in their respective fields. On the other hand, for outside directors, we expect them to provide objective management oversight based on their deep insight, and we select a wide range of candidates who are appropriate for their responsibilities and have extensive experience in management, academia, administration, etc. We have published a skills matrix for directors to ensure overall diversity in terms of knowledge, experience, abilities, etc.

(4.1.6) Attach the policy (optional)

Corporate Governance.pdf
[Fixed row]

(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

[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
☑ President

(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

☑ Approving and/or overseeing employee incentives

☑ Overseeing and guiding major capital expenditures

☑ Monitoring the implementation of the business strategy

☑ Overseeing and guiding the development of a business strategy

☑ Overseeing and guiding acquisitions, mergers, and divestitures

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

(4.1.2.7) Please explain

The Asahi Kasei Group appoints the President and CEO as the Chief Executive Officer for climate change, who is responsible for promoting sustainability and accountable for its progress and results. Greenhouse gas emission reduction targets are discussed and decided by the Board of Directors. The Board of Directors is actively promoting climate change initiatives in the current medium-term management plan and continually discusses and decides on climate change-related issues. The Board also discusses the Task Force on Climate-related Financial Disclosures (TCFD). All directors check and supervise the President's duties as Chief Operating Officer, which include matters related to climate change. Furthermore, the Group has established three committees for specialized discussions on climate change: the Sustainability Promotion Committee, the Global Environmental Measures Promotion Committee, and the Environment, Safety, and Quality Assurance Committee. The content and policies of these committees are reported to the Board of Directors and reflected in discussions regarding Group management. For example, based on these committee reports, the Board of Directors held extensive discussions and declared in 2021 that it aims to achieve carbon neutrality by 2050. Furthermore, based on the TCFD framework, the Group analyzes and addresses physical and transition risks, and pursues opportunities. The President and CEO is ultimately responsible for overall risk management, and the Risk and Compliance Officer assists him under the supervision of the Board of Directors. The Risk and Compliance Committee, chaired by the President, conveys management-level decisions and instructions regarding risk management, including climate change risks, to each department head. Important investments are decided by the Board of Directors, which reflect internal carbon pricing, confirm profitability, and determine whether or not to invest. The Board of Directors meets once a month in principle, but also whenever necessary.

Water

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

Select all that apply

☑ President

(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

☑ Approving and/or overseeing employee incentives

☑ Overseeing and guiding major capital expenditures

☑ Monitoring the implementation of the business strategy

☑ Overseeing and guiding the development of a business strategy

☑ Overseeing and guiding acquisitions, mergers, and divestitures

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

(4.1.2.7) Please explain

The Asahi Kasei Group's President and CEO bears ultimate responsibility for water-related issues. Our water-related business is one of our most important management priorities, both in terms of business risks and opportunities. While many of our plants are located in areas with abundant water resources, some face the risk of water depletion. If this risk materializes, it could significantly impact plant operations. We recognize that not only addressing current plant operations but also determining future plant locations are important management priorities. Furthermore, as climate change increases the severity of weather disasters, we anticipate the possibility of flooding and the leakage of hazardous substances. We are also discussing analysis and responses based on the TCFD framework at our Board of Directors meetings, including considering necessary responses. Meanwhile, in terms of opportunities, we are considering measures that can contribute to the global water scarcity and uneven distribution of water resources. These are reflected in the mid-term and annual management plans formulated under the leadership of the President and CEO. The Environment, Safety, and Quality Assurance (ESH&QA) Committee deliberates plans and performance related to ESH&QA, including water issues, at its annual ESH&QA meeting. The Environment, Safety and Quality Assurance Committee's secretariat reports the committee's findings to the Management Meeting once a year. If a water-related issue that requires deliberation and approval by the Board of Directors arises in connection with an acquisition, large-scale capital investment, or business expansion, the person in charge will explain the matter to the Board of Directors. In addition, the Chief Environment, Safety and Quality Assurance Officer reports to the President at least once a year on the progress of the Group's environment, safety and quality assurance activities. We believe that this multi-layered governance structure allows management and the Board of Directors to focus on high-priority water issues.
[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

☑ Regular training for directors on environmental issues, industry best practice, and standards (e.g., TCFD, SBTi)

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

☑ Other, please specify : Our Chairman serves as Chairman of the Environment Committee of the Japan Business Federation (Keidanren), a roundtable for the Japanese business community, and through this experience has gained extensive knowledge of environmental aspects, particularly climate change and water.

(4.2.3) Environmental expertise of the board member

Experience

☑ Active member of an environmental committee or organization

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

☑ Regular training for directors on environmental issues, industry best practice, and standards (e.g., TCFD, SBTi)

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

☑ Other, please specify : Our Chairman serves as Chairman of the Environment Committee of the Japan Business Federation (Keidanren), a roundtable for the Japanese business community, and through this experience has gained extensive knowledge of environmental aspects, particularly climate change and water.

(4.2.3) Environmental expertise of the board member

Experience

☑ Active member of an environmental committee or organization

[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

[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

☑ President

(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

Policies, commitments, and targets

☑ Setting corporate environmental policies and/or commitments

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Conducting environmental scenario analysis

☑ Developing a business strategy which considers environmental issues

☑ Implementing the business strategy related to environmental issues

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

(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 Asahi Kasei Group has established the Sustainability Promotion Committee and the Environment, Safety, and Quality Assurance (EHS&QA) Committee under the President and CEO to promote individual priority activities related to climate change issues. The Sustainability Promotion Committee, chaired by the President and composed of the Chief Technology Officer, Chief Business Management Officer, and executives in charge of three business areas, deliberates on the most important strategic themes related to sustainability, such as carbon neutrality. The Sustainability Promotion Committee also works closely with related committees, including the Environment, Safety, and Quality Assurance Committee, to discuss and formulate policies on ESG issues in general. The Environment, Safety, and Quality Assurance Committee, chaired by the President and composed of the Chief Environmental Officer and Environmental Safety, Safety, and Quality Assurance Manager, is a core organization responsible for planning, goal setting, activity implementation, monitoring, auditing, reporting, and review of EHS&QA management. These committees function as the foundation for a promotion system that collaborates with all business divisions. Specifically, an action plan that specifies specific measures and timeframes for achieving the goals is formulated under the leadership of the Environmental Safety & Quality Assurance Manager, and is also reported to the Board of Directors. In addition, the Environmental Safety & Quality Assurance plans and results are discussed at the Environmental Safety & Quality Assurance Promotion Council, which is chaired by the Environmental Safety & Quality Assurance Manager and meets four times a year.

Water

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ President

(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

Strategy and financial planning

☑ Conducting environmental scenario analysis

☑ Developing a business strategy which considers environmental issues

☑ Implementing the business strategy related to environmental issues

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

(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 Environmental Safety and Quality Assurance Committee, an organization directly under the President, is chaired by the President and is composed of the Environmental Safety and Quality Assurance Executive Officer and the Environmental Safety and Quality Assurance Manager. At the Annual Environmental Safety and Quality Assurance Meeting, the plans and performance of environmental safety and quality assurance, including water issues, are discussed. The committee's secretariat reports the results of the committee to the Management Meeting once a year. If a water-related matter that should be discussed and approved by the Board of Directors arises in connection with acquisitions, large-scale capital investments, or business expansion, the person in charge will report it to the Board of Directors.
[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

18

(4.5.3) Please explain

The degree of achievement of non-financial targets, including individual targets such as promoting sustainability, is used as an incentive in the form of performance-linked remuneration. Performance-linked remuneration for directors in fiscal 2024 is 113,000,000 yen, and total remuneration for directors is 616,000,000 yen, so the performance-linked remuneration ratio is calculated as 113,000,000 yen / 616,000,000 yen x 100% = 18%. Evaluation of sustainability promotion, including climate change, is linked to remuneration.

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

18

(4.5.3) Please explain

The degree of achievement of non-financial targets, including individual targets such as promoting sustainability, is used as an incentive in the form of performance-linked remuneration. Performance-linked remuneration for directors in fiscal 2024 is 113,000,000 yen, and total remuneration for directors is 616,000,000 yen, so the performance-linked remuneration ratio is calculated as 113,000,000 yen / 616,000,000 yen x 100% = 18%. Evaluation of sustainability promotion, including responses to water-related issues, is linked to remuneration.
[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

Targets

☑ Progress towards environmental targets

☑ Achievement of environmental targets

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

☑ Both Short-Term and Long-Term Incentive Plan, or equivalent

(4.5.1.5) Further details of incentives

Performance-linked compensation, which forms part of the remuneration for Directors, is calculated by comprehensively assessing the degree of achievement of financial targets such as operating profit and ROIC, as well as the degree of achievement of individually set sustainability targets, including responses to climate change and water security issues. The appropriate level of monetary incentives is selected based on a clear and objective evaluation of performance, as well as consideration of awareness of improving invested capital efficiency. The calculation formula for individual monetary performance-linked compensation is as follows: Individual monetary performance-linked compensation: Index calculated from evaluation x Base amount by position * Index that comprehensively takes into account the degree of achievement of financial indicators and non-financial target.*

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

Our directors' remuneration reflects incentives for promoting sustainability, including climate change countermeasures, and is an important element of corporate governance. We believe that an incentive system has various benefits because it fairly evaluates performance, particularly in the area of sustainability, which has not previously received sufficient attention. Furthermore, the ability to set remuneration based on individual performance also helps to promote initiatives that are in line with job duties.

Water

(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

Targets

☑ Progress towards environmental targets

☑ Achievement of environmental targets

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

☑ Both Short-Term and Long-Term Incentive Plan, or equivalent

(4.5.1.5) Further details of incentives

Performance-linked compensation, which forms part of the remuneration for Directors, is calculated by comprehensively assessing the degree of achievement of financial targets such as operating profit and ROIC, as well as the degree of achievement of individually set sustainability targets, including responses to climate change and water security issues. The appropriate level of monetary incentives is selected based on a clear and objective evaluation of performance, as well as consideration of awareness of improving invested capital efficiency. The calculation formula for individual monetary performance-linked compensation is as follows: Individual monetary performance-linked compensation: Index calculated from evaluation x Base amount by position * Index that comprehensively takes into account the degree of achievement of financial indicators and non-financial targets.*

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

Our directors' remuneration reflects incentives for promoting sustainability, including addressing water-related issues, and is an important element of corporate governance. We believe that an incentive system has various benefits because it fairly evaluates performance, particularly in the area of sustainability, which has not previously received sufficient attention. Furthermore, the ability to set remuneration based on individual performance also helps to promote initiatives that are in line with job duties.
[Add row]

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

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

[Fixed row]

(4.6.1) Provide details of your environmental policies.

Row 1

(4.6.1.1) Environmental issues covered

Select all that apply

☑ Climate change

(4.6.1.2) Level of coverage

Select from:

☑ Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

(4.6.1.4) Explain the coverage

Based on our Group Mission, the Asahi Kasei Group is committed to contributing to the lives and livelihoods of people around the world. We recognized early on that climate change is a global issue that significantly impacts both the natural environment and society. We see it as our mission to address this issue by leveraging the scientific knowledge we have cultivated since our founding and the Group's collective strength. In May 2021, we established our "Policy Toward Carbon Neutrality," setting targets for the absolute amount of greenhouse gas emissions for the Asahi Kasei Group. We are also committed to contributing to the reduction of greenhouse gas emissions across society as a whole, working toward achieving our greenhouse gas reduction targets for 2030 and 2035 throughout the entire product lifecycle. Furthermore, the Asahi Kasei Homes Group, one of the Group's core businesses, is working toward the goal of sourcing 100% of its business electricity from renewable energy. We achieved RE100 in fiscal 2023, significantly ahead of our original target of 2038 at the time of joining.

(4.6.1.5) Environmental policy content

Climate-specific commitments

☑ Commitment to 100% renewable energy

☑ Commitment to net-zero emissions

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

Select all that apply

☑ No, but we plan to align in the next two years

(4.6.1.7) Public availability

Select from:

☑ Publicly available

(4.6.1.8) Attach the policy

Responding to climate change.pdf

Row 3

(4.6.1.1) Environmental issues covered

Select all that apply

☑ Water

(4.6.1.2) Level of coverage

Select from:

☑ Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

☑ Direct operations

(4.6.1.4) Explain the coverage

The Asahi Kasei Group's business is deeply connected to water, and ensuring water sustainability into the future is a prerequisite for business continuity and our mission to society. The Asahi Kasei Group has a basic policy of reducing water usage, and is working to make effective use of water resources at each plant by reducing water usage, recovering used water, and recycling it. To prevent water pollution, we also implement thorough wastewater management and leakage countermeasures, striving to prevent contamination of bodies of water and groundwater. Furthermore, our annual goal for the Group's environmental safety activities is to achieve zero leakage accidents in accordance with the Water Pollution Control Act.

(4.6.1.5) Environmental policy content

Environmental commitments

☑ Commitment to comply with regulations and mandatory standards

Water-specific commitments

☑ Commitment to control/reduce/eliminate water pollution

☑ Commitment to reduce water consumption volumes

☑ Commitment to reduce water withdrawal volumes

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

Select all that apply

☑ No, but we plan to align in the next two years

(4.6.1.7) Public availability

Select from:

☑ Publicly available

(4.6.1.8) Attach the policy

Water Resource Conservation.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

☑ International Sustainability & Carbon Certification (ISCC)

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

☑ UN Global Compact

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

The Asahi Kasei Group supports the United Nations Global Compact and participates in its Supply Chain Subcommittee. This subcommittee promotes activities aimed at building a sustainable CSR (Corporate Social Responsibility) procurement system for companies that transcends the boundaries of industry and interests. Furthermore, we believe that disclosing risks and opportunities is beneficial for companies to build trusting relationships with stakeholders and achieve sustainable improvements in corporate value. In May 2019, we declared our support for the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). Our efforts in the ISCC are disclosed in Section 13.1.1.
[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

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

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

Select from:

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

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

Select all that apply

☑ Paris Agreement

☑ Sustainable Development Goal 6 on Clean Water and Sanitation

(4.11.4) Attach commitment or position statement

sustainability_report2024jp.pdf

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

Select from:

☑ Yes

(4.11.6) Types of transparency register your organization is registered on

Select all that apply

☑ Non-government register

(4.11.7) Disclose the transparency registers on which your organization is registered & the relevant ID numbers for your organization

InfluenceMap Asahi Kasei

(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

All collaborative activities are centrally managed and coordinated to avoid conflicts by the Corporate Planning Department, which formulates and promotes the Mid-Term Management Plan, including the Climate Change Transition Plan. When implementing these activities, we collaborate with relevant internal departments and seek management-level decisions on important matters. When public comments are solicited on proposed environmental regulations on greenhouse gas emissions, energy consumption, wastewater volume, air pollutants, and soil contamination, if we believe the proposed regulations lack scientific basis, are excessive, or are inconsistent with existing regulations, we submit our opinions individually or jointly through industry associations such as the Japan Chemical Industry Association. When submitting individual opinions, we ensure that they are fair, balanced, and consistent with our company's policies before submitting them to the government. Any unfairness, imbalance, or inconsistency we find is corrected during this process. When submitting opinions through industry associations, we follow the same process and then, after discussion at the Japan Chemical Industry Association, we formulate a joint opinion of the Japan Chemical Industry Association. While no single company can control the outcome of the discussion, we make every effort to ensure that our opinions are reflected in the Japan Chemical Industry Association's opinion. The Japan Chemical Industry Association's opinions are often submitted through Keidanren. In addition to public comments, we utilize various channels to promote external engagement activities, ensuring that our environmental initiatives and transition plans do not deviate from Japan's and global goals. For example, our Chairman serves as Vice Chairman and Chairman of the Environment Committee of Keidanren, a member of the Advisory Committee on Natural Resources and Energy, which is reviewing Japan's 7th Strategic Energy Plan, and on the Governing Board of Circular Partners, an industry-government-academia partnership for the circular economy. We also actively participate in discussions and initiatives in industry groups, such as the GX League (a framework for promoting Japan's Green Transformation (GX)), Keidanren, the Japan Chemical Industry Association, the Petrochemical Industry Association, the Japan Chamber of Commerce and Industry, and the Tokyo Chamber of Commerce and Industry.
[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

Amendment of the Act on Promotion of Effective Utilization of Resources (Resource Effective Utilization Promotion Act)

(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

Low-impact production and innovation

☑ Circular economy

(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 major exceptions

(4.11.1.7) Details of any exceptions and your organization’s proposed alternative approach to the policy, law, or regulation

The Chairman of Asahi Kasei Corporation participated as a member of the "Study Group on Designing a Growth-Oriented Resource Autonomous Economy," an expert panel organized by the Ministry of Economy, Trade and Industry, and considered measures to promote the transition to a circular economy in a manner consistent with decarbonization. One of the results was the formulation of the "Strategy for a Growth-Oriented Resource Autonomous Economy" on March 31, 2023. Based on this strategy, amendments to the Act on Promotion of Effective Utilization of Resources (3R Act) were also considered to establish a system linking the arteries and veins of material circulation, and the revised Act on Promotion of Effective Utilization of Resources was passed by the Diet in May 2025 and promulgated in June. It is scheduled to come into effect in April 2026. Going forward, this could become the core of Asahi Kasei's efforts to realize its contribution transformation plan.

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

Select all that apply

☑ Discussion in public forums

(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

The revised Act on Promotion of Effective Utilization of Resources is an important policy that promotes the use of recycled resources and environmentally conscious design in order to further promote the creation of a recycling-oriented society. It also incorporates necessary elements for building a low-carbon society and a recycling-oriented society, which are our company's environmental policy. In addition to reducing resources and extending product life at the product design stage, we are also working to expand our use of recycled materials. Specifically, we are developing chemical recycling technology that uses microwaves to refine polyamide 66, a material used in automotive airbags and other automotive components, at the molecular level. This technology can ensure quality equivalent to that of virgin materials, and we are working toward commercialization. Furthermore, in our housing business, we are working to reduce waste generation at housing construction sites and separate waste for collection, maintaining zero final disposal at new construction sites. These initiatives are promoted through collaboration with partner companies and customers, as well as dialogue with industry groups and government agencies, and progress is disclosed in our integrated reports and on our website.

(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

European PFAS Control Measures

(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 impacts and pressures

☑ Hazardous substances

☑ Water availability

☑ Water pollution

(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

☑ EU28

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

Select from:

☑ Neutral

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

Select all that apply

☑ Submitting written proposals/inquiries

☑ Other, please specify : Some interviews will also be conducted

(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

We are aware of the details of the proposed European PFAS regulations, and believe that they will have an impact on the entire chemical industry and our business. For example, at Microza, one of our businesses, we are working to gather information from experts both in Japan and overseas, consulting with relevant government ministries and associations, and considering submitting opinions to governments and industry groups as necessary. We recognize that we must continue to proceed with these activities carefully, while monitoring the contents of the European Chemical Agency's background document.

(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

☑ Sustainable Development Goal 6 on Clean Water and Sanitation

[Add row]

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

Row 1

(4.11.2.1) Type of indirect engagement

Select from:

☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

Asia and Pacific

☑ Japan Chemical Industry Association

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

Select all that apply

☑ Climate change

☑ Water

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

Select from:

☑ Consistent

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

Select from:

☑ Yes, we publicly promoted their current position

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

In accordance with the Paris Agreement, Asahi Kasei has declared its commitment to achieving carbon neutrality by 2050. It announced that it will work toward this goal by utilizing chemical technologies currently under development, such as alkaline water electrolysis and CO2 capture, to promote green electricity and steam production and the introduction of innovative processes. The Japan Chemical Industry Association (JCIA) has also formulated the "Chemical Industry Stance Toward Carbon Neutrality." In response to the Japanese government's commitment to achieving carbon neutrality by 2050, the chemical industry, as a solution provider, has pledged to leverage the potential of chemistry to address global issues, promote and accelerate innovation, and contribute to the development of a sustainable society. Asahi Kasei has also identified key issues and themes that it must address as "Asahi Kasei Group Materiality," and has positioned "water pollution prevention" as one of its key themes. This theme is also related to Goal 6 of the Sustainable Development Goals (SDGs), and it indicates that it will promote initiatives while incorporating the perspectives of diverse stakeholders. The Japan Chemical Industry Association also understands the relationship between the activities of the

chemical industry and each of the SDGs, and sees water purification using ultrafiltration membranes and adsorbents, water supply to deserts and isolated islands using technologies such as seawater desalination membranes, and water conservation in the civilian sector through the development of water-saving detergents as examples of the chemical industry's contributions to Goal 6. In this way, Asahi Kasei and the Japan Chemical Industry Association are undertaking similar and compatible efforts regarding carbon neutrality and water environment issues. The president of Asahi Kasei serves as a director of the Japan Chemical Industry Association, and in particular plays a leading role in the Carbon Neutral Action Plan Working Group promoted by Keidanren, meaning that the company is deeply involved in the chemical industry's action plan for carbon neutrality and has a major influence on the position of the Japan Chemical Industry Association.

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

0

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

Select from:

☑ Yes, we have evaluated, and it is aligned

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

Select all that apply

☑ Paris Agreement

☑ 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

☑ TCFD

(4.12.1.3) Environmental issues covered in publication

Select all that apply

☑ Climate change

(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

☑ Emission targets

☑ Other, please specify : Business risks, climate change risks

(4.12.1.6) Page/section reference

PDF Green Transformation P.21, Business Risks P.45

(4.12.1.7) Attach the relevant publication

Securities Report 2025.pdf

(4.12.1.8) Comment

We have attached the securities report.

Row 2

(4.12.1.1) Publication

Select from:

☑ In voluntary sustainability reports

(4.12.1.3) Environmental issues covered in publication

Select all that apply

☑ Climate change

☑ Water

(4.12.1.4) Status of the publication

Select from:

☑ Underway - previous year attached

(4.12.1.5) Content elements

Select all that apply

☑ Governance

☑ Strategy

☑ Emissions figures

☑ Emission targets

(4.12.1.6) Page/section reference

Asahi Kasei Group Sustainability Report 2024 (Overall)

(4.12.1.7) Attach the relevant publication

sustainability_report2024jp.pdf

(4.12.1.8) Comment

The Asahi Kasei Group Sustainability Report is attached.

Row 3

(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

☑ 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:

☑ Underway - previous year attached

(4.12.1.5) Content elements

Select all that apply

☑ Governance

☑ Strategy

☑ Emissions figures

(4.12.1.6) Page/section reference

PDF Area Strategy P.36, Green Transformation (GX) P.48, Corporate Governance P.74, Non-Financial Highlights P.95

(4.12.1.7) Attach the relevant publication

Asahi Kasei report 2024(jp).pdf

(4.12.1.8) Comment

The Asahi Kasei report is attached.
[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:
☑ Annually

Water

(5.1.1) Use of scenario analysis

Select from:
☑ Yes

(5.1.2) Frequency of analysis

Select from:
☑ Annually
[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

Physical climate scenarios

☑ RCP 7.0

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☑ SSP3

(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

☑ Market

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 4.0°C and above

(5.1.1.7) Reference year

2021

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Climate change (one of five drivers of nature change)

Stakeholder and customer demands

☑ Consumer attention to impact

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Scenario analysis is based on various assumptions, and actual risk manifestations can vary significantly depending on the changes in these assumptions. For example, the flood damage risk analysis using Aqueduct assumes a once-in-100-year flood, but these assumptions themselves can change significantly.

(5.1.1.11) Rationale for choice of scenario

We are currently utilizing the TCFD framework to consider the risks and opportunities surrounding our company and their potential financial and strategic impacts. Regarding climate change and the resulting societal changes, we have assumed two scenarios: the IPCC SSP3-7.0 (4°C) scenario and the IEA NZE 2050 (1.5°C) scenario. Under the IPCC SSP3-7.0 scenario, typhoons will become more intense, with increased rainfall and wind speeds, and temperatures will rise sharply. In contrast, under the IEA NZE 2050 scenario, temperatures will rise more slowly due to the introduction of stricter CO2 emission regulations and policies that promote climate-friendly choices, such as electric vehicles. We have held extensive discussions with representatives from our three core business sectors and corporate divisions regarding the impact of these risks and opportunities. Subsequently, we held a more comprehensive discussion of risks and opportunities, including water-related issues, at the Executive Committee and Board of Directors.

Water

(5.1.1.1) Scenario used

Climate transition scenarios

☑ IEA NZE 2050

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Policy

☑ Market

☑ Reputation

☑ Technology

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 1.5°C or lower

(5.1.1.7) Reference year

2021

(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

☑ Climate change (one of five drivers of nature change)

Stakeholder and customer demands

☑ Consumer attention to impact

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Scenario analysis is based on various assumptions, and actual risk manifestations may differ significantly depending on the assumptions. For example, if climate change countermeasures progress very slowly toward 2030 and global warming progresses rapidly, there is uncertainty that national policies may be rapidly strengthened, resulting in costs that exceed the carbon tax assumed in the IEA's NZE scenario.

(5.1.1.11) Rationale for choice of scenario

We are currently utilizing the TCFD framework to consider the risks and opportunities surrounding our company and their potential financial and strategic impacts. Regarding climate change and the resulting societal changes, we have assumed two scenarios: the IPCC SSP3-7.0 (4°C) scenario and the IEA NZE 2050 (1.5°C) scenario. Under the IPCC SSP3-7.0 scenario, typhoons will become more intense, with increased rainfall and wind speeds, and temperatures will rise sharply. In contrast, under the IEA NZE 2050 scenario, temperatures will rise more slowly due to stricter CO2 emission regulations and the introduction of policies that promote climate-friendly choices, such as electric vehicles. We have held extensive discussions with representatives from our three core business sectors and corporate divisions regarding the impact of these risks and opportunities. Subsequently, we held more comprehensive discussions of risks and opportunities, including water-related issues, at the Executive Committee and Board of Directors meetings.

Climate change

(5.1.1.1) Scenario used

Climate transition scenarios

☑ IEA NZE 2050

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Policy

☑ Market

☑ Reputation

☑ Technology

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 1.5°C or lower

(5.1.1.7) Reference year

2021

(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

☑ Climate change (one of five drivers of nature change)

Stakeholder and customer demands

☑ Consumer attention to impact

Regulators, legal and policy regimes

☑ Global regulation

☑ Global targets

☑ Methodologies and expectations for science-based targets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Scenario analysis is based on various assumptions, and actual risk manifestations may differ significantly depending on the assumptions. For example, if climate change countermeasures progress very slowly toward 2030 and global warming progresses rapidly, there is uncertainty that national policies may be rapidly strengthened, resulting in costs that exceed the carbon tax assumed in the IEA's NZE scenario.

(5.1.1.11) Rationale for choice of scenario

We are currently utilizing the TCFD framework to consider the risks and opportunities surrounding our company and their potential financial and strategic impacts. Regarding climate change and the resulting societal changes, we have assumed two scenarios: the IPCC SSP3-7.0 (4°C) scenario and the IEA NZE 2050 (1.5°C) scenario. Under the IPCC SSP3-7.0 scenario, typhoons will become more intense, with increased rainfall and wind speeds, and temperatures will rise sharply. In contrast, under the IEA NZE 2050 scenario, temperatures will rise more slowly due to stricter CO2 emission regulations and the introduction of policies that promote climate-friendly choices, such as electric vehicles. We have held extensive discussions with representatives from our three core business sectors and corporate divisions regarding the impact of these risks and opportunities. Subsequently, we held more comprehensive discussions of risks and opportunities, including water-related issues, at the Executive Committee and Board of Directors meetings.

Water

(5.1.1.1) Scenario used

Physical climate scenarios

☑ RCP 7.0

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☑ SSP3

(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

☑ Market

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 4.0°C and above

(5.1.1.7) Reference year

2021

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Climate change (one of five drivers of nature change)

Stakeholder and customer demands

☑ Consumer attention to impact

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Scenario analysis is based on various assumptions, and changes in these assumptions can lead to significant differences in the actual manifestation of risk. For example, a flood damage risk analysis using Aqueduct assumes a once-in-100-year flood, but these assumptions themselves may change significantly.

(5.1.1.11) Rationale for choice of scenario

We are currently utilizing the TCFD framework to consider the risks and opportunities surrounding our company and their potential financial and strategic impacts. Regarding climate change and the resulting societal changes, we have assumed two scenarios: the IPCC SSP3-7.0 (4°C) scenario and the IEA NZE 2050 (1.5°C) scenario. Under the IPCC SSP3-7.0 scenario, typhoons will become more intense, with increased rainfall and wind speeds, and temperatures will rise sharply. In contrast, under the IEA NZE 2050 scenario, temperatures will rise more slowly due to stricter CO2 emission regulations and the introduction of policies that promote climate-friendly choices, such as electric vehicles. We have held extensive discussions with representatives from our three core business sectors and corporate divisions regarding the impact of these risks and opportunities. Subsequently, we held more comprehensive discussions of risks and opportunities, including water-related issues, at the Executive Committee and Board of Directors meetings.
[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

☑ 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

We investigated the changes that will occur due to climate change and their impact on our business using two scenarios, +4°C and +1.5°C, in line with the TCFD framework. As a result, we found that while climate change is expected to have a significant financial impact in the medium term, the financial risk to the company as a whole will be limited as our diverse business portfolio will create opportunities and risk responses, and we also confirmed that our diverse businesses and technologies have the potential to seize new opportunities related to climate change. Through this investigation, we have come to believe that the following are our key issues. 4°C Scenario: (Risk) - Intensifying meteorological disasters due to rising temperatures (shutdown of coastal and riverside factories due to frequent storm surges and flood damage) (Opportunity) - Spread of heatstroke and infectious diseases (increased demand for existing drugs, new drugs, and critical care businesses) 1.5°C Scenario: (Risk) - Acceleration of decarbonization (tighter GHG emission regulations, rising carbon prices, rising raw material costs) (Opportunity) - Net-zero energy houses (ZEH) and widespread use of electric vehicles (EVs) through government policies, and the arrival of a hydrogen society (increased demand for water electrolysis using renewable energy) In response to the above key issues, we have begun the following initiatives from a medium- to long-term perspective. - We are currently implementing risk management and responses from a business continuity plan (BCP) perspective to address the intensifying meteorological disasters due to rising temperatures. An investigation into future flood and storm surge risks using "Aqueduct Floods" confirmed no significant increase in risk. Regarding the spread of infectious diseases and heatstroke, we continue to provide life-saving medicines and medical equipment for infectious diseases and heatstroke, as well as consumables, equipment, and services for biopharmaceutical manufacturing processes. Regarding accelerating decarbonization, we are first systematically transitioning our existing coal-fired power plants to LNG (liquefied natural gas) + gas cogeneration systems. Furthermore, by expanding our use of renewable energy, we aim to significantly reduce the Group's overall GHG emissions and achieve net zero by 2050. Through these activities, we plan to avoid the negative impacts of increasingly strict decarbonization-related regulations (e.g., rising carbon taxes). Furthermore, as raw material costs are highly likely to rise in the future, we are also actively developing chemical recycling technology for plastics to realize a circular economy. To seize decarbonization-related opportunities, we will increase production of electronic components such as separators, which are essential for lithium-ion batteries (LIBs), in order to expand demand and market share. ・ In anticipation of the arrival of a hydrogen society, we will formulate a strategy to accelerate the business development of our alkaline water electrolysis systems, in which we have a technological advantage. This year, we considered risks related to both the 4°C scenario and the 1.5°C scenario, such as company selection and a decline in our reputation in society if the expectations of investors and customers regarding carbon neutrality exceed the level of our efforts. This specific consideration has made the management team more clearly aware that these risks are increasing year by year, leading to the next action.

Water

(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

(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

Under the IPCC SSP3-7.0 (4°C) scenario, droughts caused by climate change are predicted to become commonplace in all regions of the world. For example, water shortages will become commonplace in China, leading local governments to order the suspension of manufacturing operations during such periods. However, we believe that these situations present business opportunities for products and services that contribute to water conservation, and we utilize the results of scenario analysis as a factor in considering our key issues. The Asahi Kasei Group boasts a competitive advantage in the manufacturing technology of its proprietary filtration and purification membrane, Microza. Increased revenues due to increased demand for products and services: We aim to increase sales in the Energy & Infrastructure segment, including filtration membranes, from 138.2 billion yen in fiscal 2024 to 144 billion yen in fiscal 2025. This figure was disclosed in the IR financial results briefing for fiscal 2024. The global market for microfiltration (MF) and ultrafiltration (UF) systems is growing at an annual rate of approximately 10%, driven by urgent environmental water quality issues, water shortages, and increasingly stringent wastewater regulations worldwide. Microza boasts the leading share of membrane water purification systems in the United States, a particularly large market for these systems. We are strategically seizing this opportunity as adoption of Microza systems steadily expands in many countries facing water shortages and a growing need for water quality improvement. In fact, in addition to our traditional markets of Japan and the United States, we are focusing on countries facing water shortages, such as China, South Korea, Singapore, Thailand, Indonesia, and the Middle East. Asahi Kasei will continue to expand orders for large-scale water treatment facilities around the world, particularly in Asian countries, where a steady increase in the number and scale of projects is expected, and contribute to solving a wide range of environmental issues related to water resources.
[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:

☑ No, but we plan to add an explicit commitment within the next two years

(5.2.6) Explain why your organization does not explicitly commit to cease all spending on and revenue generation from activities that contribute to fossil fuel expansion

Asahi Kasei is expanding its energy-related business as part of its business diversification efforts. At present, we believe we must fulfill our responsibility to contribute to society's stable energy supply, and an immediate withdrawal from fossil fuel-related activities is not realistic. However, in the long term, we intend to accelerate the transition to renewable energy and low-carbon technologies.

(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 provide annual explanations and progress reports on our 1.5°C transition plan in our integrated report, the Asahi Kasei Report, and on our sustainability website. Information and advice obtained through stakeholder exchanges and surveys related to the Asahi Kasei Report are thoroughly examined in detail from both technical and cost perspectives by our internal carbon neutral promotion team (responsible for formulating our transition plan). Proposals and measures deemed effective as a result are approved by the Board of Directors and incorporated into our mid- to long-term transition plan for achieving net zero, and are then put into action.

(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

Asahi Kasei's climate transition plan is based on the following key assumptions and dependencies: 1) Policy and regulatory trends in Japan and major markets (e.g., introduction of carbon tax and emissions trading schemes) 2) Progress in technological innovation (e.g., hydrogen production and utilization technologies, CCUS, and reduced renewable energy costs) 3) Progress in decarbonization throughout the supply chain 4) Securing internal investment capabilities and human resources 5)

Support and cooperation from stakeholders (customers, investors, and local communities) We believe that the establishment of these conditions will enhance the effectiveness of our transition plan to achieve our net-zero target.

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

In fiscal year 2024, Asahi Kasei achieved the following progress: 1) Established reduction targets and a roadmap through strengthened collaboration with business divisions through the Carbon Neutral Promotion Team. 2) Began implementing and disclosing CFP assessments for major products. These efforts are in line with our medium- to long-term transition plan and represent a steady step toward achieving net zero.

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

Select all that apply

☑ Plastics

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

Asahi Kasei's climate transition plan positions environmental issues related to plastics as an important element. Specifically, we are promoting the following initiatives: 1) Product development using biomass and recycled materials 2) Research, development, and demonstration of plastic recycling technologies (chemical recycling, etc.) These measures aim to achieve both climate change countermeasures and resource circulation, and are at the core of our sustainability strategy.
[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

[Case study of the most important strategic decision influenced by climate-related opportunities made to date in this sector] The market size for automotive LIB separators is estimated at approximately 2 billion m2 in 2024 and is projected to expand to over 7.6 billion m2 by 2030. To address this, we have decided to build an integrated film production and coating plant in Ontario, Canada, with an estimated investment of 180 billion yen. Furthermore, by utilizing investments from the Development Bank of Japan Inc. and Honda Motor Co., Ltd., as well as subsidies from the Canadian federal and Ontario provincial governments, we aim to capture over 30% of the North American market while controlling investment risk. This investment will secure an annual production capacity of approximately 700 million m2 (coated film equivalent) by 2027, establishing a structure to respond to the rapid expansion of the EV market.

Upstream/downstream value chain

(5.3.1.1) Effect type

Select all that apply

☑ Risks

☑ Opportunities

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

Select all that apply

☑ Climate change

☑ Water

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

[Risks]; [Company-specific explanation of how our strategy in this sector is affected by climate-related risks and the relevant timeframe] An increasing number of customers are evaluating our efforts to reduce energy costs associated with transportation. We need to review our packaging to improve transportation efficiency, and if we do not take action, we may lose customers. Because some countries have already begun providing environmental impact information such as CO2 emissions, our strategy's time horizon is short- to medium-term. Our overseas sales ratio will increase from 52.8% to 54.7% from 2023 to 2024, requiring us to manage packaging and transportation. [Case studies of the most significant strategic decisions made to date in this sector that were affected by climate-related risks] We are promoting environmentally friendly rail transport as a means of transportation. We are working with our contracted shipping companies to implement various measures to reduce energy consumption. We have received Eco Rail Mark certification, which recognizes our priority rail transport of products. [Opportunities]; [Company-specific explanation of how our strategy in this sector is affected by climate-related opportunities and the relevant timeframe] Automakers are promoting lightweight vehicles in response to regulations on CO2 emissions during driving. Asahi Kasei has been developing foam (automotive interior materials using expanded polyethylene beads) that reduces weight compared to conventional plastic parts, and has been expanding the market for automakers. This strategy covers both the short and medium term. [Case study of the most important strategic decisions made in this field to date that were influenced by climate-related opportunities] CO2 emission regulations are becoming stricter globally, particularly in the EU and China. Asahi Kasei's fiscal year 2024 sales are expected to reach 215.6 billion yen in the EU (7.1% of total sales) and 285.5 billion yen in China (9.1% of total sales), and we aim to create and expand business in these regions. As part of this effort, we established Asahi Kasei Europe GmbH in Düsseldorf, Germany, as a base for future business expansion in Europe, strengthening our ties with the European automotive industry. The Asahi Kasei Group also recognizes that the increasing severity of weather disasters increases the risk of disasters affecting our raw material suppliers and product logistics. Therefore, we are using hazard maps to visualize high-risk trade flows, and are taking steps such as creating a list of alternative suppliers, diversifying purchasing, increasing inventory, and selecting resilient suppliers.

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

[Risks]; [Company-specific explanation of how our strategy in this sector is affected by climate-related risks and the target timeframe] As a countermeasure against the heat island effect and summer climate change, technological development is being promoted in two directions: the development of construction technologies that directly remove heat, such as heat-shielding pavement, water-retentive pavement, and warm-temperature pavement, and the development of construction reduction technologies from the perspective of global warming. Missing out in the race to develop synthetic rubber that can be used with these technologies risks making business expansion difficult. The target timeframe for our strategy is medium to long term. [Case study of the most significant strategic decision made to date in this sector that was affected by climate-related risks] We are focusing on the development of our modified S-SBR product because it can improve wear resistance and handling stability while achieving a high level of balance between braking performance and fuel economy. [Opportunities]: [Company-specific explanation of how our strategy in this sector is affected by climate-related opportunities and the timeframe it covers] In Japan, regulatory energy standards for housing came into effect in April 2017, requiring compliance with energy-saving standards by April 2025. This is driving increasing demand for high-quality insulation. The housing segment accounts for approximately 34% of our sales and is expected to have a significant impact. The strategy covers the medium to long term. [Case study of the most significant strategic decision made to date in this sector that was influenced by climate-related opportunities] In anticipation of these mandates, we are working to develop higher-performance insulation materials. We developed "Neoma Zeus," a product that further enhances the insulation performance of our insulation material "Neoma Foam," and began selling it in January 2018. Taking advantage of its high-performance insulation, we are focusing on promoting and expanding ZEH.

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

☑ Water

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

[Risks]; [Company-specific explanation of how our strategy in this area is affected by climate-related risks and the relevant timeframe] According to the IPCC Sixth

Assessment Report, sea level rise is estimated to be between 28 and 101 cm by the end of the 21st century. Our factories, located in coastal areas such as Nobeoka in Kyushu, are at risk of flooding. The strategy's timeframe is medium to long-term. [Case study of the most important strategic decision made to date in this area that was affected by climate-related risks] Our company has established internal regulations for appropriate response in the event of a workplace accident or natural disaster. Close cooperation between factories, regional managers, and headquarters ensures the smooth operation of our emergency response system, ensuring human safety, preventing the spread of impacts to the surrounding area, and minimizing damage. Each factory develops an annual plan for regular training and conducts training in cooperation with headquarters. [Opportunities]; [Company-specific explanation of how our strategy in this area is affected by climate-related opportunities and the relevant timeframe] As climate change threatens the stability of water supplies, demand for water recycling is increasing. The time horizon for our strategy is medium to long term. [Case study of the most important strategic decision made to date in this sector that was influenced by climate-related opportunities] We produce Microza (hollow fiber membrane for water treatment) that meets the needs for water reuse and water quality improvement. In countries such as China, South Korea, Thailand and Indonesia, there is a high demand for water shortages and water quality improvement, which will provide an opportunity to expand our business area. In the future, we would like to actively expand into high-demand regions such as the Middle East, which are chronically short of water. [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

We will reflect the expansion of the Asahi Kasei Group's profitability in our financial plans by creating opportunities for value-added revenue businesses that address climate change, such as EV battery separators, new materials for the automotive field, and energy-efficient housing. Because we have successfully created opportunities for profitable value-added businesses, we do not anticipate a particularly high likelihood of a severe impact on our profits from climate change. Thus far, we have been successful in creating value-added businesses that outweigh the impact of a carbon tax. Our financial plans cover short, medium, and long-term time frames. The trend of profit expansion will continue. In fiscal year 2024, we achieved sales of 3,037.3 billion yen and operating profit of 211.9 billion yen. For fiscal year 2025, we plan to achieve sales of 3,117 billion yen and operating profit of 215 billion yen. We expect solid profit growth, centered on our "priority growth" businesses.

Row 2

(5.3.2.1) Financial planning elements that have been affected

Select all that apply

☑ Direct costs

(5.3.2.2) Effect type

Select all that apply

☑ Risks

☑ 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

We are transforming our business portfolio to respond to major changes in the industrial structure, as exemplified by electric vehicles. In promoting this portfolio transformation, we aim to provide new value to society by realizing our Group Vision of "healthy and comfortable living" and "coexistence with the environment." We will also focus on research and development in key areas that contribute to addressing climate change. In our materials business, we are developing renewable energy and energy-saving materials, primarily high-performance separators for lithium-ion secondary batteries. In our housing business, we incorporate research and development expenses for reducing energy consumption and improving insulation performance in homes into our financial plans. Our financial plans cover short, medium, and long term periods. The Asahi Kasei Group's research and development expenses as a business expense have hovered around ¥90 billion in recent years, but are gradually increasing. They are expected to reach ¥107 billion in fiscal 2023 and ¥112 billion in fiscal 2024. The Asahi Kasei Group's research and development expenses as a business expense have hovered around ¥100 billion in recent years, but are gradually increasing. The budget for fiscal 2024 is expected

to be 110.6 billion yen, and for fiscal 2025 it is expected to be 121 billion yen.

Row 3

(5.3.2.1) Financial planning elements that have been affected

Select all that apply

☑ Capital expenditures

☑ Capital allocation

(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

We are prioritizing capital investment in new construction and expansion in product areas expected to see long-term growth, including our climate change response business. We are also implementing rationalization, labor-saving measures, and maintenance to improve product reliability and reduce costs. We are also actively investing in information technology. In April 2024, we announced a capital investment plan totaling 180 billion yen for the expansion of separator production lines (in the United States, Japan, and South Korea) and the construction of a Canadian plant for our Hipore business. As a result of these investments, we forecast net sales of 160 billion yen and an operating profit margin of over 20% for the Hipore business in fiscal 2031 at our management briefing in May 2024. In addition to risk management, we are also actively pursuing capital investments that capture opportunities. Our financial planning covers short- and medium-term time frames. A significant portion of our capital investment plan is related to businesses impacted by climate change. The Group's overall capital investment budget is planned to be 211 billion yen in fiscal 2024 and 262 billion yen in fiscal 2025.

Row 4

(5.3.2.1) Financial planning elements that have been affected

Select all that apply

☑ Acquisitions and divestments

(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

In addition to investing in existing businesses, we are actively promoting investment in new businesses through M&A and other means. In our Medium-Term Management Plan 2027 (2025-2027) "Trailblaze Together," we have set a long-term investment amount of 1 trillion yen (cumulative over three years). This investment amount includes investments related to climate change, such as hydrogen. The time frame covered by our financial plan is medium to long term.

Row 5

(5.3.2.1) Financial planning elements that have been affected

Select all that apply

☑ Access to capital

(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

Funding is required to address climate change, including for research and development expenses, new capital investments, and funds related to corporate acquisitions. We actively disclose ESG information and aim to improve access to funds by establishing a system for raising funds at low interest rates. The time horizon for our financial plans is short- to medium-term. In fiscal 2024, long-term borrowings and corporate bond issuance totaled 306.1 billion yen. We will continue to take on new borrowings and issue corporate bonds as appropriate, while monitoring the balance of cash flow.

Row 6

(5.3.2.1) Financial planning elements that have been affected

Select all that apply

☑ Assets

(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

If a natural disaster caused by climate change occurs, it will have an impact on assets due to impairment of fixed assets such as factory equipment. The time frame covered by financial planning is short-term and medium-term. As there have been no natural disasters resulting in impairment in recent years, we believe the impact will be minor. Furthermore, we provide honest explanations to investors about our response to climate change, and strive to reduce uncertainty in ESG investments, including those related to climate change.

Row 7

(5.3.2.1) Financial planning elements that have been affected

Select all that apply

☑ Liabilities

(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

There is a possibility that an increase in liabilities will occur due to an increase in corporate bonds and borrowings in order to secure funds for new capital investments and corporate acquisitions. The time frame covered by the financial plan is short-term and medium-term. In the Medium-Term Management Plan 2027 (2025-2027) "Trailblaze Together," we plan to raise approximately 300 billion yen in funds over three years by actively promoting not only interest-bearing debt but also business sales and utilization of other companies' capital, including from the perspective of addressing environmental risks and opportunities.

Row 8

(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

☑ 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

☑ Water

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

According to the latest report from Grand View Research, Inc., the global UV sterilization equipment market is expected to reach USD 6.17 billion by 2030, driven by rising demand for safe drinking water and environmentally friendly sterilization systems in developing countries. This is based on a forecast of a compound annual growth rate (CAGR) of 7.0% from 2024 to 2030. In response to this situation, we have developed the Klaran deep UVC-LED device, a high-power device capable of emitting high-power light at wavelengths around 265 nm, the wavelength at which sterilization is most effective. This device contributes to improving the convenience of drinking water sterilization and is expected to contribute to the health of people suffering from waterborne infectious diseases in developing countries. Furthermore, because this device does not contain any mercury, it complies with international mercury regulations and is expected to be a promising alternative light source to mercury lamps. The research, application development, and sales promotion expenses required for this business expansion have already been reflected in our financial plans. The Asahi Kasei Group has budgeted 1 trillion yen for investments across the group from fiscal 2025 to fiscal 2027, including the expansion of this device business. The time horizon for financial planning is short-term and medium-term.
[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

(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)

698000000000

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

22.98

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

We define "Environmentally Contributing Products" as products that contribute to reducing environmental impact throughout their entire lifecycle. The trend in greenhouse gas reduction contributions made by Environmentally Contributing Products is effective in understanding the progress of environmental impact reduction throughout the entire value chain, and we calculate the impact while appropriately understanding fluctuations. We also monitor the sales and sales ratio of Environmentally Contributing Products as reference indicators for the results of customer engagement, and through these, we strive to achieve both the resolution of environmental issues and sustainable corporate growth.
[Add row]

(5.5) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

(5.5.1) Investment in low-carbon R&D

Select from:
☑ Yes

(5.5.2) Comment

In our previous mid-term management plan, "Be a Trailblazer" (2022-2024), we identified 10 Growth Gears (GG10) as areas that will drive our next growth, and made capital investments of approximately 700 billion yen over three years. In our new 2025 mid-term management plan, "Trailblaze Together" (2025-2027), we envision investments of 1 trillion yen. Of this, we expect 670 billion yen to be expansion-related investments, and we plan to consider investments both domestically and overseas to grow not only healthcare, which we will continue to expand primarily through M&A, but also housing, aiming for growth. In the decarbonization field in particular, we plan to focus on hydrogen, electronic materials, ion exchange membranes, etc.
[Fixed row]

(5.5.3) Provide details of your organization’s investments in low-carbon R&D for chemical production activities over the last three years.

Row 1

(5.5.3.1) Technology area

Select from:

☑ Unable to disaggregate by technology area

(5.5.3.3) Average % of total R&D investment over the last 3 years

4.1

(5.5.3.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

11000000000

(5.5.3.5) Average % of total R&D investment planned over the next 5 years

18.7

(5.5.3.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

This disclosure includes not only R&D expenses but also capital investments related to decarbonization in general. Asahi Kasei positions decarbonization-related R&D as an important upfront investment toward the transition to net-zero by 2050, and plans to expand investment in this area in future plans.
[Add row]

(5.5.6) Provide details of your organization's investments in low-carbon R&D for real estate and construction activities over the last three years.

Row 1

(5.5.6.1) Technology area

Select from:
☑ Building integrated photovoltaic systems

(5.5.6.2) Stage of development in the reporting year

Select from:

☑ Large scale commercial deployment

(5.5.6.3) Average % of total R&D investment over the last 3 years

1

(5.5.6.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

1400000000

(5.5.6.5) Average % of total R&D investment planned over the next 5 years

2

(5.5.6.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

The Asahi Kasei Group is actively investing in R&D for the solar power generation equipment and storage batteries that are installed in the homes built by Asahi Kasei Homes and that are owned and managed by Asahi Kasei Homes. As part of its environmental policy, the Asahi Kasei Homes Group has set out a policy of contributing to the mitigation of climate change through the effective use of renewable energy, and will continue to invest in R&D for solar power generation equipment and storage batteries.
[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)

-5

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

1

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

-11.08

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

5

(5.9.5) Please explain

CAPEX: FY2024 Capital investment in water-related businesses remained roughly the same as the previous fiscal year. Next fiscal year, we plan to continue investment at the same level as normal, focusing on water R&D. OPEX: Most of the operating expenses in FY2024 were for water quality analysis of wastewater discharged directly into public water bodies such as rivers and oceans, and the costs of neutralizing chemicals, much of which was used for legal compliance. There was no significant change in the number of business locations where water quality analysis was performed, but the change compared to the previous year was a decrease of 11.08%, due to factors such as reduced repair costs due to the absence of regular equipment repairs at large-scale manufacturing plants.
[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

☑ Drive energy efficiency

☑ Drive low-carbon investment

☑ Incentivize consideration of climate-related issues in decision making

☑ Identify and seize low-carbon opportunities

(5.10.1.3) Factors considered when determining the price

Select all that apply

☑ Alignment with the price of a carbon tax

☑ Benchmarking against peers

☑ Cost of required measures to achieve climate-related targets

☑ Scenario analysis

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

ICP pricing takes into account factors such as IEA carbon and market price forecasts, as well as Asahi Kasei's own carbon-neutral cost outlook.

(5.10.1.5) Scopes covered

Select all that apply

☑ Scope 1

☑ Scope 2

(5.10.1.6) Pricing approach used – spatial variance

Select from:

☑ Uniform

(5.10.1.8) Pricing approach used – temporal variance

Select from:

☑ Static

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

15000

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

15000

(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 some decision-making processes, please specify : We apply it to capital investments of 100 million yen or more, or investment projects that will increase GHG emissions by 1,000 t-CO2e or more per year, and use it to evaluate the profitability of capital investments. For example, when updating an oil-fired boiler at a chemical plant in Miyazaki, the decision was made to update to an LNG-fired boiler based on the CO2 cost based on internal carbon pricing.

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

0.01

(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

In order to further promote our efforts towards carbon neutrality, we have set an internal carbon pricing (ICP) for GHG emissions and are using it to evaluate the profitability of capital investments. This ICP is set based on future carbon price forecasts and market prices indicated by the International Energy Agency (IEA), as well as our own cost outlook for carbon neutrality, and we continue to operate and review it as an appropriate price.
[Add row]

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

Suppliers

(5.11.1) Engaging with this stakeholder on environmental issues

Select from:
☑ Yes

(5.11.2) Environmental issues covered

Select all that apply
☑ Climate change
☑ Water

Customers

(5.11.1) Engaging with this stakeholder on environmental issues

Select from:
☑ Yes

(5.11.2) Environmental issues covered

Select all that apply
☑ Climate change
☑ Water

Investors and shareholders

(5.11.1) Engaging with this stakeholder on environmental issues

Select from:

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

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

Select from:

☑ Not an immediate strategic priority

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

We are prioritizing engagement with suppliers and customers.

Other value chain stakeholders

(5.11.1) Engaging with this stakeholder on environmental issues

Select from:

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

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

Select from:

☑ Not an immediate strategic priority

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

We are prioritizing engagement with suppliers and customers.
[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

(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

Asahi Kasei Homes uses the top 80% of transaction amounts as its standard.

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

Select from:

☑ 1-25%

(5.11.1.6) Number of Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

47

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

☑ Basin/landscape condition

☑ Dependence on water

☑ Impact on water availability

☑ Impact on pollution levels

(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

Asahi Kasei Homes uses the top 80% of transaction amounts as its standard.

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

Select from:

☑ 1-25%

(5.11.1.6) Number of Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

47

[Fixed row]

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

Climate change

(5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

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

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

Select all that apply

☑ Business risk mitigation

☑ Material sourcing

☑ Procurement spend

☑ Strategic status of suppliers

(5.11.2.4) Please explain

For suppliers with large procurement amounts that result in a large impact in Scope 3 Category 1, we request the submission of CFP data and strive to quantitatively evaluate the environmental impact of those procurement items. We also conduct a CSR procurement survey that includes questions related to the environment and climate change for suppliers that account for the top 80% of contract amounts, and we conduct individual interviews with suppliers that receive low ratings in an effort to reduce risks associated with those companies.

Water

(5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

☑ No, we do not prioritize which suppliers to engage with on this environmental issue

(5.11.2.3) Primary reason for no supplier prioritization on this environmental issue

Select from:

☑ Lack of internal resources, capabilities or expertise (e.g., due to organization size)

(5.11.2.4) Please explain

Although the company conducts a CSR procurement survey that includes questions related to the efficient use of water among suppliers that account for the top 85% of the total contract amount, it has not yet selected priority suppliers for this topic. Furthermore, no systematic evaluation method has been established at present. [Fixed row]

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

	Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process	Policy in place for addressing supplier non-compliance	Comment
Climate change	*Select from:* ☑ Yes, suppliers have to meet environmental requirements related to this environmental issue, but they are not included in our supplier contracts	*Select from:* ☑ Yes, we have a policy in place for addressing non-compliance	*We have clearly stated climate change-related measures in our Supplier Code of Conduct and are requesting our suppliers' cooperation in these areas. We also request that our suppliers properly dispose of industrial waste and properly handle fluorocarbon refrigerant gases, which have a very high greenhouse effect.*
Water	*Select from:* ☑ Yes, suppliers have to meet environmental requirements related to this environmental issue, but they are not included in our supplier contracts	*Select from:* ☑ No, we do not have a policy in place for addressing non-compliance	*We have clearly stated the measures related to the efficient use of water in our Supplier Code of Conduct and are requesting our suppliers' cooperation in these areas.*

[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:

☑ Setting a science-based emissions reduction target

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Certification

☑ Supplier scorecard or rating

☑ Supplier self-assessment

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

Select from:

☑ 76-99%

(5.11.6.12) Comment

Based on our Purchasing Policy, we have formulated a Supplier Code of Conduct as a tool for promoting CSR procurement. We have published this code on our website, along with our Purchasing Policy, to ensure understanding of our Group's policy. We also conduct a CSR Procurement Survey to assess the activities of our suppliers and provide feedback to those who respond. For suppliers receiving a C or D rating on a scale of A to D, we visit them in person or conduct online interviews to confirm their status and provide support for improvement. If serious issues are identified during these interviews, we exchange opinions with the supplier and encourage early improvement. If follow-up reviews do not confirm that the issues have been corrected, we may consider suspending or reconsidering our business relationships with them. In fiscal 2024, we interviewed 10 companies, but no "serious issues" were identified. We also interviewed four suppliers whose ratings improved significantly and discussed best practices for CSR promotion activities. For suppliers who received a C or D rating in the fiscal 2024 survey, we individually evaluated and analyzed all responses and risks to the supply chain, and communicated as necessary regarding improvements based on the Group's feedback. Additionally, some of our suppliers have submitted their current greenhouse gas emissions figures and their phased reduction targets for 2030 and 2050.

Water

(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:

☑ 76-99%

(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:

☑ 100%

(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

Based on our purchasing policy, we have formulated a Supplier Code of Conduct and published it on our website along with the purchasing policy to ensure understanding of our group's policy. We also evaluate our suppliers' activities through a CSR procurement survey and provide feedback. By asking about their efforts to efficiently use water resources and manage wastewater, we understand and manage current and future risks in our supply chain. We not only use the information obtained from suppliers to assess water risks in our supply chain, but also provide feedback to encourage improvements. If serious issues are identified through interviews, we exchange opinions with the supplier and encourage early improvement. In fiscal 2024, we interviewed 10 companies, and no "serious issues" were identified. We also interviewed four suppliers whose ratings improved significantly and discussed best practices for CSR promotion activities. For suppliers who received C or D ratings in the fiscal 2024 survey, we individually evaluated and analyzed all responses and risks to the supply chain, and communicated as necessary to improve our response to their feedback.

[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:

☑ Upstream value chain transparency and human rights

(5.11.7.3) Type and details of engagement

Information collection

☑ Collect targets information at least annually from suppliers

(5.11.7.4) Upstream value chain coverage

Select all that apply

☑ Tier 1 suppliers

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

Select from:

☑ 76-99%

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

Select from:

☑ Unknown

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

We conduct CSR surveys of major suppliers. We specifically selected the top 85% of suppliers by purchase amount. This is because suppliers with large purchase

amounts play an important role in addressing climate change-related risks in the supply chain. We believe this coverage rate is appropriate from the perspective of the Asahi Kasei Group's responsibilities and risks. Further expansion of the scope is being carefully considered, as we believe that the additional costs and burdens on suppliers would not be justified. Regarding supplier-related Scope 3 emissions, we collect and aggregate emissions information from applicable suppliers and report it in section 7.8. Therefore, our coverage rate is 100%. Regarding the effectiveness of engagement, our purchasing department sends surveys to suppliers as part of supplier assessments to encourage improvements in CSR procurement, including climate change issues. The Asahi Kasei Group is considering formally requiring suppliers to achieve certain CSR performance standards, such as by incorporating them into transaction terms, and has already notified suppliers. Regarding performance indicators, the Asahi Kasei Group has already established a "Purchasing Policy" and a "Purchasing Mission Statement." We send out a questionnaire to all our suppliers regarding CSR, including environmental and energy conservation, and ask for their cooperation in CSR procurement. We compile the survey results and analyze the number and percentage of companies that have clear environmental policies and systems in place to promote environmentally conscious activities. We view the increase in these figures as a result of our suppliers' response to our CSR policy, which includes addressing climate change issues.

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

Select from:

☑ No, this engagement is unrelated to meeting an environmental requirement

(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:

☑ Upstream value chain transparency and human rights

(5.11.7.3) Type and details of engagement

Information collection

☑ Collect targets information at least annually from suppliers

(5.11.7.4) Upstream value chain coverage

Select all that apply

☑ Tier 1 suppliers

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

Select from:

☑ 76-99%

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

Select from:

☑ Unknown

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

We recognize that the higher the proportion of our procurement spend, the greater the risk that our business will be affected by water-related adverse events at our suppliers. We believe that working with members of our supply chain is a highly effective and efficient way to solve global water issues. Therefore, we conduct CSR procurement surveys of major suppliers from whom we procure many of our products. Specifically, in fiscal 2024, we conducted the survey with suppliers that account for 85% of our procurement spend. The information obtained from suppliers is not only used to assess water risks in our supply chain, but also to encourage improvements by providing feedback. We believe this serves as an incentive for suppliers to respond to the survey. We identify and manage current and future risks in our supply chain by asking suppliers about their efforts to efficiently use water resources and manage wastewater. The information obtained from suppliers is not only used to assess water risks in our supply chain, but also to encourage improvements by providing feedback. The effectiveness of this survey is measured primarily by the response rate.

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

Select from:

☑ No, this engagement is unrelated to meeting an environmental requirement

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

Select from:

☑ Unknown

[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

Education/Information sharing

☑ Run an engagement campaign to educate stakeholders about the environmental impacts about your products, goods and/or services

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:

☑ Less than 1%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☑ Less than 1%

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

Asahi Kasei is working to reduce greenhouse gas emissions and conserve water resources throughout the value chain through engagement with customers. By proposing products that meet customer needs, we contribute to reducing downstream emissions and improving water use efficiency. For example, we exhibit annually

at the Sustainable Materials Expo, one of Japan's largest exhibitions, and promote relationship building with customers by quantitatively demonstrating the environmental impact reduction effects of our products. We will continue to accelerate the provision of sustainable solutions through new business creation and global expansion.

(5.11.9.6) Effect of engagement and measures of success

An important indicator of success is the adoption of products that contribute to reducing greenhouse gas emissions and conserving water resources through engagement with customers. We specifically define products that contribute to reducing environmental impact throughout their entire lifecycle as "Environment-Contributing Products." We have set numerical targets for the amount of greenhouse gas reduction contributed by our Environment-Contributing Products to be at least double the amount in fiscal 2030 compared to fiscal 2020, and at least 2.5 times that amount in fiscal 2035. Trends in this indicator are effective in understanding the progress of environmental impact reduction throughout the entire value chain, and we calculate impact while appropriately understanding fluctuations.

Water

(5.11.9.1) Type of stakeholder

Select from:

☑ Customers

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Run an engagement campaign to educate stakeholders about the environmental impacts about your products, goods and/or services

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:

☑ Less than 1%

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

Asahi Kasei is working to reduce greenhouse gas emissions and conserve water resources throughout the value chain through engagement with customers. By proposing products that meet customer needs, we contribute to reducing downstream emissions and improving water use efficiency. For example, we exhibit annually at the Sustainable Materials Expo, one of Japan's largest exhibitions, and promote relationship building with customers by quantitatively demonstrating the environmental impact reduction effects of our products. We will continue to accelerate the provision of sustainable solutions through new business creation and global expansion.

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[Add 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	*Environmental performance data is collected from consolidated subsidiaries under financial management.*
Water	*Select from:* ☑ Financial control	*Environmental performance data is collected from consolidated subsidiaries under financial management.*

[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?

	Has there been a structural change?
	Select all that apply ☑ No

[Fixed row]

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

	Change(s) in methodology, boundary, and/or reporting year definition?
	Select all that apply ☑ 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 Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

☑ The Greenhouse Gas Protocol: Scope 2 Guidance

☑ The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Standard

(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	*We calculate and report both location-based and market-based Scope 2 emissions.*

[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:

☑ Yes

(7.4.1) Provide details of the sources of Scope 1, Scope 2, or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure.

Row 1

(7.4.1.1) Source of excluded emissions

Non-manufacturing facilities that require very little energy, such as small sales offices

(7.4.1.2) Scope(s) or Scope 3 category(ies)

Select all that apply

☑ Scope 1

☑ Scope 2 (location-based)

☑ Scope 2 (market-based)

(7.4.1.3) Relevance of Scope 1 emissions from this source

Select from:

☑ Emissions excluded due to a recent acquisition or merger

(7.4.1.4) Relevance of location-based Scope 2 emissions from this source

Select from:

☑ Emissions excluded due to a recent acquisition or merger

(7.4.1.5) Relevance of market-based Scope 2 emissions from this source

Select from:

☑ Emissions excluded due to a recent acquisition or merger

(7.4.1.7) Date of completion of acquisition or merger

09/03/2024

(7.4.1.10) Explain why this source is excluded

Scope: Greenhouse gas emissions of consolidated subsidiaries are calculated financially. This applies to companies in which the Company holds more than 50% of the voting rights or has substantial management rights. Exclusions: Non-manufacturing facilities with extremely low energy consumption, such as small sales offices, are excluded.
[Add row]

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

	Base year end	Base year emissions (metric tons CO2e)	Methodological details
Scope 1	*03/31/2014*	*3880000*	*Calculations are generally conducted in accordance with the provisions of the Act on the Rational Use of Energy and Conversion to Non-Fossil Energy (Energy Conservation Act) and the Act on Promotion of Global Warming Countermeasures (Global Warming Act).*
Scope 2 (location-based)	*03/31/2014*	*660000.0*	*Calculations are generally conducted in accordance with the provisions of the Act on the Rational Use of Energy and Conversion to Non-Fossil Energy (Energy Conservation Act) and the Act on Promotion of Global Warming Countermeasures (Global Warming Act).*
Scope 2 (market-based)	*03/31/2014*	*1230000.0*	*Calculations are generally conducted in accordance with the provisions of the Act on the Rational Use of Energy and Conversion to Non-Fossil Energy (Energy Conservation Act) and the Act on Promotion of Global Warming Countermeasures (Global Warming Act).*

[Fixed row]

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

	Gross global Scope 1 emissions (metric tons CO2e)	End date	Methodological details
Reporting year	*2485256*	*Date input [must be between [11/19/2015 - 11/19/2024]*	*Calculations are generally conducted in accordance with the provisions of the Act on the Rational Use of Energy and Conversion to Non-Fossil Energy (Energy Conservation Act) and the Act on Promotion of Global Warming Countermeasures (Global Warming Act).*
Past year 1	*2386214*	*03/31/2024*	*Calculations are generally conducted in accordance with the provisions of the Act on the Rational Use of Energy and Conversion to Non-Fossil Energy (Energy Conservation Act) and the Act on Promotion of Global Warming Countermeasures (Global Warming Act).*
Past year 2	*2853917*	*03/31/2023*	*Calculations are generally conducted in accordance with the provisions of the Act on the Rational Use of Energy and Conversion to Non-Fossil Energy (Energy Conservation Act) and the Act on Promotion of Global Warming Countermeasures (Global Warming Act).*
Past year 3	*3080947*	*03/31/2022*	*Calculations are generally conducted in accordance with the provisions of the Act on the Rational Use of Energy and Conversion to Non-Fossil Energy (Energy Conservation Act) and the Act on Promotion of Global Warming Countermeasures (Global Warming Act).*
Past year 4	*2906814*	*03/31/2021*	*Calculations are generally conducted in accordance with the provisions of the Act on the Rational Use of Energy and Conversion to Non-Fossil Energy (Energy Conservation Act) and the Act on Promotion of Global Warming Countermeasures (Global Warming Act).*
Past year 5	*2961401*	*03/31/2020*	*Calculations are generally conducted in accordance with the provisions of the Act on the Rational Use of Energy and Conversion to Non-Fossil Energy (Energy Conservation Act) and the Act on Promotion of Global Warming Countermeasures (Global Warming Act).*

[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)

768044

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

702394

(7.7.4) Methodological details

Calculations are generally conducted in accordance with the provisions of the Act on the Rational Use of Energy and Conversion to Non-Fossil Energy (Energy Conservation Act) and the Act on Promotion of Global Warming Countermeasures (Global Warming Act).

Past year 1

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

846144

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

793816

(7.7.3) End date

03/31/2024

(7.7.4) Methodological details

Calculations are generally conducted in accordance with the provisions of the Act on the Rational Use of Energy and Conversion to Non-Fossil Energy (Energy Conservation Act) and the Act on Promotion of Global Warming Countermeasures (Global Warming Act).

Past year 2

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

870683

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

823854

(7.7.3) End date

03/31/2023

(7.7.4) Methodological details

Calculations are generally conducted in accordance with the provisions of the Act on the Rational Use of Energy and Conversion to Non-Fossil Energy (Energy Conservation Act) and the Act on Promotion of Global Warming Countermeasures (Global Warming Act).

Past year 3

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

1048479

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

1030384

(7.7.3) End date

03/31/2022

(7.7.4) Methodological details

Calculations are generally conducted in accordance with the provisions of the Act on the Rational Use of Energy and Conversion to Non-Fossil Energy (Energy Conservation Act) and the Act on Promotion of Global Warming Countermeasures (Global Warming Act).

Past year 4

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

929331

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

899405

(7.7.3) End date

03/31/2021

(7.7.4) Methodological details

Calculations are generally conducted in accordance with the provisions of the Act on the Rational Use of Energy and Conversion to Non-Fossil Energy (Energy Conservation Act) and the Act on Promotion of Global Warming Countermeasures (Global Warming Act).

Past year 5

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

1024946

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

1029041

(7.7.3) End date

03/31/2020

(7.7.4) Methodological details

Calculations are generally conducted in accordance with the provisions of the Act on the Rational Use of Energy and Conversion to Non-Fossil Energy (Energy Conservation Act) and the Act on Promotion of Global Warming Countermeasures (Global Warming Act).
[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)

4507256

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Hybrid method

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

0

(7.8.5) Please explain

We calculate emissions for items whose emissions, calculated by multiplying the purchase volume (physical volume data and monetary volume data) of products and services purchased by our Group companies from outside the Group by the emission coefficient of each raw material or service, are 4,000 t-CO2e or more. Activity data is calculated using the amount of purchases, and emissions coefficients are calculated using the Environmental Impact Intensity Data Book (3EID) (2015) based on input-output tables and IDEA v2.3 from the National Institute of Advanced Industrial Science and Technology.

Capital goods

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

556655

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Investment-specific method

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

0

(7.8.5) Please explain

We refer to the GHG Protocol's "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" and its assessment guidance. Activity amounts are calculated using capital investment amounts, and emissions coefficients are calculated using the Environmental Impact Intensity Data Book (3EID) (2015) based on input-output tables and IDEA v2.3 from the National Institute of Advanced Industrial Science and Technology.

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)

899149

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Hybrid method

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

0

(7.8.5) Please explain

We refer to the GHG Protocol's "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" and its assessment guidance. Activity data is the amount of electricity, steam, and fuel purchased, and emissions are calculated using the Environmental Impact Intensity Data Book (3EID) (2015) based on input-output tables and IDEA v2.3 from the National Institute of Advanced Industrial Science and Technology.

Upstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

206461

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Hybrid method

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

0

(7.8.5) Please explain

We refer to the GHG Protocol's "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" and its assessment guidance. Activity data is calculated using the shipper's responsible logistics volume and purchase volume, and emissions coefficients are calculated using the Environmental Impact Intensity Data Book (3EID) (2015) based on input-output tables and IDEA v2.3 from the National Institute of Advanced Industrial Science and Technology.

Waste generated in operations

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

68145

(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

We refer to the GHG Protocol's "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" and its assessment guidance. Activity data is the amount of waste disposal, and emissions are calculated using the Environmental Impact Intensity Data Book (3EID) (2015) based on input-output tables and IDEA v2.3 from the National Institute of Advanced Industrial Science and Technology.

Business travel

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

27069

(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

We refer to the GHG Protocol's "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" and its assessment guidance. Activity data is calculated using travel expenses, and emissions coefficients are calculated using the Environmental Impact Intensity Data Book (3EID) (2015) based on input-output tables and IDEA v2.3 from the National Institute of Advanced Industrial Science and Technology.

Employee commuting

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

29195

(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

We refer to the GHG Protocol's "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" and its assessment guidance. Activity amounts are calculated using commuting expenses, and emissions factors are calculated using the Environmental Impact Intensity Data Book (3EID) (2015) based on input-output tables and

IDEA v2.3 from the National Institute of Advanced Industrial Science and Technology.

Upstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

0

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Hybrid method

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

0

(7.8.5) Please explain

We refer to the GHG Protocol's "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" and its assessment guidance. Emissions are calculated using emission factors from the Environmental Impact Intensity Data Book (3EID) (2015) based on input-output tables and IDEA v2.3 from the National Institute of Advanced Industrial Science and Technology.

Downstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Emissions from downstream transportation depend on the final product and are subject to many uncertainties.

Processing of sold products

(7.8.1) Evaluation status

Select from:

☑ Relevant, not yet calculated

(7.8.5) Please explain

At present, it is not possible to calculate emissions associated with the processing of products for sale because it is difficult to obtain information related to the processing of products for sale from businesses.

Use of sold products

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

1370746

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Other, please specify : We used the "Energy Consumption Performance Calculation Program (Residential Edition)" from the Building Research Institute, a National Research and Development Agency.

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

0

(7.8.5) Please explain

The calculation was conducted for homes that received a certificate of completion within the fiscal year, using the Building Research Institute's "Energy Consumption Performance Calculation Program (Residential Edition)" based on the following formula: σ (annual energy consumption per household by energy source x emission coefficient by energy source) x useful life (60 years) Emission coefficients by energy source: Electricity 0.438 (t-CO2/1,000 kWh) and 8.64 (GJ/1,000 kWh), city gas 0.051 (t-CO2/GJ), kerosene 0.069 (t-CO2/GJ)

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)

5528651

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Hybrid method

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

0

(7.8.5) Please explain

We referenced the GHG Protocol's "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" and its assessment guidance. Emission factors were referenced from the Environmental Impact Intensity Data Book based on Input-Output Tables (3EID) (2015), the National Institute of Advanced Industrial Science and Technology's IDEA v2.3, and the Ministry of the Environment's Emissions Intensity Database Ver. 3.4 for calculating organizational greenhouse gas emissions through the supply chain.

Downstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Asahi Kasei does not engage in leasing business and does not believe reporting in this category is necessary.

Franchises

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Asahi Kasei does not franchise stores or systems.

Investments

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Asahi Kasei does not engage in any applicable business.

Other (upstream)

(7.8.1) Evaluation status

Select from:
☑ Not evaluated

(7.8.5) Please explain

Relevance not assessed.

Other (downstream)

(7.8.1) Evaluation status

Select from:
☑ Not evaluated

(7.8.5) Please explain

Relevance not assessed.
[Fixed row]

(7.8.1) Disclose or restate your Scope 3 emissions data for previous years.

Past year 1

(7.8.1.1) End date

03/31/2024

(7.8.1.2) Scope 3: Purchased goods and services (metric tons CO2e)

4100000

(7.8.1.3) Scope 3: Capital goods (metric tons CO2e)

470000

(7.8.1.4) Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

690000

(7.8.1.5) Scope 3: Upstream transportation and distribution (metric tons CO2e)

200000

(7.8.1.6) Scope 3: Waste generated in operations (metric tons CO2e)

70000

(7.8.1.7) Scope 3: Business travel (metric tons CO2e)

20000

(7.8.1.8) Scope 3: Employee commuting (metric tons CO2e)

30000

(7.8.1.9) Scope 3: Upstream leased assets (metric tons CO2e)

0

(7.8.1.12) Scope 3: Use of sold products (metric tons CO2e)

1390000

(7.8.1.13) Scope 3: End of life treatment of sold products (metric tons CO2e)

4920000

Past year 2

(7.8.1.1) End date

03/31/2023

(7.8.1.2) Scope 3: Purchased goods and services (metric tons CO2e)

4780000

(7.8.1.3) Scope 3: Capital goods (metric tons CO2e)

440000

(7.8.1.4) Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

860000

(7.8.1.5) Scope 3: Upstream transportation and distribution (metric tons CO2e)

240000

(7.8.1.6) Scope 3: Waste generated in operations (metric tons CO2e)

70000

(7.8.1.7) Scope 3: Business travel (metric tons CO2e)

20000

(7.8.1.8) Scope 3: Employee commuting (metric tons CO2e)

30000

(7.8.1.9) Scope 3: Upstream leased assets (metric tons CO2e)

0

(7.8.1.12) Scope 3: Use of sold products (metric tons CO2e)

1600000

(7.8.1.13) Scope 3: End of life treatment of sold products (metric tons CO2e)

5980000

Past year 3

(7.8.1.1) End date

03/31/2022

(7.8.1.2) Scope 3: Purchased goods and services (metric tons CO2e)

4720000

(7.8.1.3) Scope 3: Capital goods (metric tons CO2e)

450000

(7.8.1.4) Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

770000

(7.8.1.5) Scope 3: Upstream transportation and distribution (metric tons CO2e)

240000

(7.8.1.6) Scope 3: Waste generated in operations (metric tons CO2e)

70000

(7.8.1.7) Scope 3: Business travel (metric tons CO2e)

0

(7.8.1.8) Scope 3: Employee commuting (metric tons CO2e)

30000

(7.8.1.9) Scope 3: Upstream leased assets (metric tons CO2e)

0

(7.8.1.12) Scope 3: Use of sold products (metric tons CO2e)

1920000

(7.8.1.13) Scope 3: End of life treatment of sold products (metric tons CO2e)

5950000

Past year 4

(7.8.1.1) End date

03/31/2021

(7.8.1.2) Scope 3: Purchased goods and services (metric tons CO2e)

4620000

(7.8.1.3) Scope 3: Capital goods (metric tons CO2e)

390000

(7.8.1.4) Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

780000

(7.8.1.5) Scope 3: Upstream transportation and distribution (metric tons CO2e)

250000

(7.8.1.6) Scope 3: Waste generated in operations (metric tons CO2e)

0

(7.8.1.7) Scope 3: Business travel (metric tons CO2e)

0

(7.8.1.8) Scope 3: Employee commuting (metric tons CO2e)

30000

(7.8.1.9) Scope 3: Upstream leased assets (metric tons CO2e)

0

(7.8.1.12) Scope 3: Use of sold products (metric tons CO2e)

1340000

(7.8.1.13) Scope 3: End of life treatment of sold products (metric tons CO2e)

5870000

Past year 5

(7.8.1.1) End date

03/31/2020

(7.8.1.2) Scope 3: Purchased goods and services (metric tons CO2e)

4430000

(7.8.1.3) Scope 3: Capital goods (metric tons CO2e)

320000

(7.8.1.4) Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

240000

(7.8.1.5) Scope 3: Upstream transportation and distribution (metric tons CO2e)

270000

(7.8.1.6) Scope 3: Waste generated in operations (metric tons CO2e)

0

(7.8.1.7) Scope 3: Business travel (metric tons CO2e)

30000

(7.8.1.8) Scope 3: Employee commuting (metric tons CO2e)

30000

(7.8.1.9) Scope 3: Upstream leased assets (metric tons CO2e)

0

(7.8.1.12) Scope 3: Use of sold products (metric tons CO2e)

960000

(7.8.1.13) Scope 3: End of life treatment of sold products (metric tons CO2e)

4700000
[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
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:

☑ Underway but not complete for reporting year – previous statement of process attached

(7.9.1.3) Type of verification or assurance

Select from:
☑ Limited assurance

(7.9.1.4) Attach the statement

Independent Assurance Report (KPMG AZSA Sustainability Co., Ltd.) FY2023PDF.pdf

(7.9.1.5) Page/section reference

P. 1,2,3 all

(7.9.1.6) Relevant standard

Select from:
☑ ISAE 3410

(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:
☑ Underway but not complete for reporting year – previous statement of process attached

(7.9.2.4) Type of verification or assurance

Select from:
☑ Limited assurance

(7.9.2.5) Attach the statement

Independent Assurance Report (KPMG AZSA Sustainability Co., Ltd.) FY2023PDF.pdf

(7.9.2.6) Page/ section reference

P. 1,2,3 all

(7.9.2.7) Relevant standard

Select from:
☑ ISAE 3410

(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: Purchased goods and services

(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:

☑ Underway but not complete for reporting year – previous statement of process attached

(7.9.3.4) Type of verification or assurance

Select from:

☑ Limited assurance

(7.9.3.5) Attach the statement

Independent Assurance Report (KPMG AZSA Sustainability Co., Ltd.) FY2023PDF.pdf

(7.9.3.6) Page/section reference

P. 1,2,3 all

(7.9.3.7) Relevant standard

Select from:

☑ ISAE 3410

(7.9.3.8) Proportion of reported emissions verified (%)

100

Row 2

(7.9.3.1) Scope 3 category

Select all that apply

☑ 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:

☑ Underway but not complete for reporting year – previous statement of process attached

(7.9.3.4) Type of verification or assurance

Select from:

☑ Limited assurance

(7.9.3.5) Attach the statement

Independent Assurance Report (KPMG AZSA Sustainability Co., Ltd.) FY2023PDF.pdf

(7.9.3.6) Page/section reference

P. 1,2,3 all

(7.9.3.7) Relevant standard

Select from:
☑ ISAE 3410

(7.9.3.8) Proportion of reported emissions verified (%)

100

Row 3

(7.9.3.1) Scope 3 category

Select all that apply
☑ Scope 3: End-of-life treatment 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:
☑ Underway but not complete for reporting year – previous statement of process attached

(7.9.3.4) Type of verification or assurance

Select from:
☑ Limited assurance

(7.9.3.5) Attach the statement

Independent Assurance Report (KPMG AZSA Sustainability Co., Ltd.) FY2023PDF.pdf

(7.9.3.6) Page/section reference

P. 1,2,3 all

(7.9.3.7) Relevant standard

Select from:
☑ ISAE 3410

(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:
☑ Increased

(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)

40000

(7.10.1.2) Direction of change in emissions

Select from:

☑ Decreased

(7.10.1.3) Emissions value (percentage)

1.25

(7.10.1.4) Please explain calculation

We reduced greenhouse gas emissions by 40,000 t-CO2e through increased hydroelectric power generation at our domestic bases. Scope 1 and 2 emissions for the previous fiscal year were: Scope 1: 2,485,256 t-CO2e, Scope 2: 702,394 t-CO2e. Total for Scope 1 and 2 was 3,187,650 t-CO2e. 1.25%: (40,000/3,187,650) x 100.

Divestment

(7.10.1.1) Change in emissions (metric tons CO2e)

40000

(7.10.1.2) Direction of change in emissions

Select from:

☑ Decreased

(7.10.1.3) Emissions value (percentage)

1.25

(7.10.1.4) Please explain calculation

We reduced greenhouse gas emissions by 40,000 t-CO2e through the transfer of general-purpose businesses to other companies. Scope 1 and 2 emissions for the previous fiscal year were: Scope 1: 2,485,256 t-CO2e, Scope 2: 702,394 t-CO2e. Total for Scope 1 and 2 was 3,187,650 t-CO2e. 1.25%: (17,000/3,187,650) x 100.

Change in output

(7.10.1.1) Change in emissions (metric tons CO2e)

110000

(7.10.1.2) Direction of change in emissions

Select from:

☑ Increased

(7.10.1.3) Emissions value (percentage)

3.45

(7.10.1.4) Please explain calculation

Greenhouse gas emissions increased by 110,000 t-CO2e due to increased production volumes in multiple businesses. Scope 1 and 2 emissions for the previous fiscal year were: Scope 1: 2,485,256 t-CO2e, Scope 2: 702,394 t-CO2e. Total for Scope 1 and 2 was 3,187,650 t-CO2e. 3.45%: (110,000/3,187,650) x 100. [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:

☑ Yes

(7.12.1) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
	0.5	*Calculations are generally conducted in accordance with the provisions of the Act on the Rational Use of Energy and Conversion to Non-Fossil Energy (Energy Conservation Act) and the Act on Promotion of Global Warming Countermeasures (Global Warming Act).*

[Fixed row]

(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)

2395096

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Fifth Assessment Report (AR5 – 100 year)

Row 2

(7.15.1.1) Greenhouse gas

Select from:

☑ CH4

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

1163

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Fifth Assessment Report (AR5 – 100 year)

Row 3

(7.15.1.1) Greenhouse gas

Select from:

☑ N2O

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

53928

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Fifth Assessment Report (AR5 – 100 year)

Row 4

(7.15.1.1) Greenhouse gas

Select from:

☑ HFCs

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

29009

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Fifth Assessment Report (AR5 – 100 year)

Row 5

(7.15.1.1) Greenhouse gas

Select from:

☑ PFCs

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

0

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Fifth Assessment Report (AR5 – 100 year)

Row 6

(7.15.1.1) Greenhouse gas

Select from:

☑ SF6

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

6061

(7.15.1.3) GWP Reference

Select from:
☑ IPCC Fifth Assessment Report (AR5 – 100 year)

Row 7

(7.15.1.1) Greenhouse gas

Select from:
☑ NF3

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

0

(7.15.1.3) GWP Reference

Select from:
☑ IPCC Fifth Assessment Report (AR5 – 100 year)
[Add row]

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

Australia

(7.16.1) Scope 1 emissions (metric tons CO2e)

2954.841

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

0

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

0

Austria

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

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

0

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

0

Brazil

(7.16.1) Scope 1 emissions (metric tons CO2e)

509.783

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

371.059

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

371.059

Canada

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

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

0

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

0

China

(7.16.1) Scope 1 emissions (metric tons CO2e)

39219.869

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

125818.969

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

125818.969

Czechia

(7.16.1) Scope 1 emissions (metric tons CO2e)

1199.979

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

6539.933

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

6539.933

France

(7.16.1) Scope 1 emissions (metric tons CO2e)

9959.122

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

1309.491

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

1309.491

Germany

(7.16.1) Scope 1 emissions (metric tons CO2e)

1557.602

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

575.253

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

575.253

India

(7.16.1) Scope 1 emissions (metric tons CO2e)

4067.654

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

14280.1

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

14280.1

Italy

(7.16.1) Scope 1 emissions (metric tons CO2e)

6844.886

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

0

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

0

Japan

(7.16.1) Scope 1 emissions (metric tons CO2e)

1991560.594

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

316486

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

250836

Mexico

(7.16.1) Scope 1 emissions (metric tons CO2e)

3558.186

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

3965.782

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

3965.782

Morocco

(7.16.1) Scope 1 emissions (metric tons CO2e)

6.287

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

2436.888

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

2436.888

Poland

(7.16.1) Scope 1 emissions (metric tons CO2e)

1872.22

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

3563.486

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

3563.486

Republic of Korea

(7.16.1) Scope 1 emissions (metric tons CO2e)

315793.539

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

52067.085

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

52067.085

Romania

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

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

0

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

0

Singapore

(7.16.1) Scope 1 emissions (metric tons CO2e)

46259.833

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

128059.177

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

128059.177

Spain

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

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

0

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

0

Sweden

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

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

23.008

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

23.008

Taiwan, China

(7.16.1) Scope 1 emissions (metric tons CO2e)

5154.894

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

15060.789

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

15060.789

Thailand

(7.16.1) Scope 1 emissions (metric tons CO2e)

6899.563

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

24827.951

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

24827.951

United States of America

(7.16.1) Scope 1 emissions (metric tons CO2e)

47305.217

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

71256.657

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

71256.657

Viet Nam

(7.16.1) Scope 1 emissions (metric tons CO2e)

532.318

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

1399.831

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

1401.831
[Fixed row]

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

Select all that apply
☑ By business division

(7.17.1) Break down your total gross global Scope 1 emissions by business division.

	Business division	Scope 1 emissions (metric ton CO2e)
Row 1	Material sector	*2403515*
Row 2	Homes sector	*70584*
Row 3	Healthcare sector	*11149*
Row 4	Others	*8*

[Add row]

(7.19) Break down your organization’s total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Comment
Chemicals production activities	*2403515*	*Calculations are generally conducted in accordance with the provisions of the Act on the Rational Use of Energy and Conversion to Non-Fossil Energy (Energy Conservation Act) and the Act on Promotion of Global Warming Countermeasures (Global Warming Act).*

[Fixed row]

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

Select all that apply

☑ By business division

(7.20.1) Break down your total gross global Scope 2 emissions by business division.

	Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Row 1	*Material sector*	*716071*	*657164*
Row 2	Homes sector	*20758*	*15185*
Row 3	Healthcare sector	*29785*	*28614*
Row 4	Others	*1430*	*1430*

[Add row]

(7.21) Break down your organization’s total gross global Scope 2 emissions by sector production activity in metric tons CO2e.

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Chemicals production activities	*716071*	*657164*	*Calculations are generally conducted in accordance with the provisions of the Act on the Rational Use of Energy and Conversion to Non-Fossil Energy (Energy Conservation Act) and the Act on Promotion of Global Warming Countermeasures (Global Warming Act).*

[Fixed 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)

2485256

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

768044

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

702394

(7.22.4) Please explain

Calculations are generally conducted in accordance with the provisions of the Act on the Rational Use of Energy and Conversion to Non-Fossil Energy (Energy Conservation Act) and the Act on Promotion of Global Warming Countermeasures (Global Warming Act).

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

This is the greenhouse gas emissions data for the consolidated accounting group.
[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

(7.25) Disclose the percentage of your organization's Scope 3, Category 1 emissions by purchased chemical feedstock.

Row 1

(7.25.1) Purchased feedstock

Select from:

☑ High Value Chemicals (Steam cracking)

(7.25.2) Percentage of Scope 3, Category 1 tCO2e from purchased feedstock

11.23

(7.25.3) Explain calculation methodology

For fiscal year 2024, we referenced the CO2 emission factors from the National Institute for Environmental Studies' "Environmental Impact Intensity Database (3EID) (2015 Edition): LCA Inventory Data" and the National Institute of Advanced Industrial Science and Technology's "IDEA v2.3." The 3EID database contains CO2 emission factors per purchase price calculated using input-output tables. Where necessary, we also use the "CO2 Equivalent Common Intensity Database for the Carbon Footprint System Pilot Project" from the Japan Environmental Management Association for Industry. This database contains CO2 emission factors for raw materials published by the Ministry of Economy, Trade and Industry and other domestic materials industry organizations. It covers all input-output tables. Emissions are calculated by multiplying the CO2 emission factors from these databases by the raw material purchase price or usage amount.

Row 2

(7.25.1) Purchased feedstock

Select from:

☑ Ammonia

(7.25.2) Percentage of Scope 3, Category 1 tCO2e from purchased feedstock

8.49

(7.25.3) Explain calculation methodology

For fiscal year 2024, we referenced the CO2 emission factors from the National Institute for Environmental Studies' "Environmental Impact Intensity Database (3EID) (2015 Edition): LCA Inventory Data" and the National Institute of Advanced Industrial Science and Technology's "IDEA v2.3." The 3EID database contains CO2 emission factors per purchase price calculated using input-output tables. Where necessary, we also use the "CO2 Equivalent Common Intensity Database for the Carbon Footprint System Pilot Project" from the Japan Environmental Management Association for Industry. This database contains CO2 emission factors for raw materials published by the Ministry of Economy, Trade and Industry and other domestic materials industry organizations. It covers all input-output tables. Emissions are calculated by multiplying the CO2 emission factors from these databases by the raw material purchase price or usage amount.

Row 3

(7.25.1) Purchased feedstock

Select from:

☑ Aromatics extraction

(7.25.2) Percentage of Scope 3, Category 1 tCO2e from purchased feedstock

16.36

(7.25.3) Explain calculation methodology

For fiscal year 2024, we referenced the CO2 emission factors from the National Institute for Environmental Studies' "Environmental Impact Intensity Database (3EID) (2015 Edition): LCA Inventory Data" and the National Institute of Advanced Industrial Science and Technology's "IDEA v2.3." The 3EID database contains CO2 emission factors per purchase price calculated using input-output tables. Where necessary, we also use the "CO2 Equivalent Common Intensity Database for the Carbon Footprint System Pilot Project" from the Japan Environmental Management Association for Industry. This database contains CO2 emission factors for raw materials published by the Ministry of Economy, Trade and Industry and other domestic materials industry organizations. It covers all input-output tables. Emissions are calculated by multiplying the CO2 emission factors from these databases by the raw material purchase price or usage amount.

Row 4

(7.25.1) Purchased feedstock

Select from:

☑ Methanol

(7.25.2) Percentage of Scope 3, Category 1 tCO2e from purchased feedstock

3.84

(7.25.3) Explain calculation methodology

For fiscal year 2024, we referenced the CO2 emission factors from the National Institute for Environmental Studies' "Environmental Impact Intensity Database (3EID) (2015 Edition): LCA Inventory Data" and the National Institute of Advanced Industrial Science and Technology's "IDEA v2.3." The 3EID database contains CO2 emission factors per purchase price calculated using input-output tables. Where necessary, we also use the "CO2 Equivalent Common Intensity Database for the Carbon Footprint System Pilot Project" from the Japan Environmental Management Association for Industry. This database contains CO2 emission factors for raw materials published by the Ministry of Economy, Trade and Industry and other domestic materials industry organizations. It covers all input-output tables. Emissions are calculated by multiplying the CO2 emission factors from these databases by the raw material purchase price or usage amount.

Row 5

(7.25.1) Purchased feedstock

Select from:

☑ Propylene (FCC)

(7.25.2) Percentage of Scope 3, Category 1 tCO2e from purchased feedstock

28.46

(7.25.3) Explain calculation methodology

For fiscal year 2024, we referenced the CO2 emission factors from the National Institute for Environmental Studies' "Environmental Impact Intensity Database (3EID) (2015 Edition): LCA Inventory Data" and the National Institute of Advanced Industrial Science and Technology's "IDEA v2.3." The 3EID database contains CO2 emission factors per purchase price calculated using input-output tables. Where necessary, we also use the "CO2 Equivalent Common Intensity Database for the Carbon Footprint System Pilot Project" from the Japan Environmental Management Association for Industry. This database contains CO2 emission factors for raw materials published by the Ministry of Economy, Trade and Industry and other domestic materials industry organizations. It covers all input-output tables. Emissions are calculated by multiplying the CO2 emission factors from these databases by the raw material purchase price or usage amount.

Row 6

(7.25.1) Purchased feedstock

Select from:

☑ Butadiene (C4 sep.)

(7.25.2) Percentage of Scope 3, Category 1 tCO2e from purchased feedstock

6.5

(7.25.3) Explain calculation methodology

For fiscal year 2024, we referenced the CO2 emission factors from the National Institute for Environmental Studies' "Environmental Impact Intensity Database (3EID) (2015 Edition): LCA Inventory Data" and the National Institute of Advanced Industrial Science and Technology's "IDEA v2.3." The 3EID database contains CO2 emission factors per purchase price calculated using input-output tables. Where necessary, we also use the "CO2 Equivalent Common Intensity Database for the Carbon Footprint System Pilot Project" from the Japan Environmental Management Association for Industry. This database contains CO2 emission factors for raw materials published by the Ministry of Economy, Trade and Industry and other domestic materials industry organizations. It covers all input-output tables. Emissions are calculated by multiplying the CO2 emission factors from these databases by the raw material purchase price or usage amount.

Row 7

(7.25.1) Purchased feedstock

Select from:

☑ Polymers

(7.25.2) Percentage of Scope 3, Category 1 tCO2e from purchased feedstock

10.48

(7.25.3) Explain calculation methodology

For fiscal year 2024, we referenced the CO2 emission factors from the National Institute for Environmental Studies' "Environmental Impact Intensity Database (3EID) (2015 Edition): LCA Inventory Data" and the National Institute of Advanced Industrial Science and Technology's "IDEA v2.3." The 3EID database contains CO2 emission factors per purchase price calculated using input-output tables. Where necessary, we also use the "CO2 Equivalent Common Intensity Database for the

Carbon Footprint System Pilot Project" from the Japan Environmental Management Association for Industry. This database contains CO2 emission factors for raw materials published by the Ministry of Economy, Trade and Industry and other domestic materials industry organizations. It covers all input-output tables. Emissions are calculated by multiplying the CO2 emission factors from these databases by the raw material purchase price or usage amount.

Row 8

(7.25.1) Purchased feedstock

Select from:

☑ Specialty chemicals

(7.25.2) Percentage of Scope 3, Category 1 tCO2e from purchased feedstock

1.02

(7.25.3) Explain calculation methodology

For fiscal year 2024, we referenced the CO2 emission factors from the National Institute for Environmental Studies' "Environmental Impact Intensity Database (3EID) (2015 Edition): LCA Inventory Data" and the National Institute of Advanced Industrial Science and Technology's "IDEA v2.3." The 3EID database contains CO2 emission factors per purchase price calculated using input-output tables. Where necessary, we also use the "CO2 Equivalent Common Intensity Database for the Carbon Footprint System Pilot Project" from the Japan Environmental Management Association for Industry. This database contains CO2 emission factors for raw materials published by the Ministry of Economy, Trade and Industry and other domestic materials industry organizations. It covers all input-output tables. Emissions are calculated by multiplying the CO2 emission factors from these databases by the raw material purchase price or usage amount.

Row 9

(7.25.1) Purchased feedstock

Select from:

☑ Other (please specify) : Sodium hydroxide

(7.25.2) Percentage of Scope 3, Category 1 tCO2e from purchased feedstock

1.38

(7.25.3) Explain calculation methodology

For fiscal year 2024, we referenced the CO2 emission factors from the National Institute for Environmental Studies' "Environmental Impact Intensity Database (3EID) (2015 Edition): LCA Inventory Data" and the National Institute of Advanced Industrial Science and Technology's "IDEA v2.3." The 3EID database contains CO2 emission factors per purchase price calculated using input-output tables. Where necessary, we also use the "CO2 Equivalent Common Intensity Database for the Carbon Footprint System Pilot Project" from the Japan Environmental Management Association for Industry. This database contains CO2 emission factors for raw materials published by the Ministry of Economy, Trade and Industry and other domestic materials industry organizations. It covers all input-output tables. Emissions are calculated by multiplying the CO2 emission factors from these databases by the raw material purchase price or usage amount.

Row 10

(7.25.1) Purchased feedstock

Select from:

☑ Other (please specify) : Hydrogen

(7.25.2) Percentage of Scope 3, Category 1 tCO2e from purchased feedstock

0.16

(7.25.3) Explain calculation methodology

For fiscal year 2024, we referenced the CO2 emission factors from the National Institute for Environmental Studies' "Environmental Impact Intensity Database (3EID) (2015 Edition): LCA Inventory Data" and the National Institute of Advanced Industrial Science and Technology's "IDEA v2.3." The 3EID database contains CO2 emission factors per purchase price calculated using input-output tables. Where necessary, we also use the "CO2 Equivalent Common Intensity Database for the Carbon Footprint System Pilot Project" from the Japan Environmental Management Association for Industry. This database contains CO2 emission factors for raw materials published by the Ministry of Economy, Trade and Industry and other domestic materials industry organizations. It covers all input-output tables. Emissions are calculated by multiplying the CO2 emission factors from these databases by the raw material purchase price or usage amount.
[Add row]

(7.25.1) Disclose sales of products that are greenhouse gases.

Carbon dioxide (CO2)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

We do not sell the greenhouse gas products listed on the left.

Methane (CH4)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

We do not sell the greenhouse gas products listed on the left.

Nitrous oxide (N2O)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

We do not sell the greenhouse gas products listed on the left.

Hydrofluorocarbons (HFC)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

We do not sell the greenhouse gas products listed on the left.

Perfluorocarbons (PFC)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

We do not sell the greenhouse gas products listed on the left.

Sulphur hexafluoride (SF6)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

We do not sell the greenhouse gas products listed on the left.

Nitrogen trifluoride (NF3)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

We do not sell the greenhouse gas products listed on the left.
[Fixed row]

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

Select from:

☑ More than 0% but less than or equal to 5%

(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:* ☑ Yes
Consumption of purchased or acquired cooling	*Select from:* ☑ No
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:

☑ HHV (higher heating value)

(7.30.1.2) MWh from renewable sources

192666

(7.30.1.3) MWh from non-renewable sources

7982626

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

8175292.00

Consumption of purchased or acquired electricity

(7.30.1.1) Heating value

Select from:
☑ HHV (higher heating value)

(7.30.1.2) MWh from renewable sources

29857

(7.30.1.3) MWh from non-renewable sources

1409715

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

1439572.00

Consumption of purchased or acquired steam

(7.30.1.1) Heating value

Select from:

☑ HHV (higher heating value)

(7.30.1.2) MWh from renewable sources

0

(7.30.1.3) MWh from non-renewable sources

838721

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

838721.00

Consumption of self-generated non-fuel renewable energy

(7.30.1.1) Heating value

Select from:
☑ HHV (higher heating value)

(7.30.1.2) MWh from renewable sources

65449

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

65449.00

Total energy consumption

(7.30.1.1) Heating value

Select from:
☑ HHV (higher heating value)

(7.30.1.2) MWh from renewable sources

286472

(7.30.1.3) MWh from non-renewable sources

10231062

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

10517534.00
[Fixed row]

(7.30.3) Report your organization’s energy consumption totals (excluding feedstocks) for chemical production activities in MWh.

Consumption of fuel (excluding feedstocks)

(7.30.3.1) Heating value

Select from:
☑ HHV (higher heating value)

(7.30.3.2) MWh consumed from renewable sources inside chemical sector boundary

192666

(7.30.3.3) MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)

7779949

(7.30.3.4) MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary

0

(7.30.3.5) Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

7972615.00

Consumption of purchased or acquired electricity

(7.30.3.1) Heating value

Select from:
☑ HHV (higher heating value)

(7.30.3.2) MWh consumed from renewable sources inside chemical sector boundary

29857

(7.30.3.3) MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)

1301099

(7.30.3.4) MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary

0

(7.30.3.5) Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

1330956.00

Consumption of purchased or acquired steam

(7.30.3.1) Heating value

Select from:
☑ HHV (higher heating value)

(7.30.3.2) MWh consumed from renewable sources inside chemical sector boundary

0

(7.30.3.3) MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)

830122

(7.30.3.4) MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary

0

(7.30.3.5) Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

830122.00

Consumption of self-generated non-fuel renewable energy

(7.30.3.1) Heating value

Select from:
☑ HHV (higher heating value)

(7.30.3.2) MWh consumed from renewable sources inside chemical sector boundary

65449

(7.30.3.5) Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

65449.00

Total energy consumption

(7.30.3.1) Heating value

Select from:
☑ HHV (higher heating value)

(7.30.3.2) MWh consumed from renewable sources inside chemical sector boundary

286472

(7.30.3.3) MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)

9911170

(7.30.3.4) MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary

0

(7.30.3.5) Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

10197642.00
[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:* ☑ Yes
Consumption of fuel for the generation of cooling	*Select from:* ☑ No
Consumption of fuel for co-generation or tri-generation	*Select from:* ☑ Yes

[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:
☑ HHV

(7.30.7.2) Total fuel MWh consumed by the organization

192666

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

192666

(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

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

We also use cogeneration, but the fuel consumption is allocated to other uses.

Other biomass

(7.30.7.1) Heating value

Select from:
☑ HHV

(7.30.7.2) Total fuel MWh consumed by the organization

6178

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

6178

(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

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

We also use cogeneration, but the fuel consumption is allocated to other uses.

Other renewable fuels (e.g. renewable hydrogen)

(7.30.7.1) Heating value

Select from:
☑ HHV

(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

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

We also use cogeneration, but the fuel consumption is allocated to other uses.

Coal

(7.30.7.1) Heating value

Select from:
☑ HHV

(7.30.7.2) Total fuel MWh consumed by the organization

1632924

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

120836

(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

1512088

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

We also use cogeneration, but the fuel consumption is allocated to other uses.

Oil

(7.30.7.1) Heating value

Select from:

☑ HHV

(7.30.7.2) Total fuel MWh consumed by the organization

1142962

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

51

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

158134

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

984777

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

We also use cogeneration, but the fuel consumption is allocated to other uses.

Gas

(7.30.7.1) Heating value

Select from:

☑ HHV

(7.30.7.2) Total fuel MWh consumed by the organization

2809617

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

1715952

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

563689

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

529976

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

We also use cogeneration, but the fuel consumption is allocated to other uses.

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

(7.30.7.1) Heating value

Select from:
☑ HHV

(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

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

We also use cogeneration, but the fuel consumption is allocated to other uses.

Total fuel

(7.30.7.1) Heating value

Select from:
☑ HHV

(7.30.7.2) Total fuel MWh consumed by the organization

8175862

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

2036351

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

1780477

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

4359034

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

We also use cogeneration, but the fuel consumption is allocated to other uses.
[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)

2101800

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

2101800

(7.30.9.3) Gross generation from renewable sources (MWh)

65449

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

65449

Heat

(7.30.9.1) Total Gross generation (MWh)

1780477

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

1780477

(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)

4359034

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

4359034

(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]

(7.30.11) Provide details on electricity, heat, steam, and cooling your organization has generated and consumed for chemical production activities.

Electricity

(7.30.11.1) Total gross generation inside chemicals sector boundary (MWh)

2051316

(7.30.11.2) Generation that is consumed inside chemicals sector boundary (MWh)

2051316

(7.30.11.3) Generation from renewable sources inside chemical sector boundary (MWh)

65449

(7.30.11.4) Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)

0

Heat

(7.30.11.1) Total gross generation inside chemicals sector boundary (MWh)

1736336

(7.30.11.2) Generation that is consumed inside chemicals sector boundary (MWh)

1736336

(7.30.11.3) Generation from renewable sources inside chemical sector boundary (MWh)

0

(7.30.11.4) Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)

0

Steam

(7.30.11.1) Total gross generation inside chemicals sector boundary (MWh)

4250967

(7.30.11.2) Generation that is consumed inside chemicals sector boundary (MWh)

4250967

(7.30.11.3) Generation from renewable sources inside chemical sector boundary (MWh)

0

(7.30.11.4) Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)

0

Cooling

(7.30.11.1) Total gross generation inside chemicals sector boundary (MWh)

0

(7.30.11.2) Generation that is consumed inside chemicals sector boundary (MWh)

0

(7.30.11.3) Generation from renewable sources inside chemical sector boundary (MWh)

0

(7.30.11.4) Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (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:

☑ Physical power purchase agreement (physical PPA) with a grid-connected generator

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Large hydropower (>25 MW)

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

28357

(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)

2021

(7.30.14.10) Comment

This electricity is provided by Tokyo Electric Power Energy Partner's "Aqua Premium"
[Add row]

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

Australia

(7.30.16.1) Consumption of purchased electricity (MWh)

4796

(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)

0

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

4796.00

Austria

(7.30.16.1) Consumption of purchased electricity (MWh)

0

(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)

0

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

0.00

Brazil

(7.30.16.1) Consumption of purchased electricity (MWh)

9638

(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)

0

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

9638.00

Canada

(7.30.16.1) Consumption of purchased electricity (MWh)

0

(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)

0

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

0.00

China

(7.30.16.1) Consumption of purchased electricity (MWh)

144065

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

0

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

669682

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

186023

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

999770.00

Czechia

(7.30.16.1) Consumption of purchased electricity (MWh)

7444

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

0

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

55605

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

15446

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

78495.00

France

(7.30.16.1) Consumption of purchased electricity (MWh)

26578

(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)

0

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

26578.00

Germany

(7.30.16.1) Consumption of purchased electricity (MWh)

2480

(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)

0

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

2480.00

India

(7.30.16.1) Consumption of purchased electricity (MWh)

20031

(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)

0

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

20031.00

Italy

(7.30.16.1) Consumption of purchased electricity (MWh)

10340

(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)

0

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

10340.00

Japan

(7.30.16.1) Consumption of purchased electricity (MWh)

656003

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

65449

(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)

317167

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

1038619.00

Mexico

(7.30.16.1) Consumption of purchased electricity (MWh)

9054

(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)

0

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

9054.00

Morocco

(7.30.16.1) Consumption of purchased electricity (MWh)

3397

(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)

0

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

3397.00

Poland

(7.30.16.1) Consumption of purchased electricity (MWh)

5503

(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)

0

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

5503.00

Republic of Korea

(7.30.16.1) Consumption of purchased electricity (MWh)

109684

(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)

0

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

109684.00

Romania

(7.30.16.1) Consumption of purchased electricity (MWh)

0

(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)

0

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

0.00

Singapore

(7.30.16.1) Consumption of purchased electricity (MWh)

105596

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

0

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

1086246

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

301735

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

1493577.00

Spain

(7.30.16.1) Consumption of purchased electricity (MWh)

0

(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)

0

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

0.00

Sweden

(7.30.16.1) Consumption of purchased electricity (MWh)

0

(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)

0

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

0.00

Taiwan, China

(7.30.16.1) Consumption of purchased electricity (MWh)

30487

(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)

0

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

30487.00

Thailand

(7.30.16.1) Consumption of purchased electricity (MWh)

87896

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

0

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

66063

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

18351

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

172310.00

United States of America

(7.30.16.1) Consumption of purchased electricity (MWh)

170919

(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)

0

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

170919.00

Viet Nam

(7.30.16.1) Consumption of purchased electricity (MWh)

3627

(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)

0

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

3627.00
[Fixed row]

(7.31) Does your organization consume fuels as feedstocks for chemical production activities?

Select from:
☑ No

(7.39) Provide details on your organization's chemical products.

Row 1

(7.39.1) Output product

Select from:
☑ Other base chemicals

(7.39.2) Production (metric tons)

600000

(7.39.3) Capacity (metric tons)

720000

(7.39.4) Direct emissions intensity (metric tons CO2e per metric ton of product)

0.71

(7.39.5) Electricity intensity (MWh per metric ton of product)

0.23

(7.39.6) Steam intensity (MWh per metric ton of product)

0.6

(7.39.7) Steam/ heat recovered (MWh per metric ton of product)

0.25

(7.39.8) Comment

We disclose data on basic chemicals. The basic unit data is an example of one of our multiple bases around the world. Since manufacturing methods and catalysts vary from base to base, it would be meaningless to summarize all the data.
[Add 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

0.00000105

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

3187650

(7.45.3) Metric denominator

Select from:

☑ unit total revenue

(7.45.4) Metric denominator: Unit total

3037312000000

(7.45.5) Scope 2 figure used

Select from:

☑ Market-based

(7.45.6) % change from previous year

8

(7.45.7) Direction of change

Select from:

☑ Decreased

(7.45.8) Reasons for change

Select all that apply

☑ Change in renewable energy consumption

☑ Change in output

☑ Change in physical operating conditions

(7.45.9) Please explain

These results were achieved through the continuous implementation of energy-saving measures (such as optimizing the operating conditions of diesel generators and steam boilers) and the active introduction of renewable energy technologies such as hydroelectric power and solar power generation, which resulted in an 8.0% reduction in CO2 emissions per unit of sales.
[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 1

(7.53.1.2) Is this a science-based target?

Select from:
☑ No, but we anticipate setting one in the next two years

(7.53.1.5) Date target was set

05/24/2021

(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

03/31/2014

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

3880000

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

1230000

(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)

5110000.000

(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

03/30/2031

(7.53.1.55) Targeted reduction from base year (%)

30

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

3577000.000

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

2485256

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

702394

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

3187650.000

(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

125.40

(7.53.1.80) Target status in reporting year

Select from:

☑ Underway

(7.53.1.82) Explain target coverage and identify any exclusions

Scope: Greenhouse gas emissions of consolidated companies are aggregated. This applies to companies in which the Company holds more than 50% of the voting rights or has substantial management rights. Exclusions: Non-manufacturing facilities with extremely low energy consumption, such as small sales offices, are excluded.

(7.53.1.83) Target objective

Asahi Kasei has established a policy of aiming for carbon neutrality by 2050, and has set reduction targets based on the belief that achieving this requires reductions of at least 30% by 2030 and 40% by 2035 (both compared to fiscal 2013 levels). From the perspective of "Care for Earth," we will work to reduce our own GHG emissions as well as contribute to reducing GHG emissions in society through our business.

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

Asahi Kasei Group companies in Japan and overseas are working to achieve net-zero combined Scope 1 and Scope 2 greenhouse gas emissions (CO2 equivalent) by 2050. Specifically, we are implementing the following measures: (1) We plan to gradually replace aging equipment at our company-owned head hydroelectric power plants and significantly improve the efficiency of hydroelectric power generation. We will replace four hydroelectric power plants in 2025. This initiative, combined with existing hydroelectric power plants, is expected to reduce CO2 emissions by approximately 81,000 tons per year. (2) We are gradually switching our coal-fired power plants to LNG and biomass fuels. The Nobeoka No. 3 coal-fired power plant has completed its switch to LNG fuel and began commercial operation in March 2022. (3) We are installing large-scale solar panels on unused land within our business sites. (4) We are also working to install solar panels on the roofs of our Hebel Maison rental housing complexes, which we rent to homeowners, and use the generated electricity within the Asahi Kasei Group. In addition to these various

initiatives, we will promote decarbonization by working to green electricity and steam, such as developing alkaline water electrolysis, and by innovating processes.

(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 increase or maintain low-carbon energy consumption or production

(7.54.1) Provide details of your targets to increase or maintain low-carbon energy consumption or production.

Row 1

(7.54.1.1) Target reference number

Select from:
☑ Low 1

(7.54.1.2) Date target was set

07/28/2024

(7.54.1.3) Target coverage

Select from:
☑ Country/area/region

(7.54.1.4) Target type: energy carrier

Select from:

☑ Electricity

(7.54.1.5) Target type: activity

Select from:

☑ Consumption

(7.54.1.6) Target type: energy source

Select from:

☑ Low-carbon energy source(s)

(7.54.1.7) End date of base year

03/31/2024

(7.54.1.8) Consumption or production of selected energy carrier in base year (MWh)

4815999

(7.54.1.9) % share of low-carbon or renewable energy in base year

19.7

(7.54.1.10) End date of target

03/31/2031

(7.54.1.11) % share of low-carbon or renewable energy at end date of target

45

(7.54.1.12) % share of low-carbon or renewable energy in reporting year

25.7

(7.54.1.13) % of target achieved relative to base year

23.72

(7.54.1.14) Target status in reporting year

Select from:

☑ Underway

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

Yes. We are promoting various measures to achieve our GHG emissions reduction targets, one of which is the reduction of carbon from electricity and other energy sources.

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

Select all that apply

☑ Other, please specify : Set and disclose non-fossil fuel ratio targets in accordance with Japan's Energy Conservation Act (Act on the Rational Use of Energy and Conversion to Non-Fossil Energy)

(7.54.1.19) Explain target coverage and identify any exclusions

The target is Asahi Kasei Corporation of Japan.

(7.54.1.20) Target objective

To promote the reduction of GHG emissions within the Group

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

We plan to increase the non-fossil fuel ratio in domestic electricity consumption from 19.7% in fiscal 2023 to 45% in 2030 by switching to low-carbon fuels, expanding the use of renewable energy such as solar power, and promoting renewable energy in purchased electricity. The actual figure for fiscal 2024 is 25.7%, and we are steadily progressing with our efforts.
[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	*2*	*`Numeric input*
To be implemented	*2*	*338*
Implementation commenced	*3*	*24288*
Implemented	*5*	*135987*
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

Low-carbon energy consumption
☑ Large hydropower (>25 MW)

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

12570

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

Select all that apply

☑ 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)

0

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

0

(7.55.2.7) Payback period

Select from:

☑ No payback

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ <1 year

(7.55.2.9) Comment

In fiscal year 2024, we purchased Aqua Premium (29,857MWh), which is hydroelectric power. The CO2 emission reduction amount is calculated by multiplying the

amount purchased as FIT Non-Fossil Certificates (MWh) by the Electricity Business Low Carbon Society Council's actual emission coefficient (0.421t/MWh). 12,570t-CO2e: 29,857MWh x 0.421t-CO2e/MWh

Row 2

(7.55.2.1) Initiative category & Initiative type

Low-carbon energy consumption

☑ Large hydropower (>25 MW)

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

27554

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

Select all that apply

☑ Scope 1

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

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

0

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

0

(7.55.2.7) Payback period

Select from:

☑ No payback

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ >30 years

(7.55.2.9) Comment

Our company owns nine drop-type hydroelectric power plants, which are expected to generate a total of 65,449 MWh of electricity in fiscal 2024. The amount of CO2 emissions reduction was calculated by multiplying the amount of electricity generated (MWh) by the Electric Power Industry Low Carbon Society Council's actual emissions coefficient (0.421 t/MWh). 27,554 t-CO2e: 65,449 MWh × 0.421 t-CO2e/MWh

Row 3

(7.55.2.1) Initiative category & Initiative type

Low-carbon energy generation

☑ Solar PV

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

47265

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

Select all that apply

☑ Scope 2 (location-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

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

0

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

0

(7.55.2.7) Payback period

Select from:

☑ No payback

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ <1 year

(7.55.2.9) Comment

In fiscal year 2024, we purchased 112,269 MWh of FIT Non-Fossil Energy Certificates. The CO2 emissions reduction is calculated by multiplying the amount of FIT Non-Fossil Energy Certificates purchased (MWh) by the Electricity Business Council's actual emissions coefficient (0.421 t/MWh). 47,265 t-CO2e: 112,269 MWh x 0.421 t-CO2e/MWh.

Row 4

(7.55.2.1) Initiative category & Initiative type

Low-carbon energy generation

☑ Solar PV

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

20615

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

Select all that apply

☑ Scope 2 (location-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

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

0

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

0

(7.55.2.7) Payback period

Select from:

☑ <1 year

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ >30 years

(7.55.2.9) Comment

In cooperation with Asahi Kasei's housing division, we are promoting an initiative to purchase non-FIT non-fossil fuel certificates for solar power generated at Hebel House. In fiscal 2024, we purchased 48,967 MWh of non-FIT non-fossil fuel certificates. The amount of CO2 emissions reduction is calculated by multiplying the amount of non-FIT non-fossil fuel certificates purchased (MWh) by the Electric Power Industry Low Carbon Society Council's actual emissions coefficient (0.421 t/MWh). 20,615 t-CO2e: 48,967 MWh x 0.421 t-CO2e/MWh.

Row 5

(7.55.2.1) Initiative category & Initiative type

Low-carbon energy consumption

☑ Low-carbon electricity mix

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

27983

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

Select all that apply

☑ 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)

0

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

0

(7.55.2.7) Payback period

Select from:

☑ No payback

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ >30 years

(7.55.2.9) Comment

Our other in-house power generation will generate a total of 66,468 MWh in fiscal year 2024. The CO2 emissions reduction was calculated by multiplying the amount of power generated (MWh) by the Electric Power Industry Low Carbon Society Council's actual emissions coefficient (0.421 t/MWh). 27,554 t-CO2e: 66,468 MWh × 0.421 t-CO2e/MWh
[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 efficiently reduce GHG emissions, starting in fiscal 2020, we have applied internal carbon pricing (ICP) to all investments with an investment amount of 100 million yen or more (excluding investments with emissions of less than 100 t-CO2e/year) and all investments with additional emissions of 1,000 t-CO2e/year or more. Effective July 2023, we revised the ICP price from 10,000 yen (100 USD)/CO2-t to 15,000 yen (140 USD)/CO2-t, in line with the IEA's carbon tax price forecast of 140 USD/CO2-t for 2030 under the World Energy Outlook (WEO) Net Zero scenario. We utilize ICP pricing to evaluate the profitability of capital investments and make investment decisions, further promoting actions toward regulatory compliance for carbon neutrality. Additionally, in our Medium-Term Management Plan covering 2025-2027, we plan to make approximately 100 billion yen in GHG reduction-related investments. Additionally, the government has set aside $100 million for investment over five years from fiscal 2023 to fiscal 2027 for startups in the environmental field, including those working to address climate change.
[Add row]

(7.72) Does your organization assess the life cycle emissions of new construction or major renovation projects?

	Assessment of life cycle emissions	Comment
	Select from: ☑ Yes, quantitative assessment	*・CO2 emissions during the "construction" and "repair/renovation/demolition" stages are determined using the assessment methods and standard values of CASBEE (Comprehensive Assessment System for Built Environment Efficiency). ・CO2 emissions during the "use" stage are determined based on the energy consumption of the home, calculated in accordance with the system established by the Ministry of Land, Infrastructure, Transport and Tourism.*

[Fixed row]

(7.72.1) Provide details of how your organization assesses the life cycle emissions of new construction or major renovation projects.

(7.72.1.1) Projects assessed

Select from:

☑ New construction and major renovation projects meeting certain criteria (please specify) : All new construction projects only

(7.72.1.2) Earliest project phase that most commonly includes an assessment

Select from:

☑ Design phase

(7.72.1.3) Life cycle stage(s) most commonly covered

Select from:

☑ Use stage

(7.72.1.4) Methodologies/standards/tools applied

Select all that apply

☑ Other, please specify : Ministry of Land, Infrastructure, Transport and Tourism's Top Runner Housing Program
[Fixed row]

(7.72.2) Can you provide embodied carbon emissions data for any of your organization's new construction or major renovation projects completed in the last three years?

	Ability to disclose embodied carbon emissions	Comment
	Select from: ☑ Yes	*Details are disclosed in 7.72.3.*

[Fixed row]

(7.72.3) Provide details of the embodied carbon emissions of new construction or major renovation projects completed in the last three years.

Row 1

(7.72.3.1) Year of completion

2024

(7.72.3.2) Property sector

Select from:
☑ Residential

(7.72.3.3) Type of project

Select from:

☑ New construction

(7.72.3.5) Life cycle stage(s) covered

Select from:

☑ Use stage

(7.72.3.6) Normalization factor (denominator)

Select from:

☑ IPMS 2 – Residential

(7.72.3.7) Denominator unit

Select from:

☑ square meter

(7.72.3.8) Embodied carbon (kg/CO2e per the denominator unit)

777

(7.72.3.9) % of new construction/major renovation projects in the last three years covered by this metric (by floor area)

89

(7.72.3.10) Methodologies/standards/tools applied

Select all that apply

☑ Other, please specify : CASBEE (Comprehensive Assessment System for Built Environment Efficiency)

[Add row]

(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 : The amount of GHG reduction contribution is calculated based on our company guidelines, which were created with reference to various guidelines published by the Japan Institute of Life Cycle Assessment, the Ministry of Economy, Trade and Industry, the Japan Chemical Industry Association, the International Council of Chemical Associations (ICCA), the World Business Council for Sustainable Development (WBCSD), etc. Products that contribute to GHG emission reductions are identified from the calculation results and are defined and operated as "environmentally beneficial products" based on our internal system.

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

Buildings construction and renovation

☑ Other, please specify : The Asahi Kasei Group classifies and certifies products in the materials domain (high-performance resins, fibers, nonwoven fabrics, batteries and electronic materials, etc.) and the housing domain (high-performance insulation materials, ZEH housing, etc.) as "environmentally beneficial products" that contribute to reducing GHG emissions. These products mainly fall under the "manufacturing industry (chemical industry and building materials manufacturing)" and "construction industry (housing construction)" categories.

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

The Asahi Kasei Group strives to provide products and services that contribute to reducing greenhouse gas emissions and environmental impact throughout the entire product and service lifecycle—from raw material procurement, manufacturing, use, and disposal (disposal and recycling)—of our products and services. In the areas of CO_2 reduction and energy conservation, we have achieved significant reductions in heating and cooling energy consumption and associated CO_2 emissions through our residential insulation material "Neoma Foam," our ZEH-spec detached houses "Hebel Haus," and our rental housing "Hebel Maison." Our inverter control

current sensors and Hall effect ICs, which are incorporated into residential and commercial air conditioners, also contribute to energy conservation. In the area of new energy, we provide separators for lithium-ion batteries (LIBs), which are essential for electric vehicles and storage batteries, supporting the electrification of mobility. In the area of waste and recycling, we promote the use of recycled materials in resins and fibers, and promote waste reduction by improving the durability and lifespan of our products. Furthermore, we contribute to resource recycling and environmental impact reduction through the use of biomass materials and the use of less raw materials in our compact, lightweight designs. In the field of water resources, we provide Microza hollow fiber membranes, which enable energy-saving and highly efficient water treatment, and UVC-LEDs for sterilization, thereby ensuring water quality and saving energy. Furthermore, from the perspective of air quality and chemical management, we develop and provide printing resin plates that do not use solvents, which are volatile organic compounds (VOCs), during development, and insulation materials that do not contain fluorocarbons, thereby working to reduce air pollution and the emission of hazardous chemicals. For these product groups, we conduct quantitative assessments of GHG reductions based on LCA (Life Cycle Assessment) in-house, and have them reviewed by external experts to ensure their reliability. We position our products and services as ones that achieve both the resolution of environmental issues and business growth.

(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:

☑ Other, please specify : The GHG emission reduction contribution is calculated based on our own guidelines, which were created with reference to various guidelines from the Japan Institute of Life Cycle Assessment (LCA), the Ministry of Economy, Trade and Industry (METI), the Japan Chemical Industry Association (JCIA), the International Council of Chemical Associations (ICCA), and the World Business Council for Sustainable Development (WBCSD).

(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

Representative examples of our products are as follows: 1) For LIB separators, 100,000 km of driving by a car 2) For ion exchange membranes, 1 ton of caustic soda production 3) For Hebel Haus Maison, 100 years of use per house

(7.74.1.9) Reference product/service or baseline scenario used

In the representative product examples, the following comparison objects are set as the baseline. 1) LIB separators: Internal combustion engine vehicles (gasoline vehicles) are used as the baseline, and the setting is based on examples in the LCA guidelines published by the Japan Chemical Industry Association. 2) Ion

exchange membranes: Our conventional grade products are used as the baseline. Conventional grades have a long history of sales and use, and can be considered a representative baseline for technology transitions in the market, so we believe this is a reasonable setting. 3) Hebel Haus/Hebel Maison: A steel-framed house with general durability (30-year service life) under the Japan Housing Performance Indication System is used as the baseline.

(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

19670000

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

For representative products, GHG emissions reduction contributions are calculated primarily based on the emission reduction effect during use. The main calculation assumptions and concepts for each product are shown below. 1) LIB separators: Based on the "cLCA Calculation for Next-Generation Vehicles" published by the Japan Chemical Industry Association, GHG emission reductions are assessed based on a comparison with gasoline-powered vehicles, hybrid electric vehicles (HEVs), plug-in hybrid electric vehicles (PHEVs), and electric vehicles (BEVs). When assessing the emission characteristics of electrified vehicles (HEVs, PHEVs, and BEVs), the electricity emissions intensity in regions with a high penetration rate of electrified vehicles is used, making realistic assumptions in line with the power source mix. Emissions for each vehicle model are treated as follows: Since HEVs do not use external charging, emissions from power generation are not considered, and only emissions during driving are considered. For PHEVs, the ratio of electric to gasoline-powered driving is assumed to be 1:1, and emissions during power generation for electric driving are assessed based on the same electricity intensity as for BEVs. The functional unit is "100,000 km driven per electric vehicle," and the difference between the driving and power generation emissions of each vehicle model and those of gasoline-powered vehicles is used to calculate the reduction contribution. Furthermore, the contribution rate of LIB separators to overall GHG reductions is estimated and multiplied by the shipment volume of the separators in question to calculate the total reduction contribution for each product. 2) Ion Exchange Membranes: The production of one ton of caustic soda is used as the functional unit, and conventional grade products are set as the baseline. The regional emissions intensity unit is applied to the amount of electricity saved through the use of the product under evaluation, and the contribution is evaluated based on the difference in emissions during use. The total reduction contribution is calculated based on the actual sales volume. 3) Hebel Haus/Hebel Maison: The effect of extending the lifespan of each home is quantitatively evaluated. The effect of extending the lifespan is calculated by calculating the difference in the number of rebuilds required, assuming 100 years of continuous use, compared to the average continuous use period of a typical steel-framed home (approximately 30 years). We evaluate the GHG emissions generated during each rebuild (material manufacturing, transportation, construction, etc.) and calculate the total GHG reduction amount. This allows us to evaluate a wider range of GHG reduction contributions, including resource input and emission reduction effects through long-term use.

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

22.98
[Add row]

(7.77) Did your organization complete new construction or major renovations projects designed as net zero carbon in the last three years?

Select from:
☑ Yes

(7.77.1) Provide details of new construction or major renovations projects completed in the last 3 years that were designed as net zero carbon.

Row 1

(7.77.1.1) Property sector

Select from:
☑ Residential

(7.77.1.2) Definition(s) of net zero carbon applied

Select all that apply
☑ National/local government standard, please specify : CASBEE (Comprehensive Assessment System for Built Environment Efficiency)

(7.77.1.3) % of net zero carbon buildings in the total number of buildings completed in the last 3 years

0.1

(7.77.1.4) Have any of the buildings been certified as net zero carbon?

Select from:
☑ No
[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:

☑ Yes

(9.1.1) Provide details on these exclusions.

Row 1

(9.1.1.1) Exclusion

Select from:

☑ Facilities

(9.1.1.2) Description of exclusion

Non-manufacturing sites such as the head office, sales offices, and some assembly and processing plants that use small amounts of water for production have been excluded because the amount of water intake and discharge is extremely small and the water risk is negligible.

(9.1.1.3) Reason for exclusion

Select from:

☑ Small volume [rainwater]

(9.1.1.7) Percentage of water volume the exclusion represents

Select from:

☑ Less than 1%

(9.1.1.8) Please explain

Data is collected for facilities with large amounts of water intake and discharge.
[Add row]

(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:
☑ 100%

(9.2.2) Frequency of measurement

Select from:
☑ Continuously

(9.2.3) Method of measurement

At each of our plants, water intake is continuously measured and monitored using flow meters and invoices.

(9.2.4) Please explain

In accordance with our internal regulations, we regularly measure and monitor the amount of water intake at all our plants. Each plant continuously measures and monitors its water intake using flow meters and invoices, and reports this annual data to Asahi Kasei Head Office once a year using our proprietary system. Asahi Kasei Head Office also monitors the water intake of the entire group every year.

Water withdrawals – volumes by source

(9.2.1) % of sites/facilities/operations

Select from:
☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

At each of our plants, we continuously measure and monitor water withdrawals by source using flow meters and invoices.

(9.2.4) Please explain

In accordance with our internal regulations, we regularly measure and monitor the amount of water intake by water source at all our plants. Each plant continuously measures and monitors the amount of water intake by water source using flow meters and invoices, and reports this annual data to Asahi Kasei Head Office once a year using our own proprietary system. Asahi Kasei Head Office also monitors the water intake of the entire group every year.

Water withdrawals quality

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

Each of our plants monitors the quality of the water they take in to ensure high-quality freshwater at all times. The monitoring method and frequency vary depending on the circumstances of each plant, such as legal requirements and the type of water. Many plants continuously monitor water quality using turbidity meters and pH meters, and regularly refer to water quality analysis reports obtained from the water utility.

(9.2.4) Please explain

In accordance with our internal regulations, we regularly monitor the quality of water used at all our plants. To ensure a constant supply of high-quality fresh water,

each plant has the basic responsibility of monitoring the quality of the water it draws from. If a water quality problem arises that a plant cannot solve on its own, it reports the situation to Asahi Kasei Head Office and requests advice and assistance. Asahi Kasei Head Office checks annually for any problems with the quality of the water it draws from.

Water discharges – total volumes

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

Flow meters and flow measuring weirs are commonly used at each of our plants to continuously measure and monitor discharge volumes.

(9.2.4) Please explain

Based on our internal regulations, we regularly measure and monitor the amount of wastewater discharged from all our plants. Each plant continuously measures and monitors the amount of wastewater discharged using flow meters and flow measuring weirs, and this annual data is reported to Asahi Kasei Head Office once a year using our own proprietary system. Asahi Kasei Head Office also monitors the amount of wastewater discharged by the entire group every year.

Water discharges – volumes by destination

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

Flow meters and flow measuring weirs are commonly used at each of our plants to continuously measure and monitor wastewater volumes at each discharge destination.

(9.2.4) Please explain

Based on our internal regulations, we regularly measure and monitor the amount of wastewater discharged to each discharge destination at all our plants. Each plant continuously measures and monitors the amount of wastewater discharged to each discharge destination using flow meters and flow measurement weirs, and this annual data is reported to Asahi Kasei Head Office once a year using our own proprietary system. Asahi Kasei Head Office also monitors the amount of wastewater discharged by the entire group every year.

Water discharges – volumes by treatment method

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

Flow meters and flow measuring weirs are commonly used at each of our plants to continuously measure and monitor wastewater volumes by treatment method.

(9.2.4) Please explain

Based on our internal regulations, we regularly measure and monitor the amount of wastewater discharged by treatment method at all our plants. Each plant continuously measures and monitors the amount of wastewater discharged by treatment method using flow meters and flow measuring weirs, and this annual data is reported to Asahi Kasei Head Office once a year using our own proprietary system. Asahi Kasei Head Office also monitors the amount of wastewater discharged by the entire group every year.

Water discharge quality – by standard effluent parameters

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

Each of our plants uses its own analytical equipment to continuously monitor parameters such as pH and COD to detect problems, and also sends wastewater samples to an external laboratory for analysis, typically once or twice a month.

(9.2.4) Please explain

In accordance with our internal regulations, all our plants regularly measure and monitor the quality of their wastewater using effluent standards. Each plant has the primary responsibility for monitoring its wastewater quality to ensure compliance with applicable standards. Many plants continuously monitor items such as nitrates and phosphates to prevent problems before they occur and also commission external analytical laboratories to collect and analyze wastewater samples. These tests are typically conducted once or twice a month to ensure compliance with effluent standards. If a plant encounters a water quality problem that it cannot solve on its own, it reports the situation to Asahi Kasei Headquarters and requests advice and assistance. Asahi Kasei Headquarters conducts annual inspections of wastewater quality for any issues.

Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

At each of our plants, we continuously monitor parameters such as nitrates and phosphates to detect any issues and also have external laboratories take and analyse wastewater samples, typically once or twice a month, to ensure we are meeting regular discharge standards and limits.

(9.2.4) Please explain

In accordance with our internal regulations, all our plants regularly measure and monitor wastewater quality using wastewater standards. Each plant has the primary responsibility for monitoring wastewater quality to ensure compliance with applicable wastewater standards. Many plants continuously monitor items such as nitrates and phosphates to prevent problems and also commission external analytical laboratories to collect and analyze wastewater samples. These tests are typically conducted once or twice a month to ensure compliance with wastewater standards. If a plant encounters a wastewater temperature issue that it cannot resolve on its own, it reports the situation to Asahi Kasei Headquarters and requests advice and assistance. Asahi Kasei Headquarters conducts annual inspections to check for any wastewater temperature issues.

Water discharge quality – temperature

(9.2.1) % of sites/facilities/operations

Select from:
☑ 100%

(9.2.2) Frequency of measurement

Select from:
☑ Monthly

(9.2.3) Method of measurement

Each of our plants regularly monitors the temperature of their wastewater using their own thermometers, typically once or twice a month, to detect any problems.

(9.2.4) Please explain

In accordance with our internal regulations, we regularly measure and monitor the temperature of wastewater at all our plants. Each plant has the primary responsibility for monitoring wastewater temperature to ensure compliance with all applicable requirements. Many plants regularly monitor wastewater temperature

using their own thermometers to prevent problems before they occur. In addition, we regularly request external analysis laboratories to collect and analyze wastewater samples, usually once or twice a month, to ensure that relevant requirements are being met. If a plant encounters a water quality problem that it cannot solve on its own, it reports the situation to Asahi Kasei Head Office and requests advice and assistance. Asahi Kasei Head Office conducts annual inspections of wastewater quality for any issues.

Water consumption – total volume

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

We continuously measure and monitor water consumption based on water intake and discharge data collected from our factories. Water intake is measured using flow meters and invoices, while discharge is measured using flow meters and flow measuring weirs.

(9.2.4) Please explain

We continuously measure and monitor our water consumption based on water intake and discharge data collected from our factories. Water intake is measured using flow meters and invoices, while discharge is measured using flow meters and flow measuring weirs. The calculation is a simple subtraction: Water consumption = Water intake - Discharge.

Water recycled/reused

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

Each of our plants continuously calculates the amount of water recycled/reused based on flow meter readings and estimates.

(9.2.4) Please explain

In accordance with our internal regulations, we regularly measure and monitor the amount of water recycled/reused at all our plants. Each plant calculates the amount of water recycled/reused based on flow meter measurements and estimated values, and reports this annual data to Asahi Kasei Head Office once a year using our own system. Asahi Kasei Head Office also monitors the amount of water recycled/reused across the entire group every year.

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:

☑ Monthly

(9.2.3) Method of measurement

Each of our factories is monitored to ensure that it has a fully managed water, sanitation and hygiene (WASH) service. This is done by carrying out regular, typically monthly, inspections of the water, sanitation and hygiene systems at each factory.

(9.2.4) Please explain

We regularly monitor whether our factories are providing fully managed water, sanitation, and hygiene (WASH) services in accordance with our internal regulations. We monitor whether each factory has basic responsibility for providing fully managed water, sanitation, and hygiene (WASH) services. This monitoring is carried out by inspecting the water supply and sanitation facilities at each factory on a regular basis, usually monthly. If a problem arises with the provision of WASH services that the factory cannot solve on its own, it reports the situation to Asahi Kasei Head Office and requests advice and assistance. Asahi Kasei Head Office checks annually

for any problems with the provision of WASH services.
[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)

285333

(9.2.2.2) Comparison with previous reporting year

Select from:
☑ Higher

(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:
☑ Lower

(9.2.2.5) Primary reason for forecast

Select from:
☑ Increase/decrease in efficiency

(9.2.2.6) Please explain

Total water withdrawal increased by 17.7% compared to the previous year due to increased production volume and air conditioning measures for construction work, etc. However, thanks to the promotion of efficient water use, the water consumption per unit of sales has been decreasing year by year. We will continue to strive to maintain and improve water usage efficiency by understanding the amount of water withdrawal in our business and recycling water, and to reduce the amount of water withdrawal from water resources.

Total discharges

(9.2.2.1) Volume (megaliters/year)

256731

(9.2.2.2) Comparison with previous reporting year

Select from:

☑ Higher

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

☑ Divestment from water intensive technology/process

(9.2.2.4) Five-year forecast

Select from:

☑ Lower

(9.2.2.5) Primary reason for forecast

Select from:

☑ Increase/decrease in efficiency

(9.2.2.6) Please explain

Total emissions increased by 19.4% compared to the previous fiscal year. However, thanks to the promotion of efficient water use, the water consumption per unit of sales has been decreasing year by year. We will continue to strive to maintain and improve water usage efficiency by understanding the amount of water intake in our business, recycling water, etc., and reducing the amount of water intake from water resources.

Total consumption

(9.2.2.1) Volume (megaliters/year)

28602

(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:

☑ Divestment from water intensive technology/process

(9.2.2.4) Five-year forecast

Select from:

☑ Lower

(9.2.2.5) Primary reason for forecast

Select from:

☑ Increase/decrease in efficiency

(9.2.2.6) Please explain

Total water consumption increased by 4.11% compared to the previous year. However, thanks to the promotion of efficient water use, the water consumption per unit of sales has been decreasing year by year. We will continue to strive to maintain and improve water usage efficiency by understanding the amount of water intake in our business and recycling water, and to reduce the amount of water intake from water resources.
[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)

57.25

(9.2.4.3) Comparison with previous reporting year

Select from:

☑ Higher

(9.2.4.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.4.5) Five-year forecast

Select from:

☑ Lower

(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

0.02

(9.2.4.8) Identification tool

Select all that apply

☑ WRI Aqueduct

(9.2.4.9) Please explain

The Mexico plant is recognized as being in a "high" water stress area by the WRI Aqueduct. Although the plant's water withdrawals represent only a small portion of the Asahi Kasei Group's total water withdrawals, the plant is working to reduce its water consumption.
[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)

234706.83

(9.2.7.3) Comparison with previous reporting year

Select from:

☑ Higher

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.7.5) Please explain

Fresh surface water is an important water resource for many of our plants, as they use large amounts of high-quality fresh water for cooling and cleaning. Fresh surface water withdrawals in fiscal year 2024 increased by 26.6% compared to the previous year, primarily due to increased production volumes and plant operating days.

Brackish surface water/Seawater

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

27238.42

(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:

☑ Increase/decrease in business activity

(9.2.7.5) Please explain

Brackish surface water is not relevant as our plants are located in areas with abundant freshwater resources. Seawater is relevant as several plants in Japan use seawater as cooling water. Seawater withdrawals in fiscal year 2024 are expected to decrease by 7.6% compared to the previous fiscal year.

Groundwater – renewable

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

26105.29

(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 business activity

(9.2.7.5) Please explain

Renewable groundwater is relevant as it is used as cooling water and cleaning water at several of our plants. In fiscal 2024, the use of renewable groundwater for cooling water and cleaning water related to power generation at large-scale production sites increased, resulting in a 3.7% increase in seawater withdrawals in fiscal 2024 compared to the previous fiscal year.

Groundwater – non-renewable

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

Non-renewable groundwater is not relevant because our plants are not located in areas where groundwater is available and we are obliged to rely on it. It will remain

an irrelevant resource for us unless we build our plants in areas where non-renewable groundwater is available and we are obliged to rely on it.

Produced/Entrained water

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

As we are not involved in the extraction of gas, oil or metals, produced water is not relevant to us and will remain an irrelevant resource for us unless we enter into any mining operations in the future.

Third party sources

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

2201.99

(9.2.7.3) Comparison with previous reporting year

Select from:

☑ Higher

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.7.5) Please explain

Water withdrawals from third-party sources are relevant because they are used for purposes that require water of drinking quality. Water withdrawals from third-party sources (mainly municipal water supplies) in fiscal year 2024 increased by 8.2% compared to the previous fiscal year due to an increase in production volume, factory operating days, and personnel.
[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)

232233.32

(9.2.8.3) Comparison with previous reporting year

Select from:
☑ Much higher

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:
☑ Increase/decrease in business activity

(9.2.8.5) Please explain

Freshwater is an important discharge destination for our company, as several of our factories discharge wastewater into it. In fiscal year 2024, the amount of wastewater discharged into freshwater increased by 26.8% compared to the previous fiscal year, mainly due to an increase in production volume and factory operating days.

Brackish surface water/seawater

(9.2.8.1) Relevance

Select from:

☑ Relevant

(9.2.8.2) Volume (megaliters/year)

27238.42

(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:

☑ Increase/decrease in business activity

(9.2.8.5) Please explain

At several of our plants, seawater is used as non-contact cooling water and discharged directly into the ocean, so seawater is a relevant discharge destination. The amount of water discharged into the ocean in fiscal 2024 decreased by 7.6% compared to the previous fiscal year. This rate of increase is consistent with the trend in the amount of seawater intake. (Since there is no evaporation in indirect cooling systems using seawater, the amount of water discharged into the ocean and the amount of water intake are exactly the same.)

Groundwater

(9.2.8.1) Relevance

Select from:

☑ Not relevant

(9.2.8.5) Please explain

Groundwater is not and will remain an irrelevant discharge destination because our plants do not discharge water to groundwater and have no need to do so in the future.

Third-party destinations

(9.2.8.1) Relevance

Select from:

☑ Relevant

(9.2.8.2) Volume (megaliters/year)

2178.78

(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 business activity

(9.2.8.5) Please explain

The amount of wastewater discharged to third parties in fiscal 2024 increased by 8.4% compared to the previous fiscal year due to an increase in production volume, factory operating days, and personnel.
[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:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

154447

(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:

☑ 51-60

(9.2.9.6) Please explain

Treatment volume increased by 37.9% compared to the previous year. Rationale for choosing this treatment level: All wastewater is subjected to increasingly stringent country-specific laws and regulations on water pollution, as well as local regulations aimed at protecting rivers and lakes, before being discharged into receiving water bodies.

Secondary treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

56870

(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:

☑ 11-20

(9.2.9.6) Please explain

Treatment volume increased by 40.7% compared to the previous year. Rationale for choosing this treatment level: All wastewater is subjected to increasingly stringent country-specific laws and regulations on water pollution, as well as local regulations aimed at protecting rivers and lakes, before being discharged into receiving water bodies.

Primary treatment only

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

730

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☑ Much 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:

☑ Less than 1%

(9.2.9.6) Please explain

Treatment volume decreased by 81.6% compared to the previous year. Rationale for selecting this treatment level: All wastewater is subjected to increasingly stringent country-specific laws and regulations on water pollution, as well as local regulations aimed at protecting rivers and lakes, before being discharged into receiving water bodies.

Discharge to the natural environment without treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

38826

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☑ Lower

(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:

☑ 11-20

(9.2.9.6) Please explain

The amount of waste processed decreased by 0.7% compared to the previous year.

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)

5858

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☑ Much lower

(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

The amount of waste processed decreased by 74.6% compared to the previous year.

Other

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Not relevant

(9.2.9.6) Please explain

There are no items to be recorded as "Other."
[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.

	Emissions to water in the reporting year (metric tons)	Categories of substances included	Please explain
	5520	*Select all that apply* ☑ Nitrates ☑ Phosphates	*The amount of waste processed decreased by 3.5% compared to the previous year, remaining almost flat compared to the previous year.*

[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

8

(9.3.3) % of facilities in direct operations that this represents

Select from:

☑ Less than 1%

(9.3.4) Please explain

By utilizing Aqueduct, we were able to identify eight of our directly operated bases that are at high risk of river flooding in their river basins.

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

Water-related dependencies and risks in the upstream value chain may also affect our company, so we will continue to analyze them and strive to understand and implement measures.
[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

(9.3.1.3) 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:

☑ No

(9.3.1.6) Reason for no withdrawals and/or discharges

Non-manufacturing sites such as the head office, sales offices, and some assembly and processing plants that use small amounts of water for production have been excluded because the amount of water intake and discharge is extremely small and the water risk is negligible.

(9.3.1.7) Country/Area & River basin

Thailand

☑ Chao Phraya

(9.3.1.8) Latitude

13.597547

(9.3.1.9) Longitude

100.776666

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.29) Please explain

Our company has a policy regarding water resources and is contributing to the conservation of water resources. We have also set a goal of "zero environmental accidents and environmental troubles," and have established and managed standards that are stricter than general standards in an effort to eliminate violations of laws and regulations. In fiscal 2024, our company has not experienced any violations, penalties, or risks such as water pollution.

Row 2

(9.3.1.1) Facility reference number

Select from:

☑ Facility 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:

☑ No

(9.3.1.6) Reason for no withdrawals and/or discharges

Non-manufacturing sites such as the head office, sales offices, and some assembly and processing plants that use small amounts of water for production have been excluded because the amount of water intake and discharge is extremely small and the water risk is negligible.

(9.3.1.7) Country/Area & River basin

China

☑ Yangtze River (Chang Jiang)

(9.3.1.8) Latitude

31.334597

(9.3.1.9) Longitude

121.602021

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.29) Please explain

Our company has a policy regarding water resources and is contributing to the conservation of water resources. We have also set a goal of "zero environmental accidents and environmental troubles," and have established and managed standards that are stricter than general standards in an effort to eliminate violations of laws and regulations. In fiscal 2024, our company has not experienced any violations, penalties, or risks such as water pollution.

Row 3

(9.3.1.1) Facility reference number

Select from:

☑ Facility 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:

☑ No

(9.3.1.6) Reason for no withdrawals and/or discharges

Non-manufacturing sites such as the head office, sales offices, and some assembly and processing plants that use small amounts of water for production have been excluded because the amount of water intake and discharge is extremely small and the water risk is negligible.

(9.3.1.7) Country/Area & River basin

India

☑ Other, please specify :Mithi River

(9.3.1.8) Latitude

19.063854

(9.3.1.9) Longitude

72.862165

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.29) Please explain

Our company has a policy regarding water resources and is contributing to the conservation of water resources. We have also set a goal of "zero environmental accidents and environmental troubles," and have established and managed standards that are stricter than general standards in an effort to eliminate violations of laws and regulations. In fiscal 2024, our company has not experienced any violations, penalties, or risks such as water pollution.

Row 4

(9.3.1.1) Facility reference number

Select from:

☑ Facility 4

(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

Republic of Korea

☑ Other, please specify :Oehwanggang

(9.3.1.8) Latitude

35.496011

(9.3.1.9) Longitude

129.331124

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.13) Total water withdrawals at this facility (megaliters)

4057.34

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:
☑ Higher

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

4057.34

(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)

995.49

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ Higher

(9.3.1.23) Discharges to fresh surface water

995.49

(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)

3061.85

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ Higher

(9.3.1.29) Please explain

In fiscal 2024, total water withdrawals are expected to increase by 5.7%, total wastewater discharges by 7.5%, and total consumption by 5.1% compared to the previous year.

Row 5

(9.3.1.1) Facility reference number

Select from:

☑ Facility 5

(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:

☑ No

(9.3.1.6) Reason for no withdrawals and/or discharges

Non-manufacturing sites such as the head office, sales offices, and some assembly and processing plants that use small amounts of water for production have been excluded because the amount of water intake and discharge is extremely small and the water risk is negligible.

(9.3.1.7) Country/Area & River basin

China

☑ Other, please specify :JinJiang

(9.3.1.8) Latitude

28.422036

(9.3.1.9) Longitude

115.374275

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.29) Please explain

Our company has a policy regarding water resources and is contributing to the conservation of water resources. We have also set a goal of "zero environmental accidents and environmental troubles," and have established and managed standards that are stricter than general standards in an effort to eliminate violations of laws and regulations. In fiscal 2024, our company has not experienced any violations, penalties, or risks such as water pollution.

Row 6

(9.3.1.1) Facility reference number

Select from:

☑ Facility 6

(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:

☑ No

(9.3.1.6) Reason for no withdrawals and/or discharges

Non-manufacturing sites such as the head office, sales offices, and some assembly and processing plants that use small amounts of water for production have been excluded because the amount of water intake and discharge is extremely small and the water risk is negligible.

(9.3.1.7) Country/Area & River basin

Sweden

☑ Other, please specify :Stomnesjon

(9.3.1.8) Latitude

61.796586

(9.3.1.9) Longitude

16.56008

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.29) Please explain

Our company has a policy regarding water resources and is contributing to the conservation of water resources. We have also set a goal of "zero environmental accidents and environmental troubles," and have established and managed standards that are stricter than general standards in an effort to eliminate violations of laws and regulations. In fiscal 2024, our company has not experienced any violations, penalties, or risks such as water pollution.

Row 7

(9.3.1.1) Facility reference number

Select from:

☑ Facility 7

(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:

☑ No

(9.3.1.6) Reason for no withdrawals and/or discharges

Non-manufacturing sites such as the head office, sales offices, and some assembly and processing plants that use small amounts of water for production have been excluded because the amount of water intake and discharge is extremely small and the water risk is negligible.

(9.3.1.7) Country/Area & River basin

United States of America

☑ Other, please specify :Lake Ontario

(9.3.1.8) Latitude

43.536621

(9.3.1.9) Longitude

-79.607825

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.29) Please explain

Our company has a policy regarding water resources and is contributing to the conservation of water resources. We have also set a goal of "zero environmental accidents and environmental troubles," and have established and managed standards that are stricter than general standards in an effort to eliminate violations of laws and regulations. In fiscal 2024, our company has not experienced any violations, penalties, or risks such as water pollution.

Row 8

(9.3.1.1) Facility reference number

Select from:

☑ Facility 8

(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:

☑ No

(9.3.1.6) Reason for no withdrawals and/or discharges

Non-manufacturing sites such as the head office, sales offices, and some assembly and processing plants that use small amounts of water for production have been excluded because the amount of water intake and discharge is extremely small and the water risk is negligible.

(9.3.1.7) Country/Area & River basin

Viet Nam

☑ Other, please specify :song Bac Hung Hai

(9.3.1.8) Latitude

20.906712

(9.3.1.9) Longitude

106.080155

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.29) Please explain

Our company has a policy regarding water resources and is contributing to the conservation of water resources. We have also set a goal of "zero environmental accidents and environmental troubles," and have established and managed standards that are stricter than general standards in an effort to eliminate violations of laws and regulations. In fiscal 2024, our company has not experienced any violations, penalties, or risks such as water pollution.
[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

At this stage, no third-party verification has been conducted.

Water withdrawals – volume by source

(9.3.2.1) % verified

Select from:
☑ Not verified

(9.3.2.3) Please explain

At this stage, no third-party verification has been conducted.

Water withdrawals – quality by standard water quality parameters

(9.3.2.1) % verified

Select from:
☑ Not verified

(9.3.2.3) Please explain

At this stage, no third-party verification has been conducted.

Water discharges – total volumes

(9.3.2.1) % verified

Select from:

☑ Not verified

(9.3.2.3) Please explain

At this stage, no third-party verification has been conducted.

Water discharges – volume by destination

(9.3.2.1) % verified

Select from:

☑ Not verified

(9.3.2.3) Please explain

At this stage, no third-party verification has been conducted.

Water discharges – volume by final treatment level

(9.3.2.1) % verified

Select from:

☑ Not verified

(9.3.2.3) Please explain

At this stage, no third-party verification has been conducted.

Water discharges – quality by standard water quality parameters

(9.3.2.1) % verified

Select from:

☑ Not verified

(9.3.2.3) Please explain

At this stage, no third-party verification has been conducted.

Water consumption – total volume

(9.3.2.1) % verified

Select from:

☑ Not verified

(9.3.2.3) Please explain

At this stage, no third-party verification has been conducted.
[Fixed row]

(9.5) Provide a figure for your organization's total water withdrawal efficiency.

	Revenue (currency)	Total water withdrawal efficiency	Anticipated forward trend
	3037312000000	*10644797.48*	*We are committed to using water more efficiently and are moving away from technologies and processes that consume large amounts of water, gradually improving our water withdrawal efficiency.*

[Fixed row]

(9.6) Do you calculate water intensity for your activities in the chemical sector?

Select from:

☑ Yes

(9.6.1) For your top five products by production weight/volume, provide the following water intensity information associated with your activities in the chemical sector.

Row 1

(9.6.1.1) Product type

Other chemicals

☑ Specialty organic chemicals

(9.6.1.2) Product name

Chemical Monomer 1 (The water consumption per unit of each product cannot be disclosed as it is confidential information.)

(9.6.1.3) Water intensity value (m3/denominator)

45.95

(9.6.1.4) Numerator: water aspect

Select from:

☑ Total water withdrawals

(9.6.1.5) Denominator

Select from:

☑ Ton

(9.6.1.6) Comparison with previous reporting year

Select from:

☑ Lower

(9.6.1.7) Please explain

We use water consumption (m3/t) as one of our productivity improvement indicators. Given the anticipated future water shortages and rising water prices, as well as the risk of water impacting manufacturing costs, we anticipate the impact of water on product manufacturing costs to be even greater than it is now. Therefore, we are actively working to improve our water consumption. As a result of our dedicated and continuous efforts to improve water consumption, the water consumption (m3/t) of our chemical product, Monomer 1, improved by 21.9% compared to the previous fiscal year. Specific initiatives to further improve water consumption for our products include the adoption of cutting-edge IT technology that enables optimization of plant operations according to production volume, the introduction of high-efficiency pumps, and measures to prevent water leakage due to piping deterioration. We will continue to actively explore methods and measures to improve the water consumption of each product from various perspectives. By implementing these measures, we will continue to contribute to efficient water use and water conservation.

Row 2

(9.6.1.1) Product type

Bulk organic chemicals

☑ Aromatics

(9.6.1.2) Product name

Chemical Monomers 2 (The water consumption per unit of each product cannot be disclosed as it is confidential information.)

(9.6.1.3) Water intensity value (m3/denominator)

4.98

(9.6.1.4) Numerator: water aspect

Select from:

☑ Total water withdrawals

(9.6.1.5) Denominator

Select from:

☑ Ton

(9.6.1.6) Comparison with previous reporting year

Select from:

☑ About the same

(9.6.1.7) Please explain

We use water consumption (m3/t) as one of our productivity improvement indicators. Given the expected future water shortages and rising water prices, as well as the risk of water impacting manufacturing costs, we anticipate a greater impact on product manufacturing costs. Therefore, we are actively working to improve our water consumption. As a result of our dedicated and continuous efforts to improve water consumption, the water consumption (m3/t) of our chemical product, Monomer 2, improved by 5.1% compared to the previous fiscal year. Specific initiatives to further improve water consumption for our products include the adoption of cutting-edge IT technology that enables optimization of plant operations according to production volume, the introduction of high-efficiency pumps, and measures to prevent water leakage due to piping deterioration. We will continue to actively explore methods and measures to improve the water consumption of each product from various perspectives. By implementing these measures, we will continue to contribute to efficient water use and water conservation.

Row 3

(9.6.1.1) Product type

Bulk organic chemicals

☑ Polymers

(9.6.1.2) Product name

Chemical Polymer 1 (The water consumption per unit of each product cannot be disclosed as it is confidential information.)

(9.6.1.3) Water intensity value (m3/denominator)

3.42

(9.6.1.4) Numerator: water aspect

Select from:

☑ Total water withdrawals

(9.6.1.5) Denominator

Select from:

☑ Ton

(9.6.1.6) Comparison with previous reporting year

Select from:

☑ About the same

(9.6.1.7) Please explain

We use water consumption (m3/t) as one of our productivity improvement indicators. Given the expected future water shortages and rising water prices, as well as the risk of water impacting manufacturing costs, we anticipate that water's impact on product manufacturing costs will become even greater than it is now. Therefore, we are actively working to improve our water consumption. As a result of our dedicated and continuous efforts to improve water consumption, the water consumption (m3/t) of our polymer 1 chemical product improved by 0.6% compared to the previous fiscal year. Specific initiatives to further improve water consumption for our products include the adoption of the latest IT technology, which enables optimization of plant operations according to production volume, the introduction of high-efficiency pumps, and measures to prevent water leakage due to piping deterioration. We will continue to actively explore methods and measures to improve the water consumption of each product from various perspectives. By implementing these measures, we will continue to contribute to efficient water use and water conservation.

Row 4

(9.6.1.1) Product type

Bulk organic chemicals

☑ Polymers

(9.6.1.2) Product name

Chemical Polymer 2 (The water consumption per unit of each product cannot be disclosed as it is confidential information.)

(9.6.1.3) Water intensity value (m3/denominator)

2.72

(9.6.1.4) Numerator: water aspect

Select from:

☑ Total water withdrawals

(9.6.1.5) Denominator

Select from:

☑ Ton

(9.6.1.6) Comparison with previous reporting year

Select from:

☑ About the same

(9.6.1.7) Please explain

We use water consumption (m3/t) as one of our productivity improvement indicators. Given the expected future water shortages and rising water prices, as well as the risk of water impacting manufacturing costs, we anticipate that water's impact on product manufacturing costs will become even greater than it is now. Therefore, we are actively working to improve our water consumption. As a result of our dedicated and continuous efforts to improve water consumption, the water consumption (m3/t) of our chemical product, Polymer 2, improved by 2.5% compared to the previous fiscal year. Specific initiatives to further improve water consumption for our products include the adoption of the latest IT technology, which enables optimization of plant operations according to production volume, the introduction of high-efficiency pumps, and measures to prevent water leakage due to piping deterioration. We will continue to actively explore methods and measures to improve the water consumption of each product from various perspectives. By implementing these measures, we will continue to contribute to efficient water use and water conservation.

Row 5

(9.6.1.1) Product type

Other chemicals

☑ Specialty organic chemicals

(9.6.1.2) Product name

Chemical Polymers 3 (The water consumption per unit of each product cannot be disclosed as it is confidential information.)

(9.6.1.3) Water intensity value (m3/denominator)

111.02

(9.6.1.4) Numerator: water aspect

Select from:

☑ Total water withdrawals

(9.6.1.5) Denominator

Select from:

☑ Ton

(9.6.1.6) Comparison with previous reporting year

Select from:

☑ Lower

(9.6.1.7) Please explain

We use water consumption (m3/t) as one of our productivity improvement indicators. Given the expected future water shortages and rising water prices, as well as the risk of water impacting manufacturing costs, we anticipate that water's impact on product manufacturing costs will become even greater than it is now. Therefore, we are actively working to improve our water consumption. As a result of our dedicated and continuous efforts to improve water consumption, the water consumption (m3/t) of our chemical product, Polymer 3, improved by 10.1% compared to the previous fiscal year. Specific initiatives to further improve water consumption for our products include the adoption of the latest IT technology, which enables optimization of plant operations according to production volume, the introduction of high-efficiency pumps, and measures to prevent water leakage due to piping deterioration. We will continue to actively explore methods and measures to improve the water consumption of each product from various perspectives. By implementing these measures, we will continue to contribute to efficient water use and water conservation.
[Add 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:

☑ EU Persistent Organic Pollutants (POPs) Regulation

(9.13.1.2) % of revenue associated with products containing substances in this list

Select from:

☑ Less than 10%

(9.13.1.3) Please explain

For products whose uses cannot be identified, we consider the possibility that they may contain trace amounts of substances and include them in our calculations. This allows us to conduct safety assessments based on laws and regulations and our internal standards throughout the product lifecycle. We are working to improve the accuracy of substance management in order to achieve both sustainability and safety.

Row 2

(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:

☑ Less than 10%

(9.13.1.3) Please explain

For products whose uses cannot be identified, we consider the possibility that they may contain trace amounts of substances and include them in our calculations. This allows us to conduct safety assessments based on laws and regulations and our internal standards throughout the product lifecycle. We are working to improve the accuracy of substance management in order to achieve both sustainability and safety.

Row 3

(9.13.1.1) Regulatory classification of hazardous substances

Select from:

☑ Other, please specify : PRTR Law (Chemical Substance Release Monitoring and Management Promotion Law)

(9.13.1.2) % of revenue associated with products containing substances in this list

Select from:

☑ Less than 10%

(9.13.1.3) Please explain

For products whose uses cannot be identified, we consider the possibility that they may contain trace amounts of substances and include them in our calculations. This allows us to conduct safety assessments based on laws and regulations and our internal standards throughout the product lifecycle. We are working to improve the accuracy of substance management in order to achieve both sustainability and safety.
[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

The Asahi Kasei Group defines "environmentally-contributing products" as products that contribute to environmental improvement throughout their entire life cycle compared to market standard products or our own conventional products. The Group conducts life cycle assessments (LCA) to evaluate the environmental impact of products throughout their entire life cycle, and certifies products that not only reduce GHG emissions but also contribute to water conservation during product use as "environmentally-contributing products."

(9.14.4) Please explain

Microza UF/MF, an "environmentally friendly product" in our water-related business, provides cutting-edge membrane filtration technology for water treatment, separation, and purification in the global market.
[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.

Water pollution

(9.15.1.1) Target set in this category

Select from:

☑ Yes

Water withdrawals

(9.15.1.1) Target set in this category

Select from:

☑ No, and we do not plan to within the next two years

(9.15.1.2) Please explain

Asahi Kasei supplies products that contribute to improving water sustainability. Because the continued supply of these products is crucial to addressing water risks in society, we are prioritizing efforts to eliminate violations of laws and regulations, including pollution prevention. To that end, we have issued "Guidelines for Wastewater Management," and in addition to reviewing wastewater management status based on these guidelines, we are also implementing equipment measures, such as increasing the capacity of wastewater treatment facilities. In fiscal 2024, there were no leakage accidents under the Water Pollution Control Act, and no violations or fines under environmental laws and regulations.

Water, Sanitation, and Hygiene (WASH) services

(9.15.1.1) Target set in this category

Select from:

☑ No, and we do not plan to within the next two years

(9.15.1.2) Please explain

Asahi Kasei supplies products that contribute to improving water sustainability. Because the continued supply of these products is crucial to addressing water risks in society, we are prioritizing efforts to eliminate violations of laws and regulations, including pollution prevention. To that end, we have issued "Guidelines for Wastewater Management," and in addition to reviewing wastewater management status based on these guidelines, we are also implementing equipment measures, such as increasing the capacity of wastewater treatment facilities. In fiscal 2024, there were no leakage accidents under the Water Pollution Control Act, and no violations or fines under environmental laws and regulations.

Other

(9.15.1.1) Target set in this category

Select from:

☑ Yes

[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:

☑ Business division

(9.15.2.3) Category of target & Quantitative metric

Water recycling/reuse

☑ Increase in water use met through recycling/reuse

(9.15.2.4) Date target was set

04/01/2019

(9.15.2.5) End date of base year

03/31/2016

(9.15.2.6) Base year figure

540000000

(9.15.2.7) End date of target year

03/31/2026

(9.15.2.8) Target year figure

7590000000

(9.15.2.9) Reporting year figure

6960000000

(9.15.2.10) Target status in reporting year

Select from:

☑ Underway

(9.15.2.11) % of target achieved relative to base year

91

(9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

☑ None, alignment not assessed

(9.15.2.13) Explain target coverage and identify any exclusions

It covers all markets where Microza is supplied, and no markets are excluded.

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

We aim to increase the volume of modules distributed in the market in order to increase the number of modules actually used. In fiscal year 2024, we will increase the supply of modules to achieve our target, which uses fiscal year 2015 as the base year.

(9.15.2.16) Further details of target

The cumulative amount of water treated by Microza from 2015 to 2024 is 6.96 billion tons. The cumulative amount of water treated by the target year of 2025 is 7.59 billion tons, so the current progress rate is 91.7% (69.6 ÷ 75.9 × 100).
[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

Introduction

☑ Facility geolocation data

(13.1.1.3) Verification/assurance standard

General standards

☑ International Sustainability and Carbon Certification (ISCC)

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

ISCC PLUS certification is a third-party certification system that covers biomass and recycled raw materials and products worldwide, managing and ensuring their sustainability throughout the supply chain. Renewal audits are conducted annually by a third-party certification body, which checks documents such as raw material certificates and manufacturing plans, as well as on-site factory audits of the product manufacturing process. The scope of application is tied to each site, covering eight of our own manufacturing sites and one trading site. As a Chain of Custody option, when raw materials with sustainable characteristics (e.g., waste-derived raw materials) are mixed with unsustainable raw materials (virgin raw materials) during the processing and distribution process from raw materials to products, we hold certification for the mass balance approach, which allocates the characteristics to a portion of the product based on the amount of raw materials with those characteristics. (An example certificate from our Tokyo headquarters, which is our trading site, is attached.)

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

ISCC PLUS Certicate_Asahi Kasei Corporation_HQ.pdf

Row 2

(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

☑ Renewable Electricity/Steam/Heat/Cooling generation

(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

The Asahi Kasei Group's renewable energy generation volume has been third-party assured by KPMG AZSA Sustainability Co., Ltd. (See attached document, page 45).

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

sustainability_report2024jp.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

Executive Officer

(13.3.2) Corresponding job category

Select from:
☑ Other C-Suite Officer
[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:
☑ Yes, CDP may share our Disclosure Submission Lead contact details with the Pacific Institute