LyondellBasell Industries N.V.

2025 CDP Corporate Questionnaire

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.
Read full terms of disclosure

Extracted from CDP platform on 09/17/2025.

Contents

C1. Introduction

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

Select from:
☑ English

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

Select from:
☑ USD

(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

We are LyondellBasell – a leader in the global chemical industry, guided by our purpose to create solutions for everyday sustainable living. As one of the world's largest polymers producers and a leader in polyolefin technologies, we develop, manufacture, and market high-quality and innovative products for applications ranging from sustainable transportation and food safety to clean water and quality healthcare. Through advanced technology and focused investments, we are working to enable a circular and low-carbon economy. Our sustainability approach is structured around three global challenges: ending plastic waste, taking climate action and supporting a thriving society. This approach shapes how we manage our business and execute strategic objectives. We use sustainability frameworks and best practice to inform our sustainability approach. With a workforce of approximately 20,000 employees, we sell our products in over 100 countries. We are the world's largest producer of oxyfuels and the leading producer of polyethylene (PE) and polypropylene (PP) in Europe. We manage our operations through six operating segments, namely Olefins and Polyolefins-Americas (O&P-Americas), Olefins and Polyolefins-Europe, Asia, International (O&P-EAI), Intermediates and Derivatives (I&D), Advanced Polymer Solutions (APS), Technology and Refining. Our refining business consists of our Houston refinery, which processes crude oil into refined products such as gasoline and distillates. In the first quarter of 2025, we ended our crude oil refining operations at our Houston Refinery and have exited the refining business. We are committed to leading in value creation from low-carbon products, delivering solutions to advance our customers' climate ambitions and reduce greenhouse gas (GHG) emissions from our global operations and value chain. Our climate goals include achieving net zero scope 1 and scope 2 GHG emissions from our global operations by 2050. Additionally, our goals include a 42% reduction in scope 1 and 2 emissions and a 30% reduction in scope 3 emissions

by 2030 relative to a 2020 baseline. As part of our scope 1 and 2 commitment, we aim to procure a minimum of 50% of our procured electricity from renewable sources by 2030, based on 2020 levels. Our climate targets are grounded in the latest climate science and guided by the Science Based Targets initiative (SBTi). While our initial commitment was accepted by the SBTi, the validation of our targets was subsequently paused due to a global suspension on companies with oil-and gas-related activities. We remain committed to aligning our climate targets with the latest climate science and will continue to work with SBTi on a path toward validation. In 2023, we committed to the UN CEO Water Mandate, which drives continual progress for our water stewardship practices across our operations and supply chains. It also advocates for watershed management, collective action, community engagement, policy and strategy, and transparency. Our approach to the environment encompasses four key areas: emissions to air, water and land; water use and availability, waste, and biodiversity and ecosystem services.
[Fixed row]

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

	End date of reporting year	Alignment of this reporting period with your financial reporting period	Indicate if you are providing emissions data for past reporting years
	12/30/2024	*Select from:* ☑ Yes	*Select from:* ☑ No

[Fixed row]

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

40302000000

(1.5) Provide details on your reporting boundary.

(1.5.1) Is your reporting boundary for your CDP disclosure the same as that used in your financial statements?

Select from:
☑ No

(1.5.2) How does your reporting boundary differ to that used in your financial statement?

Our financial statement boundary, as defined in the 2025 Form 10-K, follows U.S. GAAP consolidation rules. Subsidiaries are defined as being those companies over which we, either directly or indirectly, have control through a majority of the voting rights or the right to exercise control or to obtain the majority of the benefits and be exposed to the majority of the risks. Subsidiaries are consolidated from the date on which control is obtained until the date that such control ceases. All intercompany transactions and balances have been eliminated in consolidation. We account for equity method investments ("equity investments") using the equity method of accounting if we have the ability to exercise significant influence over, but do not control, an investee. In contrast, the reporting boundary of our 2024 Sustainability Report, consistent with this CDP response, includes operations at majority-owned or operated manufacturing sites, pipelines, research or technical centers, and large offices. This boundary is operational, not financial, and focuses on sites where we have operational control, regardless of financial ownership structure. Assets that are acquired or divested will be accounted for in our base year greenhouse gas (GHG) emissions in accordance with the Greenhouse Gas Protocol. The narrative may include our non-operated joint ventures, even though they fall outside of our financial consolidation boundary. Reporting against our recycled and renewable-based polymer goal includes: (i) joint venture production marketed by LYB plus our pro rata share of the remaining production produced and marketed by the joint venture, and (ii) production via third-party tolling arrangements.
[Fixed row]

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

	Does your organization use this unique identifier?	Provide your unique identifier
Ticker symbol	*Select from:* ☑ Yes	*LYB*

[Add row]

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

Select all that apply

☑ China
☑ Egypt
☑ India
☑ Italy
☑ Spain
☑ Brazil
☑ France
☑ Mexico

☑ Japan
☑ Sweden
☑ Turkey
☑ Belgium
☑ Germany
☑ Malaysia
☑ Netherlands
☑ Philippines
☑ Saudi Arabia
☑ Taiwan, China
☑ Republic of Korea
☑ Poland
☑ Thailand
☑ Viet Nam
☑ Indonesia
☑ Singapore
☑ Luxembourg
☑ Hong Kong SAR, China
☑ United Arab Emirates
☑ United States of America
☑ United Kingdom of Great Britain and Northern Ireland

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

	Are you able to provide geolocation data for your facilities?	Comment
	Select from: ☑ No, this is confidential data	

[Fixed row]

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

Bulk inorganic chemicals
☑ Hydrogen

Bulk organic chemicals
☑ Ethanol
☑ Methanol
☑ Ethylene oxide & Ethylene glycol

☑ Polymers
☑ Aromatics
☑ Lower olefins (cracking)

Other chemicals
☑ Specialty organic chemicals

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

Timber products

(1.22.1) Produced and/or sourced

Select from:
☑ Sourced

(1.22.2) Commodity value chain stage

Select all that apply
☑ Manufacturing

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

Select from:
☑ No, the total volume is unknown

(1.22.11) Form of commodity

Select all that apply
☑ Primary packaging
☑ Secondary packaging

(1.22.12) % of procurement spend

Select from:

☑ Unknown

(1.22.13) % of revenue dependent on commodity

Select from:

☑ Unknown

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

Select from:

☑ No, not disclosing

(1.22.15) Is this commodity considered significant to your business in terms of revenue?

Select from:

☑ No

(1.22.16) Reason for not disclosing

Select all that apply

☑ Small volume

(1.22.18) Explanation for not disclosing

Estimated small volume and procurement spend.

(1.22.19) Please explain

We do source some timber products, primarily for use in primary and secondary packaging. However, based on internal analysis, the volumes involved are considered immaterial to our overall business operations. As such, we have not provided further information in this disclosure.

Palm oil

(1.22.1) Produced and/or sourced

Select from:

☑ Sourced

(1.22.2) Commodity value chain stage

Select all that apply

☑ Manufacturing

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

Select from:

☑ Yes, we are providing the total volume

(1.22.5) Total commodity volume (metric tons)

7700

(1.22.8) Did you convert the total commodity volume from another unit to metric tons?

Select from:

☑ No

(1.22.11) Form of commodity

Select all that apply

☑ Palm oil derivatives

(1.22.12) % of procurement spend

Select from:

☑ Less than 1%

(1.22.13) % of revenue dependent on commodity

Select from:
☑ Unknown

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

Select from:
☑ Yes, disclosing

(1.22.15) Is this commodity considered significant to your business in terms of revenue?

Select from:
☑ No

(1.22.19) Please explain

Based on our estimates, palm oil derivatives account for less than 1% of our procurement spend.

Cattle products

(1.22.1) Produced and/or sourced

Select from:
☑ Sourced

(1.22.2) Commodity value chain stage

Select all that apply
☑ Manufacturing

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

Select from:

☑ No, the total volume is unknown

(1.22.11) Form of commodity

Select all that apply

☑ Tallow

(1.22.12) % of procurement spend

Select from:

☑ Unknown

(1.22.13) % of revenue dependent on commodity

Select from:

☑ Unknown

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

Select from:

☑ No, not disclosing

(1.22.15) Is this commodity considered significant to your business in terms of revenue?

Select from:

☑ No

(1.22.16) Reason for not disclosing

Select all that apply

☑ Small volume

(1.22.18) Explanation for not disclosing

Estimated small volume and procurement spend.

(1.22.19) Please explain

We may source some tallow products. However, based on internal analysis, the volumes involved are considered immaterial to our overall business operations. As such, we have not provided further information in this disclosure.

Soy

(1.22.1) Produced and/or sourced

Select from:

☑ Sourced

(1.22.2) Commodity value chain stage

Select all that apply

☑ Manufacturing

(1.22.3) Indicate if you have direct soy and/or embedded soy in your value chain

Select from:

☑ Direct soy only

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

Select from:

☑ No, the total volume is unknown

(1.22.11) Form of commodity

Select all that apply

☑ Soy derivatives

(1.22.12) % of procurement spend

Select from:

☑ Unknown

(1.22.13) % of revenue dependent on commodity

Select from:

☑ Unknown

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

Select from:

☑ No, not disclosing

(1.22.15) Is this commodity considered significant to your business in terms of revenue?

Select from:

☑ No

(1.22.16) Reason for not disclosing

Select all that apply

☑ Small volume

(1.22.18) Explanation for not disclosing

Estimated small volume and procurement spend.

(1.22.19) Please explain

We may source some soy derivatives products. However, based on internal analysis, the volumes involved are considered immaterial to our overall business operations. As such, we have not provided further information in this disclosure.
[Fixed row]

(1.24) Has your organization mapped its value chain?

(1.24.1) Value chain mapped

Select from:

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

(1.24.2) Value chain stages covered in mapping

Select all that apply

☑ Upstream value chain

☑ Downstream value chain

(1.24.3) Highest supplier tier mapped

Select from:

☑ Tier 1 suppliers

(1.24.4) Highest supplier tier known but not mapped

Select from:

☑ Tier 2 suppliers

(1.24.6) Smallholder inclusion in mapping

Select from:

☑ Smallholders not relevant, and not included

(1.24.7) Description of mapping process and coverage

Our supplier sustainability due diligence process follows a structured, multi-phase approach to ensure responsible sourcing and risk management and consists of the following four phases: setting sustainability expectations, supplier sustainability risk screening, supplier sustainability assessments and audits, and corrective actions

and continuous improvement. We use sustainability assessments and audits to gain insights into suppliers' sustainability management systems. Our LYB suppliers are screened in the EcoVadis IQ Plus platform to understand their sustainability risk. EcoVadis assessments analyze a company's policies, actions, and performance across the following themes: Environment, Labor & Human Rights, Ethics, and Sustainable procurement. In 2024, we introduced IntegrityNext, a cloud-based assessment tool that we deploy alongside EcoVadis assessments. We also utilize Together for Sustainability (TfS) audits to gain transparency into sustainability practices at a supplier site. LYB has screened over 17,000 suppliers based in 65 countries spanning over 200 industries. By the end of 2024, 71% of key suppliers had been assessed against sustainability criteria, achieving our stated target. In this phase, suppliers address identified sustainability issues through targeted corrective action plans. LYB supports suppliers through supplier days, free training, tools, and other resources. In 2024, we made significant progress in promoting sustainability through education, delivering around 30 training sessions. Currently, 387 supplier learners are registered in the TfS Academy, participating in over 1,000 courses. We also published supplier sustainability toolkits that outline our expectations and provide free resources. By 2027, we aim to assess 80% of our key suppliers against sustainability criteria. We have also continued our efforts in improving the granularity of our customer mapping including ultimate end uses of the products we sell to the market.
[Fixed row]

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

(1.24.1.1) Plastics mapping

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

(1.24.1.2) Value chain stages covered in mapping

Select all that apply
☑ Upstream value chain
☑ Downstream value chain
☑ End-of-life management

(1.24.1.4) End-of-life management pathways mapped

Select all that apply
☑ Preparation for reuse
☑ Recycling
☑ Waste to Energy

☑ Incineration

☑ Landfill

[Fixed row]

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

	Value chain mapped for this sourced commodity	Highest supplier tier known but not mapped for this sourced commodity
Palm oil	*Select from:* ☑ No	*Select from:* ☑ Tier 2 suppliers

[Fixed row]

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

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

Short-term

(2.1.1) From (years)

0

(2.1.3) To (years)

5

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

In the short term, our focus is on addressing immediate and near-term risks and opportunities that can directly impact operational efficiency, regulatory compliance, and financial performance. Strategic planning during this period involves implementing initiatives to manage emerging risks, ensure adherence to existing and anticipated regulations, and achieve quick wins in sustainability. Strategically, this period emphasizes enhancing energy efficiency and increasing the procurement of renewable energy. Financial planning during this term includes allocating resources for immediate climate-related risks, such as physical damages from extreme weather events, and investing in short-term mitigation projects that yield quick returns.

Medium-term

(2.1.1) From (years)

6

(2.1.3) To (years)

15

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

The medium term is critical for aligning our strategic objectives with long-term sustainability targets. This period is linked to planning for significant transitions, such as technological upgrades, policy shifts, and changes in market dynamics driven by climate-related factors. Financial planning during this horizon involves capital investments in infrastructure and technology to mitigate medium-term risks, reduce carbon footprint, and enhance resilience. This strategy aligns with our sustainability goals, such as reducing absolute greenhouse gas emissions by 42% for scopes 1 and 2 and 30% for scope 3 by 2030, while securing at least 50% of our electricity from renewable sources.

Long-term

(2.1.1) From (years)

16

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

Select from:

☑ Yes

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

The long-term horizon is essential for achieving our 2050 sustainability goals, including reaching net-zero emissions for scopes 1 and 2. Strategic planning during this period focuses on ensuring enduring sustainability and resilience, fostering innovation, and adapting to evolving regulatory environments. Financially, this period requires planning and budgeting in research and development, long-term projects, and strategic shifts in our business model.
[Fixed row]

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

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

[Fixed row]

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

	Process in place	Risks and/or opportunities evaluated in this process	Is this process informed by the dependencies and/or impacts process?
	Select from: ☑ Yes	*Select from:* ☑ Both risks and opportunities	*Select from:* ☑ Yes

[Fixed row]

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

Row 1

(2.2.2.1) Environmental issue

Select all that apply

☑ Climate change

(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

☑ Not location specific

(2.2.2.12) Tools and methods used

Enterprise Risk Management

☑ Enterprise Risk Management

☑ ISO 31000 Risk Management Standard

International methodologies and standards

☑ IPCC Climate Change Projections

Other

☑ Materiality assessment

☑ Scenario analysis

(2.2.2.13) Risk types and criteria considered

Acute physical

☑ Drought
☑ Tornado
☑ Landslide
☑ Heat waves
☑ Cyclones, hurricanes, typhoons
☑ Heavy precipitation (rain, hail, snow/ice)
☑ Flood (coastal, fluvial, pluvial, ground water)
☑ Storm (including blizzards, dust, and sandstorms)

Chronic physical

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

Policy

☑ Carbon pricing mechanisms
☑ Changes to international law and bilateral agreements
☑ Changes to national legislation
☑ Increased difficulty in obtaining operations permits

Market

☑ Changing customer behavior

Reputation

☑ Increased partner and stakeholder concern and partner and stakeholder negative feedback
☑ Negative press coverage related to support of projects or activities with negative impacts on the environment (e.g. GHG emissions, deforestation & conversion, water stress)
☑ Stigmatization of sector

Technology

☑ Transition to lower emissions technology and products

☑ Unsuccessful investment in new technologies

Liability

☑ Exposure to litigation

☑ Non-compliance with regulations

(2.2.2.14) Partners and stakeholders considered

Select all that apply

☑ NGOs

☑ Customers

☑ Employees

☑ Investors

☑ Suppliers

☑ Regulators

☑ Local communities

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

Select from:

☑ No

(2.2.2.16) Further details of process

Our overall risk profile – including sustainability and environmental-related risk – is defined by the Enterprise Risk Management (ERM) organization. In 2024, climate-related risk exposures throughout LYB and our extended supply chain were overseen by our Executive Vice President, Operational Excellence and HSE, with support from ERM, Sustainability, and cross-functional committees, including the Carbon Value Creation and Capture Steering Committee. Climate change presents both physical risks, such as those affecting our assets and operations, and transition risks arising from the global move toward a low-carbon economy. We assess climate-related risks, impacts and opportunities as part of our ERM program. Guided by the principles of the Task Force on Climate-related Financial Disclosures (TCFD), we have developed climate change risk management processes and embedded them in our ERM approach. The process utilizes the six-step ERM risk management process based on ISO 31000: understanding objectives, identification, assessment, evaluation, response, and monitoring and reviewing. Risks are evaluated across the Executive Committee, departmental, and project levels. Our approach includes a risk rating based on likelihood and impact across short (0–5 years), medium (6–15 years), and long-term (>15 years) timeframes. The assessment covers our own operations, upstream and downstream activities. The likelihood rating is based on

past occurrences, current trends, and future scenarios. The impact rating considers financial and non-financial effects, including regulatory compliance, safety, reputation, and workforce welfare. Each risk is assigned a risk owner and tracked using key risk indicators. We have developed climate-related scenarios aligned with IPCC RCPs 2.6, 4.5, and 8.5. We use comprehensive materiality assessments to help define the ESG topics that matter most to our business and stakeholders. In preparation for our compliance with the EU Corporate Sustainability Reporting Directive (CSRD), we have adapted our assessment based on the double materiality approach. This process has been co-developed by our Sustainability, Finance, Legal, and ERM functions and includes extensive engagement with subject matter experts. We evaluate risks and opportunities that could impact our financial performance (financial materiality), and how we could impact people and the environment (impact materiality). Through our 2024 double materiality assessment, we determined our EU CSRD-aligned material topics to be climate change, circularity, pollution, own workforce, consumers and end-users, and business conduct. In 2024, we continued to utilize EcoVadis assessments and Together for Sustainability (TfS) audits to gain insights into our suppliers' sustainability performance. These assessments play a pivotal role in identifying potential risks and opportunities, driving ongoing sustainability enhancements, and facilitating open and constructive dialogue with our suppliers. We continued to build on our supplier sustainability risk mapping project, leveraging the EcoVadis IQ platform to gain a view of risks in the areas of environment, social standards and ethics. Based on the risk mapping, we request certain suppliers to complete an EcoVadis assessment or a TfS audit. If the assessment or audit identifies a need to improve, we may request that the supplier implements corrective actions.

Row 2

(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

☑ Not location specific

(2.2.2.12) Tools and methods used

Commercially/publicly available tools

☑ EcoVadis

☑ WRI Aqueduct

Enterprise Risk Management

☑ Enterprise Risk Management

Other

☑ Materiality assessment

☑ Scenario analysis

(2.2.2.13) Risk types and criteria considered

Acute physical

☑ Drought

☑ Tornado

☑ Landslide

☑ Heat waves

☑ Cyclones, hurricanes, typhoons

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

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

☑ Storm (including blizzards, dust, and sandstorms)

Chronic physical

☑ Water stress

☑ Sea level rise

☑ Groundwater depletion

☑ Declining water quality

☑ Water quality at a basin/catchment level

☑ Increased severity of extreme weather events

☑ Water availability at a basin/catchment level

☑ Changing temperature (air, freshwater, marine water)

☑ Temperature variability
☑ Changing precipitation patterns and types (rain, hail, snow/ice)
☑ Increased levels of environmental pollutants in freshwater bodies

Policy
☑ Changes to international law and bilateral agreements
☑ Changes to national legislation
☑ Increased difficulty in obtaining operations permits

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

Reputation
☑ Increased partner and stakeholder concern and partner and stakeholder negative feedback
☑ Negative press coverage related to support of projects or activities with negative impacts on the environment (e.g. GHG emissions, deforestation & conversion, water stress)
☑ Stigmatization of sector

Technology
☑ Unsuccessful investment in new technologies

Liability
☑ Exposure to litigation
☑ Non-compliance with regulations

(2.2.2.14) Partners and stakeholders considered

Select all that apply
☑ Employees
☑ Local communities
☑ Regulators
☑ Suppliers
☑ Water utilities at a local level

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

Select from:

☑ No

(2.2.2.16) Further details of process

Our overall risk profile – including sustainability and environmental-related risk – is defined by the Enterprise Risk Management (ERM) organization. Climate-related risk exposures throughout LYB and our extended supply chain were overseen by our Executive Vice President, Operational Excellence and HSE, with support from ERM, Sustainability, and cross-functional committees, including the Carbon Value Creation and Capture Steering Committee. Climate change presents both physical risks, such as those affecting our assets and operations, and transition risks arising from the global move toward a low-carbon economy. We assess climate-related risks, impacts and opportunities as part of our ERM program. Guided by the principles of the Task Force on Climate-related Financial Disclosures (TCFD), we have developed climate change risk management processes and embedded them in our ERM approach. The process utilizes the six-step ERM risk management process based on ISO 31000. Risks are evaluated across the Executive Committee, departmental, and project levels. Our approach includes a risk rating based on likelihood and impact across short (0–5 years), medium (6–15 years), and long-term (>15 years) timeframes. The assessment covers our own operations, upstream and downstream activities. The likelihood rating is based on past occurrences, current trends, and future scenarios. The impact rating considers financial and non-financial effects, including regulatory compliance, safety, reputation, and workforce welfare. Each risk is assigned a risk owner and tracked using key risk indicators. We have developed climate-related scenarios aligned with IPCC RCPs 2.6, 4.5, and 8.5. We use comprehensive materiality assessments to help define the ESG topics that matter most to our business and stakeholders. In preparation for compliance with the EU Corporate Sustainability Reporting Directive (CSRD), we adapted our assessment based on the double materiality approach. This process was co-developed by our Sustainability, Finance, Legal, and ERM functions and includes engagement with subject matter experts. We evaluate risks and opportunities that could impact our financial performance (financial materiality), and how we could impact people and the environment (impact materiality). Through our 2024 assessment, we determined our CSRD-aligned material topics to be climate change, circularity, pollution, own workforce, consumers and end-users, and business conduct. In 2024, we conducted a combined water stress and biodiversity screening using the WRI Aqueduct Tool (v4.0) and internal assessments to evaluate long-term environmental risks across our operations and value chain. This confirmed alignment between projected high-risk areas and our current site-level prioritization, including sites near protected or key biodiversity areas. We continue to develop site-specific water and biodiversity risk management plans, prioritizing high-risk locations and integrating findings into our environmental management system. We continued to utilize EcoVadis assessments and Together for Sustainability (TfS) audits to gain insights into our suppliers' sustainability performance. These tools help identify risks and opportunities, support supplier engagement, and drive improvements. We expanded our supplier risk mapping using the EcoVadis IQ platform to assess environmental, social, and human rights risks.

Row 3

(2.2.2.1) Environmental issue

Select all that apply

☑ Biodiversity

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

Select all that apply

☑ Dependencies

☑ 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

☑ Not location specific

(2.2.2.12) Tools and methods used

Commercially/publicly available tools

☑ IBAT – Integrated Biodiversity Assessment Tool

Enterprise Risk Management

☑ Enterprise Risk Management

Other

☑ Materiality assessment

☑ Scenario analysis

(2.2.2.13) Risk types and criteria considered

Chronic physical

☑ Declining ecosystem services

☑ Increased ecosystem vulnerability

(2.2.2.14) Partners and stakeholders considered

Select all that apply

☑ Local communities

☑ 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

Our overall risk profile – including sustainability and environmental-related risk – is defined by the Enterprise Risk Management (ERM) organization. Climate-related risk exposures throughout LYB and our extended supply chain were overseen by our Executive Vice President, Operational Excellence and HSE, with support from ERM, Sustainability, and cross-functional committees, including the Carbon Value Creation and Capture Steering Committee. Climate change presents both physical risks, such as those affecting our assets and operations, and transition risks arising from the global move toward a low-carbon economy. We assess climate-related risks, impacts and opportunities as part of our ERM program. Guided by the principles of the Task Force on Climate-related Financial Disclosures (TCFD), we have developed climate change risk management processes and embedded them in our ERM approach. The process utilizes the six-step ERM risk management process based on ISO 31000. Risks are evaluated across the Executive Committee, departmental, and project levels. Our approach includes a risk rating based on likelihood and impact across short (0–5 years), medium (6–15 years), and long-term (>15 years) timeframes. The assessment covers our own operations, upstream and downstream activities. The likelihood rating is based on past occurrences, current trends, and future scenarios. The impact rating considers financial and non-financial effects, including regulatory compliance, safety, reputation, and workforce welfare. Each risk is assigned a risk owner and tracked using key risk indicators. We have developed climate-related scenarios aligned with IPCC RCPs 2.6, 4.5, and 8.5. We use comprehensive materiality assessments to help define the ESG topics that matter most to our business and stakeholders. In preparation for compliance with the EU Corporate Sustainability Reporting Directive (CSRD), we adapted our assessment based on the double materiality approach. This process was co-developed by our Sustainability, Finance, Legal, and ERM functions and includes engagement with subject matter experts. We evaluate risks and opportunities that could impact our financial performance (financial materiality), and how we could

impact people and the environment (impact materiality). Through our 2024 assessment, we determined our CSRD-aligned material topics to be climate change, circularity, pollution, own workforce, consumers and end-users, and business conduct. In 2024, we conducted a combined water stress and biodiversity screening using the WRI Aqueduct Tool (v4.0) and internal assessments to evaluate long-term environmental risks across our operations and value chain. This confirmed alignment between projected high-risk areas and our current site-level prioritization, including sites near protected or key biodiversity areas. We continue to develop site-specific water and biodiversity risk management plans, prioritizing high-risk locations and integrating findings into our environmental management system. We continued to utilize EcoVadis assessments and Together for Sustainability (TfS) audits to gain insights into our suppliers' sustainability performance. These tools help identify risks and opportunities, support supplier engagement, and drive improvements. We expanded our supplier risk mapping using the EcoVadis IQ platform to assess environmental, social, and human rights risks.

Row 4

(2.2.2.1) Environmental issue

Select all that apply

☑ Forests

(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

☑ Not location specific

(2.2.2.12) Tools and methods used

Enterprise Risk Management

☑ Enterprise Risk Management

Other

☑ Materiality assessment

☑ Scenario analysis

(2.2.2.13) Risk types and criteria considered

Market

☑ Uncertainty about commodity origin and/or legality

(2.2.2.14) Partners and stakeholders considered

Select all that apply

☑ 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

Our overall risk profile – including sustainability and environmental-related risk – is defined by the Enterprise Risk Management (ERM) organization. Climate-related risk exposures throughout LYB and our extended supply chain were overseen by our Executive Vice President, Operational Excellence and HSE, with support from ERM, Sustainability, and cross-functional committees, including the Carbon Value Creation and Capture Steering Committee. Climate change presents both physical risks, such as those affecting our assets and operations, and transition risks arising from the global move toward a low-carbon economy. We assess climate-related risks, impacts and opportunities as part of our ERM program. Guided by the principles of the Task Force on Climate-related Financial Disclosures (TCFD), we have developed climate change risk management processes and embedded them in our ERM approach. The process utilizes the six-step ERM risk management process based on ISO 31000. Risks are evaluated across the Executive Committee, departmental, and project levels. Our approach includes a risk rating based on likelihood

and impact across short (0–5 years), medium (6–15 years), and long-term (>15 years) timeframes. The assessment covers our own operations, upstream and downstream activities. The likelihood rating is based on past occurrences, current trends, and future scenarios. The impact rating considers financial and non-financial effects, including regulatory compliance, safety, reputation, and workforce welfare. Each risk is assigned a risk owner and tracked using key risk indicators. We have developed climate-related scenarios aligned with IPCC RCPs 2.6, 4.5, and 8.5. We use comprehensive materiality assessments to help define the ESG topics that matter most to our business and stakeholders. In preparation for compliance with the EU Corporate Sustainability Reporting Directive (CSRD), we adapted our assessment based on the double materiality approach. This process was co-developed by our Sustainability, Finance, Legal, and ERM functions and includes engagement with subject matter experts. We evaluate risks and opportunities that could impact our financial performance (financial materiality), and how we could impact people and the environment (impact materiality). Through our 2024 assessment, we determined our CSRD-aligned material topics to be climate change, circularity, pollution, own workforce, consumers and end-users, and business conduct. In 2024, we conducted a combined water stress and biodiversity screening using the WRI Aqueduct Tool (v4.0) and internal assessments to evaluate long-term environmental risks across our operations and value chain. This confirmed alignment between projected high-risk areas and our current site-level prioritization, including sites near protected or key biodiversity areas. We continue to develop site-specific water and biodiversity risk management plans, prioritizing high-risk locations and integrating findings into our environmental management system. We continued to utilize EcoVadis assessments and Together for Sustainability (TfS) audits to gain insights into our suppliers' sustainability performance. These tools help identify risks and opportunities, support supplier engagement, and drive improvements. We expanded our supplier risk mapping using the EcoVadis IQ platform to assess environmental, social, and human rights risks.
[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

Our ERM process assesses impacts, risks, opportunities and dependencies, and includes consideration across sustainability topics, including climate, water, biodiversity, and forests. While we have not identified enterprise-level risks or opportunities specific to water, biodiversity, or forests, our assessment considers the interconnectivity of these topics with climate. Climate change risks include physical risks stemming from the direct impact of climate change on the environment including for extreme water-related weather events (e.g. flooding and drought). Climate-related risk exposures throughout LYB and our extended supply chain are overseen by our Executive Vice President, Operational Excellence and HSE, with support from ERM, Sustainability, and cross-functional committees, including the Carbon Value Creation and Capture Steering Committee. Guided by the principles of the Task Force on Climate-related Financial Disclosures (TCFD), we have developed climate change risk management processes and embedded them in our ERM approach to support further analysis of risks from climate change and the development of climate scenarios to provide additional insight into future business decisions and inform our climate strategy.
[Fixed row]

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

(2.3.1) Identification of priority locations

Select from:

☑ Yes, we have identified priority locations

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

Select all that apply

☑ Direct operations

(2.3.3) Types of priority locations identified

Sensitive locations

☑ Areas important for biodiversity

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

☑ Areas of importance for ecosystem service provision

(2.3.4) Description of process to identify priority locations

In 2024, we refreshed our baseline water risk assessments, using the World Resources Institute Aqueduct™ Tool (version 4.0), which rates geographic locations on a scale from low to extremely high overall water risk based on watershed data related to water quantity stress, quality, and regional factors. The attached map shows extremely high and high water risk sites identified in a baseline water risk assessment of our manufacturing sites conducted in 2024. Most of our sites are in low to medium-water risk areas, with less than 0.1% of our global water consumption in high or extremely-high water risk locations. For the few sites located in high and extremely-high water-risk areas, we are evaluating opportunities to reduce consumption, including through reusing water in our processes. Additionally, in 2022, we completed an enterprise-wide screening level biodiversity assessment of our major manufacturing operations, large offices, and significant upstream and downstream value chain activities. From this assessment, we identified our focus areas: nine direct operations sites, our fossil fuel-based feedstocks, and our propylene products. The nine priority sites were selected based on several factors, including proximity to protected areas or key biodiversity areas. We are prioritizing sites for assessment based on proximity to protected areas or key biodiversity areas. The work needed to complete biodiversity impact assessments at our priority sites is already underway, informed by our enterprise-wide 2022 screening assessment. In 2024, we began biodiversity impact assessments for three of our priority sites in the Netherlands, Germany, and the U.S. Gulf Coast region. We research biodiversity features around these sites, including threatened species and endangered ecosystems, identify critical species and habitats, and assess factors that may impact them, including GHG emissions, air emissions, and changes in land use. In

2025, we will continue to progress these three assessments to deepen our understanding of potential biodiversity impacts and, if an impact is identified, develop appropriate management responses.

(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

LYB Sustainability Report 2024, p.141 - Water risk and key biodiversity areas.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:

☑ EBITDA

(2.4.3) Change to indicator

Select from:

☑ Absolute decrease

(2.4.5) Absolute increase/ decrease figure

100000000

(2.4.6) Metrics considered in definition

Select all that apply

☑ Time horizon over which the effect occurs

☑ Likelihood of effect occurring

☑ Other, please specify :Financial impact, Environmental, Legislative, Reputational, and People-related risks

(2.4.7) Application of definition

LyondellBasell assesses risks and opportunities, including sustainability-related risks and opportunities, as part of its Enterprise Risk Management process. For purposes of responding to this question, a substantive effect on our organization is defined as a risk with an EBITDA loss of more than 100MM USD. Beyond financial consequence, we also consider environmental, legislative, reputational, and people-related consequences as part of our assessment. We classify risks based on financial and/or strategic consequence starting from insignificant, minor, moderate, major, and substantial. Time horizon: short, medium, and long term (0 to 5 years, 6 to 20 years, 21 years and beyond). Likelihood of effect: We classify risks based on likelihood from rare, unlikely, possible, likely, and almost certain. EBITDA is a "non-GAAP" financial measure as defined in Regulation G under the U S Securities Exchange Act of 1934, as amended. We calculate EBITDA as income from continuing operations plus interest expense (net), provision for (benefit from) income taxes, and depreciation and amortization. This measure, as presented herein, may not be comparable to similarly titled measures reported by other companies due to differences in the way the measures are calculated.

Opportunities

(2.4.1) Type of definition

Select all that apply

☑ Qualitative

☑ Quantitative

(2.4.2) Indicator used to define substantive effect

Select from:

☑ EBITDA

(2.4.3) Change to indicator

Select from:

☑ Absolute increase

(2.4.5) Absolute increase/ decrease figure

10000000

(2.4.6) Metrics considered in definition

Select all that apply

☑ Time horizon over which the effect occurs

☑ Likelihood of effect occurring

☑ Other, please specify :Financial impact

(2.4.7) Application of definition

LyondellBasell assesses risks and opportunities, including sustainability-related risks and opportunities, as part of its Enterprise Risk Management process. For purposes of responding to this question, a substantive effect on our organization is defined as a financial gain or increase in savings and efficiencies above 10 MM USD. Beyond financial consequence, we also consider environmental, legislative, reputational, and people-related consequences as part of our assessment. We classify risks based on financial and/or strategic consequence starting from insignificant, minor, moderate, major, and substantial. Time horizon: short, medium, and long term (0 to 5 years, 6 to 20 years, 21 years and beyond). Likelihood of effect: We classify risks based on likelihood from rare, unlikely, possible, likely, and almost certain. EBITDA is a "non-GAAP" financial measure as defined in Regulation G under the U S Securities Exchange Act of 1934, as amended. We calculate EBITDA as income from continuing operations plus interest expense (net), provision for (benefit from) income taxes, and depreciation and amortization. This measure, as presented herein, may not be comparable to similarly titled measures reported by other companies due to differences in the way the measures are calculated.
[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

We have processes to identify and classify water pollutants. Our HSES Policy requires sites to maintain a risk-based management system to ensure compliance with legal and HSES requirements, including wastewater discharge classification, with a goal of no environmental harm. Our Environmental Management System standard, consistent with ISO 14001, defines the management systems needed for continual performance improvement and to manage significant environmental aspects. Most sites are ISO 14001 certified and/or participate in the US chemical industry Responsible Care program. Our sites' primary potential pollutants are 'conventional pollutants,' as defined in US Clean Water Act section 304(a)(4) and Federal Register § 401.16. We comply with local regulations to monitor effluent conditions, operate and maintain pollution prevention measures, and address any excursions. Our sites primarily monitor pH, chemical oxygen demand, total suspended solids, and temperature. For sites that discharge wastewater to a surface water body, potential pollutants are identified as required by the jurisdiction. Toxicological testing is also conducted at site wastewater discharges where required by the authority to assure protection of ecosystems. Sites using third-party treatment must confirm that treatment and monitoring are completed before discharge.
[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 nutrients and oxygen demanding pollutants

(2.5.1.2) Description of water pollutant and potential impacts

• LyondellBasell refers to the definition of conventional pollutants and their potential impacts in US Clean Water Act section 304(a)(4), Federal Register § 401.16. and other specific references listed below. • BOD:. "Certain environmental stresses can lessen the amount of dissolved oxygen in a water body, resulting in stresses on the local aquatic life."

(2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

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

☑ Provision of best practice instructions on product use

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

(2.5.1.5) Please explain

• Infrastructure and Storage: We manage the risks of release for materials that cause BOD through reducing the quantity of pollutants that cause BOD, by providing appropriate containment, specifying correct handling, storage, and treatment, and limiting the quantity of such materials from entering wastewater conveyance systems. Our Incident Reporting Standard requires investigations into the root causes and corrective actions for any exceedances of permit or regulatory limits. General equipment integrity is managed through a risk-based inspection and repair program, informed by learnings from past investigations. • Instructions on Product Use: Compliance with applicable product safety data informs protective actions. For example, we refer to Safety Data Sheets for recommended storage and handling instructions. • Sector-specific Processes: Most of our sites are ISO 14001 certified or participate in the Responsible Care program. We also identify pollutants to ensure compliance with permitting requirements and/or applicable pre-treatment regulations. LYB's HSES policy states LYB conducts "…the systematic identification of risks…consistent with our Operational Excellence (OE) program." Success is measured and evaluated through monitoring and reporting against limits specific to permits and local requirements.

Row 2

(2.5.1.1) Water pollutant category

Select from:

☑ Oil

(2.5.1.2) Description of water pollutant and potential impacts

• Source: United States 43 Federal Register 32857: Oil and Grease "It is common practice to install oil and grease removal equipment for by-product recovery purposes or to prevent disruption of subsequent wastewater treatment. • Substances found in this group of pollutants also represent oxygen demanding material and are of concern in wastewater treatment."

(2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

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

☑ Provision of best practice instructions on product use

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

(2.5.1.5) Please explain

• Infrastructure and Storage: We manage the risks of release of wastewater containing oil through reducing the quantity of oil in the wastewater, by providing appropriate containment, and by specifying correct handling, storage, and treatment. General equipment integrity is managed through a risk-based inspection program, informed by learnings from past investigations. • Instructions on Product Use: Compliance with applicable product safety data informs protective actions. For example, we refer to Safety Data Sheets for recommended storage and handling instructions. • Sector-specific Processes: Most of our sites are ISO 14001 certified or participate in the Responsible Care program. We also identify pollutants to ensure compliance with permitting and/or pre-treatment requirements. LYB's HSES policy states LYB conducts "…the systematic identification of risks…consistent with our Operational Excellence (OE) program." Success is measured and evaluated through monitoring and reporting against limits specific to permits and local requirements.

Row 3

(2.5.1.1) Water pollutant category

Select from:

☑ Other physical pollutants

(2.5.1.2) Description of water pollutant and potential impacts

• TSS Source USGS, Sediment and Suspended Sediment, 2018: "Sediment in rivers can... shorten the lifespan of dams and reservoirs….Reservoirs slowly fill up with sediment and mud, eventually making them unusable for their intended purposes."

(2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

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

☑ Provision of best practice instructions on product use

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

(2.5.1.5) Please explain

• Infrastructure and Storage: We manage the risks of release of wastewater containing Total Suspended Solids (TSS) through reducing the quantity of solids in the wastewater, by providing appropriate containment, and by specifying correct handling, storage, and treatment. Our Incident Reporting Standard requires investigations into the root causes and corrective actions for any exceedances of permit or regulatory limits. General equipment integrity is managed through a risk-based inspection program, informed by learnings from past investigations. • Instructions on Product Use: Compliance with applicable product safety data informs protective actions. For example, we refer to Safety Data for recommended storage and handling procedures. • Sector-specific Processes: Most of our sites are ISO 14001 certified or participate in the Responsible Care program. We also identify pollutants to ensure compliance with permitting and/or pre-treatment regulatory requirements. LYB's HSES policy states LYB conducts "…the systematic identification of risks…consistent with our Operational Excellence (OE) program." Success is measured and evaluated through monitoring and reporting against limits specific to permits and local requirements.

Row 4

(2.5.1.1) Water pollutant category

Select from:

☑ Microplastics and plastic particles

(2.5.1.2) Description of water pollutant and potential impacts

There is a growing concern with the accumulation of plastic, plastic additives, and microplastics in the environment, particularly in waterways and oceans. LyondellBasell believes ending plastic waste in the environment is a critical issue of our time. We are committed to helping eliminate plastic waste and are engaged in collaborative efforts across the value chain to direct action where it is needed most. We are a founding member of the Alliance to End Plastic Waste which aims to

divert millions of metric tons of plastic waste from the environment. We are also a member of Operation Clean Sweep® (OCS), the plastics industry's global initiative that promotes collaboration, training and education in controlling and reducing the loss of pellets, flakes and powders. In 2019, we committed to OCS Blue, a U.S. program that enhances management and reporting requirements.

(2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

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

(2.5.1.5) Please explain

• Infrastructure and Storage: We manage the risks of release of polymeric solids by providing appropriate containment, preventing spills, and specifying correct handling, storage, and treatment.• Sector-specific Processes: We are committed to zero polymeric pellet loss to the environment and being transparent about our performance. We monitor and report pellet loss in accordance with American Chemistry Council (ACC) guidance. We clean spills and conduct investigations to prevent similar incidents in the future. We conduct annual assessments of our operations to evaluate and improve pellet loss efforts, including monitoring, handling, recycling, safe disposal, cleaning and containment. We also have tools to identify opportunities to prevent pellet loss and emphasize educating and empowering our employees in their continuing support of this effort. We monitor and report pellet loss in accordance with American Chemistry Council (ACC) guidance. For purposes of our reporting, loss is defined as an unplanned release of polymeric solids from a site boundary in a quantity greater than 0.5 kilograms (equivalent to 1.1 pounds) in a single incident. In 2024, we did not experience any reportable losses off-site.
[Add row]

C3. Disclosure of risks and opportunities

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

Climate change

(3.1.1) Environmental risks identified

Select from:

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

Forests

(3.1.1) Environmental risks identified

Select from:

☑ No

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

Select from:

☑ Environmental risks exist, but none with the potential to have a substantive effect on our organization

(3.1.3) Please explain

Our ERM process assesses impacts, risks, opportunities and dependencies, and includes consideration of sustainability and environment related topics (including climate, water, biodiversity and forest). We have not identified an enterprise level risk specific to forests in part since we do not procure significant quantities of forest risk commodities. We estimate that palm oil-derived products represent a very small portion of our overall procurement – well below 1% of total spend.

Water

(3.1.1) Environmental risks identified

Select from:
☑ No

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

Select from:
☑ Environmental risks exist, but none with the potential to have a substantive effect on our organization

(3.1.3) Please explain

Our ERM process assesses impacts, risks, opportunities and dependencies, and includes consideration of sustainability and environment related topics (including climate, water, biodiversity and forest). We have not identified an enterprise level risk specific to water. Climate change risks include physical risks stemming from the direct impact of climate change on the environment including for extreme water-related weather events (e.g. flooding and drought). A multi-disciplinary team led by ERM identifies and assesses climate-related risk exposures throughout LYB and our extended supply chain. We address specific climate-related risks through structured response plans, which are shared with our Sustainability Council, with input and alignment from the Executive Committee and the Health, Safety, Environmental & Sustainability Committee of the Board. We utilize the Task Force on Climate-Related Financial Disclosures (TCFD) framework to guide our approach to reporting and disclosure, underscoring our commitment to transparency. We refreshed our baseline water risk assessments in 2023, using the World Resources Institute Aqueduct™ Tool (Aqueduct™), version 3.0. Aqueduct™ rates geographic locations worldwide on a scale from low to extremely high overall water risk based on watershed data related to water quantity stress, quality, and regional factors. Our sites located in extremely high or high water risk areas of the world comprised less than 0.06% of our estimated total water consumption.
[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

☑ France

☑ Germany

☑ Italy

☑ Netherlands

(3.1.1.9) Organization-specific description of risk

LyondellBasell has manufacturing sites in the European Union that fall under the scope of the EU ETS, including in Germany, France, the Netherlands and Italy. The European Union is preparing national legislation and protection plans to implement their emission reduction commitments under the Paris Agreement. In the past years, a series of legislative reforms arising out of the EU's 'Fit for 55' package of proposals has been adopted and are in the process of being implemented, including reforms to the EU Emissions Trading System (ETS) and the introduction of a Carbon Border Adjustment Mechanism. Our operations in Europe and UK participate in the ETS, and we meet our obligations through a combination of free and purchased emission allowances. We anticipate that these regulations will result in an accelerated reduction of our free allowances and higher market prices for purchased allowances. These and other future regulations could result in increased costs, additional capital expenditures, and/or restrictions on operations.In addition, any future potential climate regulations, legislation, or litigation results could impose additional operating restrictions or delays in implementing growth projects or other capital investments, require us to incur increased costs, and could have a material adverse effect on our business and results of operations.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Increased indirect [operating] costs

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

Select all that apply

☑ Medium-term

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

Select from:

☑ About as likely as not

(3.1.1.14) Magnitude

Select from:

☑ 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

We anticipate that these expected regulatory changes in the EU carbon market will result in an accelerated reduction of our free allowances, resulting in a possible shortfall in EU Allowances (EUAs) needed to meet our compliance needs under ETS by 2030, along with higher market prices for purchased allowances. These and other future regulations could result in increased costs, additional capital expenditures, and/or restrictions on operations.

(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)

162000000

(3.1.1.25) Explanation of financial effect figure

*Our forecast looks at a period to 2030. By the end of 2030 (ETS Phase IV), we expect to have a shortfall of up to 1 million EUAs, depending on several factors, including the impact of dynamic allocation and the timeline for the inclusion of our products within the scope of CBAM. On May 8, 2024, we announced the formal launch of a strategic review of our European assets. The outcome of this strategic review will also impact the availability of EUAs for the remainder of the Phase IV period. While our current planning includes an average EUA price of 103 USD per EUA, we expect those prices to increase up to 162 USD per ton by 2030. Our medium-term financial effect figure is calculated as follows: Expected shortfall of EUAs to 2030 (end of Phase IV): from 0 to 1 million EUAs. Expected price of EUAs in 2030: up to 162 USD per ton. Calculation of medium-term financial effect figure: 0 to 1 million EUAs shortfall * 162 USD per ton from 0 (minimum) to 162 million USD (maximum).*

(3.1.1.26) Primary response to risk

Compliance, monitoring and targets

☑ Other compliance, monitoring or target, please specify :Deployment of site-level emission reduction projects

(3.1.1.27) Cost of response to risk

13437580

(3.1.1.28) Explanation of cost calculation

*Explanation of cost: Cost calculation represents the results of a case study in Wesseling. In the case study, the reduction in onsite energy production due to the phaseout of coal will require an increase in the volume of purchased electricity. We estimate the increase in purchased electricity will be approximately 88,500 MWh per year. Assuming a cost of electricity of 93.08 USD per MWh (based on 2024 prices), the additional electricity demand will correspond to an annual cost increase of 8,237,580 USD per year. We also estimate annual cost linked to the purchase of steam from third-party to be approximately 5,200,000 USD per year, bringing the total cost of response to 13,437,580 USD per year (88,500 * 93.08 + 5,200,000 = 13,437,580 USD).*

(3.1.1.29) Description of response

Situation: We anticipate an increase in our indirect operating costs due to regulatory developments under the EU ETS. We have committed to reaching net zero emissions in our scopes 1 and 2 by 2050, with an interim target of a 42% reduction by 2030, relative to a 2020 baseline. We have put in place an ambitious reduction

program to meet this commitment, including plans for our European manufacturing assets. Task: Our corporate and manufacturing teams in Europe are tasked with the identification, development, and implementation of site emission reduction initiatives, with the double objective of contributing to our overall plan to meet our 2030 and 2050 targets and reducing our exposure to the risk of increased cost of EU ETS allowances (EUAs), which could negatively impact our indirect operating costs. These initiatives include energy efficiency and process optimization, switching to lower carbon intensive fuels including hydrogen, electrification of process equipment, and capturing, reusing, and/or storing CO2. Action: As part of these efforts, our dedicated team at our largest European site in Wesseling, Germany has developed a project to phase out the use of coal from our utilities to produce energy onsite. In parallel, LyondellBasell has been working with a third party neighbor of our Wesseling site on an agreement to purchase high-pressure steam generated from natural gas, and to connect with their site in order to optimize steam supply and demand between both sites. Result: Starting in 2025, we estimate this new steam purchase agreement, coupled with the phaseout of the use of coal, will reduce GHG emissions by approximately 130kt per year at our Wesseling site. This project will be an important part of our approach to reducing GHG emissions at our Wesseling site and will help meet our corporate 2030 and 2050 goals. This project is also anticipated to reduce our exposure to increased indirect operating costs linked to increase in EUA prices.
[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?

(3.3.1) Water-related regulatory violations

Select from:
☑ Yes

(3.3.2) Fines, enforcement orders, and/or other penalties

Select all that apply
☑ Fines, but none that are considered as significant

(3.3.3) Comment

We manage water in accordance with permitted limits for discharge destination water quality, and our Operational Excellence system supports ongoing compliance. Potential wastewater pollutants are identified and evaluated at the site level, and we maintain appropriate treatment and monitoring. We also comply with permits issued by local authorities and third-party treatment entities. Although we work hard to ensure GoalZERO at all sites, incidents do occur. If they do, we investigate thoroughly to understand their causes and work to reduce the likelihood of recurrence. We strive to share and apply relevant learnings across our business to drive continuous improvement. In 2024, we paid USD 1,500 in fines for two instances of water-related non-compliance.

[Fixed row]

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

(3.3.1.1) Total number of fines

2

(3.3.1.2) Total value of fines

1500

(3.3.1.3) % of total facilities/operations associated

0.02

(3.3.1.4) Number of fines compared to previous reporting year

Select from:
☑ Higher

(3.3.1.5) Comment

We manage water in accordance with permitted limits for discharge destination water quality, and our Operational Excellence system supports ongoing compliance. Potential wastewater pollutants are identified and evaluated at the site level, and we maintain appropriate treatment and monitoring. We also comply with permits issued by local authorities and third-party treatment entities. Although we work hard to ensure GoalZERO at all sites, incidents do occur. If they do, we investigate thoroughly to understand their causes and work to reduce the likelihood of recurrence. We strive to share and apply relevant learnings across our business to drive continuous improvement. In 2024, we paid USD 1,500 in fines for two instances of water-related non-compliance.
[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

☑ EU ETS

☑ UK ETS

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

EU ETS

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

23.93

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

6.66

(3.5.2.3) Period start date

12/31/2023

(3.5.2.4) Period end date

12/30/2024

(3.5.2.5) Allowances allocated

3195557

(3.5.2.6) Allowances purchased

655313

(3.5.2.7) Verified Scope 1 emissions in metric tons CO2e

3596675

(3.5.2.8) Verified Scope 2 emissions in metric tons CO2e

470991

(3.5.2.9) Details of ownership

Select from:

☑ Facilities we own and operate

(3.5.2.10) Comment

The percentages of scope 1 and scope 2 emissions covered by the EU ETS are calculated by dividing the respective verified emissions by the respective total reported emissions.

UK ETS

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

0.14

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

0

(3.5.2.3) Period start date

12/31/2023

(3.5.2.4) Period end date

12/30/2024

(3.5.2.5) Allowances allocated

13107

(3.5.2.6) Allowances purchased

18000

(3.5.2.7) Verified Scope 1 emissions in metric tons CO2e

21723

(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

The percentages of scope 1 and scope 2 emissions covered by the EU ETS are calculated by dividing the respective verified emissions by the respective total reported emissions.
[Fixed row]

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

LyondellBasell complies with emission trading schemes by pursuing the lowest cost solutions, considering both near-term and future anticipated costs under these systems. This may involve either minimizing internal emissions or purchasing allowances/compliance instruments to satisfy compliance obligations. If allowances allocated to the company exceed the current compliance obligations, allowances are retained for future compliance needs. LyondellBasell has established procedures to ensure compliance with regulatory requirements and reporting, and to monitor deadlines and regulatory updates. We also have systems in place at EU ETS sites to

ensure timely surrendering of certificates for compliance. We have been involved in industry associations at the national or European level to address the effectiveness of the ETS and to reduce carbon leakage. The company has created a global energy management group, supported by a network of energy management specialists at each manufacturing site to pursue energy reduction measures. European sites also have CO2 focal points to manage compliance obligations. Example: For example, we anticipate annual GHG emission reduction of 130,000t at our Wesseling site in Germany from the planned shutdown of an onsite boiler. Situation: We expect increasing ETS certificate prices due to an increase of the EU's ambition for its 2030 climate targets, which could lead to higher operating costs for our European manufacturing assets. Task: Our Net Zero organization aims to identify and reduce GHG emissions from our highest energy-intensive manufacturing sites as part of our overall strategy to reach our 2030 goal to reduce scope 1 and 2 GHG emissions by 42%, relative to a 2020 baseline, and executing on this strategy also serves to manage our exposure to the risk of increased ETS certificate (EUAs) costs. Action: First, we have a dedicated purchasing strategy that hedges against the volatility in market prices to help avoid cost spikes for credits. Second, within our Net Zero program, we evaluate GHG emission reduction opportunities such as process optimization (e.g., heat integration, waste heat to power, or fuel switch to lower carbon intensive fuels), energy management systems to monitor and control energy streams, and process electrification. Results: Our Net Zero program identified emission reduction potentials at our site in Wesseling (Germany), our largest GHG-emitting site in Europe, which also reduce our exposure to increased carbon pricing in the EU ETS. We are currently deploying a project that will result in the shutdown of a lignite-fueled boiler in our site in Wesseling, compensated by the supply of steam from their neighboring site. This will allow us to reduce the site's CO2 emissions by approximately 130,000t CO2e per year. The potential annual cost savings linked to this reduction initiative once it is complete is up to 21MM USD assuming an estimated EUA price ranging up to 162 USD per ton.

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

Climate change

(3.6.1) Environmental opportunities identified

Select from:

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

Forests

(3.6.1) Environmental opportunities identified

Select from:

☑ No

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

Select from:

☑ Opportunities exist, but none anticipated to have a substantive effect on organization

(3.6.3) Please explain

Identifying forest-related opportunities is not an immediate business priority, as we estimate that palm oil-derived products represent a very small portion of our overall procurement - well below 1% of total spend.

Water

(3.6.1) Environmental opportunities identified

Select from:

☑ No

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

Select from:

☑ Opportunities exist, but none anticipated to have a substantive effect on organization

(3.6.3) Please explain

Many of the chemicals and plastics we supply help create innovative products that meet the needs of modern society and contribute to a sustainable future. Our products are found in nearly every sector of the economy. Our products make irrigation more efficient, reducing water leakage as well as make pipes that are lighter and more durable; making installation faster and easier, reducing water use, preventing water leakage, and protecting water purity.
[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

Resource efficiency

☑ Increased efficiency of production and/or distribution processes

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Direct operations

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

☑ Germany

(3.6.1.8) Organization specific description

As part of our corporate target to reach net zero GHG emissions by 2050 for Scopes 1 and 2, and our interim 2030 target to reduce scopes 1 and 2 GHG emissions by 42% relative to a 2020 baseline, we have put in place an ambitious emission reduction program, including plans for our European assets, which relies on several levers including improving energy efficiency, switching to lower carbon intensive fuels including hydrogen, electrifying process equipment, and capturing, reusing and/or storing CO2. As we develop plans to reduce GHG emissions at our sites, projects under these plans will not only contribute toward our 2030 goal, but also, in some cases, reduce our energy and fuel demand, thereby reducing direct operating costs. For example, our site roadmap for Wesseling includes a number of projects to reduce site GHG emissions, including an approximately 130kt per year GHG emission reduction project involving the shutdown of a coal-fueled onsite boiler.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Reduced direct costs

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

Select all that apply

☑ Short-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

The financial impact figure represents the estimated cost savings from reduced energy and fuel demand as well as decreased maintenance needs, less the increase in costs associated with an increase in purchased electricity, associated with anticipated operating changes in conjunction with the emission reduction project at Wesseling described in this case study.

(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)

3325160

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

3325160

(3.6.1.23) Explanation of financial effect figures

The financial impact figure represents the estimated cost savings from reduced energy and fuel demand as well as decreased maintenance needs, less the increase in costs associated with an increase in purchased electricity, associated with anticipated operating changes in conjunction with the emission reduction project at Wesseling described in this case study. The figure of USD is based on the following. We estimate that the implementation of the Wesseling coal-fired boiler shutdown project will result in reduced energy and fuel demand of approximately 173,100 MWh per year. Assuming a fuel market price of 38.20 USD per MWh (based on an average of 2024 market prices across different regions), this reduction in energy and fuel demand would result in a savings of 6,612,420 USD per year. Since the project will also result in a decrease in onsite electricity production, additional electricity will need to be procured. We estimate the additional purchased electricity need will be approximately 88,500 MWh per year. Assuming an electricity market price of 93.08 USD per MWh (based on average 2024 prices), the additional purchased electricity needs are estimated to cost 8,237,580 USD per year. The project includes the need to purchase emergency steam from a third party due to the shutdown of the onsite boiler. We estimate these costs to be approximately 5,200,000 USD per year. Finally, implementation of the project is estimated to reduce maintenance costs by approximately 3,500,000 USD per year. The total impact figure was calculated as follows: (173,100 MWh × 38.20 USD/MWh) – (88,500 MWh × 93.08 USD/MWh) – 5,200,000 USD + 3,500,000 USD = -3,325,160 USD This number represents an anticipated increased cost associated with the project.

(3.6.1.24) Cost to realize opportunity

13437580

(3.6.1.25) Explanation of cost calculation

In this Wesseling case study, the reduction in onsite energy production due to the phaseout of coal will require an increase in the volume of purchased electricity and the purchase of emergency steam from third-party. We estimate the additional purchased electricity need will be approximately 88,500 MWh per year. Assuming an electricity market price of 93.08 USD per MWh (based on average 2024 prices), the additional purchased electricity needs are estimated to cost 8,237,580 USD per year. The project includes the need to purchase emergency steam from third-party due to the shutdown of the onsite boiler. We estimate these costs to be approximately 5,200,000 USD per year. The total cost of response was calculated as follows: (88,500 MWh × 93.08 USD/MWh) + 5,200,000 USD = 13,437,580 USD

(3.6.1.26) Strategy to realize opportunity

Case study Situation: We anticipate an increase in our indirect operating costs due to regulatory developments under the EU ETS. As part of our climate ambition, we have committed to reaching net zero emissions in our scopes 1 and 2 by 2050, with an interim target of a 42% reduction by 2030, relative to a 2020 baseline. We have put in place an ambitious reduction program to meet this commitment, including plans for our European manufacturing assets. Task: Our corporate and manufacturing site teams in Europe are tasked with the identification, development, and implementation of site emission reduction initiatives, both by identifying energy saving initiatives and emission reducing initiatives, the former helping to reduce our overall site energy demand and energy-related direct operating costs. Action: As part of these efforts, our dedicated team at our largest European site in Wesseling, Germany has developed a project to phase out the use of coal from our utilities to produce energy onsite. In parallel, LyondellBasell has been working with third-party on an agreement to purchase high-pressure steam generated from natural gas by third-party, connecting with their neighboring site and optimizing steam supply and demand between both sites. Result: Starting in 2025, we estimate this new steam purchase agreement with third-party, coupled with the phaseout of the use of coal, will reduce GHG emissions by approximately 130kt per year at our Wesseling site. As part of this project, we estimate we will reduce the overall fuel consumption at the site by 173,100 MWh per year. This project will be an important part of our approach to reducing GHG emissions at our Wesseling site and helping meet our corporate 2030 and 2050 goals. This project is also estimated to reduce the overall site energy demand and contribute to reducing overall energy-related direct operating costs.

[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:
☑ OPEX

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

0

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

Select from:
☑ Less than 1%

(3.6.2.4) Explanation of financial figures

The opportunity disclosed on our reduced cost savings due to optimized energy production processes is not expected to have any significant impact on our financial performance during this reporting year. The project is currently under development for the construction of the infrastructure.
[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

☑ 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

As outlined in our Board Profile, our Board seeks representation across a range of attributes, including background, expertise, gender, gender identity, race, ethnicity and nationality. In accordance with goals we set as required under Dutch law, the Board seeks to have at least 33% of the seats on our Board held by women and at least 33% by men.

(4.1.6) Attach the policy (optional)

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

	Board-level oversight of this environmental issue
Climate change	*Select from:* ☑ Yes
Forests	*Select from:* ☑ Yes
Water	*Select from:* ☑ Yes
Biodiversity	*Select from:* ☑ Yes

[Fixed row]

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

Climate change

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

Select all that apply
☑ Board-level committee

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

Select from:

☑ Yes

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

Select all that apply

☑ Other policy applicable to the board, please specify :Health, Safety, Environmental, and Sustainability Committee Charter

(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 the setting of corporate targets

☑ Monitoring progress towards corporate targets

☑ Approving corporate policies and/or commitments

☑ Overseeing and guiding public policy engagement

☑ Overseeing and guiding acquisitions, mergers, and divestitures

☑ Monitoring compliance with corporate policies and/or commitments

☑ Overseeing and guiding the development of a climate transition plan

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

☑ Approving and/or overseeing employee incentives

☑ Overseeing and guiding major capital expenditures

☑ Overseeing reporting, audit, and verification processes

☑ Monitoring the implementation of a climate transition plan

☑ Overseeing and guiding the development of a business strategy

(4.1.2.7) Please explain

Our Board is committed to sustainability, social responsibility, and good corporate governance and delegates oversight to its committees. Our Health, Safety, Environmental, and Sustainability (HSE&S) Committee oversees risks and opportunities related to safety, sustainability and climate change. Management reports on key sustainability and climate topics and initiatives at each regularly scheduled HSE&S Committee meeting, and the Board participates in a deep dive on

sustainability strategy and actions at least annually. During the Board's annual strategy meeting in July 2024, the Board reviewed the Company's strategy, progress, and programs related to its goals on sustainability, climate and the circular economy, and the HSE&S Committee reviewed updates to the Company's ESG dashboard, which summarizes key environmental, social and governance metrics and activities, at each of its regularly scheduled meetings. In addition, the HSE&S Committee provides oversight of the company's sustainability programs, initiatives, and activities; reviews with management relevant sustainability risks and trends; and monitors the company's progress on sustainability targets, ambitions, and reporting. Lastly, HSE&S Committee's responsibility is to review and approve the scope of the company's health, safety, and environmental audit program and regularly monitor audit program results. Our Compensation and Talent Development (C&TD) Committee oversees our talent management practices, including compensation policies and practices, succession planning, and progress towards sustainability performance goals for short-term incentive compensation (in conjunction with the HSE&S Committee). The C&TD Committee monitors the Company's compensation policies and practices to determine whether its risk management objectives are being met with respect to incentivizing its employees. Both the HSE&S and the C&TD Committees report back on these topics to the general Board of Directors.

Forests

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

Select all that apply

☑ Board-level committee

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

Select from:

☑ Yes

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

Select all that apply

☑ Other policy applicable to the board, please specify :Health, Safety, Environmental, and Sustainability Committee Charter

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

Select from:

☑ Sporadic – agenda item as important matters arise

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

Select all that apply

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

(4.1.2.7) Please explain

Our Board is committed to sustainability, social responsibility, and good corporate governance and delegates oversight to its committees. Our Health, Safety, Environmental, and Sustainability (HSE&S) Committee oversees risks and opportunities related to safety, sustainability and climate change. Management reports on key sustainability and climate topics and initiatives at each regularly scheduled HSE&S Committee meeting, and the Board participates in a deep dive on sustainability strategy and actions at least annually. During the Board's annual strategy meeting in July 2024, the Board reviewed the Company's strategy, progress, and programs related to its goals on sustainability, climate and the circular economy, and the HSE&S Committee reviewed updates to the Company's ESG dashboard, which summarizes key environmental, social and governance metrics and activities, at each of its regularly scheduled meetings. In addition, the HSE&S Committee provides oversight of the company's sustainability programs, initiatives, and activities; reviews with management relevant sustainability risks and trends; and monitors the company's progress on sustainability targets, ambitions, and reporting. Lastly, HSE&S Committee's responsibility is to review and approve the scope of the company's health, safety, and environmental audit program and regularly monitor audit program results. Our Compensation and Talent Development (C&TD) Committee oversees our talent management practices, including compensation policies and practices, succession planning, and progress towards sustainability performance goals for short-term incentive compensation (in conjunction with the HSE&S Committee). The C&TD Committee monitors the Company's compensation policies and practices to determine whether its risk management objectives are being met with respect to incentivizing its employees. Both the HSE&S and the C&TD Committees report back on these topics to the general Board of Directors.

Water

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

Select all that apply

☑ Board-level committee

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

Select from:

☑ Yes

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

Select all that apply

☑ Other policy applicable to the board, please specify :Health, Safety, Environmental, and Sustainability Committee Charter

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

Select from:

☑ Sporadic – agenda item as important matters arise

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

Select all that apply

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

(4.1.2.7) Please explain

Our Board is committed to sustainability, social responsibility, and good corporate governance and delegates oversight to its committees. Our Health, Safety, Environmental, and Sustainability (HSE&S) Committee oversees risks and opportunities related to safety, sustainability and climate change. Management reports on key sustainability and climate topics and initiatives at each regularly scheduled HSE&S Committee meeting, and the Board participates in a deep dive on sustainability strategy and actions at least annually. During the Board's annual strategy meeting in July 2024, the Board reviewed the Company's strategy, progress, and programs related to its goals on sustainability, climate and the circular economy, and the HSE&S Committee reviewed updates to the Company's ESG dashboard, which summarizes key environmental, social and governance metrics and activities, at each of its regularly scheduled meetings. In addition, the HSE&S Committee provides oversight of the company's sustainability programs, initiatives, and activities; reviews with management relevant sustainability risks and trends; and monitors the company's progress on sustainability targets, ambitions, and reporting. Lastly, HSE&S Committee's responsibility is to review and approve the scope of the company's health, safety, and environmental audit program and regularly monitor audit program results. Our Compensation and Talent Development (C&TD) Committee oversees our talent management practices, including compensation policies and practices, succession planning, and progress towards sustainability performance goals for short-term incentive compensation (in conjunction with the HSE&S Committee). The C&TD Committee monitors the Company's compensation policies and practices to determine whether its risk management objectives are being met with respect to incentivizing its employees. Both the HSE&S and the C&TD Committees report back on these topics to the general Board of Directors.

Biodiversity

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

Select all that apply

☑ Board-level committee

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

Select from:

☑ Yes

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

Select all that apply

☑ Other policy applicable to the board, please specify :Health, Safety, Environmental, and Sustainability Committee Charter

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

Select from:

☑ Sporadic – agenda item as important matters arise

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

Select all that apply

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

(4.1.2.7) Please explain

Our Board is committed to sustainability, social responsibility, and good corporate governance and delegates oversight to its committees. Our Health, Safety, Environmental, and Sustainability (HSE&S) Committee oversees risks and opportunities related to safety, sustainability and climate change. Management reports on key sustainability and climate topics and initiatives at each regularly scheduled HSE&S Committee meeting, and the Board participates in a deep dive on sustainability strategy and actions at least annually. During the Board's annual strategy meeting in July 2024, the Board reviewed the Company's strategy, progress, and programs related to its goals on sustainability, climate and the circular economy, and the HSE&S Committee reviewed updates to the Company's ESG dashboard, which summarizes key environmental, social and governance metrics and activities, at each of its regularly scheduled meetings. In addition, the HSE&S Committee provides oversight of the company's sustainability programs, initiatives, and activities; reviews with management relevant sustainability risks and trends; and monitors the company's progress on sustainability targets, ambitions, and reporting. Lastly, HSE&S Committee's responsibility is to review and approve the scope of the company's health, safety, and environmental audit program and regularly monitor audit program results. Our Compensation and Talent Development (C&TD) Committee oversees our talent management practices, including compensation policies and practices, succession planning, and progress towards sustainability performance goals for short-term incentive compensation (in conjunction with the HSE&S Committee). The C&TD Committee monitors the Company's compensation policies and practices to determine whether its risk management objectives are being met with respect to incentivizing its employees. Both the HSE&S and the C&TD Committees report back on these topics to the general Board of Directors.
[Fixed row]

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

Climate change

(4.2.1) Board-level competency on this environmental issue

Select from:

☑ Yes

(4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

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

☑ Integrating knowledge of environmental issues into board nominating process

☑ 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

(4.2.3) Environmental expertise of the board member

Experience

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

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

☑ Experience in an organization that is exposed to environmental-scrutiny and is going through a sustainability transition

☑ Active member of an environmental committee or organization

Forests

(4.2.1) Board-level competency on this environmental issue

Select from:

☑ Yes

(4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

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

☑ Integrating knowledge of environmental issues into board nominating process

Water

(4.2.1) Board-level competency on this environmental issue

Select from:

☑ Yes

(4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

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

☑ Integrating knowledge of environmental issues into board nominating process

[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
Forests	*Select from:* ☑ Yes

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

[Fixed row]

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

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Chief Executive Officer (CEO)

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

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

☑ Managing environmental dependencies, impacts, risks, and opportunities

Engagement

☑ Managing engagement in landscapes and/or jurisdictions

☑ Managing public policy engagement related to environmental issues
☑ Managing supplier compliance with environmental requirements
☑ Managing value chain engagement related to environmental issues

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

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

(4.3.1.4) Reporting line

Select from:
☑ Reports to the board directly

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

Select from:
☑ Quarterly

(4.3.1.6) Please explain

Our Chief Executive Officer (CEO) holds overall responsibility for our climate change program as part of our broader sustainability strategy. The CEO chairs the Executive Committee, which includes the CFO, heads of our four strategic business units, and several Executive Vice Presidents (EVPs) who oversee critical areas such as sustainability, operational excellence, legal and compliance, innovation, and people and culture. ESG matters are regularly discussed within this group, reflecting their impact across operations. Each function contributes to identifying opportunities, managing risks, and advancing our sustainability goals. The EVP, Operational Excellence and HSE, plays a key role in managing climate-related risks and leads the Carbon Value Creation and Capture Steering Committee, which is responsible for executing plans to meet our scope 1 and scope 2 GHG emission reduction targets. Scope 3 progress is overseen by the Global Sustainability Team, working closely with internal stakeholders, business segments, procurement, and supply chain. Supported by our Chief Sustainability Officer, the Executive Committee reviews strategies, policies, and risks related to ESG and climate topics. Quarterly meetings are held with the CEO and Executive Committee members to assess progress against climate targets and related initiatives. The CEO, alongside the EVP of Operational Excellence and HSE, SVP of Net Zero Transition Strategy, and Chief Sustainability Officer, provides regular briefings to the Board on climate strategy and performance.

Forests

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Chief Executive Officer (CEO)

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

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

Engagement

☑ Managing engagement in landscapes and/or jurisdictions

☑ Managing value chain engagement related to environmental issues

Policies, commitments, and targets

☑ Setting corporate environmental policies and/or commitments

Strategy and financial planning

☑ Developing a business strategy which considers environmental issues

☑ Managing annual budgets related to environmental issues

☑ Managing environmental reporting, audit, and verification processes

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

(4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

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

Select from:

☑ Quarterly

(4.3.1.6) Please explain

Our Chief Executive Officer (CEO) holds overall responsibility for our climate change program as part of our broader sustainability strategy. The CEO chairs the Executive Committee, which includes the CFO, heads of our four strategic business units, and several Executive Vice Presidents (EVPs) who oversee critical areas such as sustainability, operational excellence, legal and compliance, innovation, and people and culture. ESG matters are regularly discussed within this group, reflecting their impact across operations. Each function contributes to identifying opportunities, managing risks, and advancing our sustainability goals. The EVP, Operational Excellence and HSE, plays a key role in managing climate-related risks and leads the Carbon Value Creation and Capture Steering Committee, which is responsible for executing plans to meet our scope 1 and scope 2 GHG emission reduction targets. Scope 3 progress is overseen by the Global Sustainability Team, working closely with internal stakeholders, business segments, procurement, and supply chain. Supported by our Chief Sustainability Officer, the Executive Committee reviews strategies, policies, and risks related to ESG and climate topics. Quarterly meetings are held with the CEO and Executive Committee members to assess progress against climate targets and related initiatives. The CEO, alongside the EVP of Operational Excellence and HSE, SVP of Net Zero Transition Strategy, and Chief Sustainability Officer, provides regular briefings to the Board on climate strategy and performance.

Water

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Chief Executive Officer (CEO)

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

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

Engagement

☑ Managing engagement in landscapes and/or jurisdictions

☑ Managing value chain engagement related to environmental issues

Policies, commitments, and targets

☑ Setting corporate environmental policies and/or commitments

Strategy and financial planning

☑ Developing a business strategy which considers environmental issues

☑ Managing annual budgets related to environmental issues

☑ Managing environmental reporting, audit, and verification processes

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

(4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

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

Select from:

☑ Quarterly

(4.3.1.6) Please explain

Our Chief Executive Officer (CEO) holds overall responsibility for our climate change program as part of our broader sustainability strategy. The CEO chairs the Executive Committee, which includes the CFO, heads of our four strategic business units, and several Executive Vice Presidents (EVPs) who oversee critical areas such as sustainability, operational excellence, legal and compliance, innovation, and people and culture. ESG matters are regularly discussed within this group, reflecting their impact across operations. Each function contributes to identifying opportunities, managing risks, and advancing our sustainability goals. The EVP, Operational Excellence and HSE, plays a key role in managing climate-related risks and leads the Carbon Value Creation and Capture Steering Committee, which is responsible for executing plans to meet our scope 1 and scope 2 GHG emission reduction targets. Scope 3 progress is overseen by the Global Sustainability Team, working closely with internal stakeholders, business segments, procurement, and supply chain. Supported by our Chief Sustainability Officer, the Executive Committee reviews strategies, policies, and risks related to ESG and climate topics. Quarterly meetings are held with the CEO and Executive Committee members to assess progress against climate targets and related initiatives. The CEO, alongside the EVP of Operational Excellence and HSE, SVP of Net Zero Transition Strategy, and Chief Sustainability Officer, provides regular briefings to the Board on climate strategy and performance.

Biodiversity

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Chief Executive Officer (CEO)

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

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

Engagement

☑ Managing engagement in landscapes and/or jurisdictions

☑ Managing value chain engagement related to environmental issues

Policies, commitments, and targets

☑ Setting corporate environmental policies and/or commitments

Strategy and financial planning
☑ Developing a business strategy which considers environmental issues
☑ Managing annual budgets related to environmental issues
☑ Managing environmental reporting, audit, and verification processes
☑ Managing priorities related to innovation/low-environmental impact products or services (including R&D)

(4.3.1.4) Reporting line

Select from:
☑ Reports to the board directly

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

Select from:
☑ Quarterly

(4.3.1.6) Please explain

Our Chief Executive Officer (CEO) holds overall responsibility for our climate change program as part of our broader sustainability strategy. The CEO chairs the Executive Committee, which includes the CFO, heads of our four strategic business units, and several Executive Vice Presidents (EVPs) who oversee critical areas such as sustainability, operational excellence, legal and compliance, innovation, and people and culture. ESG matters are regularly discussed within this group, reflecting their impact across operations. Each function contributes to identifying opportunities, managing risks, and advancing our sustainability goals. The EVP, Operational Excellence and HSE, plays a key role in managing climate-related risks and leads the Carbon Value Creation and Capture Steering Committee, which is responsible for executing plans to meet our scope 1 and scope 2 GHG emission reduction targets. Scope 3 progress is overseen by the Global Sustainability Team, working closely with internal stakeholders, business segments, procurement, and supply chain. Supported by our Chief Sustainability Officer, the Executive Committee reviews strategies, policies, and risks related to ESG and climate topics. Quarterly meetings are held with the CEO and Executive Committee members to assess progress against climate targets and related initiatives. The CEO, alongside the EVP of Operational Excellence and HSE, SVP of Net Zero Transition Strategy, and Chief Sustainability Officer, provides regular briefings to the Board on climate strategy and performance.
[Add row]

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

Climate change

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

Select from:

☑ Yes

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

10

(4.5.3) Please explain

For 2024, 30% of the total payout under the STI program (20% Safety and 10% Sustainability) reflects the Company's ongoing commitment to safety, accountability and timely delivery of our climate and circularity goals. The C&TD Committee considers the Company's achievement of key milestones supporting our sustainability goals. In 2024, we focused on three milestones: (1) Execute power purchase agreements with cumulative value of 700 GW of renewable electricity; (2)Progress energy efficiency projects to improve energy efficiency by 1%, relative to a 2021 baseline; and (3) produce and market 180kt of recycled and renewable-based polymers in 2024. Production and marketing includes (i) joint venture production marketed by LYB plus our pro rata share of the remaining production produced and marketed by the joint venture, and (ii) production via third-party tolling arrangements.

Forests

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

Select from:

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

(4.5.3) Please explain

Forests have not been deemed a material issue to date. Therefore, we do not provide incentives to C-suite employees or board members for the management of forest-related issues.

Water

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

Select from:

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

(4.5.3) Please explain

Water has not been deemed a material issue to date. Therefore, we do not provide incentives to C-suite employees or board members for management of water-related issues.
[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

☑ Corporate executive team

(4.5.1.2) Incentives

Select all that apply

☑ Bonus - % of salary

(4.5.1.3) Performance metrics

Targets

☑ Progress towards environmental targets

Emission reduction

☑ Increased share of renewable energy in total energy consumption

Resource use and efficiency

☑ Energy efficiency improvement

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

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

(4.5.1.5) Further details of incentives

Our Short-Term Incentive Plan includes a component tied to corporate performance defined during each year. For 2024, 30% of the total payout under the STI program (20% Safety and 10% Sustainability) reflects the Company's ongoing commitment to safety, accountability and timely delivery of our climate and circularity goals. The C&TD Committee considers the Company's achievement of key milestones supporting our sustainability goals. In 2024, we focused on three milestones: (1) Execute power purchase agreements with cumulative value of 700 GW of renewable electricity; (2)Progress energy efficiency projects to improve energy efficiency by 1%, relative to a 2021 baseline; and (3) produce and market 180kt of recycled and renewable-based polymers in 2024. Production and marketing includes (i) joint venture production marketed by LYB plus our pro rata share of the remaining production produced and marketed by the joint venture, and (ii) production via third-party tolling arrangements.

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

To tackle the global challenges of plastic waste and climate change, we set 2030 goals to reduce our scope 1 and 2 emissions by 42% and scope 3 emissions by 30%, relative to a 2020 baseline. We also set a goal to produce and market at least 2 million metric tons of recycled and renewable-based polymers annually by 2030. Production and marketing includes (i) joint venture production marketed by LYB plus our pro rata share of the remaining production produced and marketed by the joint venture, and (ii) production via third-party tolling arrangements. We believe that the sustainability metric incentivizes accountability and timely delivery of our climate and circularity goals. The C&TD Committee with support of the HSE&S Committee considers the Company's achievement of key milestones supporting our sustainability goals. For 2024, the Committees set goals to achieve certain milestones, with target (100%) performance for the 3 key metrics provided in our 2025 Proxy Statement. Payout at 163% of target reflected the Company's above-target delivery on these goals.
[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

☑ Forests

☑ 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

☑ Upstream value chain

☑ Downstream value chain

(4.6.1.4) Explain the coverage

Our Health, Safety, Environment, and Security (HSES) Policy outlines our commitments and how we will realize them. These are further detailed in our 2024 Sustainability Report, which highlights our goals and progress across key sustainability challenges. The 'Ending Plastic Waste' section presents our approach toward reducing plastic waste and supporting circular economy practices. In the 'Taking Climate Action' section, we outline our climate approach, including 2030 targets for reducing Scope 1, 2, and 3 greenhouse gas emissions and increasing our use of renewable electricity. LYB supports the global objectives to limit the rise in global temperatures to well below 2° C above pre-industrial levels, and to consider additional efforts to limit the increase even further to 1.5° C. We also detail our approach to environmental management, including emissions to air, water, and land; water use and availability; waste management; and biodiversity and ecosystem services. In 2023, we reinforced our commitment to water stewardship by joining the UN CEO Water Mandate, which promotes responsible water practices across operations and supply chains, including watershed management, collective action, community engagement, policy development, and transparency. Finally, the 'Supporting a thriving society' section highlights how we engage with suppliers to promote responsible sourcing and alignment with our environmental and social standards.

(4.6.1.5) Environmental policy content

Environmental commitments

☑ Commitment to a circular economy strategy

☑ Commitment to comply with regulations and mandatory standards

☑ Commitment to take environmental action beyond regulatory compliance

☑ Commitment to stakeholder engagement and capacity building on environmental issues

Climate-specific commitments

☑ Commitment to net-zero emissions

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

Water-specific commitments

☑ Commitment to reduce or phase out hazardous substances

☑ Commitment to control/reduce/eliminate water pollution

☑ Commitment to reduce water withdrawal volumes

☑ Commitment to water stewardship and/or collective action

Social commitments

☑ Commitment to respect internationally recognized human rights

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

Select all that apply

☑ Yes, in line with the Paris Agreement

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

(4.6.1.7) Public availability

Select from:

☑ Publicly available

(4.6.1.8) Attach the policy

LYB HSES Policy 2022.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

☑ CEO Water Mandate

☑ Science-Based Targets Initiative (SBTi)

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

☑ UN Global Compact

☑ World Business Council for Sustainable Development (WBCSD)

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

CEO Water Mandate: In 2023, we committed to the UN CEO Water Mandate which drives continual progress for our water stewardship practice across the areas of direct operations, supply chain and watershed management, collective action, community engagement, policy and strategy, and transparency. United Nations Global Compact (UNGC): As a member of the UNGC we aim to incorporate the Ten Principles into our strategies, policies and procedures. Responsible Care: We are committed to Responsible Care, which is the global chemical industry's voluntary initiative to drive continuous improvement, including for environmental performance. Together for Sustainability (TfS): As an active member of Together for Sustainability (TfS) since 2022, we are committed to advancing sustainability across the chemical industry and its supply chain. Under the leadership of TfS President and our Chief Procurement Officer, Jen Jewson, we support the "Accelerate for Impact" strategy and contribute to initiatives like the Product Carbon Footprint guidance and the development of a PCF data exchange platform. Alliance to End Plastic Waste (AEPW): As a founding member of the Alliance to End Plastic Waste (AEPW) since 2019, we are committed to driving real, scalable solutions to tackle plastic waste and build a circular economy for plastics. In 2025, our EVP of Sustainability & Corporate Affairs, Tracey Campbell, will serve as Chair of AEPW's Board, helping guide its strategic direction and accelerate progress toward a world free of plastic waste. Ocean Plastic Leadership Network (OPLN): In 2023, we were invited to join a diverse stakeholder group convened by the Ocean Plastics Leadership Network (OPLN) to develop Responsible Production Guidelines for Advanced/Chemical/Molecular (ACM) Recycling. Endorsed by the U.S. Plastics Pact, these Guidelines now serve as the foundation for a formal ACM Recycling Responsible Production Standard. Through our continued engagement, we help drive industry best practices and champion responsible recycling solutions. Global Impact Coalition (GIC): Through the GIC, we collaborate with industry leaders to accelerate circularity and reduce GHG emissions, contributing to high-impact initiatives like plastics recycling for automotive and alternative olefin production routes. World Business Council for Sustainable Development (WBCSD): As a member of the WBCSD since 2023, we engage in key workstreams on climate, circularity, and accountability. In 2024, we became a founding member of the Center for Decarbonization Demand Acceleration (CDDA), collaborating to scale adoption of low-carbon materials and advance robust standards across industries. SBTi: We are a member of the SBTi Expert Advisory Group supporting the development of chemical sector-specific guidance for climate targets and are collaborating with SBTi to help ensure its applicability across the industry. TCFD, SASB, GRI: Our climate disclosures are guided by the principles of TCFD and we have integrated climate risk into our enterprise risk management; our TCFD index is published on our website. We also consider GRI and SASB frameworks in our disclosures, with indices included in our annual sustainability report.
[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

(4.11.4) Attach commitment or position statement

LYB Climate Advocacy Report 2025.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

☑ Mandatory government register

☑ Voluntary government register

☑ Non-government register

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

LyondellBasell is listed in the EU Transparency Register (REG# 606644737858-48), German Transparency Register (REG# R005987 via Basell Polyolefine GmbH), and the Zicklin Index (Center for Political Accountability). It reports U.S. federal lobbying quarterly via the Office of the Clerk and Secretary of the Senate, search "LYONDELL CHEMICAL COMPANY" as Registrant.

(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

LYB has a structured process in place to ensure that our external engagement activities align with our environmental and sustainability commitments. Our VP of Government Relations, our legal compliance team and applicable executive leaders are responsible for approving membership in trade associations. Members of trade associations are required to complete annual training which details our climate policy positions and expectations for engagement with trade associations on these issues. In addition, any significant voting decisions require review and approval of the VP of Government Relations. We support effective policies to achieve emission reduction targets in line with goals that help the world reach net zero by 2050.
[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

"Fit for 55" package, in particular the introduction of a Carbon Border Adjustment Mechanism (CBAM), the future of the Emission Trading System (ETS), the Renewable Energy Directive (RED III), carbon capture and storage/ carbon capture and usage) and the EU Industrial Carbon Management Strategy.

(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

Environmental impacts and pressures
☑ Emissions – CO2
☑ Emissions – other GHGs
☑ Other environmental impacts and pressures, please specify :Industrial decarbonization via low-carbon hydrogen and carbon capture technologies.

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

Select from:

☑ Regional

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

Select all that apply

☑ Europe

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

Select from:

☑ Support with minor exceptions

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

In the case of the RED III, we have advocated for cost-competitive low-carbon hydrogen and equal treatment between low-carbon and renewable hydrogen in the EU policy framework, as we see hydrogen as an important lever to reduce GHG emissions. We have explored ideas with the European Commission on how to enable the creation of markets for products produced from and with renewable fuels of non-biological origin (RFNBOs) such as renewable hydrogen and low-carbon hydrogen. We have supported legislative initiatives to increase the availability of high-quality low carbon hydrogen irrespective of its production route to support the reduction of GHG emissions at industrial sites, which we see as key in order to develop a hydrogen economy and ensure the hydrogen volumes necessary for GHG emission reductions at the scale necessary. The price and availability of low-carbon hydrogen is critical to realize our GHG emission reduction targets, and in particular at our emission intensive plants. Investments in CCS must be made with urgency and accelerating these projects will require supportive governmental policies, subsidies, transparent and timely permit processing and improved community awareness and education.

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

Select all that apply

☑ Ad-hoc meetings

☑ Participation in working groups organized by policy makers

☑ Participation in voluntary government programs

☑ Responding to consultations

(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 Fit for 55 package is directly relevant to LYB's environmental commitments and transition plan, as it supports electrification technologies, low-carbon hydrogen, renewable or low-carbon electricity and infrastructure, and the development of CCUS. In the case of the RED III, we have advocated for cost-competitive low-carbon hydrogen and equal treatment between low-carbon and renewable hydrogen in the EU policy framework, as we see hydrogen as an important lever to reduce GHG emissions. We have explored ideas with the European Commission on how to enable the creation of markets for products produced from and with renewable fuels of non-biological origin (RFNBOs) such as renewable hydrogen and low-carbon hydrogen. We have supported legislative initiatives to increase the availability of high-quality low carbon hydrogen irrespective of its production route to support the reduction of GHG emissions at industrial sites, which we see as key in order to develop a hydrogen economy and ensure the hydrogen volumes necessary for GHG emission reductions at the scale necessary. Carbon capture technologies are another key lever for LYB to reduce GHG-emissions, particularly from hard-to-abate emissions sources. Investments in CCS must be made with urgency and accelerating these projects will require supportive governmental policies, subsidies, transparent and timely permit processing and improved community awareness and education.

(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

National subsidy instruments linked to GHG-reduction technologies

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

Select all that apply

☑ Climate change

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

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

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

☑ Subsidies on infrastructure

☑ Other financial mechanisms, please specify :National subsidy instruments supporting industrial decarbonization and infrastructure for GHG-reduction technologies.

(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

☑ France

☑ Germany

☑ United States of America

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

Select from:

☑ Support with minor exceptions

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

In France, LYB signed two "Ecological Transition Contracts" with the French government (Ministry of Economy, Finance and Industry) in late 2023, which define objectives for the reduction of CO_2 emissions at our two sites in the south of France. Dialogues with the Minister cabinet and other high-level officials were scheduled throughout 2024 to support subsidies for our two major sites. A discussion with the authorities regarding the development of a specific subsidy scheme for large net zero projects for the manufacturing industry in France, which is expected to be finalized for 2025, is ongoing. LYB has also been involved in the pursuit of several studies of the Syrius program (supported by the French government): those studies address the prospects for large scale GHG-emission reduction in industry, including the necessary infrastructure. In Germany, we continue to engage with government officials from ministries and the Federal Chancellery, as well as members of parliament at federal and state (North Rhine-Westphalia) levels on the net zero roadmap for our sites in Germany. This is particularly true at Wesseling, where funding and supportive policies regarding new infrastructures and availability of low carbon energy sources are key enablers of decarbonization. In the United States, LYB is directly involved in advocacy to advance CCUS to ensure a supportive regulatory framework for carbon reduction technologies as well as policies to support electricity market reforms to support renewable generation investments, innovation and grid reliability. An adequate supply of electricity from low-and zero-carbon sources is one of our four critical levers to reducing our GHG emissions. We believe that electrical infrastructure and capacity must increase in size, system management must be upgraded to meet growing demand and infrastructure planning must be enhanced. We evaluated policy proposals that would support this important lever in our GHG emissions reduction targets, laying the groundwork for future engagement with policymakers. We believe the 45V tax credit is key to enabling the availability of cost-competitive hydrogen supply, an important part of our pathway to reach net zero scope 1 and 2 GHG emissions.

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

Select all that apply

☑ Regular meetings

☑ Participation in voluntary government programs

☑ Submitting written proposals/inquiries

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

0

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

In France, LYB signed two "Ecological Transition Contracts" with the French government (Ministry of Economy, Finance and Industry) in late 2023, which define objectives for the reduction of CO_2 emissions at our two sites in the south of France. Dialogues with the Minister cabinet and other high-level officials were scheduled throughout 2024 to support subsidies for our two major sites. A discussion with the authorities regarding the development of a specific subsidy scheme for large net

zero projects for the manufacturing industry in France, which is expected to be finalized for 2025, is ongoing. LYB has also been involved in the pursuit of several studies of the Syrius program (supported by the French government): those studies address the prospects for large scale GHG-emission reduction in industry, including the necessary infrastructure. In Germany, we continue to engage with government officials from ministries and the Federal Chancellery, as well as members of parliament at federal and state (North Rhine-Westphalia) levels on the net zero roadmap for our sites in Germany. This is particularly true at Wesseling, where funding and supportive policies regarding new infrastructures and availability of low carbon energy sources are key enablers of decarbonization. In the United States, LYB is directly involved in advocacy to advance CCUS to ensure a supportive regulatory framework for carbon reduction technologies as well as policies to support electricity market reforms to support renewable generation investments, innovation and grid reliability. An adequate supply of electricity from low-and zero-carbon sources is one of our four critical levers to reducing our GHG emissions. We believe that electrical infrastructure and capacity must increase in size, system management must be upgraded to meet growing demand and infrastructure planning must be enhanced. We evaluated policy proposals that would support this important lever in our GHG emissions reduction targets, laying the groundwork for future engagement with policymakers. We believe the 45V tax credit is key to enabling the availability of cost-competitive hydrogen supply, an important part of our pathway to reach net zero scope 1 and 2 GHG emissions.

(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

[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

North America
☑ American Chemistry Council

(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

(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

No misalignment with LYB climate policy positions. ACC has voiced support for the Inflation Reduction Act's 45V tax credit, paired with the Bipartisan Infrastructure Law's hydrogen hub infrastructure program as essential for investment in a clean hydrogen economy. In its February 2024 comments to the Internal Revenue Service (IRS), ACC advocated for the continued role of fossil gas in hydrogen production, but in the context of allowing a hydrogen producer with more efficient carbon capture technology to take credit for co-produced steam created during the production process as a result of its carbon capture technology being more efficient. In

comments to the Department of Energy in June of 2024, ACC re-emphasized the need to ensure the final 45V tax credit guidance incentivizes investment in all forms of clean hydrogen production technologies that can meet the GHG emissions standards, regardless of the energy source, feedstock or process.

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

5000000

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

The funding aims to support policy engagement that advances shared business and sustainability goals. In our Climate Advocacy Report, we disclose dues paid using ranges. The figure entered here reflects the lower bound of the applicable range.

(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

Row 2

(4.11.2.1) Type of indirect engagement

Select from:
☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

North America

☑ American Fuel & Petrochemical Manufacturers

(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

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

Select from:

☑ Mixed

(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 attempted to influence them but they did not change their 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

Mixed alignment with one or more of the LYB climate policy priority areas. AFPM states support for "…address[ing] climate change through global cooperation and greenhouse gas emissions reductions" but does not specify support to limit global temperature rise to well below 2º C above preindustrial levels and to pursue efforts to limit the temperature increase even further to 1.5º C. AFPM is opposed to EV mandates and bans that would impact their refining members. AFPM is leading litigation efforts to oppose federal and state laws/regulations designed to reduce GHG emissions from the transportation sector by supporting zero emissions vehicles, which play a key role in the U.S. meeting its climate targets. However, AFPM has been in active discussions with members about comprehensive transportation policy legislation, including a federal fuel carbon reduction standard and complementary well-to-wheel vehicle standard as an alternative policy. These discussions have led some members to move AFPM from misaligned on climate policy to partially aligned. AFPM has filed regulatory comments endorsing parts of federal legislation and articulating support in its sustainability report and annual report for lower-carbon technologies such as CCS and hydrogen. AFPM has stated its support for sound policies and regulations, and the goal of reducing emissions, but opposes regulations that "make unreasonable and often conflicting demands on U.S. refiners and petrochemical manufacturers to make major changes in their processes."

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

1000000

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

The funding aims to support policy engagement that advances shared business and sustainability goals. In our Climate Advocacy Report, we disclose dues paid using ranges. The figure entered here reflects the lower bound of the applicable range.

(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

Row 3

(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

☑ Other trade association in Asia and Pacific, please specify :Asian Clean Fuels Association (AFCA)

(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

(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

ACFA demonstrates general alignment with emissions reduction through the use of clean fuels and fuel additives but has limited to no engagement on any other climate policy issue. ACFA's engagement on climate is confined to advancing fuels and fuels additives which reduce emissions. ACFA focuses on emissions reductions from fuels and the promotion of low carbon or carbon-neutral fuels as a key lever for achieving carbon neutrality by 2050. ACFA has no appreciable engagement in any other climate policy issue outside of this.

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

250000

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

The funding aims to support policy engagement that advances shared business and sustainability goals. In our Climate Advocacy Report, we disclose dues paid using ranges. The figure entered here reflects the lower bound of the applicable range.

(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

Row 4

(4.11.2.1) Type of indirect engagement

Select from:

☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

Europe

☑ BusinessEurope

(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

(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

No misalignment with LYB climate policy positions. BusinessEurope supports the European Green Deal and is committed to the transition to a climate-neutral economy by mid-century. Our evaluation has shown that their positions around hydrogen and low carbon fuels, CCUS, emerging technologies, renewable and low carbon electricity, and carbon pricing are consistent with ours.

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

25000

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

The funding aims to support policy engagement that advances shared business and sustainability goals. In our Climate Advocacy Report, we disclose dues paid using ranges. The figure entered here reflects the lower bound of the applicable range.

(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

Row 5

(4.11.2.1) Type of indirect engagement

Select from:

☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

Global

☑ Other global trade association, please specify :Chemical Industries 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

(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

No misalignment with LYB climate policy positions. The CIA reiterates the chemical industry's commitment to the transition to a climate-neutral economy by mid-century. Our evaluation has shown that their positions around hydrogen and low carbon fuels, CCUS, emerging technologies, renewable and low carbon electricity, and carbon pricing are consistent with ours.

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

50000

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

The funding aims to support policy engagement that advances shared business and sustainability goals. In our Climate Advocacy Report, we disclose dues paid using ranges. The figure entered here reflects the lower bound of the applicable range.

(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

Row 8

(4.11.2.1) Type of indirect engagement

Select from:

☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

Europe

☑ European Chemical Industry Council (CEFIC) [CH only]

(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

(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

No misalignment with LYB climate policy positions. CEFIC supports the European Green Deal and Europe's ambition to become climate neutral by 2050. Our evaluation has shown that their positions around hydrogen and low carbon fuels, CCUS, emerging technologies, renewable and low carbon electricity, and carbon pricing are consistent with ours.

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

1000000

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

The funding aims to support policy engagement that advances shared business and sustainability goals. In our Climate Advocacy Report, we disclose dues paid using ranges. The figure entered here reflects the lower bound of the applicable range.

(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

Row 9

(4.11.2.1) Type of indirect engagement

Select from:

☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

Global

☑ Other global trade association, please specify :International Council of Chemical Associations (ICCA)

(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

(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

No misalignment with LYB climate policy positions. In the climate neutrality statement published in 2021, the ICCA stated its support for the ambition of the chemical industry to achieve climate neutrality by mid-century. To align with this statement, ICCA commissioned a study to identify pathways and key enablers for the global chemical industry to reach climate neutrality, which was published in 2024. The Climate Neutrality report recognizes the industry need for low emission hydrogen combined with CCS and accompanying supportive policy frameworks and permit processes as an important pathway to limiting emissions from manufacturing processes. The report also notes the importance of low-emission energy from various sources as a key enabler to climate neutrality.

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

50000

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

The funding aims to support policy engagement that advances shared business and sustainability goals. In our Climate Advocacy Report, we disclose dues paid using ranges. The figure entered here reflects the lower bound of the applicable range.

(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

Row 10

(4.11.2.1) Type of indirect engagement

Select from:

☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

North America

☑ National Association of Manufacturers

(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

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

Select from:

☑ Mixed

(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 attempted to influence them but they did not change their 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

Mixed alignment with one or more of LYB climate policy priority areas. Our evaluation has shown that NAM's positions around hydrogen and low carbon fuels, CCUS, emerging technologies, and renewable and low carbon electricity are largely consistent with ours. However, while NAM has supported the energy transition with a focus on permitting reform, it has focused in many cases on increased investment in fossil fuels vs. energy sourced via more sustainable means.

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

250000

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

The funding aims to support policy engagement that advances shared business and sustainability goals. In our Climate Advocacy Report, we disclose dues paid using ranges. The figure entered here reflects the lower bound of the applicable range.

(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

Row 11

(4.11.2.1) Type of indirect engagement

Select from:
☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

Europe
☑ Other trade association in Europe, please specify :PlasticsEurope

(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

(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

No misalignment with LYB climate policy positions, but with limited engagement. Plastics Europe states support emissions reduction efforts, stating "we therefore support the EU's ambition to become climate-neutral by 2050..." Our evaluation has shown that their high-level positions around hydrogen and low carbon fuels, CCUS, emerging technologies, renewable and low carbon electricity, and carbon pricing are consistent with ours, but that engagement on climate issues is generally limited.

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

1000000

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

The funding aims to support policy engagement that advances shared business and sustainability goals. In our Climate Advocacy Report, we disclose dues paid using ranges. The figure entered here reflects the lower bound of the applicable range.

(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

Row 12

(4.11.2.1) Type of indirect engagement

Select from:

☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

Global

☑ Other global trade association, please specify :Electricity Consumers Resource Council (ELCON)

(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

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

Select from:

☑ Mixed

(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 attempted to influence them but they did not change their 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

Mixed alignment with LYB climate policy positions related to emerging technologies and low carbon renewable energy and electrification. No appreciable positions on other LYB climate policy priorities. ELCON is inactive with regard to many of the LYB climate policy positions, focusing almost exclusively on US federal and state policies that affect the price, availability and reliability of electrical service. General alignment demonstrated with the LYB climate policy positions related to grid capacity upgrades needed to support the high electricity demands tied to the electrification of processes and with policies accelerating the development of emerging technologies which enable the reduction of emissions from carbon intensive, large scale manufacturing needs. However, ELCON remains a strong proponent of fossil fuel-derived sources of energy in the short- to mid-term. LYB recognizes that the energy transition will take place over time, and that energy sourced from fossil fuel-derived sources are necessary in the short-to mid-term while renewable fuel sources and accompanying low-carbon dispatchable capacity is developed.

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

50000

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

The funding aims to support policy engagement that advances shared business and sustainability goals. In our Climate Advocacy Report, we disclose dues paid using ranges. The figure entered here reflects the lower bound of the applicable range.

(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

Row 13

(4.11.2.1) Type of indirect engagement

Select from:
☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

North America
☑ Other trade association in North America, please specify :United States Council for International Business (USCIB)

(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

(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

No misalignment with LYB climate policy positions. USCIB's priorities include advancing global climate action alongside energy security, innovation and climate resilience. USCIB principles recognize carbon pricing as an important climate policy tool, and USCIB seeks opportunities to design international climate cooperation that works with markets to encourage companies in all sectors to integrate climate mitigation into their activities, supply and value chains. Our evaluation has shown that their high-level positions align with our climate policy principles.

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

25000

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

The funding aims to support policy engagement that advances shared business and sustainability goals. In our Climate Advocacy Report, we disclose dues paid using ranges. The figure entered here reflects the upper bound of the applicable range.

(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

Row 14

(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

☑ Other trade association in Asia and Pacific, please specify :China Petroleum and Chemical Industry Federation (CPCIF)

(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

(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

While the CPCIF website is difficult to navigate, there appears to be general alignment with some of the LYB climate policy positions. However, the level of activity in many climate policy areas is difficult to determine.

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

25000

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

The funding aims to support policy engagement that advances shared business and sustainability goals. In our Climate Advocacy Report, we disclose dues paid using ranges. The figure entered here reflects the upper bound of the applicable range.

(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
[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

(4.12.1.3) Environmental issues covered in publication

Select all that apply

☑ Climate change

☑ Water

(4.12.1.4) Status of the publication

Select from:

☑ Complete

(4.12.1.5) Content elements

Select all that apply

☑ Governance

☑ Risks & Opportunities

☑ Strategy

☑ Emission targets

(4.12.1.6) Page/section reference

2025 Proxy Statement: pages 22–25 (Approach to Sustainability), page 27 (Oversight of ESG Matters), page 28 (ERM and climate risk), page 51 and 53 (executive compensation). Annual report on Form 10-K for the year ended December 31, 2024: pages 12-13 (Environmental and sustainability topics), Item 1A (Climate-related risks).

(4.12.1.7) Attach the relevant publication

Proxy Statement and Annual Report 2024.pdf

(4.12.1.8) Comment

In 2025, we published a single combined document that includes both our 2025 Proxy Statement and Annual Report for the reporting year 2024. Attached is this combined document. In the first section—the Proxy Statement—relevant disclosures can be found in the following sections: Our Approach to Sustainability is outlined on pages 22–25; Oversight of Environmental, Social, and Governance Matters is described on page 27; our Enterprise Risk Management (ERM) function, including climate change risk management, is detailed on page 28; and sustainability metrics related to executive compensation are outlined on pages 51 and 53. In the second section—the Annual Report—Item 1A: Risk Factors includes risks related to climate, while Items 1 and 2: Business and Properties (pages 12–13) provide general information on environmental and sustainability topics.

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

☑ Forests

☑ Water

☑ Biodiversity

(4.12.1.4) Status of the publication

Select from:

☑ Complete

(4.12.1.5) Content elements

Select all that apply

☑ Strategy

☑ Governance

☑ Value chain engagement

☑ Dependencies & Impacts

☑ Emission targets
☑ Emissions figures
☑ Risks & Opportunities
☑ Water pollution indicators
☑ Content of environmental policies
☑ Biodiversity indicators
☑ Public policy engagement
☑ Water accounting figures

(4.12.1.6) Page/section reference

Key areas of our 2024 Sustainability Report which cover the environmental issues in this CDP response are sections “Ending Plastic Waste' (p.20-28), 'Taking Climate Action' (p.30-65), and 'Governance' (p.105-120).

(4.12.1.7) Attach the relevant publication

LYB Sustainability Report 2024.pdf

(4.12.1.8) Comment

Our 2024 Sustainability Report is designed to meet the information needs of stakeholders interested in our overall sustainability performance. In preparing this report, we have aligned our disclosures with key regulatory and voluntary sustainability reporting standards, including the Global Reporting Initiative (GRI), the Sustainability Accounting Standards Board (SASB), and the Task Force on Climate-related Financial Disclosures (TCFD). Our sustainability strategy is structured around three global challenges: ending plastic waste, taking climate action, and supporting a thriving society. The 2024 report is organized around these pillars to reflect our commitment and progress in each area.
[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

Forests

(5.1.1) Use of scenario analysis

Select from:

☑ No, and we do not plan to within the next two years

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

Select from:

☑ Not an immediate strategic priority

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

Forest risk commodities have not been deemed a material issue to date. Therefore, scenario analysis has not been used to identify forest-related environmental outcomes.

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

Climate transition scenarios

☑ Bespoke climate transition scenario

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Policy

☑ Market

☑ Reputation

☑ Technology

☑ Liability

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 1.5°C or lower

(5.1.1.7) Reference year

2020

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2050

(5.1.1.9) Driving forces in scenario

Finance and insurance

☑ Cost of capital

☑ Sensitivity of capital (to nature impacts and dependencies)

Stakeholder and customer demands

☑ Consumer sentiment

☑ Consumer attention to impact

Regulators, legal and policy regimes

☑ Global regulation

☑ Level of action (from local to global)

☑ Global targets

Relevant technology and science

☑ Other relevant technology and science driving forces, please specify :Availability of technologies needed to achieve interim and long-term reduction targets

Macro and microeconomy

☑ Domestic growth

☑ Globalizing markets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

We used quantitative and qualitative scenario analysis for further development of our climate strategy and as part of our regular risk evaluation process. We developed three scenarios to support our business strategy including the future development of our sustainability and climate strategy. These three scenarios are, where (1) sustainability progress has taken a step back globally, with significant differences in levels of ambition and action between global regions, (2) a reference baseline scenario representing "Business as Usual", and a (3) a net zero scenario with an acceleration of climate action globally. The Net Zero scenario is a future state up to 2050 with limiting global warming to 1.5°C, which was developed as a bespoke scenario with references to IEA NZE 2050 scenarios and was supported with relevant sector-specific publications. The PESTEL framework (Political, Environmental, Social, Technological, Economical, Legal) has been applied to capture key external driving forces, which are the underlying reasons for change in the magnitude of the probability, consequence, vulnerability, and velocity of the risks. The driving forces have been selected based on potential financial or strategic impact on our organization and the uncertainty involved. Examples of driving forces are international climate change policy including policies that promote clean energy growth, availability and price of feedstock, economic growth, plastic demand in different regions, and low carbon technologies. Key assumptions include a fall of carbon emissions from energy use by more than 95% by 2050, a greater adoption of circular and sharing economies with increased propensity to switch to low-carbon energy sources, the implementation of policies that accelerate the energy transition, consumer sentiment that shows willingness to pay for goods and services that support the energy transition, and the ability to access technology that support the energy transition. The time horizon considered in our scenario extends to 2050, with a mid-point at 2030 to align with the goals of the Paris Agreement on global decarbonization by 2050.The scenario analysis covers all business segments, geographic locations where LyondellBasell operates, and our major production sites. The development of scenarios, inputs, assumptions, and analytical methods used to substantiate each scenario were supported by an external consultant in collaboration with LyondellBasell stakeholders.

(5.1.1.11) Rationale for choice of scenario

We have used quantitative and qualitative scenario analysis for the further development of our climate strategy and as part of our regular risk evaluation process. We've developed three scenarios to support our business strategy including the future development of our sustainability and climate strategy. These scenarios are (1) sustainability progress has taken a step back globally, with significant differences in levels of ambition and action between global regions, (2) a reference baseline scenario representing "Business as Usual", and a (3) a net zero scenario with an acceleration of climate action globally. The "Net Zero" scenario is a future state up to 2050 with limiting global warming to 1.5°C, which was developed as a bespoke scenario with references to several public scenarios and sector specific publications including IEA NZE 2050, IHS, and SystemIQ.

Water

(5.1.1.1) Scenario used

Water scenarios

☑ WRI Aqueduct

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Chronic physical

(5.1.1.7) Reference year

2023

(5.1.1.8) Timeframes covered

Select all that apply

☑ Other, please specify :Unspecified future scenario

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Changes to the state of nature

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

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

We refreshed our baseline water risk assessments in 2024, using the World Resources Institute Aqueduct™ Tool (Aqueduct™), version 4.0. Aqueduct™ rates geographic locations worldwide on a scale from low to extremely high overall water risk based on watershed data related to water quantity stress, quality, and regional factors. Most of our sites are in low to medium-water risk areas, with less than 0.1% of our global water consumption in high or extremely-high water risk locations.

(5.1.1.11) Rationale for choice of scenario

The World Resources Institute (WRI) Aqueduct Tool (Aqueduct) was chosen due to its wide acceptance and alignment with CDP, GRI, UN Global Compact, etc., and is seen as the best tool to measure and understand our water-related risks.

Climate change

(5.1.1.1) Scenario used

Physical climate scenarios

☑ RCP 2.6

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☑ No SSP used

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Acute physical

☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 1.6ºC - 1.9ºC

(5.1.1.7) Reference year

2020

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Changes to the state of nature

☑ Number of ecosystems impacted

☑ Speed of change (to state of nature and/or ecosystem services)

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

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

We have used qualitative scenario analysis for the further development of our climate strategy and as part of our regular risk evaluation process. We developed three scenarios until 2050. The first scenario is a future state up to 2050 with limiting global warming to well below 2°C, and the second scenario looks to a state in line with 2.5°C – 2.9°C global warming (the business as usual scenario), and the third scenario looks to a future state in line with 4°C global warming (the worst case scenario). All scenarios have been developed based on input and models from IRENA World Energy Transitions Outlook (1.5°C pathway), IPCC RCP 2.6 (well below 2°C), IPCC RCP 4.5 (2.5°C – 2.9°C), IPCC RCP 8.5 (4°C global warming), as well as the IEA Sustainable Development Scenario 2020. These scenarios are also supported by relevant sector-specific publications. The PESTEL framework (Political, Environmental, Social, Technological, Economical, Legal) has been applied to capture key external driving forces, which are the underlying reasons for changes in the magnitude of the probability, consequence, vulnerability, and velocity of the risks. The driving forces have been selected based on potential financial or strategic impact on our organization and the uncertainty involved. The time horizon considered in our scenario exercise extends to 2050, with a mid-point at 2030 to align with the goals of the Paris Agreement on global decarbonization by 2050. The scenario analysis covers all business segments, geographic locations where LyondellBasell operates, and our major production sites. The development of scenarios, inputs, assumptions, and analytical methods used to substantiate each scenario were supported by an external consultant in collaboration with LyondellBasell stakeholders.

(5.1.1.11) Rationale for choice of scenario

We have used qualitative scenario analysis as part of our risk evaluation process on physical climate risk, both acute and chronic. We have used three different scenarios referencing IPCC RCP 2.6, 4.5 and 8.5 to represent the evolution of climate and its physical impact on our manufacturing operations and our supply chain under a 1.5 / well below 2oC world, an intermediate scenario, and a worst case scenario.

Climate change

(5.1.1.1) Scenario used

Physical climate scenarios

☑ RCP 4.5

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☑ No SSP used

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Acute physical

☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 2.5ºC - 2.9ºC

(5.1.1.7) Reference year

2020

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Changes to the state of nature

☑ Number of ecosystems impacted

☑ Speed of change (to state of nature and/or ecosystem services)

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

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

We have used qualitative scenario analysis for the further development of our climate strategy and as part of our regular risk evaluation process. We developed three scenarios until 2050. The first scenario is a future state up to 2050 with limiting global warming to well below 2°C, and the second scenario looks to a state in line with 2.5°C – 2.9°C global warming (the business as usual scenario), and the third scenario looks to a future state in line with 4°C global warming (the worst case scenario). All scenarios have been developed based on input and models from IRENA World Energy Transitions Outlook (1.5°C pathway), IPCC RCP 2.6 (well below 2°C), IPCC RCP 4.5 (2.5°C – 2.9°C), IPCC RCP 8.5 (4°C global warming), as well as the IEA Sustainable Development Scenario 2020. These scenarios are also supported by relevant sector-specific publications. The PESTEL framework (Political, Environmental, Social, Technological, Economical, Legal) has been applied to capture key external driving forces, which are the underlying reasons for changes in the magnitude of the probability, consequence, vulnerability, and velocity of the risks. The driving forces have been selected based on potential financial or strategic impact on our organization and the uncertainty involved. The time horizon considered in our scenario exercise extends to 2050, with a mid-point at 2030 to align with the goals of the Paris Agreement on global decarbonization by 2050. The scenario analysis covers all business segments, geographic locations where LyondellBasell operates, and our major production sites. The development of scenarios, inputs, assumptions, and analytical methods used to substantiate each scenario were supported by an external consultant in collaboration with LyondellBasell stakeholders.

(5.1.1.11) Rationale for choice of scenario

We have used qualitative scenario analysis as part of our risk evaluation process on physical climate risk, both acute and chronic. We have used three different scenarios referencing IPCC RCP 2.6, 4.5 and 8.5 to represent the evolution of climate and its physical impact on our manufacturing operations and our supply chain under a 1.5 / well below 2oC world, an intermediate scenario, and a worst case scenario.

Climate change

(5.1.1.1) Scenario used

Physical climate scenarios

☑ RCP 8.5

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☑ No SSP used

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Acute physical

☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 4.0°C and above

(5.1.1.7) Reference year

2020

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Changes to the state of nature

☑ Number of ecosystems impacted

☑ Speed of change (to state of nature and/or ecosystem services)

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

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

We have used qualitative scenario analysis for the further development of our climate strategy and as part of our regular risk evaluation process. We developed three scenarios until 2050. The first scenario is a future state up to 2050 with limiting global warming to well below 2°C, and the second scenario looks to a state in line with 2.5°C – 2.9°C global warming (the business as usual scenario), and the third scenario looks to a future state in line with 4°C global warming (the worst case scenario). All scenarios have been developed based on input and models from IRENA World Energy Transitions Outlook (1.5°C pathway), IPCC RCP 2.6 (well below 2°C), IPCC RCP 4.5 (2.5°C – 2.9°C), IPCC RCP 8.5 (4°C global warming), as well as the IEA Sustainable Development Scenario 2020. These scenarios are also supported by relevant sector-specific publications. The PESTEL framework (Political, Environmental, Social, Technological, Economical, Legal) has been applied to capture key external driving forces, which are the underlying reasons for changes in the magnitude of the probability, consequence, vulnerability, and velocity of the risks. The driving forces have been selected based on potential financial or strategic impact on our organization and the uncertainty involved. The time horizon considered in our scenario exercise extends to 2050, with a mid-point at 2030 to align with the goals of the Paris Agreement on global decarbonization by 2050. The scenario analysis covers all business segments, geographic locations where LyondellBasell operates, and our major production sites. The development of scenarios, inputs, assumptions, and analytical methods used to substantiate each scenario were supported by an external consultant in collaboration with LyondellBasell stakeholders.

(5.1.1.11) Rationale for choice of scenario

We have used qualitative scenario analysis as part of our risk evaluation process on physical climate risk, both acute and chronic. We have used three different scenarios referencing IPCC RCP 2.6, 4.5 and 8.5 to represent the evolution of climate and its physical impact on our manufacturing operations and our supply chain under a 1.5 / well below 2oC world, an intermediate scenario, and a worst case scenario.

Water

(5.1.1.1) Scenario used

Physical climate scenarios

☑ RCP 2.6

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☑ No SSP used

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Acute physical

☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 1.6ºC - 1.9ºC

(5.1.1.7) Reference year

2020

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Changes to the state of nature

☑ Number of ecosystems impacted

☑ Speed of change (to state of nature and/or ecosystem services)

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

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

We have used qualitative scenario analysis for the further development of our climate strategy and as part of our regular risk evaluation process. We developed three scenarios until 2050. The first scenario is a future state up to 2050 with limiting global warming to well below 2°C, and the second scenario looks to a state in line with 2.5°C – 2.9°C global warming (the business as usual scenario), and the third scenario looks to a future state in line with 4°C global warming (the worst case scenario). All scenarios have been developed based on input and models from IRENA World Energy Transitions Outlook (1.5°C pathway), IPCC RCP 2.6 (well below 2°C), IPCC RCP 4.5 (2.5°C – 2.9°C), IPCC RCP 8.5 (4°C global warming), as well as the IEA Sustainable Development Scenario 2020. These scenarios are also supported by relevant sector-specific publications. The PESTEL framework (Political, Environmental, Social, Technological, Economical, Legal) has been applied to capture key external driving forces, which are the underlying reasons for changes in the magnitude of the probability, consequence, vulnerability, and velocity of the risks. The driving forces have been selected based on potential financial or strategic impact on our organization and the uncertainty involved. The time horizon considered in our scenario exercise extends to 2050, with a mid-point at 2030 to align with the goals of the Paris Agreement on global decarbonization by 2050. The scenario analysis covers all business segments, geographic locations where LyondellBasell operates, and our major production sites. The development of scenarios, inputs, assumptions, and analytical methods used to substantiate each scenario were supported by an external consultant in collaboration with LyondellBasell stakeholders.

(5.1.1.11) Rationale for choice of scenario

We have used qualitative scenario analysis as part of our risk evaluation process on physical climate risk, both acute and chronic. We have used three different scenarios referencing IPCC RCP 2.6, 4.5 and 8.5 to represent the evolution of climate and its physical impact on our manufacturing operations and our supply chain under a 1.5 / well below 2oC world, an intermediate scenario, and a worst case scenario.

Water

(5.1.1.1) Scenario used

Physical climate scenarios

☑ RCP 4.5

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☑ No SSP used

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Acute physical

☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 2.5ºC - 2.9ºC

(5.1.1.7) Reference year

2020

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Changes to the state of nature

☑ Number of ecosystems impacted

☑ Speed of change (to state of nature and/or ecosystem services)

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

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

We have used qualitative scenario analysis for the further development of our climate strategy and as part of our regular risk evaluation process. We developed two scenarios until 2050. The first scenario is a future state up to 2050 with limiting global warming to well below 2°C, and the second scenario looks to a state in line with 2.5°C – 2.9°C global warming (the business as usual scenario), and the third scenario looks to a future state in line with 4°C global warming (the worst case scenario). All scenarios have been developed based on input and models from IRENA World Energy Transitions Outlook (1.5°C pathway), IPCC RCP 2.6 (well below 2°C), IPCC RCP 4.5 (2.5°C – 2.9°C), IPCC RCP 8.5 (4°C global warming), as well as the IEA Sustainable Development Scenario 2020. These scenarios are also supported by relevant sector-specific publications. The PESTEL framework (Political, Environmental, Social, Technological, Economical, Legal) has been applied to capture key external driving forces, which are the underlying reasons for changes in the magnitude of the probability, consequence, vulnerability, and velocity of the risks. The driving forces have been selected based on potential financial or strategic impact on our organization and the uncertainty involved. The time horizon considered in our scenario exercise extends to 2050, with a mid-point at 2030 to align with the goals of the Paris Agreement on global decarbonization by 2050. The scenario analysis covers all business segments, geographic locations where LyondellBasell operates, and our major production sites. The development of scenarios,

inputs, assumptions, and analytical methods used to substantiate each scenario were supported by an external consultant in collaboration with LyondellBasell stakeholders.

(5.1.1.11) Rationale for choice of scenario

We have used qualitative scenario analysis as part of our risk evaluation process on physical climate risk, both acute and chronic. We have used three different scenarios referencing IPCC RCP 2.6, 4.5 and 8.5 to represent the evolution of climate and its physical impact on our manufacturing operations and our supply chain under a 1.5 / well below 2oC world, an intermediate scenario, and a worst case scenario.

Water

(5.1.1.1) Scenario used

Physical climate scenarios

☑ RCP 8.5

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☑ No SSP used

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Acute physical
☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:
☑ 4.0ºC and above

(5.1.1.7) Reference year

2020

(5.1.1.8) Timeframes covered

Select all that apply
☑ 2030
☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts
☑ Changes to the state of nature
☑ Number of ecosystems impacted
☑ Speed of change (to state of nature and/or ecosystem services)
☑ Climate change (one of five drivers of nature change)

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

We have used qualitative scenario analysis for the further development of our climate strategy and as part of our regular risk evaluation process. We developed three scenarios until 2050. The first scenario is a future state up to 2050 with limiting global warming to well below 2°C, and the second scenario looks to a state in line with 2.5°C – 2.9°C global warming (the business as usual scenario), and the third scenario looks to a future state in line with 4°C global warming (the worst case scenario). All scenarios have been developed based on input and models from IRENA World Energy Transitions Outlook (1.5°C pathway), IPCC RCP 2.6 (well below 2°C), IPCC RCP 4.5 (2.5°C – 2.9°C), IPCC RCP 8.5 (4°C global warming), as well as the IEA Sustainable Development Scenario 2020. These scenarios are also

supported by relevant sector-specific publications. The PESTEL framework (Political, Environmental, Social, Technological, Economical, Legal) has been applied to capture key external driving forces, which are the underlying reasons for changes in the magnitude of the probability, consequence, vulnerability, and velocity of the risks. The driving forces have been selected based on potential financial or strategic impact on our organization and the uncertainty involved. The time horizon considered in our scenario exercise extends to 2050, with a mid-point at 2030 to align with the goals of the Paris Agreement on global decarbonization by 2050. The scenario analysis covers all business segments, geographic locations where LyondellBasell operates, and our major production sites. The development of scenarios, inputs, assumptions, and analytical methods used to substantiate each scenario were supported by an external consultant in collaboration with LyondellBasell stakeholders.

(5.1.1.11) Rationale for choice of scenario

We have used qualitative scenario analysis as part of our risk evaluation process on physical climate risk, both acute and chronic. We have used three different scenarios referencing IPCC RCP 2.6, 4.5 and 8.5 to represent the evolution of climate and its physical impact on our manufacturing operations and our supply chain under a 1.5 / well below 2oC world, an intermediate scenario, and a worst case scenario.
[Add row]

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

Climate change

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

Select all that apply
☑ Risk and opportunities identification, assessment and management
☑ Strategy and financial planning
☑ Resilience of business model and strategy
☑ Capacity building
☑ 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

Our risk management process analyzed several transition and physical risks including increase in temperature, low water level, water stress, extreme weather events, regulations and standards on carbon emissions and other environmental regulations, low carbon technologies, electrification and green hydrogen, replacement of energy-intensive technology, feedstock availability, shift in expectations from business partners, potential changing market demand, insurance capacity, cost of capital and market demand for transparency. The analysis has been used to classify risks in terms of likelihood and as input into our long-term business planning process. The qualitative insights from these scenarios are a starting point for use as inputs into wider business strategy and will continue to be enriched with a range of inputs. The scenarios we ran showed that, with respect to physical risk, although we have preparedness plans in place, should an event occur, it could have the potential to disrupt our supply chain and operations. Several of our facilities are located on the U.S. Gulf Coast, which has been impacted by hurricanes. Landslides occurring near key supply arteries could create disruptions to rail networks. Our sites rely on rivers for transportation that may experience restrictions in times of drought or other unseasonal weather variation. In addition, scarcity of water and drought conditions due to climate change could reduce the availability of fresh water needed to produce our products, which could increase our costs of operations. The scenarios we ran showed that, with respect to transition risk, international climate change policy may result in increases in carbon pricing with an indirect impact on the costs of our operations and price of goods. Low carbon technologies may not be commercially mature or available in sufficient capacity to reduce the GHG footprint of our operations. Similarly, alternative feedstocks, whether renewable-based or derived from plastic waste, may also not be available in volumes necessary to sufficiently reduce feedstock-related emissions. The scenario analysis informed our decision to revise our corporate targets for 2030 and increase our scope 1 and 2 target to a 42% reduction in absolute emissions from 2020 levels. As we continue to focus on the future beyond, and to meet growing customer demands for low carbon products, we took action in 2022 to establish a Circular and Low Carbon Solutions (CLCS) business to deliver on our ambition to produce and market 2 million metric tons of recycled and renewable-based polymers annually by 2030. CLCS is also responsible for securing access to renewable and circular (plastic waste) feedstock. Informed by scenario analysis, and as part of our strategic and financial planning process, we undertook specific business actions in 2024 aligned with our feedstock sourcing and circularity processes. For example, in 2024, our Source One Plastics joint venture began advanced plastic waste sorting operations at its Eicklingen, Germany facility, processing difficult-to-recycle plastics to supply feedstock that will be used in our MoReTec-1 facility in Cologne. Powered by renewable energy, the Source One Plastics facility uses dry processing to reduce energy consumption by 30% compared to conventional plastic recycling technologies while also minimizing environmental dust release. In 2024, our Cyclyx joint venture reached a final investment decision to build a second Cyclyx Circularity Center (CCC2) in the Dallas-Fort Worth area. This new facility, expected to start operations in the second half of 2026, will produce approximately 136,000 metric tons of plastic feedstock per year for both mechanical and chemical recycling technologies. Combined with the first center (CCC1) in Houston which is currently under construction, the two facilities will have the capacity to produce an estimated 272,000 metric tons annually. These investments reflect strategic capital allocation decisions aimed at enhancing our operational resilience and enabling long-term circularity goals.

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

We refreshed our baseline water risk assessments in 2024, using the World Resources Institute Aqueduct™ Tool (Aqueduct™), version 4.0. Aqueduct™ rates geographic locations worldwide on a scale from low to extremely high overall water risk based on watershed data related to water quantity stress, quality, and regional factors. Most of our sites are in low to medium-water risk areas, with less than 0.1% of our global water consumption in high or extremely-high water risk locations. We aim to complete site-specific water risk management plans at our large sites and facilities in high and extremely high water risk areas by 2030. We are completing water risk management plans in a systematic manner across our in-scope sites, and plan to evolve our water-related risk assessment approach as we progress this effort in the coming years. For the few sites located in high and extremely-high water-risk areas, we are evaluating opportunities to reduce consumption, including through reusing water in our processes. Some areas where we operate could become high-water risk in the future or be vulnerable to restrictions. In 2024, we completed a future water stress assessment using Aqueduct's "business as usual" water stress scenario (SSP3 RCP7.0). While most of our sites are generally classified as low- or medium- water risk, water stress is an important variable when calculating overall water risk. In this assessment, the modeling indicated that our sites that could be located in extremely high or high overall water stress areas of the world in the future were consistent with our current identified group of sites located in water-stressed regions. This reaffirms our current approach and commitment to site-specific water risk management plans.
[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, and we do not 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

We have a commitment to reach net zero scope 1 and 2 GHG emissions for our global operations by 2050. Our core business currently runs on fossil feedstocks for which there does not exist any commercial alternative at scale today. We are working on the development of technologies, and pathways to secure availability of alternative feedstock volumes at scale, for example through the deployment of our MoReTec technology, which aims to bring back plastic waste in the value chain displacing fossil feedstocks.

(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

Feedback from shareholders on our climate transition plan is primarily collected through ongoing engagement led by our Investor Relations team. This includes one-on-one meetings, calls, industry conferences, investor roadshows, and analyst meetings. Throughout the year, we discuss strategy and ESG topics with investors and address their questions and concerns. When requested, members of the Executive Committee and our Chief Sustainability Officer participate in these discussions. Management regularly updates the Board on shareholder conversations and feedback. We remain proactive in our outreach efforts and maintain strong relationships with shareholders and other key stakeholders to ensure their perspectives are considered in our strategic planning.

(5.2.9) Frequency of feedback collection

Select from:

☑ More frequently than annually

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

Our ability to achieve these goals depends on many factors, including the availability of technology, our ability to secure permits and emissions credits, evolving regulatory requirements, competitor actions, customer preferences, and our ability to reduce emissions from our operations through modernization and innovation, reduce the emissions intensity of the electricity we buy, and invest in renewables and low carbon energy. We may also not timely adapt to changes or methods in carbon pricing that could increase our costs and reduce our competitiveness.

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

In 2024, we continued to implement our climate transition plan by advancing site-level emission reduction projects, investing in renewable energy, and collaborating with partners to scale impact. We reduced our Scope 1 and 2 emissions by approximately 200 kilotons of CO_2e compared to 2023 through sustained efforts in deploying Value Enhancement Program (VEP) projects and procuring renewable electricity. We secured PPAs with an aggregate generation capacity that will enable us to meet our goal of procuring at least 50% of our electricity from renewable sources by 2030, based on 2020 procured levels. These agreements are expected to generate an estimated five million megawatt hours of renewable electricity annually, reducing our scope 2 emissions by more than 1.8 million metric tons of carbon emissions. At our PO site in Botlek, Netherlands, we launched a multi-stakeholder steam reuse project to reduce Scope 2 emissions. This initiative is expected to reduce site emissions by 15% and contribute to a regional reduction of 100 kilotons of GHG emissions annually. We also progressed in evaluating low-carbon technologies across our olefin and PO operations, which account for ~85% of our Scope 1 and 2 emissions.

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

LYB Sustainability Report 2024.pdf

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

Select all that apply

☑ Water

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

We have developed climate-related scenarios to assess physical risks, including those related to water. These pathways represent varying expectations of global temperature rise in the medium (2030) and long term (2050). Severe weather events and climatic factors pose an acute physical risk to our operations, especially in vulnerable regions like the U.S. Gulf Coast. Climate change intensifies this risk, increasing the frequency and severity of events like hurricanes, flooding, and drought. While we maintain preparedness and business continuity plans aimed at minimizing potential disruptions and enhancing safety, these events still have the potential to interrupt our supply chain and operations. Our facilities on the U.S. Gulf Coast, a region that has previously encountered hurricanes, have experienced such interruptions in the past, necessitating temporary shutdowns. Long-term climate changes bring about chronic physical risks to our operations, notably global sea level rise and persistent drought conditions. For instance, we have witnessed feedstock shipping restrictions caused by unseasonal weather variations in Germany, affecting the Rhine River's water levels. We address specific climate-related risks through structured response plans, which are shared with our Sustainability Council Committee, with input and alignment from the Executive Committee and the HSE&S Committee of the Board.
[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

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

LyondellBasell believes that there may be an increase in demand for more sustainable products in the future due to growing interest in carbon reduction and circularity from our customers and wider society. In the second half of 2022, we established our Circular and Low Carbon Solutions (CLCS) business unit to address the rapidly growing demand for recycled and renewable-based products. As we continue to build our CLCS business, we are making strategic investments to secure feedstock supply, expand our recycling footprint, and develop scalable technologies to grow our Circulen family of polymers. These polymers are produced using raw materials derived from mechanical recycling (CirculenRecover), advanced recycling (CirculenRevive), or renewable materials (CirculenRenew). In 2024, we began construction on our first industrial-scale chemical recycling plant at our site in Wesseling, Germany, which utilizes our proprietary MoReTec technology. This marks a significant step in scaling up our advanced recycling capabilities. We also continued to expand our +LC (Low Carbon) product range. The +LC brand is an offering of O&P and I&D products, which uses alternative sources of carbon from recycled and renewable, bio-based materials, offering a low-carbon solution compared to fossil-based alternatives. These products include core offerings such as styrene monomer and propylene oxide (PO), with end applications including insulation materials, automotive, and consumer goods.

Upstream/downstream value chain

(5.3.1.1) Effect type

Select all that apply

☑ Risks

☑ Opportunities

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

Select all that apply

☑ Climate change

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

In 2024, we screened suppliers using the EcoVadis IQ Plus platform to assess sustainability risks. Suppliers identified as high or very high risk were asked to complete a sustainability assessment. We introduced IntegrityNext, a cloud-based tool used alongside EcoVadis to evaluate suppliers' sustainability management systems. We also conducted 17 Together for Sustainability (TfS) audits at high-risk supplier sites, with all findings addressed through corrective action plans. To support supplier improvement, we delivered 30 training sessions, and 387 supplier learners participated in over 1,000 courses via the TfS Academy. Having achieved our 2024 assessment goal, we set a new target to assess 80% of key suppliers by 2027. Downstream: We collaborate with customers to develop low-carbon and circular solutions that support their sustainability goals. Pigeon Singapore partnered with LYB to renew its SofTouch™ nursing bottles using CirculenRenew polypropylene polymers, attributed with 20% bio-based content via an ISCC PLUS certified mass balance approach. Haleon is replacing 700 million virgin plastic toothpaste caps across Europe with bio-based versions made from waste products. The company has launched these caps in several markets, aiming for broad adoption by 2025. LYB supports this transition through CirculenRenew polymers, enabling production of packaging and toothbrushes from renewable-based materials. In June 2024, LYB inaugurated KunstStoffWelt, an experience center at its Kerpen facility combining art, sustainability, and innovation. The center

showcases artwork made from post-consumer plastic waste and serves as a hub for workshops and collaboration, engaging customers and the public in developing creative solutions for a circular economy.

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

International organizations, such as the International Energy Agency, recognize the hard-to-abate nature of GHG emissions in the chemical industry, largely due to the immaturity of necessary technologies for large-scale deployment. Emerging technologies like low emission hydrogen, CCUS, and process electrification are critical for reducing GHG emissions in the chemical sector and driving transformational changes for larger-scale emission reductions. We are pursuing R&D investments to support these technologies. In evaluating the abatement potential of these technologies, we consider short-, medium-, and long-term impacts on our business objectives. We have been actively pursuing R&D investments to support these technologies. For instance, in 2024, we laid the foundation for MoReTec-1, our first commercial-scale advanced recycling plant in Cologne, Germany. Using our proprietary MoReTec technology, this 50KTA facility will convert hard-to-recycle, post-consumer plastic waste into feedstock for new polymers under our CirculenRevive brand. Once operational, it will process plastic waste equivalent to that generated by approximately 1.2 million German citizens annually. We are also evaluating a second MoReTec facility in Houston, U.S., with double the capacity. Our Cyclyx joint venture is progressing, with its first advanced sorting facility (CCC1) in Houston expected to start up in 2025, and a second (CCC2) planned for Dallas-Fort Worth in 2026. We expect our Genox joint venture to start up an additional mechanical recycling line in 2025 and are evaluating investments in our Newcycling technology.

Operations

(5.3.1.1) Effect type

Select all that apply

☑ Risks
☑ Opportunities

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

Select all that apply
☑ Climate change

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

Our European sites subject to the EU ETS incorporate carbon pricing in their business and financial planning. Similar carbon pricing mechanisms are being implemented in other regions where we operate. We consider the short-, medium-, and long-term impacts of existing and emerging carbon pricing regulations in our analyses. Through internal carbon pricing, we assign a monetary value to our GHG emissions which is integrated into our business planning and capital allocation processes, driving cost-effective climate action. We use a regionally differentiated approach, with price levels defined based on the EU Emissions Trading System (ETS) carbon market in the EU, and industry benchmarks in the U.S. and for the rest of our global operations. The use of an internal carbon price is a key enabler for us to progress towards our scope 1 and 2 targets. As the energy transition progresses, we anticipate an increased value for carbon, driven by expected increases in global carbon regulations and growing customer willingness to pay a premium for low-carbon products. As part of our approach to reducing our scope 1 and 2 emissions, we are evaluating different projects including on energy efficiency, renewable and low-carbon electricity and electrification, hydrogen and carbon capture and storage/utilization (CCS/CCU). Additionally, in 2024, we made preparations for the successful shutdown of refining operations at our Houston Refinery in Q1 2025. We estimate that our exit from the refining business will reduce scope 1 and 2 GHG emissions by around 3 MMt and scope 3 emissions by approximately 40 MMt annually, including emissions related to crude oil procurement and the sale and marketing of petroleum refined products.
[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
☑ Assets
☑ Revenues
☑ Liabilities
☑ Direct costs
☑ Access to capital
☑ Capital allocation
☑ Capital expenditures
☑ Acquisitions and divestments

☑ Indirect 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

Our financial planning considers climate-related risks and opportunities related to revenues, costs, capital expenditures, acquisitions and divestments, access to capital, and assets and liabilities over the short, medium and long terms. Our commitment to sustainability and climate action has continued to evolve and is an important consideration in setting corporate strategy. This has led to the development of our climate transition plan for LyondellBasell to achieve its interim and long-term climate targets. To achieve our targets, we expect capital spending in the future will include investments to support lowering emissions in our operations. We also anticipate incurring costs for environmental compliance, including potential legislation and regulation related to climate change. In 2024, our capital spending to support our sustainability goals represented approximately $200 million of our total capital expenditures. In 2025, our profit-generating growth project budget includes approximately $268 million for projects that support our sustainability goals, including investments in emissions reduction and our CLCS business. This represents 15.3% of the total planned capital expenditures. As an energy-intensive business, we are impacted by existing and emerging energy and climate legislation. For example, the European Union Emissions Trading System (ETS) has a direct impact on our operational costs, and we incorporate the costs associated with ETS in our long-range financial planning. We expect our scope 1 and 2 emissions reduction targets to partially mitigate the risk associated with new or modified climate regulation. We identified projects that reduce energy use and CO_2 emissions. These projects are at different stages of development, requiring further assessment of their economic feasibility and GHG reduction potential. We continuously evaluate the business case of each project and prioritize reduction opportunities based on value creation from low-carbon products to support customers' scope 3 goals. This includes evaluating value creation along with the project's rate of return to ensure we continue to generate value for shareholders while reducing our emissions footprint. In 2024, our Value Enhancement Program (VEP) resulted in estimated annual GHG emissions savings of nearly 310,000 metric tons of CO_2e and energy savings of over 5.2 million gigajoules, from a 32 million investment in operating expenses and capital expenditures.

[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 :Alignment with our climate transition plan

(5.4.1.5) Financial metric

Select from:
☑ CAPEX

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

200000000

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

10.9

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

15.3

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

In 2024, our capital spending to support our sustainability goals, including climate and circularity ambitions, represented approximately $200 million of our total capital expenditures, which amounted to $1.839 million, equating to 10.9% of the total. In 2025, we are planning to invest approximately $1.7 billion in capital expenditures. Our profit-generating growth capex project budget includes approximately $268 million for projects that support our sustainability goals, including investments in emissions reduction and our CLCS business. This represents 15.3% of the total planned capital expenditures. Our capital spending plans are aligned with our strategic pillars.
[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

We continuously investigate novel production processes with low to no GHG emissions, especially for potential application in our core olefin and propylene oxide businesses. We strategically invest in emission reduction projects and evaluate their GHG reduction potential and business value, including opportunities to support customers' Scope 3 goals through low-carbon products. Several of these projects involve collaboration with external stakeholders and are built into our long-range plan.
[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:

☑ Other, please specify :Molecular recycling and low carbon technologies

(5.5.3.2) Stage of development in the reporting year

Select from:

☑ Pilot demonstration

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

9.3

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

8

(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

We are active in R&D activities to further develop sustainable and circular solutions such as advanced recycling and other technologies for polymer production which minimize resource use and result in products with an improved carbon footprint. Our advanced recycling technology, MoReTec, can be operated on renewable electricity, further aligning our technology development with our climate commitments and supporting the transition to a low-carbon economy.

Row 2

(5.5.3.1) Technology area

Select from:

☑ Other, please specify :Molecular recycling and other initiatives for circular polymers

(5.5.3.2) Stage of development in the reporting year

Select from:

☑ Full/commercial-scale demonstration

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

0

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

3.3

(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

In November 2023, we made the final investment decision to build a first of its kind, commercial-scale advanced recycling plant at our Wesseling, Germany, site. Using LyondellBasell's proprietary MoReTec technology, this single-train advanced recycling plant will convert post-consumer plastic waste into feedstock for production of new plastic materials. The new plant is expected to have an annual capacity of 50,000 tons per year and is designed to recycle the amount of plastic packaging waste generated by over 1.2 million German citizens per year. In addition, our MoReTec plant can be operated on renewable electricity.

Row 3

(5.5.3.1) Technology area

Select from:

☑ Other, please specify :Molecular recycling technology development

(5.5.3.2) Stage of development in the reporting year

Select from:

☑ Applied research and development

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

1

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

3.2

(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

Our R&D investment in MoReTec technology is aligned with our climate transition plan. In 2024, we initiated construction of MoReTec-1, a commercial-scale chemical recycling facility in Wesseling designed to operate on renewable energy. With an expected annual output of 50,000 metric tons/year of recycled feedstock with a lower carbon footprint compared to feedstock from fossil-based processes, MoReTec enables the production of more sustainable polymers for demanding applications. We are actively developing the MoReTec technology through targeted internal and external R&D projects, focusing on scalable, high-yield platforms that reduce emissions and support circularity. These investments directly contribute to our carbon reduction goals and long-term climate commitments.

Row 4

(5.5.3.1) Technology area

Select from:
☑ Other, please specify :Molecular recycling product development

(5.5.3.2) Stage of development in the reporting year

Select from:
☑ Large scale commercial deployment

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

4.5

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

5.3

(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

Product development in molecular recycling is focused on expanding LYB's Circulen portfolio to deliver high-performance polymers for demanding applications. Using chemical recycling, post-consumer plastic waste is converted into feedstock for CirculenRevive products, suitable for demanding applications such as food contact and healthcare. Recycled content is attributed to these products through a mass balance approach certified under ISCC PLUS. Development efforts aim to enhance material quality, address hard-to-recycle plastics, and support customer sustainability goals through innovative circular solutions.

Row 5

(5.5.3.1) Technology area

Select from:

☑ Other, please specify :Solvent based recycling technology

(5.5.3.2) Stage of development in the reporting year

Select from:

☑ Pilot demonstration

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

1

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

5.4

(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 R&D investment supports the development of our Newcycling technology, which enables recycling of multilayer LDPE waste into high-quality polymers. It contributes to our Circulen portfolio and helps reduce reliance on virgin feedstock while supporting circularity and low-carbon growth.

Row 6

(5.5.3.1) Technology area

Select from:

☑ Other, please specify :CO2 reduction, hydrogen, Co2 utilization

(5.5.3.2) Stage of development in the reporting year

Select from:

☑ Applied research and development

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

0.5

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

4.5

(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

Technology assessment focused on the areas of CO_2 reduction, hydrogen, and CO_2 utilization to identify the most suitable solutions for LYB processes. This assessment supports LYB's pathway to net zero scope 1 and 2 greenhouse gas emissions, which is built on four key levers: energy efficiency, renewable and low carbon electricity, hydrogen, and carbon capture and utilization. Within the hydrogen area, the evaluation considers cost-competitive low carbon hydrogen supply across different production routes to replace more carbon-intensive fuels in the site-level energy mix. For CO_2 utilization, the assessment explores technologies that enable the capture and reuse of CO_2 from operations, particularly from hard-to-abate sources such as the reforming process. The approach is technology agnostic and aims to support LYB's ambition to reduce its energy footprint, lower operational costs, and decarbonize its global operations.
[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)

-16

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

0

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

-95

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

0

(5.9.5) Please explain

The decreased CAPEX spending in 2024 can be attributed to normal fluctuations in global projects activity, with no significant OPEX projects underway in 2024. From time to time we undertake large water-related asset replacements which drive significant spending changes. Changes of this magnitude are not expected to continue year over year, but may happen as major assets age.
[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

☑ Navigate regulations

(5.10.1.3) Factors considered when determining the price

Select all that apply

☑ Alignment with the price of allowances under an Emissions Trading Scheme

☑ Benchmarking against peers

☑ Scenario analysis

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

Our key objectives in setting up an internal carbon pricing mechanism were to (1) support executive decisions to drive low carbon investment, (2) drive efficiency projects, and (3) meet regulatory requirements. We consider several dimensions in our approach to setting price levels, including (1) regional differences, especially when considering regulatory requirements in specific regions such as the EU ETS (2) GHG emission coverage, (3) and the time periods over which our price levels will evolve. Our price levels for our EU manufacturing operations take into account price levels for EU ETS EUAs and our assumptions for their evolution over time, with scenarios that cover the impact of dynamic allocation, the inclusion of chemicals and polymers under CBAM, and global economic conditions that affect the EU market.

(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:

☑ Differentiated

(5.10.1.7) Indicate how and why the price is differentiated

We use a regionally differentiated internal carbon pricing approach. Price levels are defined based on the EU Emissions Trading System (ETS) carbon market for EU projects, and industry benchmarks for the U.S. and the rest of our global operations. In 2024, the internal carbon price was set at 89 EUR/ton CO_2e for EU projects and 42 USD/ton CO_2e for projects in the Americas and globally. This differentiation reflects regional regulatory environments and market expectations.

(5.10.1.8) Pricing approach used – temporal variance

Select from:

☑ Evolutionary

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

As the energy transition progresses, we anticipate an increased value for carbon, driven by expected increases in global carbon regulations and growing customer willingness to pay a premium for low-carbon products.

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

42.16

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

96.97

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

Select all that apply

☑ Capital expenditure

☑ Procurement

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

Select from:

☑ Yes, for some decision-making processes, please specify :capital expenditures and procurement

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

100

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

Select from:

☑ Yes

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

Through internal carbon pricing, we assign a monetary value to our GHG emissions, which is integrated into our business planning and capital allocation processes. This approach drives cost-effective climate action and supports progress toward our Scope 1 and 2 targets. As the energy transition progresses, we anticipate an increased value for carbon, driven by expected increases in global carbon regulations and growing customer willingness to pay a premium for low-carbon products. [Add row]

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

Suppliers

(5.11.1) Engaging with this stakeholder on environmental issues

Select from:

☑ Yes

(5.11.2) Environmental issues covered

Select all that apply

☑ Climate change

☑ Forests

☑ Water

☑ Plastics

Smallholders

(5.11.1) Engaging with this stakeholder on environmental issues

Select from:

☑ No, and we do not plan to within the next two years

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

Select from:

☑ Judged to be unimportant or not relevant

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

None of our Tier 1 suppliers are smallholders.

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

☑ Plastics

Investors and shareholders

(5.11.1) Engaging with this stakeholder on environmental issues

Select from:

☑ Yes

(5.11.2) Environmental issues covered

Select all that apply

☑ Climate change

☑ Plastics

Other value chain stakeholders

(5.11.1) Engaging with this stakeholder on environmental issues

Select from:

☑ No, and we do not plan to within the next two years

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

Select from:

☑ Judged to be unimportant or not relevant

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

The stakeholders above cover the majority of stakeholders we engage with.
[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

☑ Other, please specify :Procurement spend

(5.11.1.3) % Tier 1 suppliers assessed

Select from:

☑ 100%

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

For CDP purposes, we define our key suppliers, those with an annual spend over 1MM USD, as having substantive environmental dependencies and/or impacts. These suppliers are requested to complete an EcoVadis assessment, which covers climate and water topics under environmental theme. Suppliers scoring below 45 overall or on the environmental section must implement a corrective action plan. We also use Together for Sustainability audits on select suppliers to gain transparency.

(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

1181

Forests

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

Select from:
☑ No, we do not assess the dependencies and/or impacts of our suppliers, and have no plans to do so within two years

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

☑ Impact on water availability

☑ Impact on pollution levels

☑ Other, please specify :Procurement spend

(5.11.1.3) % Tier 1 suppliers assessed

Select from:

☑ 100%

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

For CDP purposes, we define our key suppliers, those with an annual spend over 1MM USD, as having substantive environmental dependencies and/or impacts. These suppliers are requested to complete an EcoVadis assessment, which covers climate and water topics under environmental theme. Suppliers scoring below 45 overall or on the environmental section must implement a corrective action plan. We also use Together for Sustainability audits on select suppliers to gain transparency.

(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

1181
[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

☑ Procurement spend

☑ Product lifecycle

☑ Regulatory compliance

☑ Business risk mitigation

☑ Strategic status of suppliers

☑ Supplier performance improvement

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

(5.11.2.4) Please explain

In the first instance, we prioritize our key suppliers – defined as those with annual spend exceeding 1MM USD - for engagement on climate change. In 2024, we updated our supplier climate maturity framework to support the initial scoping of this key supplier pool as a first step toward engagement. This framework helps us assess supplier climate maturity using data from EcoVadis, supplier surveys, and CO_2 emissions data, enabling us to focus our efforts on the greatest impact. As part of our commitment to reducing Scope 3 greenhouse gas emissions by 30% by 2030 (from a 2020 baseline), we accelerated our engagement efforts in 2024. We prioritized bilateral engagements with suppliers of key raw materials for our cracker and I&D operations, as well as selected high-priority suppliers in our APS business. These efforts resulted in over 35 engagement meetings and the collection of more than 130 supplier product carbon footprint (PCF) datapoints—marking strong progress toward increasing the share of primary data in our Scope 3, Category 1 inventory and identifying opportunities for collaboration.

Forests

(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:

☑ Judged to be unimportant or not relevant

(5.11.2.4) Please explain

We have estimated our sourced volume of palm-oil derived raw materials and determined that these represent less than 1% of our total procurement spend. Given their lack of materiality, we are not currently prioritizing supplier engagement specifically on forest-related issues. With that said, all bio-circular feedstocks used to produce our CirculenRenew and +LC products (on a mass balance basis), which may include feedstocks sourced from palm fatty acid distillates, are required to be certified under the International Sustainability and Carbon Certification (ISCC) PLUS scheme. Additionally, our Supplier Code of Conduct outlines our expectation that suppliers comply with all applicable laws, which will include the upcoming EU Regulation on Deforestation Free Products for EU-based suppliers of in-scope products.

Water

(5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

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

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

Select all that apply

☑ Procurement spend

☑ Regulatory compliance

☑ Business risk mitigation

☑ Strategic status of suppliers

☑ Supplier performance improvement

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

(5.11.2.4) Please explain

In the first instance, we prioritize our key suppliers – defined as those with annual spend exceeding 1MM USD - for engagement on water. In 2024, we developed a supplier nature maturity framework to support the initial scoping of this key supplier pool as a first step toward engagement. As part of this framework, we evaluated several parameters related to water, such as actions to recycle or reuse water, quantitative water-related objectives, and, more generally, the supplier's environmental policy and overall water usage.

[Fixed row]

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

Climate change

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

Select from:

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

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

Select from:

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

(5.11.5.3) Comment

Sustainability is an important element of our procurement strategy and is incorporated in our supplier relationship management processes. As a responsible business, we expect our suppliers to comply with applicable laws and internationally recognized standards, conduct business ethically and share the principles set out in our Supplier Code of Conduct. In 2024, we simplified our sustainability clause in our General Terms and Conditions to require compliance with internationally recognized ESG standards. This sustainability clause requires suppliers to complete an ESG assessment upon request, and provides us with the right to implement certain measures in the event of non-compliance with ESG standards.

Forests

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

Select from:

☑ No, and we do not plan to introduce environmental requirements related to this environmental issue within the next two years

(5.11.5.3) Comment

We have estimated our sourced volume of palm-oil derived raw materials and determined that these represent less than 1% of our total procurement spend. Given their lack of materiality, we are not currently prioritizing supplier engagement specifically on forest-related issues. With that said, all bio-circular feedstocks used to produce our CirculenRenew and +LC products (on a mass balance basis), which may include feedstocks sourced from palm fatty acid distillates, are required to be certified under the International Sustainability and Carbon Certification (ISCC) PLUS scheme. Additionally, our Supplier Code of Conduct outlines our expectation that suppliers comply with all applicable laws, which will include the upcoming EU Regulation on Deforestation Free Products for EU-based suppliers of in-scope products.

Water

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

Select from:

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

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

Select from:

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

(5.11.5.3) Comment

Sustainability is an important element of our procurement strategy and is incorporated in our supplier relationship management processes. As a responsible business, we expect our suppliers to comply with applicable laws and internationally recognized standards, conduct business ethically and share the principles set out in our Supplier Code of Conduct. In 2024, we simplified our sustainability clause in our General Terms and Conditions to require compliance with internationally recognized ESG standards. This sustainability clause requires suppliers to complete an ESG assessment upon request, and provides us with the right to implement certain measures in the event of non-compliance with ESG standards.
[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:

☑ Environmental disclosure through a non-public platform

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Certification

☑ On-site third-party audit

☑ Supplier self-assessment

☑ Off-site third-party audit

☑ Supplier scorecard or rating

☑ Grievance mechanism/ Whistleblowing hotline

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

Select from:

☑ 100%

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

Select from:

☑ 76-99%

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

Select from:

☑ 100%

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

Select from:

☑ 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

In this section, we limit the scope of "tier 1 suppliers" to our key suppliers, defined as those with an annual spend exceeding 1MM USD. These suppliers are required to complete an EcoVadis assessment including climate related questions and/or undergo a Together for Sustainability (TfS) audit. By the end of 2024, 71% of key suppliers had been assessed. While our primary focus remains on key suppliers, we may also engage non-key suppliers if they are flagged as high risk through EcoVadis IQ screening. Our General Terms & Conditions provide us with the right to request ESG assessments. We take follow-up actions with all key suppliers who do not comply with the request to complete an EcoVadis assessment. For those identified as higher risk through EcoVadis IQ, we initiate stronger engagement measures. These assessments and audits serve as the foundation for prioritizing further engagement. If an assessment or audit reveals ESG-related concerns, we may collaborate with the supplier to develop a Corrective Action Plan (CAP), outlining specific actions and timelines to address the issues. We actively monitor CAP implementation through ongoing engagement, capacity-building support, and periodic reassessments. This includes supplier training, access to tools and resources, and participation in supplier days. In cases where suppliers fail to make sufficient progress, we may escalate our engagement or, if necessary, reconsider the business relationship.

Water

(5.11.6.1) Environmental requirement

Select from:

☑ Environmental disclosure through a non-public platform

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Certification

☑ On-site third-party audit

☑ Supplier self-assessment

☑ Off-site third-party audit

☑ Supplier scorecard or rating

☑ Grievance mechanism/ Whistleblowing hotline

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

Select from:

☑ 100%

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

Select from:

☑ 76-99%

(5.11.6.5) % tier 1 suppliers with substantive environmental dependencies and/or impacts related to this environmental issue required to comply with this environmental requirement

Select from:

☑ 100%

(5.11.6.6) % tier 1 suppliers with substantive environmental dependencies and/or impacts related to this environmental issue that are in compliance with this environmental requirement

Select from:
☑ 51-75%

(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

In this section, we limit the scope of "tier 1 suppliers" to our key suppliers, defined as those with an annual spend exceeding 1MM USD. These suppliers are required to complete an EcoVadis assessment including water related questions and/or undergo a Together for Sustainability (TfS) audit. By the end of 2024, 71% of key suppliers had been assessed. While our primary focus remains on key suppliers, we may also engage non-key suppliers if they are flagged as high risk through EcoVadis IQ screening. Our General Terms & Conditions provide us with the right to request ESG assessments. We take follow-up actions with all key suppliers who do not comply with the request to complete an EcoVadis assessment. For those identified as higher risk through EcoVadis IQ, we initiate stronger engagement measures. These assessments and audits serve as the foundation for prioritizing further engagement. If an assessment or audit reveals ESG-related concerns, we may collaborate with the supplier to develop a Corrective Action Plan (CAP), outlining specific actions and timelines to address the issues. We actively monitor CAP implementation through ongoing engagement, capacity-building support, and periodic reassessments. This includes supplier training, access to tools and resources, and participation in supplier days. In cases where suppliers fail to make sufficient progress, we may escalate our engagement or, if necessary, reconsider the business relationship.
[Add row]

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

(5.11.7.2) Action driven by supplier engagement

Select from:
☑ Emissions reduction

(5.11.7.3) Type and details of engagement

Capacity building
☑ Provide training, support and best practices on how to measure GHG emissions
☑ Provide training, support and best practices on how to mitigate environmental impact
☑ Support suppliers to set their own environmental commitments across their operations

Information collection
☑ Collect environmental risk and opportunity information at least annually from suppliers
☑ Collect GHG emissions data at least annually from suppliers
☑ Collect targets information at least annually from suppliers

Innovation and collaboration
☑ Collaborate with suppliers on innovations to reduce environmental impacts in products and services
☑ Facilitate adoption of a unified climate transition approach with 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:

☑ 76-99%

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

In this section, we define engagement as completion of an EcoVadis assessment. All of our key suppliers (defined as having procurement spend >1MM USD) have received a request to submit product carbon footprint (PCF) data in addition to the request to complete an EcoVadis assessment. To support suppliers, we offer a range of resources, including access to the Together for Sustainability (TfS) Academy, toolkits on climate action, and free training sessions. In 2024, we delivered approximately 30 training sessions to help suppliers strengthen their sustainability practices. Currently, 387 supplier learners are registered in the TfS Academy, participating in over 1,000 courses focused on environmental topics and EcoVadis assessments. We also engage directly with certain high-emitting suppliers through bilateral meetings to collect PCF data and discuss their emissions reduction plans. These engagements help us obtain more accurate primary data for our Scope 3 emissions inventory and identify opportunities for collaboration on decarbonization. In addition, we promote the use of international industry standards such as the TfS Product Carbon Footprint guidance and the Global Logistics Emissions Council (GLEC) Framework to harmonize Scope 3 accounting across the value chain.

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

Select from:

☑ Yes, please specify the environmental requirement :GHG emission reduction and Product Carbon Footprint Collection (PCF); capacity building

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

Select from:

☑ Unknown

Forests

(5.11.7.1) Commodity

Select from:

☑ Palm oil

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ No other supplier engagement

Water

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ Waste and resource reduction and improved end-of-life management

(5.11.7.3) Type and details of engagement

Capacity building

☑ Provide training, support and best practices on how to mitigate environmental impact

Information collection

☑ Collect targets information at least annually from suppliers

☑ Collect water quality information at least annually from suppliers (e.g., discharge quality, pollution incidents, hazardous substances)

(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:

☑ 51-75%

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

In this section, we define engagement as completion of an EcoVadis assessment. To further support suppliers on this topic, we offer a range of resources, including access to the Together for Sustainability (TfS) Academy and free training sessions. In 2024, we delivered approximately 30 training sessions to help suppliers strengthen their sustainability practices. Currently, 387 supplier learners are registered in the TfS Academy, participating in over 1,000 courses focused on environmental topics and EcoVadis assessments. Courses cover also water-related topics such as water management and wastewater treatment.

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

Select from:

☑ Yes, please specify the environmental requirement :Completing an EcoVadis assessment

(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

☑ Share information about your products and relevant certification schemes

☑ Share information on environmental initiatives, progress and achievements

Innovation and collaboration

☑ Align your organization's goals to support customers' targets and ambitions

☑ 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:

☑ 1-25%

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

As part of its Carbon Value Creation and Capture (CVCC) initiative, LYB engages strategically with key customers on decarbonization goals, including how LYB's Scope 1 and 2 reductions can support customer Scope 3 targets. Engagements focus on raising awareness, understanding willingness to pay, and co-developing low carbon solutions. Customers are increasingly requesting product carbon footprint (PCF) data and expect meaningful reductions to influence procurement. LYB supports these needs by sharing PCF data, offering options for reducing PCF, and identifying value propositions tailored to customer goals around circularity and climate. Follow-up activities include PCF mapping, chain of custody model alignment, and abatement opportunity discussions. To quantify the percentage of stakeholder-associated scope 3 emissions, we assessed the emissions profiles of the 40 customers engaged to date. This analysis indicated that these customers represent approximately 1–25% of stakeholder-associated scope 3 emissions. The figure is conservative, as it only includes first-tier customers, even though some engaged stakeholders may fall beyond this tier.

(5.11.9.6) Effect of engagement and measures of success

We believe sustainability plays a key part in our long-term profitability. In 2024, we formalized the Carbon Value Creation and Capture initiative, ensuring a sound business case for low-carbon products derived from our GHG reduction investments or projects. This effort is generating strong internal momentum by aligning our climate ambition with emerging market opportunities. By developing differentiated low-carbon solutions, we are positioning ourselves to capture first-mover advantages as demand grows. We have a full scope of solutions in our CLCS business, tailored to meet brand owner requirements, including highly regulated applications. Although CLCS currently represents a small portion of our overall business, it is expanding rapidly, with a 65% increase in recycled and renewable-based polymer volumes from 2023 to 2024. The roll-out of our corporate strategy and CLCS business supports low carbon innovation in close collaboration with our customers. Successful collaborations include, for example, our work with Zhengxin Packaging Co. Ltd. to advance a polyethylene-based heat shrink film containing up to 60% post-consumer recycled content.

Climate change

(5.11.9.1) Type of stakeholder

Select from:

☑ Investors and shareholders

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Share information about your products and relevant certification schemes

☑ Share information on environmental initiatives, progress and achievements

Innovation and collaboration

☑ Align your organization's goals to support customers' targets and ambitions

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 51-75%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☑ None

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

Engagement with shareholders occurs in one on one meetings with analysts, shareholders, and their representatives, at our annual general meeting of shareholders and through our regular participation in industry conferences and investor road shows. During 2024, we held hundreds of meetings with investors. We specifically reached out to our top 20 largest shareholders representing more than two thirds of our shareholder base and engaged with 85% of these investors. Shareholders provided feedback on a range of topics, including our overall strategy, portfolio changes, capital allocation goals and sustainability strategy. Management updates the Board regularly on conversations with shareholders and feedback received, and our directors may join these discussions when requested. We are committed to remaining proactive in our engagement efforts and shareholder outreach.

(5.11.9.6) Effect of engagement and measures of success

The success of our engagement strategy with our shareholders is shown by the consistent holdings by investors with high sustainability hurdles for investment, and by shareholders with a mandate to invest in companies making a positive contribution to global emission reduction and achieving UN SDGs.
[Add row]

C6. Environmental Performance - Consolidation Approach

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

Climate change

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

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

We have used the same consolidation approach in our CDP response as used in our 2024 Sustainability Report. Both cover the period from January 1 to December 31, 2024, and include sustainability performance information related to LyondellBasell Industries N.V. (LYB). We include consolidated data from the operations over which we, or one of our subsidiaries, have operational control. The narrative may include information related to our non-operated joint ventures, and activities that occurred during 2025 prior to publishing. Financial data includes joint ventures to the extent appropriate under Generally Accepted Accounting Principles in the U.S. (U.S. GAAP). Consolidated Financial Statements are prepared from the books and records of LYB.

Forests

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

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

We have used the same consolidation approach in our CDP response as used in our 2024 Sustainability Report. Both cover the period from January 1 to December 31, 2024, and include sustainability performance information related to LyondellBasell Industries N.V. (LYB). We include consolidated data from the operations over which we, or one of our subsidiaries, have operational control. The narrative may include information related to our non-operated joint ventures, and activities that occurred during 2025 prior to publishing. Financial data includes joint ventures to the extent appropriate under Generally Accepted Accounting Principles in the U.S. (U.S. GAAP). Consolidated Financial Statements are prepared from the books and records of LYB.

Water

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

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

We have used the same consolidation approach in our CDP response as used in our 2024 Sustainability Report. Both cover the period from January 1 to December 31, 2024, and include sustainability performance information related to LyondellBasell Industries N.V. (LYB). We include consolidated data from the operations over which we, or one of our subsidiaries, have operational control. The narrative may include information related to our non-operated joint ventures, and activities that occurred during 2025 prior to publishing. Financial data includes joint ventures to the extent appropriate under Generally Accepted Accounting Principles in the U.S. (U.S. GAAP). Consolidated Financial Statements are prepared from the books and records of LYB.

Plastics

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

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

We have used the same consolidation approach in our CDP response as used in our 2024 Sustainability Report. Both cover the period from January 1 to December 31, 2024, and include sustainability performance information related to LyondellBasell Industries N.V. (LYB). We include consolidated data from the operations over which we, or one of our subsidiaries, have operational control. The narrative may include information related to our non-operated joint ventures, and activities that occurred during 2025 prior to publishing. Financial data includes joint ventures to the extent appropriate under Generally Accepted Accounting Principles in the U.S. (U.S. GAAP). Consolidated Financial Statements are prepared from the books and records of LYB.

Biodiversity

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

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

We have used the same consolidation approach in our CDP response as used in our 2024 Sustainability Report. Both cover the period from January 1 to December 31, 2024, and include sustainability performance information related to LyondellBasell Industries N.V. (LYB). We include consolidated data from the operations over which we, or one of our subsidiaries, have operational control. The narrative may include information related to our non-operated joint ventures, and activities that occurred during 2025 prior to publishing. Financial data includes joint ventures to the extent appropriate under Generally Accepted Accounting Principles in the U.S. (U.S. GAAP). Consolidated Financial Statements are prepared from the books and records of LYB.
[Fixed row]

C7. Environmental performance - Climate Change

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

Select from:
☑ No

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

(7.1.1.1) Has there been a structural change?

Select all that apply
☑ Yes, an acquisition
☑ Yes, a divestment

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

Acquired: Mechanical recycling assets in California, NATPET at 35%; Divested: Ethylene Oxide and Derivatives business

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

On February 20, 2024, we acquired mechanical recycling assets, including rigid plastics recycling processing lines in California. On May 1, 2024, we divested our Ethylene Oxide and Derivatives business. On May 30, 2024, we acquired a 35% stake in the National Petrochemical Industrial Company (NATPET) joint venture. These structural changes are reflected in the emissions data presented in this CDP response.
[Fixed row]

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

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

Select all that apply

☑ Yes, a change in methodology

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

We follow an operational control accounting approach in line with the GHG Protocol developed by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD), accounting for 100% of GHG emissions from assets under our operational control. Emissions from non-operated assets are reported under Scope 3, Category 15. In 2024, we updated the methodology for calculating Category 15 to align with GHG Protocol guidance and engaged PricewaterhouseCoopers LLP (PwC) to perform a limited assurance engagement over Scope 3 emissions data for categories 1, 11, and 12. During our internal audit of these categories, we identified impacts that exceeded the GHG Protocol's 5% threshold for recalculating base year and prior year emissions. As a result, we adjusted historical emissions for Categories 1, 11, 12, and 15. These changes are reflected in this CDP response. Our Scope 1 and 2 baseline was not recalculated.
[Fixed row]

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

(7.1.3.1) Base year recalculation

Select from:

☑ Yes

(7.1.3.2) Scope(s) recalculated

Select all that apply

☑ Scope 3

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

We follow an operational control accounting approach in line with the GHG Protocol developed by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD), accounting for 100% of GHG emissions from assets under our operational control. Emissions from non-operated assets are reported under Scope 3, Category 15. In 2024, we updated the methodology for calculating Category 15 to align with GHG Protocol guidance and engaged PricewaterhouseCoopers LLP (PwC) to perform a limited assurance engagement over Scope 3 emissions data for categories 1, 11, and 12. During our internal audit of these categories, we identified impacts that exceeded the GHG Protocol's 5% threshold for recalculating base year and prior year emissions. As a result, we adjusted historical emissions for Categories 1, 11, 12, and 15. These changes are reflected in this CDP response. Our Scope 1 and 2 baseline was not recalculated.

(7.1.3.4) Past years' recalculation

Select from:
☑ Yes
[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
☑ The Greenhouse Gas Protocol: Scope 2 Guidance
☑ The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Standard
☑ Smart Freight Centre: GLEC Framework for Logistics Emissions Methodologies
☑ The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
☑ European Union Emission Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) – General guidance for installations
☑ Other, please specify :American Petroleum Institute Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry, 2021

(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	

[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

Small regional offices with energy consumption below 3,500 gigajoules

(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 are not relevant

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

Select from:

☑ Emissions are not relevant

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

Select from:

☑ Emissions are not relevant

(7.4.1.10) Explain why this source is excluded

These sites are excluded from reporting as their energy consumption is below the defined materiality threshold.

(7.4.1.11) Explain how you estimated the percentage of emissions this excluded source represents

We assessed energy consumption and associated scope 2 emissions from our small office facilities based on utility invoices and compared them with our total scope 2 emissions.

Row 2

(7.4.1.1) Source of excluded emissions

Combustion related to emissions from LyondellBasell owned or leased motor vehicles

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

Select all that apply

☑ Scope 1

(7.4.1.3) Relevance of Scope 1 emissions from this source

Select from:

☑ Emissions are not relevant

(7.4.1.8) Estimated percentage of total Scope 1+2 emissions this excluded source represents

0

(7.4.1.10) Explain why this source is excluded

These emissions are immaterial against total scope 1 emissions from the combustion of fuel used in our manufacturing processes.

(7.4.1.11) Explain how you estimated the percentage of emissions this excluded source represents

We assessed fuel consumption volumes for motor vehicles at a representative sample of our sites and based on that, created estimates of fuel consumption for our remaining production assets. The total volume was found to be immaterial for our total scope 1 emissions.

Row 3

(7.4.1.1) Source of excluded emissions

Combustion related to emissions from non-stationary leased and rented equipment such as temporary air compressors and pumps, welding machines, and mobile light plants used onsite

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

Select all that apply

☑ Scope 1

(7.4.1.3) Relevance of Scope 1 emissions from this source

Select from:

☑ Emissions are not relevant

(7.4.1.8) Estimated percentage of total Scope 1+2 emissions this excluded source represents

0

(7.4.1.10) Explain why this source is excluded

These emissions are immaterial against total scope 2 emissions from the procurement of steam and electricity.

(7.4.1.11) Explain how you estimated the percentage of emissions this excluded source represents

We assessed fuel consumption volumes for non-stationary equipment at a representative sample of our sites and based on that, created estimates of fuel consumption for our remaining production assets. The total volume was found to be immaterial for our total scope 1 emissions.

Row 4

(7.4.1.1) Source of excluded emissions

District heating and cooling

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

Select all that apply

☑ Scope 2 (location-based)

☑ Scope 2 (market-based)

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

Select from:

☑ Emissions are not relevant

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

Select from:

☑ Emissions are not relevant

(7.4.1.8) Estimated percentage of total Scope 1+2 emissions this excluded source represents

0

(7.4.1.10) Explain why this source is excluded

These emissions are immaterial against total scope 2 emissions from the procurement of steam and electricity.

(7.4.1.11) Explain how you estimated the percentage of emissions this excluded source represents

Only one of our sites uses purchased cooling water. Upon review, the associated emissions were found to be immaterial when compared to the total scope 2 emissions across all sites.

Row 5

(7.4.1.1) Source of excluded emissions

Cooling water and chilled water purchased from third party suppliers

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

Select all that apply

☑ Scope 2 (location-based)

☑ Scope 2 (market-based)

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

Select from:

☑ Emissions are not relevant

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

Select from:

☑ Emissions are not relevant

(7.4.1.8) Estimated percentage of total Scope 1+2 emissions this excluded source represents

0

(7.4.1.10) Explain why this source is excluded

These emissions are immaterial against total scope 2 emissions from the procurement of steam and electricity.

(7.4.1.11) Explain how you estimated the percentage of emissions this excluded source represents

Only one of our sites uses purchased cooling water. Upon review, the associated emissions were found to be immaterial when compared to the total scope 2 emissions across all sites.

Row 6

(7.4.1.1) Source of excluded emissions

Services, packaging of products, tolling activities, Brazil sites, intercompany transactions, and feedstock and raw material volumes that are not used in the production process in our manufacturing assets but that are purchased for trading purposes

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

Select all that apply

☑ Scope 3: Purchased goods and services

(7.4.1.6) Relevance of Scope 3 emissions from this source

Select from:

☑ Emissions are not relevant

(7.4.1.10) Explain why this source is excluded

These emissions are immaterial against total scope 3 emissions.

(7.4.1.11) Explain how you estimated the percentage of emissions this excluded source represents

We assessed spend volumes for the listed sources and found them to be immaterial against larger spend areas such as feedstock procurement.

Row 7

(7.4.1.1) Source of excluded emissions

Intercompany transactions and feedstock and raw material volumes that are not used in the production process in our manufacturing assets but that are purchased and sold for trading purposes

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

Select all that apply

☑ Scope 3: Use of sold products

(7.4.1.6) Relevance of Scope 3 emissions from this source

Select from:

☑ Emissions are not relevant

(7.4.1.10) Explain why this source is excluded

These emissions are immaterial against total scope 3 emissions.

(7.4.1.11) Explain how you estimated the percentage of emissions this excluded source represents

These emissions are excluded by definition per the GHG Protocol and unable to estimate/emissions are immaterial.

Row 8

(7.4.1.1) Source of excluded emissions

Packaging volumes for products sold to third parties, intercompany transactions, and feedstock and raw material volumes that are not used in the production process in our manufacturing assets but that are purchased and sold for trading purposes

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

Select all that apply

☑ Scope 3: End-of-life treatment of sold products

(7.4.1.6) Relevance of Scope 3 emissions from this source

Select from:

☑ Emissions are not relevant

(7.4.1.10) Explain why this source is excluded

These emissions are immaterial against total scope 3 emissions.

(7.4.1.11) Explain how you estimated the percentage of emissions this excluded source represents

These emissions are excluded by definition per the GHG Protocol and unable to estimate/emissions are immaterial.
[Add row]

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

Scope 1

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

15600000

(7.5.3) Methodological details

Scope 1 emission inventory covering all greenhouse gases including emissions from the onsite combustion of fuels for energy and process-related emissions. Accounting principles and methodology are in line with the GHG Protocol Corporate Standard - see exclusions listed in C7.4.1 for scope 1, and methodology frameworks used in 7.2. Heating values and emission factors are referenced from the API Conpendium of GHG Emission Methodologies for procured fuels. Heating values and emission factors for site-specific fuels produced as a by-product of our manufacturing processes are referenced and compiled using site-specific data.

Scope 2 (location-based)

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

7100000

(7.5.3) Methodological details

Scope 2 emission inventory covers emissions from purchased steam and electricity. Accounting principles and methodology are in line with the GHG Protocol Corporate Standard and associated Scope 2 guidance - see exclusions listed in C7.4.1 for scope 2 (location-based), and methodology frameworks used in 7.2. Location-based emission factors are sourced from the International Energy Agency Emission Factors 2023.

Scope 2 (market-based)

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

7600000

(7.5.3) Methodological details

Scope 2 emission inventory covers emissions from purchased steam and electricity. Accounting principles and methodology are in line with the GHG Protocol Corporate Standard and associated Scope 2 guidance - see exclusions listed in C7.4.1 for scope 2 (market-based), and methodology frameworks used in 7.2. Market-based emission factors are obtained directly from utility suppliers if possible, and substituted with location-based emission factors otherwise. Coverage of supplier-specific emission factors.

Scope 3 category 1: Purchased goods and services

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

28500000

(7.5.3) Methodological details

Average data: Data Quantity (mass and volume) of the goods and services, namely refining and petrochemical feedstocks, additives, chemicals, and catalysts were obtained from our internal management systems. Emission factors were sourced from internal and customer LCA studies, and complemented by different commercial and public data sources, including ecoinvent, Gabi, PlasticsEurope, and regional regulatory databases.

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

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

2000000

(7.5.3) Methodological details

Average data: Data Quantity (mass and volume) of fuels, electricity and steam used in our operations for energy related purposes were obtained from our internal management systems. Emission factors were sourced from different commercial and public data sources, including ecoinvent, Gabi and DEFRA.

Scope 3 category 4: Upstream transportation and distribution

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

1000000

(7.5.3) Methodological details

Distance based: Data on the transportation of our purchased goods, including transport mode, tonnage and distance data, was compiled for each region from our internal management systems. Emission factors were sourced primarily from the GLEC framework for the chemical industry that was developed in a joint study led by Cefic and the Smart Freight Centre.

Scope 3 category 5: Waste generated in operations

(7.5.1) Base year end

12/31/2020

Scope 3 category 6: Business travel

(7.5.1) Base year end

12/31/2020

Scope 3 category 7: Employee commuting

(7.5.1) Base year end

12/31/2020

Scope 3 category 8: Upstream leased assets

(7.5.3) Methodological details

Scope 3 category 10: Processing of sold products

(7.5.3) Methodological details

Scope 3 category 11: Use of sold products

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

48100000

(7.5.3) Methodological details

Average data: Data Quantity (mass and volume) of fuel products from our refinery operations and oxyfuels business, was compiled from our internal management systems. Emission factors were sourced from different public data sources, including DEFRA.

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

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

16200000

(7.5.3) Methodological details

Average data: Data Quantity (mass and volume) for our products, including sold-to region and application, was compiled from our internal management systems. Emission factors were sourced from different commercial and public data sources, including ecoinvent, Gabi, PlasticsEurope, and regional regulatory databases. We considered the product volumes sold in each region for specific applications to calculate emissions in this category. We then applied specific emission factors for each waste treatment type.

Scope 3 category 13: Downstream leased assets

(7.5.3) Methodological details

Scope 3 category 14: Franchises

(7.5.3) Methodological details

Scope 3 category 15: Investments

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

3100000

(7.5.3) Methodological details

Average data: Revenue data from investee companies based on share of investment was used as the calculation basis, reflecting our equity investments as of December 31, 2024. CO2 equivalent emissions were calculated on the basis of our equity investments using the Supply Chain Greenhouse Gas Emission Factors for US Industries and Commodities published from EPA.

Scope 3: Other (upstream)

(7.5.1) Base year end

12/30/2020

(7.5.2) Base year emissions (metric tons CO2e)

1700000

(7.5.3) Methodological details

Other upstream scope 3 emissions include categories 2, 5 and 6. For capital goods (Category 2), we use a spend-based approach based on capital expenditures related to projects, equipment upgrades, and replacements. For waste generated in operations (Category 5), we apply an average-data method using waste tonnage data by treatment type (e.g., incineration, recycling, landfill) from our internal systems. Emission factors are sourced from databases such as ecoinvent, GaBi, PlasticsEurope, and regional regulatory sources. For business travel (Category 6), we use a distance-based method to calculate emissions from global employee travel. Air travel emissions are based on haul category, class type, and include non-CO_2 radiative forcing effects. Rental car emissions are calculated using rental days, car size, and an assumed daily distance of 82 kilometers. Travel not booked through our agency is estimated by comparing spend data between our travel agency and expense system. Emissions from hotel stays, rail, bus, and taxi/rideshare travel are excluded. Air travel not booked through the agency represents approximately 8% of reported emissions in this category, and rental car travel not booked through the agency represents approximately 2%.

Scope 3: Other (downstream)

(7.5.1) Base year end

12/30/2020

(7.5.2) Base year emissions (metric tons CO2e)

600000

(7.5.3) Methodological details

Other downstream scope 3 emissions include categories 7 and 9. For employee commuting (Category 7), we apply an average-data method based on regional employee numbers and commuting mode assumptions. Emission factors specific to each commuting mode are sourced from regional databases. For downstream transportation and distribution (Category 9), we use a distance-based method. Data on transport mode, tonnage, and distance for finished goods is compiled regionally from our internal systems. Emission factors are sourced from the GLEC framework for the chemical industry, developed in collaboration with Cefic and the Smart Freight Centre. For some transport modes, we also receive GHG data directly from freight suppliers using the same GLEC methodology.
[Fixed row]

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

Reporting year

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

15000000

(7.6.3) Methodological details

Scope 1 GHG emissions include direct emissions from the combustion of fossil and non-fossil fuels in stationary equipment and machinery, process-related emissions from venting, flaring, wastewater treatment, and peroxide decomposition, and fugitive emissions including methane and refrigerants. Fuel usage data is collected from monthly utility invoices and readings from on-site meters. Emission factors for fuels such as natural gas, refinery gas, diesel, hydrogen, coal, coke, lignite, butene, and pitch are sourced from the American Petroleum Institute. Site-generated fuels (e.g., fuel gas/tail gas, fuel A xTBE, fuel A POTBA, and fuel B) use calculated values based on site-specific heating values and emissions. Venting and flaring emissions are measured directly and converted to CO_2e using Global Warming Potentials (GWPs) from the IPCC's Sixth Assessment Report. Fugitive emissions, including VOCs and methane, are measured per regulatory requirements and converted using the same GWPs. Refrigerant losses are calculated using site-specific records and converted to CO_2e using GWPs from the same IPCC report. Scope 1 emissions are inclusive of CO_2, CH_4, N_2O, HCFCs, and HFCs. PFCs, NF_3, and SF_6 are not emitted at our sites. Emissions data by individual gas is not disclosed, as the majority relates to CO_2. CO_2e emissions are calculated by multiplying activity data by the relevant emission factor and/or GWP. All emission factors are updated annually where applicable. Emissions associated with the sale of energy generated from our operations to other companies are not deducted from Scope 1 totals, in line with the Protocol. GHG quantification is subject to inherent measurement uncertainty due to limitations in emission factors, scientific models, and data collection methods. Management's selection of acceptable techniques could result in materially different reported values.
[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)

7200000

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

7100000

(7.7.4) Methodological details

We calculate Scope 2 GHG emissions in accordance with the GHG Protocol Scope 2 Guidance, applying both the location-based and market-based methods. Location-based Scope 2 emissions include indirect GHG emissions from the generation of purchased or acquired electricity and steam, using regional average emission factors. Market-based Scope 2 emissions reflect contractual instruments such as Energy Attribute Certificates (EACs) and utility-specific emission factors, where available. Electricity and steam consumption data is collected from monthly utility invoices. Emission factors for steam are based on the most recent data provided by third-party steam suppliers. For electricity, location-based emission factors are sourced from the U.S. Energy Information Administration (for U.S. sites), the European Environment Agency (for European sites), and the International Energy Agency (for other regions). For market-based emissions, we apply EACs procured through power purchase agreements to reflect renewable energy procurement at our manufacturing sites. EACs are retired by the end of the reporting year. Any remaining electricity not covered by EACs is converted to emissions using a hierarchy of emission factors: (1) utility-specific market-based emission factors provided by electricity suppliers, and (2) grid-average emission factors, which are the same as those used for the location-based method. Scope 2 emissions include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and industrial gases such as hydrochlorofluorocarbons (HCFCs) and hydrofluorocarbons (HFCs). Perfluorocarbons (PFCs), nitrogen trifluoride (NF_3), and sulfur hexafluoride (SF_6) are not emitted at our sites. Emissions are reported in CO_2 equivalents (CO_2e) using Global Warming Potentials (GWPs) from the IPCC's Sixth Assessment Report (AR6 – 100 year). CO_2e emissions are calculated by multiplying activity data by the relevant emission factor and/or GWP. All emission factors are reviewed and updated annually where applicable. GHG emissions quantification is subject to inherent measurement uncertainty due to limitations in emission factors, scientific models, and data collection methods.
[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)

33100000

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

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

0.55

(7.8.5) Please explain

Average data: Data Quantity (mass and volume) of the goods and services, namely refining and petrochemical feedstocks, additives, chemicals, and catalysts were obtained from our internal management systems. Emission factors were sourced from internal and customer LCA studies, and complemented by different commercial and public data sources, including ecoinvent, Gabi, PlasticsEurope, and regional regulatory databases.

Capital goods

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

This category was quantitatively assessed and found not to be a significant contributor to total scope 3 emissions. It is therefore not considered relevant by itself and has been consolidated under 'Other (upstream),' which includes categories 2, 5, and 6.

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)

2300000

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

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

0

(7.8.5) Please explain

Average data: Data Quantity (mass and volume) of fuels, electricity and steam used in our operations for energy related purposes were obtained from our internal management systems. Emission factors were sourced from different commercial and public data sources, including ecoinvent, Gabi and DEFRA.

Upstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

1000000

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Distance-based method

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

13.13

(7.8.5) Please explain

Distance based: Data on the transportation of our purchased goods, including transport mode, tonnage and distance data, was compiled for each region from our internal management systems. Emission factors were sourced primarily from the GLEC framework for the chemical industry that was developed in a joint study led by Cefic and the Smart Freight Centre.

Waste generated in operations

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

This category was quantitatively assessed and found not to be a significant contributor to total scope 3 emissions. It is therefore not considered relevant by itself and has been consolidated under 'Other (upstream),' which includes categories 2, 5, and 6.

Business travel

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

This category was quantitatively assessed and found not to be a significant contributor to total scope 3 emissions. It is therefore not considered relevant by itself and has been consolidated under 'Other (upstream),' which includes categories 2, 5, and 6.

Employee commuting

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

This category was quantitatively assessed and found not to be a significant contributor to total scope 3 emissions. It is therefore not considered relevant by itself and has been consolidated under 'Other (downstream),' which includes categories 7 and 9.

Upstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

LyondellBasell does not lease any significant upstream assets

Downstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

This category was quantitatively assessed and found not to be a significant contributor to total scope 3 emissions. It is therefore not considered relevant by itself and has been consolidated under 'Other (downstream),' which includes categories 7 and 9.

Processing of sold products

(7.8.1) Evaluation status

Select from:

☑ Relevant, not yet calculated

(7.8.5) Please explain

LyondellBasell does not calculate scope 3 emissions linked to the processing of sold products. Given the many end use applications for our products, and as stated in the WBCSD Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain, "chemical companies are not required to report scope 3, category 10 emissions, since reliable figures are difficult to obtain due to the diverse application and customer structure". Our portfolio of products includes a diverse range of products, from polymers to different intermediate chemicals, with reliable data difficult to obtain. This absence of a standard methodology for accounting is a recognized gap that we are working towards addressing as part of industry led efforts through Cefic.

Use of sold products

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

53300000

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

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

0

(7.8.5) Please explain

Average data: Data Quantity (mass and volume) of fuel products from our refinery operations and oxyfuels business, was compiled from our internal management systems. Emission factors were sourced from different public data sources, including DEFRA.

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)

16100000

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

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

0

(7.8.5) Please explain

Data Quantity (mass and volume) for our products, including sold-to region and application, was compiled from our internal management systems. Emission factors were sourced from different commercial and public data sources, including ecoinvent, Gabi, PlasticsEurope, and regional regulatory databases. We considered the product volumes sold in each region for specific applications to calculate emissions in this category. We then applied specific emission factors for each waste treatment type.

Downstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

LyondellBasell does not lease any significant downstream assets.

Franchises

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

LyondellBasell has no franchised businesses or assets.

Investments

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

4200000

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

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

0

(7.8.5) Please explain

Average data: Revenue data from investee companies based on share of investment was used as the calculation basis, reflecting our equity investments as of December 31, 2024. CO2 equivalent emissions were calculated on the basis of our equity investments using the Supply Chain Greenhouse Gas Emission Factors for US Industries and Commodities published from EPA.

Other (upstream)

(7.8.1) Evaluation status

Select from:
☑ Relevant, calculated

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

1200000

(7.8.3) Emissions calculation methodology

Select all that apply
☑ Other, please specify :Capital goods (spend-based method); Waste generated in operations (average data method); business travel (distance-based method)

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

0

(7.8.5) Please explain

Other upstream scope 3 emissions include categories 2, 5 and 6. For capital goods (Category 2), we use a spend-based approach based on capital expenditures related to projects, equipment upgrades, and replacements. For waste generated in operations (Category 5), we apply an average-data method using waste tonnage data by treatment type (e.g., incineration, recycling, landfill) from our internal systems. Emission factors are sourced from databases such as ecoinvent, GaBi, PlasticsEurope, and regional regulatory sources. For business travel (Category 6), we use a distance-based method to calculate emissions from global employee travel. Air travel emissions are based on haul category, class type, and include non-CO_2 radiative forcing effects. Rental car emissions are calculated using rental days, car size, and an assumed daily distance of 82 kilometers. Travel not booked through our agency is estimated by comparing spend data between our travel agency and expense system. Emissions from hotel stays, rail, bus, and taxi/rideshare travel are excluded. Air travel not booked through the agency represents approximately 8% of reported emissions in this category, and rental car travel not booked through the agency represents approximately 2%.

Other (downstream)

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

600000

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Other, please specify :Employee commuting (average data method); business travel (distance-based method); Downstream transportation and distribution (distance-based method)

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

0

(7.8.5) Please explain

Other downstream scope 3 emissions include categories 7 and 9. For employee commuting (Category 7), we apply an average-data method based on regional employee numbers and commuting mode assumptions. Emission factors specific to each commuting mode are sourced from regional databases. For downstream transportation and distribution (Category 9), we use a distance-based method. Data on transport mode, tonnage, and distance for finished goods is compiled

regionally from our internal systems. Emission factors are sourced from the GLEC framework for the chemical industry, developed in collaboration with Cefic and the Smart Freight Centre. For some transport modes, we also receive GHG data directly from freight suppliers using the same GLEC methodology.
[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:
☑ Complete

(7.9.1.3) Type of verification or assurance

Select from:
☑ Limited assurance

(7.9.1.4) Attach the statement

LYB Sustainability Report 2024, p.122-132.pdf

(7.9.1.5) Page/section reference

The attached statement contains extracted pages 122–132 of our 2024 Sustainability Report. Printed page 123 (corresponding to PDF page 2 of the attachment) includes the table titled "GHG emissions and energy consumption and mix metrics," which presents our verified scope 1 emissions. These total 15 million metric tons CO_2e, representing 100% of our reported scope 1 emissions. The data was subject to limited assurance by PwC, conducted in accordance with AICPA AT-C 105 and AT-C 210.

(7.9.1.6) Relevant standard

Select from:
☑ Attestation standards established by AICPA (AT105)

(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 location-based

(7.9.2.2) Verification or assurance cycle in place

Select from:

☑ Annual process

(7.9.2.3) Status in the current reporting year

Select from:

☑ Complete

(7.9.2.4) Type of verification or assurance

Select from:

☑ Limited assurance

(7.9.2.5) Attach the statement

LYB Sustainability Report 2024, p.122-132.pdf

(7.9.2.6) Page/ section reference

The attached statement contains extracted pages 122–132 of our 2024 Sustainability Report. Printed page 123 (corresponding to PDF page 2 of the attachment) includes the table titled "GHG emissions and energy consumption and mix metrics," which presents our verified scope 2 emissions: 7.1 million metric tons CO_2e (market-based) and 7.2 million metric tons CO_2e (location-based), representing 100% of our reported scope 2 emissions.

(7.9.2.7) Relevant standard

Select from:

☑ Attestation standards established by AICPA (AT105)

(7.9.2.8) Proportion of reported emissions verified (%)

100

Row 2

(7.9.2.1) Scope 2 approach

Select from:
☑ Scope 2 market-based

(7.9.2.2) Verification or assurance cycle in place

Select from:
☑ Annual process

(7.9.2.3) Status in the current reporting year

Select from:
☑ Complete

(7.9.2.4) Type of verification or assurance

Select from:
☑ Limited assurance

(7.9.2.5) Attach the statement

LYB Sustainability Report 2024, p.122-132.pdf

(7.9.2.6) Page/ section reference

The attached statement contains extracted pages 122–132 of our 2024 Sustainability Report. Printed page 123 (corresponding to PDF page 2 of the attachment) includes the table titled "GHG emissions and energy consumption and mix metrics," which presents our verified scope 2 emissions: 7.1 million metric tons CO_2e (market-based) and 7.2 million metric tons CO_2e (location-based), representing 100% of our reported scope 2 emissions.

(7.9.2.7) Relevant standard

Select from:

☑ Attestation standards established by AICPA (AT105)

(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

☑ Scope 3: Use of sold products

☑ 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:
☑ Complete

(7.9.3.4) Type of verification or assurance

Select from:
☑ Limited assurance

(7.9.3.5) Attach the statement

LYB Sustainability Report 2024, p.122-132.pdf

(7.9.3.6) Page/section reference

The attached statement contains extracted pages 122–132 of our 2024 Sustainability Report. Printed page 123 (corresponding to PDF page 2 of the attachment) includes the table titled “GHG emissions and energy consumption and mix metrics,” which presents verified scope 3 emissions for Categories 1, 11, and 12, representing 100% of reported emissions within those categories.

(7.9.3.7) Relevant standard

Select from:
☑ Attestation standards established by AICPA (AT105)

(7.9.3.8) Proportion of reported emissions verified (%)

100
[Add row]

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

Select from:
☑ Decreased

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

Change in renewable energy consumption

(7.10.1.1) Change in emissions (metric tons CO2e)

162000

(7.10.1.2) Direction of change in emissions

Select from:

☑ Decreased

(7.10.1.3) Emissions value (percentage)

0.73

(7.10.1.4) Please explain calculation

*In 2024, several of our PPAs became operational resulting in 447,273 MWh of renewable electricity delivered to LYB. These projects allowed us to reduce GHG emissions from our operations by 162,000 metric tons CO2e. Our 2023 market-based scope 1 and 2 footprint was 22,300,000 metric tons CO2e. This decrease in emissions corresponded to a 0.73% decrease (162,000 / 22,300,000 *100).*

Other emissions reduction activities

(7.10.1.1) Change in emissions (metric tons CO2e)

310000

(7.10.1.2) Direction of change in emissions

Select from:

☑ Decreased

(7.10.1.3) Emissions value (percentage)

1.39

(7.10.1.4) Please explain calculation

*In 2024, LYB avoided nearly 310,000 metric tons CO2e through the implementation of GHG emissions reduction projects. Our 2023 market-based scope 1 and 2 footprint was 22,300,000 metric tons CO2e. This decrease in emissions corresponded to a 1.39% decrease (310,000 / 22,300,000 *100).*

Divestment

(7.10.1.1) Change in emissions (metric tons CO2e)

201000

(7.10.1.2) Direction of change in emissions

Select from:

☑ Decreased

(7.10.1.3) Emissions value (percentage)

0.9

(7.10.1.4) Please explain calculation

In May 2024, we divested our Ethylene Oxide and Derivatives business. As a result, only scope 1 and 2 emissions up to that point were included in our 2024 reporting. If emissions from this business had remained consistent with 2023 levels, the divestment led to an estimated reduction of 201,000 metric tons CO2e, calculated as the difference between our 2023 and 2024 market-based scope 1 and 2 emissions. Given our 2023 footprint of 22,300,000 metric tons CO2e, this reduction represents a 0.9% decrease in total scope 1 and 2 emissions.

Other

(7.10.1.1) Change in emissions (metric tons CO2e)

473000

(7.10.1.2) Direction of change in emissions

Select from:
☑ Increased

(7.10.1.3) Emissions value (percentage)

2.12

(7.10.1.4) Please explain calculation

The remaining change in scope 1 and 2 emissions from 2023 to 2024 is attributed to shifts in the production mix, such as production occurring at different sites, using different technologies, or involving different products. These shifts influenced the emissions profile in ways that cannot be attributed to a single, specific driver. As such, the resulting residual increase in emissions is accounted for under this category.
[Fixed row]

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

Select from:
☑ Market-based

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

Select from:
☑ No

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

Select from:
☑ Yes

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

Row 1

(7.15.1.1) Greenhouse gas

Select from:
☑ CO2

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

13200000

(7.15.1.3) GWP Reference

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

Row 2

(7.15.1.1) Greenhouse gas

Select from:
☑ CH4

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

46800

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Sixth Assessment Report (AR6 - 100 year)

Row 3

(7.15.1.1) Greenhouse gas

Select from:
☑ N2O

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

26000

(7.15.1.3) GWP Reference

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

Row 4

(7.15.1.1) Greenhouse gas

Select from:
☑ HFCs

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

15600

(7.15.1.3) GWP Reference

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

Row 5

(7.15.1.1) Greenhouse gas

Select from:
☑ SF6

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

309

(7.15.1.3) GWP Reference

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

Row 6

(7.15.1.1) Greenhouse gas

Select from:
☑ Other, please specify :HCFCs

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

1900

(7.15.1.3) GWP Reference

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

Row 7

(7.15.1.1) Greenhouse gas

Select from:

☑ Other, please specify :CO2, CH4 and N2O mainly from flaring activities

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

1710000

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Sixth Assessment Report (AR6 - 100 year)

[Add row]

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

Belgium

(7.16.1) Scope 1 emissions (metric tons CO2e)

547

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

2100

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

2160

Brazil

(7.16.1) Scope 1 emissions (metric tons CO2e)

5

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

2070

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

5

China

(7.16.1) Scope 1 emissions (metric tons CO2e)

62

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

28100

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

30000

Egypt

(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

France

(7.16.1) Scope 1 emissions (metric tons CO2e)

1170000

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

71200

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

64800

Germany

(7.16.1) Scope 1 emissions (metric tons CO2e)

2180000

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

349000

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

484000

Hong Kong SAR, China

(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

India

(7.16.1) Scope 1 emissions (metric tons CO2e)

28

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

11200

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

10900

Indonesia

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

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

2590

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

2590

Italy

(7.16.1) Scope 1 emissions (metric tons CO2e)

56400

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

87600

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

113000

Japan

(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

Luxembourg

(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

Malaysia

(7.16.1) Scope 1 emissions (metric tons CO2e)

81

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

8020

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

6150

Mexico

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

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

11700

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

13600

Netherlands

(7.16.1) Scope 1 emissions (metric tons CO2e)

532000

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

603000

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

676000

Philippines

(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

Poland

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

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

995

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

1210

Republic of Korea

(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

Saudi Arabia

(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)

0

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

0

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

0

Spain

(7.16.1) Scope 1 emissions (metric tons CO2e)

1260

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

25500

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

25500

Sweden

(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

Taiwan, China

(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

Thailand

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

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

2010

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

2150

Turkey

(7.16.1) Scope 1 emissions (metric tons CO2e)

1370

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

647

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

962

United Arab Emirates

(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

United Kingdom of Great Britain and Northern Ireland

(7.16.1) Scope 1 emissions (metric tons CO2e)

31000

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

17400

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

14500

United States of America

(7.16.1) Scope 1 emissions (metric tons CO2e)

11100000

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

5940000

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

5620000

Viet Nam

(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
[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	*O&P Americas*	*7260000*
Row 2	*O&P EAI*	*3200000*
Row 3	*I&D*	*2640000*
Row 4	*Refining*	*1920000*
Row 5	*APS*	*10400*
Row 6	*Technology*	*853*

[Add row]

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

Chemicals production activities

(7.19.1) Gross Scope 1 emissions, metric tons CO2e

13100000

(7.19.3) Comment

Gross scope 1 emissions associated with chemical production activities are calculated as total gross scope 1 emissions, excluding those from the refining business division.
[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	*O&P Americas*	*2710000*	*2580000*
Row 2	*O&P EAI*	*462000*	*602000*
Row 3	*I&D*	*2380000*	*2380000*
Row 4	*Refining*	*1380000*	*1280000*
Row 5	*APS*	*193000*	*180000*
Row 6	*Technology*	*33200*	*40600*

[Add row]

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

Chemicals production activities

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

5780000

(7.21.2) Scope 2, market-based (if applicable), metric tons CO2e

5790000

(7.21.3) Comment

Gross scope 2 emissions associated with chemical production activities are calculated as total gross scope 2 emissions, excluding those from the refining business division.

Oil and gas production activities (upstream)

(7.21.3) Comment

Oil and gas production activities (midstream)

(7.21.3) Comment

Oil and gas production activities (downstream)

(7.21.3) Comment

[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)

12000000

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

4990000

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

4850000

(7.22.4) Please explain

Our Consolidated Financial Statements have been prepared under accounting principles generally accepted in the United States (“U.S. GAAP”). We account for equity method investments using the equity method of accounting if we have the ability to exercise significant influence over, but do not control an investee.

All other entities

(7.22.1) Scope 1 emissions (metric tons CO2e)

2980000

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

2170000

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

2220000

(7.22.4) Please explain

We account for and report the GHG emissions and energy consumption metrics under the operational control approach, which includes operations over which we, or one of our subsidiaries, have operational control. Other entities includes equity investments which we operate.
[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:
☑ Yes

(7.23.1) Break down your gross Scope 1 and Scope 2 emissions by subsidiary.

Row 1

(7.23.1.1) Subsidiary name

A Schulman Belgium BVBA

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

91

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

94

Row 2

(7.23.1.1) Subsidiary name

A Schulman Plastik Sanayi ve Ticaret Anonim Sirketi

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

1370

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

647

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

962

Row 3

(7.23.1.1) Subsidiary name

A Schulman Polska Sp. z o.o.

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

995

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

1210

Row 4

(7.23.1.1) Subsidiary name

A. Schulman Castellon S.L

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

50

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

1220

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

899

Row 5

(7.23.1.1) Subsidiary name

A. Schulman de Mexico, S.A. de C.V.

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

7140

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

8050

Row 6

(7.23.1.1) Subsidiary name

A. Schulman Gainsborough Ltd

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

746

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

623

Row 7

(7.23.1.1) Subsidiary name

A. Schulman GmbH

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

253

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

5160

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

28

Row 8

(7.23.1.1) Subsidiary name

A. Schulman Inc. Limited

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

1620

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

1350

Row 9

(7.23.1.1) Subsidiary name

A. Schulman Nordic AB

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

0

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

0

Row 10

(7.23.1.1) Subsidiary name

A. Schulman Plasticos do Brasil LTDA.

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

5

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

946

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

2

Row 11

(7.23.1.1) Subsidiary name

A. Schulman Plastics BV

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

547

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

2010

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

2060

Row 12

(7.23.1.1) Subsidiary name

A. Schulman Plastics India Private Limited

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

28

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

4560

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

4420

Row 13

(7.23.1.1) Subsidiary name

A. Schulman Plastics S.r.l.

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

1490

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

2210

Row 14

(7.23.1.1) Subsidiary name

A. Schulman Plastics SAS

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

1210

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

2430

Row 15

(7.23.1.1) Subsidiary name

A. Schulman 's-Gravendeel B.V.

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

1850

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

3310

Row 16

(7.23.1.1) Subsidiary name

A. Schulman Thermoplastic Compounds Limited

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

1040

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

868

Row 17

(7.23.1.1) Subsidiary name

Basell Advanced Polyolefins (Dalian) Co., Ltd

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

4470

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

4800

Row 18

(7.23.1.1) Subsidiary name

Basell Advanced Polyolefins (Suzhou) Co., Ltd.

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

26

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

8300

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

8910

Row 19

(7.23.1.1) Subsidiary name

Basell Advanced Polyolefins (Thailand) Company Ltd.

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

2010

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

2150

Row 20

(7.23.1.1) Subsidiary name

Basell Bayreuth Chemie GmbH

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

373

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

13500

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

19400

Row 21

(7.23.1.1) Subsidiary name

Basell Benelux B.V.

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

3050

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

43300

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

55100

Row 22

(7.23.1.1) Subsidiary name

Basell Poliolefinas Iberica S.L.

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

1210

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

24300

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

24600

Row 23

(7.23.1.1) Subsidiary name

Basell Poliolefinas Ltda.

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

962

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

2

Row 24

(7.23.1.1) Subsidiary name

Basell Poliolefinas S. de R.L. de C.V

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

4560

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

5510

Row 25

(7.23.1.1) Subsidiary name

Basell Poliolefine Italia S.r.l.

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

56400

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

86100

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

111000

Row 26

(7.23.1.1) Subsidiary name

Basell Polyolefine GmbH

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

2170000

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

330000

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

464000

Row 27

(7.23.1.1) Subsidiary name

Basell Polyolefines France S.A.S.

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

940000

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

26700

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

21000

Row 28

(7.23.1.1) Subsidiary name

Basell Polyolefins India Private Limited

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

6650

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

6440

Row 29

(7.23.1.1) Subsidiary name

Basell Polyolefins UK Limited

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

31000

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

14000

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

11700

Row 30

(7.23.1.1) Subsidiary name

Basell Sales & Marketing Company B.V.

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

143

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

153

Row 31

(7.23.1.1) Subsidiary name

Bulk Molding Compounds Do Brasil Industria De Plasticos Reforcados LTDA

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

167

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

0

Row 32

(7.23.1.1) Subsidiary name

Bulk Molding Compounds, Inc.

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

942

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

810

Row 33

(7.23.1.1) Subsidiary name

Colortech de Amazonia Ltda.

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

0

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

0

Row 34

(7.23.1.1) Subsidiary name

Elian S.A.S.

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

149

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

298

Row 35

(7.23.1.1) Subsidiary name

Equistar Chemicals, LP

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

7800000

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

2880000

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

2660000

Row 36

(7.23.1.1) Subsidiary name

Guangzhou Basell Advanced Polyolefins Co., Ltd

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

6800

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

7190

Row 37

(7.23.1.1) Subsidiary name

Houston Refining LP

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

1920000

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

1380000

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

1280000

Row 38

(7.23.1.1) Subsidiary name

LYB Premix LLC

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

2070

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

1700

Row 39

(7.23.1.1) Subsidiary name

LYB Recycling CA, LLC

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

176

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

0

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

0

Row 40

(7.23.1.1) Subsidiary name

Lyondell Chemical Company

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

1330000

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

1640000

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

1640000

Row 41

(7.23.1.1) Subsidiary name

Lyondell Chemie Nederland B.V.

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

320000

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

290000

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

239000

Row 42

(7.23.1.1) Subsidiary name

Lyondell Chimie France SAS

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

230000

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

43100

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

41100

Row 43

(7.23.1.1) Subsidiary name

LyondellBasell Advanced Polymer (Changshu) Co., Ltd

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

691

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

741

Row 44

(7.23.1.1) Subsidiary name

LyondellBasell Advanced Polymer (Dongguan) Co. Ltd

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

37

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

7870

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

8320

Row 45

(7.23.1.1) Subsidiary name

LyondellBasell Advanced Polymers Inc.

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

26

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

32600

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

29000

Row 46

(7.23.1.1) Subsidiary name

LyondellBasell Advanced Polyolefins (Malaysia) Sdn. Bhd.

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

81

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

5800

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

6140

Row 47

(7.23.1.1) Subsidiary name

LyondellBasell Covestro Manufacturing Maasvlakte VOF

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

210000

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

263000

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

378000

Row 48

(7.23.1.1) Subsidiary name

LyondellBasell Polymers (Malaysia) Sdn. Bhd.

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

2220

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

9

Row 49

(7.23.1.1) Subsidiary name

Mepol S.r.l.

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

18

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

0

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

0

Row 50

(7.23.1.1) Subsidiary name

Polar S.r.l.

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

0

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

0

Row 51

(7.23.1.1) Subsidiary name

PT LyondellBasell Advanced Polyolefins

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

2590

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

2590

Row 52

(7.23.1.1) Subsidiary name

QCP B.V.

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

2

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

4460

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

27

Row 53

(7.23.1.1) Subsidiary name

Quantum Composites, Inc.

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

698

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

835

Row 54

(7.23.1.1) Subsidiary name

tetra-DUR Kunststoff-Produktion GmbH

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

283

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

418

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

693

Row 55

(7.23.1.1) Subsidiary name

TIVACO

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

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

0

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

1
[Add row]

(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:
☑ Other (please specify) :Total feedstock mixture

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

95.3

(7.25.3) Explain calculation methodology

We calculated the scope 3 emissions arising from purchased feedstocks as a portion of the total scope 3 emissions from purchased goods and services, which resulted in a total of 95.3% in 2024. We do not segregate between feedstock types as we consider this to be company sensitive information. Scope 3 Category 1 GHG emissions from purchased goods and services were calculated using the average-data method from The Greenhouse Gas Protocol Technical Guidance, based on volumes of feedstocks and raw materials such as crude oil, naphtha, natural gas, ethane, butane, isobutane, propylene, or ethylene, recorded in LyondellBasell's ERP system; emission factors were applied according to the region and production mode, sourced either from third-party suppliers or secondary LCA databases like GaBi (version 2023) and Ecoinvent (version 3.9), and where unavailable, emissions were extrapolated using the ratio of materials without emission factors, which represented about 5% of total volume, while bio-based feedstocks used in products like CirculenRenew and bio-ETBE were assessed using cradle-to-gate emission factors that include biological CO_2 removal in line with ISO 14067:2018 and the Together for Sustainability guidelines, reducing reported emissions by approximately 5%.
[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

LyondellBasell does not sell carbon dioxide.

Methane (CH4)

(7.25.1.1) Sales, metric tons

98000

(7.25.1.2) Comment

The volume disclosed includes the total volume from sales of methane and a mix fuel gas product which consists primarily of methane.

Nitrous oxide (N2O)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

LyondellBasell does not sell nitrous oxide.

Hydrofluorocarbons (HFC)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

LyondellBasell does not sell hydrofluorocarbons.

Perfluorocarbons (PFC)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

LyondellBasell does not sell perfluorocarbons.

Sulphur hexafluoride (SF6)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

LyondellBasell does not sell sulphur hexafluoride.

Nitrogen trifluoride (NF3)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

LyondellBasell does not sell nitrogen trifluoride.
[Fixed row]

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

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

Select from:

☑ No

(7.28.4) Explain why you do not plan to develop capabilities to allocate emissions to your customers

LyondellBasell is currently working to deploy an LCA automation software which would allow for the calculation of product carbon footprints for the majority of products in our portfolio that are sold to customers. We have been developing several life cycle assessment studies, the results of which we share in direct engagement with our customers. In general, LyondellBasell maintains an attributional and ISO 14040/44/67 product accounting approach which does not allow any allocation of emissions to our customers.
[Fixed row]

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

Select from:

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

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

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

☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

0

(7.30.1.3) MWh from non-renewable sources

76200000

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

76200000.00

Consumption of purchased or acquired electricity

(7.30.1.1) Heating value

Select from:
☑ Unable to confirm heating value

(7.30.1.2) MWh from renewable sources

1640000

(7.30.1.3) MWh from non-renewable sources

7120000

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

8760000.00

Consumption of purchased or acquired steam

(7.30.1.1) Heating value

Select from:

☑ Unable to confirm heating value

(7.30.1.2) MWh from renewable sources

0

(7.30.1.3) MWh from non-renewable sources

20700000

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

20700000.00

Consumption of self-generated non-fuel renewable energy

(7.30.1.1) Heating value

Select from:
☑ Unable to confirm heating value

(7.30.1.2) MWh from renewable sources

0

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

0.00

Total energy consumption

(7.30.1.1) Heating value

Select from:

☑ Unable to confirm heating value

(7.30.1.2) MWh from renewable sources

1640000

(7.30.1.3) MWh from non-renewable sources

104000000

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

105640000.00
[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:
☑ LHV (lower 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)

26700000

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

41600000

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

68300000.00

Consumption of purchased or acquired electricity

(7.30.3.1) Heating value

Select from:
☑ Unable to confirm heating value

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

1640000

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

6070000

(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

7710000.00

Consumption of purchased or acquired steam

(7.30.3.1) Heating value

Select from:
☑ Unable to confirm 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)

17400000

(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

17400000.00

Consumption of self-generated non-fuel renewable energy

(7.30.3.1) Heating value

Select from:
☑ Unable to confirm heating value

(7.30.3.2) MWh consumed from renewable sources 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

0.00

Total energy consumption

(7.30.3.1) Heating value

Select from:
☑ Unable to confirm heating value

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

1640000

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

50100000

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

41600000

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

93340000.00
[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:

☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

0

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

0

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

0

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

0

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

0

(7.30.7.8) Comment

Other biomass

(7.30.7.1) Heating value

Select from:

☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

0

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

0

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

0

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

0

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

0

(7.30.7.8) Comment

Other renewable fuels (e.g. renewable hydrogen)

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

0

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

0

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

0

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

0

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

0

(7.30.7.8) Comment

Coal

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

2360000

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

16400

(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

2350000

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

0

(7.30.7.8) Comment

Oil

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

5900000

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

31100

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

2860000

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

3010000

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

0

(7.30.7.8) Comment

Gas

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

52900000

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

38300

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

44100000

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

6330000

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

2490000

(7.30.7.8) Comment

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

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

15000000

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

1110

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

14700000

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

184000

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

72500

(7.30.7.8) Comment

Total fuel

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

76200000

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

87000

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

61600000

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

11900000

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

2560000

(7.30.7.8) Comment

Low heating value used.
[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)

647000

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

647000

(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

Heat

(7.30.9.1) Total Gross generation (MWh)

61600000

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

61600000

(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)

14300000

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

14300000

(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)

647000

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

647000

(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)

213000

Heat

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

55900000

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

55900000

(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)

37100000

Steam

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

14300000

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

14300000

(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)

4730000

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:

☑ United States of America

(7.30.14.2) Sourcing method

Select from:

☑ Financial (virtual) power purchase agreement (VPPA)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Renewable energy mix, please specify :Wind / solar mix

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

447000

(7.30.14.6) Tracking instrument used

Select from:

☑ US-REC

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

Select from:

☑ United States of America

(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)

2022

(7.30.14.10) Comment

In 2024, we retired RECs from combined solar and wind assets, reported as a single line item. The projects were commissioned over 2022–2023, with the commissioning year reflecting the earliest commercial operation date.

Row 2

(7.30.14.1) Country/area

Select from:

☑ United States of America

(7.30.14.2) Sourcing method

Select from:

☑ Other, please specify :renewable energy embedded in supplier-provided grid coefficients

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Renewable energy mix, please specify :Wind / solar mix

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

227000

(7.30.14.6) Tracking instrument used

Select from:

☑ No instrument used

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

Select from:

☑ United States of America

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

Select from:

☑ No

(7.30.14.10) Comment

The figure disclosed in this line represents renewable energy embedded in supplier-provided grid coefficients, which include a wind/solar mix as the energy source.

Row 3

(7.30.14.1) Country/area

Select from:

☑ Belgium

(7.30.14.2) Sourcing method

Select from:

☑ Other, please specify :renewable energy embedded in supplier-provided grid coefficients

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Renewable energy mix, please specify :Wind / solar mix

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

6650

(7.30.14.6) Tracking instrument used

Select from:

☑ No instrument used

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

Select from:

☑ Belgium

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

Select from:

☑ No

(7.30.14.10) Comment

The figure disclosed in this line represents renewable energy embedded in supplier-provided grid coefficients, which include a wind/solar mix as the energy source.

Row 4

(7.30.14.1) Country/area

Select from:

☑ Brazil

(7.30.14.2) Sourcing method

Select from:

☑ Other, please specify :renewable energy embedded in supplier-provided grid coefficients

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Renewable energy mix, please specify :Wind / solar mix

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

21900

(7.30.14.6) Tracking instrument used

Select from:

☑ No instrument used

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

Select from:

☑ Brazil

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

Select from:

☑ No

(7.30.14.10) Comment

The figure disclosed in this line represents renewable energy embedded in supplier-provided grid coefficients, which include a wind/solar mix as the energy source.

Row 5

(7.30.14.1) Country/area

Select from:

☑ France

(7.30.14.2) Sourcing method

Select from:

☑ Other, please specify :renewable energy embedded in supplier-provided grid coefficients

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Renewable energy mix, please specify :Wind / solar mix

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

196000

(7.30.14.6) Tracking instrument used

Select from:

☑ No instrument used

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

Select from:

☑ France

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

Select from:

☑ No

(7.30.14.10) Comment

The figure disclosed in this line represents renewable energy embedded in supplier-provided grid coefficients, which include a wind/solar mix as the energy source.

Row 6

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Other, please specify :renewable energy embedded in supplier-provided grid coefficients

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:
☑ Renewable energy mix, please specify :Wind / solar mix

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

490000

(7.30.14.6) Tracking instrument used

Select from:
☑ No instrument used

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

Select from:
☑ Germany

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

Select from:
☑ No

(7.30.14.10) Comment

The figure disclosed in this line represents renewable energy embedded in supplier-provided grid coefficients, which include a wind/solar mix as the energy source.

Row 7

(7.30.14.1) Country/area

Select from:

☑ Indonesia

(7.30.14.2) Sourcing method

Select from:

☑ Other, please specify :renewable energy embedded in supplier-provided grid coefficients

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Renewable energy mix, please specify :Wind / solar mix

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

1820

(7.30.14.6) Tracking instrument used

Select from:

☑ No instrument used

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

Select from:

☑ Indonesia

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

Select from:
☑ No

(7.30.14.10) Comment

The figure disclosed in this line represents renewable energy embedded in supplier-provided grid coefficients, which include a wind/solar mix as the energy source.

Row 8

(7.30.14.1) Country/area

Select from:
☑ Italy

(7.30.14.2) Sourcing method

Select from:
☑ Other, please specify :renewable energy embedded in supplier-provided grid coefficients

(7.30.14.3) Energy carrier

Select from:
☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:
☑ Renewable energy mix, please specify :Wind / solar mix

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

115000

(7.30.14.6) Tracking instrument used

Select from:

☑ No instrument used

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

Select from:

☑ Italy

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

Select from:

☑ No

(7.30.14.10) Comment

The figure disclosed in this line represents renewable energy embedded in supplier-provided grid coefficients, which include a wind/solar mix as the energy source.

Row 9

(7.30.14.1) Country/area

Select from:

☑ Mexico

(7.30.14.2) Sourcing method

Select from:

☑ Other, please specify :renewable energy embedded in supplier-provided grid coefficients

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Renewable energy mix, please specify :Wind / solar mix

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

4980

(7.30.14.6) Tracking instrument used

Select from:

☑ No instrument used

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

Select from:

☑ Mexico

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

Select from:

☑ No

(7.30.14.10) Comment

The figure disclosed in this line represents renewable energy embedded in supplier-provided grid coefficients, which include a wind/solar mix as the energy source.

Row 10

(7.30.14.1) Country/area

Select from:

☑ Netherlands

(7.30.14.2) Sourcing method

Select from:

☑ Other, please specify :renewable energy embedded in supplier-provided grid coefficients

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Renewable energy mix, please specify :Wind / solar mix

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

37500

(7.30.14.6) Tracking instrument used

Select from:

☑ No instrument used

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

Select from:

☑ Netherlands

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

Select from:

☑ No

(7.30.14.10) Comment

The figure disclosed in this line represents renewable energy embedded in supplier-provided grid coefficients, which include a wind/solar mix as the energy source.

Row 11

(7.30.14.1) Country/area

Select from:
☑ Poland

(7.30.14.2) Sourcing method

Select from:
☑ Other, please specify :renewable energy embedded in supplier-provided grid coefficients

(7.30.14.3) Energy carrier

Select from:
☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:
☑ Renewable energy mix, please specify :Wind / solar mix

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

5360

(7.30.14.6) Tracking instrument used

Select from:
☑ No instrument used

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

Select from:

☑ Poland

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

Select from:

☑ No

(7.30.14.10) Comment

The figure disclosed in this line represents renewable energy embedded in supplier-provided grid coefficients, which include a wind/solar mix as the energy source.

Row 12

(7.30.14.1) Country/area

Select from:

☑ Spain

(7.30.14.2) Sourcing method

Select from:

☑ Other, please specify :renewable energy embedded in supplier-provided grid coefficients

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Renewable energy mix, please specify :Wind / solar mix

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

85800

(7.30.14.6) Tracking instrument used

Select from:
☑ No instrument used

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

Select from:
☑ Spain

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

Select from:
☑ No

(7.30.14.10) Comment

The figure disclosed in this line represents renewable energy embedded in supplier-provided grid coefficients, which include a wind/solar mix as the energy source.

Row 13

(7.30.14.1) Country/area

Select from:
☑ Sweden

(7.30.14.2) Sourcing method

Select from:

☑ Other, please specify :renewable energy embedded in supplier-provided grid coefficients

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Renewable energy mix, please specify :Wind / solar mix

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

2820

(7.30.14.6) Tracking instrument used

Select from:

☑ No instrument used

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

Select from:

☑ Sweden

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

Select from:

☑ No

(7.30.14.10) Comment

The figure disclosed in this line represents renewable energy embedded in supplier-provided grid coefficients, which include a wind/solar mix as the energy source.

Row 14

(7.30.14.1) Country/area

Select from:
☑ United Kingdom of Great Britain and Northern Ireland

(7.30.14.2) Sourcing method

Select from:
☑ Other, please specify :renewable energy embedded in supplier-provided grid coefficients

(7.30.14.3) Energy carrier

Select from:
☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:
☑ Renewable energy mix, please specify :Wind / solar mix

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

154

(7.30.14.6) Tracking instrument used

Select from:
☑ No instrument used

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

Select from:

☑ United Kingdom of Great Britain and Northern Ireland

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

Select from:

☑ No

(7.30.14.10) Comment

The figure disclosed in this line represents renewable energy embedded in supplier-provided grid coefficients, which include a wind/solar mix as the energy source. [Add row]

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

Belgium

(7.30.16.1) Consumption of purchased electricity (MWh)

18000

(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)

2700

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

20700.00

Brazil

(7.30.16.1) Consumption of purchased electricity (MWh)

22500

(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)

22500.00

China

(7.30.16.1) Consumption of purchased electricity (MWh)

48200

(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)

48200.00

Egypt

(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

France

(7.30.16.1) Consumption of purchased electricity (MWh)

755000

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

11600

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

78100

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

4100000

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

4944700.00

Germany

(7.30.16.1) Consumption of purchased electricity (MWh)

1010000

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

179000

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

113000

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

8240000

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

9542000.00

Hong Kong SAR, China

(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

India

(7.30.16.1) Consumption of purchased electricity (MWh)

15000

(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)

15000.00

Indonesia

(7.30.16.1) Consumption of purchased electricity (MWh)

3340

(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)

3340.00

Italy

(7.30.16.1) Consumption of purchased electricity (MWh)

264000

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

0

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

163000

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

135000

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

562000.00

Japan

(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

Luxembourg

(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

Malaysia

(7.30.16.1) Consumption of purchased electricity (MWh)

12800

(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)

154

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

12954.00

Mexico

(7.30.16.1) Consumption of purchased electricity (MWh)

33300

(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)

33300.00

Netherlands

(7.30.16.1) Consumption of purchased electricity (MWh)

523000

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

0

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

2290000

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

1860000

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

4673000.00

Philippines

(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

Poland

(7.30.16.1) Consumption of purchased electricity (MWh)

1620

(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)

1620.00

Republic of Korea

(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

Saudi Arabia

(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)

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

Spain

(7.30.16.1) Consumption of purchased electricity (MWh)

140000

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

0

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

17000

(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)

157000.00

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)

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

Thailand

(7.30.16.1) Consumption of purchased electricity (MWh)

4490

(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)

4490.00

Turkey

(7.30.16.1) Consumption of purchased electricity (MWh)

1510

(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)

1510.00

United Arab Emirates

(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

United Kingdom of Great Britain and Northern Ireland

(7.30.16.1) Consumption of purchased electricity (MWh)

77100

(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)

91700

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

168800.00

United States of America

(7.30.16.1) Consumption of purchased electricity (MWh)

5780000

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

457000

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

17000000

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

61600000

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

84837000.00

Viet Nam

(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
[Fixed row]

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

Select from:
☑ Yes

(7.31.1) Disclose details on your organization's consumption of feedstocks for chemical production activities.

Row 1

(7.31.1.1) Fuels used as feedstocks

Select from:
☑ Other, please specify :Total feedstock

(7.31.1.2) Total consumption

38164000

(7.31.1.3) Total consumption unit

Select from:
☑ metric tons

(7.31.1.4) Inherent carbon dioxide emission factor of feedstock, metric tons CO2 per consumption unit

2.96

(7.31.1.5) Heating value of feedstock, MWh per consumption unit

12.29

(7.31.1.6) Heating value

Select from:
☑ LHV

(7.31.1.7) Comment

Feedstock composition is considered to be confidential information, and therefore a total of all feedstock volumes has been provided. The heating value of the feedstock is based on a weighted average of heating values for the total feedstock mix. Please also note that the majority of our feedstock is converted into chemicals and polymer products, rather than combusted, and therefore there are no direct CO2 emissions associated with these products.
[Add row]

(7.31.2) State the percentage, by mass, of primary resource from which your chemical feedstocks derive.

Oil

(7.31.2.1) Percentage of total chemical feedstock (%)

47.3

(7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year

Select from:
☑ Decreased

Natural Gas

(7.31.2.1) Percentage of total chemical feedstock (%)

50.42

(7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year

Select from:
☑ Increased

Coal

(7.31.2.1) Percentage of total chemical feedstock (%)

0

(7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year

Select from:
☑ No change

Biomass

(7.31.2.1) Percentage of total chemical feedstock (%)

2.17

(7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year

Select from:
☑ Increased

Waste (non-biomass)

(7.31.2.1) Percentage of total chemical feedstock (%)

0.11

(7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year

Select from:
☑ Increased

Fossil fuel (where coal, gas, oil cannot be distinguished)

(7.31.2.1) Percentage of total chemical feedstock (%)

0

(7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year

Select from:
☑ No change

Unknown source or unable to disaggregate

(7.31.2.1) Percentage of total chemical feedstock (%)

0

(7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year

Select from:
☑ No change
[Fixed row]

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

Row 1

(7.39.1) Output product

Select from:
☑ Polymers

(7.39.2) Production (metric tons)

7777257

(7.39.3) Capacity (metric tons)

12960884

(7.39.8) Comment

Intensity ratios are not published as they are regarded as confidential business information.

Row 2

(7.39.1) Output product

Select from:
☑ High Value Chemicals (Steam cracking)

(7.39.2) Production (metric tons)

9988985

(7.39.3) Capacity (metric tons)

14221947

(7.39.8) Comment

Intensity ratios are not published as they are regarded as confidential business information.

Row 3

(7.39.1) Output product

Select from:
☑ Methanol

(7.39.2) Production (metric tons)

1202376

(7.39.3) Capacity (metric tons)

1443745

(7.39.8) Comment

Intensity ratios are not published as they are regarded as confidential business information.

Row 4

(7.39.1) Output product

Select from:
☑ Other base chemicals

(7.39.2) Production (metric tons)

8049900

(7.39.3) Capacity (metric tons)

13750359

(7.39.8) Comment

Intensity ratios are not published as they are regarded as confidential business information.

Row 5

(7.39.1) Output product

Select from:
☑ Other, please specify :Gasoline and distilate

(7.39.2) Production (metric tons)

9909163

(7.39.3) Capacity (metric tons)

13266768

(7.39.8) Comment

Intensity ratios are not published as they are regarded as confidential business information.
[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

0.000548274

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

22100000

(7.45.3) Metric denominator

Select from:
☑ unit total revenue

(7.45.4) Metric denominator: Unit total

40302000000

(7.45.5) Scope 2 figure used

Select from:
☑ Market-based

(7.45.6) % change from previous year

0.99

(7.45.7) Direction of change

Select from:
☑ Increased

(7.45.8) Reasons for change

Select all that apply
☑ Change in renewable energy consumption
☑ Other emissions reduction activities
☑ Divestment
☑ Other, please specify :Shifts in production mix

(7.45.9) Please explain

In 2024, we continued progressing toward our 2030 scope 1 and 2 targets through the deployment of emission reduction initiatives under our Value Enhancement Program (VEP), resulting in estimated annual emissions savings of nearly 310 kilotons of CO_2e. Additionally, the procurement of renewable electricity via virtual power purchase agreements (VPPAs) led to a further reduction of 162 kilotons of CO_2e in scope 2 emissions. These reductions are described in 7.10.1. From 2023 to 2024, our company revenue decreased by nearly 2%, which resulted in our CO2e intensity by unit of revenue increasing in 2024. Despite these reductions, our scope 1 and 2 intensity figure increased by nearly 1 percent in 2024. This was primarily due to a nearly 2 percent decline in company revenue from 2023 to 2024, which raised our CO_2e intensity per unit of revenue even as absolute scope 2 emissions decreased.
[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 3

(7.53.1.2) Is this a science-based target?

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

(7.53.1.4) Target ambition

Select from:
☑ 1.5°C aligned

(7.53.1.5) Date target was set

09/27/2021

(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)
☑ Sulphur hexafluoride (SF6)

☑ Nitrous oxide (N2O)
☑ Carbon dioxide (CO2)
☑ Perfluorocarbons (PFCs)
☑ Hydrofluorocarbons (HFCs)
☑ 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

12/30/2020

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

15600000

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

7600000

(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)

23200000.000

(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

12/30/2050

(7.53.1.55) Targeted reduction from base year (%)

100

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

0.000

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

15000000

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

7100000

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

22100000.000

(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

4.74

(7.53.1.80) Target status in reporting year

Select from:

☑ Underway

(7.53.1.82) Explain target coverage and identify any exclusions

These emission reduction targets apply across our entire organization, covering global operations.

(7.53.1.83) Target objective

The objective of this target is to achieve net zero scope 1 and 2 GHG emissions from our global operations by 2050. This ambition is grounded in the latest climate science and guided by the Science Based Targets initiative (SBTi). We support the global objectives to limit global temperature rise to well below 2° C above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5° C. Our approach includes significant investment in technologies such as hydrogen, process electrification, and carbon capture and storage. As companies increasingly set their own scope 3 goals and demand for low-carbon footprint materials increases, we believe our ambitious climate goals will be a competitive advantage, generating value for LYB, our shareholders, and society.

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

Our pathway to net zero scope 1 and 2 GHG emissions across our global operations relies on four key reduction levers: energy efficiency, renewable and low-carbon electricity and electrification, hydrogen, and carbon capture and storage/utilization (CCS/CCU). Energy efficiency includes optimizing our use of energy in manufacturing processes to lower our energy footprint, reduce GHG emissions, and reduce operational costs. Renewable and low-carbon electricity and

electrification include sourcing low-carbon electricity, including from renewable electricity projects, primarily through power purchase agreements (PPAs), and electrifying processes to reduce our reliance on fossil fuels. Increasing the use of low-carbon hydrogen in our fuel mix used for energy on-site, to replace other more carbon-intensive fuels. Capturing and either storing or reusing CO_2 from our operations to reduce direct emissions. Beyond these four levers, we continuously investigate novel production processes with low to no GHG emissions, especially for potential application in our core olefin and propylene oxide businesses. As we focus our asset base in market segments of core importance to us, we take into account as part of our climate approach organic growth, divestments, acquisitions and closures, including the shutdown of refining operations at our Houston Refinery effective Q1 2025. In 2024, we secured PPAs with an aggregate generation capacity that will enable us to meet our goal of procuring at least 50% of our electricity from renewable sources by 2030, based on 2020 procured levels. These agreements are expected to generate an estimated five million megawatt hours of renewable electricity annually, reducing our scope 2 emissions by more than 1.8 million metric tons of carbon emissions. Our ability to achieve these goals depends on many factors, including the development and availability of technology, our ability to secure permits and emissions credits, project execution risk, the availability of infrastructure, the availability of suppliers, the availability of supportive governmental policies and markets, to evolving regulatory requirements, competitor actions, and customer and consumer preferences.

(7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

☑ No

Row 2

(7.53.1.1) Target reference number

Select from:

☑ Abs 2

(7.53.1.2) Is this a science-based target?

Select from:

☑ Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

(7.53.1.4) Target ambition

Select from:

☑ Well-below 2°C aligned

(7.53.1.5) Date target was set

12/14/2022

(7.53.1.6) Target coverage

Select from:

☑ Organization-wide

(7.53.1.7) Greenhouse gases covered by target

Select all that apply

☑ Methane (CH4)

☑ Nitrous oxide (N2O)

☑ Carbon dioxide (CO2)

☑ Perfluorocarbons (PFCs)

☑ Hydrofluorocarbons (HFCs)

☑ Sulphur hexafluoride (SF6)

☑ Nitrogen trifluoride (NF3)

(7.53.1.8) Scopes

Select all that apply

☑ Scope 3

(7.53.1.10) Scope 3 categories

Select all that apply

☑ Scope 3, Category 1 – Purchased goods and services

☑ Scope 3, Category 3 – Fuel- and energy- related activities (not included in Scope 1 or 2)

☑ Scope 3, Category 4 – Upstream transportation and distribution

☑ Scope 3, Category 11 – Use of sold products

☑ Scope 3, Category 15 – Investments

(7.53.1.11) End date of base year

12/30/2020

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

28500000

(7.53.1.16) Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

2000000

(7.53.1.17) Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

1000000

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

48100000

(7.53.1.28) Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

3100000

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

82700000.000

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

82700000.000

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

100.0

(7.53.1.37) Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

100.0

(7.53.1.38) Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

100.0

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

100.0

(7.53.1.49) Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

100.0

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

82

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

82

(7.53.1.54) End date of target

12/30/2030

(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)

57890000.000

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

33100000

(7.53.1.61) Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

2300000

(7.53.1.62) Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

1000000

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

53300000

(7.53.1.73) Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

4200000

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

93900000.000

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

93900000.000

(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

-45.14

(7.53.1.80) Target status in reporting year

Select from:

☑ Underway

(7.53.1.82) Explain target coverage and identify any exclusions

These emission reduction targets apply across our entire organization, covering global operations. We've set 2030 climate targets for scopes 1, 2, and 3 emissions relative to a 2020 baseline. In this CDP question, we report the targets for scopes 1 and 2 separately from scope 3 due to their different reductions. Specifically, we're aiming for a 42% reduction in scopes 1 and 2 emissions by 2030, and a 30% reduction in scope 3 emissions by 2030.. In line with SBTi target-setting standards, our scope 3 emissions target covers over two-thirds of estimated global emissions, totaling 83 MMt, and includes our most material sources: feedstocks, products, and equity investments.

(7.53.1.83) Target objective

The objective of this target is to reduce scope 3 GHG emissions 30% by 2030 relative to a 2020 baseline. This target supports our customers' climate and scope 3 ambitions and reflects our commitment to low-carbon and circular solutions. It is part of our company-wide 2030 climate goals and is supported by actions such as our exit from the refining business, increased use of renewable-based and circular feedstocks, and supplier engagement across our value chain.

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

Our evolving strategy incorporates four reduction levers while accounting for organic growth and investments affecting scope 3 emissions. In the first quarter of 2025, we ended crude oil refining operations at our Houston Refinery. We estimate our exit from the refining business will reduce scope 3 emissions, including those related to crude oil procurement and the sale and marketing of petroleum refined products, by approximately 40MMt annually. We are increasing our use of renewable bio-based and recycled feedstocks to meet our goal of producing and marketing at least 2 MMt of recycled and renewable-based polymers annually by 2030. Collaborating with feedstocks, raw materials, and logistics suppliers helps us better understand product carbon footprints and identify reduction opportunities. In 2024, we updated our supplier climate maturity framework, categorized suppliers to tailor engagement, and focused on increasing the share of primary data in our scope 3 inventory. We held more than 35 engagement meetings, resulting in over 130 product carbon footprint datapoints. We supported the rollout of SiGREEN, a PCF data exchange platform launched in October 2024, and began onboarding key suppliers. We developed a climate action toolkit and hosted webinars attended by over 300 suppliers, offering technical support on PCF calculation and promoting the TfS PCF Guideline and SiGREEN. We emphasized ISO-compliant data and addressed common challenges in PCF calculation. We also engaged with logistics service providers to improve scope 3 data accuracy for transportation and distribution emissions, using the GLEC framework. We conducted in-house studies on transport modality and emission optimization, and procured a shallow drafted PO barge, "Gas 96," to reduce emissions during low water levels. As part of a VEP project, we introduced a tank cleanliness inspection process using spectrophotometer readings to reduce ship emissions by reducing time spent waiting for readings.

(7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

☑ No

Row 3

(7.53.1.1) Target reference number

Select from:

☑ Abs 1

(7.53.1.2) Is this a science-based target?

Select from:

☑ Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

(7.53.1.4) Target ambition

Select from:

☑ 1.5°C aligned

(7.53.1.5) Date target was set

12/14/2022

(7.53.1.6) Target coverage

Select from:

☑ Organization-wide

(7.53.1.7) Greenhouse gases covered by target

Select all that apply

☑ Methane (CH4)

☑ Nitrous oxide (N2O)

☑ Carbon dioxide (CO2)

☑ Perfluorocarbons (PFCs)

☑ Hydrofluorocarbons (HFCs)

☑ Sulphur hexafluoride (SF6)

☑ Nitrogen trifluoride (NF3)

(7.53.1.8) Scopes

Select all that apply

☑ Scope 1

☑ Scope 2

(7.53.1.9) Scope 2 accounting method

Select from:

☑ Market-based

(7.53.1.11) End date of base year

12/30/2020

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

15600000

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

7600000

(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)

23200000.000

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

100.0

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

100.0

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

100

(7.53.1.54) End date of target

12/30/2030

(7.53.1.55) Targeted reduction from base year (%)

42

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

13456000.000

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

15000000

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

7100000

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

22100000.000

(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

11.29

(7.53.1.80) Target status in reporting year

Select from:
☑ Underway

(7.53.1.82) Explain target coverage and identify any exclusions

These emission reduction targets apply across our entire organization, covering global operations. We've set 2030 climate targets for scopes 1, 2, and 3 emissions relative to a 2020 baseline. In this CDP question, we report the targets for scopes 1 and 2 separately from scope 3 due to their different reductions. Specifically, we're aiming for a 42% reduction in scopes 1 and 2 emissions by 2030, and a 30% reduction in scope 3 emissions by 2030.

(7.53.1.83) Target objective

The objective of this target is to reduce absolute scope 1 and 2 GHG emissions 42% by 2030 based on a 2020 baseline. This target is aligned with the latest climate science and is part of our broader ambition to reach net zero by 2050. It reflects our commitment to cost-effective climate action, supported by internal carbon pricing and investment in emission reduction technologies, while continuing to generate value for our shareholders and supporting the decarbonization of our operations. As companies increasingly set their own scope 3 goals and demand for low-carbon footprint materials increases, we believe our ambitious climate goals will be a competitive advantage, generating value for LYB, our shareholders, and society.

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

Our pathway to net zero scope 1 and 2 GHG emissions across our global operations relies on four key reduction levers: energy efficiency, renewable and low-carbon electricity and electrification, hydrogen, and carbon capture and storage/utilization (CCS/CCU). Energy efficiency includes optimizing our use of energy in manufacturing processes to lower our energy footprint, reduce GHG emissions, and reduce operational costs. Renewable and low-carbon electricity and electrification include sourcing low-carbon electricity, including from renewable electricity projects, primarily through power purchase agreements (PPAs), and electrifying processes to reduce our reliance on fossil fuels. Hydrogen includes increasing the use of low-carbon hydrogen in our fuel mix used for energy on-site, to replace other more carbon-intensive fuels. CCS/CCU includes capturing and either storing or reusing CO_2 from our operations to reduce direct emissions. Beyond these four levers, we continuously investigate novel production processes with low to no GHG emissions, especially for potential application in our core olefin and propylene oxide businesses. As we focus our asset base in market segments of core importance to us, we take into account as part of our climate approach organic growth, divestments, acquisitions and closures, including the shutdown of refining operations at our Houston Refinery effective Q1 2025. In 2024, we secured PPAs with an aggregate generation capacity that will enable us to meet our goal of procuring at least 50% of our electricity from renewable sources by 2030, based on 2020 procured levels. These agreements are expected to generate an estimated five million megawatt hours of renewable electricity annually, reducing our scope 2 emissions by more than 1.8 million metric tons of carbon emissions. Our ability to achieve these goals depends on many factors, including the development and availability of technology, our ability to secure permits and emissions credits, project execution risk, the availability of infrastructure, the availability of suppliers, the availability of supportive governmental policies and markets, to evolving regulatory requirements, competitor actions, and customer and consumer preferences.

(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

☑ Net-zero targets

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

Row 1

(7.54.3.1) Target reference number

Select from:

☑ NZ1

(7.54.3.2) Date target was set

09/27/2021

(7.54.3.3) Target Coverage

Select from:

☑ Organization-wide

(7.54.3.4) Targets linked to this net zero target

Select all that apply

☑ Abs1

☑ Abs3

(7.54.3.5) End date of target for achieving net zero

12/30/2050

(7.54.3.6) Is this a science-based target?

Select from:

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

(7.54.3.8) Scopes

Select all that apply

☑ Scope 1

☑ Scope 2

(7.54.3.9) Greenhouse gases covered by target

Select all that apply

☑ Methane (CH4)

☑ Nitrous oxide (N2O)

☑ Carbon dioxide (CO2)

☑ Perfluorocarbons (PFCs)

☑ Hydrofluorocarbons (HFCs)

☑ Sulphur hexafluoride (SF6)

☑ Nitrogen trifluoride (NF3)

(7.54.3.10) Explain target coverage and identify any exclusions

We aim to achieve net zero GHG emissions from global operations under our control (scope 1 and scope 2) by 2050. The target coverage is company-wide.Our net zero 2050 target currently does not include scope 3. There are many industry-wide challenges to the definition of scope 3 targets, including the lack of a uniform calculation methodology for scope 3 emissions, and the lack of sectoral guidance for target setting for the chemical industry. Rigorous emissions accounting is a prerequisite for the definition of a reliable baseline and the definition of a scope 3 target. LyondellBasell is part of several sectoral initiatives through its engagement with the World Economic Forum (WEF) and Together for Sustainability (TfS) to further understand and act upon the common challenges of the chemical industry in dealing with scope 3 emissions.The SBTi is developing a chemical sector-specific standard for defining science-based climate targets. Along with several industry peers, LYB is a member of the SBTi Expert Advisory Group (EAG) through which we continue to collaborate with the SBTi to advance the development of the guidance document, which is expected to be published in 2025.

(7.54.3.11) Target objective

We are committed to reducing GHG emissions from our global operations and value chain, and to delivering solutions which advance our customers' climate ambitions and support society's transition to a low carbon world. As companies within our value chains increasingly set their own scope 3 goals, we believe our ambitious climate goals will be an advantage. We aim to deliver low carbon footprint materials that will meet increasing demand across our value chains.

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

Select from:

☑ Unsure

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

Select from:

☑ No, and we do not plan to within the next two years

(7.54.3.17) Target status in reporting year

Select from:

☑ Underway

(7.54.3.19) Process for reviewing target

Our CEO leads oversight of our ESG profile through regular engagement with the Executive Committee, which reviews sustainability strategies, policies, and risks, including climate-related topics. ESG considerations are integrated across all operations, with each function contributing to opportunity identification, risk management, and sustainability goals. The Executive Committee comprises the CEO, CFO, and heads of our four strategic business units, along with key executives responsible for sustainability, CLCS, operational excellence and HSE, people and culture, legal and compliance, and innovation. This group collaborates closely with the Chief Sustainability Officer and other leaders, including the Carbon Value Creation and Capture Steering Committee, which reports to the EVP of Operational Excellence and HSE and drives execution of our scope 1 and 2 GHG reduction plans. Scope 3 progress is overseen by the Global Sustainability Team, which works with internal stakeholders, business segments, procurement, and supply chain to advance our net zero targets. At the governance level, the Board of Directors maintains oversight of sustainability through its five standing committees. The Health, Safety, Environmental, and Sustainability (HSE&S) Committee plays a central role, overseeing our health, safety, environmental, sustainability, and climate policies, risks, initiatives, ambitions, performance, and reporting. It receives updates on key HSE&S and climate topics at each scheduled meeting and regularly reviews the company's ESG dashboard, which summarizes key metrics and activities.
[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	*40*	*`Numeric input*
To be implemented	*103*	*233000*
Implementation commenced	*23*	*1946000*
Implemented	*54*	*310000*
Not to be implemented	*0*	*`Numeric input*

[Fixed row]

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

Row 1

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in production processes
☑ Process optimization

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

310000

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

Select all that apply

☑ Scope 1

☑ Scope 2 (location-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

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

31800000

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

32000000

(7.55.2.7) Payback period

Select from:

☑ 1-3 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 11-15 years

(7.55.2.9) Comment

In 2024, our greenhouse gas (GHG) emission reduction projects, implemented through the Value Enhancement Program (VEP), resulted in estimated annual savings of nearly 310,000 kilotons of CO_2e. These outcomes were achieved with a total investment of USD 32 million in operating expenses and capital expenditures. The projects included initiatives focused on energy efficiency, process optimization, maintenance, unplanned downtime reduction, quality improvement, and flared material reduction.

[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:

☑ Marginal abatement cost curve

(7.55.3.2) Comment

Our process to develop and implement an emission reduction program to reach our interim and long-term scope 1 and 2 targets starts with an ideation phase at all our larger manufacturing sites (olefins and I&D) to generate potential project ideas on how to reduce emissions at our sites. These ideas are assessed using Marginal Abatement Cost Curves (MACCs) to evaluate and compare the associated CO2e abatement cost. The MACC is how we prioritize which ideas advance into projects.

Row 2

(7.55.3.1) Method

Select from:

☑ Internal price on carbon

(7.55.3.2) Comment

Integrating climate into our business planning is a crucial step in our journey to drive cost-effective climate action and achieve our ambitions. Through internal carbon pricing, we assign a monetary value to our GHG emissions which is integrated into our business planning and capital allocation processes, driving cost-effective climate action. We use a regionally differentiated approach, with price levels defined based on the EU Emissions Trading System (ETS) carbon market in the EU, and industry benchmarks in the U.S. and for the rest of our global operations. The use of an internal carbon price is a key enabler for us to progress towards our scope 1 and 2 targets. As the energy transition progresses, we anticipate an increased value for carbon, driven by expected increases in global carbon regulations and growing customer willingness to pay a premium for low-carbon products.

Row 3

(7.55.3.1) Method

Select from:

☑ Financial optimization calculations

(7.55.3.2) Comment

Energy and CO2 reduction projects are subject to the standard LyondellBasell capital allocation and evaluation processes, which include a financial analysis of the project payback period as well as a sensitivity analysis. To help drive cost effective climate action, Financial Optimization Calculations incorporate an internal carbon price in the base case. This approach ensures that the cost of carbon is factored into decision-making, helping prioritize projects that deliver both environmental and financial value.

Row 4

(7.55.3.1) Method

Select from:

☑ Compliance with regulatory requirements/standards

(7.55.3.2) Comment

Several LyondellBasell manufacturing sites operate under the EU ETS regulations. The increasing costs associated with compliance act as a financial driver for investment in low-carbon technology and R&D activities.

Row 5

(7.55.3.1) Method

Select from:

☑ Internal incentives/recognition programs

(7.55.3.2) Comment

To underscore our commitment to safety, accountability and timely delivery of our climate and circularity goals, ESG performance accounts for 30% of the total payout under the company's short-term incentive program (20% Safety and 10% Sustainability). For 2024, the total payout under the STI program reflected the Company's ongoing commitment to safety, accountability and timely delivery of our climate and circularity goals. The C&TD Committee considers the Company's achievement of key milestones supporting our sustainability goals. In 2024, we focused on three milestones: (1) Execute power purchase agreements with cumulative value of 700

GW of renewable electricity; (2)Progress energy efficiency projects to improve energy efficiency by 1%, relative to a 2021 baseline; and (3) produce and market 180kt of recycled and renewable-based polymers in 2024. Production and marketing includes (i) joint venture production marketed by LYB plus our pro rata share of the remaining production produced and marketed by the joint venture, and (ii) production via third-party tolling arrangements.

Row 6

(7.55.3.1) Method

Select from:

☑ Employee engagement

(7.55.3.2) Comment

We engage employees to drive investment in emissions reduction activities through initiatives like the Value Enhancement Program (VEP), which empowers employees to pursue opportunities for continuous value creation. Through the VEP, employees have helped drive continuous value creation, including significant carbon emission reductions and financial benefits. In 2024, we implemented VEP projects resulting in estimated annual GHG emissions savings of nearly 310,000 metric tons of CO_2e. The true power of the VEP lies in its ability to harness the collective expertise of our workforce. Unlike traditional top-down initiatives, the VEP is built on a foundation of bottom-up ideation.
[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:

☑ Product or service

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

Select from:

☑ Other, please specify :We define a product as “low-carbon” if it demonstrates a significant reduction in its product carbon footprint compared to the equivalent fossil-based product, as supported by a life cycle assessment (LCA).

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

Chemicals and plastics

☑ Other, please specify :Propylene Oxide

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

We produce propylene oxide (PO) through two distinct technologies, one of which yields tertiary butyl alcohol (TBA) as the co-product and the other which yields styrene monomer (SM) as the co-product. The two technologies are mutually exclusive with dedicated assets for manufacturing. PO is an intermediate commodity chemical and is a precursor of polyols, propylene glycol, propylene glycol ethers, and butadienol. PO and derivatives are used in a variety of durable and consumable items with key applications such as polyurethanes used for insulation, automotive/furniture cushioning, coatings, surfactants, synthetic resins and several other household usages. CarbonMinds, an industry leader and provider of a TfS compliant background database, identifies POTBA and POSM as having the lowest carbon footprint amongst the existing commercial PO technologies, based on global average data for each commercial PO technology.

(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 :LCA ISO 14040-44 & 14067

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

Select from:

☑ Cradle-to-gate

(7.74.1.8) Functional unit used

Metric ton of Propylene Oxide (PO) produced

(7.74.1.9) Reference product/service or baseline scenario used

Equivalent of publicly available data for PO from Sphera Solutions, LCA for Experts, database version 2022.2. Reference period for data collection 2020.

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

Select from:
☑ Cradle-to-gate

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

1.42

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

We finalized an ISO 14040/44 compliant life cycle assessment study for our PO and derivatives (PO&D) portfolio in December 2022. The estimated avoided emissions and generated revenue relate to our PO&D portfolio, which includes products produced via our proprietary PO/TBA and POSM technologies. When compared with publicly available LCA data averaged for other conventional production routes the difference in the cradle-to-gate product carbon footprint between the products is 1.42 metric tons per metric ton PO produced.

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

5.85

Row 2

(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 :We define a product as “low-carbon” if it demonstrates a significant reduction in its product carbon footprint compared to the equivalent fossil-based product, as supported by a life cycle assessment (LCA).

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

Chemicals and plastics

☑ Other, please specify :Renewable-based and recycled polymers

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

Our product portfolio contains a number of recycled and renewable, bio-based polymers that provide GHG benefits through a lower cradle to gate carbon footprint compared to the equivalent fossil-based product, and/or climate benefits in the product's use. For example, our CirculenRenew polymers are made from renewable feedstocks based on waste and residue bio-based oils, using a mass balance approach, and have a wide range of end-use applications. Our manufacturing sites producing our CirculenRenew products maintain ISCC PLUS certification to ensure traceability along the supply chain and enable the renewable content to be attributed to the final polymer using a certified mass balance method.

(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 :LCA ISO 14040-44 & 14067

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

Select from:

☑ Cradle-to-gate

(7.74.1.8) Functional unit used

Metric ton polymer produced

(7.74.1.9) Reference product/service or baseline scenario used

Equivalent fossil-based polymer from LyondellBasell manufacturing asset; reference period for data collection 2021.

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

Select from:
☑ Cradle-to-gate

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

4.38

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

We finalized an ISO 14040/44 compliant comparative life cycle assessment study for our CirculenRenew polymer grades with their fossil-based equivalents in 2023. Our CirculenRenew polymer grades are manufactured using a feedstock composed of bio-based waste and residue oils. We evaluated the avoided emissions for CirculenRenew PP, LDPE, HDPE, and LLDPE, compared to their fossil-based equivalent. The highest avoided emissions were observed for HDPE, with up to 4.38 metric tons CO2e per metric ton of polymer produced, representing the difference in the cradle-to-gate product carbon footprint between the two products in both North America and Europe. The revenue disclosed is related to our total 2024 sales of recycled and renewable-based products and is equivalent to less than 1% of our global revenues. In addition to our CirculenRenew offering, we offer CirculenRecover and CirculenRevive products. CirculenRecover products are made from plastic waste through a mechanical recycling process, upgrading waste into usable materials for various applications. CirculenRevive products use an advanced recycling process to convert plastic waste back to its molecular level, suitable for highly regulated applications like food contact and healthcare.

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

1
[Add row]

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

Select from:

☑ No

C8. Environmental performance - Forests

(8.1) Are there any exclusions from your disclosure of forests-related data?

	Exclusion from disclosure
Palm oil	*Select from:* ☑ No

[Fixed row]

(8.2) Provide a breakdown of your disclosure volume per commodity.

	Disclosure volume (metric tons)	Volume type	Sourced volume (metric tons)
Palm oil	*7700*	*Select all that apply* ☑ Sourced	*7700*

[Fixed row]

(8.5) Provide details on the origins of your sourced volumes.

Palm oil

(8.5.1) Country/area of origin

Select from:
☑ Unknown origin

(8.5.4) Volume sourced from country/area of origin (metric tons)

7700

(8.5.5) Source

Select all that apply
☑ Contracted suppliers (processors)

(8.5.7) Please explain

We have estimated our sourced volume of palm oil-derived products by using the tariff codes commonly associated with palm oil and its derivatives assigned to raw materials in our SAP system. This estimate is subject to certain limitations: for example, it is possible that the actual volume may be higher if raw materials containing palm oil or its derivatives are not classified under the commonly associated tariff codes, or if any products have been assigned incorrect codes. The estimated sourced volume includes both additives derived from palm oil and bio-circular feedstocks sourced from palm fatty acid distillates, tracked on a mass balance basis. The bio-circular feedstocks are procured from suppliers certified under the International Sustainability and Carbon Certification (ISCC) PLUS scheme. We estimate that palm oil-derived products represent a very small portion of our overall procurement - well below 1% of total spend.
[Add row]

(8.6) Does your organization produce or source palm oil derived biofuel?

Select from:
☑ No

(8.7) Did your organization have a no-deforestation or no-conversion target, or any other targets for sustainable production/ sourcing of your disclosed commodities, active in the reporting year?

Palm oil

(8.7.1) Active no-deforestation or no-conversion target

Select from:

☑ No, and we do not plan to have a no-deforestation or no-conversion target in the next two years

(8.7.3) Primary reason for not having an active no-deforestation or no-conversion target in the reporting year

Select from:

☑ Not an immediate strategic priority

(8.7.4) Explain why you did not have an active no-deforestation or no-conversion target in the reporting year

We estimate that the procurement of palm-oil derived products relative to our overall product consumption is low, well below 1% of total spend.

(8.7.5) Other active targets related to this commodity, including any which contribute to your no-deforestation or no-conversion target

Select from:

☑ No, and we do not plan to have other targets related to this commodity in the next two years

(8.7.6) Primary reason for not having other active targets in the reporting year

Select from:

☑ Not an immediate strategic priority

(8.7.7) Explain why you did not have other active targets in the reporting year

We estimate that the procurement of palm-oil derived products relative to our overall product consumption is low, well below 1% of total spend.
[Fixed row]

(8.8) Indicate if your organization has a traceability system to determine the origins of your sourced volumes and provide details of the methods and tools used.

Palm oil

(8.8.1) Traceability system

Select from:

☑ Yes

(8.8.2) Methods/tools used in traceability system

Select all that apply

☑ Chain-of-custody certification

☑ Value chain mapping

☑ Supplier engagement/communication

☑ Internal traceability system

(8.8.3) Description of methods/tools used in traceability system

For our CirculenRenew and +LC bio-circular based products specifically, we purchase our feedstocks from ISCC PLUS certified suppliers and track various details about the source materials, such as the vegetable origin, and outgoing material type.
[Fixed row]

(8.8.1) Provide details of the point to which your organization can trace its sourced volumes.

Palm oil

(8.8.1.1) % of sourced volume traceable to production unit

0

(8.8.1.2) % of sourced volume traceable to sourcing area and not to production unit

0

(8.8.1.3) % sourced volume traceable to country/area of origin and not to sourcing area or production unit

0

(8.8.1.4) % of sourced volume traceable to other point (i.e., processing facility/first importer) not in the country/area of origin

0

(8.8.1.5) % of sourced volume from unknown origin

100

(8.8.1.6) % of sourced volume reported

100.00
[Fixed row]

(8.9) Provide details of your organization's assessment of the deforestation-free (DF) or deforestation- and conversion-free (DCF) status of its disclosed commodities.

Palm oil

(8.9.1) DF/DCF status assessed for this commodity

Select from:
☑ No, and we do not plan to do so within the next two years

(8.9.6) Is a proportion of your disclosure volume certified through a scheme not providing full DF/DCF assurance?

Select from:
☑ No

(8.9.7) Primary reason for not assessing DF/DCF status

Select from:
☑ Judged to be unimportant or not relevant

(8.9.8) Explain why you have not assessed DF/DCF status

We estimate that the procurement of palm-oil derived products relative to our overall product consumption is low, well below 1% of total spend.
[Fixed row]

(8.10) Indicate whether you have monitored or estimated the deforestation and conversion of other natural ecosystems footprint for your disclosed commodities.

	Monitoring or estimating your deforestation and conversion footprint	Primary reason for not monitoring or estimating deforestation and conversion footprint	Explain why you do not monitor or estimate your deforestation and conversion footprint
Palm oil	*Select from:* ☑ No, and we do not plan to monitor or estimate our deforestation and conversion footprint in the next two years	*Select from:* ☑ Not an immediate strategic priority	*We estimate that the procurement of palm-oil derived products relative to our overall product consumption is low, well below 1% of total spend.*

[Fixed row]

(8.11) For volumes not assessed and determined as deforestation- and conversion-free (DCF), indicate if you have taken actions in the reporting year to increase production or sourcing of DCF volumes.

	Actions taken to increase production or sourcing of DCF volumes
Palm oil	*Select from:* ☑ No, and we do not plan to within the next two years

[Fixed row]

(8.14) Indicate if you assess your own compliance and/or the compliance of your suppliers with forest regulations and/or mandatory standards, and provide details.

(8.14.1) Assess legal compliance with forest regulations

Select from:

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

(8.14.5) Please explain

We have limited use of forest risk commodities. We estimate that the procurement of palm-oil derived products relative to our overall product consumption is low, well below 1% of total spend. As a responsible business, we expect our suppliers to comply with applicable laws and internationally recognized standards, conduct business ethically and share the principles set out in our Supplier Code of Conduct. In 2024, we simplified our sustainability clause in our General Terms and Conditions to require compliance with internationally recognized ESG standards.
[Fixed row]

(8.15) Do you engage in landscape (including jurisdictional) initiatives to progress shared sustainable land use goals?

(8.15.1) Engagement in landscape/jurisdictional initiatives

Select from:

☑ No, we do not engage in landscape/jurisdictional initiatives, and we do not plan to within the next two years

(8.15.2) Primary reason for not engaging in landscape/jurisdictional initiatives

Select from:

☑ Not an immediate strategic priority

(8.15.3) Explain why your organization does not engage in landscape/jurisdictional initiatives

Engaging in landscape/jurisdictional approaches is not our immediate strategic priority.
[Fixed row]

(8.16) Do you participate in any other external activities to support the implementation of policies and commitments related to deforestation, ecosystem conversion, or human rights issues in commodity value chains?

Select from:

☑ No, and we do not plan to within the next two years

(8.17) Is your organization supporting or implementing project(s) focused on ecosystem restoration and long-term protection?

Select from:

☑ No, and we do not plan to implement project(s) within the next two years

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

We do not include our regional offices in the total water volumes reported. The water volumes from these offices are immaterial when compared to our overall water data.

(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

We analyzed water consumption data from our regional offices and compared it with our overall global water usage. These facilities are administrative offices, so the water used is for WASH services. Our two primary office locations are located within the 1) Gulf Coast US, Buffalo Bayou/San Jacinto and 2) Rhine, Nederrijn water basins. The consumption at these facilities accounted for less than 1% of our total reported water use, making it immaterial from a global perspective.
[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:
☑ Yearly

(9.2.3) Method of measurement

Water withdrawals are measured at the sites, typically by metering, either directly on site or via a municipal or local water supplier. Meters provide continuous, cumulative quantity output. Data is collected from meters by various methods such as direct manual readings or electronic means.

(9.2.4) Please explain

This water aspect is relevant to our operations. At the enterprise level, LyondellBasell collects and reports this data annually.

Water withdrawals – volumes by source

(9.2.1) % of sites/facilities/operations

Select from:
☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Yearly

(9.2.3) Method of measurement

We track water withdrawals by the following intake sources: freshwater, groundwater, brackish/seawater, and intake from third party sources. Water withdrawals are measured at the sites, typically by metering, either directly on site or via a municipal or local water supplier. Meters provide continuous, cumulative quantity output. Data is collected from meters by various methods such as direct manual readings or electronic means.

(9.2.4) Please explain

This water aspect is relevant to our operations. At the enterprise level, LyondellBasell collects and reports this data annually.

Water withdrawals quality

(9.2.1) % of sites/facilities/operations

Select from:

☑ 76-99

(9.2.2) Frequency of measurement

Select from:

☑ Yearly

(9.2.3) Method of measurement

We measure and monitor withdrawal water quality as required by local regulations for potable water supply, as applicable, and also to assure suitability for specific industrial water uses. We confirm water supplies delivered from municipalities or other third party suppliers are monitored for quality before distribution to our sites. Withdrawal quality is typically analyzed using locally approved test methods.

(9.2.4) Please explain

This water aspect is relevant to our operations. At the enterprise level, LyondellBasell collects and reports this data annually. Our Operational Excellence systems support ongoing compliance with withdrawal water quality requirements.

Water discharges – total volumes

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Yearly

(9.2.3) Method of measurement

Water discharges are measured at the sites, either directly on site or via a municipality. Measurement methods include frequent gauging of the water levels within discharge structures and metering. Meters provide continuous, cumulative quantity output. Volume data is calculated using water level data or collected from meters by various methods. In some cases, municipalities choose to estimate discharge volumes based on the volume of water supplied to their customers.

(9.2.4) Please explain

This water aspect is relevant to our operations. At the enterprise level, LyondellBasell collects and reports this data annually.

Water discharges – volumes by destination

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Yearly

(9.2.3) Method of measurement

We track water discharge by the following destinations: fresh surface water, groundwater, offsite treatment, seawater/brackish water, and other destinations. Measurement methods include frequent gauging of the water levels within discharge structures and metering. Volume data is calculated using water level data or collected from meters by various methods. In some cases, municipalities choose to estimate discharge volumes based on the volume of water supplied to their customers.

(9.2.4) Please explain

This water aspect is relevant to our operations. At the enterprise level, LyondellBasell collects and reports this data annually.

Water discharges – volumes by treatment method

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Yearly

(9.2.3) Method of measurement

LyondellBasell wastewaters are treated via one or more biological, physical, or chemical treatment methods before being discharged, or wastewater discharges are sent directly to a 3rd party facility for treatment. Some water is used for cooling but does not come into contact with production activity. Therefore, no treatment is required for these streams prior to discharge. Measurement methods include frequent gauging of the water levels within discharge structures.

(9.2.4) Please explain

This water aspect is relevant to our operations. At the enterprise level, LyondellBasell collects and reports this data annually. We manage water in accordance with permitted limits for discharge destination water quality, and our Operational Excellence system supports ongoing compliance. Operational Excellence is the

management system we use to deliver safety, environmental responsibility and reliability in everything we do. It sets out clear requirements for how we work, includes explicit requirements for people, process and product safety, and applies to our employees and contractors.

Water discharge quality – by standard effluent parameters

(9.2.1) % of sites/facilities/operations

Select from:

☑ 76-99

(9.2.2) Frequency of measurement

Select from:

☑ Yearly

(9.2.3) Method of measurement

Where applicable, sites monitor effluent condition and report on water treatment, monitoring, and pollution prevention at a frequency required by the jurisdiction. Where water is delivered to a third party, we confirm water quality testing before discharging treated water. Potential wastewater pollutants are identified and evaluated at the site-level. The percentage represents the proportion of sites that monitor standard effluent parameters. Discharge quality is analyzed using approved methods.

(9.2.4) Please explain

This water aspect is relevant to our operations. At the enterprise level, LyondellBasell collects and reports data on site monitoring of effluent parameters annually. LyondellBasell requires sites that analyze for Biological Oxygen Demand (BOD) and Total Suspended Solids (TSS) for wastewater discharges to a receiving water body provide the weighted-average results for these parameters annually. We manage water in accordance with permitted limits for discharge destination water quality, and our Operational Excellence system supports ongoing compliance.

Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)

(9.2.1) % of sites/facilities/operations

Select from:

☑ 26-50

(9.2.2) Frequency of measurement

Select from:

☑ Yearly

(9.2.3) Method of measurement

Where applicable, our sites monitor effluent conditions, including nitrates, phosphates, pesticides, at a frequency required by the jurisdiction. The percentage entered represents the proportion of our sites that monitor nitrates, phosphates, or pesticides. Discharge quality is typically analyzed using locally approved test methods.

(9.2.4) Please explain

This water aspect is relevant to our operations. At the enterprise level, LyondellBasell collects and reports data on site monitoring of effluent parameters annually. We manage water in accordance with permitted limits for discharge destination water quality, and our Operational Excellence system supports ongoing compliance.

Water discharge quality – temperature

(9.2.1) % of sites/facilities/operations

Select from:

☑ 26-50

(9.2.2) Frequency of measurement

Select from:

☑ Yearly

(9.2.3) Method of measurement

Where applicable, our sites monitor effluent conditions, including temperature, and maintain and monitor pollution prevention measures, at a frequency required by the jurisdiction. The percentage entered represents the proportion of our sites that monitor temperature. Discharge quality is typically analyzed using locally approved test methods.

(9.2.4) Please explain

This water aspect is relevant to our operations. At the enterprise level, LyondellBasell collects and reports data on site monitoring of effluent parameters annually. We manage water in accordance with permitted limits for discharge destination water quality, and our Operational Excellence systems support ongoing compliance with water discharge quality requirements.

Water consumption – total volume

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Yearly

(9.2.3) Method of measurement

LyondellBasell calculates total water consumption volume based on the annual site estimates of water withdrawals and water discharges. Water withdrawals are measured at the sites, typically by metering or via a municipal or local water supplier. Measurement methods for water discharges include frequent gauging of the water levels within structures and metering. In some cases, municipalities choose to estimate discharge volumes based on the volume of water supplied to their customers.

(9.2.4) Please explain

This water aspect is relevant to our operations. At the enterprise level, LyondellBasell calculates and reports this data annually.

Water recycled/reused

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Yearly

(9.2.3) Method of measurement

Some sites are required by permit or other mechanism to measure and monitor recycled water use, such as for use in cooling water systems. In remaining cases, sites estimate the volumes based on assumptions about cycles, pump curve data, or other reasonable means to estimate. We ask sites to estimate volumes of water routed to recycle systems. The percentage entered represents the proportion of our sites that reported water volume routed to recycle systems in the period.

(9.2.4) Please explain

We recycle our supply of water, when feasible, to limit the amount we draw from regional supplies. LyondellBasell collects site-specific estimates of recycled/reused water on an annual basis.

The provision of fully-functioning, safely managed WASH services to all workers

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Yearly

(9.2.3) Method of measurement

We also ask sites to confirm annually that water is safe for the intended use, such as for drinking and sanitation needs at our sites.

(9.2.4) Please explain

This water aspect is relevant to our operations. At the enterprise level, LyondellBasell collects and reports this data annually.
[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)

248000

(9.2.2.2) Comparison with previous reporting year

Select from:
☑ Much lower

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:
☑ Increase/decrease in business activity

(9.2.2.4) Five-year forecast

Select from:
☑ About the same

(9.2.2.5) Primary reason for forecast

Select from:
☑ Increase/decrease in business activity

(9.2.2.6) Please explain

Total water withdrawals in 2024 were much lower than the 2023 figure of 279,000 megaliters. This reduction was primarily driven by the closure of a unit at one of our European sites, which significantly impacted intake volumes. Additionally, temporary shutdowns for scheduled turnaround activities at our largest Gulf Coast site

contributed to the decline. While year-over-year variation reflects normal fluctuations in global production, we anticipate future consumption to be about the same as current year consumption. When comparing current data to the prior year, we apply a 5% change threshold: changes above 5% are "higher," below 5% are "lower," and +-10% are "much lower/higher.

Total discharges

(9.2.2.1) Volume (megaliters/year)

138000

(9.2.2.2) Comparison with previous reporting year

Select from:

☑ Much lower

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.2.4) Five-year forecast

Select from:

☑ About the same

(9.2.2.5) Primary reason for forecast

Select from:

☑ Increase/decrease in business activity

(9.2.2.6) Please explain

Total water discharge decreased in 2024 due to operational changes at key sites. The closure of the unit at at one of our European sites significantly lowered discharge volumes. Additionally, temporary shutdowns for scheduled turnaround activities at our largest Gulf Coast site contributed to the decline. We anticipate

future consumption to be about the same as current year consumption. When comparing current data to the prior year, we apply a 5% change threshold: changes above 5% are “higher,” below 5% are “lower,” and +-10% are “much lower/higher.”

Total consumption

(9.2.2.1) Volume (megaliters/year)

110000

(9.2.2.2) Comparison with previous reporting year

Select from:

☑ Lower

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.2.4) Five-year forecast

Select from:

☑ About the same

(9.2.2.5) Primary reason for forecast

Select from:

☑ Increase/decrease in business activity

(9.2.2.6) Please explain

LyondellBasell calculates total consumption as the difference in withdrawals and discharges. Consumption was lower in 2024 compared to 2023. The variation between years can be attributed to normal fluctuations in global production. We anticipate future consumption to be about the same as current year consumption. When comparing current data to the prior year, we apply a 5% change threshold: changes above 5% are “higher,” below 5% are “lower,” and +-10% are “much lower/higher.

[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)

204

(9.2.4.3) Comparison with previous reporting year

Select from:
☑ About the same

(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:
☑ About the same

(9.2.4.6) Primary reason for forecast

Select from:

☑ Increase/decrease in business activity

(9.2.4.7) % of total withdrawals that are withdrawn from areas with water stress

0.08

(9.2.4.8) Identification tool

Select all that apply

☑ WRI Aqueduct

(9.2.4.9) Please explain

In 2020, we conducted a baseline water risk assessment of our manufacturing sites using the World Resources Institute (WRI) Aqueduct Water Risk Atlas tool. Most of our sites are in low to medium-water risk areas, with less than 0.1% of our global water consumption in high or extremely-high water risk locations based on World Resources Institute (WRI) water risk framework, Aqueduct 4.0 (WRI Aqueduct). WRI Aqueduct rates geographic locations worldwide on a scale from low to extremely high overall water risk based on watershed data related to water quantity stress, quality and regional factors. We engaged a third party expert to complete a water use and risk assessment as a supplement to the Aqueduct assessment. The assessment focused on our large manufacturing facilities encompassing over 98% of our global water consumption. None of these sites were identified as high or extremely high overall risk in the Aqueduct assessment. Results of the assessment will be used to help guide possible watershed-specific targets, approaches and improvements.
[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)

121000

(9.2.7.3) Comparison with previous reporting year

Select from:

☑ Much lower

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

☑ Change in accounting methodology

(9.2.7.5) Please explain

In 2024, based on our withdrawal source definition, several site intake contributions were moved from the fresh surface water classification to the third-party withdrawals classification. Our freshwater withdrawal was much lower due to this change and also from reductions such as at like one of our Gulf Coast locations that realized reduced intake volumes through operational changes—lowering cooling tower blowdown and drift, and improving firewater pond level control to reduce overflow. When comparing current data to the prior year, we apply a 5% change threshold: changes above 5% are “higher,” below 5% are “lower,” and +-10% are “much higher/lower.” We anticipate future withdrawals to be about the same as current year withdrawals.

Brackish surface water/Seawater

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

300

(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

Brackish surface and sea water was <1% of our 2024 water withdrawals across the enterprise, and were associated primarily with two manufacturing sites. Brackish surface and sea water withdrawals were about the same when compared to 2023's brackish / sea water withdrawal. When comparing current data to the prior year, we apply a 5% change threshold: changes above 5% are “higher,” below 5% are “lower,” and +/-10% are “much higher/lower.” We anticipate future withdrawals to be about the same as current year withdrawals.

Groundwater – renewable

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

25000

(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

Renewable groundwater withdrawals in 2024 were higher than the 2023. When comparing current data to the prior year, we apply a 5% change threshold: changes above 5% are “higher,” below 5% are “lower,” and +/-10% are “much higher/lower.” The minor variation between years can be attributed to normal fluctuations in global production. We anticipate future withdrawals to be about the same as current year.

Groundwater – non-renewable

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

We did not identify any existing groundwater withdrawals as non-renewable. Reviews of the classification of groundwater sources were completed by local site, environmental specialists for applicable sites, and in some cases, included inquiry with local authorities. We do not anticipate future changes to this assessment.

Produced/Entrained water

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

200

(9.2.7.3) Comparison with previous reporting year

Select from:

☑ Much 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

When comparing current data to the prior year, we apply a 5% change threshold: changes above 5% are “higher,” below 5% are “lower,” and +/-10% are “much higher/lower.” The minor variation between years can be attributed to normal fluctuations in global production. We anticipate future withdrawals to be about the same as 2024. We report produced water withdrawals at two sites. Reviews of the classification of sources as produced/entrained water were completed by local site Environmental specialists and entries for this category will be reviewed for alignment in future data request cycles.

Third party sources

(9.2.7.1) Relevance

Select from:
☑ Relevant

(9.2.7.2) Volume (megaliters/year)

101500

(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

We received about the same amount of water from third party sources in 2024 as in 2023. When comparing current data to the prior year, we apply a 5% change threshold: changes above 5% are “higher,” below 5% are “lower,” and +/-10% are “much higher/lower.” The variation between years can be attributed to normal fluctuations in global production. We anticipate future withdrawals to be about the same as current year withdrawals. This category of CDP-Water withdrawal by third

party source includes water categorized as “Other Water” in our 2024 Sustainability Report, since waters in the “Other Water” category also originate from third party sources.
[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)

36000

(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

Fresh surface water discharge makes up about 26% of our total water discharge across the enterprise. LyondellBasell discharged a lower amount to freshwater surfaces in 2024 as compared to 2023. When comparing current data to the prior year, we apply a 5% change threshold: changes above 5% are “higher,” below 5% are “lower,” and +/-10% are “much higher/lower.” The slight variation between years can be attributed to normal fluctuations in production. We anticipate future discharges to fresh surface water at the enterprise level to be about the same as current year discharges. We exclude rainwater from our industrial wastewater discharge volumes where reasonably possible.

Brackish surface water/seawater

(9.2.8.1) Relevance

Select from:

☑ Relevant

(9.2.8.2) Volume (megaliters/year)

9000

(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

LyondellBasell discharged less to seawater sources in 2024 compared with 2023. When comparing current data to the prior year, we apply a 5% change threshold: changes above 5% are “higher,” below 5% are “lower,” and +/-10% are “much higher/lower.” This reduction was primarily driven by the closure of a unit at one of our European sites, which significantly impacted intake volumes. Additionally, temporary shutdowns for scheduled turnaround activities at another Gulf Coast site contributed to the decline. We anticipate future discharges to be about the same as current year discharges.

Groundwater

(9.2.8.1) Relevance

Select from:

☑ Relevant

(9.2.8.2) Volume (megaliters/year)

100

(9.2.8.3) Comparison with previous reporting year

Select from:

☑ About the same

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.8.5) Please explain

LyondellBasell water volume discharged to groundwater in 2024 was about the same as 2023. When comparing current data to the prior year, we apply a 5% change threshold: changes above 5% are “higher,” below 5% are “lower,” and +/-10% are “much higher/lower.” The variation between years can be attributed to normal fluctuations in production. We anticipate future discharges to groundwater to be about the same as current year discharges.

Third-party destinations

(9.2.8.1) Relevance

Select from:

☑ Relevant

(9.2.8.2) Volume (megaliters/year)

93000

(9.2.8.3) Comparison with previous reporting year

Select from:

☑ Much 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

LyondellBasell discharged less to third-party destinations in 2024 compared with 2023. When comparing current data to the prior year, we apply a 5% change threshold: changes above 5% are "higher," below 5% are "lower," and +/-10% are "much higher/lower." We anticipate future discharges at the enterprise level to be about the same as current year discharges. The variation between years can be attributed to normal fluctuations in production.
[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)

23000

(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:

☑ 11-20

(9.2.9.6) Please explain

LyondellBasell's wastewater is treated using one or more biological, physical, or chemical methods before discharge, or sent to a publicly owned treatment works (POTW) for processing. All sites follow our Operational Excellence standards, which include selecting and adapting appropriate treatment methods, and comply with local regulatory requirements to consistently meet effluent discharge limits. Complex sites require tertiary treatment due to the variety and complexity of wastewater streams. This advanced treatment enhances removal of organics and solids—particularly pollutants affecting biochemical oxygen demand (BOD) and total suspended solids (TSS) (as noted in CDP question 2.5.1)—and may also remove nutrients, toxic materials to meet local authority requirements. When comparing current data to the prior year, we apply a 5% change threshold: changes above 5% are "higher," below 5% are "lower," and +/-10% are "much higher/lower. The variation between years can be attributed to normal fluctuations in global production.

Secondary treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

33000

(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:

☑ 11-20

(9.2.9.6) Please explain

LyondellBasell's wastewater is typically treated using one or more biological, physical, or chemical methods before discharge, or sent to a publicly owned treatment works (POTW) for processing. All sites follow our Operational Excellence standards, which include selecting and adapting appropriate water treatment methods. Sites also comply with applicable local regulations and apply the level of treatment necessary to consistently meet effluent discharge requirements. Secondary treatment is required for moderately complex operating sites. This level of treatment is typically selected to remove organics and/or toxic materials or to meet local authority requirements based on stream characteristics. Sites monitor treatment systems and maintain performance records as required by local regulations and permit conditions, which are based on the characteristics of both the wastewater and the receiving water body. In 2024, secondary treatment volumes were lower than the previous year. This reduction was primarily driven by the closure of a unit at one of our European sites and by temporary shutdowns for scheduled turnaround activities at our largest Gulf Coast site which significantly impacted treatment volumes. When comparing current data to the prior year, we apply a 5% change threshold: changes above 5% are "higher," below 5% are "lower," and +/-10% are "much higher/lower." Variations between years are attributed to normal production fluctuations. Future treatment needs are expected to remain consistent with current levels.

Primary treatment only

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

3000

(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

LyondellBasell's wastewater is typically treated using one or more biological, physical, or chemical methods before discharge, or sent to a publicly owned treatment works (POTW) for processing. Primary treatment is generally applied to simpler wastewater streams and is most common at less complex operating sites, where discharges have low or no organic content. This level of treatment primarily removes solids and meets local authority requirements based on stream characteristics. All sites follow our Operational Excellence standards, which include selecting and adapting appropriate water treatment methods. Sites also comply with applicable local regulations and apply the level of treatment necessary to consistently meet effluent discharge requirements. Treatment systems are tracked and monitored, and performance records are maintained as required by local regulations and permit conditions. These requirements are based on the characteristics of both the wastewater and the receiving water body. Discharge volumes for this reporting year are higher than the previous year. When comparing current data to the prior year, we apply a 5% change threshold: changes above 5% are "higher," below 5% are "lower," and +/-10% are "much higher/lower." Variations between years are attributed to normal production fluctuations,. Future treatment needs are expected to remain consistent with current levels.

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)

0

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☑ About the same

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

☑ Other, please specify :Solidification of classification methodology

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

☑ Less than 1%

(9.2.9.6) Please explain

LyondellBasell wastewaters are typically treated via one or more biological, physical, or chemical treatment methods before being discharged, or wastewaters are discharged directly to a publicly-owned treatment works (POTW) facility for treatment. Water that is used for cooling but does not come into contact with production activity may not require treatment prior to discharge. There was no volume of this type of discharge reported by our sites this cycle. Between 2022 and 2023, we have solidified our classification methodology across all sites and our sites report that no water is discharged before treatment, either by LYB operated treatment, or via treatment by third party.

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)

79000

(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:

☑ 61-70

(9.2.9.6) Please explain

LyondellBasell's wastewater is typically treated using one or more biological, physical, or chemical methods before discharge, or sent to a publicly owned treatment works (POTW) for processing. Some sites direct wastewater to third-party treatment facilities, which are obligated to meet local regulatory requirements for water treatment and discharge. These facilities often provide treatment up to the tertiary level, as required by local standards. Sites track and monitor wastewater as required by third-party agreements and maintain compliance records based on local regulations. All LyondellBasell sites follow our Operational Excellence standards, which include selecting and adapting appropriate water treatment methods. Sites also comply with applicable local regulations and apply the level of treatment necessary to consistently meet effluent discharge requirements. Treatment systems are monitored, and performance records are maintained as required by local regulations and permit conditions. Discharge volumes for this reporting year were much lower than the previous year. When comparing current data to the prior year, we apply a 5% change threshold: changes above 5% are "higher," below 5% are "lower," and +/-10% are "much higher/lower." Variations between years are attributed to normal production fluctuations,. Future treatment needs are expected to remain consistent with current levels.

Other

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Not relevant

(9.2.9.6) Please explain

LyondellBasell does not have another treatment method to disclose.
[Fixed row]

(9.2.10) Provide details of your organization's emissions of nitrates, phosphates, pesticides, and other priority substances to water in the reporting year.

(9.2.10.1) Emissions to water in the reporting year (metric tons)

217

(9.2.10.2) Categories of substances included

Select all that apply

☑ Nitrates

☑ Phosphates

(9.2.10.4) Please explain

Water management is an important aspect of our operations. At the enterprise level, we collect data on monitored parameters, including phosphates, for each site. All sites comply with local regulatory requirements for discharges and implement the necessary monitoring and treatment measures to consistently meet those standards. Potential pollutants are identified and assessed at the site level. Additionally, we have begun evaluating site emission data for nitrates, phosphates, pesticides, and other priority substances across the enterprise.
[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:

☑ No, we have assessed this value chain stage but did not identify any facilities with water-related dependencies, impacts, risks, and opportunities

(9.3.4) Please explain

In 2024, we completed a future water stress assessment using Aqueduct's "business as usual" water stress scenario (SSP3 RCP7.0). While most of our sites are generally classified as low- or medium- water risk, water stress is an important variable when calculating overall water risk. Most of our sites are in low to medium-water risk areas, with less than 0.1% of our global water consumption in high or extremely-high water risk locations. We are committed to completing water risk management plans for our large sites and facilities in high and extremely-high water risk areas by 2030.

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, and are not planning to do so in the next 2 years

(9.3.4) Please explain

Our LYB suppliers are screened in the EcoVadis IQ Plus platform to understand their sustainability risk. Our supplier sustainability risk screening considers business relevance, as well as country-specific, sector-specific, and commodity-specific risks to ensure a comprehensive assessment. Vendors identified as high or very high risk in the screening are requested to complete a sustainability assessment to gain transparency on the maturity of their sustainability management systems. Our main assessment solution is EcoVadis, a globally recognized sustainability ratings platform that evaluates companies' ESG performance. In 2024, we introduced IntegrityNext, a cloud-based assessment tool that we deploy alongside EcoVadis assessments to assess suppliers' sustainability management systems. Our supplier audit program successfully completed its first year in 2024. Based on our risk screening, we conducted 17 TfS audits targeting high-risk suppliers. Across all audits conducted to date, major findings primarily related to health and safety (e.g., fire safety) and labor and human rights (e.g., working hours). All findings, regardless of severity, are addressed through corrective action plans with defined deadlines.
[Fixed row]

(9.4) Could any of your facilities reported in 9.3.1 have an impact on a requesting CDP supply chain member?

Select from:

☑ No facilities were reported in 9.3.1

(9.5) Provide a figure for your organization's total water withdrawal efficiency.

(9.5.1) Revenue (currency)

40302000000

(9.5.2) Total water withdrawal efficiency

162508.06

(9.5.3) Anticipated forward trend

In 2024, our water withdrawal efficiency improved by ~10.3% compared to 2023, reflecting more efficient water use. Looking ahead, we anticipate maintaining water withdrawal efficiency within a similar range.
[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

Bulk organic chemicals
☑ Aromatics

(9.6.1.2) Product name

Included within enterprise calculation are the top 5 products.

(9.6.1.3) Water intensity value (m3/denominator)

2.61

(9.6.1.4) Numerator: water aspect

Select from:

☑ Total water consumption

(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 provide a response to this question using the total enterprise water consumption divided by the total tons of products produced, and select Aromatics as one of our most produced product type. The intensity is about the same as the prior year intensity (2.74 m3/mt), with the minor differences attributed to normal fluctuations in production. We expect future intensities to be about the same. We are undertaking life cycle assessment (LCA) studies for our product portfolio. Our LCAs are conducted according to ISO 14040/44. They undergo a critical review with an independent expert reviewer or a panel of experts (ISO/TS 14071), using recognized tools and databases, aligning with Together for Sustainability (TfS). The LCAs will be used to support customer information needs on the sustainability attributes of our products and technologies, including water use/intensity. We are collaborating to support the harmonization of product life cycle metrics and their application (e.g., ISO 14040/44, Product Environmental Footprint, GHG Protocol Product Standard) and share best practices within the chemical industry. Examples are our participation in TfS and the World Business Council for Sustainable Development (WBCSD) Partnership for Carbon Transparency (PACT) pathfinder framework project. We will continue to expand our capability to deliver life cycle metrics information in 2025 to support our customer information needs and sustainability ambitions, and further enhance the value proposition of sustainable solutions offerings. Water reuse is integral to our operations. We recycle our supply of water,

when possible, to limit the amount we draw from regional supplies. We track the number of cooling water cycles, representing the number of times water is reused in these systems, at our large sites.
[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:
☑ Annex XVII of EU REACH 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

In 2024, less than 2% of our revenue was generated from products containing substances in the scope of REACH Annex XVII restrictions. Similarly in 2024, less than 0.1% of our total number of products and representing approximately 3% of revenue, contained substances in the candidate list of SVHC for authorization above 0.1wt%. Further, we note that these products were placed on the market almost exclusively (>99.9% by revenue) for monomer or intermediate uses.
[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:
☑ No, and we do not plan to address this within the next two years

(9.14.3) Primary reason for not classifying any of your current products and/or services as low water impact

Select from:
☑ Judged to be unimportant, explanation provided

(9.14.4) Please explain

While we are undertaking life cycle assessment studies to support customer information needs on the sustainability attributes of our products and technologies, we do not classify low water impact as a primary sustainability driver for our products.
[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, but we plan to within the next two years

(9.15.1.2) Please explain

We are completing water risk management plans in a systematic manner across our in-scope sites, and plan to evolve our water-related risk assessment approach as we progress this effort in the coming years. For the few sites located in high and extremely-high water-risk areas, we are evaluating opportunities to reduce consumption, including through reusing water in our processes. Additionally, we signed the UN CEO Water Mandate, committing to continuous improvement in water stewardship. We track site-level instances of reductions in water use at the enterprise level, including at our sites in extremely high-risk regions, as part of water stewardship. For example, at our Vadodara India site, a resource conservation team meets regularly to identify resource savings.

Water, Sanitation, and Hygiene (WASH) services

(9.15.1.1) Target set in this category

Select from:

☑ Yes

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:
☑ Organization-wide (direct operations only)

(9.15.2.3) Category of target & Quantitative metric

Water pollution
☑ Other water pollution, please specify :Zero instances of environmental incidents. An environmental incident includes instances of water pollution excursions related to water discharges and water quality.

(9.15.2.4) Date target was set

12/31/2023

(9.15.2.5) End date of base year

12/30/2023

(9.15.2.6) Base year figure

19

(9.15.2.7) End date of target year

12/30/2024

(9.15.2.8) Target year figure

0

(9.15.2.9) Reporting year figure

22

(9.15.2.10) Target status in reporting year

Select from:

☑ Underway

(9.15.2.11) % of target achieved relative to base year

-16

(9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

☑ Other, please specify :UN CEO Water Mandate

(9.15.2.13) Explain target coverage and identify any exclusions

We classify environmental incidents on a scale from 0 to 5, with Level 5 having the highest impact. We report Level 2+ environmental incidents, indicating a failure to meet a policy, standard, or applicable law due to an unplanned release or discharge into the environment. Any releases that cannot be immediately mitigated are managed with support from HSE professionals who direct the mitigation efforts, monitor conditions, and interact with appropriate local authorities. We also develop action plans and share learnings throughout the organization to prevent future incidents.

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

Although we work hard to ensure compliance, sometimes incidents can occur. Our emphasis on reliability and process safety improvements will positively impact our environmental compliance performance as will our commitment to environmental performance improvement.

(9.15.2.16) Further details of target

Although we work hard to ensure compliance, sometimes incidents can occur. Our emphasis on reliability and process safety improvements will positively impact our environmental compliance performance as will our commitment to environmental performance improvement.

Row 2

(9.15.2.1) Target reference number

Select from:

☑ Target 2

(9.15.2.2) Target coverage

Select from:

☑ Organization-wide (direct operations only)

(9.15.2.3) Category of target & Quantitative metric

Water recycling/reuse

☑ Other water recycling/reuse, please specify :Number of cooling water cycles

(9.15.2.4) Date target was set

12/31/2023

(9.15.2.5) End date of base year

12/30/2023

(9.15.2.6) Base year figure

3

(9.15.2.7) End date of target year

12/30/2024

(9.15.2.8) Target year figure

3

(9.15.2.9) Reporting year figure

3

(9.15.2.10) Target status in reporting year

Select from:

☑ Achieved

(9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

☑ Other, please specify :UN CEO Water Mandate

(9.15.2.13) Explain target coverage and identify any exclusions

We track the number of cooling water cycles, representing the number of times water is reused in these systems, at our large sites. We target a minimum of 3 cycles for these systems.

(9.15.2.15) Actions which contributed most to achieving or maintaining this target

Support and emphasis from utilities managers at site and enterprise level.

(9.15.2.16) Further details of target

In 2024, we achieved our water use efficiency target at the relevant sites where we track cooling tower system cycles. This target is set for reliability and cost efficiency; however, it does impact the efficient use of water.

Row 4

(9.15.2.1) Target reference number

Select from:
☑ Target 4

(9.15.2.2) Target coverage

Select from:
☑ Organization-wide (direct operations only)

(9.15.2.3) Category of target & Quantitative metric

Water, Sanitation, and Hygiene (WASH) services
☑ Other WASH, please specify :% of our sites confirming water is safe for intended use

(9.15.2.4) Date target was set

12/31/2023

(9.15.2.5) End date of base year

12/30/2023

(9.15.2.6) Base year figure

100

(9.15.2.7) End date of target year

12/30/2024

(9.15.2.8) Target year figure

100

(9.15.2.9) Reporting year figure

100

(9.15.2.10) Target status in reporting year

Select from:

☑ Achieved

(9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

☑ Other, please specify :UN CEO Water Mandate

(9.15.2.13) Explain target coverage and identify any exclusions

We confirm water supplies delivered from municipalities or other third-party suppliers are monitored for quality before distribution to our sites. We require sites to confirm annually that appropriate monitoring is being conducted in order to ensure these water supplies are acceptable for use.

(9.15.2.15) Actions which contributed most to achieving or maintaining this target

Support and emphasis from utilities managers at site and enterprise level.

(9.15.2.16) Further details of target

In 2024 we achieved the related target since 100% of our sites confirmed water is safe for intended use.
[Add row]

C10. Environmental performance - Plastics

(10.1) Do you have plastics-related targets, and if so what type?

(10.1.1) Targets in place

Select from:

☑ Yes

(10.1.2) Target type and metric

Plastic polymers

☑ Other plastic polymers target, please specify :1.Produce and market at least 2 million metric tons of recycled and renewable-based polymers annually by 2030. 2.Generate at least $1 billion of CLCS incremental EBITDA 2030. 3.Zero loss of plastic pellets to the environment from our operations.

(10.1.3) Please explain

1.Produce and market at least 2 million metric tons of recycled and renewable-based polymers annually by 2030. Production and marketing includes (i) joint venture production marketed by LYB plus our pro rata share of the remaining production produced and marketed by the joint venture, and (ii) production via third-party tolling arrangements. With growing global demand for recycled and renewable-based plastics and limited supply, securing access to plastic waste feedstock and profitably expanding production capacity is key. This has been the focus of our Circular and Low Carbon Solutions (CLCS) business since its inception in 2022.. In addition to our investments in mechanical recycling, in 2024, we started construction of our MoReTec-1 plant in Cologne, a commercial scale chemical recycling facility utilizing our proprietary MoReTec technology.. We are further broadening our portfolio of recycled polymers with our newly acquired Newcycling solution-based recycling technology. We are also investing in plastic waste sorting infrastructure through partnerships such as Cyclyx and Source One Plastics. Our Circulen portfolio, which includes CirculenRecover, CirculenRevive, and CirculenRenew, enables customers to achieve their sustainability goals through high quality, customizable solutions. 2.Generate at least $1 billion of CLCS incremental EBITDA 2030 incremental to LyondellBasell's fossil-based O&P Americas and O&P EAI annual EBITDA. Through mechanical, solvent based, and chemical recycling we transform plastic waste into valuable resources, helping our customers meet their recycling and sustainability commitments while reducing plastic waste that would otherwise end up incinerated or landfilled or in the environment. Our renewable based polymers also offer our customers a lower product carbon footprint through the use of bio based wastes and residues as feedstock on a mass balance basis. Customers are increasingly seeking higher quality recycled and renewable based content to meet regulatory requirements and sustainability commitments. We deliver differentiated value in markets such as consumer packaging, automotive, and consumer durables through mechanical recycling, while for end markets requiring high quality specifications

such as food and contact sensitive consumer packaging we provide solutions through chemical recycling and renewable based product portfolios. We believe attractive demand in targeted segments will continue to support our goal of CLCS incremental EBITDA of $1 billion by 2030, incremental to LyondellBasell's fossil based O&P Americas and O&P EAI annual EBITDA. Although CLCS currently represents a small portion of our overall business, it is expanding rapidly, and we remain committed to its growth. 3.Zero loss of plastic pellets to the environment from our operations. We sell polymer products in the form of pellets, flakes, and powders, which are handled at multiple points from production to transportation and delivery to customers. Responsible pellet management and preventing pellet and polymer loss from our polymer handling sites is a high priority for us. LYB is a member of Operation Clean Sweep (OCS), a global initiative aimed at reducing the loss of pellets, flakes, and powders into the environment. The initiative supports members in their efforts to identify and improve practices to achieve zero pellet loss. Our manufacturing operations are guided by OCS's management system, which is embedded into our Operational Excellence Management System. We train our employees, conduct annual risk assessments associated with pellet handling, recycling, disposal, and containment, and develop enhancement projects to address identified risks. We monitor and report pellet loss in accordance with American Chemistry Council guidance. In 2024 we had no reportable losses of pellets to the environment from our operations.
[Fixed row]

(10.2) Indicate whether your organization engages in the following activities.

Production/commercialization of plastic polymers (including plastic converters)

(10.2.1) Activity applies

Select from:
☑ Yes

(10.2.2) Comment

We produce polypropylene, polyethylene, and compounds from fossil, recycled and renewable-based sources. We have other operations that could be considered engaging in activities associated with the other categories in this table.

Production/commercialization of durable plastic goods and/or components (including mixed materials)

(10.2.1) Activity applies

Select from:
☑ No

(10.2.2) Comment

We produce polypropylene, polyethylene, and compounds from fossil, recycled and renewable-based sources. We have other operations that could be considered engaging in activities associated with the other categories in this table.

Usage of durable plastics goods and/or components (including mixed materials)

(10.2.1) Activity applies

Select from:

☑ No

(10.2.2) Comment

We produce polypropylene, polyethylene, and compounds from fossil, recycled and renewable-based sources. We have other operations that could be considered engaging in activities associated with the other categories in this table.

Production/commercialization of plastic packaging

(10.2.1) Activity applies

Select from:

☑ No

(10.2.2) Comment

We produce polypropylene, polyethylene, and compounds from fossil, recycled and renewable-based sources. We have other operations that could be considered engaging in activities associated with the other categories in this table.

Production/commercialization of goods/products packaged in plastics

(10.2.1) Activity applies

Select from:

☑ Yes

(10.2.2) Comment

We produce polypropylene, polyethylene, and compounds from fossil, recycled and renewable-based sources. We have other operations that could be considered engaging in activities associated with the other categories in this table.

Provision/commercialization of services that use plastic packaging (e.g., food services)

(10.2.1) Activity applies

Select from:

☑ No

(10.2.2) Comment

We do not engage in this activity.

Provision of waste management and/or water management services

(10.2.1) Activity applies

Select from:

☑ No

(10.2.2) Comment

We do not engage in this activity.

Provision of financial products and/or services for plastics-related activities

(10.2.1) Activity applies

Select from:

☑ No

(10.2.2) Comment

We do not engage in this activity.

Other activities not specified

(10.2.1) Activity applies

Select from:
☑ No
[Fixed row]

(10.3) Provide the total weight of plastic polymers sold and indicate the raw material content.

(10.3.7) Please explain

Our CLCS business continued to grow at a rapid pace in 2024 and we made progress against our goal to produce and market at least 2 million metric tons of recycled and renewable-based polymers annually by 2030. In 2024, we produced and marketed 203 kilotons (kt) of recycled and renewable- based polymers. Production and marketing includes: (i) joint venture production marketed by LYB plus our pro rata share of the remaining production produced and marketed by the joint venture, and (ii) production via third-party tolling arrangements. We do not currently publicly disclose the total weight of polymers produced from all raw material sources.
[Fixed row]

C11. Environmental performance - Biodiversity

(11.2) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

(11.2.1) Actions taken in the reporting period to progress your biodiversity-related commitments

Select from:

☑ Yes, we are taking actions to progress our biodiversity-related commitments

(11.2.2) Type of action taken to progress biodiversity- related commitments

Select all that apply

☑ Land/water protection

☑ Land/water management

☑ Education & awareness

[Fixed row]

(11.4) Does your organization have activities located in or near to areas important for biodiversity in the reporting year?

	Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity
Legally protected areas	*Select from:* ☑ Yes (partial assessment)
Key Biodiversity Areas	*Select from:*

	Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity
	☑ Yes (partial assessment)

[Fixed row]

C13. Further information & sign off

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

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

[Fixed row]

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

Row 1

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

Select all that apply
☑ Climate change

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

Environmental performance – Climate change
☑ Other data point in module 7, please specify :Energy consumption, GHG emissions (scopes 1, 2 and 3)

(13.1.1.3) Verification/assurance standard

General standards

☑ Attestation Standards (AT-C Section 105 & 210/205) established by the American Institute of Certified Public Accountants (AICPA)

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

We publish our greenhouse gas (GHG) emissions and energy consumption mix data as part of our annual Sustainability Report. In 2024, PwC performed a limited assurance engagement over our GHG emissions (scopes 1, 2, and 3) and energy consumption and mix metrics. The scope 3 categories included in the assurance were purchased goods and services (Category 1), use of sold products (Category 11), and end-of-life treatment of sold products (Category 12). The review was conducted in accordance with the attestation standards established by the American Institute of Certified Public Accountants (AICPA), specifically AT-C section 105, Concepts Common to All Attestation Engagements, and AT-C section 210, Review Engagements. The assurance report from PwC is available on page 122 of our 2024 Sustainability Report, followed by the Management Assertion on pages 123–131.

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

LYB Sustainability Report 2024, p.122-132.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

Chief Executive Officer (CEO)

(13.3.2) Corresponding job category

Select from:

☑ Chief Executive Officer (CEO)
[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