Bunge - Climate Change 2023

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

At Bunge (NYSE: BG), our purpose is to connect farmers to consumers to deliver essential food, feed and fuel to the world. With more than two centuries of experience, global scale and deeply rooted relationships, we work to put quality food on the table, increase sustainability where we operate, strengthen global food security, and help communities prosper. As a leading company in oilseed processing and a leading producer and supplier of specialty plant-based oils and fats, we value our partnerships with farmers to improve the productivity and environmental efficiency of agriculture across our value chains and to bring quality products from where they're grown to where they're consumed. At the same time, we collaborate with our customers to create and reimagine the future of food, developing tailored and innovative solutions to meet evolving dietary needs and trends in every part of the world. Our Company is headquartered in St. Louis, Missouri, and we have almost 23,000 dedicated employees working across approximately 300 facilities located in more than 40 countries.

Sustainability is core to our business. The very nature of the work we do — connecting farmers to consumers to deliver essential food, feed and fuel to the world — requires a deep understanding of the environment and market demands around us. It means we must face the realities of a changing climate and food insecurity, as we work to minimize our impact on delicate ecosystems while meeting the needs of consumers and communities.

Learn more in Bunge's 2023 Global Sustainability Report: https://bunge.com/-/media/files/pdf/2023-bunge-sustainability-report

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date
January 1 2022

End date
December 31 2022

Indicate if you are providing emissions data for past reporting years
No

Select the number of past reporting years you will be providing Scope 1 emissions data for
<Not Applicable>

Select the number of past reporting years you will be providing Scope 2 emissions data for
<Not Applicable>

Select the number of past reporting years you will be providing Scope 3 emissions data for
<Not Applicable>

C0.3

(C0.3) Select the countries/areas in which you operate.

Argentina
Austria
Brazil
Canada
China
Colombia
Finland
France
Germany
Ghana
Hungary
India
Italy
Malaysia
Netherlands
Poland
Romania
Russian Federation
Solomon Islands
Spain
Turkey
Ukraine
United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C-AC0.6/C-FB0.6/C-PF0.6

(C-AC0.6/C-FB0.6/C-PF0.6) Are emissions from agricultural/forestry, processing/manufacturing, distribution activities or emissions from the consumption of your products – whether in your direct operations or in other parts of your value chain – relevant to your current CDP climate change disclosure?

	Relevance
Agriculture/Forestry	Elsewhere in the value chain only [Agriculture/Forestry/processing/manufacturing/Distribution only]
Processing/Manufacturing	Both direct operations and elsewhere in the value chain [Processing/manufacturing/Distribution only]
Distribution	Elsewhere in the value chain only [Agriculture/Forestry/processing/manufacturing/Distribution only]
Consumption	No

C-AC0.6b/C-FB0.6b/C-PF0.6b

(C-AC0.6b/C-FB0.6b/C-PF0.6b) Why are emissions from agricultural/forestry activities undertaken on your own land not relevant to your current CDP climate change disclosure?

Row 1

Primary reason

Do not own/manage land

Please explain

We do not own nor manage land. We source agricultural commodities directly and indirectly from primary producers.

C-AC0.6f/C-FB0.6f/C-PF0.6f

(C-AC0.6f/C-FB0.6f/C-PF0.6f) Why are emissions from distribution activities within your direct operations not relevant to your current CDP climate change disclosure?

Row 1

Primary reason

Outside the direct operations of my organization

Please explain

Emissions from distribution activities within our direct operations are accounted for in Scope 3: Category 4 and Category 9.

C-AC0.6g/C-FB0.6g/C-PF0.6g

(C-AC0.6g/C-FB0.6g/C-PF0.6g) Why are emissions from the consumption of your products not relevant to your current CDP climate change disclosure?

Row 1

Primary reason

Evaluated but judged to be unimportant

Please explain

Our products are sourced primarily from renewable sources (agricultural crops). Emissions from their use would fall into a biogenic scope or be immaterial related to emissions at other stages of our value chain.

C-AC0.7/C-FB0.7/C-PF0.7

(C-AC0.7/C-FB0.7/C-PF0.7) Which agricultural commodity(ies) that your organization produces and/or sources are the most significant to your business by revenue? Select up to five.

Agricultural commodity
Soy

% of revenue dependent on this agricultural commodity
40-60%

Produced or sourced
Sourced

Please explain
The company is a major global trader and processor of oilseeds and grains. Soy is the principal crop Bunge handles in its agribusiness and edible oils segments. Where provided, financial and cost figures in this submission are estimates presented for purposes of providing general insights into scale and materiality. They are unaudited and not immediately comparable to SEC figures reported in Bunge's public filings. Confidential figures have been omitted. Please refer to our annual report on Form 10-K for audited financials and other information.

Agricultural commodity
Palm Oil

% of revenue dependent on this agricultural commodity
Less than 10%

Produced or sourced
Sourced

Please explain
The company is a major global trader of palm oil and other tropical oils. Where provided, financial and cost figures in this submission are estimates presented for purposes of providing general insights into scale and materiality. They are unaudited and not immediately comparable to SEC figures reported in Bunge's public filings. Confidential figures have been omitted. Please refer to our annual report on Form 10-K for audited financials and other information.

Agricultural commodity
Other, please specify (Corn)

% of revenue dependent on this agricultural commodity
10-20%

Produced or sourced
Sourced

Please explain
The company is a major global trader and processor of oilseeds and grains. Where provided, financial and cost figures in this submission are estimates presented for purposes of providing general insights into scale and materiality. They are unaudited and not immediately comparable to SEC figures reported in Bunge's public filings. Confidential figures have been omitted. Please refer to our annual report on Form 10-K for audited financials and other information.

Agricultural commodity
Other, please specify (Wheat)

% of revenue dependent on this agricultural commodity
Less than 10%

Produced or sourced
Sourced

Please explain
The company is a major global trader and processor of oilseeds and grains. Where provided, financial and cost figures in this submission are estimates presented for purposes of providing general insights into scale and materiality. They are unaudited and not immediately comparable to SEC figures reported in Bunge's public filings. Confidential figures have been omitted. Please refer to our annual report on Form 10-K for audited financials and other information.

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	BMG169621056

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?
Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual or committee	Responsibilities for climate-related issues
Board-level committee	Sustainability considerations – including climate change, deforestation and native vegetation conversion, water, biodiversity, human rights, social development, stakeholder engagement and more – are embedded across the functions of multiple committees of Bunge's Board of Directors. The Board is composed of five committees that oversee Bunge's governance, compensation, risk management and sustainability practices, including climate-related risks and opportunities. → The Sustainability and Corporate Responsibility Committee oversees and provides input on the development of sustainability and corporate social responsibility policies, strategies and programs of the company. → The Corporate Governance and Nominations Committee has the overall responsibility for overseeing, among other things, Bunge's governance frameworks and Board practices, as well as the identification of qualified Board candidates with the appropriate skills, diversity and experience to oversee Bunge's business. → The Human Resources and Compensation Committee oversees our compensation framework, governance, guidelines and performance criteria, which includes Environmental, Social and Governance ("ESG") and human capital metrics. → The Enterprise Risk Management Committee evaluates climate-related risks and exposures in connection with its periodic review of other enterprise risks facing the company, and management's risk mitigation strategies. → The Audit Committee evaluates trends and developments in non-financial reporting practices and requirements which impact the company's regulatory filings, including ESG disclosures.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – all meetings	Reviewing and guiding annual budgets Overseeing major capital expenditures Overseeing acquisitions, mergers, and divestitures Reviewing innovation/R&D priorities Overseeing and guiding employee incentives Reviewing and guiding strategy Overseeing and guiding the development of a transition plan Monitoring the implementation of a transition plan Overseeing and guiding scenario analysis Overseeing the setting of corporate targets Monitoring progress towards corporate targets Overseeing and guiding public policy engagement Reviewing and guiding the risk management process	<Not Applicable>	Sustainability considerations – including climate change, deforestation and native vegetation conversion, water, biodiversity, human rights, social development, stakeholder engagement and more – are embedded across the functions of multiple committees of Bunge's Board of Directors. The Board is composed of five committees that oversee Bunge's governance, compensation, risk management and sustainability practices, including climate-related risks and opportunities. → The Sustainability and Corporate Responsibility Committee oversees and provides input on the development of sustainability and corporate social responsibility policies, strategies and programs of the company. → The Corporate Governance and Nominations Committee has the overall responsibility for overseeing, among other things, Bunge's governance frameworks and Board practices, as well as the identification of qualified Board candidates with the appropriate skills, diversity and experience to oversee Bunge's business. → The Human Resources and Compensation Committee oversees our compensation framework, governance, guidelines and performance criteria, which includes Environmental, Social and Governance ("ESG") and human capital metrics. → The Enterprise Risk Management Committee evaluates climate-related risks and exposures in connection with its periodic review of other enterprise risks facing the company, and management's risk mitigation strategies. → The Audit Committee evaluates trends and developments in non-financial reporting practices and requirements which impact the company's regulatory filings, including ESG disclosures. The five committees mentioned above have varying levels of responsibilities over the governance in into which climate-related issues are integrated. These mechanisms are discussed during each board committee meeting, during which executives present Bunge's situation, strategy and proposals, and directors provide their feedback, guidance and suggestions. Particular focus has been on climate matters including Bunge's science based targets and the transition plan to achieve them by 2030; Bunge's sustainability-linked revolving credit facility, trade receivables securitization program, and other "green" loans; and compensation that is linked to performance on emissions targets.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	Yes	When evaluating a Board Director's competence on climate-related issues, relevant Committees consider the Director's current or recent professional responsibilities and their relationship to climate subjects, as well as any civic engagement or public policy work. For participation on the Board-level Sustainability and Corporate Responsibility Committee, Directors are expected to understand and engage with climate issues with greater detail in their professional and public policy life.	<Not Applicable>	<Not Applicable>

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Position or committee
Chief Executive Officer (CEO)

Climate-related responsibilities of this position
Managing annual budgets for climate mitigation activities
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Managing climate-related acquisitions, mergers, and divestitures
Integrating climate-related issues into the strategy
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets

Coverage of responsibilities
<Not Applicable>

Reporting line
Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line
Quarterly

Please explain
Chief Executive Officer ("CEO") is the final arbiter in the management of sustainability strategy, risks and opportunities, and helps to set the overall vision for the company. The CEO directly oversees the strategy, decision-making, and monitoring of all climate-related responsibilities of their direct reports.

Position or committee
Chief Sustainability Officer (CSO)

Climate-related responsibilities of this position
Managing annual budgets for climate mitigation activities
Developing a climate transition plan
Implementing a climate transition plan
Integrating climate-related issues into the strategy
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate

Coverage of responsibilities
<Not Applicable>

Reporting line
CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line
Quarterly

Please explain
At Bunge, the Chief Sustainability Officer & Government Affairs lead rests in one merged role, whose primary oversight is the management lead of the Board-level sustainability committee. The CSO leads a global team operating across multiple geographies and functions, which regularly engages business leadership to enhance company-wide alignment with sustainability objectives and opportunities. The CSO sets the strategy, monitors progress, and evaluates performance, providing regular updates to the executive leadership team and quarterly updates to the Board-level sustainability committee.

Position or committee
Chief Risks Officer (CRO)

Climate-related responsibilities of this position
Conducting climate-related scenario analysis
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities
<Not Applicable>

Reporting line
CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line
Quarterly

Please explain
The Chief Risk Officer ("CRO") oversees the enterprise risk management process of the company, with the inclusion of climate-related risks and opportunities and their impacts on the business strategy, operations and investments. The CRO oversaw the development of an enhanced enterprise risk management process that includes multiple climate-related factors across short, medium and long-term timelines. The CRO also oversaw the climate-related scenario analysis throughout 2022.

Position or committee
Chief Financial Officer (CFO)

Climate-related responsibilities of this position
Managing annual budgets for climate mitigation activities
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Managing climate-related acquisitions, mergers, and divestitures

Coverage of responsibilities
<Not Applicable>

Reporting line
CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line
Quarterly

Please explain
Chief Financial Officer (“CFO”) provides overall guidance and strategic input into financial opportunities and risks associated with sustainability issues, as well as oversight of Bunge’s sustainability-linked revolving credit facility, trade receivables securitization program, and other “green” loans. The CFO also oversees the CAPEX and OPEX programs of the company, which include actions taken to mitigate greenhouse gas emissions in our operations.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	In April 2022, we updated our Annual Incentive Plan (AIP) for how we will hold ourselves accountable to our sustainability commitments. The funding approach calculates a share of profit that is then allocated based on the individual incentive targets for each of the more than 7,000 employees in the plan. Several of the targets are directly related to Bunge's performance reducing our climate emissions as per our Science Based Targets. Additionally, senior executives and plant operations managers have compensation performance indicators with even broader range of climate-related metrics.

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive
Corporate executive team

Type of incentive
Monetary reward

Incentive(s)
Bonus - % of salary

Performance indicator(s)
Progress towards a climate-related target
Reduction in absolute emissions
Increased share of revenue from low-carbon products or services in product or service portfolio

Incentive plan(s) this incentive is linked to
Short-Term Incentive Plan

Further details of incentive(s)
In April 2022, we updated our Annual Incentive Plan (AIP) for how we will hold ourselves accountable to our sustainability commitments. The funding approach calculates a share of profit that is then allocated based on the individual incentive targets for each of the more than 7,000 employees in the plan. Several of the targets are directly related to Bunge's performance reducing our climate emissions as per our Science Based Targets. Corporate executives incentives are linked to absolute emissions reductions and the uptake of lower carbon products such as certified commodities.

Explain how this incentive contributes to the implementation of your organization’s climate commitments and/or climate transition plan
At Bunge, we believe accountability is an important driver of our business success. That is why we have updated our annual incentive plans to ensure that our people are accountable to the commitments that are made within the enterprise. This includes our climate-related commitments and our intention to source lower carbon commodities and products that help to reduce the GHG emissions from the agriculture industry. The AIP covers over 7,000 employees but it is most acute for our executive team who are directly responsible and accountable to the strategies that go into the achievement of our GHG reduction goals.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?
Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	1	5	Due to the dynamics of the commodities market, horizons beyond 5 years may change significantly. When considering climate-related risks, we use publicly available and peer reviewed scientific data and IPCC findings that factor in aggregate climate information from multiple scientific sources.
Medium-term	5	10	Medium term strategies and analyses consider longer evolution and cycles of international agricultural supply and demand. These may span 5 to 10 years due to climate patterns, government policy and market innovations. When considering climate-related risks, we use publicly available and peer reviewed scientific data and IPCC findings that factor in aggregate climate information from multiple scientific sources.
Long-term	10	20	Long term horizons are those that consider scenarios beyond 10 years' time and could span multiple commodity market cycles. When considering climate-related risks, we use publicly available and peer reviewed scientific data and IPCC findings that factor in aggregate climate information from multiple scientific sources.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Bunge has a Corporate Risk Management Committee in its corporate structure, which is responsible for reviewing and approving the Company's risk management policies and any material changes thereto. The risks covered by the Management Committee include without limitation:

- Commodity price risk;

- Market risk;

- Liquidity, interest rate and financing risk;

- Credit and counterparty risk;

- Country risk;

- Risks related to climate change.

When considering these risks, three criteria are evaluated: possibility of occurrence, magnitude of risk and power to mitigate. These risks are directly linked to the substantive impact understood by Bunge, which is the impact related to the potential loss of customer demand for our products or the ability to supply products in sufficient volumes to meet demand. Bunge also has a Risk Management Committee and a Sustainability and Corporate Responsibility Committee on its Board of Directors, which are responsible for assisting the Board and the Corporate Risk Management Committee in fulfilling their supervisory responsibility, identifying, evaluating and continuously monitoring sustainability, corporate social responsibility and trends, environmental issues, risks and concerns that may affect the Company's activities and business performance.

Since 2021, Bunge has been enhancing its enterprise risk management (ERM) process by incorporating more detailed climate-related risks and opportunities. With support from a third-party expert, we developed a climate risk analysis (CRA) framework aligned with the TCFD framework to incorporate physical and transition risks into our analysis and strategic planning. Importantly, we desired to quantify the potential exposure to our business, which required that we assess the financial magnitude of all risks identified. To understand and quantify the direct physical risks to our assets and operations, we partnered with an outside expert firm to capture the modelled average annual loss (MAAL) of our major facilities and port locations. For the transition risks, we used our internal expertise to quantify each expected risk across a range of less than $50M to greater than $500M.We define substantive financial risks as those which can incur costs of $200,000,000 or more, which would constitute a magnitude of 4 or above in our ERM process. We believe this high threshold underscores Bunge’s ability to leverage its global asset footprint to mitigate against climate-related risks, helping to reinforce the climate resilience of our business. In addition, we assessed the likelihood of these risks occurring and our ability to mitigate against each risk. In doing so, we were able to prioritize risks based on short-, medium- and long-term scenarios across RCP 4.5 and RCP 8.5, providing insight into potential actions we could take to adapt our business.

Adverse weather conditions, including as a result of climate change, may negatively affect the availability, quality and price of agricultural commodities and agricultural commodity products, as well as our operations and operating results. Adverse weather conditions have historically caused volatility in the agricultural commodity industry and consequently in our operating results by causing crop failures or significantly reduced harvests, which may affect the supply and pricing of the agricultural commodities that we sell and use in our business, reduce demand for our products and negatively affect the creditworthiness of agricultural producers who do business with us.

Severe adverse weather conditions, such as hurricanes or severe storms, may also result in extensive property damage, extended business interruption, personal injuries and other loss and damage to us. Our operations also rely on dependable and efficient transportation services. A disruption in transportation services, as a result of weather conditions or otherwise, may also significantly adversely impact our operations.

Additionally, the potential physical impacts of climate change are uncertain and may vary by region. These potential effects could include changes in rainfall patterns, water shortages, changing sea levels, changing storm patterns and intensities, and changing temperature levels that could adversely impact our costs and business operations, the location, costs and competitiveness of global agricultural commodity production and related storage and processing facilities and the supply and demand for agricultural commodities. These effects could be material to our results of operations, liquidity or capital resources.

Finally, our business could be affected in the future by the regulation or taxation of greenhouse gas emissions or policies related to national emission reduction plans. We regularly assess the potential impacts to our business resulting from regulation or policies aimed at reducing greenhouse gas emissions.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered
Direct operations
Upstream
Downstream

Risk management process
Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment
More than once a year

Time horizon(s) covered
Short-term
Medium-term
Long-term

Description of process
Bunge has a Corporate Risk Management Committee (ERM) in its corporate structure, responsible for reviewing and approving the Company's risk management policies and any material changes thereto. The Committee meets quarterly and reports to the Board-level Enterprise Risk Management Committee multiple times a year. The risks covered by the Management Committee include:

- Commodity price risk;
- Market risk;
- Liquidity, interest rate and financing risk;
- Credit and counterparty risk;
- Country risk;
- Risks related to climate change.

Since 2021, Bunge has been enhancing its enterprise risk management (ERM) process by incorporating more detailed climate-related risks and opportunities. With support from a third-party expert, we developed a climate risk analysis (CRA) framework aligned with the TCFD framework to incorporate physical and transition risks into our analysis and strategic planning. We went through a year-long process working with multiple internal stakeholders within our organization, ranging across commercial teams, industrial operations, sustainability, government affairs, and more. Through this process we began to identify the major climate-related risk factors expected to impact the company, both physical and transition risk categories. We assessed acute and chronic direct physical risks to our asset footprint and indirect physical risk to our business such as reduced farmer productivity. We also analyzed the transition risks such as those pertaining to policy and legal, reputation and market dynamics.

This process was enhanced in 2022 when we assessed and quantified these risks based on pathways established by the Intergovernmental Panel on Climate Change (IPCC). We decided to apply two different climate scenarios known as Representative Concentration Pathways (RCP). The first is RCP4.5, which considers a moderate scenario in which emissions peak around 2040 and then decline. The second is RCP 8.5 which considers business as usual – a “worst-case-scenario” where no actions are taken by companies or countries to reduce emissions. These two scenarios are then applied using three timelines: short- (1-5 years), medium- (5-10 years), and long-term (10+ years), and cover risks throughout the value chain (upstream, direct operations, and downstream).

Importantly, we desired to quantify the potential exposure to our business, which required that we assess the financial magnitude of all risks identified. To understand and quantify the direct physical risks to our assets and operations, we partnered with an outside expert firm to capture the modeled average annual loss (MAAL) of our major facilities and port locations. For the transition risks, we used our internal expertise to quantify each expected risk across a range of less than $50M to greater than $500M. In addition, we assessed the likelihood of these risks occurring and our ability to mitigate against each risk. In doing so, we were able to prioritize risks based on short-, medium- and long-term scenarios across RCP 4.5 and RCP 8.5, providing insight into potential actions we could take to adapt our business.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	The agriculture industry is subject to regulations and laws that vary across jurisdictions and geographies. Bunge operates in over 40 countries, and as such is subject to various national, regional, and municipal-level laws or regulations that directly impact our operations and projects. Within each country, Bunge’s teams work to ensure that the company operates in compliance with these laws and regulations, under the general oversight of Bunge's local legal department and reporting regularly to our global office. When considering current regulations on climate-related factors, Bunge's government affairs and sustainability teams work jointly with other business functions to identify known risks, acceptable thresholds, and mitigating factors. An example of a current regulation owing to climate change mitigation and adaptation is the Brazilian Forest Code, considered one of the most comprehensive and strictest regulations of forestry use in the world. A key climate provision in the Forest Code mandates that farms must preserve a minimum of 20% of native vegetation on their property -- extending to 80% in the Amazon Biome. All of Bunge's suppliers in Brazil are required to comply with the Forest Code. Suppliers are required under contractual clauses to be legally compliant and to provide further documentation when requested. Failure to comply with local regulation and mandatory standards prevents further negotiation and expose suppliers to contractual penalties. Commercial and origination teams work closely with the local legal and sustainability teams to drive full compliance by suppliers in the value chain, often conducting due diligence protocols that exceed national government standards. Today, 100% of Bunge's suppliers in Brazil are in compliance, and we publicly list any farms that we have previously blocked due to violations of the Code and other similar regulations. Given the risk associated with purchasing commodities from farms that are found to be in violation of the Forest Code, and the associated fines that can result from such purchases, the Risk Committee factors in these regulations in their assessment.

	Relevance & inclusion	Please explain
Emerging regulation	Relevant, always included	The agriculture industry is subject to regulations and laws that vary across jurisdictions and geographies. Bunge operates in over 40 countries, and as such is subject to various national, regional, and municipal-level laws or regulations that directly impact our operations and projects. Within each country, Bunge's teams work to ensure that the company operates in compliance with these laws and regulations, under the general oversight of Bunge's local legal department. Bunge may be impacted directly and/or indirectly by emerging regulations that may affect our business and operations, and are therefore always included in our assessments. Our government affairs teams work in close cooperation with national-level teams to monitor, review and assess the regulatory environment, engage with government stakeholders, and produce reports that embed emerging regulatory risks into short, medium and long-term planning. Through 2022, Bunge's government affairs team closely monitored and evaluated the potential impact the emerging European Union Deforestation Regulation (EUDR) restricting the import of Brazil-based soy associated with land-use change, a driver of climate change. Regulations such as these are considered by the Risk Committee and other teams to understand if and how volumes from Brazil could be impacted, and whether Bunge's portfolio of deforestation- and conversion-free supply opens the door for opportunity through such possible regulations.
Technology	Relevant, always included	Technological advances have the potential to impact Bunge's business and operations, and are therefore included in risk assessments. Bunge works to evaluate and incorporate new technology into its market analyses and forecasting. The company also evaluates and invests in new technologies via its venture fund and works with supplying farmers in key areas to apply technologically supported agronomic best practices. New technologies are incorporated into short and long-term strategies. In recent years, the rise of new seed inputs and biotechnology have emerged that are more climate resilient or otherwise provide new opportunities for farmers to capture carbon through cover crops. Such technologies can indirectly benefit Bunge's growth strategy and planning but may also open the door to competitive disadvantages if not assessed appropriately. Through our recent partnerships with CoverCress Inc, Corteva, Bayer and Nutrien, and our joint venture with Chevron, Bunge is supporting the expansion of novel seeds and other inputs to farmers that provide a lower carbon intensity feedstock that helps meet the growing demand for renewable fuels. In addition to serving as a renewable feedstock, novel seeds may also offer ecosystem benefits of a rotational cover crop as it provides cover, decreases nitrogen losses and improves overall soil health, exemplifying our commitment to supporting farmers and reducing carbon across our supply chain.
Legal	Relevant, always included	Legal compliance is a minimum standard in Bunge's operations. Bunge maintains strong compliance standards and infrastructure across global and regional business units and incorporates legal risks into its assessments. The company conducts employee training on a variety of environmental, social, and technology-related subjects. The risk of non-compliance with laws and regulations, and the impact it can have on the business for both financial and reputational factors, is always considered. Bunge also seeks legal compliance in supplier contracts that meet and sometimes exceed national regulation. Such regulation includes but is not limited to labor and environmental crimes committed by suppliers. In 2022, 740 farmers in Bunge's Brazil supply chain are blocked due to social and environmental criteria, considering the requirements of the Soy Moratorium, embargoed areas by IBAMA, slave labor legislation, the Green Protocol for Grains of Pará and sourcing standards.
Market	Relevant, always included	Agricultural commodity markets are inherently volatile and influenced by government policy, consumer trends and other factors. Bunge's Risk Committee works with relevant research teams and other business functions, both internally and externally, to keep track of these trends, and communicate potential risks and opportunities to relevant stakeholders including the Enterprise Risk Risk Committee on the Board of Directors. A significant market risk includes the diminishing demand for products that are not verified or certified as sustainable. Whereas in previous years the agriculture industry was able to provide products without assurances, pressure from end consumers to provide a minimum guarantee of products that are climate friendly in that they do not contribute to climate change or to social disruption is growing significantly. Therefore the Risk Committee evaluates this potential impact on the Company's financial well-being. In Bunge's case, the Company has been able to provide certified or verified products on demand for some time, and in recent years has been one of the largest provider of deforestation-free and low carbon products. The soy certification portfolio includes the Round Table on Responsible Soy (RTRS), Biomass Biofuel Sustainability Voluntary Scheme (2BSvs), Proterra and International Carbon and Sustainability Certification (ISCC) standards, among others. In Brazil, total volumes of soy are over 97% verified deforestation- and conversion-free. For palm oil, we actively promote the uptake of Roundtable on Sustainable Palm Oil (RSPO) certified material by our global customer base. 37% of Bunge's global palm oil volumes were certified in 2022.
Reputation	Relevant, always included	Agribusiness and food companies have become a major focus of public efforts to improve the sustainability of global supply chains and the overall food system. Attention on actors such as Bunge has grown, with stakeholders now broadening to include governments, major investors, global and local NGOs, consumer groups, and academia. Negative perceptions about agribusiness and food companies can have substantive impacts on the Company's growth, operations and financial health. Therefore reputational risks are always included in Bunge's annual assessments. Due to our global presence in key agricultural markets with known impacts on the environment, Bunge places high priority on, at a minimum, complying with local and national regulations intended to protect social and environmental considerations. Beyond compliance, Bunge establishes public commitments to meet stakeholder expectations for a more sustainable food system.
Acute physical	Relevant, always included	Acute climate-related physical impacts from climate change are increasingly common in geographies around the world, and as a result are always considered in our risk planning. Bunge has facilities in multiple geographies, some of which are exposed to the increasingly acute weather patterns such as hurricanes, tornadoes, droughts and other factors. There were no substantive acute physical events experienced in 2022. A cold snap in the Southern states of the United States resulted in roughly $10m business disruption, however, this is considered a relatively small impact. Nevertheless, in previous years Bunge experienced more significant events such as hurricanes that caused more structural damage and business disruption – all of which were beneath our substantive risk threshold and recuperated through insurance.
Chronic physical	Relevant, sometimes included	With the potential for increasing global temperatures, the likelihood of chronic physical risks from climate change are also increasing. This can create disruptions in agricultural regions that have traditionally relied on predictable weather and climate over decades. Chronic physical risks are therefore considered in long-term horizons for their potential impact on Bunge's origination strategy. In 2022, we enhanced our enterprise risk management framework to take into consideration the impacts of chronic physical risks on our business strategy in the long-term. We continue to evaluate the scientific research and trends to ensure we adapt our strategy accordingly.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Risk 1

Where in the value chain does the risk driver occur?
Upstream

Risk type & Primary climate-related risk driver

Acute physical	Cold wave/frost

Primary potential financial impact
Decreased revenues due to reduced production capacity

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Acute physical risks due to climate change are increasingly impacting specific locations, supply chains and commodities. Although Bunge's global asset footprint is a natural mitigant to this risk, adverse conditions such as hurricanes and severe storms may result in extensive property damage, extended business interruption, personal injuries and other loss and damage to us. Additionally, acute climatic events such as droughts and frost are increasingly possible which may impact the availability of commodities that we source. Our operations also rely on dependable and efficient transportation services. A disruption in transportation services as a result of weather conditions or otherwise, may also significantly adversely impact our operations. This may result in lost competitiveness and reduced financial results, as well as potential increases to insurance costs in the long-term.

In previous years, Bunge was affected by acute weather events such as hurricanes and cyclones that resulted in business disruption and property damage. Although no major acute storms affected Bunge in 2022, we nevertheless experienced business disruption and reduced supply in the Southern states of the United States due to significant frost and cold weather patterns that are not typical for that geography in the autumn/early winter period. This resulted in reduced production capacity, and by extension, reduced revenue within this value chain. It did not disrupt relationships with farmers or with customers, as we were able to source commodities from other geographies.

Time horizon
Medium-term

Likelihood
Very likely

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
8000000

Potential financial impact figure – maximum (currency)
12000000

Explanation of financial impact figure
Due to the recentness of the event, exact figures for the business disruption are still being audited. The range above represents the best-case scenario ($8m) and worst-case scenario ($12m) of the business disruption as a result of lost origination capacity resulting from diminished crop supply in the growing areas nearby a Bunge facility processing in Alabama. At this time we are still assessing exact figures and working through insurance to recover losses, though we believe it will be resolved sometime in late 2023.

Cost of response to risk
0

Description of response and explanation of cost calculation
The cost of the response to this particular acute weather-related incident is included in our standard insurance coverage. Due to the smaller nature of this business disruption, we do not anticipate increased insurance premiums. However, we note that an increase in severity, frequency and magnitude of weather-related impacts on Bunge's sourcing regions and direct operations may incur additional costs in the future. These have been identified through Bunge's enterprise risk management process, and within our new climate-related risk scenario analysis which is described in later portions of this document and in our latest sustainability report. At this time no specific actions will be taken, since short-term costs have not been materially impacted by acute weather-related events. But our climate and risk management teams continuously evaluate the potential for rising costs due to such events and their impact on insurance premiums and other financial tools.

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?
Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Opp1

Where in the value chain does the opportunity occur?
Upstream

Opportunity type
Products and services

Primary climate-related opportunity driver
Development and/or expansion of low emission goods and services

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
The sustainable sourcing of our products is the cornerstone of our commitment to responsible supply chains. Among other methods, we use annual certification and verification to help validate the sustainability of our products and processes. Products that have been certified as free from deforestation are considered lower carbon because they do not result in land-use change, a major source of global emissions. This approach evaluates both the environmental and socioeconomic impacts of our work, with particular emphasis in regions where we have identified increased sustainability risks.

We are able to provide certified or verified products on demand, and in recent years we have been been one of the largest provider of deforestation-free and low carbon products. The soy certification portfolio includes the Round Table on Responsible Soy (RTRS), Biomass Biofuel Sustainability Voluntary Scheme (2BSvs), Proterra and International Carbon and Sustainability Certification (ISCC) standards, among others.

As one of the largest providers of non-deforestation certified soybean from Brazil, Bunge's commitment to certification is a powerful tool to build public trust in food, feed and fuel products while providing assurances to our customers and helping them meet their own climate commitments. Certification can include requirements that suppliers are operating in compliance with local regulations, providing safe working conditions for employees, acting in an environmentally responsible manner and implementing agricultural best practices that reduce CO2 loss from soil. Demand for such products continues to be a trend in certain markets among customers that require assurances and third-party verification. Since certifications carry a premium, there are additional margins to be earned by Bunge for their sale.

Bunge adopts commitments and practices specific to our value chains. We prioritized these value chains based on their environmental and social relevance, their importance to Bunge’s business, and considering input from stakeholders. We aim to reduce progressively any incidents of deforestation in our supply chains, achieving our goal of deforestation-free supply in 2025.

Time horizon
Short-term

Likelihood
Very likely

Magnitude of impact
Medium-high

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
35000000

Potential financial impact figure – maximum (currency)
45000000

Explanation of financial impact figure
The range above represents the additional margins that Bunge can earn from the sale of certified soybean from areas of Brazil that are considered to be higher at risk of deforestation. Certification standards include RTRS, 2BsVs, Bunge’s custom certification PRO-S, or other related standards. Bunge regularly purchases more certified volumes than is demanded by the market. Therefore, the low-estimate figure represents the minimum margin based on current demand averaged over the last three years, and the high-estimate figure represents the potential margins if a larger share than normal of certified volumes is purchased by customers. The precise number varies each year, though falls within this estimated range for Brazil-based soybean volumes.

Cost to realize opportunity
11500000

Strategy to realize opportunity and explanation of cost calculation
Certification is a powerful means to provide assurances to customers that the products they purchase from Bunge are free from deforestation and contain lower carbon attributes due to the lack of land-use change associated with their production. But certification is subject to market demand (as explained by the minimum and maximum margin opportunity described above). In an operational sense, there is no specific cost to purchasing certified products. This is included in our standard origination expenses.

Instead, we have disclosed the figure above to demonstrate the approximate cost to maintain our non-deforestation commitment approach in the priority regions of South America, particularly Brazil, which can include the cost of certifications and other standards.

The year 2022 was used as the basis for this figure, meaning that the investments made only during this year, which eliminates the initial expenses for the creation of our commitment back in 2015, any previous certification standards established, or the amount spent up through 2022. The figure is therefore an encapsulation of all the 2022 expenses that include satellite monitoring, database management, engagement with non-compliant farms, audits (when necessary), third-party verification of certified commodities, and other related efforts that are a key part of Bunge’s strategy to be deforestation-free in 2025.

As a result of these investments, Bunge is able to verify (whether through certification or our own sourcing standards) that over 97% of the volumes of soybean in Brazil are deforestation- and conversion-free.

Comment

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1

Climate transition plan

No, but our strategy has been influenced by climate-related risks and opportunities, and we are developing a climate transition plan within two years

Publicly available climate transition plan

<Not Applicable>

Mechanism by which feedback is collected from shareholders on your climate transition plan

<Not Applicable>

Description of feedback mechanism

<Not Applicable>

Frequency of feedback collection

<Not Applicable>

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

<Not Applicable>

Explain why your organization does not have a climate transition plan that aligns with a 1.5°C world and any plans to develop one in the future

In 2021, we announced science-based targets (SBTs) to reduce greenhouse gas emissions in our operations and throughout our value chains, in line with the ambitions of the 2015 Paris Climate Agreement. These targets are the most ambitious in our sector, and a natural next step in Bunge's climate journey. They are validated by the Science Based Targets Initiative for all three scopes, and are framed in a climate transition plan that is aligned with a well-below 2-degree pathway.

We are laser-focused on implementing our SBTs. Bunge colleagues around the world know they play an important role in achieving these targets, and our teams—including sustainability, commercial, origination, industrial operations, procurement and finance—meet weekly to identify gaps, opportunities and resources needed to meet these goals. We provide regular updates to our leadership team and Board of Directors, in addition to disclosing our progress publicly each year.

To achieve our targets, we anticipate we will make significant enhancements across our global operations and value chain interactions. This includes: procuring renewable electricity and promoting renewable energy consumption where feasible; promoting decarbonization practices with our suppliers, and enhancing shipping and logistics in coordination with suppliers and customers across our value chain.

Even as we perform well against our industry-leading goals, we know there is more that can be done. That is why we are increasing our efforts and shifting our business mindset toward the next phase of our climate journey, as we seek to develop a climate transition plan aligned with a 1.5°C world. Starting in 2023, Bunge is working in collaboration with Ceres, a leading authority on climate transition plans for food and agriculture companies, on a multiphase journey to advance our climate ambitions and transition planning.

Our intention is to develop a preliminary plan in the second half of 2023 that will describe the emissions reductions and investments needed to align with a 1.5°C pathway, potential scenarios and actions that Bunge could take, and ranges of emissions reductions expected from those actions. The preliminary plan will be refined after the final GHG Protocol Land Sector and Removals Guidance is released, currently expected during mid-2024.

Explain why climate-related risks and opportunities have not influenced your strategy

<Not Applicable>

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy	Primary reason why your organization does not use climate-related scenario analysis to inform its strategy	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	Yes, qualitative and quantitative	<Not Applicable>	<Not Applicable>

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Physical climate scenarios: RCP 4.5	Company-wide	<Not Applicable>	The risk assessment took into consideration the established risk types within the scenario. The level of risk was calculated by multiplying: 1) likelihood, 2) magnitude) and 3) mitigation.
Physical climate scenarios: RCP 8.5	Company-wide	<Not Applicable>	The risk assessment took into consideration the established risk types within the scenario. The level of risk was calculated by multiplying: 1) likelihood, 2) magnitude) and 3) mitigation.
Transition scenarios: Bespoke transition scenario	Company-wide	1.6ºC – 2ºC	The risk assessment took into consideration the established risk types within the scenario. The level of risk was calculated by multiplying: 1) likelihood, 2) magnitude) and 3) mitigation.
Transition scenarios: Bespoke transition scenario	Company-wide	4.1ºC and above	The risk assessment took into consideration the established risk types within the scenario. The level of risk was calculated by multiplying: 1) likelihood, 2) magnitude) and 3) mitigation.

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

What are some of the physical and transition risks, and their magnitude of impact on the business, that can result from a 2 degree warming scenario and a >4 degree warming scenario in the short, medium and long-term?

Is Bunge's current enterprise risk management framework currently fit for purpose in assessing the variety of physical and transition risks that arise from the two scenarios?

Results of the climate-related scenario analysis with respect to the focal questions

Since 2021, Bunge has been enhancing its enterprise risk management (ERM) process by incorporating more detailed climate-related risks and opportunities. We developed a climate risk analysis (CRA) framework aligned with the TCFD framework to incorporate physical and transition risks into our analysis and strategic planning. Through this process we began to identify the major climate-related risk factors expected to impact the company, both physical and transition risk categories. We assessed acute and chronic direct physical risks to our asset footprint and indirect physical risk to our business such as reduced farmer productivity. We also analyzed the transition risks such as those pertaining to policy and legal, reputation and market dynamics. This process was enhanced in 2022 when we assessed and quantified these risks based on pathways established by the Intergovernmental Panel on Climate Change (IPCC). We decided to apply two different climate scenarios: the first is RCP4.5, the second is RCP 8.5. These two scenarios are then applied using three timelines: short-, medium-, and long-term. To understand and quantify the direct physical risks to our assets and operations, we partnered with an outside expert firm to capture the modeled average annual loss (MAAL) of our major facilities and port locations. For the transition risks, we used our internal expertise to quantify each expected risk across a range of less than $50M to greater than $500M. In addition, we assessed the likelihood of these risks occurring and our ability to mitigate against each risk. In doing so, we were able to prioritize risks based on short-, medium- and long-term scenarios across RCP 4.5 and RCP 8.5, providing insight into potential actions we could take to adapt our business. Using the CRA framework, we are able to identify the geographies and physical assets that are most exposed to the impacts of climate change in the second half of the century, and their expected cost to our business. The most significant of the transition risks is expected to involve public-policy decisions that may impact Bunge's business, such as additional mandates and regulation on carbon which could add costs to our business and lack of availability of lower carbon fuel sources in the short- and medium-term. Since 2020, Bunge has become active the Fuels America Coalition with the intention of helping to support public policy decisions that create a more favorable market for lower carbon intensity products such as biodiesel, renewable diesel, and sustainable aviation fuel. Participating in the coalition is an important and effective means to ensure that public policy is supporting the shift away from traditional high carbon fossil fuel-based inputs.. As a result, Bunge has become active in industry associations and networks to support regulatory policy that allows for greater uptake of sustainable fuel derived from plant-based sources like soy and canola.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	As climate change continues to drive market, regulatory, reputational, and other trends, Bunge's risk management system is a powerful way to help shape the products and services we source and develop. We believe that climate change opens significant opportunities for growth. This past year we announced an important joint venture with Chevron to increase our ability to meet the demand for next generation renewable fuels and the development of lower carbon intensity feedstocks. This partnership allows us to leverage our experience to help shape the sustainability of the growing renewable energy industry. Our other growth areas – improving our processing and origination capabilities, increasing our plant lipids portfolio, and developing new plant-based protein ingredients – will contribute to more climate-friendly agribusiness and food systems today and into the future. Additionally, a new partnership with Nutrien in the United States will support farmers to do the same while increasing the cultivation of lower carbon products. The program is targeting the 2023-2024 crop season and is expected to include practices such as cover crops, reduced tillage, nutrient management, and responsible pesticide use. While Nutrien plans to provide crop consulting services, Bunge will contract with these farmers and manage harvest and post-harvest commercialization
Supply chain and/or value chain	Yes	Bunge's climate action mindset has helped to unlock new growth opportunities that are defined by their low-carbon attributes. These include a focus on renewable fuels, plant-based proteins, used cooking oils, and sustainably sourced commodities. Together, we are calling these our carbon solutions. We're positioning ourselves to be the preferred low carbon solutions partner to customers in the food, feed and fuel industries, while also reducing our own carbon footprint to meet our climate targets. We're expanding pilot programs in North America, South America and Europe to increase the acreage of land that is using regenerative agricultural practices. We are also supporting farmers as they access new tools and capabilities to improve resource use so that regenerative agriculture can become a scalable market. Our regenerative agriculture program in Brazil, in which the pilot project in place covers roughly 250,000 hectares of land, was designed to assist farmers to be ready for the increasing demand for sustainable products. It provides an assessment of the farms' current practices, a customized action plan supporting more sustainable practices, and a range of other resources to support implementation efforts.
Investment in R&D	Yes	Sustainability and climate considerations are a key component of our innovation and R&D investment. We're further expanding existing customer offerings with the construction of a fully integrated soy protein and textured soy concentrate facility in the United States, through a $500m investment. Plant-based foods are 10 times less carbon intensive than traditional beef. Nearly half of the products in our pipeline are plant-based alternatives.
Operations	Yes	In 2021, we were proud to announce ambitious climate action and emissions reduction targets, made possible by our existing work and our ambitions for a more sustainable agribusiness and food system. Our targets are validated by the globally recognized Science Based Targets Initiative (SBTi), highlighting our commitment to reducing greenhouse gas emissions within our operations and throughout our supply chains. In addition, Bunge announced our commitment alongside the United Nations Climate Change Conference (COP26), where we joined other agricultural leaders in a separate, industry-wide commitment to accelerate action towards fighting climate change. In 2022, we continued our relentless pursuit of projects that improve energy performance, drive cost reductions, and lower emissions across the organization. Over $250 million in capital expenditure (CAPEX) spending has been identified over the next decade that will directly help us meet our Scope 1 and 2 targets. The largest reductions achieved in 2022 were accomplished by contracting low carbon and renewable electricity for multiple plants around the world. In addition to minor changes to some plant operations, the purchasing of greener sources of electricity reduced CO2e (carbon dioxide or equivalent emissions) by more than 331,000 metric tons. This is equivalent to removing nearly 75,000 gas-powered vehicles from the road for a year.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Capital expenditures Acquisitions and divestments Access to capital Assets Liabilities	Addressing the realities of climate change is one of the biggest challenges facing our planet today. Rapid changes in the environment have had a direct impact on nearly everyone in our industry and in the communities where we live and work. With the urgency of climate action greater than ever, we are committed to doing our part to find tangible solutions to the crisis, and are scaling up our ambition more than ever before. It starts with how we think as a business. Driven by a variety of teams and levels of leadership, Bunge has embraced climate-focused decision-making with strong business benefits. As a result, our financial planning has evolved and now more than ever we consider the associated greenhouse gas (GHG) impact of our strategies, operations and investments, and how it will shape our long-term climate ambitions. In 2021, we announced science-based targets (SBTs) to reduce greenhouse gas emissions in our operations and throughout our value chains, in line with the ambitions of the 2015 Paris Climate Agreement. These targets are the most ambitious in our sector, and a natural next step in Bunge's climate journey. Over $250 million in capital expenditure (CAPEX) spending has been identified over the next decade that will directly help us meet our Scope 1 and 2 targets. Our climate action mindset, combined with the opportunities afforded by a transition to SBTs, has helped to unlock new growth markets that are defined by their low-carbon attributes. The food production portion of our business has been focused on meeting consumer demand for more healthy and low-carbon sources of food, including the growing plant-based protein market for meat and dairy. At the same time, we are leveraging our capabilities to help support the growing renewable energy industry and the development of next-generation renewable fuels and other low-carbon-intensity products. We've been a leading provider of sustainable products and solutions for years, including sourcing certified commodities around the world. These commodities carry lower carbon attributes since they are not associated with active deforestation. They also incorporate the value obtained through regenerative agricultural projects. This past year we also announced an important joint venture with Chevron to increase our ability to meet the demand for next generation renewable fuels and the development of lower carbon intensity feedstocks. This partnership allows us to leverage our experience to help shape the sustainability of the growing renewable energy industry. Our other growth areas – improving our processing and origination capabilities, increasing our plant lipids portfolio, and developing new plant-based protein ingredients – will contribute to more climate-friendly agribusiness and food systems today and into the future. New financial instruments have also been realized, including the $1.75 billion sustainability-linked revolving credit facility that was renewed in late 2021, and a trade receivables securitization program in 2022 to which applicable margin will be increased or decreased based on Bunge's performance in comparison with certain sustainability targets: chief among them our climate goals and SBTs. Bunge has developed enhancements to its enterprise risk management process by incorporating more detailed sustainability risks and opportunities. These include risks emanating from changing climate and weather patterns, water scarcity, deforestation, human rights, farmer productivity and increasing taxation and regulation on GHG emissions. The enhanced process provides Bunge with greater oversight and management of climate-related risks and the potential financial implications, and will help ensure continued short-, medium- and long-term resilience.

C3.5

(C3.5) 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	Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance taxonomy
Row 1	No, but we plan to in the next two years	<Not Applicable>

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

Intensity target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Is this a science-based target?

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

Target ambition

Well-below 2°C aligned

Year target was set

2021

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Market-based

Scope 3 category(ies)

<Not Applicable>

Base year

2020

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

1862418

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

1337064

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

<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

<Not Applicable>

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)

<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e)
<Not Applicable>

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
3199482

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
100

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)
<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)
<Not Applicable>

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)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)
<Not Applicable>

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)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
<Not Applicable>

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
100

Target year
2030

Targeted reduction from base year (%)
25

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
1769789

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
1098589

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

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)
<Not Applicable>

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
2868378

Does this target cover any land-related emissions?

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

% of target achieved relative to base year [auto-calculated]

Target status in reporting year
Underway

Please explain target coverage and identify any exclusions
This target covers Scopes 1 and 2 per SBTi criteria. It includes industrial operations and excludes offices and other non-material sources.

Plan for achieving target, and progress made to the end of the reporting year
In 2022, we continued our relentless pursuit of projects that improve energy performance, drive cost reductions, and lower emissions across the organization. Over $250 million in capital expenditure (CAPEX) spending has been identified over the next decade that will directly help us meet our Scope 1 and 2 targets. The largest reductions achieved in 2022 were accomplished by contracting low carbon and renewable electricity for multiple plants around the world. In addition to minor changes to some plant operations, the purchasing of greener sources of electricity reduced CO2e (carbon dioxide or equivalent emissions) by more than 331,000 metric tons. This is equivalent to removing nearly 75,000 gas-powered vehicles from the road for a year.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

Target reference number
Abs 2

Is this a science-based target?
Yes, and this target has been approved by the Science Based Targets initiative

Target ambition
Well-below 2°C aligned

Year target was set
2021

Target coverage
Company-wide

Scope(s)
Scope 3

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
Category 1: Purchased goods and services
Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)
Category 4: Upstream transportation and distribution

Base year
2020

Base year Scope 1 emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 2 emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)
60154267

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)
<Not Applicable>

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)
2103940

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)
6444410

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e)
68702617

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
68702617

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
<Not Applicable>

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
<Not Applicable>

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)
57

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)
<Not Applicable>

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)
2

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)
6

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)
<Not Applicable>

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)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)
<Not Applicable>

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)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
67

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
68

Target year
2030

Targeted reduction from base year (%)
12

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)
55194008

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

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)
2036766

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
6435193

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)
63665967

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
63665967

Does this target cover any land-related emissions?
Yes, it covers land-related and non-land related emissions (e.g. SBT approved before the release of FLAG target-setting guidance)

% of target achieved relative to base year [auto-calculated]

Target status in reporting year
Underway

Please explain target coverage and identify any exclusions
Categories 1, 3, and 4 of GHG Protocol are included. This meets the threshold set by SBTi, and other categories are not part of the target.

Plan for achieving target, and progress made to the end of the reporting year
The largest share of Bunge's total emissions comes from the supply chain, known as Scope 3. This is also where we can target the largest reductions. The most important

reduction comes from implementing our 2025 non-deforestation commitment. Leveraging our global network of suppliers and partners, we're also cutting Scope 3 emissions by encouraging regenerative farming practices, optimizing logistics operations, and pushing for the uptake of certified products that are produced sustainably. In 2022, we replaced secondary data for soy originated from areas of Brazil that experience higher rates of deforestation, leveraging our powerful non deforestation monitoring system. We did the same for our marine transportation. Having better data helps us better analyze our emissions inventory, therefore enabling interventions that can reduce overall emissions levels.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number
Int 1

Is this a science-based target?
No, but we are reporting another target that is science-based

Target ambition
<Not Applicable>

Year target was set
2016

Target coverage
Company-wide

Scope(s)
Scope 1
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Intensity metric
Metric tons CO2e per metric ton of product

Base year
2016

Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity)
0.0557

Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity)
0.0557

Intensity figure in base year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for total Scope 3 (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)
0.0557

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure
50

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure
50

% of total base year emissions in Scope 3, Category 1: Purchased goods and services covered by this Scope 3, Category 1: Purchased goods and services intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 2: Capital goods covered by this Scope 3, Category 2: Capital goods intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) covered by this Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution covered by this Scope 3, Category 4: Upstream transportation and distribution intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 5: Waste generated in operations covered by this Scope 3, Category 5: Waste generated in operations intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 6: Business travel covered by this Scope 3, Category 6: Business travel intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 7: Employee commuting covered by this Scope 3, Category 7: Employee commuting intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 8: Upstream leased assets covered by this Scope 3, Category 8: Upstream leased assets intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution covered by this Scope 3, Category 9: Downstream transportation and distribution intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 10: Processing of sold products covered by this Scope 3, Category 10: Processing of sold products intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 11: Use of sold products covered by this Scope 3, Category 11: Use of sold products intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products covered by this Scope 3, Category 12: End-of-life treatment of sold products intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 13: Downstream leased assets covered by this Scope 3, Category 13: Downstream leased assets intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 14: Franchises covered by this Scope 3, Category 14: Franchises intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 15: Investments covered by this Scope 3, Category 15: Investments intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Other (upstream) covered by this Scope 3, Other (upstream) intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Other (downstream) covered by this Scope 3, Other (downstream) intensity figure
<Not Applicable>

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this total Scope 3 intensity figure
<Not Applicable>

% of total base year emissions in all selected Scopes covered by this intensity figure
100

Target year

2026

Targeted reduction from base year (%)
10

Intensity figure in target year for all selected Scopes (metric tons CO2e per unit of activity) [auto-calculated]

% change anticipated in absolute Scope 1+2 emissions
10

% change anticipated in absolute Scope 3 emissions

Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)
0.04935

Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)
0.04935

Intensity figure in reporting year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for total Scope 3 (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)
0.04935

Does this target cover any land-related emissions?
No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

Target status in reporting year
Achieved

Please explain target coverage and identify any exclusions
Bunge achieved the 10% reduction target compared to the 2026 baseline.

Plan for achieving target, and progress made to the end of the reporting year
<Not Applicable>

List the emissions reduction initiatives which contributed most to achieving this target
Emission reduction initiatives that contributed to achieving this target include global green electricity purchases.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?
Other climate-related target(s)

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number
Oth 1

Year target was set
2016

Target coverage
Company-wide

Target type: absolute or intensity
Intensity

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

Energy productivity	Other, please specify (Energy (Scopes 1&2))

Target denominator (intensity targets only)
GJ

Base year
2016

Figure or percentage in base year
1.004

Target year
2026

Figure or percentage in target year
0.9

Figure or percentage in reporting year
0.96

% of target achieved relative to base year [auto-calculated]

Target status in reporting year
Underway

Is this target part of an emissions target?
No

Is this target part of an overarching initiative?
Science Based targets initiative - other

Please explain target coverage and identify any exclusions
The 2016 baseline had the removal of sold assets to reflect business adjustments. We expect to reach the 2026 target.

Plan for achieving target, and progress made to the end of the reporting year
We continue to promote energy efficiency in our plants by investing in new boilers and other equipment that reduces costs and resource inputs required to power our operations and processes. An example includes heat reuse methodologies that lower overall costs and waste. The result is that our operations are more sustainable and adaptable to the new trends in energy generation. Our target is to reduce energy use by 10% per ton of product by 2026, from a 2016 baseline. We have been making good progress on this target, with further investments needed in the next few years.

List the actions which contributed most to achieving this target
<Not Applicable>

Target reference number
Oth 2

Year target was set
2016

Target coverage
Company-wide

Target type: absolute or intensity
Intensity

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

Waste management	Other, please specify (total waste to landfill)

Target denominator (intensity targets only)
metric ton of waste

Base year
2016

Figure or percentage in base year
0.86

Target year
2026

Figure or percentage in target year
0.77

Figure or percentage in reporting year
0.53

% of target achieved relative to base year [auto-calculated]

Target status in reporting year
Achieved

Is this target part of an emissions target?
No

Is this target part of an overarching initiative?
Science Based targets initiative - other

Please explain target coverage and identify any exclusions
Bunge's major industrial facilities create hazardous and non-hazardous waste as a byproduct of the processes to convert the raw materials we purchase into the products that our customers need. Although our overall waste generation is low relative to other industries, we nevertheless have built robust waste management processes and systems to ensure we are minimizing our impact on landscapes and ecosystems. Our target is to reduce waste disposal by 10% per ton of product by 2026, from a 2016 baseline. We have made considerable progress already, overperforming our target by more than threefold. The 2016 baseline had the removal of sold assets to reflect business adjustments.

Plan for achieving target, and progress made to the end of the reporting year
<Not Applicable>

List the actions which contributed most to achieving this target
Implementation of new policies to reuse non-hazardous waste products in facilities. After 14 months without any waste disposal reported, Bunge's plant in Xiamen, China achieved zero waste landfill status. All of Bunge's six facilities in the country are now labeled with this accomplishment, adding to the additional 23 plants with zero-waste landfill status in other countries around the world.

Target reference number
Oth 3

Year target was set
2015

Target coverage
Company-wide

Target type: absolute or intensity
Absolute

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

Land use change	Percent of supply chain compliant with zero gross deforestation

Target denominator (intensity targets only)
<Not Applicable>

Base year
2015

Figure or percentage in base year
10

Target year
2025

Figure or percentage in target year
100

Figure or percentage in reporting year
97

% of target achieved relative to base year [auto-calculated]

Target status in reporting year
Underway

Is this target part of an emissions target?
Eliminating deforestation in Bunge's supply chains has been a priority of the Company since the establishment of its 2025 commitment in 2016. Since then, considerable resources have been dedicated to enhancing traceability and monitoring of the supply chain, enacting impact projects to protect and restore native vegetation, and other activities. Since a significant share of global GHG emissions come from land-use change, it is clear that the implementation of Bunge's non-deforestation policy in 2025 will drive reduction in emissions in our supply chains, thus helping the Company achieve its Scope 3 SBT.

Is this target part of an overarching initiative?
Remove deforestation

Please explain target coverage and identify any exclusions
Bunge's commitment to eliminate deforestation in 2025 applied to all of its supply chains. However, efforts are focused in the priority value chains and geography where deforestation is considered to be a greater risk. This includes regions of South America (in Brazil, Argentina and Paraguay within the company's grains & oilseeds platform), and global palm oil volumes.

Plan for achieving target, and progress made to the end of the reporting year
Bunge has an industry-leading commitment to end deforestation in our supply chains in 2025. We were the first with a 2025 commitment when we set it in 2015. Today, we are one of the largest providers of verified deforestation- and conversion-free soy in the world.

We have built the industry's most comprehensive monitoring system for the areas of South America facing higher risk of deforestation. It gives us unprecedented visibility into our supply chain, which is important because this visibility allows us to take action and course correct on our partnerships as needed. 100% of our direct purchases of soy are traceable to farms in the priority areas of Brazil, Paraguay and Argentina. 16,000+ farms across nearly 20m hectares of land are monitored with satellite, GPS coordinates, and Rural Environmental Registry (CAR) data.

In our global palm value chain, 95% of volumes are traceable to mill, and 90% to plantation.

We actively engage with suppliers to drive compliance with our sourcing policies, as well as industry standards. It also includes the promotion of: Certified products, regenerative agriculture, biodiversity protection, and other incentives for more sustainable agriculture practices.

List the actions which contributed most to achieving this target
<Not Applicable>

C4.3

(C4.3) 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.
Yes

C4.3a

(C4.3a) 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 (only for rows marked *)
Under investigation	0	0
To be implemented*	12	32600
Implementation commenced*	0	0
Implemented*	14	55700
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Low-carbon energy consumption	Low-carbon electricity mix

Estimated annual CO2e savings (metric tonnes CO2e)
51300

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
0

Payback period
No payback

Estimated lifetime of the initiative
6-10 years

Comment
In 2022 Bunge reduced 51,300 tons of CO2 through zero-carbon electricity power purchase agreements.

Initiative category & Initiative type

Energy efficiency in production processes	Machine/equipment replacement

Estimated annual CO2e savings (metric tonnes CO2e)
4400

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
10000

Payback period
1-3 years

Estimated lifetime of the initiative
6-10 years

Comment
In 2022 Bunge reduced 4,400 tons CO2 in energy efficiency through the implementation of boiler exchanges in key facilities.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Internal price on carbon	We use a $40 shadow price to internally evaluate potential investments (CAPEX and mergers & acquisitions). This $40 was calculated using State and Trends of Carbon Pricing from the World Bank's carbon pricing dashboard and applying those trends to jurisdictions in which Bunge has operations. Projects that result in an increase in emissions have a positive cashflow input (cost) and vice versa for CO2 decrease / revenue.
Dedicated budget for low-carbon product R&D	Sustainability is a key component of our innovation and budget for low-carbon product development. We continue to see growing interest from potential partners in non-food applications for oils, wanting to replace petroleum-based products with plant-based ones. Nearly half of the products in our pipeline are plant-based alternatives.
Internal incentives/recognition programs	We updated our Annual Incentive Plan (AIP) for how we will hold ourselves accountable to our sustainability commitments. The funding approach calculates a share of profit that is then allocated based on the individual incentive targets for each of the more than 7,000 employees in the plan. Many of the targets directly correspond to emissions reduction activities, and for staff whose role is to execute on these activities, more specific climate-related targets have been developed.
Dedicated budget for energy efficiency	With nine interrelated performance pillars in place to improve the efficiency, sustainability and safety of operations worldwide -- including energy efficiency -- the Bunge Production System (BPS) is a comprehensive system that presents consistent and global ways of working. Its focus is on improving and evolving industrial processes, on a constant and continuous basis, so that all units operate as efficiently as possible, considering our value chains and reaching the desired level of excellence.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?
Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation
Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon
The EU Taxonomy for environmentally sustainable economic activities

Type of product(s) or service(s)

Biofuels	Hydrogenated vegetable oil

Description of product(s) or service(s)
The company produces biofuel which can be used as fuel or added to regular fossil fuel and still reduces over 60% of emissions when compared to traditional fossil fuels. We own and operate biodiesel facilities in Europe and Brazil and have equity investments in biodiesel producers in Europe and Argentina. This business is complementary to our core Agribusiness operations as in each case we supply some of the raw materials (crude vegetable oil) used in their production processes. Due to business confidentiality, we do not disclose the specific revenue from such products or sales. It's important to note that up to 40% of crude oil sales in Brazil are linked to biofuel supplies.

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

Methodology used to calculate avoided emissions
Estimating and Reporting the Comparative Emissions Impacts of Products (WRI)

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

Functional unit used
MJ

Reference product/service or baseline scenario used
Fossil fuel-based diesel

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

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario
0.00004581

Explain your calculation of avoided emissions, including any assumptions
The California Air Resources Board has made available a list of current alternative fuel pathways in accordance with the Low-Carbon Fuel Standard where the carbon intensity of each fuel type is listed in gCO2e/MJ. The biodiesel with the corresponding feedstock was compared to the CARBOB fossil diesel carbon intensity to estimate the avoided emissions.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year
2

Level of aggregation
Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon
Other, please specify (Established certification systems such as RTRS, ISCC, RSPO, 2BSvs, Proterra, and others)

Type of product(s) or service(s)

Other	Other, please specify (Grains, oilseeds, and tropical oils)

Description of product(s) or service(s)
Certified products (especially soybean and palm oil, the two principle crops that Bunge sources) come with assurances of no deforestation or conversion of native vegetation. As a result, the products that are certified carry a lower carbon intensity, and can be sold to destination markets and customers as a low-carbon premium product.

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

Methodology used to calculate avoided emissions
Estimating and Reporting the Comparative Emissions Impacts of Products (WRI)

Life cycle stage(s) covered for the low-carbon product(s) or services(s)
Cradle-to-gate

Functional unit used
Metric tons of product

Reference product/service or baseline scenario used
Full land use change products

Life cycle stage(s) covered for the reference product/service or baseline scenario
Cradle-to-gate

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario
2.7

Explain your calculation of avoided emissions, including any assumptions
Land use change (LUC) and land management emissions of certified products are lower compared to uncertified counterparts. The carbon intensities of certified commodities were compared to carbon intensities of non-certified commodities to calculate avoided emissions.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year
2.5

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?
No

C5.1a

(C5.1a) 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?

Row 1

Has there been a structural change?
Yes, a divestment

Name of organization(s) acquired, divested from, or merged with
Since we set our SBTs in late 2021, Bunge publicly announced the following divestitures from its operations: the sale of its interior grain elevators and oils facilities in Rotterdam and Mexico (late 2021), and the sale of our oilseed processing and refining business in Russia (in early 2023). As a result of these divestitures, we re-baselined our 2020 emissions data this year for Scopes 1, 2 and 3.

Details of structural change(s), including completion dates
Since we set our SBTs in late 2021, Bunge publicly announced the following divestitures from its operations: the sale of its interior grain elevators and oils facilities in Rotterdam and Mexico (late 2021), and the sale of our oilseed processing and refining business in Russia (in early 2023). As a result of these divestitures, we re-baselined our 2020 emissions data this year for Scopes 1, 2 and 3.

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	No	<Not Applicable>

C5.1c

(C5.1c) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in C5.1a and/or C5.1b?

	Base year recalculation	Scope(s) recalculated	Base year emissions recalculation policy, including significance threshold	Past years' recalculation
Row 1	Yes	Scope 1 Scope 2, location-based Scope 2, market-based Scope 3	Impact on emissions calculation is greater than or equal to a 5% significance threshold.	Yes

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
1862418

Comment
Includes direct CO2 emissions from fuel use in facilities.

Scope 2 (location-based)

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
1376996

Comment
After creating science based targets, our base year Scope 2 emissions were recalculated using the market-based method. The calculation of the location-based method is meant for analysis purposes only and is not audited.

Scope 2 (market-based)

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
1337064

Comment
After creating science based targets, our base year Scope 2 emissions were recalculated using the market-based method.

Scope 3 category 1: Purchased goods and services

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
60154267

Comment
To measure our value chain footprint, we follow the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. This standard provides requirements and guidance for companies to prepare and report data from 15 distinct categories, providing companies with a systematic framework to understand value chain-related emissions.

Scope 3 category 2: Capital goods

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
66598

Comment
To measure our value chain footprint, we follow the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. This standard provides requirements and guidance for companies to prepare and report data from 15 distinct categories, providing companies with a systematic framework to understand value chain-related emissions.

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

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
2103940

Comment
To measure our value chain footprint, we follow the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. This standard provides requirements and guidance for companies to prepare and report data from 15 distinct categories, providing companies with a systematic framework to understand value chain-related emissions.

Scope 3 category 4: Upstream transportation and distribution

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
6444410

Comment
To measure our value chain footprint, we follow the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. This standard provides requirements and guidance for companies to prepare and report data from 15 distinct categories, providing companies with a systematic framework to understand value chain-related emissions.

Scope 3 category 5: Waste generated in operations

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
27545

Comment
To measure our value chain footprint, we follow the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. This standard provides requirements and guidance for companies to prepare and report data from 15 distinct categories, providing companies with a systematic framework to understand value chain-related emissions.

Scope 3 category 6: Business travel

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
2367

Comment
To measure our value chain footprint, we follow the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. This standard provides requirements and guidance for companies to prepare and report data from 15 distinct categories, providing companies with a systematic framework to understand value chain-related emissions.

Scope 3 category 7: Employee commuting

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
18243

Comment
To measure our value chain footprint, we follow the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. This standard provides requirements and guidance for companies to prepare and report data from 15 distinct categories, providing companies with a systematic framework to understand value chain-related emissions.

Scope 3 category 8: Upstream leased assets

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
61517

Comment
To measure our value chain footprint, we follow the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. This standard provides requirements and guidance for companies to prepare and report data from 15 distinct categories, providing companies with a systematic framework to understand value chain-related emissions.

Scope 3 category 9: Downstream transportation and distribution

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
1689851

Comment
To measure our value chain footprint, we follow the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. This standard provides requirements and guidance for companies to prepare and report data from 15 distinct categories, providing companies with a systematic framework to understand value chain-related emissions.

Scope 3 category 10: Processing of sold products

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
22664366

Comment
To measure our value chain footprint, we follow the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. This standard provides requirements and guidance for companies to prepare and report data from 15 distinct categories, providing companies with a systematic framework to understand value chain-related emissions.

Scope 3 category 11: Use of sold products

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
266018

Comment
To measure our value chain footprint, we follow the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. This standard provides requirements and guidance for companies to prepare and report data from 15 distinct categories, providing companies with a systematic framework to understand value chain-related emissions.

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

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
8611059

Comment
To measure our value chain footprint, we follow the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. This standard provides requirements and guidance for companies to prepare and report data from 15 distinct categories, providing companies with a systematic framework to understand value chain-related emissions.

Scope 3 category 13: Downstream leased assets

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
0

Comment
There are no downstream leased assets under Bunge's business model.

Scope 3 category 14: Franchises

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
0

Comment
There are no franchises under Bunge's business model.

Scope 3 category 15: Investments

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
983286

Comment
To measure our value chain footprint, we follow the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. This standard provides requirements and guidance for companies to prepare and report data from 15 distinct categories, providing companies with a systematic framework to understand value chain-related emissions.

Scope 3: Other (upstream)

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
0

Comment
All upstream emissions were accounted for in Categories 1-8.

Scope 3: Other (downstream)

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
0

Comment
All downstream emissions were accounted for in Categories 9-15.

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.
Brazil GHG Protocol Programme
Defra Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance, 2019
IPCC Guidelines for National Greenhouse Gas Inventories, 2006
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
The Greenhouse Gas Protocol Agricultural Guidance: Interpreting the Corporate Accounting and Reporting Standard for the Agricultural Sector
The Greenhouse Gas Protocol: Scope 2 Guidance
The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Standard
US EPA Mandatory Greenhouse Gas Reporting Rule
US EPA Emissions & Generation Resource Integrated Database (eGRID)
Other, please specify (Argentina / Brazil governmental sources)

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
1769789

Start date
<Not Applicable>

End date
<Not Applicable>

Comment
Includes direct CO2 emissions from fuel use in facilities.

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based
We are reporting a Scope 2, location-based figure

Scope 2, market-based
We are reporting a Scope 2, market-based figure

Comment
We calculate the residual mix for each site and use it as the emission factor for our inventory. For cases in which we have specific emission factor from the utility company, those are used instead.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based
1150738

Scope 2, market-based (if applicable)
1098589

Start date
<Not Applicable>

End date
<Not Applicable>

Comment
After setting our science-based targets, our base year Scope 2 emissions were recalculated using the market-based method. The calculation of the location-based method is meant for analysis purposes only and is not audited.

C6.4

(C6.4) 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?
Yes

C6.4a

(C6.4a) 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.

Source of excluded emissions
Ports, silos, and offices are excluded from our reporting boundary because they are found to be immaterial sources of emissions.

Scope(s) or Scope 3 category(ies)
Scope 1
Scope 2 (location-based)
Scope 2 (market-based)
Scope 3: Upstream transportation and distribution

Relevance of Scope 1 emissions from this source
Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source
Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source
Emissions are not relevant

Relevance of Scope 3 emissions from this source
Emissions are not relevant

Date of completion of acquisition or merger
<Not Applicable>

Estimated percentage of total Scope 1+2 emissions this excluded source represents
0

Estimated percentage of total Scope 3 emissions this excluded source represents
0

Explain why this source is excluded
Emissions are not relevant nor are they significant according to our calculations and methodologies used.

Explain how you estimated the percentage of emissions this excluded source represents
Emissions are not relevant nor are they significant according to our calculations and methodologies used.

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
55194008

Emissions calculation methodology
Hybrid method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
15

Please explain
We obtain direct sourcing data for certified material (RSPO, ISCC, 2BSVS, Proterra, etc.) and direct sourcing in deforestation-risk areas in South America. Other methods include use of emissions factors provided by public sources that are then calculated as per our volume of product purchased in a given year.

Capital goods

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
109853

Emissions calculation methodology
Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Spend data was obtained internally.

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

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
2036766

Emissions calculation methodology
Hybrid method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Fuel data was obtained internally

Upstream transportation and distribution

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
6435193

Emissions calculation methodology
Hybrid method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
50

Please explain
Marine transport data was obtained directly from suppliers

Waste generated in operations

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
17203

Emissions calculation methodology
Hybrid method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Waste data was obtained internally

Business travel

Evaluation status
Not relevant, calculated

Emissions in reporting year (metric tons CO2e)
4144

Emissions calculation methodology
Hybrid method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
50

Please explain
Travel data was obtained from travel management software.

Employee commuting

Evaluation status
Not relevant, calculated

Emissions in reporting year (metric tons CO2e)
18190

Emissions calculation methodology
Hybrid method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Employee travel data was obtained internally.

Upstream leased assets

Evaluation status
Not relevant, calculated

Emissions in reporting year (metric tons CO2e)
81781

Emissions calculation methodology
Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Leased assets data was obtained internally.

Downstream transportation and distribution

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
1638680

Emissions calculation methodology
Hybrid method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Downstream transportation and distribution data was obtained internally.

Processing of sold products

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
17641731

Emissions calculation methodology
Hybrid method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Sold products data was obtained internally.

Use of sold products

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
487539

Emissions calculation methodology
Hybrid method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Sold products data was obtained internally.

End of life treatment of sold products

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
8259270

Emissions calculation methodology
Hybrid method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Sold products data was obtained internally. EPA WARM Model was used to determine emissions from food waste.

Downstream leased assets

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Downstream leased assets are unrelated to Bunge's operations and therefore excluded from calculation.

Franchises

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Franchises are unrelated to Bunge's operations and therefore excluded from calculation.

Investments

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
1116447

Emissions calculation methodology
Hybrid method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Investment data was obtained internally.

Other (upstream)

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
All upstream data was calculated in Categories 1-8

Other (downstream)

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
All downstream data was calculated in Categories 9-15

C-AC6.8/C-FB6.8/C-PF6.8

(C-AC6.8/C-FB6.8/C-PF6.8) Is biogenic carbon pertaining to your direct operations relevant to your current CDP climate change disclosure?
No

C-AC6.9/C-FB6.9/C-PF6.9

(C-AC6.9/C-FB6.9/C-PF6.9) Do you collect or calculate greenhouse gas emissions for each commodity reported as significant to your business in C-AC0.7/FB0.7/PF0.7?

Agricultural commodities
Soy

Do you collect or calculate GHG emissions for this commodity?
Yes

Reporting emissions by
Total

Emissions (metric tons CO2e)
17143920

Denominator: unit of production
<Not Applicable>

Change from last reporting year
Lower

Please explain
The volume of originated soy in the reporting year decreased from the last reporting year.

Explain why you do not calculate GHG emission for this commodity and your plans to do so in the future
<Not Applicable>

Agricultural commodities
Palm Oil

Do you collect or calculate GHG emissions for this commodity?
Yes

Reporting emissions by
Total

Emissions (metric tons CO2e)
8134149

Denominator: unit of production
<Not Applicable>

Change from last reporting year
Lower

Please explain
Deforestation of originated palm in the reporting year decreased from the last reporting year.

Explain why you do not calculate GHG emission for this commodity and your plans to do so in the future
<Not Applicable>

Agricultural commodities
Other, please specify (Corn)

Do you collect or calculate GHG emissions for this commodity?
Yes

Reporting emissions by
Total

Emissions (metric tons CO2e)
8949575

Denominator: unit of production
<Not Applicable>

Change from last reporting year
Lower

Please explain
The volume of originated corn in the reporting year decreased from the last reporting year.

Explain why you do not calculate GHG emission for this commodity and your plans to do so in the future
<Not Applicable>

Agricultural commodities
Other, please specify (Wheat)

Do you collect or calculate GHG emissions for this commodity?
Yes

Reporting emissions by
Total

Emissions (metric tons CO2e)
8795106

Denominator: unit of production
<Not Applicable>

Change from last reporting year
Higher

Please explain
The volume of originated wheat in the reporting year increased from the last reporting year due to global disease-related crop failure and yield reductions in the baseline year.

Explain why you do not calculate GHG emission for this commodity and your plans to do so in the future
<Not Applicable>

C6.10

(C6.10) 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.

Intensity figure
0.00004266

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
2868378

Metric denominator
unit total revenue

Metric denominator: Unit total
67000000000

Scope 2 figure used
Market-based

% change from previous year
21

Direction of change
Decreased

Reason(s) for change
Change in renewable energy consumption
Divestment

Please explain
The revenue increased and emissions decreased. The % KPI above however, is not tracked nor representative as we re-baseline our 2020 emissions every year and we do not re-baseline the revenue.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?
No

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/area/region.

Country/area/region	Scope 1 emissions (metric tons CO2e)
Argentina	161801
Austria	16018
Brazil	9420
Canada	174483
China	3913
France	26387
Germany	18085
Hungary	1768
India	135474
Italy	65252
Poland	73669
Romania	13268
Spain	168456
Turkey	30867
Ukraine	216
United States of America	698554
Netherlands	104526
Malaysia	59548
Finland	0
Ghana	8084

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.
By business division

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
North America	873036
South America	171221
Europe/ Africa	526596
Asia	198936

C-AC7.4/C-FB7.4/C-PF7.4

(C-AC7.4/C-FB7.4/C-PF7.4) Do you include emissions pertaining to your business activity(ies) in your direct operations as part of your global gross Scope 1 figure?
Partially

C-AC7.4b/C-FB7.4b/C-PF7.4b

(C-AC7.4b/C-FB7.4b/C-PF7.4b) Report the Scope 1 emissions pertaining to your business activity(ies) and explain any exclusions. If applicable, disaggregate your agricultural/forestry by GHG emissions category.

Activity
Processing/Manufacturing

Emissions category
<Not Applicable>

Emissions (metric tons CO2e)
1769789

Methodology
Default emissions factor

Please explain
Primary fuel tonnage used by the emission factors per fuel applied

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/area/region.

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Argentina	71939	71939
Austria	3589	0
Brazil	60661	60661
Canada	38035	37191
China	462197	462197
Finland	777	0
France	1748	1001
Germany	35142	15508
Ghana	2575	2575
Hungary	12424	15394
India	19526	19526
Italy	4617	5672
Malaysia	34172	34172
Poland	41212	55216
Romania	14684	15659
Spain	3096	3821
Netherlands	2488	0
Turkey	16474	16474
Ukraine	4202	4202
United States of America	321178	277381

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

C7.6a

(C7.6a) 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)
North America	359213	314572
South America	132599	132599
Europe/ Africa	143030	135522
Asia	515896	515896

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

Not relevant as we do not have any subsidiaries

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) 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 emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	31100	Decreased	1	Zero carbon electricity and purchased steam (Scope2): We purchased an additional 44,200 MWh of Renewable electricity and steam, which saved an additional 24,710 tCO2. Biomass: We used an additional 120,500 mmBTU of biomass, which saved an additional 6,390 tCO2
Other emissions reduction activities	55700	Decreased	2	Increased energy efficiency in plants due to carbon reduction initiatives implemented in the reporting year.
Divestment	41500	Decreased		Bunge sold an oilseed processing plant in Russia, which led to the reduction of 41,500 tCO2 from the baseline year and the reporting year.
Acquisitions	0	No change	0	No Acquisitions
Mergers	0	No change	0	No mergers
Change in output	0	No change	0	No changes in output
Change in methodology	0	No change	0	No changes in methodology
Change in boundary	0	No change	0	No changes in boundary
Change in physical operating conditions	0	No change	0	No changes
Unidentified	0	No change	0	N/A
Other	0	No change	0	N/A

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 15% but less than or equal to 20%

C8.2

(C8.2) 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)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	3196913	9229890	12426803
Consumption of purchased or acquired electricity	<Not Applicable>	192136	1844640	2036766
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	246640	847908	1094548
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	0	<Not Applicable>	0
Total energy consumption	<Not Applicable>	3635689	11922080	15558127

C8.2b

(C8.2b) 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	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	Yes

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
3196913

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment
Use of consumed MWh cannot be confirmed

Other biomass

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment
N/A

Other renewable fuels (e.g. renewable hydrogen)

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment
N/A

Coal

Heating value
HHV

Total fuel MWh consumed by the organization
574609

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment
Use of consumed MWh cannot be confirmed

Oil

Heating value
HHV

Total fuel MWh consumed by the organization
27864

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment
Use of consumed MWh cannot be confirmed; Includes light oil and fuel oil

Gas

Heating value
HHV

Total fuel MWh consumed by the organization
8594986

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment
Use of consumed MWh cannot be confirmed; Includes natural gas and LPG

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

Heating value
HHV

Total fuel MWh consumed by the organization
54210

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment
Use of consumed MWh cannot be confirmed; Includes gasoline and diesel

Total fuel

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
12448582

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment
Use of consumed MWh cannot be confirmed

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	226643	0	0	0
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2e

(C8.2e) 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 C6.3.

Country/area of low-carbon energy consumption
Germany

Sourcing method
Direct line to an off-site generator owned by a third party with no grid transfers (direct line PPA)

Energy carrier
Steam

Low-carbon technology type
Renewable energy mix, please specify (Within our portfolio, we buy renewable energy for a number of plants. This includes a mix of zero carbon generation PPAs and renewable energy credits.)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
234709

Tracking instrument used
Contract

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

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

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2003

Comment

Country/area of low-carbon energy consumption
Finland

Sourcing method
Direct line to an off-site generator owned by a third party with no grid transfers (direct line PPA)

Energy carrier
Steam

Low-carbon technology type
Renewable energy mix, please specify (Within our portfolio, we buy renewable energy for a number of plants. This includes a mix of zero carbon generation PPAs and renewable energy credits.)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
11931

Tracking instrument used
Contract

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

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment

Country/area of low-carbon energy consumption
United States of America

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

Energy carrier
Electricity

Low-carbon technology type
Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
66594

Tracking instrument used
Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute
United States of America

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

Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2020

Comment

Country/area of low-carbon energy consumption
Spain

Sourcing method
Financial (virtual) power purchase agreement (VPPA)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Within our portfolio, we buy renewable energy for a number of plants. This includes a mix of zero carbon generation PPAs and renewable energy credits.)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
1328

Tracking instrument used
Contract

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

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment

Country/area of low-carbon energy consumption
Netherlands

Sourcing method
Financial (virtual) power purchase agreement (VPPA)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Within our portfolio, we buy renewable energy for a number of plants. This includes a mix of zero carbon generation PPAs and renewable energy credits.)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
7009

Tracking instrument used
Contract

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

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment

Country/area of low-carbon energy consumption
India

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
7009

Tracking instrument used
Contract

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

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment

Country/area of low-carbon energy consumption
Germany

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
62173

Tracking instrument used
I-REC

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

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment

Country/area of low-carbon energy consumption
China

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Nuclear

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
62173

Tracking instrument used
GEC

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

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment

Country/area of low-carbon energy consumption
Austria

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
22783

Tracking instrument used
Contract

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

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment

Country/area of low-carbon energy consumption
Argentina

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Within our portfolio, we buy renewable energy for a number of plants. This includes a mix of zero carbon generation PPAs and renewable energy credits.)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
13639

Tracking instrument used
I-REC

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

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

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2011

Comment

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area
Argentina

Consumption of purchased electricity (MWh)
181642

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
Austria

Consumption of purchased electricity (MWh)
22783

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
Brazil

Consumption of purchased electricity (MWh)
481712

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?

<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
Canada

Consumption of purchased electricity (MWh)
199388

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
China

Consumption of purchased electricity (MWh)
187244

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
847908

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
Finland

Consumption of purchased electricity (MWh)
5930

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
11931

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
France

Consumption of purchased electricity (MWh)
20607

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
Germany

Consumption of purchased electricity (MWh)
80814

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
234709

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
Ghana

Consumption of purchased electricity (MWh)
4734

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
Hungary

Consumption of purchased electricity (MWh)
55723

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
India

Consumption of purchased electricity (MWh)
36095

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
Italy

Consumption of purchased electricity (MWh)
12423

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
Malaysia

Consumption of purchased electricity (MWh)
53478

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
Netherlands

Consumption of purchased electricity (MWh)
42827

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
Poland

Consumption of purchased electricity (MWh)
64944

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
Romania

Consumption of purchased electricity (MWh)
55597

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
Spain

Consumption of purchased electricity (MWh)
719

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
Turkey

Consumption of purchased electricity (MWh)
35581

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
Ukraine

Consumption of purchased electricity (MWh)
11577

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
United States of America

Consumption of purchased electricity (MWh)
686524

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description
Waste

Metric value
0.53

Metric numerator
kg

Metric denominator (intensity metric only)
Metric tons of production

% change from previous year
10

Direction of change
Decreased

Please explain

Description
Other, please specify (Water Usage)

Metric value
0.43

Metric numerator
m3 of fresh water

Metric denominator (intensity metric only)
Metric tons of production

% change from previous year
0.4

Direction of change
Increased

Please explain

Description
Energy usage

Metric value
0.96

Metric numerator
GJ

Metric denominator (intensity metric only)
Metric tons of production

% change from previous year
1.6

Direction of change
Increased

Please explain

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	No third-party verification or assurance

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
High assurance

Attach the statement
Bunge 2022 Assurance Report.pdf

Page/ section reference
Page 7

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach
Scope 2 market-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
High assurance

Attach the statement
Bunge 2022 Assurance Report.pdf

Page/ section reference
Page 7

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?
Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C9. Additional metrics	Product footprint verification	Control Union - audit of traceability data	The commodities that are most at risk of causing land use change, and by extension carbon emissions, are palm oil and soy originated in South America. We receive annual audits of our traceability and monitoring data for both these commodities to ensure that we have full visibility into our sourcing footprint. This visibility enables us to disincentivize native vegetation conversion and deforestation, and to help ensure deforestation-free volumes from our supply chain.

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?
Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.
Alberta TIER - ETS
California CaT - ETS
Canada federal Output Based Pricing System (OBPS) - ETS
EU ETS
Saskatchewan OBPS - ETS
Tianjin pilot ETS

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

Alberta TIER - ETS

% of Scope 1 emissions covered by the ETS
0.8

% of Scope 2 emissions covered by the ETS
0.6

Period start date
January 1 2022

Period end date
December 31 2022

Allowances allocated
19585

Allowances purchased
1726

Verified Scope 1 emissions in metric tons CO2e
14433

Verified Scope 2 emissions in metric tons CO2e
6878

Details of ownership
Facilities we own and operate

Comment

California CaT - ETS

% of Scope 1 emissions covered by the ETS
0.06

% of Scope 2 emissions covered by the ETS
0.07

Period start date
January 1 2022

Period end date
December 31 2022

Allowances allocated
0

Allowances purchased
0

Verified Scope 1 emissions in metric tons CO2e
1019

Verified Scope 2 emissions in metric tons CO2e
817

Details of ownership
Facilities we own and operate

Comment

Canada federal OBPS - ETS

% of Scope 1 emissions covered by the ETS
5.5

% of Scope 2 emissions covered by the ETS
2

Period start date
January 1 2022

Period end date
December 31 2022

Allowances allocated
115207

Allowances purchased
8677

Verified Scope 1 emissions in metric tons CO2e
96851

Verified Scope 2 emissions in metric tons CO2e
21546

Details of ownership
Facilities we own and operate

Comment

EU ETS

% of Scope 1 emissions covered by the ETS
3

% of Scope 2 emissions covered by the ETS
38

Period start date
January 1 2022

Period end date
December 31 2022

Allowances allocated
214295

Allowances purchased
0

Verified Scope 1 emissions in metric tons CO2e
419954

Verified Scope 2 emissions in metric tons CO2e
58419

Details of ownership
Facilities we own and operate

Comment

Saskatchewan OBPS - ETS

% of Scope 1 emissions covered by the ETS
1.3

% of Scope 2 emissions covered by the ETS
0.7

Period start date
January 1 2022

Period end date
December 31 2022

Allowances allocated
28190

Allowances purchased
1958

Verified Scope 1 emissions in metric tons CO2e
22538

Verified Scope 2 emissions in metric tons CO2e
7610

Details of ownership
Facilities we own and operate

Comment

Tianjin pilot ETS

% of Scope 1 emissions covered by the ETS
1

% of Scope 2 emissions covered by the ETS
11

Period start date
January 1 2022

Period end date
December 31 2022

Allowances allocated
131483

Allowances purchased
5641

Verified Scope 1 emissions in metric tons CO2e
18655

Verified Scope 2 emissions in metric tons CO2e
118469

Details of ownership
Facilities we own and operate

Comment

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

Bunge has a long history participating in the Clean Development Mechanism system and has been an active participant in the European Trading Scheme (ETS). Market changes have motivated us to evolve our strategy for carbon trading and find new opportunities. This includes using a shadow price on carbon in order to evaluate the long-term payback of CAPEX projects that enhance our operations and result in reduced emissions from the plants in the ETS system. We have dedicated teams internally responsible for compliance with the ETS (and other related systems), and providing insight each year to business partners about ways to leverage opportunities to both reduce emissions and find growth avenues.

In the countries where our plants are included in the ETS system, we are approaching this as we do any other legal compliance topic. We are committed to fully respect all the environmental requirements applicable to our operations. But it is also our strategy to make compliance in the most efficient way. We have implemented a CO2 management system to achieve such efficiency. We are starting to forecast our CO2 emissions based in the correspondent business practice. This means we set the target of CO2 that we will emit and our experts in energy markets together with our purchase departments start tracking the CO2 markets during the whole year to buy the carbon credits needed to cover our emissions. This is made at EU level, so we are purchasing this carbon credits (EUAs) centrally for the whole Bunge Europe. Then, the EUAs purchased are distributed within all the ETS plants to surrender these EUAs in accordance with the final emissions verification made by one authorized auditing company. We have successfully built this process since 2020 and are continuing to execute against it each year as the ETS evolves and carbon prices increase.

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?
No

C11.3

(C11.3) Does your organization use an internal price on carbon?
Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Type of internal carbon price
Shadow price

How the price is determined
Alignment with the price of allowances under an Emissions Trading Scheme

Objective(s) for implementing this internal carbon price
Change internal behavior
Drive energy efficiency
Drive low-carbon investment
Identify and seize low-carbon opportunities
Navigate GHG regulations
Stakeholder expectations

Scope(s) covered
Scope 1
Scope 2

Pricing approach used – spatial variance
Differentiated

Pricing approach used – temporal variance
Static

Indicate how you expect the price to change over time
<Not Applicable>

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)
40

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)
100

Business decision-making processes this internal carbon price is applied to
Capital expenditure
Operations

Mandatory enforcement of this internal carbon price within these business decision-making processes
Yes, for some decision-making processes, please specify (Only used for CAPEX projects above a spend threshold determined by the sustainability and risk teams)

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan
The shadow price is used to evaluate the risks and opportunities associated with proposed projects that reduce or increase greenhouse gas emissions within the company's value chain. By integrating an internal carbon price, the company can more effectively allocate resources to opportunities that help achieve our sustainability targets by reducing emissions while increasing productivity.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?
Yes, our suppliers
Yes, our customers/clients
Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement
Engagement & incentivization (changing supplier behavior)

Details of engagement
Offer financial incentives for suppliers who reduce your upstream emissions (Scopes 3)

% of suppliers by number
10

% total procurement spend (direct and indirect)
0

% of supplier-related Scope 3 emissions as reported in C6.5
15

Rationale for the coverage of your engagement
In areas where deforestation is a higher risk (chiefly the palm growing regions of the world and the Cerrado of Brazil), Bunge engages with farmers to promote the uptake of more sustainable practices that prevent land use change over native vegetation and tropical rainforest. We offer unique incentives and financial opportunities to farmers that commit to sustainable practices, in addition to encouraging the uptake of certification methods that result in commodities produces with lower carbon intensity since they are free from deforestation and land use change. The figure is a conservative estimate of the number of suppliers in the priority geographies whom we engage directly in these matters.

Impact of engagement, including measures of success
As a result of our engagement efforts, we are proud to have achieved significant progress in helping to transform the wider agricultural industry for both palm and soy. In palm, we have achieved 53% verified deforestation-free volumes by working with suppliers and third parties to encourage compliance with NDPE practices on plantations. We also source a significant volume of certified commodities (37% in 2022). In Brazil, over 97% of Bunge's soybean volumes are verified deforestation- and conversion-free. We have engaged thousands of farmers in programs and initiatives that encourage sustainable farming practices and regenerative agricultural practices.

Comment
Due to commercial sensitivity, we do not disclose the precise percentage of suppliers engaged out of our entire global supply chain. Estimates are illustrative only.

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Collaboration & innovation	Other, please specify (Partnerships for regenerative agriculture)

% of customers by number
1

% of customer - related Scope 3 emissions as reported in C6.5
15

Please explain the rationale for selecting this group of customers and scope of engagement
As the world population grows, farmers will be key actors helping to meet the rising demand for food, feed and fuel, while also reducing GHG emissions on farms. Regenerative agriculture creates an opportunity to achieve both. In 2022, Bunge began pilots of multiple regenerative agriculture projects in Europe, South America and North America. In partnership with customers and farmers, we're helping to scale farming practices that will result in productive crop yields that put less pressure on the land and sequester CO2 into the soil. Over time, regenerative agriculture is expected to help companies including Bunge to meet their emissions goals while creating new income streams for farmers.

Impact of engagement, including measures of success
Bunge was recognized alongside the Illinois Corn Growers Association, PepsiCo, The Nature Conservancy and Environmental Defense Fund as Field to Market's 2020 Collaboration of the Year for the Precision Conservation Management (PCM) Innovation Project. PCM provides more than 300 farmers across 325,000 acres with financial and technical assistance that incentivizes uptake and mitigates the risk of implementing conservation practices.

More recently, we are engaging customers in the uptake of regenerative agriculture commodities in North America, Europe and South America. In Brazil alone, we have enrolled over 30 farmers covering more than 250,000 hectares of land in regenerative agriculture destined for international markets and customers in multiple geographies.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

We lean into our role as a connector – bringing together the perspectives of the full value chain to find sustainable solutions. Bunge plays a leadership role across important industry efforts including:

→ Soft Commodities Forum – connecting South American soy production to global trends, and standardizing industry measurements and governance.

→ Centerfield – a partnership with farmers and food companies to promote supply chain transparency and sustainable agriculture in North America.

→ Field to Market – an organization dedicated to improving the productivity and environmental efficiency of agriculture across the entire food production chain.

→ Round Table on Sustainable Palm Oil – an organization that unites stakeholders from the seven sectors of the palm oil industry: oil palm producers, processors or traders, consumer goods manufacturers, retailers, banks/investors, and environmental and social non-governmental organizations, to develop and implement global standards for sustainable palm oil.

→ The Agri-Sector Roadmap –a multi-stakeholder initiative focused on reducing emissions from land-use change in the cattle, palm oil, and soy sectors, while protecting global food systems and producer livelihoods.

→ Round Table for Responsible Soy –a non-profit organization promoting the growth of production, trade, and use of responsible soy. The initiative has developed and implements a global certification standard to ensure that soy is produced in environmentally-friendly, socially-appropriate and economically-viable processes, including deforestation and conversion-free.

→ Origeo –a joint venture between Bunge and UPL whose operational model provides end-to-end solutions to farmers in Brazil, including by mapping producer needs and overcoming business challenges they face. The JV supports crop planting to harvest, with a focus on promoting sustainable production combined with the productivity and profitability gains for the business.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

No, but we plan to introduce climate-related requirements within the next two years

C-AC12.2/C-FB12.2/C-PF12.2

(C-AC12.2/C-FB12.2/C-PF12.2) Do you encourage your suppliers to undertake any agricultural or forest management practices with climate change mitigation and/or adaptation benefits?

Yes

C-AC12.2a/C-FB12.2a/C-PF12.2a

(C-AC12.2a/C-FB12.2a/C-PF12.2a) Specify which agricultural or forest management practices with climate change mitigation and/or adaptation benefits you encourage your suppliers to undertake and describe your role in the implementation of each practice.

Management practice reference number
MP1

Management practice
Land use change

Description of management practice
Preventing land use change and native vegetation conversion is an important means to reduce the levels of GHG emissions into the atmosphere. Bunge is committed to eliminating deforestation and native vegetation conversion in its supply chains in 2025 - the first in the industry with a 2025 commitment.

Although Bunge's commitment is in 2025, we are taking active measures to engage with our suppliers before its implementation to disincentivize conversion and incentivize sustainable agricultural practices instead, which will have positive impacts on the planet.

Bunge has created a variety of incentives and programs that encourage sustainable expansion. Details of these programs can be found in the Company's latest non-deforestation progress report here: https://bunge.com/-/media/files/pdf/2023-bunge-sustainability-report (starting on page 44).

Your role in the implementation
Financial
Knowledge sharing
Procurement

Explanation of how you encourage implementation
Through face-to-face interactions with suppliers and in purchasing contracts, we describe our non-deforestation commitment and provide overview of the menu of options we have available to promote sustainable agriculture. This includes offering to buy certified products that come with lower carbon intensity attributes. Orígeo, a joint venture between Bunge and UPL, is key to this strategy. Orígeo supports farmers by offering solutions at various stages of agriculture production, starting at crop planting all the way through harvest. Some of its services include consulting, providing technology and digital tools, and other inputs that assist farmers in Brazil’s priority biomes in the transition to lower carbon agriculture.

Climate change related benefit
Emissions reductions (mitigation)
Increasing resilience to climate change (adaptation)
Increase carbon sink (mitigation)
Reduced demand for pesticides (adaptation)

Comment

C-AC12.2b/C-FB12.2b/C-PF12.2b

(C-AC12.2b/C-FB12.2b/C-PF12.2b) Do you collect information from your suppliers about the outcomes of any implemented agricultural/forest management practices you have encouraged?
Yes

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

Yes

Attach commitment or position statement(s)

CLIMATE LOBBYING

One of the pillars of Bunge's sustainability strategy is to take meaningful action on climate. We achieve this by integrating carbon-focused decision-making into our strategies, operations and investments. Establishing Science Based Targets, investing in new growth areas with lower carbon attributes, and delivering on our non-deforestation commitment are examples of our overall climate risk management approach.

We believe that the agribusiness and food industry has an important role to play in finding scalable and realistic solutions to climate challenges. Our own climate goals and activities are in line with the Paris Climate Agreement, and we participate in organizations that support climate action.

Bunge is a member of many organizations, and while we may not always agree with these organizations' positions on climate, we take opportunities to advance pro-climate positions when feasible.

TRADE ASSOCIATIONS

Like most large companies, Bunge is a member of several trade, industry, and business associations representing the various industries in which Bunge operates. These memberships provide Bunge important resources for employees, engagement opportunities with policymakers and key stakeholders, and an ability to learn and share about non-competitive industry issues. Many, but not all, of the associations in which Bunge holds a membership, engage in government advocacy. Sometimes, the associations in which Bunge participates may advocate policy views that are contrary to the Bunge view. When these differences arise between Bunge and its respective trade associations, it is an opportunity for Bunge to learn about the views of others, voice the Bunge position, and gain a better understanding of the various viewpoints on issues impacting our industries and businesses.

The portion of dues associated with lobbying activities by our trade associations is reported in Bunge's quarterly LD-2 lobbying disclosure filings. Below is a list of trade associations to which we contribute $25,000 or more where a portion of those contributions may be used for lobbying activities:

- National Oilseed Processors Association
- Fuels America

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

We connect farmers to consumers to deliver essential food, feed and fuel to the world. We aim to advance our vision by engaging with policymakers, working through public policy-facing organizations, networks, and regulatory bodies, and offering our own insights and experiences through these bodies to improve public understanding around our industry.

At Bunge, we believe political advocacy is an important way to support our business interests and contribute positively to the communities where we operate. We support candidates who promote policies that align with our values and business principles, and who have strong connections to areas where we have facilities. In addition, we are members of organizations that may contribute to dialogue and political action on agricultural, food, and biofuel issues.

Bunge employees are encouraged to take part in their communities by participating in political activities, but must do so on their own time and without using Bunge's resources. These activities must not imply support from Bunge. Furthermore, employees' political activities or affiliations will not result in adverse employment action by Bunge, unless such activities are inconsistent with the principles and expectations outlined in our Code of Conduct or are considered unlawful.

Bunge's political activities are conducted in accordance with relevant laws and regulations. Political activities are overseen at the Board level by the Corporate Governance and Nominations Committee (the "Committee") and are executed by members of Bunge's government affairs teams. The Committee periodically reviews Bunge's political contribution program and the Company's position and engagement on relevant public policy and corporate governance issues and trends affecting the Company's business.

Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association
Other, please specify (Fuels America)

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
No, we did not attempt to influence their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
Since 2020 Bunge has been participating in Fuels America, an organization that is promoting public policy that enables the growth of the biofuels, renewable diesel and sustainable aviation fuel industries. The shift from high carbon fossil-based fuel to lower carbon plant based fuel will be an important way to reduce global CO2 emissions and ensure that farmers are part of the solution for more sustainable fuel and food systems. At Bunge, we believe this decarbonization approach is in line with the Paris Climate Agreement, our own emissions goals, and the goals of multiple value chain partners including national governments. Therefore we engage and our positions on this climate vision are aligned.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)
100000

Describe the aim of your organization's funding
The funding covers Bunge's membership in the association which advocates on behalf of the lower carbon fuel industry in US public policy circles.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication
In voluntary sustainability report

Status
Complete

Attach the document
2023-Bunge-Sustainability-Report.pdf

Page/Section reference
Page 20, though the full Action on Climate section covers elements of our climate transition plan.

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	Business Ambition for 1.5C Global Reporting Initiative (GRI) Community Member International Sustainability & Carbon Certification (ISCC) Science Based Targets Network (SBTN) Sustainable Agriculture Initiative (SAI) Task Force on Climate-related Financial Disclosures (TCFD) Task Force on Nature-related Financial Disclosures (TNFD) UN Global Compact World Business Council for Sustainable Development (WBCSD)	We are active members of the organizations listed, and leverage our membership to learn from peers and provide our own experiences to ensure we can develop scalable solutions to common sustainability challenges.

C13. Other land management impacts

C-AC13.2/C-FB13.2/C-PF13.2

(C-AC13.2/C-FB13.2/C-PF13.2) Do you know if any of the management practices mentioned in C-AC12.2a/C-FB12.2a/C-PF12.2a that were implemented by your suppliers have other impacts besides climate change mitigation/adaptation?

Yes

C-AC13.2a/C-FB13.2a/C-PF13.2a

(C-AC13.2a/C-FB13.2a/C-PF13.2a) Provide details of those management practices implemented by your suppliers that have other impacts besides climate change mitigation/adaptation.

Management practice reference number

MP1

Overall effect

Positive

Which of the following has been impacted?

Biodiversity
Soil
Water
Yield

Description of impacts

As the world population grows, farmers will be key actors helping to meet the rising demand for food, feed and fuel, while also reducing GHG emissions on farms. Regenerative agriculture creates an opportunity to achieve both. In 2022, Bunge began pilots of multiple regenerative agriculture projects in Europe, South America and North America. In partnership with customers and farmers, we're helping to scale farming practices that will result in productive crop yields that put less pressure on the land and sequester CO2 into the soil. Over time, regenerative agriculture is expected to help companies including Bunge to meet their emissions goals while creating new income streams for farmers.

Have any response to these impacts been implemented?

Yes

Description of the response(s)

Farmers that undergo regenerative agriculture practices typically use fewer inputs such as pesticides and fertilizer, they engage in no-till practices, employ the use of cover crops, and undertake other efforts that protect soil health, reduce negative impacts to water supply, and enhance biodiversity.

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity	Scope of board-level oversight
Row 1	Yes, both board-level oversight and executive management-level responsibility	Sustainability broadly, including biodiversity issues, is overseen at the highest level by the Sustainability and Corporate Responsibility Committee (SCRC) of the Board of Directors. The SCRC periodically reviews important biodiversity topics, risks associated with biodiversity loss in the operation regions, and Bunge's programs or commitments to reduce or eliminate biodiversity loss. These commitments include the Company's non-deforestation commitment and the associated factors to prevent land use change and the protection of sensitive biomes or landscapes. The sustainability function is executed by the Chief Sustainability Officer and Government Affairs who reports to the Chief Executive Officer (CEO) and is the management lead of the SCRC. The CSO oversees a global team located in more than 10 offices worldwide. As of January 1, 2022, performance-based sustainability goals will be a component of the executive leadership team's annual incentive bonuses. Our compensation framework is based on a pay-for-performance philosophy with payout now directly impacted by our attainment of certain sustainability targets. In early 2023, this performance incentive was expanded to include over 7,000 Bunge employees. A key component of this incentive is biodiversity-related, through targets to realize the Company's non-deforestation commitment.	<Not Applicable>

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Commitment to not explore or develop in legally designated protected areas Commitment to respect legally designated protected areas Commitment to no conversion of High Conservation Value areas Commitment to secure Free, Prior and Informed Consent (FPIC) of Indigenous Peoples	CBD – Global Biodiversity Framework SDG Other, please specify (TNFD - Taskforce on Nature Related Financial Disclosure)

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment
Yes

Value chain stage(s) covered
Direct operations
Upstream

Portfolio activity
<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity
Biodiversity indicators for site-based impacts
TNFD – Taskforce on Nature-related Financial Disclosures

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)
Respect for biodiversity and the environment has been a major part of Bunge's sustainability commitments for many years. Biodiversity and other environmental matters are overseen at the highest level by Bunge's Board of Directors, and executed by multiple executive leadership functions and management committees. By advancing our 2025 non-deforestation commitment, we are intrinsically linking our business to the protection of ecosystems of high biodiversity value, such as the Cerrado of Brazil and the tropical rainforests of Southeast Asia.

Over 8,000,000+ hectares of native vegetation has been preserved in Brazil alone due to a combination of robust forest legislation and sustainable farming practices, both of which Bunge has been championing for years. Bunge's environmental goals – intended to reduce our water, waste, emissions and energy intensity – were first developed over 20 years ago. The most recent update of these goals aim for even more aggressive reductions by 2026.

Our promotion of cover crops and regenerative agriculture programs in multiple geographies around the world is creating additional opportunities to improve biodiversity. Cover crops help to reduce nutrient loss on farms, promote overall soil health, and even support natural wildlife, while regenerative agriculture practices can lead to reduced fertilizer and pesticide runoff which protects sensitive waterways.

Bunge has been an active participant in the Taskforce on Nature-Related Financial Disclosures (TNFD) and is supporting the development of new indicators and reporting guidelines for companies to disclose their biodiversity and nature impacts, and their dependencies.

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment
No, but we plan to within the next two years

Value chain stage(s) covered
<Not Applicable>

Portfolio activity
<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity
<Not Applicable>

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)
<Not Applicable>

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity- sensitive areas in the reporting year?
Yes

C15.4a

(C15.4a) Provide details of your organization's activities in the reporting year located in or near to biodiversity -sensitive areas.

Classification of biodiversity -sensitive area
Other biodiversity sensitive area, please specify (The Cerrado)

Country/area
Brazil

Name of the biodiversity-sensitive area
The Cerrado, a biome in the central part of Brazil considered to be an area of high biodiversity value.

Proximity
Overlap

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Known as the Brazilian Savannah, the Cerrado is made up predominantly of small vegetation cover and has a continental tropical climate, with a dry season that may cause occasional wildfires. Currently around 52% of the native vegetation remains in the biome. The Cerrado covers around 25% of Brazil, encompassing 12 states with different levels of agricultural development. Soybeans occupy around 10% of the Cerrado, and recent analysis shows that 97% of the soybean expansion between 2014 and 2021 is over previously cleared area.

Bunge sources grains & oilseeds, principally soybean, from farms in the Cerrado. We successfully achieved 100% traceability to our direct supply in 2020. Since then, we have shifted our focus to the indirect supply chain. Although it is only around 20% of our sourcing in the priority regions of the Cerrado, our indirect supply is the final gap before we can confidently achieve deforestation-free supply chains in 2025. Closing this gap required a groundbreaking innovation: The Sustainable Partnership Program.

The program is a partnership between Bunge and grain resellers that enables us to gain insight into the soy that is part of our indirect supply chain by supporting resellers as they build their own traceability and monitoring systems through the sharing of our knowledge, methodologies, tools, and technologies – including satellite image data. Resellers in the program set targets and create incentives to gradually increase the traceability of their supply chains until they reach 100%. Since 2021, we have engaged 14-large scale resellers in our growing network. We also launched new resources to support program participants, such as a partnership with Vega Monitoramento which offers resellers access to the Lyra platform. Lyra uses remote sensing, artificial intelligence, and structured data to perform socio-environmental analyses of farm properties though an exclusive web interface developed with Bunge.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area
Site selection

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
As the leading soybean processor in South America, we are focusing and investing a significant share of our sustainability and technology implementation efforts in this region, which is not only relevant for our business, but also considered home to vital landscapes for the global environment and climate. The biomes of the Cerrado and the Grand Chaco are located in South America, and are subject to pressure from agricultural expansion. That is why they are the focus of preservation efforts and are priority areas for the implementation of our non-deforestation commitment.

The foundation of our commitment is built on:

→ A fully traceable supply chain – Having already achieved 100% traceability in our direct supply in the priority areas of South America, we are shifting our focus on our indirect supply. Through the Sustainable Partnership Program, we continue to exceed our targets, and in 2022 achieved 82% traceability in Brazil's high risk areas. This is a crucial enabler of our 2025 commitment.

→ Promoting regenerative agriculture – More sustainable farming practices that preserve native vegetation, sequester GHG emissions, and provide economic opportunities for farmers is a key part of our engagement strategy.

→ Sector collaboration – We want to transform the soy value chain, and we know that we cannot do this alone. That is why we actively participate in sector initiatives to create impact at scale, lending our experience and knowledge to our peers and value chain partners.

→ Publicly reporting on our progress – Transparency is something we value, so we have improved our disclosure to provide greater insight into how we are engaging with farms in South America that do not currently meet the requirements of our sourcing policies and supporting them toward compliance.

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water protection Land/water management Education & awareness Livelihood, economic & other incentives

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	Response indicators

C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments Governance Impacts on biodiversity Risks and opportunities Biodiversity strategy	22-24 2023-Bunge-Sustainability-Report.pdf

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

More details can be found in Bunge's 2023 Global Sustainability Report: 2023-bunge-sustainability-report

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chief Sustainability Officer and Government Affairs	Chief Sustainability Officer (CSO)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	67232000000

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

Requesting member
Ajinomoto Co.Inc.

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
2

Uncertainty (±%)

Major sources of emissions

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
81.9

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions per scope per customer are proportional based total production volume from Bunge in 2021. Please note that these estimates are not the carbon intensity of the product sold.

Requesting member
Ajinomoto Co.Inc.

Scope of emissions
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
2

Uncertainty (±%)

Major sources of emissions

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
81.9

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions per scope per customer are proportional based total production volume from Bunge in 2021. Please note that these estimates are not the carbon intensity of the product sold.

Requesting member
Ajinomoto Co.Inc.

Scope of emissions
Scope 3

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
Category 1: Purchased goods and services

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
131

Uncertainty (±%)

Major sources of emissions

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
81.9

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions per scope per customer are proportional based total production volume from Bunge in 2021. Please note that these estimates are not the carbon intensity of the product sold.

Requesting member
International Flavors & Fragrances Inc.

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
0

Uncertainty (±%)

Major sources of emissions

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
16

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions per scope per customer are proportional based total production volume from Bunge in 2021. Please note that these estimates are not the carbon intensity of the product sold.

Requesting member
International Flavors & Fragrances Inc.

Scope of emissions
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
0

Uncertainty (±%)

Major sources of emissions

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
16

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions per scope per customer are proportional based total production volume from Bunge in 2021. Please note that these estimates are not the carbon intensity of the product sold.

Requesting member
International Flavors & Fragrances Inc.

Scope of emissions
Scope 3

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
Category 1: Purchased goods and services

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
26

Uncertainty (±%)

Major sources of emissions

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
16

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions per scope per customer are proportional based total production volume from Bunge in 2021. Please note that these estimates are not the carbon intensity of the product sold.

Requesting member
McCain Foods

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
832

Uncertainty (±%)

Major sources of emissions

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
27330

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions per scope per customer are proportional based total production volume from Bunge in 2021. Please note that these estimates are not the carbon intensity of the product sold.

Requesting member
McCain Foods

Scope of emissions

Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
517

Uncertainty (±%)

Major sources of emissions

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
27330

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions per scope per customer are proportional based total production volume from Bunge in 2021. Please note that these estimates are not the carbon intensity of the product sold.

Requesting member
McCain Foods

Scope of emissions
Scope 3

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
Category 1: Purchased goods and services

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
43729

Uncertainty (±%)

Major sources of emissions

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
27330

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions per scope per customer are proportional based total production volume from Bunge in 2021. Please note that these estimates are not the carbon intensity of the product sold.

Requesting member
Walmart, Inc.

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level

Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
1236

Uncertainty (±%)

Major sources of emissions

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
40595

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions per scope per customer are proportional based total production volume from Bunge in 2021. Please note that these estimates are not the carbon intensity of the product sold.

Requesting member
Walmart, Inc.

Scope of emissions
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
767

Uncertainty (±%)

Major sources of emissions

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
40595

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions per scope per customer are proportional based total production volume from Bunge in 2021. Please note that these estimates are not the carbon intensity of the product sold.

Requesting member
Walmart, Inc.

Scope of emissions
Scope 3

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
Category 1: Purchased goods and services

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
64954

Uncertainty (±%)

Major sources of emissions

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
40595

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions per scope per customer are proportional based total production volume from Bunge in 2021. Please note that these estimates are not the carbon intensity of the product sold.

Requesting member
Kellogg Company

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
9112

Uncertainty (±%)

Major sources of emissions

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
299250.17

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions per scope per customer are proportional based total production volume from Bunge in 2021. Please note that these estimates are not the carbon intensity of the product sold.

Requesting member
Kellogg Company

Scope of emissions
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
5656

Uncertainty (±%)

Major sources of emissions

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member

299250.17

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions per scope per customer are proportional based total production volume from Bunge in 2021. Please note that these estimates are not the carbon intensity of the product sold.

Requesting member
Kellogg Company

Scope of emissions
Scope 3

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
Category 1: Purchased goods and services

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
478815

Uncertainty (±%)

Major sources of emissions

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
299250.17

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions per scope per customer are proportional based total production volume from Bunge in 2021. Please note that these estimates are not the carbon intensity of the product sold.

Requesting member
McDonald's Corporation

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
2259

Uncertainty (±%)

Major sources of emissions

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
74181

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions per scope per customer are proportional based total production volume from Bunge in 2021. Please note that these estimates are not the carbon intensity of the product sold.

Requesting member
McDonald's Corporation

Scope of emissions
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
1402

Uncertainty (±%)

Major sources of emissions

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
74181

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions per scope per customer are proportional based total production volume from Bunge in 2021. Please note that these estimates are not the carbon intensity of the product sold.

Requesting member
McDonald's Corporation

Scope of emissions
Scope 3

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
Category 1: Purchased goods and services

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
118693

Uncertainty (±%)

Major sources of emissions

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
74181

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions per scope per customer are proportional based total production volume from Bunge in 2021. Please note that these estimates are not the carbon intensity of the product sold.

Requesting member
PepsiCo, Inc.

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
5840

Uncertainty (±%)

Major sources of emissions

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
191800

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions per scope per customer are proportional based total production volume from Bunge in 2021. Please note that these estimates are not the carbon intensity of the product sold.

Requesting member
PepsiCo, Inc.

Scope of emissions
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
3625

Uncertainty (±%)

Major sources of emissions

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
191800

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions per scope per customer are proportional based total production volume from Bunge in 2021. Please note that these estimates are not the carbon intensity of the product sold.

Requesting member
PepsiCo, Inc.

Scope of emissions
Scope 3

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
Please select

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
306889

Uncertainty (±%)

Major sources of emissions

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions per scope per customer are proportional based total production volume from Bunge in 2021. Please note that these estimates are not the carbon intensity of the product sold.

Requesting member
Unilever plc

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
2936

Uncertainty (±%)

Major sources of emissions

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
96411

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions per scope per customer are proportional based total production volume from Bunge in 2021. Please note that these estimates are not the carbon intensity of the product sold.

Requesting member
Unilever plc

Scope of emissions
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
1822

Uncertainty (±%)

Major sources of emissions

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
96411

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions per scope per customer are proportional based total production volume from Bunge in 2021. Please note that these estimates are not the carbon intensity of the product sold.

Requesting member
Unilever plc

Scope of emissions
Scope 3

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
Category 1: Purchased goods and services

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
154262

Uncertainty (±%)

Major sources of emissions

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
96411

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions per scope per customer are proportional based total production volume from Bunge in 2021. Please note that these estimates are not the carbon intensity of the product sold.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Customer base is too large and diverse to accurately track emissions to the customer level	Product carbon footprint and life cycle analysis is required for each product, supply chain, flow, and other factors which is not currently demanded by the market.
Doing so would require we disclose business sensitive/proprietary information	Carbon accounting and LCA for products is currently a premium offering given the amount of proprietary and confidential data that is required to be disclosed. We provide this information under confidentiality agreements and with commercial agreement.

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?
Yes

SC1.4a

(SC1.4a) Describe how you plan to develop your capabilities.

Bunge currently allocates emissions to specific customers based on total revenue and on volume of product sold. Additionally Bunge adopts the continuous improvement in order to improve accuracy of data and calculations.

Allocation per product line or per specific geography are not request from customers currently, but when market demand arises, we will likely pursue this.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?
Please select

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?
Yes, I will provide data

SC4.1a

(SC4.1a) Give the overall percentage of total emissions, for all Scopes, that are covered by these products.

SC4.2a

(SC4.2a) Complete the following table for the goods/services for which you want to provide data.

Name of good/ service

Description of good/ service

Type of product
Please select

SKU (Stock Keeping Unit)

Total emissions in kg CO2e per unit

±% change from previous figure supplied

Date of previous figure supplied

Explanation of change

Methods used to estimate lifecycle emissions
Please select

SC4.2b

(SC4.2b) Complete the following table with data for lifecycle stages of your goods and/or services.

SC4.2c

(SC4.2c) Please detail emissions reduction initiatives completed or planned for this product.

Name of good/ service	Initiative ID	Description of initiative	Completed or planned	Emission reductions in kg CO2e per unit

SC4.2d

(SC4.2d) Have any of the initiatives described in SC4.2c been driven by requesting CDP Supply Chain members?

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms