# Bunge - Climate Change 2021

## 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, unmatched 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 the world's leader 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 more than 23,000 dedicated employees working across approximately 300 facilities located in more than 40 countries.

### C0.2

**(C0.2) State the start and end date of the year for which you are reporting data.**

| | Start date | End date | Indicate if you are providing emissions data for past reporting years | Select the number of past reporting years you will be providing emissions data for |
|---|---|---|---|---|
| Reporting year | January 1 2020 | December 31 2020 | Yes | 1 year |

### C0.3

**(C0.3) Select the countries/areas for which you will be supplying data.**

Argentina
Australia
Austria
Brazil
Cambodia
Canada
China
Colombia
Costa Rica
Côte d'Ivoire
Finland
France
Germany
Guatemala
Honduras
Hungary
India
Indonesia
Italy
Mexico
Netherlands
Nicaragua
Panama
Papua New Guinea
Paraguay
Peru
Philippines
Romania
Russian Federation
Solomon Islands
Spain
Thailand
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 | Both direct operations and elsewhere in the value chain [Processing/manufacturing/Distribution only] |
| Consumption | Both direct operations and elsewhere in the value chain [Processing/manufacturing/Distribution only] |

## 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 producer.

## 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**

In 2018, Bunge acquired 70% of Loders Croklaan, which primary business is related to Palm products. We reported palm related results for 2019 for the first time jointly, as Bunge (considering also Bunge Loders Croklaan - BLC business). 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.

## 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(s) | Please explain |
|---|---|
| Director on board | Sustainability activities and issues, including climate change risks, are overseen by the Sustainability and Corporate Responsibility Committee of the Bunge Board of Directors. This committee was established in 2014. Climate change is also considered by the full board and by various teams and functions, including global sustainability, corporate affairs and economic research. Daily management of emissions falls under our global Productivity, Quality, Safety and Environment (PQSE) program within the Global Industrial Operations function, which is managed by a member of our Executive Leadership Team, reporting to the Bunge CEO. The selected individuals have oversight of climate related issues because they oversee sustainability and environmental performance for the Company. Therefore, they are best placed to manage climate related issues as they are integrated in to general business strategy. |

## 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 – some meetings | Reviewing and guiding strategy<br>Reviewing and guiding major plans of action<br>Reviewing and guiding risk management policies<br>Reviewing and guiding business plans<br>Monitoring implementation and performance of objectives<br>Monitoring and overseeing progress against goals and targets for addressing climate-related issues | <Not Applicable> | The Sustainability and Corporate Responsibility Committee regularly reviews issues, strategy and performance related to climate change, including emissions and deforestation. Written updates on overall sustainability performance, issues and related topics are provided to the full board at each of its meetings. Reviews consider adherence to strategy, risk mitigation and business alignment in Bunge's operations, supply and value chains. |

## C1.2

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

| Name of the position(s) and/or committee(s) | Reporting line | Responsibility | Coverage of responsibility | Frequency of reporting to the board on climate-related issues |
|---|---|---|---|---|
| Chief Executive Officer (CEO) | <Not Applicable> | Both assessing and managing climate-related risks and opportunities | <Not Applicable> | Quarterly |
| Chief Sustainability Officer (CSO)<br>*Vice President, Global Corporate Affairs serves as global lead for sustainability and reports on issues, strategies and progress to the Board Committee quarterly. The CEO attends all Board Committee meetings.* | <Not Applicable> | Both assessing and managing climate-related risks and opportunities | <Not Applicable> | Quarterly |

## C1.2a

**(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).**

**Where in the structure does this committee sit?**

The Sustainability and Corporate Responsibility Committee (SCRC) is made up of independent directors of the board. The Chair of the Committee provides updates and feedback to the full Board. The Board also receives quarterly reports from the Chief Sustainability Officer & Governmental Affairs. The CEO is engaged in discussing and addressing, in the highest management level, the issues identified that are related to climate change.

The Chief Sustainability Officer & Governmental Affairs serves as a regular conduit between the Sustainability Committee and the business. The CSO interacts directly with EHS areas as well as global operations to assure policies and practices are implemented. The company discloses progress on the monitoring and management of material issues regularly, and produces GRI reports at a global or regional level annually.

**Why does responsibility lie here?**

Responsibility for climate related issues sits here because the members of this committee have influence on the strategy and policy of Bunge's general management. Through this they can ensure that climate issues are integrated in to business strategy and monitor progress effectively.

**What are the responsibilities of the committee?**

The responsibilities of the committee include discussion on climate related issues, review and setting of goals, monitoring performance and identifying and considering major risks.

**Description of position(s)/committee(s) specific climate-related issues monitoring process**

Each area of global operations is responsible for its own climate related management. The committee, via the CSO, engages with the different business areas to collect information on climate – related issues. This information is discussed with the committee at meetings and where required fed into board meetings.

## 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 | Climate related goals and performance are part of compensation metrics for key members of the senior and executive leadership |

## 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 | Type of incentive | Activity inventivized | Comment |
|---|---|---|---|
| Other C-Suite Officer | Monetary reward | Emissions reduction target<br>Energy reduction target<br>Efficiency target<br>Behavior change related indicator<br>Environmental criteria included in purchases<br>Supply chain engagement | Executives managing businesses or regional operations where there are material issues, often have supply chain related engagement included among annual performance goals. |
| Environment/Sustainability manager | Monetary reward | Emissions reduction project<br>Emissions reduction target<br>Energy reduction project<br>Energy reduction target<br>Efficiency project<br>Efficiency target<br>Behavior change related indicator<br>Environmental criteria included in purchases | Accomplishment of climate change related targets are part of incentive plans for environmental managers |
| Facilities manager | Monetary reward | Efficiency project<br>Efficiency target<br>Environmental criteria included in purchases | Accomplishment of supply chain engagement goals are part of incentive plans for facilities operational managers |

## 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. |
| 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. |
| Long-term | 10 | 30 | Long term horizons are those that consider scenarios beyond 10 years time and could span multiple commodity market cycles. |

## C2.1b

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

Adverse weather conditions, including as a result of climate change, may adversely 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 fertilizer 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**
Annually

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

**Description of process**
Due to the nature of Bunge's footprint and operations, our business could be affected in the future by regulation, taxation of greenhouse gas emissions, or policies related to national emissions reduction plans and market access requirements. Potential consequences could include variances in energy, transportation and raw material costs. The company is dependent on global logistics systems to deliver its products. Issues related to emissions in these areas, as well as those related to sourcing from expanding agricultural regions, could affect the company's performance on climate related strategies. Bunge's Enterprise Risk Management team (ERM) meets quarterly and assesses a variety of risks and opportunities that could have impacts on the business. Climate related risks, such as from adverse weather patterns, current or emerging regulations, reputational hazards, and other sources are included in this process. The results of these assessments are distributed throughout the executive leadership team and to the Board of Directors, and provided to key stakeholders in annual risk reports. More specifically, the company has a team directly charged with incorporating carbon pricing strategy worldwide and tracking low carbon intensity products to leverage the business opportunities. This team works closely with the risk management team to ensure the risk and opportunities adequately reflect the company's approach and ambitions. As a result of climate-related risks in the ERM process, the company has taken steps to mitigate, such as increasing the share of renewable energy sources for its operations, reducing emissions in our facilities and no longer sourcing from newly deforested areas in the Amazon Biome, in an effort to respond to climate issues and shift such production to areas of lower environmental impact. An emerging European Union regulation in 2020 related to the sustainability of soybean in biofuels presented a possible risk for the Company, but was in fact mitigated by Bunge's global asset footprint. As a consequence, Bunge was able to leverage its capacity to deliver deforestation-free soybeans from North America to supply the EU's biofuel directive. Oilseed-based fuels like soy renewable diesel are considered green or drop-in biofuels, chemically equivalent to traditional diesel fuels, but significantly better for the environment. The carbon intensity score for soy renewable diesel is about half that of traditional fossil fuels and much better than corn-derived ethanol.

## 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 | 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, environmental teams ensure that the company operates in compliance with these laws and regulations, under the general oversight of Bunge's local legal department. 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. For example in Brazil, deforestation is considered a driver of climate change. Across the high-risk regions of Brazil where deforestation is a higher risk, Bunge observes and complies with the national and regional laws pertaining to legal reserves in its rural operations for sourcing soybean. Legal and regulatory staff in our South America office regularly monitor and review Bunge's practices to ensure, at a minimum, that operations are in compliance with local laws and regulations. In furthering Bunge's commitment to zero deforestation globally, national- and regional-level teams also comply with company-wide policies that in many cases go beyond the legal requirements of the national government or municipality. |
| Emerging regulation | Relevant, always included | Bunge may be impacted directly and/or indirectly by emerging regulation 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. For example, carbon taxes or changes to emissions regulations could have short-term impacts on industrial operations. Regulations pertaining to agriculture or trade could pose risks or opportunities across multiple time periods that may affect financial performance in key markets. Additionally, industry-wide voluntary agreements are monitored. An example includes Brazil's Soy Moratorium, which currently restricts farming in the Amazon biome by barring soy traders from purchasing products connected to Amazon deforestation. Such regulation could potentially expand to include the Cerrado biome as well. In 2020, Bunge's government affairs team closely monitored and evaluated the potential impact of E.U. legislation restricting the import of Brazil-based soy, given the rise in Amazon fires within the country. The company also started to evaluate a proposition to start pricing carbon for locations where there is no regulated enforced carbon pricing. |
| Technology | Relevant, always included | Technological advances have the potential to impact Bunge's business and operations, and are therefore included in riskassessments. 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 2019, Bunge joined with industry peers to develop a radar based technology to monitor tree cover and land use change in palm oil growing regions of Southeast Asia. The new technology is able to penetrate cloud cover, which is a superior method when compared to traditional satellite. The impacts provide for greater capacity to ensure a deforestation-free supply and create new levels of trust with stakeholders. In 2018, 2019 and 2020, we actively monitored more than 30 million hectares of land. Through our in-depth knowledge of our suppliers and our collaboration with Earth Equalizer, we have the resources and capabilities to check for and act on instances of suspected deforestation. |
| 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. Bunge also requires 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 2020, 324 farmers in Bunge's Brazil supply chain are blocked due to social and environmental criteria in Brazil, considering the requirements of the Soy Moratorium, embargoed areas by IBAMA, slave labor legislation, the Green Protocol for Grains of Pará and internal criteria of our Non-Deforestation Policy. |
| Market | Relevant, always included | Agricultural commodity markets are inherently volatile and influenced by government policy, consumer trends and other influences. Bunge regularly conducts global and local market research analyses to keep track of these trends, and communicates potential risks and opportunities to relevant stakeholders. A significant market demand that we have identified pertains to the availability of certified products. In recent years, Bunge has been one of the largest traders of non-deforestation certified soybean and palm oil and we are able to deliver certified products to market when requested. 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. For palm oil, we actively promote the uptake of Roundtable on Sustainable Palm Oil (RSPO) certified material by our global customer base. |
| Reputation | Relevant, always included | 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 compliance with national and local regulation to protect at-risk ecosystems, such as our commitment to zero deforestation and protection of HCV and HCS areas when applicable, i.e. mapped in a given ecosystem. A significant reputational risk identified in the last year was related to the rise in fires used for clearing land in the Amazon Biome. Although in some cases legally permitted, Bunge nevertheless opposes the use of fire to clear land. Furthermore, as a signatory to the Amazon Soy Moratorium, Bunge does not purchase from newly deforested lands after July 2008. The situation in the region created significant reputational risk, as Bunge is a leading supplier of Brazil-based soy and could therefore be erroneously labeled as a driver of the deforestation. |
| Acute physical | Relevant, sometimes included | Acute physical risks due to climate change are likely to impact specific locations. Bunge's global asset footprint is a natural mitigant to this risk. The company's strategy is to source commodities from multiple regions and leverage multiple logistics and distribution chains to ensure the ability to supply customers in times of market dislocation. As such, identified acute physical risks such as potential flooding in specific geographies is considered in risk assessments. In North America, regional flooding could have a negative impact on Bunge's facilities and ports, which would temporarily disrupt commercial operations. Although no significant events occured in 2020, they are nevertheless considered. |
| Chronic physical | Relevant, sometimes included | Chronic physical risks are assessed based on new research and data provided around agricultural production in key areas where the Company operates. Bunge's diverse asset footprint could offset chronic physical risks. Persistent changes in agricultural production could impact specific operations and assets. Such changes could also result in adjustments in agricultural production and trade flows, which could have benefits to other parts of Bunge's business. The company considers potential long-term changes in agriculture as part of its regular economic research activities. Bunge uses a sustainable expansion zoning tool, called Agroideal.org, to map areas and trends of chronic physical risks in its supply chain of beans in South America. Additionally, an energy efficiency task force is in charge of seeking energy projects to maximize efficiency of facilities and to minimize exposure to fuel price volatility. In 2020, 28% of Bunge's energy came from renewable sources. Although our commitment is to reduce energy intensity, we actively seek opportunities to reduce the overall emissions from our electricity sources. |

## 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?**

Direct operations

**Risk type & Primary climate-related risk driver**

| | |
|---|---|
| Chronic physical | Changes in precipitation patterns and extreme variability in weather patterns |

**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**

Bunge's risk assessment process has identified weather-related disruptions in particular geographic areas as having an impact on financial, logistical and operational performance. Although Bunge's global footprint helps to mitigate the disruptions to our supply chain, there are nevertheless persistent risks to areas exposed to varying fluctuations in climate and weather patterns. For example, changing weather patterns and situations brought about by increased rainfall can have negative impacts on facilities or plants that are nearby important water sources, and furthermore can diminish the company's ability to ship product. This happened in Bunge facilities in North America in 2019 due to historic rainfall and flooding. No such situations occured at scale in 2020, but the ongoing changing weather pattern trends indicate a higher likelihood of flooding in that particular geography in future years, leading to impacts on both facilities and the upstream supply chain.

**Time horizon**
Medium-term

**Likelihood**
About as likely as not

**Magnitude of impact**
Medium

**Are you able to provide a potential financial impact figure?**
No, we do not have this figure

**Potential financial impact figure (currency)**
<Not Applicable>

**Potential financial impact figure – minimum (currency)**
<Not Applicable>

**Potential financial impact figure – maximum (currency)**
<Not Applicable>

**Explanation of financial impact figure**
Impacts would vary depending upon the nature of the operations affected, and the availability of crop. Financial impact could include property damage, damage to infrastructure, transportation disruption, higher costs for transporting product, higher insurance costs, and loss of customer or business revenue.

**Cost of response to risk**

**Description of response and explanation of cost calculation**
Bunge endeavours to source commodities from a variety of sources globally to mitigate disruptions in the supply chain. Our global footprint enables this wider logistic network. Additionally, Bunge widely uses technologies that help track and predict weather patterns that can help minimize instances of shocks from severe weather.

**Comment**

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**Identifier**
Risk 2

**Where in the value chain does the risk driver occur?**
Direct operations

**Risk type & Primary climate-related risk driver**

| | |
|---|---|
| Current regulation | Carbon pricing mechanisms |

**Primary potential financial impact**
Increased direct costs

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

**Company-specific description**
Bunge is subject to regulations and carbon pricing for emissions in various local and regional contexts. The growth of this regulatory regime presents additional costs for our operating companies in these regions, as well as locations that are not yet subject to carbon taxation or trading schemes. Also, due to its large footprint, some units of the company are located in areas with high risk of acute climate events, and are subject to additional taxes accordingly.

**Time horizon**
Short-term

**Likelihood**
Virtually certain

**Magnitude of impact**
Medium-low

**Are you able to provide a potential financial impact figure?**
No, we do not have this figure

**Potential financial impact figure (currency)**
<Not Applicable>

**Potential financial impact figure – minimum (currency)**
<Not Applicable>

**Potential financial impact figure – maximum (currency)**
<Not Applicable>

**Explanation of financial impact figure**
In 2020, Bunge paid carbon-related costs, owing to regulation mostly in the European Union (EU ETS). The annual volume / cost in 2020 was 197.000 EUAs / 4.700.000 €s. These figures vary depending the traded value . Other regulations were not as relevant or even immaterial. There is an expectation that regulated carbon will increase in volume and possibly price too, representing potential cost increases to our business but also opportunities to the extend agricultural commodities and alternative feedstocks for business as fuels, feed and food.

**Cost of response to risk**

**Description of response and explanation of cost calculation**
Bunge has already implemented a proprietary facility management system intended to reduce costs and to improve efficiency across over 40 countries where the company operates, called the Bunge Production System. In 2020 the system was embedded into 100% of Bunge facilities. As a result of Bunge's long-term GHG emissions reduction goals (10% between 2016-2026 per unit of production), we can expect to reduce costs associated with carbon taxation and other regulation. Additionally, in 2020 the company implemented a task force to measure and find business opportunities based on the carbon intensity of Bunge's products. This includes the impact of carbon taxes on facilities where relevant.

**Comment**
The general insurance policy covers risks related to extreme acute events and is already embedded in the cost of doing business.

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**Identifier**
Risk 3

**Where in the value chain does the risk driver occur?**
Downstream

**Risk type & Primary climate-related risk driver**

| | |
|---|---|
| Reputation | Increased stakeholder concern or negative stakeholder feedback |

**Primary potential financial impact**
Decreased revenues due to reduced demand for products and services

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

**Company-specific description**
Agriculture accounts for nearly 30% of global carbon emissions, driven by land use change and agricultural operations. As a buyer of agricultural commodities, some of which are linked to land use changes in sensitive geographies, Bunge is subject to scrutiny by a variety of stakeholders: customers, investors, consumers, the media, NGOs, governments and international organizations, and its own employees. For example, Bunge is a trader of palm oil, which has been considered a driver of deforestation on Southeast Asia. Although Bunge maintains an industry-leading non-deforestation policy and commits to end purchases of palm oil associated with deforestation, there are nevertheless expectations that Bunge prevent deforestation more broadly. Bunge has strong traceability scores for palm and palm kernel oil, and maintains strong relations with industry peers to develop solutions to deforstation that address stakeholder concerns. Our robust sustainability performance in the palm space provides a mitigant to reputational risks.

**Time horizon**
Medium-term

**Likelihood**
Unlikely

**Magnitude of impact**
Medium-low

**Are you able to provide a potential financial impact figure?**
Please select

**Potential financial impact figure (currency)**
<Not Applicable>

**Potential financial impact figure – minimum (currency)**
<Not Applicable>

**Potential financial impact figure – maximum (currency)**
<Not Applicable>

**Explanation of financial impact figure**
The financial impact is associated with the loss of customers. Bunge strives to ensure customer demands for traceability and disclosure are reasonably met, helping to ensure continued engagement. Relationship with suppliers under scrutiny from civil society could impose an extra reputational risk.

**Cost of response to risk**

**Description of response and explanation of cost calculation**
Bunge's non-deforestation policy is leading, and in the palm space, a commtiment to NDPE (no deforestation, no peatland development, and no exploitation) supplying practices has been in place since 2018. Violations of the Palm Oil Sourcing Policy and our NDPE principles are listed in a public grievance list, where violations and lack of engagement result in suppliers being blocked. Bunge is also a participant in a variety of trade associations, working groups, and international organizations that work to meet sustainability commitments and improve the overall sustainability performance of the supply chain. Annual disclosures and a transparent culture help ensure that the Bunge brand is valued by stakeholders.

**Comment**

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## 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?**
Direct operations

**Opportunity type**
Energy source

**Primary climate-related opportunity driver**
Use of lower-emission sources of energy

**Primary potential financial impact**
Reduced direct costs

**Company-specific description**
The majority of Bunge's facilities are in South America (primarily Brazil) and in North America. Since the facilities in Brazil are all powered by renewable energy, the main opportunity for growth in use of renewables is in North America. By utilizing solar and wind power, Bunge can reduce energy costs for its facilities. Through 2020, the company closed several long-term deals with wind energy providers for large facilities in the United States, leading to 100% renewable electricity. This has resulted in annual savings in excess of $250,000. Furthermore, Bunge North America is 100% coal-free.

**Time horizon**
Short-term

**Likelihood**
Virtually certain

**Magnitude of impact**
Medium-low

**Are you able to provide a potential financial impact figure?**
Yes, a single figure estimate

**Potential financial impact figure (currency)**
200000

**Potential financial impact figure – minimum (currency)**
<Not Applicable>

**Potential financial impact figure – maximum (currency)**
<Not Applicable>

**Explanation of financial impact figure**
Positive impact due to reduction in energy procurement from third party sources in select regions.

**Cost to realize opportunity**

**Strategy to realize opportunity and explanation of cost calculation**
This is being done through the deployment our Bunge Production System (BPS) in all regions where we operate, the implementation of technology at our facilities, and continuous improvement processes. It is also the result of the creation of our energy working group, which is successfully finding ways to optimize energy consumption in our plants.

**Comment**
Costs to realize these opportunities have been considered as investments in past periods. Please refer to financial note in section C-AC0.7

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**Identifier**
Opp2

**Where in the value chain does the opportunity occur?**
Downstream

**Opportunity type**
Products and services

**Primary climate-related opportunity driver**
Development of new products or services through R&D and innovation

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

*Better competitive position to reflect shifting consumer preferences, resulting in increased revenues*

**Company-specific description**
Responding to consumer, investor, and customer demand for more sustainable supply chains, Bunge has developed and implemented policies that will improve our environmental footprint in the high-risk areas in which we operate. The commodities most affected by this policy are soy and palm oil, which are the main commodities operated by the company, accounting for more than 60% of annual revenue. Bunge has developed traceability systems to ensure better management of climate and reputation related supply chain issues, and has offered such systems as differentials in the commodity market. Bunge's supply chain with the most material sustainability risk is soy from certain geographies of South America, where land-use change is a leading driver of environmental risk. In these geographies, Bunge commits to eliminate deforestation and native vegetation conversion by 2025 -- the most ambitious commitment at its scale in the industry. In the past few years, Bunge's traceability and monitoring system in the region has become the most robust, with 100% traceability to all direct-source farms in the relevant geographies, and over 96% monitoring for those in Brazil (100% in Argentina & Paraguay). Given the robust traceability system in place and with Bunge's history of strong relationships with farmers, we are able to provide products with assurances of deforestation-free quality, along with other parameters. The higher demand for such products, though still limited, represents a financial opportunity for Bunge. In addition, as regulations change and consumer preferences for environmentally protected products grow, Bunge is well positioned to deliver to market as needed.

**Time horizon**
Short-term

**Likelihood**
Very likely

**Magnitude of impact**
Medium-high

**Are you able to provide a potential financial impact figure?**
No, we do not have this figure

**Potential financial impact figure (currency)**
<Not Applicable>

**Potential financial impact figure – minimum (currency)**
<Not Applicable>

**Potential financial impact figure – maximum (currency)**
<Not Applicable>

**Explanation of financial impact figure**
Use of certified products offers customers an option to buy beans and oil from sustainable sources in compliance with multistakeholder initiatives on non-deforestation. Bunge is one of the largest trader of verified deforestation-free beans. Our growth in the use of certified products across both soy and palm commodities is built into the company's sustainability-linked revolving credit facility, the loan for which is $1.75 billion.

**Cost to realize opportunity**

**Strategy to realize opportunity and explanation of cost calculation**
As the largest soy trader in Brazil, Bunge is an active member of multi-stakeholder platforms developing solutions to deforestation, including a signatory to the Amazon Moratorium, a participant of the Cerrado Working Group (GTC), and the Soft Commodities Forum. Through dialogues with participants in these forums, Bunge is promoting industry-wide transparency and disclosure practices that will allow upstream suppliers and downstream costumers to understand our positive environmental impact.

**Comment**
Costs to realize the opportunity are based on gathering data from farmers, monitoring performance, and engaging and investing to build sustainable approaches in multiple regions. Please refer to financial note in section C-AC0.7

## C3. Business Strategy

### C3.1

**(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?**
Yes, and we have developed a low-carbon transition plan

### C3.1a

**(C3.1a) Is your organization's low-carbon transition plan a scheduled resolution item at Annual General Meetings (AGMs)?**

| | Is your low-carbon transition plan a scheduled resolution item at AGMs? | Comment |
|---|---|---|
| Row 1 | Yes | The company has established a comprehensive carbon related plan with cross sector teams evaluating carbon cost reduction measures as well as business opportunities. |

### C3.2

**(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?**
Yes, qualitative and quantitative

### C3.2a

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

| Climate-related scenarios and models applied | Details |
|---|---|
| Other, please specify (Internal analysis and tailor made models) | The company uses internal models to define its emissions targets. |
| 2DS | In 2018, Bunge investigated the alignment of the company's GHG emissions goals with a 2 degrees Celsius pathway. To assess Bunge's SBT for Scope 1 & 2 emissions, the 2DS scenario was chosen, aligning Bunge's requirements to the Sectoral Decarbonisation Approach (SDA) methodology. To validate the outputs of the SDA model, Bunge has used RCP 2.6. As Bunge operates in the agricultural sector, which has no specific pathway, RCP 2.6 was analysed to ensure that the SDA output was appropriate. Science based targets are currently being modeled to a number of target years, with 2030 being the longest-term target assessed. 2030 has been identified and chosen due to the SBTi validation criteria C5 and the requirement of a long-term carbon reduction target. As Bunge would seek SBTi validation in setting an SBT, alignment to the validation criteria is necessary. Our entire Scope 1 & 2 footprint, including emissions originating from biogenic sources, have been included within the scope of our scenario analysis. This covers approximately 99% of our global Scope 1 & 2 GHG emissions and therefore all of our operations that have a material impact on our environmental performance. |

## 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 | Climate change as a result of fossil fuel-based energy emissions continues to grow. In order to wean consumers off dependency on fuels like extracted oil, it will be important to develop and integrate sustainable energy sources for consumption, particularly automotive use. The company runs biofuel plants in Europe, sourcing grains and palm oil as raw materials. The company recently created a multi-disciplinary team to evaluate carbon intensity of products and to propose low carbon business opportunities. |
| Supply chain and/or value chain | Yes | Responding to consumer, investor, and customer demand for more sustainable supply chains, Bunge has developed and implemented policies that will improve our environmental footprint in the high-risk areas in which we operate. For example, we have established a company-wide goal of deforestation-free supply chain by 2025. This policy applies to all of Bunge's investments, strategy and operations, and is extended to suppliers and joint business ventures. The commodities most affected by this policy are soy and palm, which are the main commodities sourced by the company, accounting for more than 60% of annual revenue. Bunge has developed traceability systems to ensure better management of climate and reputation related supply chain issues, and has offered such systems as differentials in the commodity market. In both soy and palm, Bunge offers certified and verified products based on market demand, and delivers these products with assurances of their sustainability and quality credentials. As the largest soy trader in Brazil, Bunge is an active member of multi-stakeholder platforms developing solutions to deforestation, including a signatory to the Amazon Moratorium, a participant of the Cerrado Working Group (GTC), and a founding member of the Soft Commodities Forum (SCF). Through dialogues with participants in these forums, Bunge is promoting industry-wide transparency and disclosure practices that will allow upstream suppliers and downstream costumers to understand our positive environmental impact. |
| Investment in R&D | Yes | Research and development factors strongly into Bunge's ability to provide new products to market, as well as minimize risks associated with climate and other sustainability variables. For example, Bunge's Vénusz sunflower cooking oil has been a well-known brand in the market for years. By shifting the sourcing of oilseeds into ISCC +certification, the local team successfully rebranded the product. Vénusz, which was already GMO-free, is also now certified for sustainability in ISCC+ standards, bottled in 50% recycled PET, and using IFC-certified paper for its label. A marketing campaign advertised these benefits to customers to increase their visibility and tangibility and, as a result, the brand has increased its sales and expanded into different markets. These and other future sustainability innovations, are helping the brand maintain its leadership in the eastern European market. |
| Operations | Yes | Enhancing the climate resilience and sustainability impact of Bunge's operations is a key component of our strategy, with particular emphasis found to be cutting costs associated with energy use. Since 2016, Bunge has been progressively reducing the intensity of its energy use and the scope 1 and 2 emissions from its facilities, with the goal of reaching an overall 10% reduction in by 2026. We are making good progress on these goals, and expect to meet them by the deadline. Throughout the year, we succeeded in improving energy efficiencies by implementing heat reuse methodologies (heat exchangers) in some of our facilities. Maintenance and replacement of engines with better performance systems have also contributed to creating additional efficiencies across our operations. In 2020, 28% of Bunge's energy came from renewable sources. Although our commitment is to reduce energy intensity, we actively seek opportunities to reduce the overall emissions from our electricity sources. |

## 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<br>Direct costs<br>Capital allocation<br>Access to capital<br>Assets<br>Liabilities | As customer preference for sustainably sourced commodities increases, Bunge has explored ways to add these products into our portfolio as an opportunity to increase revenue. Certification schemes provide a way to ensure verification for products with a premium cost. As long as customers demand for certification continues, Bunge will incorporate these into revenue expectations. The magnitude of impact is medium-low on overall revenue. In 2019, Bunge closed its first $1.75bn sustainability-linked revolving credit facility tied to performance targets -- two of which directly relate to the company's push to supply more certified products to customers on demand. In parallel, the company established a carbon task-force in 2019 with the purpose of identifying the carbon intensity of its products, in order to find short term carbon market opportunities. The task force began its work throughout 2020. The wide availability of renewable energy from wind power in key North American states where Bunge operates processing and crushing facilities has made it possible to lower operating costs associated with electricity generation. The magnitude of impact is medium-low because most facilities in North America are low-electricity usage grain storage. However in 2018 Bunge began purchasing wind power indirectly for two high-energy usage facilities in Kansas, which will be 100% renewable through wind. Energy savings in 2020 exceeded $250,000. Bunge is actively seeking additional renewable energy sources for its other facilities in North America, and regularly seeks ways to reduce costs with these sources. Bunge monitors capital expenditure risks and opportunities, but has not identified any materially relevant situations to date. Through 2020, Bunge implemented a process to modernize its capital expenditures strategy to ensure that strict environmental and sustainability criteria were reflected in future planing and investment. The content encompasses material factors that will help Bunge to meet its environmental goals of reductions in emissions, energy, waste and water usage by 2026, and will have a doubling effect of reducing costs to account for future regulations and taxation on carbon emissions. In parallel, a task force was established to incorporate carbon pricing into all future CAPEX planning for the future. Access to capital represents a significant opportunity for Bunge's climate-related financial planning. Market direction points towards capital being more closely tied to sustainability considerations. In 2019 Bunge closed its first $1.75 billion revolving credit facility tied to performance across five sustainability indicators: emissions intensity reductions, soy traceability, palm traceability, soy certification and palm certification. Widely hailed by our stakeholders for its ambition and complexity, Bunge believes that capital opportunities such as these will become more prominent in the future, and therefore is actively exploring additional options to build upon this achievement. Climate change and acute physical impacts associated with rapidly changing weather patterns and increased storm likelihood present significant risks to Bunge's assets along coastal waterways and other maritime locations. In 2019, a Bunge facility in the United States was damaged due to unusually high seasonal flooding and storms, considered to be a new consequence of global climate change. This reflects the importance of asset location and vulnerability, and as such, is factored into new planning and strategy. No such impact at scale was experienced in 2020. We are subject to various environmental protection and occupational health and safety laws and regulations in the countries in which we operate, and we incur costs to comply with these requirements. Compliance with applicable laws and regulations relating to environmental matters has not had a material financial or competitive effect on our business. However, due to our extensive operations across multiple industries and jurisdictions globally, we are exposed to the risk of claims and liabilities under these laws and regulations. Violation can result in substantial fines, administrative sanctions, criminal penalties, revocations of operating permits and/or shutdown of facilities. |

## C3.4a

**(C3.4a) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).**

Climate change and other environmental issues are a significant part of the agriculture industry. As much as 30% of greenhouse gas emissions are a result of land use change and agricultural development. Therefore these issues are implicitly recognized in Bunge's long-term supply and demand strategic forecasting processes. Bunge seeks to mitigate the effects of agricultural production on local ecosystems by employing a company-wide environmental management policy that requires reductions in emissions, water usage, waste disposal, and total energy use. Bunge also embraces the use of new technologies and strategies that minimize costs while also reducing our dependence on emissions-related operations. With nine interrelated performance pillars in place to improve the efficiency, sustainability and safety of operations worldwide, 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.

The rapid growth of markets demanding low carbon intensity products has also motivated the establishment of a multi-disciplinary task force responsible carbon tracking. As an outcome of this task force, the company is developing strategies and objectives to deliver value products to market based on the company's low-carbon intensity performance.

Bunge also has short-term targets and objectives that are in alignment with business strategy and environmental performance. Our non-deforestation policy is applicable throughout our entire supply-chain, and continues to improve as we source products from more suppliers each year. By 2020, 100% of our soy volumes directly sourced from farms in areas of South America considered at higher risk of deforestation are traceable. We monitor over 8,300 farms across more than 14 million hectares of land. A portion of these farms are no longer supply to us, though we continue to monitor them for any land use change.

# C4. Targets and performance

## C4.1

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

## C4.1b

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

**Target reference number**
Int 1

**Year target was set**
2016

**Target coverage**
Company-wide

**Scope(s) (or Scope 3 category)**
Scope 1+2 (location-based)

**Intensity metric**
Metric tons CO2e per metric ton of product

**Base year**
2016

**Intensity figure in base year (metric tons CO2e per unit of activity)**
0.06079

**% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure**
100

**Target year**
2026

**Targeted reduction from base year (%)**
10

**Intensity figure in target year (metric tons CO2e per unit of activity) [auto-calculated]**
0.054711

**% change anticipated in absolute Scope 1+2 emissions**

**% change anticipated in absolute Scope 3 emissions**

**Intensity figure in reporting year (metric tons CO2e per unit of activity)**
0.05865

**% of target achieved [auto-calculated]**
35.2031584142128

**Target status in reporting year**
Underway

**Is this a science-based target?**
Yes, we consider this a science-based target, but it has not been approved by the Science Based Targets initiative

**Target ambition**
Please select

**Please explain (including target coverage)**
In 2019 the company underwent significant changes to its operations, and therefore saw changes in its ESG reporting boundary. The most notable include the divesting of Bunge's sugar and bioenergy assets to a joint venture with BP, and the inclusion of new plants following the acquisition of Loders Croklaan in 2018. Considering these changes, Bunge's baseline calculation from 2016 has been adjusted to reflect the removal of the sugar & bioenergy assets in 2019. The 2026 target date remains consistent with the original reporting. The plants from Bunge Loders Croklaan are implementing their goal to reduce 10% of its emissions reductions, and since 2016, we've reduced emissions by 5.4%

## 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**
63

**% of target achieved [auto-calculated]**
-59611.5384615385

**Target status in reporting year**
Underway

**Is this target part of an emissions target?**
No

**Is this target part of an overarching initiative?**
No, it's not part of an overarching initiative

**Please explain (including target coverage)**
Baseline 2016 had the removal of S&B to reflect business adjustment. Expect to reach the 2026 target.

---

**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**
0.855

**Target year**
2026

**Figure or percentage in target year**
10

**Figure or percentage in reporting year**
96

**% of target achieved [auto-calculated]**
1040.40459267359

**Target status in reporting year**
Underway

**Is this target part of an emissions target?**
No

**Is this target part of an overarching initiative?**
No, it's not part of an overarching initiative

**Please explain (including target coverage)**
Baseline 2016 had the removal of S&B to reflect business adjustment. Expect to reach the 2026 target.

---

**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**
2016

**Figure or percentage in base year**
10

**Target year**
2025

**Figure or percentage in target year**
100

**Figure or percentage in reporting year**
98

**% of target achieved [auto-calculated]**
97.7777777777778

**Target status in reporting year**
Please select

**Is this target part of an emissions target?**
Connected to sustainable supply chains, indirectly supporting reduction of emissions that could cause climate change.

**Is this target part of an overarching initiative?**
Remove deforestation

**Please explain (including target coverage)**
The target covers the company's efforts to eliminate deforestation in our global supply chains, particularly soy from South America. The KPI covers monitoring of direct source farms from areas at higher risk of deforestation in Brazil, Argentina and Paraguay. More information available at https://www.bunge.com/sustainability/non-deforestation.

## 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 | 22 | 200000 |
| To be implemented* | 2 | 6000 |
| Implementation commenced* | 1 | 1000000 |
| Implemented* | 1 | 20000 |
| Not to be implemented | 1 | 100 |

## 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 | Wind |

**Estimated annual CO2e savings (metric tonnes CO2e)**
4360

**Scope(s)**
Scope 2 (market-based)

**Voluntary/Mandatory**
Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**
1

**Investment required (unit currency – as specified in C0.4)**
1

**Payback period**
<1 year

**Estimated lifetime of the initiative**
Ongoing

**Comment**
The above was a replacement grid energy by 100% wind in Atchinson USA. It is used as pilot for other BG plants and a proxy for a Ren Electricity purchasing for other plants.

---

**Initiative category & Initiative type**

| | |
|---|---|
| Low-carbon energy consumption | Wind |

**Estimated annual CO2e savings (metric tonnes CO2e)**
4280

**Scope(s)**
Scope 2 (market-based)

**Voluntary/Mandatory**
Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**
1

**Investment required (unit currency – as specified in C0.4)**
1

**Payback period**
<1 year

**Estimated lifetime of the initiative**
Ongoing

**Comment**
The above was a replacement grid energy by 100% wind in Emporia USA. It is used as pilot for other BG plants and a proxy for a Ren Electricity purchasing for other plants.

---

**Initiative category & Initiative type**

| | |
|---|---|
| Low-carbon energy consumption | Wind |

**Estimated annual CO2e savings (metric tonnes CO2e)**
11420

**Scope(s)**
Scope 2 (market-based)

**Voluntary/Mandatory**
Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**
1

**Investment required (unit currency – as specified in C0.4)**
1

**Payback period**
<1 year

**Estimated lifetime of the initiative**
Ongoing

**Comment**
The above was a replacement grid energy by 100% wind in Council Bluffs USA. It is used as pilot for other BG plants and a proxy for a Ren Electricity purchasing for other plants.

---

## C4.3c

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

| Method | Comment |
|---|---|
| Dedicated budget for energy efficiency | Bunge's Best in Class initiative, including enhanced analytics, optimized assets and improved processes, is being implemented throughout all of our operations. Our Bunge Management Operating System. With nine interrelated performance pillars in place to improve the efficiency, sustainability and safety of operations worldwide, 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. |
| Dedicated budget for other emissions reduction activities | Certain units in plants and other facilities have been utilizing previous generation equipment that needs to be replaced in order to support approach for achieving emissions targets. Bunge's optimization programs are addressing these units and intend to update with modern equivalents offering lower carbon emissions. In 2020, we began to receive third party verification ofthe emissions from our direct sources, known as Scope 1 & Scope 2. These actions allow us to help meet global commitments for a more sustainable and resilient food system. |
| Financial optimization calculations | Some initiatives aim to extend the life span of equipment that would allow company to realize financial optimization. |
| Financial optimization calculations | Internal challenge for cost neutral switch from regular grid electricity to 100% renewable has been initiated in the US with successful results. The above case is not exhaustive, but one that is being use as case study for a scale up program. |

## C4.5

**(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?**

Yes

## C4.5a

**(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.**

**Level of aggregation**

Group of products

**Description of product/Group of products**

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.

**Are these low-carbon product(s) or do they enable avoided emissions?**

Avoided emissions

**Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions**

The EU Taxonomy for environmentally sustainable economic activities

**% revenue from low carbon product(s) in the reporting year**

**% of total portfolio value**

<Not Applicable>

**Asset classes/ product types**

<Not Applicable>

**Comment**

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 product or sales. It's important to note that up to 40% of crude oil sales in Brazil are linked to biofuel supplies.

# C5. Emissions methodology

## C5.1

**(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).**

**Scope 1**

**Base year start**
January 1 2016

**Base year end**
December 31 2016

**Base year emissions (metric tons CO2e)**
1663890

**Comment**
Includes direct CO2 emissions from fuel use in facilities.

**Scope 2 (location-based)**

**Base year start**
January 1 2016

**Base year end**
December 31 2016

**Base year emissions (metric tons CO2e)**
1674805

**Comment**
This refers to GHG emissions from purchased energy.

**Scope 2 (market-based)**

**Base year start**
January 1 2016

**Base year end**
December 31 2016

**Base year emissions (metric tons CO2e)**

**Comment**
No market based emissions were implemented at the baseline year.

## C5.2

**(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.**
Brazil GHG Protocol Programme
IPCC Guidelines for National Greenhouse Gas Inventories, 2006
US EPA Mandatory Greenhouse Gas Reporting Rule
Other, please specify (Argentina / Brazil governmental sources)

## C5.2a

**(C5.2a) Provide details of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.**

The Argentine Secretary of Energy and the Brazilian Ministry of Science and Technology are also sources of regional indexes that support the use of global guidelines like the GHG protocol and IPCC.

# 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)**
1858212

**Start date**
January 1 2020

**End date**
December 31 2020

**Comment**
global direct emissions as per GHG protocol, no scope change from previous year.

**Past year 1**

**Gross global Scope 1 emissions (metric tons CO2e)**
1958125

**Start date**
January 1 2019

**End date**
December 31 2019

**Comment**
global direct emissions as per GHG protocol

## 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**
Most sites use location-based Scope 2, however Bunge uses market-based Scope 2 on a few sites.

## C6.3

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

**Reporting year**

**Scope 2, location-based**
1862357

**Scope 2, market-based (if applicable)**
0

**Start date**
January 1 2020

**End date**
December 31 2020

**Comment**
The company acquires third party generated steam and electricity which are both from renewable sources and therefore with no indirect emissions and within proper certificate guidelines and credentials.

**Past year 1**

**Scope 2, location-based**
1791572

**Scope 2, market-based (if applicable)**
0

**Start date**
January 1 2019

**End date**
December 31 2019

**Comment**
The company acquires third party generated steam and electricity which are both from renewable sources and therefore with no indirect emissions and within proper certificate guidelines and credentials.

## C6.4

**(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 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 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.**

**Source**

Ports, silos and offices

**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 (if applicable)**

Emissions are not relevant

**Explain why this source is excluded**

Ports, silos and offices are not relevant in the calculation of Scope 1 and 2 for the company, as they have been shown to produce considerably low emissions compared to the other facilities within our reporting boundary. Therefore Bunge's resources for emissions reductions are allocated based on where impact will be most significant.

## 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

**Metric tonnes CO2e**

56056865

**Emissions calculation methodology**

GHG Protocol

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

0

**Please explain**

Supplier data (from farms and growers) is not collected as the basis is very large and spread (farmers, silos and intermediaries spread worldwide).

**Capital goods**

**Evaluation status**

Relevant, calculated

**Metric tonnes CO2e**

69799

**Emissions calculation methodology**

GHG Protocol

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

0

**Please explain**

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

**Evaluation status**

Relevant, calculated

**Metric tonnes CO2e**

851911

**Emissions calculation methodology**

GHG Protocol

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

0

**Please explain**

### Upstream transportation and distribution

**Evaluation status**
Relevant, calculated

**Metric tonnes CO2e**
6188305

**Emissions calculation methodology**
GHG Protocol

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**
56

**Please explain**
We use actual amount of bunker fuel used on the time chartered ocean going vessels.

### Waste generated in operations

**Evaluation status**
Relevant, calculated

**Metric tonnes CO2e**
9164

**Emissions calculation methodology**
GHG Protocol

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

**Please explain**
Amount of hazardous / non hazardous waste is tracked. Emissions calculated using factors.

### Business travel

**Evaluation status**
Not relevant, calculated

**Metric tonnes CO2e**
2114

**Emissions calculation methodology**
GHG Protocol

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**
100

**Please explain**
Very significant reduction due to the COVID-19 pandemic.

### Employee commuting

**Evaluation status**
Not relevant, calculated

**Metric tonnes CO2e**
18998

**Emissions calculation methodology**
GHG Protocol

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**
0.03

**Please explain**
Calculated using factors based on full time employees.

### Upstream leased assets

**Evaluation status**
Not relevant, calculated

**Metric tonnes CO2e**
85442

**Emissions calculation methodology**
GHG Protocol

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**
0.09

**Please explain**

### Downstream transportation and distribution

**Evaluation status**
Relevant, calculated

**Metric tonnes CO2e**
761821

**Emissions calculation methodology**
GHG Protocol

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

**Please explain**
Data not available. Calculated from factors and using intensity of upstream Ex-sea transportation.

### Processing of sold products

**Evaluation status**
Relevant, calculated

**Metric tonnes CO2e**
24474367

**Emissions calculation methodology**
GHG Protocol

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

**Please explain**
Data not available. Calculated from factors derived from volumes sold.

### Use of sold products

**Evaluation status**
Relevant, calculated

**Metric tonnes CO2e**
256564

**Emissions calculation methodology**
GHG Protocol

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

**Please explain**
Data not available. Calculated from spend data and factors.

### End of life treatment of sold products

**Evaluation status**
Relevant, calculated

**Metric tonnes CO2e**
3091

**Emissions calculation methodology**
GHG Protocol

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

**Please explain**

### Downstream leased assets

**Evaluation status**
Not relevant, explanation provided

**Metric tonnes 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**
Leased assets are immaterial to company operations

**Franchises**

**Evaluation status**
Not relevant, explanation provided

**Metric tonnes 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**
No franchises under Bunge's business model

**Investments**

**Evaluation status**
Relevant, calculated

**Metric tonnes CO2e**
44621

**Emissions calculation methodology**
GHG Protocol

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

**Please explain**
Data not available. Calculated from list of partners and public data. Amount is is immaterial and was reported the same as previous year.

**Other (upstream)**

**Evaluation status**

**Metric tonnes 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**

**Other (downstream)**

**Evaluation status**

**Metric tonnes 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**

## C-AC6.6/C-FB6.6/C-PF6.6

**(C-AC6.6/C-FB6.6/C-PF6.6) Can you break down your Scope 3 emissions by relevant business activity area?**
No

## C-AC6.6b/C-FB6.6b/C-PF6.6b

**(C-AC6.6b/C-FB6.6b/C-PF6.6b) Why can you not report your Scope 3 emissions by business activity area?**

**Row 1**

**Primary reason**
Other, please specify

**Please explain**
We have developing and disclosing our Scope 3 for the last 2 years and it takes into consideration all business units together. Our structre is so that business units are interconected therefore for accuracy we decided for this metodoloy.

## 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?**
Yes

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

**(C-AC6.8a/C-FB6.8a/C-PF6.8a) Account for biogenic carbon data pertaining to your direct operations and identify any exclusions.**

**CO2 emissions from biofuel combustion (processing/manufacturing machinery)**

**Emissions (metric tons CO2)**
1515057

**Methodology**
Default emissions factors

**Please explain**
Biogenic emissions remain as the main source of boiler fuel in the Brazilian operations, above figures reflect the CO2 amount..

**CO2 emissions from biofuel combustion (other)**

**Emissions (metric tons CO2)**

**Methodology**

**Please explain**
Biogenic emisions disclosed from biomass only. Biofuel related emissions area immaterial.

## 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

**Please explain**
we calculate emissions considering GHG agricultural protocol (Scope3, Category 1) and consider metrics currently used for the certification of emissions.

**Agricultural commodities**
Palm Oil

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

**Please explain**
we calculate emissions considering GHG agricultural protocol (Scope3, Category 1) and consider metrics currently used for the certification of emissions.

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

**(C-AC6.9a/C-FB6.9a/C-PF6.9a) Report your greenhouse gas emissions figure(s) for your disclosing commodity(ies), explain your methodology, and include any exclusions.**

**Palm Oil**

**Reporting emissions by**
Total

**Emissions (metric tons CO2e)**
7554259

**Denominator: unit of production**
<Not Applicable>

**Change from last reporting year**
Lower

**Please explain**
Bunge has produced a specific Palm Oil model (Scope 3 Category 1), which takes into consideration RSPO certified volumes. There was also a volumetric reduction from 2019 to 2020.

**Soy**

**Reporting emissions by**
Total

**Emissions (metric tons CO2e)**
22873036

**Denominator: unit of production**
<Not Applicable>

**Change from last reporting year**
Higher

**Please explain**
Bunge has produced a specific Soy model (Scope 3 Category 1), which takes into consideration a 20 year amortization period for land use change. There was also a volumetric increase from 2019 to 2020.

## 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**
0.0009

**Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)**
3720569

**Metric denominator**
unit total revenue

**Metric denominator: Unit total**
41140000000

**Scope 2 figure used**
Location-based

**% change from previous year**
4.3

**Direction of change**
Decreased

**Reason for change**
We have overall changed our portfolio mix for our scope 1 which includes amongst others less coal consumption. There was also a change in our footprint as well as its capacity utilization.

# 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/region.**

| Country/Region | Scope 1 emissions (metric tons CO2e) |
|---|---|
| Argentina | 181658.865 |
| Austria | 19014.679 |
| Brazil | 39671.1 |
| Canada | 174743.1 |
| China | 56105.364 |
| France | 25459.207 |
| Germany | 18839.18 |
| Hungary | 1779.145 |
| India | 125913.59 |
| Italy | 64046.482 |
| Mexico | 209 |
| Poland | 77783.361 |
| Romania | 18162.967 |
| Russian Federation | 2196.905 |
| Spain | 164633.972 |
| Turkey | 38653.334 |
| Ukraine | 1661.425 |
| United States of America | 673942 |
| Netherlands | 117376.063 |
| Malaysia | 56361.862 |

## 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 | 848894.1 |
| South America | 221330 |
| Europe | 549606.725 |
| Asia | 238380.816 |

## 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)**

1858211.642

**Methodology**

Default emissions factor

**Please explain**

Primary fuel tonnage use controlled and emission factors applied

## C7.5

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

| Country/Region | Scope 2, location-based (metric tons CO2e) | Scope 2, market-based (metric tons CO2e) | Purchased and consumed electricity, heat, steam or cooling (MWh) | Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh) |
|---|---|---|---|---|
| United States of America | 456914 | | | |
| Canada | 38922.7 | | | |
| Brazil | 38094.35 | | | |
| Spain | 1333.93 | | | |
| Austria | 0 | | | |
| Turkey | 15454.012 | | | |
| Italy | 3551.162 | | | |
| Hungary | 14365.913 | | | |
| Ukraine | 32481.075 | | | |
| Russian Federation | 17137.341 | | | |
| Germany | 32440.665 | | | |
| Poland | 47475.963 | | | |
| Romania | 17838.785 | | | |
| France | 1399.38 | | | |
| China | 943403.533 | | | |
| India | 21050.597 | | | |
| Mexico | 23164.4 | | | |
| Argentina | 86487.747 | | | |
| Netherlands | 25516.665 | | | |
| Malaysia | 45325.212 | | | |
| Please select | | | | |

## 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 | 519001.1 | |
| South America | 124581.837 | |
| Europe | 208994.895 | |
| Asia | 1009779.343 | |

## 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 | Emissions value (percentage) | Please explain calculation |
|---|---|---|---|---|
| Change in renewable energy consumption | | <Not Applicable> | | |
| Other emissions reduction activities | 29128 | Decreased | | |
| Divestment | | <Not Applicable> | | |
| Acquisitions | | <Not Applicable> | | |
| Mergers | | <Not Applicable> | | |
| Change in output | | <Not Applicable> | | |
| Change in methodology | | <Not Applicable> | | |
| Change in boundary | | <Not Applicable> | | |
| Change in physical operating conditions | | <Not Applicable> | | |
| Unidentified | | <Not Applicable> | | |
| Other | | <Not Applicable> | | |

## 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?**

Location-based

# C8. Energy

## C8.1

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

More than 65% but less than or equal to 70%

## 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) | LHV (lower heating value) | 3298682.64 | 9157432.88 | 12456115.52 |
| Consumption of purchased or acquired electricity | <Not Applicable> | 37413 | 2575866 | 2613279 |
| Consumption of purchased or acquired heat | <Not Applicable> | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Consumption of purchased or acquired steam | <Not Applicable> | 260616 | 1018556 | 1279172 |
| Consumption of purchased or acquired cooling | <Not Applicable> | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Consumption of self-generated non-fuel renewable energy | <Not Applicable> | | <Not Applicable> | |
| Total energy consumption | <Not Applicable> | | | 12456115.52 |

## 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.**

**Fuels (excluding feedstocks)**
Natural Gasoline

**Heating value**
LHV (lower heating value)

**Total fuel MWh consumed by the organization**
8349514.74

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

**MWh fuel consumed for self-generation of steam**

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

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

**Emission factor**
0.00192

**Unit**
metric tons CO2e per m3

**Emissions factor source**

**Comment**
Factor for metric countries. For USA it was used 0.054495 Metric Tons / MCF

---

**Fuels (excluding feedstocks)**
Petrol

**Heating value**
LHV (lower heating value)

**Total fuel MWh consumed by the organization**
1038.06

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

**MWh fuel consumed for self-generation of steam**

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

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

**Emission factor**
0.00231

**Unit**
metric tons CO2e per liter

**Emissions factor source**

**Comment**
Factor for metric countries. For USA it was used 0.005744 Metric Tons / Gallons

---

**Fuels (excluding feedstocks)**
Diesel

**Heating value**
LHV (lower heating value)

**Total fuel MWh consumed by the organization**
45845.31

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

**MWh fuel consumed for self-generation of steam**

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

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

**Emission factor**
0.0027

**Unit**
metric tons CO2e per liter

**Emissions factor source**

**Comment**
Factor for metric countries. For USA it was used 0.010241 Metric Tons / Gallons

---

**Fuels (excluding feedstocks)**
Liquefied Petroleum Gas (LPG)

**Heating value**
LHV (lower heating value)

**Total fuel MWh consumed by the organization**
56669.21

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

**MWh fuel consumed for self-generation of steam**

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

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

**Emission factor**
0.00151

**Unit**
metric tons CO2e per liter

**Emissions factor source**

**Comment**
Factor for metric countries. For USA it was used 0.005744 Metric Tons / Gallons

---

**Fuels (excluding feedstocks)**
Light Distillate

**Heating value**
LHV (lower heating value)

**Total fuel MWh consumed by the organization**
7363.62

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

**MWh fuel consumed for self-generation of steam**

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

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

**Emission factor**

**Unit**
Please select

**Emissions factor source**

**Comment**
Factor for metric countries. For USA it was used 0.010186 Metric Tons / Gallons

---

**Fuels (excluding feedstocks)**
Coal

**Heating value**
LHV (lower heating value)

**Total fuel MWh consumed by the organization**
684439.44

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

**MWh fuel consumed for self-generation of steam**

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

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

**Emission factor**

**Unit**
Please select

**Emissions factor source**

**Comment**

---

**Fuels (excluding feedstocks)**
Fuel Oil Number 1

**Heating value**
LHV (lower heating value)

**Total fuel MWh consumed by the organization**
12562.51

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

**MWh fuel consumed for self-generation of steam**

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

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

**Emission factor**

**Unit**
Please select

**Emissions factor source**

**Comment**

---

**Fuels (excluding feedstocks)**
Wood

**Heating value**
LHV (lower heating value)

**Total fuel MWh consumed by the organization**
1507504.82

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

**MWh fuel consumed for self-generation of steam**

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

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

**Emission factor**

**Unit**
Please select

**Emissions factor source**

**Comment**

---

**Fuels (excluding feedstocks)**
Agricultural Waste

**Heating value**
LHV (lower heating value)

**Total fuel MWh consumed by the organization**
1222985.7

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

**MWh fuel consumed for self-generation of steam**

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

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

**Emission factor**

**Unit**
Please select

**Emissions factor source**

**Comment**

---

**Fuels (excluding feedstocks)**
Solid Biomass Waste

**Heating value**
LHV (lower heating value)

**Total fuel MWh consumed by the organization**
564910.45

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

**MWh fuel consumed for self-generation of steam**

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

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

**Emission factor**

**Unit**
Please select

**Emissions factor source**

**Comment**

---

**Fuels (excluding feedstocks)**
Bagasse

**Heating value**
LHV (lower heating value)

**Total fuel MWh consumed by the organization**
3281.67

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

**MWh fuel consumed for self-generation of steam**

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

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

**Emission factor**

**Unit**
Please select

**Emissions factor source**

**Comment**

---

## 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 | 35161.02 | 35161.02 | | |
| Heat | | | | |
| Steam | | | | |
| Cooling | | | | |

## C8.2e

**(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero emission factor in the market-based Scope 2 figure reported in C6.3.**

**Sourcing method**
Other, please specify

**Low-carbon technology type**
Other, please specify (Within our portfolio we buy renewable energy on a number of plants. They include a mix of a zero carbon generation PPAs and renewable energy credits. )

**Country/area of consumption of low-carbon electricity, heat, steam or cooling**
Please select

**MWh consumed accounted for at a zero emission factor**
37413

**Comment**

## C9. Additional metrics

### C9.1

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

**Description**
Energy usage

**Metric value**
0.94

**Metric numerator**
GJ

**Metric denominator (intensity metric only)**
metric Tons of production

**% change from previous year**
1.75

**Direction of change**
Decreased

**Please explain**
Energy efficiency usage at our facilities is a priority due to cost and emissions association. As such we have dedicated programs to achieve excellence. YoY variations do not always reflect reasons within our control (ex: unexpected wet harvesting season demands extra energy for drying crops). Despite this we are underway to achieve our target and did have improved KPI metrics from 2019 to 2020 (as above).

**Description**
Waste

**Metric value**
0.82

**Metric numerator**
M3 waste sent to landfill

**Metric denominator (intensity metric only)**
metric Tons of production

**% change from previous year**
0

**Direction of change**
Please select

**Please explain**
There was no progress from 2019 to 2020 on waste to landfill diversion. The year 2020 went through country-wide silo cleaning in Brazil, which is a one time event in many years. This event did generate extra waste in 2020, but it will likely reflect positively in the current and following years. For the reason above we classify our target is underway and expect to reach the 10 y goal.

## 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**
Limited assurance

**Attach the statement**
Bunge´s 2020 Assurance Report.pdf

**Page/ section reference**
Full document - 2020 data was verified by third party audit.

**Relevant standard**
Please select

**Proportion of reported emissions verified (%)**

## 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 location-based

**Verification or assurance cycle in place**
Annual process

**Status in the current reporting year**
Complete

**Type of verification or assurance**
Limited assurance

**Attach the statement**
Bunge´s 2020 Assurance Report.pdf

**Page/ section reference**
Full document - 2020 data was verified by third party audit.

**Relevant standard**
Please select

**Proportion of reported emissions verified (%)**

## 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?**
No, but we are actively considering verifying within the next two years

# 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.**

EU ETS

## C11.1b

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

**EU ETS**

**% of Scope 1 emissions covered by the ETS**

27

**% of Scope 2 emissions covered by the ETS**

16

**Period start date**

January 1 2020

**Period end date**

December 31 2020

**Allowances allocated**

**Allowances purchased**

197000

**Verified Scope 1 emissions in metric tons CO2e**

**Verified Scope 2 emissions in metric tons CO2e**

**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 in the Clean Development Mechanism system and has been an active participant in the European Trading Scheme (ETS). Market changes have forced us to evolve our strategy for carbon trading and find new opportunities as presented in the ETS.

For the ETS scheme, we are complying with regional legislation. We comply with this scheme as we have a group internally that is dedicated to monitoring changes, engaging with working groups and ensuring that relevant data is collated and reviewed in line with annual deadlines. Countries involved in ETS are Spain, Italy, Poland and Austria. Only Spain and Poland are required to purchase EUAs in the market.

The allowances allocated are the free allocation we receive. The emissions verified are the amount that we send/pay to the authorities.

## C11.2

**(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?**

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.**

**Objective for implementing an internal carbon price**
Navigate GHG regulations
Stakeholder expectations
Change internal behavior
Drive energy efficiency
Drive low-carbon investment

**GHG Scope**
Scope 1
Scope 2

**Application**
Emissions and environmental markets liquidity provider and internal price on carbon is applied over certain facilities located in regions under regulation regarding carbon emissions.

**Actual price(s) used (Currency /metric ton)**
15

**Variance of price(s) used**
Bunge has implemented a company wide carbon price which takes into consideration the World Bank carbon price dashboard and our footprint.

**Type of internal carbon price**
Shadow price
Implicit price

**Impact & implication**
Internal carbon price (shadow) has been implemented for all CAPEX investment above a certain threshold. For specific cases where project is under ETS, carbon TAX or added carbon value business cases, the cashflow impact is reflected into the economic return of the project.

## C12. Engagement

### C12.1

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

### C12.1a

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

**Type of engagement**
Compliance & onboarding

**Details of engagement**
Code of conduct featuring climate change KPIs
Climate change is integrated into supplier evaluation processes

**% of suppliers by number**
95

**% total procurement spend (direct and indirect)**
95

**% of supplier-related Scope 3 emissions as reported in C6.5**
95

**Rationale for the coverage of your engagement**
Engagement through contract clauses and application of Code of Ethics to all agricultural suppliers.

**Impact of engagement, including measures of success**
Compliance to the company's code and policy, decreasing negative impact on the environment, land use change and reputation and sourcing capacity risks in the direct supply chain.

**Comment**
Policies are explained and are part of commercial contracts with suppliers, supporting adherence and compliance to the company's directives.

### C12.1b

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

**Type of engagement**
Education/information sharing

**Details of engagement**
Run an engagement campaign to education customers about your climate change performance and strategy

**% of customers by number**
70

**% of customer - related Scope 3 emissions as reported in C6.5**
80

**Portfolio coverage (total or outstanding)**
<Not Applicable>

**Please explain the rationale for selecting this group of customers and scope of engagement**
Customers demand more information on land use change in our supply chain and what are the policies in place. Our role is not only to promote the right incentives and governance over suppliers, but also to engage customers into positive discussions and solutions, sharing the responsibility with them. Global customers are primary target, while local business also receive the outcomes of the governance in place.

**Impact of engagement, including measures of success**
Customers are more aware about feasible solutions and their share of responsibility. Company is then able to minimize reputation issues and enhances possible solutions into the market, supporting the resilience of the systems.

## C12.1d

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

Bunge's Grains & Oilseeds commitment, established in 2015, sets out our approach to promoting sustainable agriculture and achieving deforestation-free supply chains. It calls for value chains that are transparent, verified sustainable and which create positive impacts on the ground while advancing the spirit of the Sustainable Development Goals. The commitment calls for:

- achieve deforestation-free supply chains worldwide by 2025, considering both direct and indirect sourcing, and applying to native vegetation conversion in the appropriate geographies, reconciling production with environmental, economic and social interests,
- employ science-based definitions and cutoff dates for deforestation and native vegetation conversion determined by a credible multi-stakeholder process,
- apply these criteria to our supply chains, in addition to minimum standards of legal compliance,
- respect human rights and indigenous community rights, and apply free, prior and informed consent for land purchases and use,
- enhance traceability to farm and transparency overall,
- ensure respect for legally protected areas,
- publicly disclose progress on our efforts,
- engage in open and productive dialogue with stakeholders.
- reducing greenhouse gas (GHG) emissions
- protecting peat land and other carbon-capturing ecosystems
- conserving freshwater and acting responsibly in water-stressed regions
- conserving biodiversity
- supporting livelihoods
- respecting labor and land use rights
- applying free, prior and informed consent.

Our commitment is especially material for soybeans sourced in areas of South America that are at higher risk of deforestation, such the Brazilian Cerrado and Argentinian Chaco regions. In 2020, 100% of our soy volumes directly sourced from farms in these regions are traceable. We monitor over 9,000 farms across more than 14 million hectares of land. A portion of these farms are no longer supply to us, though we continue to monitor them for any land use change. .

Bunge believes that palm oil and palm kernel oil must be produced in a manner that is legally compliant and traceable, that protects forests and biodiversity, reduces greenhouse gas (GHG) emissions and respects the rights of indigenous peoples, workers and local communities. Our Palm Oil Sourcing Policy shows our approach to sustainable sourcing of this commodity. In 2020, we achieved 98% traceability to the mill for palm oil, and over 77% traceability to plantation. Over 20 million hectares of forest are monitored by satellite and radar. Land use changes are reported on a bi-weekly basis, and we work with a variety of stakeholders to engage plantations that are identified as having violated our sourcing policy.

## 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**
Biodiversity considerations

**Description of management practice**
Farmers in Brazil must keep a designated area that serves as biodiversity reserve.

**Your role in the implementation**
Knowledge sharing
Procurement

**Explanation of how you encourage implementation**
Farmers shall comply with local regulations and are monitored through official documentation provided.

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

**Comment**
Set aside areas support machinery use in areas more suitable for cropping and thus reduce emissions. Also, it enhances resilience to climate change by creating a micro-climate. This area of increasing vegetation also serves as a carbon sink and serves as a nesting area for natural enemies of harmful insects, supporting the reduction of pesticides use.

---

**Management practice reference number**
MP2

**Management practice**
Low carbon energy use

**Description of management practice**
Support planted forests

**Your role in the implementation**
Financial
Knowledge sharing
Operational
Procurement

**Explanation of how you encourage implementation**
Support planted forests to increase local offer of biomass.

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

**Comment**
Currently, our operations in Brazil are already based on a successfully implemented system of sourcing sustainable wood from planted forests.

---

**Management practice reference number**
MP3

**Management practice**
Contour farming

**Description of management practice**
Set aside areas on river banks and preservation on site.

**Your role in the implementation**
Knowledge sharing
Operational

**Explanation of how you encourage implementation**
Request compliance with environmental regulation where applicable, making certain that we collect farm information to verify compliance.

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

**Comment**

---

**Management practice reference number**
MP4

**Management practice**
Governmental or institutional policies and programs

**Description of management practice**
Non deforestation policy

**Your role in the implementation**
Financial

Knowledge sharing
Operational
Procurement

**Explanation of how you encourage implementation**
Implementation of our non deforestation policy, supporting farmers to comply with sustainable expansion of agriculture. We support financially and technically the expansion over areas not related to original forest.

**Climate change related benefit**
Emissions reductions (mitigation)
Increasing resilience to climate change (adaptation)
Increase carbon sink (mitigation)

**Comment**

---

**Management practice reference number**
MP6

**Management practice**
Crop rotation

**Description of management practice**
Incentive for different row crops to help Nitrogen fixation

**Your role in the implementation**
Knowledge sharing
Operational
Procurement

**Explanation of how you encourage implementation**
Offering various buy options to farmers and rotation of beans and cereals.

**Climate change related benefit**
Reduced demand for fertilizers (adaptation)
Reduced demand for pesticides (adaptation)
Other, please specify (diversification of production and revenue sources)

**Comment**

---

**Management practice reference number**
MP7

**Management practice**
Equipment maintenance and calibration

**Description of management practice**
Continuous calibration

**Your role in the implementation**
Knowledge sharing
Operational

**Explanation of how you encourage implementation**

**Climate change related benefit**
Emissions reductions (mitigation)
Increasing resilience to climate change (adaptation)
Reduced demand for fossil fuel (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) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?**
Direct engagement with policy makers
Trade associations

## C12.3a

**(C12.3a) On what issues have you been engaging directly with policy makers?**

| Focus of legislation | Corporate position | Details of engagement | Proposed legislative solution |
|---|---|---|---|
| Clean energy generation | Support with minor exceptions | Bunge engages with policy makers on issues related to biofuel production, marketing, sustainability and trade. The company supports market-based approaches to promoting economically and environmentally efficient first generation biofuels. | To encourage the use of biofuel and bio-electricity where it is available, considering a proper relation to food supply and local economic viability |

## C12.3b

**(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?**

Yes

## C12.3c

**(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.**

**Trade association**

Fediol

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

Support the use of oilseed raw materials for biofuel

**How have you influenced, or are you attempting to influence their position?**

Participation in the board

**Trade association**

Abiove

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

Support the use of oilseed raw materials for biofuel

**How have you influenced, or are you attempting to influence their position?**

Participation in the council

## C12.3f

**(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?**

Public affairs' activities at Bunge are overseen by the CSO & Governmental Affairs, who reports to the Bunge Limited CEO. The Global Government Affairs committee, which is comprised of public affairs' heads from each of Bunge's regional operating companies and global segments, coordinates policies, positions and activities on an ongoing basis.

## 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 other regulatory filings

**Status**
Complete

**Attach the document**
Bunge Annual Report 2020.pdf

**Page/Section reference**

**Content elements**
Governance
Strategy
Risks & opportunities

**Comment**

---

**Publication**
In mainstream reports

**Status**
Complete

**Attach the document**
2021_global_sustainability_report.pdf

**Page/Section reference**

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

**Comment**

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## 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**
Biodiversity reserves protect the soil locally, allow the maintenance of water shed supply and increase the yields by helping pollinators and other useful insects.

**Have any response to these impacts been implemented?**
Yes

**Description of the response(s)**
on farm best practices implemented by farmers in supply shed.

---

## C15. 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.**

### C15.1

**(C15.1) 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 | 41404000000 |

### SC0.2

**(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?**

Yes

### SC0.2a

**(SC0.2a) Please use the table below to share your ISIN.**

| | ISIN country code (2 letters) | ISIN numeric identifier and single check digit (10 numbers overall) |
|---|---|---|
| Row 1 | US | BMG1696210 |

### 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

**Allocation level**
Company wide

**Allocation level detail**
<Not Applicable>

**Emissions in metric tonnes of CO2e**
22.53

**Uncertainty (±%)**
5

**Major sources of emissions**
At Bunge, we have sustainability goals and measurable targets for reducing the use of natural resources and reducing energy consumption that directly affect the amount of

greenhouse gases emitted into the atmosphere, prioritizing the consumption of renewable energy sources in our industrial units where feasible. Source of emissions are related use of Natural Gas and Coal in global operations.

**Verified**
Yes

**Allocation method**
Allocation based on the market value of products purchased

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**
GHG sources are verified by 3rd party and are based on emissions factors per source of energy, per country were we operate. Evidences of use are invoices of purchased fuel, being it renewable or renewable.

---

**Requesting member**
Ajinomoto Co.Inc.

**Scope of emissions**
Scope 2

**Allocation level**
Company wide

**Allocation level detail**
<Not Applicable>

**Emissions in metric tonnes of CO2e**
23.74

**Uncertainty (±%)**
5

**Major sources of emissions**
At Bunge, we have sustainability goals and measurable targets for reducing the use of natural resources and reducing energy consumption that directly affect the amount of greenhouse gases emitted into the atmosphere, prioritizing the consumption of renewable energy sources in our industrial units where feasible. Source of emissions are related use of Natural Gas and Coal in global operations.

**Verified**
Yes

**Allocation method**
Allocation based on the market value of products purchased

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**
GHG sources are verified by 3rd party and are based on emissions factors per source of energy, per country were we operate. Evidences of use are invoices of purchased fuel, being it renewable or renewable.

---

**Requesting member**
McDonald's Corporation

**Scope of emissions**
Scope 1

**Allocation level**
Company wide

**Allocation level detail**
<Not Applicable>

**Emissions in metric tonnes of CO2e**
7782

**Uncertainty (±%)**
5

**Major sources of emissions**
At Bunge, we have sustainability goals and measurable targets for reducing the use of natural resources and reducing energy consumption that directly affect the amount of greenhouse gases emitted into the atmosphere, prioritizing the consumption of renewable energy sources in our industrial units where feasible. Source of emissions are related use of Natural Gas and Coal in global operations.

**Verified**
Yes

**Allocation method**
Allocation based on the market value of products purchased

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**
GHG sources are verified by 3rd party and are based on emissions factors per source of energy, per country were we operate. Evidences of use are invoices of purchased fuel, being it renewable or renewable.

---

**Requesting member**
McDonald's Corporation

**Scope of emissions**
Scope 2

**Allocation level**
Company wide

**Allocation level detail**

<Not Applicable>

**Emissions in metric tonnes of CO2e**
7799

**Uncertainty (±%)**
5

**Major sources of emissions**
At Bunge, we have sustainability goals and measurable targets for reducing the use of natural resources and reducing energy consumption that directly affect the amount of greenhouse gases emitted into the atmosphere, prioritizing the consumption of renewable energy sources in our industrial units where feasible. Source of emissions are related use of Electricity purchased from the grid, considering also the portion of co-generation, where applicable

**Verified**
Yes

**Allocation method**
Allocation based on the market value of products purchased

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**
GHG sources are verified by 3rd party and are based on emissions factors per country were we operate. Evidences of use are invoices of purchased electricity.

---

**Requesting member**
McDonald's Corporation

**Scope of emissions**
Scope 3

**Allocation level**
Company wide

**Allocation level detail**
<Not Applicable>

**Emissions in metric tonnes of CO2e**
163697

**Uncertainty (±%)**
5

**Major sources of emissions**
Production of agricultural commodities that were purchased from farmers, and the processing of products sold to the customer. A 3rd major source of emissions is logistics overall.

**Verified**
No

**Allocation method**
Allocation based on the volume of products purchased

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**
we use factors of emissions for the categories of scope 3 where actual values are not availablee. The main source is agricultural commodities and same rationale applies, with significant variances amongst emissions factors per crop depending on the sourcing country. The allocation is based on volume of products sold, rather than revenue, due to materiality of such analysis.

---

**Requesting member**
Unilever plc

**Scope of emissions**
Scope 1

**Allocation level**
Company wide

**Allocation level detail**
<Not Applicable>

**Emissions in metric tonnes of CO2e**
3637

**Uncertainty (±%)**
5

**Major sources of emissions**
At Bunge, we have sustainability goals and measurable targets for reducing the use of natural resources and reducing energy consumption that directly affect the amount of greenhouse gases emitted into the atmosphere, prioritizing the consumption of renewable energy sources in our industrial units where feasible. Source of emissions are related use of Natural Gas and Coal in global operations.

**Verified**
Yes

**Allocation method**
Allocation based on the market value of products purchased

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**
GHG sources are verified by 3rd party and are based on emissions factors per source of energy, per country were we operate. Evidences of use are invoices of purchased fuel, being it renewable or renewable.

---

**Requesting member**

Unilever plc

**Scope of emissions**
Scope 2

**Allocation level**
Company wide

**Allocation level detail**
<Not Applicable>

**Emissions in metric tonnes of CO2e**
3459

**Uncertainty (±%)**
5

**Major sources of emissions**
At Bunge, we have sustainability goals and measurable targets for reducing the use of natural resources and reducing energy consumption that directly affect the amount of greenhouse gases emitted into the atmosphere, prioritizing the consumption of renewable energy sources in our industrial units where feasible. Source of emissions are related use of Electricity purchased from the grid, considering also the portion of co-generation, where applicable

**Verified**
Yes

**Allocation method**
Allocation based on the market value of products purchased

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**
GHGe sources are verified by 3rd party and are based on emissions factors per country were we operate. Evidences of use are invoices of purchased electricity.

---

**Requesting member**
Unilever plc

**Scope of emissions**
Scope 3

**Allocation level**
Company wide

**Allocation level detail**
<Not Applicable>

**Emissions in metric tonnes of CO2e**
127384

**Uncertainty (±%)**
5

**Major sources of emissions**
Production of agricultural commodities that were purchased from farmers, and the processing of products sold to the customer. A 3rd major source of emissions is logistics overall.

**Verified**
No

**Allocation method**
Allocation based on the volume of products purchased

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**
We use factors of emissions for the categories of scope 3 where actual values are not available. The main source is agricultural commodities and same rationale applies, with significant variances amongst emissions factors per crop depending on the sourcing country. The allocation is based on volume of products sold, rather than revenue, due to materiality of such analysis.

---

**Requesting member**
Arcos Dorados

**Scope of emissions**
Scope 1

**Allocation level**
Company wide

**Allocation level detail**
<Not Applicable>

**Emissions in metric tonnes of CO2e**
243.19

**Uncertainty (±%)**
5

**Major sources of emissions**
At Bunge, we have sustainability goals and measurable targets for reducing the use of natural resources and reducing energy consumption that directly affect the amount of greenhouse gases emitted into the atmosphere, prioritizing the consumption of renewable energy sources in our industrial units where feasible. Source of emissions are related use of Natural Gas and Coal in global operations.

**Verified**
Yes

**Allocation method**
Allocation based on the market value of products purchased

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**
GHG sources are verified by 3rd party and are based on emissions factors per source of energy, per country were we operate. Evidences of use are invoices of purchased fuel, being it renewable or renewable.

---

**Requesting member**
Arcos Dorados

**Scope of emissions**
Scope 2

**Allocation level**
Company wide

**Allocation level detail**
<Not Applicable>

**Emissions in metric tonnes of CO2e**
256.26

**Uncertainty (±%)**
5

**Major sources of emissions**
At Bunge, we have sustainability goals and measurable targets for reducing the use of natural resources and reducing energy consumption that directly affect the amount of greenhouse gases emitted into the atmosphere, prioritizing the consumption of renewable energy sources in our industrial units where feasible. Source of emissions are related use of Natural Gas and Coal in global operations.

**Verified**
Yes

**Allocation method**
Allocation based on the market value of products purchased

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**
GHG sources are verified by 3rd party and are based on emissions factors per source of energy, per country were we operate. Evidences of use are invoices of purchased fuel, being it renewable or renewable.

---

**Requesting member**
Ajinomoto Co.Inc.

**Scope of emissions**
Scope 3

**Allocation level**
Company wide

**Allocation level detail**
<Not Applicable>

**Emissions in metric tonnes of CO2e**
29217

**Uncertainty (±%)**
5

**Major sources of emissions**
Production of agricultural commodities that were purchased from farmers, and the processing of products sold to the customer. A 3rd major source of emissions is logistics overall.

**Verified**
No

**Allocation method**
Allocation based on the market value of products purchased

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**
We use factors of emissions for the categories of scope 3 where actual values are not available. The main source is agricultural commodities and same rationale applies, with significant variances amongst emissions factors per crop depending on the sourcing country. The allocation is based on volume of products sold, rather than revenue, due to materiality of such analysis.

---

**Requesting member**
Arcos Dorados

**Scope of emissions**
Scope 3

**Allocation level**
Company wide

**Allocation level detail**
<Not Applicable>

**Emissions in metric tonnes of CO2e**
3041

**Uncertainty (±%)**

5

**Major sources of emissions**
Production of agricultural commodities that were purchased from farmers, and the processing of products sold to the customer. A 3rd major source of emissions is logistics overall.

**Verified**
No

**Allocation method**
Allocation based on the number of units purchased

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**
We use factors of emissions for the categories of scope 3 where actual values are not available. The main source is agricultural commodities and same rationale applies, with significant variances amongst emissions factors per crop depending on the sourcing country. The allocation is based on volume of products sold, rather than revenue, due to materiality of such analysis.

---

**Requesting member**
Kellogg Company

**Scope of emissions**
Scope 1

**Allocation level**
Company wide

**Allocation level detail**
<Not Applicable>

**Emissions in metric tonnes of CO2e**
8362

**Uncertainty (±%)**
5

**Major sources of emissions**
Production of agricultural commodities that were purchased from farmers, and the processing of products sold to the customer. A 3rd major source of emissions is logistics overall.

**Verified**
Yes

**Allocation method**
Allocation based on the market value of products purchased

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**
GHG sources are verified by 3rd party and are based on emissions factors per source of energy, per country were we operate. Evidences of use are invoices of purchased fuel, being it renewable or renewable.

---

**Requesting member**
Kellogg Company

**Scope of emissions**
Scope 2

**Allocation level**
Company wide

**Allocation level detail**
<Not Applicable>

**Emissions in metric tonnes of CO2e**
8381

**Uncertainty (±%)**
5

**Major sources of emissions**
Production of agricultural commodities that were purchased from farmers, and the processing of products sold to the customer. A 3rd major source of emissions is logistics overall.

**Verified**
Yes

**Allocation method**
Allocation based on the market value of products purchased

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**
GHGe sources are verified by 3rd party and are based on emissions factors per country were we operate. Evidences of use are invoices of purchased electricity.

---

**Requesting member**
Kellogg Company

**Scope of emissions**
Scope 3

**Allocation level**
Company wide

**Allocation level detail**
<Not Applicable>

**Emissions in metric tonnes of CO2e**
230193

**Uncertainty (±%)**
5

**Major sources of emissions**
Production of agricultural commodities that were purchased from farmers, and the processing of products sold to the customer. A 3rd major source of emissions is logistics overall.

**Verified**
No

**Allocation method**
Allocation based on the volume of products purchased

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**
We use factors of emissions for the categories of scope 3 where actual values are not available. The main source is agricultural commodities and same rationale applies, with significant variances amongst emissions factors per crop depending on the sourcing country. The allocation is based on volume of products sold, rather than revenue, due to materiality of such analysis.

---

**Requesting member**
Anheuser Busch InBev

**Scope of emissions**
Scope 1

**Allocation level**
Company wide

**Allocation level detail**
<Not Applicable>

**Emissions in metric tonnes of CO2e**
1137

**Uncertainty (±%)**
5

**Major sources of emissions**
Production of agricultural commodities that were purchased from farmers, and the processing of products sold to the customer. A 3rd major source of emissions is logistics overall.

**Verified**
Yes

**Allocation method**
Allocation based on the market value of products purchased

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**
GHG sources are verified by 3rd party and are based on emissions factors per source of energy, per country were we operate. Evidences of use are invoices of purchased fuel, being it renewable or renewable.

---

**Requesting member**
Anheuser Busch InBev

**Scope of emissions**
Scope 2

**Allocation level**
Company wide

**Allocation level detail**
<Not Applicable>

**Emissions in metric tonnes of CO2e**
1140

**Uncertainty (±%)**
5

**Major sources of emissions**
Production of agricultural commodities that were purchased from farmers, and the processing of products sold to the customer. A 3rd major source of emissions is logistics overall.

**Verified**
Yes

**Allocation method**
Please select

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**
GHGe sources are verified by 3rd party and are based on emissions factors per country were we operate. Evidences of use are invoices of purchased electricity.

---

**Requesting member**
Anheuser Busch InBev

**Scope of emissions**
Scope 3

**Allocation level**
Company wide

**Allocation level detail**
<Not Applicable>

**Emissions in metric tonnes of CO2e**
34315

**Uncertainty (±%)**
5

**Major sources of emissions**
Production of agricultural commodities that were purchased from farmers, and the processing of products sold to the customer. A 3rd major source of emissions is logistics overall.

**Verified**
No

**Allocation method**
Allocation based on the volume of products purchased

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**
We use factors of emissions for the categories of scope 3 where actual values are not available. The main source is agricultural commodities and same rationale applies, with significant variances amongst emissions factors per crop depending on the sourcing country. The allocation is based on volume of products sold, rather than revenue, due to materiality of such analysis.

## SC1.2

**(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).**

Information is available through are GRI Global Sustainability report, with full inventory of emissions. It is public in our website at https://www.bunge.com/sites/default/files/2021_global_sustainability_report.pdf

Complementary information is also derived from our SEC filings 10-k, available at https://investors.bunge.com/investors/financial-information/sec-filings

## 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 |
|---|---|
| Diversity of product lines makes accurately accounting for each product/product line cost ineffective | Full life cycle analysis. |

## 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

## 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?**
No

## 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 am submitting to | Public or Non-Public Submission | Are you ready to submit the additional Supply Chain questions? |
|---|---|---|---|
| I am submitting my response | Investors<br>Customers | Public | Yes, I will submit the Supply Chain questions now |

**Please confirm below**

I have read and accept the applicable Terms