Tyson Foods, Inc. - Climate Change 2019

C0. Introduction

C0.1

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

Tyson Foods, Inc. (NYSE: TSN) is one of the world's largest food companies and a recognized leader in protein. Founded in 1935 by John W. Tyson and grown under three generations of family leadership, the company has a broad portfolio of products and brands like Tyson®, Jimmy Dean®, Hillshire Farm®, Ball Park®, Wright®, Aidells®, IBP® and State Fair®. Tyson Foods innovates continually to make protein more sustainable, tailor food for everywhere it's available and raise the world's expectations for how much good food can do. Headquartered in Springdale, Arkansas, the company had 121,000 team members at September 29, 2018. Through its Core Values, Tyson Foods strives to operate with integrity, create value for its shareholders, customers, communities and team members and serve as a steward of the animals, land and environment entrusted to it.

Please note: the reporting period end date was changed from 9/29/18 to 10/1/18 to comply with CDP's ORS requirement of providing a start date that is 364-367 days before the end date. However, Tyson Foods' fiscal year is 10/01/17 to 9/29/18.

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
Row 1	October 1 2017	October 1 2018	No	<Not Applicable>

C0.3

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

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 consolidation approach to your Scope 1 and Scope 2 greenhouse gas 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	Both own land and elsewhere in the value chain [Agriculture/Forestry 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	Elsewhere in the value chain only [Agriculture/Forestry/processing/manufacturing/Distribution only]

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
Cattle products

% of revenue dependent on this agricultural commodity
20-40%

Produced or sourced
Sourced

Please explain
We participate in the open commodity market with our own set of regionally based cattle buyers. We negotiate our purchases with cattle feeders ranging from feedlots with thousands of head of cattle to small farming operations with just a few head of cattle. We do not own any cattle or feeding operations. Therefore, these animals are fed by independent farmers before being purchased by Tyson Foods for harvest.

Agricultural commodity
Soy

% of revenue dependent on this agricultural commodity
20-40%

Produced or sourced
Sourced

Please explain
As a vertically integrated poultry company, we operate feed mills to produce scientifically formulated feeds for our broiler chickens and turkeys. Corn and soybean meal are the primary raw materials used to produce feed. We procure corn and soybean meal on the commodity market.

Agricultural commodity
Other, please specify (Chicken products)

% of revenue dependent on this agricultural commodity
20-40%

Produced or sourced
Produced

Please explain
As a vertically integrated poultry company we produce our chicken products. There are seven stages in producing chicken for consumers including breeder flock, pullet farm, breeder house, hatchery, broiler farm, processing/further-processing, and distribution.

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
Board-level committee	Our approach to sustainability is multidimensional and we maintain an integrated strategy that allows us to drive improvements in all areas of sustainability. This strategy is supported by our President & CEO, with oversight from our Board of Directors (BOD). Sustainability is directly connected to our strategic intent - sustainably feeding the world with the fastest growing protein brands. As a result, in 2017 we established the role of Chief Sustainability Officer. This position reports to our President & CEO and regularly interacts with the company's BOD. This position shares regular sustainability updates with the Governance & Nominating Committee of our BOD as well as the full BOD. This position has helped to develop and lead to new enterprise wide sustainability commitments, including climate-related issues such as setting an approved Science Based Target for GHG reduction, investments in new business models, investments, and partnerships.

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	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding business plans	Our approach to sustainability is multidimensional, and we maintain an integrated strategy that allows us to drive improvements in all areas of sustainability. This strategy is supported by our President and CEO, with oversight from our Board of Directors. Our Executive Vice President of Alternative Proteins and Chief Sustainability Officer, who reports to our President and CEO, regularly interacts with the company's Board of Directors, and shares progress updates with the Governance and Nominating Committee of our Board of Directors.

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)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Sustainability Officer (CSO)	Both assessing and managing climate-related risks and opportunities	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).

Tyson recognizes the importance of monitoring climate-related issues at a high level within the organization, therefore our Executive Vice President of Alternative Proteins and Chief Sustainability Officer, who reports to our President and CEO, is responsible for leading and implementing our sustainability strategy. He regularly interacts with the company's Board of Directors and shares regular progress updates with the Governance and Nominating Committee of our Board of Directors. He is supported by a team of sustainability professionals who facilitate our goal-setting efforts, including actions to manage or mitigate risks as well as the pursuit of continual improvement opportunities related to animals, communities, the environment, food and the workplace.

Our Chief Sustainability Officer oversees the activities of the Chief Environmental Officer and SVP of Sustainability who provides corporate leadership, direction, and technical standards for the company's more than 450 environmental professionals and processes. More specifically, this position assesses, prioritizes, and manages all aspects of the company's environmental efforts across all segments of the company. This position also monitors the current-status of environmental compliance and activities for our operating locations in the U.S., China, and India, and institutes regular meetings with regulatory officials to share information, build relationships, and demonstrate Tyson's commitment to environmental excellence. Our internal Executive Environmental Council meets monthly to stay on top of the most critical items facing us environmentally across the enterprise.

C1.3

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

Yes

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).

Who is entitled to benefit from these incentives?
Management group

Types of incentives
Monetary reward

Activity incentivized
Emissions reduction target

Comment
Enterprise Leadership approval and support of our sustainability roadmap dictates how we will achieve our emission reduction targets.

Who is entitled to benefit from these incentives?
Environmental, health, and safety manager

Types of incentives
Monetary reward

Activity incentivized
Emissions reduction target

Comment
Enterprise Leadership approval of our roadmap dictates how we will achieve our emission reduction targets.

Who is entitled to benefit from these incentives?
Environment/Sustainability manager

Types of incentives
Monetary reward

Activity incentivized
Emissions reduction target

Comment
Enterprise Leadership approval of our roadmap dictates how we will achieve our emission reduction targets.

C2. Risks and opportunities

C2.1

(C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.

	From (years)	To (years)	Comment
Short-term	0	2	We collaborated with World Resources Institute (WRI) to create science-based targets for our Scope 1, 2 and 3 greenhouse gas emissions. In early 2018, we announced a reduction target of 30% by 2030 and submitted our target to the Science-based Target Initiative (SBTi) for review and approval. Our science-based target was officially approved by the SBTi on July 31, 2018.
Medium-term	2	5	We will implement our established roadmap for achieving a 30% reduction in GHG emissions by 2030. We will collaborate with various stakeholders, environmental groups, such as the Environmental Defense Fund and others, as well as academic experts to validate our approach and progress made. We will report our progress towards achieving our goal.
Long-term	5	10	We will implement our established roadmap for achieving a 30% reduction in GHG emissions by 2030. We will collaborate with various stakeholders, environmental groups, such as the Environmental Defense Fund and others, as well as academic experts to validate our approach and progress made. We will report our progress towards achieving our goal.

C2.2

(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.
A specific climate change risk identification, assessment, and management process

C2.2a

(C2.2a) Select the options that best describe your organization's frequency and time horizon for identifying and assessing climate-related risks.

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Annually	>6 years	Tyson is committed to bold reduction of our carbon footprint. We are working toward a “30 by 30” target to reduce our greenhouse gases (GHG) 30 percent by 2030, against a 2016 baseline year. This target is designed to meet the criteria of the Science Based Targets initiative (SBTi). The target was accepted by SBTi in 2018, making us the first U.S. protein company in the food and beverage sector to receive such an approval. Currently, we measure and report our GHG emissions from direct sources we control as well as indirect emissions from the energy we buy. Inventory is performed annually to identify risks towards meeting this goal.

C2.2b

(C2.2b) Provide further details on your organization's process(es) for identifying and assessing climate-related risks.

Climate related risks were identified and assessed during the company's sustainability materiality assessment but were determined not material. In FY2017, however, we collaborated with the World Resources Institute (WRI) to establish our new "30 by 30" target to reduce our greenhouse gases (GHG) 30 percent by 2030. This target is designed to meet the criteria of the Science Based Targets initiative (SBTi) and is in accordance with the Paris Climate Agreement. The target was accepted by SBTi in 2018, making us the first U.S. protein company in the food and beverage sector to receive such an approval. At this time Tyson recognizes a 'substantive financial impact' as one that will materiality affect our profitability. Per our 2018 10-K, increased government regulations to limit carbon dioxide and other greenhouse gas emissions as a result of concern over climate change may result in increased compliance costs, capital expenditures and other financial obligations for us. We use natural gas, diesel fuel and electricity in the manufacturing and distribution of our products. Legislation or regulation affecting these inputs could materially affect our profitability. In addition, climate change could affect our ability to procure needed commodities at costs and in quantities we currently experience and may require us to make additional unplanned capital expenditures.

C2.2c

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Current regulations are always included in our climate-related risk assessments. Compliance with existing regulations is a requirement for all of our business. Our legal, environmental, and government relations teams assess current regulations to determine their impacts on our operations. In our Annual Report on Form 10-K, we have identified that increased government regulations to limit carbon dioxide and other greenhouse gas emissions as a result of concern over climate change may result in increased compliance costs, capital expenditures and other financial obligations for us.
Emerging regulation	Relevant, always included	Emerging regulations are always included in our climate-related risk assessments. Our legal, environmental, and government relations teams assess emerging regulations to determine their impacts on our operations. As an example, in our Annual Report on Form 10-K, we noted our use natural gas, diesel fuel and electricity in the manufacturing and distribution of our products. Legislation or regulation affecting these inputs could materially affect our profitability.
Technology	Relevant, always included	Technology is always included in our climate-related risk assessments. We have identified risk in our direct operations from climate changed related to the transportation of our products. We operate one of the largest private truck fleets in the U.S. with 2,800 trucks and 7,300 trailers We continually seek new ways to reduce emissions, lower fuel consumption and decrease the GHG emissions of our fleet, while improving the miles per gallon. In FY2018, we upgraded our fleet with new and more fuel-efficient vehicles. We also added an incentive for drivers to use cruise control while on the roads, which improves fuel economy and also increases safety. Early in 2019, we began participating in a pilot of an opposed-piston (OP) engine-equipped tractor from shipments traveling between Arizona and California. The OP engine involved in the pilot is projected to reduce oxides of nitrogen (NOx) by up to 90 percent and CO2 emissions by up to 15 percent. The technology could be used to help meet the requirements of the EPA's recently announced Cleaner Trucks Initiative.
Legal	Relevant, always included	Legal activities are always included in our climate related risk assessments. At this time, we have not identified a legal action that would be a risk to our company. If this arises in the future, we will address it.
Market	Relevant, always included	Market is always included in our climate change assessments. We recognize customers and consumers have a growing interest and awareness with regards to the long-term sustainability of the environment and our natural resources as related to the products they purchase. Our leadership is strategically focused on innovation and shaping the future of food. We're investing in disruptive food ideas like alternative proteins, products that fight food waste and new uses of food safety and supply chain technologies. For example, consumers are driving demand for more transparency and traceability in the products they buy – food included. Because of this shift, we're exploring blockchain technology in our supply chain as we seek to develop capabilities that will enable us to provide the next level of transparency that consumers seek.
Reputation	Relevant, always included	Reputation is always included in our climate related risk assessments. Maintaining and building stakeholder trust with respect to our corporate name and brands, is critical to our success. We recognize potential sustainability risks, such as climate change, could impact our corporate reputation and believe bold commitments and partnerships are key to elevating positive impact. For example, we partnered with World Resources Institute to establish a bold reduction target of our carbon footprint. We are working toward a "30 by 30" target to reduce our greenhouse gases (GHG) 30 percent by 2030, against a 2016 baseline year. This target is designed to meet the criteria of the Science Based Targets initiative (SBTi). The target was accepted by SBTi in 2018, making us the first U.S. protein company in the food and beverage sector to receive such an approval.
Acute physical	Relevant, always included	Acute risk is always included in our climate related risk assessments. Natural disasters could cause damage to people, property or the environment, and directly affect Tyson, our consumers or the regions where we operate. Another physical risk for Tyson is water scarcity, which could affect the water used in our processes and the sources managed by the company. We maintain a collaboration with the World Resources Institute and will be setting outcome-based as well as context-based water conservation targets for our operations and our supply chain.
Chronic physical	Relevant, always included	Chronic risk is always included in our climate related risk assessments. For example, climate change could impact our ability to procure raw materials. We recognize natural disasters, fire, bioterrorism, pandemic or extreme weather, including droughts, floods, excessive cold or heat, hurricanes or other storms, could impair the health or growth of livestock or interfere with our operations due to power outages, fuel shortages, decrease in availability of water, damage to our production and processing facilities or disruption of transportation channels or unfavorably impact the demand for, or our consumers' ability to purchase our products, among other things. Any of these factors could have an adverse effect on our financial results.
Upstream	Relevant, always included	Upstream activities are always included in our climate related risk assessments. For example, when setting our greenhouse gas reduction target of 30% by 2030, we identified the majority of our scope 3 emissions are contained upstream. That's why we announced a commitment to support improved environmental practices on 2 million acres of corn by 2020. Impacting 2 million acres requires broad support. We sponsored a Nutrient Management Summit in 2018 that brought together more than 30 leaders of the corn supply chain, including professors from three major universities, representatives of the grain and animal agriculture commodity groups, seed and fertilizer dealers, the Environmental Protection Agency, the United States Department of Agriculture, Environmental Defense Fund (EDF) and the Nature Conservancy. Based on insights from the gathering, we launched two projects in early FY2019 in partnership with EDF. The first project involves two pilots expected to improve farmer's environmental and economic bottom line. This effort will also help us meet our 2020 land stewardship goal.
Downstream	Relevant, always included	Downstream inputs are always included in our climate-related risk assessments. We have the ability to produce and ship fresh, frozen and refrigerated products worldwide. We operate one of the largest private truck fleets in the U.S. with 2,800 trucks and 7,300 trailers We continually seek new ways to reduce emissions, lower fuel consumption and decrease the GHG emissions of our fleet, while improving the miles per gallon. As a partner in the EPA's SmartWay® program, we require all products be transported by SmartWay participating carriers. We implement several strategies to reduce our truck miles, including route optimization; shipping product directly to customer docks; collaborating internally and externally to eliminate empty truck miles; using rail for product shipment instead of trucks when possible; and investing in ultra-light equipment that allows us to add product weight to our shipments and reduce the number of trucks on the road. We continue to evaluate new sustainable energy sources, such as natural gas, electrification and hydrogen products.

C2.2d

(C2.2d) Describe your process(es) for managing climate-related risks and opportunities.

In 2018, Tyson was welcomed into the U.S. Department of Energy (DOE) Better Buildings, Better Plants Program, joining almost 200 other U.S. companies. This national initiative helps manufacturers become more efficient in managing climate-related risks and opportunities by supporting them in setting ambitious energy savings goals, developing energy management plans and tracking and reporting their annual progress. Our GHG reduction target compels us to evaluate possible emissions reduction opportunities at every stage. Through this process we identified an opportunity to assess physical opportunities within our grain for livestock. We are conducting two pilots aimed at the continual improvement of grain production practices. Furthermore, we are reviewing our transitional opportunities as we use electricity, fossil fuels, and biogas for powering processing equipment, cooking, chilling, and freezing product. Currently we strive to use renewable fuels like biogas from our wastewater treatment operations and are a partner in the EPA SmartWay program, and we are always looking for ways to reduce miles driven.

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
Transition risk

Primary climate-related risk driver
Policy and legal: Increased pricing of GHG emissions

Type of financial impact
Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

Company- specific description
Increased government regulations to limit carbon dioxide and other greenhouse gas emissions as a result of concern over climate change may result in increased compliance costs, capital expenditures and other financial obligations for us. We use natural gas, diesel fuel and electricity in the manufacturing and distribution of our products. Legislation or regulation affecting these inputs could materially affect our profitability. In addition, climate change could affect our ability to procure needed commodities at costs and in quantities we currently experience and may require us to make additional unplanned capital expenditures. Some U.S. states, such as Washington and California continue to consider various options to control greenhouse gas emissions. Additionally, increased state regulations, such as those being considered in Illinois, to limit carbon dioxide and other greenhouse gas emissions as a result of concern over climate change could result in increased compliance costs, capital expenditures, and other financial obligations for us.

Time horizon
Short-term

Likelihood
Likely

Magnitude of impact
Medium

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

Potential financial impact figure (currency)
0

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

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

Explanation of financial impact figure
While a financial impact has not been calculated at this time, specific financial implications will depend on the nature and extent of any forthcoming regulatory requirements. Moreover, additional costs may be incurred to acquire and maintain emissions control technology.

Management method
Our Legal, Environmental, and Government Affairs teams monitor this issue on a regular basis and we have engaged in ambitious target setting, in cooperation with the World Resources Institute, to reduce our greenhouse gas emissions 30 percent by 2030 across our value chain. We are taking steps now; a case example being the land stewardship program we are piloting with the Environmental Defense Fund that looks to partner with farmers to scale practices to reduce greenhouse gas emissions. Our initial pilot is focused on 500,000 acres of corn and our plan is to expand to two million acres by 2020. While we acknowledge the seriousness of this risk, a specific cost of management has not been calculated at this time. We expect these costs to be minimal and likely will be integrated within our day to day business activities associated with maintaining compliance with regulatory laws and requirements.

Cost of management
0

Comment
While a specific cost of management has not been calculated at this time, we expect these costs to be minimal and likely to be integrated within our day to day business activities associated with maintaining compliance with regulatory laws and requirements.

Identifier
Risk 2

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

Risk type
Physical risk

Primary climate-related risk driver
Chronic: Changes in precipitation patterns and extreme variability in weather patterns

Type of financial impact
Reduced revenue from decreased production capacity (e.g., delayed planning approvals, supply chain interruptions)

Company- specific description
Our ability to make, move and sell products is critical to our success. Natural disasters, fire, bioterrorism, pandemic or extreme weather, including droughts, floods, excessive cold or heat, hurricanes or other storms, could impair the health or growth of livestock or interfere with our operations due to power outages, fuel shortages, decrease in availability of water, damage to our production and processing facilities or disruption of transportation channels or unfavorably impact the demand for, or our consumers' ability to purchase our products, among other things. Any of these factors could have an adverse effect on our financial results.

Time horizon
Short-term

Likelihood
More likely than not

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)
0

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

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

Explanation of financial impact figure
While a financial impact has not been calculated at this time, specific financials implications will be variable and dependent on the nature of the change in precipitation extremes.

Management method
We maintain protocols, including special situations management and emergency preparedness and response procedures that allow us to address and help mitigate negative impacts. In FY16 we launched an initiative to better understand sustainability related risks and opportunities within our business with the intent of establishing strategies and programs to strengthen our social and environmental performance, including performance related to climate change. As part of this initiative as well as our deeper commitment to sustainable food production, we announced in May 2017 an action to collaborate with the World Resources Institute to become an industry leader by setting science- based greenhouse gas (GHG) targets for our operations and our supply chain. In early 2018, we announced a target to reduce greenhouse gases (GHG) 30 percent by 2030. In addition, we are actively promoting sustainable farming practices around the world. An example being Tyson and our subsidiary Cobb-Vantress began a partnership with OneEgg in 2017 where we to promote sustainable farming and business practices. Our grants have helped launch projects in six countries and now help more than 10,000 kids receive an egg a day. In 2018, we expanded the program beyond Haiti, Rwanda and Uganda to include Ethiopia, Honduras and Nepal. While a specific cost of management has not been calculated at this time, we believe any additional costs would be low or already integrated within our day to day business activities.

Cost of management
0

Comment
While a specific cost of management has not been calculated at this time, we believe any additional costs would be low or already integrated within our day to day business activities.

Identifier
Risk 3

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

Risk type
Transition risk

Primary climate-related risk driver
Reputation: Increased stakeholder concern or negative stakeholder feedback

Type of financial impact
Reduced revenue from decreased demand for goods/services

Company- specific description
There is growing public concern, changes in consumer behavior, and increased stakeholder expectations for companies to do more to effectively manage and mitigate their environmental footprint. Increased focus on carbon intensive processes could present some risk to the image and reputation of the company.

Time horizon
Short-term

Likelihood

More likely than not

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)
0

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

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

Explanation of financial impact figure
While a financial impact has not been calculated at this time, we believe potential impacts would be variable to the extent of the changes in the perception of the company.

Management method
In May 2017, we announced the action of collaborating with the World Resources Institute to become an industry leader by setting science- based greenhouse gas (GHG) targets for our operations and our supply chain. In early 2018 we announced a target to reduce greenhouse gases (GHG) 30 percent by 2030. As an example of how we are actively promoting engagement with our stakeholders on climate-related issues, as well as others, we added a summary of stakeholder dialogue and outcomes to our latest 2018 Sustainability Report. While a specific cost of management has not been calculated at this time, we believe any additional costs would be low or already integrated within our day to day business activities related to voluntary reduction and efficiency improvement efforts.

Cost of management
0

Comment
While a specific cost of management has not been calculated at this time, we believe any additional costs would be low or already integrated within our day to day business activities related to voluntary reduction and efficiency improvement efforts.

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
Resource efficiency

Primary climate-related opportunity driver
Use of more efficient production and distribution processes

Type of financial impact
Reduced operating costs (e.g., through efficiency gains and cost reductions)

Company-specific description
We are exploring design and efficiency solutions that include new technologies across our entire network focusing on natural gas and electricity usage.

Time horizon
Short-term

Likelihood
Likely

Magnitude of impact
Medium

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

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
1000000

Potential financial impact figure – maximum (currency)
5000000

Explanation of financial impact figure
We consider this information to be business confidential. However, we believe more efficient production and distribution processes could generate positive financial

outcomes.

Strategy to realize opportunity
Our Environmental, Sustainable Food Production, and Engineering teams monitor for these opportunities on a regular basis. An example being, at six of our production locations, we have covered wastewater treatment lagoons allowing us to capture the biogas generated from the lagoons. Biogas is generated by bacteria-consuming nutrients in the wastewater, which then produce methane and carbon dioxide gases. We clean up the biogas by removing some of the sulfur and water, and then use the biogas in plant boilers at four of the six plants, allowing us to use less natural gas. This practice takes advantage of a renewable fuel source, helps reduce GHG emissions and reduces the amount of natural gas we need to purchase. In FY2018, we burned approximately 585 million cubic feet of biogas in our boilers. The cost to realize the opportunity was calculated by the assumption that we can achieve a 2% absolute reduction in CO2e for next fiscal year with behavior changes and process changes with minimal investment.

Cost to realize opportunity
100000

Comment
We believe we can achieve a 2% absolute reduction in CO2e for next fiscal year with behavior and process changes with minimal investment.

Identifier
Opp2

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

Type of financial impact
Reduced operational costs (e.g., through use of lowest cost abatement)

Company-specific description
We are considering renewable energy solutions, including fixed asset purchases along with Purchase Power Agreements (PPAs). This could potentially reduce our demand from non-renewable sources.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Medium

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

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
5000000

Potential financial impact figure – maximum (currency)
10000000

Explanation of financial impact figure
We consider this information to be business confidential. However, we believe the ability to use energy from renewable sources could generate positive financial outcomes in the range of $5,000,000 to $10,000,000.

Strategy to realize opportunity
Our Environmental, Government Affairs, Commodities Procurement and Sustainable Food Production teams monitor for these opportunities on a regular basis through both internal and external collaborations with industry, regulatory, and academic partners. An example being, in 2018 Tyson was welcomed into the U.S. Department of Energy (DOE) Better Buildings, Better Plants Program, joining almost 200 other U.S. companies. This national initiative helps manufacturers become more efficient by supporting them in setting ambitious energy savings goals, developing energy management plans and tracking and reporting their annual progress. The cost to realize the opportunity was calculated by the assumption that creative financing opportunities abound in relation to power purchase agreements (PPAs) and Energy-as-a-service solutions, including Microgrids. With minimal investment, we can achieve sourcing of renewables to reduce our CO2e footprint.

Cost to realize opportunity
100000

Comment
Creative financing opportunities abound in relation to PPAs and Energy-As-A-Service solutions, including Microgrids. With a minimal investment of $100,000 or less, we can achieve sourcing of renewables to reduce our CO2e footprint.

Identifier
Opp3

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Resilience

Primary climate-related opportunity driver
Participation in renewable energy programs and adoption of energy-efficiency measures

Type of financial impact

Increased reliability of supply chain and ability to operate under various conditions

Company-specific description
We are considering renewable energy solutions, including fixed asset purchases along with Purchase Power Agreements (PPAs). This could potentially reduce our demand from non-renewable sources.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Low

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

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
5000000

Potential financial impact figure – maximum (currency)
10000000

Explanation of financial impact figure
We consider this information to be business confidential. However, we believe there is potential for a decrease in total operations costs as a result of increased energy efficiency measures and renewable energy solutions.

Strategy to realize opportunity
The ability to enable energy solutions to maximize our efficiency of our production facilities, while minimizing our energy draw is an important opportunity for us to realize. A case example being our feed mill in Aurora, Missouri, recently became our first commercial feed mill to use solar energy. The panels are projected to generate nearly 21 percent of the annual energy needed. This cost was internally estimated using subject matter expertise and industry knowledge.

Cost to realize opportunity
5000000

Comment
Energy solutions will require hardware and software in order to make a meaningful impact that could cost approximately $5,000,000.

C2.5

(C2.5) Describe where and how the identified risks and opportunities have impacted your business.

	Impact	Description
Products and services	Not impacted	While it has not yet impacted our products, we recognize there is growing public concern and increasing stakeholder expectations for companies to mitigate their environmental footprint. As such, we collaborated with World Resources Institute in FY2017 to create science- based targets for our Scope 1, 2 and 3 greenhouse gas emissions. In early 2018, we announced a reduction target of 30% by 2030 and submitted our target to the Science-based Target Initiative (SBTi) for review and approval. Our science-based target was officially approved by the SBTi on July 31, 2018. In addition we are continuously innovating within our operational footprint to reduce resources used and overall impact. Although we have not been impacted, we continue to create new and more efficient ways to eliminate food product waste. An example is our ¡Yappah! Chicken Crisps, created from our own rescued vegetable purees and grains like malted barley from beer brewing. This revolutionary protein snack directly tackles food waste.
Supply chain and/or value chain	Impacted for some suppliers, facilities, or product lines	Our ability to make, move and sell products is critical to our success. Natural disasters, fire, bioterrorism, pandemic or extreme weather, including droughts, floods, excessive cold or heat, hurricanes or other or interfere with our operations due to power outages, fuel shortages, decrease in availability of water, damage to our production and processing facilities or disruption of transportation channels, among other things. As such, we collaborated with World Resources Institute in FY2017 to create science-based targets for our Scope 1, 2 and 3 greenhouse gas emissions. In early 2018, we announced a reduction target of 30% by 2030 and submitted our target to the Science-based Target Initiative (SBTi) for review and approval. Our science-based target was officially approved by the SBTi on July 31, 2018. In addition we partner with our suppliers to provide education and resources to our suppliers to further sustainable land management practices and commitments.
Adaptation and mitigation activities	Not yet impacted	We use energy in our everyday operations for powering processing equipment; cooking, chilling and freezing product; transporting product to distribution centers and customers; and more. The main types of energy we use in our operations include electricity, fossil fuels and biogas. We recognize renewable energy solutions, inclusive of fixed asset purchases along with power purchase agreements (PPAs), can reduce our environmental impact. We recently invested in a renewable energy solution that reduces our demand from non-renewable sources. Our feed mill in Aurora, Missouri, recently became our first commercial feed mill to use solar energy. The panels are projected to generate nearly 21 percent of the annual energy needed. To mitigate the impact of wastewater treatment lagoon off-gassing, we have covered wastewater treatment lagoons at six of our production locations, to allow us to capture the biogas generated from the lagoons. Biogas is generated by bacteria-consuming nutrients in the wastewater, which then produce methane and carbon dioxide gases. We clean up the biogas by removing some of the sulfur and water, and then use the biogas in plant boilers at four of the six plants, allowing us to use less natural gas. This practice takes advantage of a renewable fuel source helps reduce GHG emissions and reduces the amount of natural gas we need to purchase. In FY2018, we burned approximately 585 million cubic feet of biogas in our boilers.
Investment in R&D	Not yet impacted	Tyson regularly explores design and efficiency solutions inclusive of new technologies across its entire network focusing on natural gas and electricity usage. While the exact financial impacts are unknown, the ability to use energy from renewable sources could generate positive financial outcomes. However, it is likely that the cost of management could result in additional headcount and administrative costs.
Operations	Not yet impacted	The adoption of energy efficiency measures and participation in renewable energy programs is routinely evaluated by Tyson with the goal of lowering overall operating costs and GHG Emissions. Some states continue to consider various options to control greenhouse gas emissions. Increased state regulations to limit carbon dioxide and other greenhouse gas emissions as a result of concern over climate change may result in increased compliance costs, capital expenditures, and other financial obligations for us. Specific financial implications will depend on the nature and extent of any forthcoming regulatory requirements. Additional costs may be incurred to acquire and maintain emissions control technology.
Other, please specify	Please select	Not applicable.

C2.6

(C2.6) Describe where and how the identified risks and opportunities have been factored into your financial planning process.

	Relevance	Description
Revenues	Not yet impacted	We realize changes in precipitation patterns and extreme variability in weather patterns could negatively impact our ability to make, move, and sell products which would ultimately affect our revenues. Natural disasters, fire, bioterrorism, pandemic or extreme weather, including droughts, floods, excessive cold or heat, hurricanes or other climate change issues could interfere with our operations due to power outages, fuel shortages, decrease in availability of water, damage to our production and processing facilities or disruption of transportation channels, among other things in turn impacting our revenues. We have also identified that increased stakeholder concern or negative stakeholder feedback around our climate change policies could negatively impact our sales and revenues. We recognize that there is growing public concern and increasing stakeholder expectations for companies to do more to effectively manage and mitigate their environmental footprint. As such, we collaborated with World Resources Institute in FY2017 to create science-based targets for our Scope 1, 2 and 3 greenhouse gas emissions. In early 2018, we announced a reduction target of 30% by 2030 and submitted our target to the Science-based Target Initiative (SBTi) for review and approval. Our science-based target was officially approved by the SBTi on July 31, 2018.
Operating costs	Not yet impacted	In our 2018 Annual Report on Form 10-K, we have identified that increased costs to manage GHG emission or mandates on and regulation of existing products and services could negatively impact our operating costs. Some states continue to consider various options to control greenhouse gas emissions. Increased state regulations to limit carbon dioxide and other greenhouse gas emissions as a result of concern over climate change may result in increased financial obligations for us. We have also identified that the use of more efficient production and distribution processes, new technologies, and participation in renewable energy programs and the adoption of energy-efficiency measures could reduce our operating costs. Tyson is exploring design and efficiency solutions inclusive of new technologies across its entire network focusing on natural gas and electricity usage. We are also considering Renewable Energy solutions, inclusive of fixed asset purchases along with PPAs and implementing energy efficiency measures to lower overall operating costs and GHG.
Capital expenditures / capital allocation	We have not identified any risks or opportunities	Not applicable.
Acquisitions and divestments	We have not identified any risks or opportunities	Not applicable.
Access to capital	We have not identified any risks or opportunities	Not applicable.
Assets	We have not identified any risks or opportunities	Not applicable.
Liabilities	We have not identified any risks or opportunities	Not applicable.
Other	Please select	Not applicable.

C3. Business Strategy

C3.1

(C3.1) Are climate-related issues integrated into your business strategy?

Yes

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy?

Yes, qualitative and quantitative

C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b

(C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b) Indicate whether your organization has developed a low-carbon transition plan to support the long-term business strategy.

Yes

C3.1c

(C3.1c) Explain how climate-related issues are integrated into your business objectives and strategy.

We recognize the importance of climate change and have deployed initiatives to reduce emissions throughout our company. FY17 was a pivotal year for Tyson Foods as Sustainability became integral and defined as part of our publicly disclosed strategy. In FY18 we announced a science-based target for reducing greenhouse gas emissions by 30%. We also implemented the largest-ever land stewardship commitment by a U.S. protein company, which supports improved environmental practices on two million acres of cropland by 2020. This commitment is expected to lower the GHG emissions generated by our supply chain. Currently, there is not an SBTi approved accounting methodology for our sector. The Ecofys model has recently been taken off line for public use. Tyson is hopeful a methodology will be developed, and Tyson stands ready as a first mover in this space to collaborate with stakeholders to develop a methodology for agriculture. Additionally, Tyson Ventures (TV) makes minority stake investments in early stage companies. With growing demand for proteins of all kind, TV has made investments in alternative protein startups Beyond Meat, Memphis Meats and Future Meat Technologies.

C3.1d

(C3.1d) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios	Details
2DS	Tyson's climate scenario analysis targets the four primary components of the value chain: grain for livestock, operations, wastewater treatment, and transportation. Current innovations to complement our climate strategy include capturing produced biogas to power facilities, leveraging solar power to fuel operations, reinventing our transportation program, eliminating food waste, and increasing land stewardship through resource reduction. This year Tyson committed to supporting improved environmental practices on 2 million acres of row crop corn by the end of 2020. This is the largest-ever land stewardship commitment by a U.S. protein company and is expected to lower the GHG emissions generated by our supply chain. It represents enough corn to feed all of Tyson Foods' annual broiler chicken production in the U.S., as well as some of the pigs and cattle the company buys from independent farmers and ranchers. To achieve this, we sponsored a Nutrient Management Summit that brought together 30 leaders of the corn supply chain, resulting in two pilot projects launched in 2019 in partnership with the Environmental Defense Fund (EDF). The pilots will leverage the power of cloud-based agricultural technologies that collect and analyze information about agricultural production practices while protecting data privacy. Recently we partnered with the World Resource Institute (WRI) to create target to lessen the impact to climate throughout our value chain. With the assistance of WRI, science-based targets for Tyson's Scope 1 and Scope 2 inventories were developed using the absolute emissions contraction (AEC) method. For the Science-based Targets initiative (SBTi), a methodology, called the Sectoral Decarbonization Approach (SDA) was developed by CDP, WRI, and WWF with technical support from Ecofys. The SDA builds on existing approaches that allocate a carbon budget to companies based on their relative contribution to the economy and uses a least-cost modelled 2° C scenario developed by the International Energy Agency (IEA 2DS). This model provides a cost-competitive mitigation pathway to stay below 2° C while accounting for variations in activity growth, mitigation potentials, and technological options for each sector. Tyson recognizes that due to the complexity of our operations, a sector-specific approach was necessary to fully realize our operational impact. GHG emissions of Agriculture, Forestry, and Other Land-Use (AFOLU) are not modelled by IEA and were not included in the originally approved SDA methodology. However, funded by the KR Foundation, the University of Aberdeen, PBL Netherlands Environmental Assessment Agency, and Ecofys developed an additional methodology looking at key commodities of the AFOLU sector and developing emissions (CO2 and non-CO2) intensity pathways towards 2050 for these commodities. (this methodology is currently under review by the SBTi). Tyson utilizes the online tool developed by Ecofys, the University of Aberdeen, and PBL Netherlands Environmental Assessment Agency uses production data to provide estimate total cradle-to-farm gate emissions. The Ecofys Model online tool allows the user to select the type of commodity and the region where the commodity is produced. For beef, pork, and chicken it uses production of fresh meat to calculate emissions. Tyson used this model and their actual 2016 production data and anticipated 2030 production data to assess emission intensity reductions for Scope 3 emissions from poultry, pork and beef. The EcoFys agriculture SBT tool results indicate a 30% intensity reduction for poultry, pork and beef by 2030 is a target in line with science-based target methodology.

C-AC3.1e/C-CE3.1e/C-CH3.1e/C-CO3.1e/C-EU3.1e/C-FB3.1e/C-MM3.1e/C-OG3.1e/C-PF3.1e/C-ST3.1e/C-TO3.1e/C-TS3.1e

(C-AC3.1e/C-CE3.1e/C-CH3.1e/C-CO3.1e/C-EU3.1e/C-FB3.1e/C-MM3.1e/C-OG3.1e/C-PF3.1e/C-ST3.1e/C-TO3.1e/C-TS3.1e) Disclose details of your organization's low-carbon transition plan.

In FY2017, we collaborated with the World Resources Institute (WRI) to establish our new "30 by 30" target to reduce our greenhouse gases (GHG) 30 percent by 2030. This target is designed to meet the criteria of the Science-based Targets initiative (SBTi) and is in accordance with the Paris Climate Agreement. In FY2018 our science-based target was officially approved by the SBTi on July 31, 2018, making us the first U.S. protein company in the food and beverage sector to receive such an approval. In addition, this year we were welcomed into the U.S. Department of Energy (DOE) Better Buildings, Better Plants Program, joining almost 200 other U.S. companies. This national initiative helps manufacturers become more efficient by supporting them in setting ambitious energy savings goals, developing energy management plans and tracking and reporting their annual progress.

Tyson continuously evaluates opportunities to optimize our operations. Most recently we began capturing biogas from our processes to fuel facility boilers. In FY2018 we captured and burned approximately 585 million cubic feet of biogas, reducing our natural gas usage by the equivalent of 4,700 homes annually. Another recent optimization was within our transportation fleet- upgrading to new, more efficient vehicles. We are currently investing in technology aimed at addressing the EPA Clean Trucks Initiative. An additional optimization was within producing our own renewable energy. Our feed mill in Aurora, Missouri, recently became our first commercial feed mill to use solar energy. The panels are projected to generate nearly 21 percent of the annual energy needed.

C4. Targets and performance

C4.1

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

Both absolute and intensity targets

C4.1a

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

Target reference number
Abs 1

Scope
Scope 1 +2 (market-based)

% emissions in Scope
100

Targeted % reduction from base year
30

Base year
2016

Start year
2017

Base year emissions covered by target (metric tons CO2e)
5421370

Target year
2030

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

% of target achieved
0

Target status
Underway

Please explain
Target set according to the SBTi absolute emissions contraction method. Target exceeds CDP recommended 2.1% per year.

C4.1b

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

Target reference number
Int 1

Scope
Scope 3: Purchased goods & services

% emissions in Scope
80

Targeted % reduction from base year
30

Metric
Other, please specify (Metric ton CO2e per ton of meat)

Base year
2016

Start year
2017

Normalized base year emissions covered by target (metric tons CO2e)
7.77

Target year
2030

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

% of target achieved
0

Target status
Underway

Please explain
Tyson commits to reduce Scope 3 agriculture GHG emissions from production of poultry, pork and beef by 30% per ton of finished meat by 2030 from a 2016 base-year. Target set using the Ecofys SBT tool for Agricultural Commodities (uses the SDA method). 2016 average emissions intensity in the US per the EcoFys is 18.25 metric tons per ton of fresh meat for beef, 5.35 for pork and 2.34 for poultry for a weighted average of 7.77 metric tons CO2e per ton of fresh meat. Tyson's goal is a weighted average of 5.44 metric tons CO2e per ton of fresh meat. Emissions from the Ecofys model do not include emissions from land use change. Tyson will refine Scope 3 estimates as supplier data becomes available.

% change anticipated in absolute Scope 1+2 emissions
0

% change anticipated in absolute Scope 3 emissions
0

C4.2

(C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.

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	15	
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	2	27049
Not to be implemented	0	

C4.3b

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

Initiative type
Fugitive emissions reductions

Description of initiative
Oil/natural gas methane leak capture/prevention

Estimated annual CO2e savings (metric tonnes CO2e)
26904

Scope
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
1480000

Investment required (unit currency – as specified in C0.4)
87500000

Payback period
>25 years

Estimated lifetime of the initiative
Ongoing

Comment
At six of our production locations, we have covered wastewater treatment lagoons that allow us to capture the biogas generated from the lagoons. Biogas is generated by bacteria-consuming nutrients in the wastewater, which then produce methane and carbon dioxide gases. We clean up the biogas by removing some of the sulfur and water then use the biogas in plant boilers at four of the six plants, allowing us to use less natural gas. This practice takes advantage of a renewable fuel source, helps reduce greenhouse gas emissions and reduces the amount of natural gas we need to purchase. In FY2018, we burned approximately 862 million cubic feet of biogas in our boilers. This is equivalent to the amount of natural gas used by more than 7,000 homes annually.

Initiative type
Low-carbon energy installation

Description of initiative
Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)
145

Scope
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
83333

Investment required (unit currency – as specified in C0.4)
950000

Payback period
>25 years

Estimated lifetime of the initiative
Ongoing

Comment
Our feed mill in Aurora, Missouri, recently became our first commercial feed mill to use solar energy. The 2160 panels generate 800,000 kWh annually which supplies are projected to 21 percent of the feed mills annual energy needs. Additionally, the panels help us avoid 600 metric tons of CO2 emissions annually and are expected to generate $2.5 million in savings over the next 30 years.

C4.3c

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

Method	Comment
Dedicated budget for energy efficiency	During FY18, Tyson implemented a specific budget for Sustainability-related projects for FY18, which includes GHG reduction initiatives consisting of the following activities: Scope 1 & 2 1) Supply – eGrid improvements 2) Supply – Alternative Energy Solutions 3) Design – Wastewater Methane Capture 4) Design & Efficiency – Electricity 5) Design & Efficiency – Natural Gas / Propane Scope 3 1) Implement land stewardship practices

C-AC4.4/C-FB4.4/C-PF4.4

(C-AC4.4/C-FB4.4/C-PF4.4) Do you implement management practices on your own land with a climate change mitigation and/or adaption benefit?
No

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?
No

C5. Emissions methodology

C5.1

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

Scope 1

Base year start
October 1 2015

Base year end
September 30 2016

Base year emissions (metric tons CO2e)
2902845

Comment
Base year of emissions is updated to match Tyson's SBTi approved by WRI

Scope 2 (location-based)

Base year start
October 1 2015

Base year end
September 30 2016

Base year emissions (metric tons CO2e)
2518525

Comment
Base year of emissions is updated to match Tyson's SBTi approved by WRI

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
US EPA Climate Leaders: Direct HFC and PFC Emissions from Use of Refrigeration and Air Conditioning Equipment
US EPA Climate Leaders: Direct Emissions from Stationary Combustion
US EPA Climate Leaders: Direct Emissions from Mobile Combustion Sources
US EPA Mandatory Greenhouse Gas Reporting Rule

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)
3496310

Start date
October 1 2017

End date
October 1 2018

Comment
Number confirmed with totals of individual facilities.

C6.2

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

Row 1

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

Scope 2, market-based
We have operations where we are able to access electricity supplier emission factors or residual emissions factors, but are unable to report a Scope 2, market-based figure

Comment
Electricity is purchased from local utility based on contractual agreement and/or location based relative to Tyson facilities.

C6.3

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

Reporting year

Scope 2, location-based
2727269

Scope 2, market-based (if applicable)
<Not Applicable>

Start date
October 1 2017

End date
October 1 2018

Comment
Total confirmed with individual facilities.

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?
No

C6.5

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

Purchased goods and services

Evaluation status
Relevant, not yet calculated

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>

Explanation
In FY16, we launched an initiative to better understand sustainability related risks and opportunities within our business with the intent of establishing strategies and programs to strengthen our social and environmental performance, including performance related to climate change. As part of this initiative as well as our deeper commitment to sustainable food production, we announced in May 2017 a collaboration with the World Resources Institute (WRI) to become an industry leader by setting science- based greenhouse gas (GHG) targets for our operations and our supply chain (i.e., Scope 1, 2, and 3). In early 2018, we announced a target to reduce greenhouse gases (GHG) 30 percent by 2030. Our science-based target was officially approved by the SBTi on July 31, 2018. As part of this initiative, Tyson used Ecofys and WRI's Goods and Services screening model to qualitatively determine Tyson's relevant scope 3 categories. Tyson is currently comparing Life Cycle Analyses in scientific literature to the outputs from the Ecofys model.

Capital goods

Evaluation status
Relevant, not yet calculated

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>

Explanation
In FY16, we launched an initiative to better understand sustainability related risks and opportunities within our business with the intent of establishing strategies and programs to strengthen our social and environmental performance, including performance related to climate change. As part of this initiative as well as our deeper commitment to sustainable food production, we announced in May 2017 a collaboration with the World Resources Institute (WRI) to become an industry leader by setting science- based greenhouse gas (GHG) targets for our operations and our supply chain (i.e., Scope 1, 2, and 3). In early 2018, we announced a target to reduce greenhouse gases (GHG) 30 percent by 2030. As part of this initiative, Tyson used Ecofys and WRI's Goods and Services screening model to qualitatively determine Tyson's relevant scope 3 categories. Tyson is currently comparing Life Cycle Analyses in scientific literature to the outputs from the Ecofys model.

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

Evaluation status
Relevant, not yet calculated

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>

Explanation
In FY16, we launched an initiative to better understand sustainability related risks and opportunities within our business with the intent of establishing strategies and programs to strengthen our social and environmental performance, including performance related to climate change. As part of this initiative as well as our deeper commitment to sustainable food production, we announced in May 2017 a collaboration with the World Resources Institute (WRI) to become an industry leader by setting science- based greenhouse gas (GHG) targets for our operations and our supply chain (i.e., Scope 1, 2, and 3). In early 2018, we announced a target to reduce greenhouse gases (GHG) 30 percent by 2030. As part of this initiative, Tyson used Ecofys and WRI's Goods and Services screening model to qualitatively determine Tyson's relevant scope 3 categories. Tyson is currently comparing Life Cycle Analyses in scientific literature to the outputs from the Ecofys model.

Upstream transportation and distribution

Evaluation status
Relevant, not yet calculated

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>

Explanation
In FY16, we launched an initiative to better understand sustainability related risks and opportunities within our business with the intent of establishing strategies and programs to strengthen our social and environmental performance, including performance related to climate change. As part of this initiative as well as our deeper commitment to sustainable food production, we announced in May 2017 a collaboration with the World Resources Institute (WRI) to become an industry leader by setting science- based greenhouse gas (GHG) targets for our operations and our supply chain (i.e., Scope 1, 2, and 3). In early 2018, we announced a target to reduce greenhouse gases (GHG) 30 percent by 2030. As part of this initiative, Tyson used Ecofys and WRI's Goods and Services screening model to qualitatively determine Tyson's relevant scope 3 categories. Tyson is currently comparing Life Cycle Analyses in scientific literature to the outputs from the Ecofys model.

Waste generated in operations

Evaluation status
Relevant, not yet calculated

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>

Explanation
In FY16, we launched an initiative to better understand sustainability related risks and opportunities within our business with the intent of establishing strategies and programs to strengthen our social and environmental performance, including performance related to climate change. As part of this initiative as well as our deeper commitment to sustainable food production, we announced in May 2017 a collaboration with the World Resources Institute (WRI) to become an industry leader by setting science- based greenhouse gas (GHG) targets for our operations and our supply chain (i.e., Scope 1, 2, and 3). In early 2018, we announced a target to reduce greenhouse gases (GHG) 30 percent by 2030. As part of this initiative, Tyson used Ecofys and WRI's Goods and Services screening model to qualitatively determine Tyson's relevant scope 3 categories. Tyson is currently comparing Life Cycle Analyses in scientific literature to the outputs from the Ecofys model.

Business travel

Evaluation status
Relevant, not yet calculated

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>

Explanation
In FY16, we launched an initiative to better understand sustainability related risks and opportunities within our business with the intent of establishing strategies and programs to strengthen our social and environmental performance, including performance related to climate change. As part of this initiative as well as our deeper commitment to sustainable food production, we announced in May 2017 a collaboration with the World Resources Institute (WRI) to become an industry leader by setting science- based greenhouse gas (GHG) targets for our operations and our supply chain (i.e., Scope 1, 2, and 3). In early 2018, we announced a target to reduce greenhouse gases (GHG) 30 percent by 2030. As part of this initiative, Tyson used Ecofys and WRI's Goods and Services screening model to qualitatively determine Tyson's relevant scope 3 categories. Tyson is currently comparing Life Cycle Analyses in scientific literature to the outputs from the Ecofys model.

Employee commuting

Evaluation status
Relevant, not yet calculated

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>

Explanation
In FY16, we launched an initiative to better understand sustainability related risks and opportunities within our business with the intent of establishing strategies and programs to strengthen our social and environmental performance, including performance related to climate change. As part of this initiative as well as our deeper commitment to sustainable food production, we announced in May 2017 a collaboration with the World Resources Institute (WRI) to become an industry leader by setting science- based greenhouse gas (GHG) targets for our operations and our supply chain (i.e., Scope 1, 2, and 3). In early 2018, we announced a target to reduce greenhouse gases (GHG) 30 percent by 2030. As part of this initiative, Tyson used Ecofys and WRI's Goods and Services screening model to qualitatively determine Tyson's relevant scope 3 categories. Tyson is currently comparing Life Cycle Analyses in scientific literature to the outputs from the Ecofys model.

Upstream leased assets

Evaluation status
Relevant, not yet calculated

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>

Explanation
In FY16, we launched an initiative to better understand sustainability related risks and opportunities within our business with the intent of establishing strategies and programs to strengthen our social and environmental performance, including performance related to climate change. As part of this initiative as well as our deeper commitment to sustainable food production, we announced in May 2017 a collaboration with the World Resources Institute (WRI) to become an industry leader by setting science- based greenhouse gas (GHG) targets for our operations and our supply chain (i.e., Scope 1, 2, and 3). In early 2018, we announced a target to reduce greenhouse gases (GHG) 30 percent by 2030. As part of this initiative, Tyson used Ecofys and WRI's Goods and Services screening model to qualitatively determine Tyson's relevant scope 3 categories. Tyson is currently comparing Life Cycle Analyses in scientific literature to the outputs from the Ecofys model.

Downstream transportation and distribution

Evaluation status
Relevant, not yet calculated

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>

Explanation
In FY16, we launched an initiative to better understand sustainability related risks and opportunities within our business with the intent of establishing strategies and programs to strengthen our social and environmental performance, including performance related to climate change. As part of this initiative as well as our deeper commitment to sustainable food production, we announced in May 2017 a collaboration with the World Resources Institute (WRI) to become an industry leader by setting science- based greenhouse gas (GHG) targets for our operations and our supply chain (i.e., Scope 1, 2, and 3). In early 2018, we announced a target to reduce greenhouse gases (GHG) 30 percent by 2030. As part of this initiative, Tyson used Ecofys and WRI's Goods and Services screening model to qualitatively determine Tyson's relevant scope 3 categories. Tyson is currently comparing Life Cycle Analyses in scientific literature to the outputs from the Ecofys model.

Processing of sold products

Evaluation status
Relevant, not yet calculated

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>

Explanation
In FY16, we launched an initiative to better understand sustainability related risks and opportunities within our business with the intent of establishing strategies and programs to strengthen our social and environmental performance, including performance related to climate change. As part of this initiative as well as our deeper commitment to sustainable food production, we announced in May 2017 a collaboration with the World Resources Institute (WRI) to become an industry leader by setting science- based greenhouse gas (GHG) targets for our operations and our supply chain (i.e., Scope 1, 2, and 3). In early 2018, we announced a target to reduce greenhouse gases (GHG) 30 percent by 2030. As part of this initiative, Tyson used Ecofys and WRI's Goods and Services screening model to qualitatively determine Tyson's relevant scope 3 categories. Tyson is currently comparing Life Cycle Analyses in scientific literature to the outputs from the Ecofys model.

Use of sold products

Evaluation status
Relevant, not yet calculated

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>

Explanation
In FY16, we launched an initiative to better understand sustainability related risks and opportunities within our business with the intent of establishing strategies and programs to strengthen our social and environmental performance, including performance related to climate change. As part of this initiative as well as our deeper commitment to sustainable food production, we announced in May 2017 a collaboration with the World Resources Institute (WRI) to become an industry leader by setting science- based greenhouse gas (GHG) targets for our operations and our supply chain (i.e., Scope 1, 2, and 3). In early 2018, we announced a target to reduce greenhouse gases (GHG) 30 percent by 2030. As part of this initiative, Tyson used Ecofys and WRI's Goods and Services screening model to qualitatively determine Tyson's relevant scope 3 categories. Tyson is currently comparing Life Cycle Analyses in scientific literature to the outputs from the Ecofys model.

End of life treatment of sold products

Evaluation status
Relevant, not yet calculated

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>

Explanation
In FY16, we launched an initiative to better understand sustainability related risks and opportunities within our business with the intent of establishing strategies and programs to strengthen our social and environmental performance, including performance related to climate change. As part of this initiative as well as our deeper commitment to sustainable food production, we announced in May 2017 a collaboration with the World Resources Institute (WRI) to become an industry leader by setting science- based greenhouse gas (GHG) targets for our operations and our supply chain (i.e., Scope 1, 2, and 3). In early 2018, we announced a target to reduce greenhouse gases (GHG) 30 percent by 2030. As part of this initiative, Tyson used Ecofys and WRI's Goods and Services screening model to qualitatively determine Tyson's relevant scope 3 categories. Tyson is currently comparing Life Cycle Analyses in scientific literature to the outputs from the Ecofys model.

Downstream leased assets

Evaluation status
Relevant, not yet calculated

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>

Explanation
In FY16, we launched an initiative to better understand sustainability related risks and opportunities within our business with the intent of establishing strategies and programs to strengthen our social and environmental performance, including performance related to climate change. As part of this initiative as well as our deeper commitment to sustainable food production, we announced in May 2017 a collaboration with the World Resources Institute (WRI) to become an industry leader by setting science- based greenhouse gas (GHG) targets for our operations and our supply chain (i.e., Scope 1, 2, and 3). In early 2018, we announced a target to reduce greenhouse gases (GHG) 30 percent by 2030. As part of this initiative, Tyson used Ecofys and WRI's Goods and Services screening model to qualitatively determine Tyson's relevant scope 3 categories. Tyson is currently comparing Life Cycle Analyses in scientific literature to the outputs from the Ecofys model.

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>

Explanation
We have no partnerships with franchises.

Investments

Evaluation status
Relevant, not yet calculated

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>

Explanation
In FY16, we launched an initiative to better understand sustainability related risks and opportunities within our business with the intent of establishing strategies and programs to strengthen our social and environmental performance, including performance related to climate change. As part of this initiative as well as our deeper commitment to sustainable food production, we announced in May 2017 a collaboration with the World Resources Institute (WRI) to become an industry leader by setting science- based greenhouse gas (GHG) targets for our operations and our supply chain (i.e., Scope 1, 2, and 3). In early 2018, we announced a target to reduce greenhouse gases (GHG) 30 percent by 2030. As part of this initiative, Tyson used Ecofys and WRI's Goods and Services screening model to qualitatively determine Tyson's relevant scope 3 categories. Tyson is currently comparing Life Cycle Analyses in scientific literature to the outputs from the Ecofys model.

Other (upstream)

Evaluation status
Not evaluated

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>

Explanation

Other (downstream)

Evaluation status
Not evaluated

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>

Explanation

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

We are planning to include in the next two years

Please explain

In FY16, we launched an initiative to better understand sustainability related risks and opportunities within our business with the intent of establishing strategies and programs to strengthen our social and environmental performance, including performance related to climate change. As part of this initiative as well as our deeper commitment to sustainable food production, we announced in May 2017 a collaboration with the World Resources Institute (WRI) to become an industry leader by setting science- based greenhouse gas (GHG) targets for our operations and our supply chain (i.e., Scope 1, 2, and 3). In early 2018, we announced a target to reduce greenhouse gases (GHG) 30 percent by 2030. As part of this initiative, Tyson used Ecofys and WRI's Goods and Services screening model to qualitatively determine Tyson's relevant scope 3 categories. Tyson is currently comparing Life Cycle Analyses in scientific literature to the outputs from the Ecofys model.

C6.7

(C6.7) Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

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 land use management

Emissions (metric tons CO2)
56

Methodology
Default emissions factors

Please explain
Tyson has one (1) facility in Pennsylvania that uses the local land fill gas to offset natural gas usage for the complex

CO2 removals from land use management

Emissions (metric tons CO2)

Methodology
Please select

Please explain

Sequestration during land use change

Emissions (metric tons CO2)

Methodology
Please select

Please explain

CO2 emissions from biofuel combustion (land machinery)

Emissions (metric tons CO2)

Methodology
Please select

Please explain

CO2 emissions from biofuel combustion (processing/manufacturing machinery)

Emissions (metric tons CO2)
26940

Methodology
Default emissions factors

Please explain
Eight (8) Tyson facilities burn biogas from either the company's own WWTP captured biogas or the local city's WWTP captured biogas to displace natural gas for the facility

CO2 emissions from biofuel combustion (other)

Emissions (metric tons CO2)

Methodology
Please select

Please explain

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
Cattle products

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

Please explain
GHG emissions are calculated for each facility. Tyson is able to provide the GHG emissions as a total for all cattle production facilities. As well, production is monitored for each facility so the GHG emissions per production unit are submitted in Questions 6.9a.

Agricultural commodities
Soy

Do you collect or calculate GHG emissions for this commodity?
No, not currently but intend to collect or calculate this data within the next two years

Please explain
In FY16, we launched an initiative to better understand sustainability related risks and opportunities within our business with the intent of establishing strategies and programs to strengthen our social and environmental performance, including performance related to climate change. As part of this initiative as well as our deeper commitment to sustainable food production, we announced in May 2017 a collaboration with the World Resources Institute (WRI) to become an industry leader by setting science- based greenhouse gas (GHG) targets for our operations and our supply chain (i.e., Scope 1, 2, and 3). In early 2018, we announced a target to reduce greenhouse gases (GHG) 30 percent by 2030. We hope to evaluate calculation of this commodity in the future.

Agricultural commodities
Other (chicken products)

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

Please explain
GHG emissions are calculated for each facility. Tyson is able to provide the GHG emissions as a total for all chicken production facilities. As well, production is monitored for each facility so the GHG emissions per production unit are submitted in Questions 6.9a.

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.

Cattle products

Reporting emissions by
Unit of production

Emissions (metric tons CO2e)
988036

Denominator: unit of production
Unit of product

Change from last reporting year
This is our first year of measurement

Please explain
Emissions for facilities that harvest cattle were added together to arrive at the total emission figure.

Soy

Reporting emissions by
Please select

Emissions (metric tons CO2e)

Denominator: unit of production
<Not Applicable>

Change from last reporting year
Please select

Please explain

Other

Reporting emissions by
Unit of production

Emissions (metric tons CO2e)
3397982

Denominator: unit of production
Please select

Change from last reporting year
This is our first year of measurement

Please explain
Emissions for facilities that harvest chicken were added together to arrive at the total emission figure.

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
0.2

Metric numerator (Gross global combined Scope 1 and 2 emissions)
6223579

Metric denominator
Other, please specify (million pounds)

Metric denominator: Unit total
31142

Scope 2 figure used
Location-based

% change from previous year
5.4

Direction of change
Increased

Reason for change
Predominantly the increase is due to production increased 2.63%. As well, Tyson acquired both American Proteins, Inc, Advanced Pierre Foods, Smart Chicken, Original Philly, and 4 grain elevators which added a significant increase, 2.1%, of GHG emissions to the company footprint. Our intensity numbers are offset, because these emissions are included in our intensity however, we did not have full year production data for American Proteins, Inc., Smart Chicken, Humboldt facility, and new grain elevators, therefore their production values were not included.

Intensity figure
0.000155

Metric numerator (Gross global combined Scope 1 and 2 emissions)
6223579

Metric denominator
unit total revenue

Metric denominator: Unit total
40052000000

Scope 2 figure used
Location-based

% change from previous year
5.4

Direction of change
Increased

Reason for change
Predominantly the increase is due to production increased 2.63%. As well, Tyson acquired both American Proteins, Inc, Advanced Pierre Foods, Smart Chicken, Original Philly, and 4 grain elevators which added a significant increase, 2.1%, of GHG emissions to the company footprint. Our intensity numbers are offset, because these emissions are included in our intensity however, we did not have full year production data for American Proteins, Inc., Smart Chicken, Humboldt facility, and new grain elevators, therefore their production values were not included.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?
Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	2770482	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	720715	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	5113	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	107854	IPCC Fourth Assessment Report (AR4 - 100 year)

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
United States of America	3496310

C7.3

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

By business division
By facility

C7.3a

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

Business division	Scope 1 emissions (metric ton CO2e)
Prepared	434030.61
Fresh meats	1002141.68
Poultry	2040863
Pork group	4267.47
Corporate	15007.62

C7.3b

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

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Albertville Complex	21633	34.274444	-85.803889
Berryville Complex	71392	36.369444	-92.4375
Carthage, MS (Choctaw) Complex	34433	32.825278	-88.464722
Carthage, TX Complex	8265	32.173611	-93.675278
Center Complex	19115	31.7925	-93.838333
Clarksville Complex	70104	35.477778	-92.544444
Corydon Complex	8335	38.208333	-85.875
Cumming Complex Poultry	19125	34.388889	-83.286667
Dardanelle Complex	14413	35.216667	-92.866667
Dexter Complex	11402	36.793549	-88.055514
Forest Complex	16738	32.358333	-88.508056
Forest RVAF	62565	32.362222	-88.549167
Fort Smith By Product	470	35.395448	-93.59011
Glen Allen Complex	5756	37.6975	-76.448611
Grannis Complex	135740	34.240658	-93.664766
Harmony	36215	35.955556	-79.277778
Hope Complex	29564	33.635833	-92.4125
Jackson Complex	38	32.281056	-90.206898
Fayetteville Plant	11475	36.035777	-93.828609
Portland Indiana Mexican Original	9789	40.429601	-84.997068
Sanford NC Mexican Original	7130	35.45977	-78.860312
Mississippi live Production Complex	15268	31.855	-88.284722
Monett Complex	14302	36.9175	-92.0875
Monroe Complex	18614	34.980556	-79.506944
Nashville Complex	29215	33.928056	-92.155833
New Holland Complex	49206	40.080556	-75.914444
Noel Complex	16726	36.559167	-93.508611
North Alabama Complex	63378	34.046667	-85.426111
Rogers Plant	1462	39.332222	-93.885278
Chick-n-Quick	16522	36.320833	-93.876389
Oxford Complex	3	33.608333	-84.156111
Pine Bluff Complex	46455	34.220278	-91.949167
Robards Complex	60140	37.658056	-86.480556
Scranton Complex	103750	35.383333	-92.433333
Sedalia Complex	87407	38.75	-92.675
Seguin Complex	19066	29.57998	-96.018062

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Shelbyville Complex	19779	35.475	-85.520833
South Georgia Complex	25336	32.095	-82.227778
Springdale Complex	71864	36.191667	-93.875
Temperanceville Complex	47548	37.883333	-74.458333
Texarkana Complex	35921	33.532222	-92.19
Union City Complex	62841	36.421389	-89
No Little Rock	6048	34.75808	-91.77638
Tyler Rd. Proc	21025	35.269903	-92.91362
Van Buren Plant	1559	35.425294	-93.669351
Vicksburg Complex	12475	32.341667	-89.341667
Waldron Complex	17045	34.9125	-93.894444
Wilkesboro Complex	61947	36.145833	-80.8375
Amarillo	83822	35.258611	-100.357778
Council Bluffs Case Ready	15316	41.242177	-94.11221
Dakota City	70208	42.434722	-95.583333
Denison	491	42.001111	-94.621667
Emporia	30966	38.403591	-95.789015
Finney County	214937	38	-100.973889
Goodlettsville	11343	36.331399	-85.288913
Joslin	44249	41.584722	-89.774444
Lexington	60477	40.760986	-98.262938
Logansport	112828	40.765556	-85.608333
Louisa County	74752	41.295833	-90.647222
Madison	24545	41.817778	-96.531667
Olathe	318	38.838233	-93.176997
Ottawa, Illinois	127	41.441525	-88.799144
Pasco	109314	46.136111	-117.088889
Perry	25568	40.841944	-93.873889
Sherman, TX	10298	33.580809	-95.394541
Storm Lake	43024	42.64	95.1875
Waterloo	50493	42.508611	92.261389
Bosco (Warren MI)	1085	42.477843	-82.924096
Bruss - Chicago, IL	392	41.945777	-86.262021
Bruss - Jacksonville	310	30.34401	-80.259914
Buffalo, NY	0	42.871107	-77.146503
Cherokee, IA	566	42.730833	-94.444444
Columbia, SC	7147	33.95691	-79.006344
Concordia, MO	3451	38.986389	-92.429444
Council Bluffs Prepared	5767	41.242177	-94.11221
Dallas, TX (Rosani)	12936	32.685132	-95.112841
Ft Worth, TX (Kettle)	6591	32.646057	-96.686481
Green Bay - Cedar Street	771	44.510053	-86.009363
Green Bay - Elizabeth Street	10266	44.509441	-86.017088
Houston Portwall	3392	29.78397	-94.720877
Hutchinson, KS	12415	38.045409	-96.067209
Independence	10290	42.470556	-90.095833
Jefferson, WI (Closed)	1	43.000948	-87.190203
North Richland Hills and NRH R&D	15297	32.857416	-96.753772
Omaha, NE	10360	41.202778	-95.000278
S. Hutchinson, KS (KPR)	17364	38.029151	-96.05721
San Diego, CA	666	32.552674	-115.038221
Vernon, TX	14900	34.162997	-98.707561
Chicago Service Ctr Office	5	41.876329	-86.357344
Claryville, KY	11476	38.910529	-83.618066
Haltom City, TX	4586	32.822473	-96.71089
Haltom City (MC), TX (4000 Meacham)	481	32.823194	-96.712907
Kansas City, KS	3901	39.096223	-93.315611
Macon (MC)	325	32.731072	-82.271836
New London, WI	23777	44.371923	-87.266453
Newbern, TN	5751	36.140514	-88.728908
Pottsville (MC)	2943	40.738048	-75.700025
Rancho Cucamonga 6th St. and Fulton St.	1234	34.083761	-116.412025
Rochelle (MC)	365	41.922887	-88.958634
Rome, GA	2915	34.222176	-84.817231
San Lorenzo, CA	2951	37.66915	-121.847889
St. Joseph, MO	17079	39.756295	-93.242237
Storm Lake Farms	18695	42.639307	-94.816198
Tarboro, NC	8444	35.874637	-76.442509
Tolleson (MC) - no natural gas	54	33.440608	-111.710261
Traverse City, MI	4832	44.735438	-84.376653
Zeeland, MI	84436	42.918419	-85.974724

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Corp Center (Dakota Dunes) (includes Tasco, FM hanger, N. Sioux City Dakota Tech	20197	42.503554	-95.518721
Oak Lawn, IL (closed)	0	41.876329	-86.357344
Tasco	423	35.237185	-100.313607
Corp Lab Building Included in Springdale Corp Office	562	36.155	-93.845553
Corporate/Scalehouse Johnson Rd	27	36.147662	-93.843309
Fayetteville- Office (MLK BLVD)	40	36.053513	-93.808872
Print Shop (Johnson Rd)	44	36.147662	-93.843309
Records Retention (Dakota Dunes)	122	42.503554	-95.518721
River Valley Propane	9	35.217209	-93.161283
Springdale- 412 Bldg - 412 MIS Building	13	36.174044	-94.157658
Springdale Corporate Office - (includes Discover Center includes Corp Lab Builidings and R&D Pilot)	261307	36.155	-93.845553
Tyson Aviation Department	70	36.284811	-93.696776
Mason OH Sales Office	104	39.303646	-84.308051
River Valley Animal	6590	36.155	-93.845553
High Starr	5	36.356492	-94.133196
George Training Sow	59	35.272913	-96.200398
Williamson Finish	86	35.039167	-96.599167
Anderson Nursery	273	35.192011	-96.176081
Perkins Nursery	281	35.290019	-96.48356
County Line AI	24	35.288567	-96.339722
Delware AI	24	36.182925	-94.606862
Holcombe (same as SAP Propane) Farm	20	36.396303	-94.640742
Holdenville Complex/Swine	3409	35.082084	-96.421608
Armour, South Dakota	2	43.307055	-97.653475
Bancroft, IA	2	43.290978	-93.778051
Biehle, Missouri	2	37.60679	-88.162504
Bloomfield Iowa	2	41.392057	-91.176675
Bluffton, Indiana	3	40.732437	-84.816078
Burlington, Michigan	3	42.105467	-84.942233
Cambridge City, Indiana	2	39.803283	-84.834018
Cambridge, Illinois	2	41.552814	-89.774687
Carroll, Iowa	2	42.181705	-93.116848
Carthage, Illinois	3	40.415071	-91.061076
Coleman, South Dakota	3	43.978709	-95.248654
Conroy, Iowa	3	41.731037	-90.002515
Corunna, Indiana	3	41.437306	-84.841659
Creighton, Nebraska	3	42.439328	-96.103596
Crofton, Nebraska	3	42.851475	-96.533984
Delmar, Iowa	4	41.932536	-89.392987
DeMotte, Indiana	3	41.1457	-86.829219
Dixon, Illinois	3	41.82839	-88.524081
Donnellson, Iowa	2	40.639835	-91.581621
Elgin, Iowa	2	42.901398	-90.344657
Fancy Farm, Kentucky	3	36.831188	-87.216257
Farmersburg, Iowa	4	42.961166	-90.632075
Farmersburg/Waukon	3	43.236537	-91.462496
Fontanelle, Iowa	3	41.289518	-93.447182
Freeman, South Dakota	3	43.357429	-96.576891
Garner, Iowa	3	43.104199	-92.304638
Geneva, Minnesota	4	43.828435	-92.734784
Girard, Illinois	2	39.474256	-88.219102
Goodfield, Ilinois	2	40.640555	-88.727877
Greensburg, Indiana	4	39.284961	-84.359889
Harmony, Minnesota	2	43.562778	-92.009214
Hawk Point, Missouri	2	38.972762	-91.106363
Ireton, Iowa	5	42.993631	-95.687403
Jasper, Indiana	3	38.365791	-85.090565
Lakefield, Minnesota	3	43.668897	-94.820953
Lancaster Wisconsin	3	42.835037	-89.249078
Laurel, Nebraska	4	42.4673	-96.915752
Leipsic, Ohio	2	41.104994	-82.000196
Linden, Indiana	3	40.182349	-85.120889
Litchfield, Minnesota	3	45.152358	-93.444396
Lyndon, Illinois	2	41.721833	-88.089225
Manning, Iowa	2	41.906184	-94.942438
Mapleton, Minnesota	3	43.963772	-92.041725
Marion, Kentucky	2	37.345002	-87.933562
Marshall, Minnesota	4	44.470306	-94.21911
Morenci, Michigan	3	41.709218	-83.646747
Mt. Ayr, Iowa	3	40.702617	-94.27838
Mt. Blanchard, Ohio	3	40.90146	-82.437739

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
N. Manchester, Indiana	3	41.001279	-85.824497
Osage, Iowa	3	43.331033	-92.809616
Oskaloosa, Iowa	3	41.378708	-91.183589
Pella, Iowa	3	41.378557	-92.816132
Perryville, Missouri	1	37.604692	-89.840811
Pinckneyville, Illinois	2	38.040133	-89.409805
Prinsburg, Minnesota	3	44.934112	-94.791567
Ravenwood, Missouri	1	40.344271	-93.320112
Rock Rapids, Iowa	3	43.413852	-95.824123
Rossville, Indiana	4	40.448868	-86.623148
Rushford, Minnesota	3	43.792835	-90.270192
Rushville, Indiana	3	39.612999	-84.596278
Sheldon, Iowa	2	43.187404	-94.143875
Sleepy Eye, Minnesota	3	44.340767	-93.275161
St. Augstine, Ilinois	3	40.729343	-90.339768
Stilesville, Indiana	2	40.305122	-84.041757
Stockton, Iowa	4	41.635457	-89.140162
Sully, Iowa	0	41.553701	-91.165035
Sutton, Nebraska	3	40.601569	-96.140399
Truman, Minnesota	3	43.809632	-93.571117
Versailles, Ohio	2	40.223748	-83.417556
Villisca, Iowa	2	40.857364	-93.013926
Warsaw/Clunnette, Indiana	3	41.319343	-85.934588
Washington, Indiana	2	38.66449	-87.08022
Willow Hill, Illinois	3	39.010336	-88.028506
Wolcott, Indiana (Gary Gilmore)	3	40.768361	-87.040975
York, Nebraska	3	3.71	-97.598991
54th Street, (Enid OK)	2389	36.3957	-97.7997
70 St. John (Portland ME)	780	43.6456	-70.2785
82 St John (Portland ME)	6	43.6462	-70.2784
Advance Pierre Foods, OH	1	39.242131	-84.388295
Aliceville Blend Mill	91	33.067182	-88.244776
Alma, GA (RVI)	7168	31.516471	-82.461998
Ames, NE	53	41.452455	-96.626589
Amherst, OH	120	41.415736	-82.198639
Anderson Grain Office (Dyer and Kenton)	120	36.202433	-89.011248
Baxter Nursery and Sow	30	35.080361	-96.399176
Blue Ash OH Office	1	39.100736	-84.511987
Caseyville - Landshire, IL	1166	38.609997	-90.056484
Claremont, NC	690	35.714712	-81.137233
Concordia, MO Blend Mill	51	38.99623	-93.564234
Cumming Blend Mill, GA	55	34.321153	-84.138696
Cumming Processing RVI	60694	34.278654	-84.051206
Cuthbert Blend Mill	3	31.761641	-84.740106
Cuthbert RVI	83079	31.770978	-84.734721
Dawsonville Blend Mill	55	34.488888	-84.186381
DC-Willow	276	36.418203	-97.804858
Downer's Grove 3131 Woodcreek Drive	462	41.829248	-88.033662
Dustin Sow	20	35.270652	-96.030834
Easley, SC	11	34.923931	-82.590866
Elizabeth City Grain Elevator	1	36.273762	-76.291205
Enterprise (Enid OK)	18637	36.416615	-97.807638
Gainesville GA Blend mill and Office	106	34.225188	-83.787198
Hanceville, AL (RVI)	125805	33.956426	-86.80876
Holcombe Complex/Office	8	36.398703	-94.708704
Humboldt Complex	22	35.819788	-88.909312
Knox (Enid OK) (same as Pine (Enid OK)	3	36.40168	-97.875986
Lucas and Black Sow	18	35.066768	-96.406015
Milliken Warehouse (Portland ME)	10	43.707181	-70.304313
Muscatine, IA	61	41.369996	-91.117651
New Jersey Allied (Vineland, NJ)	23662	39.526134	-75.052747
Philly	4195	40.011743	-75.117147
Pickensville, AL	138	33.22639	-88.278219
Pine (Enid OK)	10	36.40168	-97.875986
Portsmouth VA	64	36.815309	-76.319477
Stafford, KS	56	37.971235	-98.604147
Tecumseh Complex	15585	40.901374	-96.543652
United Bank Building	0	36.160826	-94.14469
West Chester, OH	26823	39.307652	-84.46337
West Point MS	1	33.625586	-88.632489

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?

Yes

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

(C-AC7.4a/C-FB7.4a/C-PF7.4a) Select the form(s) in which you are reporting your agricultural/forestry emissions.

Total emissions

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
Agriculture/Forestry

Emissions category
<Not Applicable>

Emissions (metric tons CO2e)
0

Methodology
Default emissions factor

Please explain
All of the emissions except for de minimis emissions fall under process/manufacturing

Activity
Processing/Manufacturing

Emissions category
<Not Applicable>

Emissions (metric tons CO2e)
3496310

Methodology
Default emissions factor

Please explain
All of the emissions except for de minimis emissions fall under process/manufacturing.

Activity
Distribution

Emissions category
<Not Applicable>

Emissions (metric tons CO2e)
0

Methodology
Default emissions factor

Please explain
All of the emissions except for de minimis emissions fall under process/manufacturing.

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 in market-based approach (MWh)
United States of America	2727269	0	4597373	0

C7.6

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

By business division

By facility

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Prepared	618786.8	
Fresh meats	767019.76	
Poultry	1303007.61	
Pork Group	2541.22	
Corporate	35913.3	

C7.6b

(C7.6b) Break down your total gross global Scope 2 emissions by business facility.

Facility	Scope 2 location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Albertville, AL	16125	
Berryville Complex	102114	
Carthage, MS	32734	
Carthage, TX	10895	
Center Complex	30822	
Clarksville Poultry Growout	30260	
Corydon Complex	15301	
Cumming Complex	34000	
Dardanelle Complex	27653	
Dexter Complex	20114	
Forest Complex	21289	
Forest RVAF	18850	
Fort Smith	4720	
Glen Allen Complex	13621	
Grannis Complex	45604	
Harmony	6477	
Hope Complex	24748	
Jackson Complex	137	
MISSISSIPPI LIVE PRODUCTION COMPLEX	13399	
Monett Complex	21583	
Monroe Complex	20117	
Nashville Complex	29413	
New Holland Complex	17257	
Noel Complex	28344	
North Alabama Complex	28793	
ROGERS PLANT -	4678	
Chick -N-Quik	41616	
Oxford Complex	86	
Pine Bluff Complex	42876	
Robards Complex	59308	
SCRANTON	22271	
Sedalia	92669	
Seguin Complex	15106	
Shelbyville Complex	31921	
South Georgia Complex	40231	
Springdale Complex	52728	
Temperanceville Complex	24073	
TEXARKANA	15377	
Union City Complex	40731	
N. Little Rock	6237	
Tyler Rd	15148	
Van Buren	6219	
VICKSBURG	17463	
Waldron Complex	26279	
Wilkesboro Complex	39120	
Anderson Grain Elevators NEW	412	
Elizabeth City NEW	10	

Facility	Scope 2 location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Humboldt NEW	288	
Tecumseh Corporate/Plant	10211	
Amarillo	88354	
Council Bluffs (Case Ready)	18105	
Dakota City	106919	
Denison	1934	
Emporia	28471	
Finney County Plant and Slaughter	89077	
Goodlettsville (Case Ready)	29039	
Joslin	69206	
Lexington	55285	
Logansport	38446	
Louisa County	29308	
Madison	25453	
Norfolk (Warehouse 3 South of Town)	13	
Ottawa Forward Warehouse	1823	
Pasco	19094	
Perry	27546	
Sherman	21894	
Sioux City Freezer	7405	
Storm Lake	52113	
Waterloo	57000	
Bosco (Warren MI)	4289	
Bruss Chicago	2258	
Bruss Jacksonville	3221	
Cherokee	596	
Columbia	8202	
Concordia	8500	
Council Bluffs	16244	
Dallas, TX (Rosani)	13581	
Ft Worth, TX (Kettle)	19854	
Green Bay - Cedar Street	1712	
Green Bay - Elizabeth Street	11769	
Houston Portwall	11632	
Hutchinson	33565	
Independence	5702	
Jefferson (Closed)	752	
North Richland Hills and NRH R&D	26858	
Olathe	19515	
Omaha Plant and Freezer	28612	
S. Hutchinson, KS (KPR)	7254	
Santa Teresa	273	
Vernon,Tx	14083	
San Diego CA	703	
PORTLAND	10904	
SANFORD- 800 E MAIN	7455	
FAYETTEVILLE- MO	21046	
Claryville, KY	19463	
Haltom City, TX	23305	
Haltom City (MC), TX (4000 Meacham)	3026	
Kansas City, KS	16660	
Macon (MC), GA	3733	
New London, WI	26558	
Newbern, TN	19480	
Pottsville (MC), PA	1648	
Rancho Cucamonga Fulton St./6th St.	1397	
Rochelle (MC), IL	10558	
Rome, GA	4790	
San Lorenzo, CA	2173	
Seymour CT	5	
St. Joseph, MO	32168	
Storm Lake FM	1646	
Storm Lake Processing	16040	
Storm Lake Farms	2225	
Tarboro, NC	18540	
Tolleson (MC), AZ	1365	
Traverse City, MI	18412	
Zeeland, MI	56500	
Philly	2548	
54th Street, (Enid OK)	7726	

Facility	Scope 2 location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
82 St. John (Portland ME)	29	
Advance Pierre Foods, OH	1	
Amherst, OH	1076	
Caseyville - Landshire, IL	2079	
Claremont, NC	2434	
Easley, SC	804	
Enterprise (Enid OK)	22607	
Knox (Enid OK)	182	
Milliken Warehouse (Portland ME)	725	
New Jersey Allied (Vineland, NJ)	3886	
Pine (Enid OK)	65	
Portland, ME (70 St John)	1768	
West Chester, OH	14584	
Aliceville, AL (AP3)	186	
Alma, GA (RVI)	2112	
Ames, NE	8	
Concordia, MO	140	
Cumming Blend Mill (Matt), GA	310	
Cumming Processing RVI	22642	
Cuthbert, GA Plant 1/Plant 2 Blend Mill	378	
Cuthbert Processing (RVI)	28470	
Dawsonville, GA	128	
Gainesville GA Office	1028	
Hanceville, AL (RVI)	27440	
Muscatine, IA	109	
Pickensville, AL (AP1)/(AP2) Blend Mill	462	
Portsmouth, VA	98	
Stafford, KS	72	
CORPORATE SPRINGDALE OFFICE	29812	
Corp Center (Dakota Dunes), hanger, N Sioux City, Tasco	3260	
West Point MS	4	
Downer's Grove 3131 Woodcreek Drive	1899	
Scottsdale AZ Leased Sales Office	29	
Mason OH	118	
Chicago Office	726	
Earth City Leased Office	36	
Chicago Service Ctr Office Leased Office	16	
United Bank Building	1	
Washington DC Office	10	
Blue Ash OH Office	2	
Highstarr	5	
George Training Sow (George Complex)	278	
Williamson Finish	35	
Anderson Nursery	187	
Baxter Nursery	4	
Canary Nursery	0	
Dustin Nursery	169	
Lucas/Black Nursery	159	
Black Sow Nursery - New	2	
Perkins Nursery (Perkins Pigs Grading)	120	
COUNTY LINE AI	257	
DELAWARE AI	50	
Clyde	0	
Holdenville Complex/Office (TADD)	71	
Holdenville Feed mill	1205	
Armour, South Dakota	2	
Bancroft, IA	4	
Biehle, Missouri	2	
Bloomfield, Iowa	3	
Bluffton, Indiana	6	
Burlington, Michigan	9	
Cambridge City, Indiana	4	
Cambridge, Illinois	7	
Carroll, Iowa	6	
Carthage, Illinois	4	
Coleman, South Dakota	9	
Conroy, Iowa	4	
Corunna, Indiana	12	
Creighton, NE	5	
Crofton, Nebraska	5	

Facility	Scope 2 location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Delmar, Iowa	3	
DeMotte, Indiana	8	
Dixon, Illinois	11	
Donnellson, Iowa	8	
Elgin, Iowa	16	
Fancy Farm, Kentucky	3	
Farmersburg, Iowa	4	
Farmersburg/Waukon, Iowa	4	
Fontanelle, Iowa	4	
Forrest, Illinois	15	
Fostoria, Ohio	9	
Freeman, South Dakota	6	
Galva, Illinois	4	
Garner, Iowa	4	
Geneva, Minnesota	25	
Girard, Illinois	4	
Goodfield, Illinois	20	
Greensburg, Indiana	6	
Hamilton, Michigan	6	
Harmony, Minnesota	2	
Hawk Point, Missouri	2	
Ireton, Iowa	7	
Jasper, Indiana	6	
Lakefield, Minnesota	5	
Lancaster Wisconsin	6	
Laurel, Nebraska	6	
Leipsic, Ohio	19	
Linden, Indiana	15	
Litchfield, Minnesota	5	
Lyndon, Illinois	17	
Manning, Iowa	2	
Mapleton, Minnesota	4	
Marion Kentucky	2	
Marshall, Minnesota	3	
Morenci, Michigan	10	
Mt. Ayr, Iowa	12	
Mt. Blanchard, Ohio	3	
N. Manchester, Indiana	9	
Osage, Iowa	9	
Oskaloosa, Iowa	3	
Ottawa, Illinois	8	
Pella Iowa	11	
Perryville, Missouri	4	
Pinckneyville, Illinois	5	
Prinsburg, Minnesota	4	
Ravenwood, Missouri	2	
Rock Rapids, Iowa	4	
Rossville, Indiana	2	
Rushford, Minnesota	4	
Rushville, Indiana	4	
Sheldon, Iowa	4	
Sleepy Eye, Minnesota	4	
St. Augustine, Illinois	3	
Stilesville, Indiana	3	
Stockton, Iowa	6	
Sutton, Nebraska	4	
Truman, Minnesota	6	
Versailles, Ohio	13	
Villisca, Iowa	7	
Warsaw/Clunette, Indiana	6	
Washington, Indiana	15	
Willow Hill, Illinois	9	
Wolcott, Indiana	8	
York, Nebraska	5	

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?
Increased

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	38.86	Decreased	21.9	Decrease in biogas is a correlation to more recovery of waste material routed to the WWTP as well the supply from the local landfill and local WWTP biogas is not available. To calculate the emissions value, we (FY18-FY17)/(FY17).
Other emissions reduction activities	0	No change	0	Not applicable
Divestment	0	No change	0	Not applicable
Acquisitions	519860	Increased	9.11	Increase is due to the acquisition of Advanced Pierre Foods, American Protein, Inc., Original Philly, and 4 grain elevators. To calculate the emissions value, we (FY18-FY17)/(FY17).
Mergers	0	No change	0	Not applicable
Change in output	276363	Increased	8.58	A portion of the increase of GHG emissions is due to the increase of production from existing facilities as well as the increase of emissions due to acquisitions. Note, Advanced Pierre Foods and Original Philly, which is 2% of the total company production, is included in the company production numbers but American Proteins, Inc. and the 4 grain elevators production is not yet included in the company total fiscal year production. To calculate the emissions value, we (FY18-FY17)/(FY17).
Change in methodology	0	No change	0	Not applicable
Change in boundary	0	No change	0	Not applicable
Change in physical operating conditions	0	No change	0	Not applicable
Unidentified	0	No change	0	Not applicable
Other	0	No change	0	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 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertakes this energy-related activity
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	No
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 MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	151947	9794002	9945949
Consumption of purchased or acquired electricity	<Not Applicable>	0	4597373	4597373
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	0	<Not Applicable>	0
Total energy consumption	<Not Applicable>	151947	14391375	14543322

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	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

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

Fuels (excluding feedstocks)
Biogas

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
151631

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

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

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

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Comment
The information provided is inclusive of stationary sources and does not include any fuel used for transportation.

Fuels (excluding feedstocks)
Fuel Oil Number 2

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
49290

MWh fuel consumed for self-generation of electricity
6232

MWh fuel consumed for self-generation of heat
0

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

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

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Comment

The information provided is inclusive of stationary sources and does not include any fuel used for transportation.

Fuels (excluding feedstocks)
Landfill Gas

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
316

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

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

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

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Comment
The information provided is inclusive of stationary sources and does not include any fuel used for transportation.

Fuels (excluding feedstocks)
Liquefied Petroleum Gas (LPG)

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
204443

MWh fuel consumed for self-generation of electricity
18

MWh fuel consumed for self-generation of heat
0

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

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

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Comment
The information provided is inclusive of stationary sources and does not include any fuel used for transportation.

Fuels (excluding feedstocks)
Petrol

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
0.81

MWh fuel consumed for self-generation of electricity
0.81

MWh fuel consumed for self-generation of heat
0

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

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

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Comment
The information provided is inclusive of stationary sources and does not include any fuel used for transportation.

Fuels (excluding feedstocks)
Natural Gas

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
9540276

MWh fuel consumed for self-generation of electricity
205

MWh fuel consumed for self-generation of heat
0

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

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

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Comment
The information provided is inclusive of stationary sources and does not include any fuel used for transportation.

Fuels (excluding feedstocks)
Fuel Oil Number 6

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
33.97

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

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

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

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Comment
The information provided is inclusive of stationary sources and does not include any fuel used for transportation.

C8.2d

(C8.2d) List the average emission factors of the fuels reported in C8.2c.

Biogas

Emission factor
52.07

Unit
kg CO2e per million Btu

Emission factor source
EPA GHG Reporting April 4, 2014

Comment

Fuel Oil Number 2

Emission factor
73.96

Unit
kg CO2e per million Btu

Emission factor source
EPA GHG Reporting April 4, 2014

Comment

Fuel Oil Number 6

Emission factor
75.1

Unit
kg CO2e per million Btu

Emission factor source
EPA GHG Reporting April 4, 2014

Comment

Landfill Gas

Emission factor
52.07

Unit
kg CO2e per million Btu

Emission factor source
EPA GHG Reporting April 4, 2014

Comment

Liquefied Petroleum Gas (LPG)

Emission factor
61.71

Unit
kg CO2e per million Btu

Emission factor source
EPA GHG Reporting April 4, 2014

Comment

Natural Gas

Emission factor
53.06

Unit
kg CO2e per million Btu

Emission factor source
EPA GHG Reporting April 4, 2014

Comment

Petrol

Emission factor
70.22

Unit
kg CO2e per million Btu

Emission factor source
EPA GHG Reporting April 4, 2014

Comment

C8.2e

(C8.2e) 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	6455	6455	0	0
Heat	9939494	9939494	151947	151947
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2f

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

Basis for applying a low-carbon emission factor
No purchases or generation of low-carbon electricity, heat, steam or cooling accounted with a low-carbon emission factor

Low-carbon technology type
<Not Applicable>

Region of consumption of low-carbon electricity, heat, steam or cooling
<Not Applicable>

MWh consumed associated with low-carbon electricity, heat, steam or cooling
<Not Applicable>

Emission factor (in units of metric tons CO2e per MWh)
<Not Applicable>

Comment
Tyson does not actively seek out low carbon electricity at this time.

C9. Additional metrics

C9.1

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

C10. Verification

C10.1

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

	Verification/assurance status
Scope 1	No third-party verification or assurance
Scope 2 (location-based or market-based)	No third-party verification or assurance
Scope 3	No emissions data provided

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, we do not verify any other climate-related information reported in our CDP disclosure

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)?
No, and we do not anticipate being regulated in the next three years

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?
No, and we do not currently anticipate doing so in the next two years

C12. Engagement

C12.1

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

C12.1c

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

More than ever, consumers are demanding to know more about the beef they purchase – where it comes from and how the cattle are raised. In 2018, we demonstrated our commitment to supply chain transparency by becoming the first beef processor to license the Progressive Beef™ program, a comprehensive quality management system designed for cattle feeding operations that sell to companies like Tyson Foods. We don't own feedlots or ranches, but instead rely on more than 4,000 independent producers across the country to sell us high-quality cattle. Progressive Beef covers all aspects of day-to-day cattle care. Cattle feeding operators, a partner in our value chain, certified in the program follow best practices for animal welfare, food safety, responsible antibiotic use and environmental sustainability. All of these practices are verified twice per year through USDA-approved auditors. Each audit is like a report card, and the metrics involved help ranchers improve their operations. We have seen firsthand the benefits of bringing together verifiable best practices that are geared toward continuing improvement in long-term beef production. Licensing the program allows us to better collaborate with our supply chain and measure the progress we're making in beef sustainability. Together with Progressive Beef, a partner in our value chain, we aspire to accelerate the entire beef industry toward embracing proven practices so that all consumers know the beef they buy is from cattle that were well cared for, in a safe and sustainable environment and verified through USDA-approved auditors. Our goal is to buy 2 million program cattle in the first year and to grow this to 50 percent of all the cattle we source after three years. We also work toward continual improvement in finding new ways to reduce emissions, lower fuel consumption and decrease greenhouse gases, while improving the miles per gallon (MPG) performance of our fleet. As a partner in the EPA's SmartWay® program, a partner in our value chain, we require all products be transported by SmartWay participating carriers. We implement several strategies to reduce our truck miles, including route optimization; shipping product directly to customer docks; using rail for product shipment instead of trucks when possible; and investing in ultra-light equipment that allows us to add product weight to our shipments and reduce the number of trucks on the road. We are a founding member of the U.S. Roundtable for Sustainable Beef (USRSB), a partner in our value chain. USRSB is an independent, multi-stakeholder, transparent effort focused on shaping the sustainability framework for the U.S. beef value chain. USRSB encourages and promotes continuous improvement in the U.S. beef value chain through several actions, including identifying sustainability indicators (inclusive of air and greenhouse gas emissions), establishing verification methodologies, generating field project data to test sustainability concepts, providing a forum for open discussion, information exchange and program development, and offering stakeholders an equal opportunity through membership participation. Additionally, in FY16, we launched an initiative to better understand sustainability related risks and opportunities within our business with the intent of establishing strategies and programs to strengthen our social and environmental performance, including performance related to climate change. As part of this initiative as well as our deeper commitment to sustainable food production, we announced in May 2017 a collaboration with the World Resources Institute (WRI), a partner in our value chain, to become an industry leader by setting science-based greenhouse gas (GHG) targets for our operations and our supply chain (i.e., Scope 1, 2, and 3). In early 2018, we announced a target to reduce greenhouse gases (GHG) 30 percent by 2030. We anticipate working with customers and suppliers on GHG reduction initiatives in the future. Finally, while we don't own grain farms, we do buy corn and soybeans to feed our poultry, as do the independent farmers and ranchers who sell us cattle and pigs. We recently committed to support improved environmental practices on 2 million acres of corn production by the end of 2020. As farmers implement increasingly efficient land and nutrient management practices, the effects can be felt throughout the supply chain. Specifically, through optimized nutrient management, there will be less demand for fertilizer resulting in less energy used to produce the fertilizer; but more importantly, there will be less fertilizer applied per acre, resulting in reduced total nitrous oxide emissions. We will be collaborating with our supply chain and other stakeholders to achieve this goal. Grain farmers are a partner in our value chain.

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

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
Energy efficiency	Support	We direct the National Chicken Council and the National Turkey Federation to lobby for EQIP (Environments Quality Incentives Program) and also do our own direct lobbying in support of the program. EQIP enables agricultural producers to identify ways to conserve energy on the farm through development of Agricultural Energy Management Plans (AgEMPs), and by providing financial assistance to implement conservation practices recommended in AgEMPs or other approved on-farm energy audits.	We support the legislation with no exceptions.
Clean energy generation	Support	We direct the National Chicken Council and the National Turkey Federation to lobby for REAP (Rural Energy for America Program) and also do our own direct lobbying in support of the program. REAP provides guaranteed loan financing and grant funding to agricultural producers and rural small businesses for renewable energy systems or to make energy efficiency improvements to existing energy using operations (e.g. Solar Chicken Houses).	We support the legislation with no exceptions.

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?

While we currently do not have a formal process in place, we do maintain an Environmental, Legal, and Government Affairs team to help us monitor activities

C12.4

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

Publication
In voluntary sustainability report

Status
Complete

Attach the document
Tyson - Sustaining Our World Together - 2018 Sustainability Report.pdf

Page/Section reference
Pages 56, 59-62

Content elements
Governance
Emissions figures
Emission targets

Comment

C14. 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.

C14.1

(C14.1) 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	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.

Tyson Foods, Inc. (NYSE: TSN) is one of the world's largest food companies and a recognized leader in protein. Founded in 1935 by John W. Tyson and grown under three generations of family leadership, the company has a broad portfolio of products and brands like Tyson®, Jimmy Dean®, Hillshire Farm®, Ball Park®, Wright®, Aidells®, IBP® and State Fair®. Tyson Foods innovates continually to make protein more sustainable, tailor food for everywhere it's available and raise the world's expectations for how much good food can do. Headquartered in Springdale, Arkansas, the company had 121,000 team members at September 29, 2018. Through its Core Values, Tyson Foods strives to operate with integrity, create value for its shareholders, customers, communities and team members and serve as a steward of the animals, land and environment entrusted to it.

Please note: the reporting period end date was changed from 9/29/18 to 10/1/18 to comply with CDP's ORS requirement of providing a start date that is 364-367 days before the end date. However, Tyson Foods' fiscal year is 10/01/17 to 9/29/18.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	40052000000

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	9024941034

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
Walmart, Inc.

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
604861.63

Uncertainty (±%)
0

Major sources of emissions

Verified
No

Allocation method
Other, please specify (percent fiscal sales)

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Requesting member
Walmart, Inc.

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
471817.537

Uncertainty (±%)
0

Major sources of emissions

Verified
No

Allocation method
Other, please specify (percent fiscal sales)

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

SC1.2

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

Percent sale was included in our 2018 10-k.

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
Doing so would require we disclose business sensitive/proprietary information	Walmart Inc. accounted for 17.3% of our fiscal 2018 consolidated sales. Sales to Walmart Inc. were included in all of our segments. Any extended discontinuance of sales to this customer could, if not replaced, have a material impact on our operations. No other single customer or customer group represented more than 10% of fiscal 2018 consolidated sales.

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

No

SC1.4b

(SC1.4b) Explain why you do not plan to develop capabilities to allocate emissions to your customers.

We are unable to provide customer specific allocations due to the sensitive/proprietary nature of the information and possible SEC violations by doing so. If a single customer or customer group did not make up more than 10% of our overall consolidated sales in a fiscal year, we do not disclosure the % of sales to them in our 10-K filing and will be unable to present such data via our CDP responses and risk violating the SEC regulation FD (fair disclosure).

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

SC3.1

(SC3.1) Do you want to enroll in the 2019-2020 CDP Action Exchange initiative?

No

SC3.2

(SC3.2) Is your company a participating supplier in CDP's 2018-2019 Action Exchange initiative?

Please select

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

No, I am not providing data

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	Public or Non-Public Submission	I am submitting to	Are you ready to submit the additional Supply Chain Questions?
I am submitting my response	Public	Investors Customers	Yes, submit Supply Chain Questions now

Please confirm below

I have read and accept the applicable Terms