

C0. Introduction

C0.1

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

At Darling Ingredients, we create sustainable food, feed and fuel ingredient solutions. We take the meat by-products from our animal-based diets and process them to reclaim valuable and essential bio-nutrients, fats, oils, proteins, meals and more that are used daily in personal, commercial, and industrial products. Our natural and sustainable ingredients are marketed internationally to the pharmaceutical, food, animal feed, pet food, biofuel, fertilizer, sports nutrition and cosmetic industries.

Our Feed and Pet Food solutions, by re-purposing organic bio-nutrient residuals, have grown into one of the world's leading suppliers of natural, sustainable feed ingredients. Additionally, the safe processing of organic meat co-products and animal mortalities has proven to be the most secure and efficient way of handling these materials, as compared to other methods which can harm the environment through the release of methane gases and pathogens.

What we do and how we do it helps protect the world's food chain from farm to table. Through our bio-security standards at our processing facilities, our customers can be assured that our food ingredients are fully traceable, and our products and processes are fully compliant with food safety regulations. Our industry is often referred to as "the gatekeeper," keeping our food chain safe from harmful materials. By processing unconsumed meat co-products into usable ingredients rather than disposing of them in landfills or compost piles, our facilities *prevent* more greenhouse gases from being released into the air rather than what they add to it during operations. By re-purposing this material, we also help protect our land and groundwater from pathogens that occur during nature's decomposition process. And, by ensuring our feed ingredients are traceable and safe, we protect the livestock that start this food cycle in motion. Through our secure operations, we are able to provide the world's food manufacturers and supply chains with a range of safe and tested food ingredients and products that are sustainable and natural, and economically and ecologically viable. We're the world's leading supplier of gelatin and collagen peptides. We provide global food and meat manufacturers with safe, fully traceable sausage casings and meat co-products. We contribute to innovative, healthy food concepts through our natural proteins and other natural dietary supplements

Darling Ingredients has taken the lead in developing new opportunities in renewable energy. Whether from re-purposed animal fats, organic residuals or the oil and grease we collect from restaurants, our energy solutions are one more contribution towards a paradigm shift in the world's long-term energy balance. Our many years of experience in acquiring organic co-products and residuals and converting them into innovative, high-value products have positioned us as a global leader in renewable energy development. We were the first in the USA to pioneer the commercial production of biodiesel utilizing animal fats and used cooking oils. In 2001, we became Canada's first producer of biodiesel from animal fats and cooking oils. In 2013, together with Valero Energy Corporation, we constructed North America's largest facility to convert animal fats, used cooking oils and distiller oils into renewable diesel. In Europe, we are leading the way with innovative biofuel and renewable energy solutions.

At Darling Ingredients, we have over a century of experience in making the world a greener place. As an innovative developer of organic fertilizers, we take 'going green' quite literally, re-purposing industrial residuals and meat co-products into nutritional, life-sustaining solutions for horticultural gardens, organic farming, healthy sports turf and more. Using our fertilizer and soil enrichment solutions result in higher yields on conventional and organic farms, as well as greener golf courses, sports turf and lawns. We can also help to improve phosphate balances in agriculture. Developing these resources from residuals also means we make operations cleaner, smoother and more sustainable for a variety of industries. Our methods for storing, collecting and re-purposing these residuals demonstrate how our company serves as a leading steward of our planet's natural resources.

Commercial bakeries and snack manufacturers throughout North America rely on us for the full-service management of their residuals. Bakery Feeds we re-purpose them into a sustainable, quality ingredient for feed rations. Our services unburden the bakery and snack industry, add value to the feed industry, and improve the sustainability performance of both.

C0.2

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

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1 2019	December 31 2019	Yes	1 year

C0.3

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

- Argentina
- Australia
- Belgium
- Brazil
- Canada
- China
- Czechia
- France
- Germany
- Italy
- Japan
- Malaysia
- Netherlands
- Poland
- Portugal
- Spain
- United Kingdom of Great Britain and Northern Ireland
- United States of America

C0.4

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

USD

C0.5

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

Operational control

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

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

	Relevance
Agriculture/Forestry	Elsewhere in the value chain only [Agriculture/Forestry/processing/manufacturing/Distribution only]
Processing/Manufacturing	Both direct operations and elsewhere in the value chain [Processing/manufacturing/Distribution only]
Distribution	Both direct operations and elsewhere in the value chain [Processing/manufacturing/Distribution only]
Consumption	Elsewhere in the value chain only [Agriculture/Forestry/processing/manufacturing/Distribution only]

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

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

Row 1

Primary reason

Do not own/manage land

Please explain

Darling does not own or directly manage any of these value chain lands.

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

Other, please specify (Food Ingredients such as gelatin & hydrolyzed collagen peptides, food grade fats, natural casings, functional proteins, bone and heparin.)

% of revenue dependent on this agricultural commodity

20-40%

Produced or sourced

Produced

Please explain

We take the meat by-products from the production of our animal-based diets and process them to reclaim valuable and essential bio-nutrients, fats, oils, proteins, meals and more that are used daily in personal, commercial, and industrial products. Our natural and sustainable ingredients are marketed internationally to the pharmaceutical, food, animal feed, pet food, biofuel, fertilizer, sports nutrition and cosmetic industries.

Agricultural commodity

Other, please specify (Feed Ingredients such as fats, proteins, used cooking oils, blood products, pet food ingredients, bakery by-product meals and insect fats and proteins.)

% of revenue dependent on this agricultural commodity

40-60%

Produced or sourced

Produced

Please explain

We take the meat by-products from the production of our animal-based diets and process them to reclaim valuable and essential bio-nutrients, fats, oils, proteins, meals and more that are used daily in personal, commercial, and industrial products. Our natural and sustainable ingredients are marketed internationally to the pharmaceutical, food, animal feed, pet food, biofuel, fertilizer, sports nutrition and cosmetic industries.

Agricultural commodity

Other, please specify (Fuel Products such as green energy, green electricity, biogas, biodiesel and renewable diesel.)

% of revenue dependent on this agricultural commodity

Less than 10%

Produced or sourced

Produced

Please explain

We take the meat by-products from the production of our animal-based diets and process them to reclaim valuable and essential bio-nutrients, fats, oils, proteins, meals and more that are used daily in personal, commercial, and industrial products. Our natural and sustainable ingredients are marketed internationally to the pharmaceutical, food, animal feed, pet food, biofuel, fertilizer, sports nutrition and cosmetic industries.

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
Chief Executive Officer (CEO)	With respect to sustainability risks, the company's executive management assesses and manages climate related and other ESG risks and opportunities through an interdisciplinary approach that coordinates the views of our operational, commercial, regulatory, financial and legal groups into long-term strategic planning. In addition, the company has a Global Sustainability Committee comprised of persons in leadership positions representing various disciplines throughout the company. The Global Sustainability Committee is managed by our Vice President of Global Communications and Sustainability and regularly reports progress to the CEO, who is the Chairman of the Board. The Committee provides input and guidance to our sustainability strategy and activities; and reviews metrics and strategies that can be used to measure advancement with environmental and other sustainability initiatives. In addition, the chairman of the Global Sustainability Committee provides periodic updates to the Board and senior executive management. In addition, we continually engage with stakeholders, including our shareholders, and monitor current and proposed climate and environmental related policies, laws and regulations and best practices to help us shape effective business strategies.

C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures	<Not Applicable>	The Board is responsible for overseeing management's execution of its risk management responsibilities and for assessing the company's approach to risk management. The Board's oversight of risk occurs as an integral and continuous part of the Board's oversight of our business and seeks to ensure that management has processes in place to appropriately manage risk, including climate-related risks. The Board actively engages with senior management to understand and oversee the company's various risks, and members of senior management regularly attend Board meetings to provide periodic briefings on risk related matters, including with respect to climate related and cybersecurity risks. At least once per year, our executive management team has a formal strategic planning meeting with our full Board of Directors. This meeting addresses all aspects of the company's businesses, including climate related risks and opportunities.

C1.2

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

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	More frequently than quarterly
Sustainability committee	<Not Applicable>	Assessing climate-related risks and opportunities	<Not Applicable>	Annually

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).

Darling's Global Sustainability Committee comprised of persons in leadership positions representing various disciplines throughout the company. The Committee provides guidance, feedback and regular reporting on material ESG matters, including climate-related, to the CEO. Darling recognizes the importance of monitoring climate-related issues at a high level within the organization and this group is strategically placed to bridge between corporate upper management and plant operations. Our VP of Sustainability, with guidance from the entire Global Sustainability Committee, is responsible for leading and implementing our sustainable strategy. The Global Sustainability Committee members each have specific responsibilities related to their expertise on climate related issues and company operations. The VP of Sustainability regularly interacts and presents to the company's Board. The VP of Sustainability is also supported by a team of environmental professionals who facilitate sustainability efforts, including information gathering and opportunities for improvement related to the climate. The environmental professionals have direct oversight of emissions reporting, wastewater discharges, and overall environmental impact to the climate for global operations. Subsequent to the oversight, this group identifies targets for potential improvement in order to demonstrate Darling's environmental excellence and stewardship.

C1.3

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

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

C1.3a

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

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Other (please specify) (Further develop Sustainability and Corporate Social Responsibility Approach)	Continued to refine our ESG goals, objectives and messaging, including the rollout of a detailed ESG Factsheet.

C2. Risks and opportunities

C2.1

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

Yes

C2.1a

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

	From (years)	To (years)	Comment
Short-term	0	3	Darling believes that short-term goals in conjunction to climate change may occur within the immediate to 3 years. Capital budgeting for each year allows each business unit to decipher year to year improvements and/or changes that would allow for climate impact changes. These changes could occur without additional installations but could be achieved by modifying current practices and/or equipment.
Medium-term	3	10	Darling believes that a roadmap would need to be developed in order to concentrate on how the company would positively change its climate impact. This could be accomplished by installing capital to accomplish the roadmap goals. However, other environmental groups would need to be consulted to discuss the approach.
Long-term	10	30	Darling believes that a roadmap would need to be developed in order to concentrate on how the company would positively change its climate impact over the long-term. This could be accomplished by completely changing the culture of how climate change is approached. Other environmental groups and/or academic experts would need to be consulted to discuss the approach.

C2.1b

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

The determination of the level of impact of a risk or opportunity on our business is dependent on the particular facts and circumstances at hand. In general, we would consider any business risk or opportunity that applies to both our direct operations and our supply chain, including those related to climate and water, that could have an impact of greater than 5% of our Adjusted EBITDA to have a "substantive financial or strategic impact" on our business. For example, if one or more sites representing more than 5% of our Adjusted EBITDA in the previous financial year experienced a prolonged shutdown due to a loss of operating capacity induced by a water shortage, this would be considered as substantive impact. A change could also be considered substantive if it directly impacted our corporate reputation and/or brand value and/or directly affected the wellbeing of our employees.

C2.2

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

Value chain stage(s) covered

Direct operations

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

Annually

Time horizon(s) covered

Long-term

Description of process

The company's senior executives are responsible for day-to-day management of strategic, operational and compliance risks, including the creation of appropriate risk management policies and assigning responsibility and accountability for their implementation. These risks include, financial, regulatory, workforce, business performance, commodity, cybersecurity, reputational, water and climate related. The Board is responsible for overseeing management's execution of its risk management responsibilities and for assessing the company's approach to risk management. The Board's oversight of risk occurs as an integral and continuous part of the Board's oversight of our business and seeks to ensure that management has processes in place to appropriately manage risk, including climate-related risks. The Board actively engages with senior management to understand and oversee the company's various risks, and members of senior management regularly attend Board meetings to provide periodic briefings on risk related matters, including with respect to climate related and cybersecurity risks. At least once per year, our executive management team has a formal strategic planning meeting with our full Board of Directors. This meeting addresses all aspects of the company's businesses, including climate related risks and opportunities. With respect to sustainability risks, the company's executive management assesses and manages climate related and other ESG risks and opportunities through an interdisciplinary approach that coordinates the views of our operational, commercial, regulatory, financial and legal groups into long-term strategic planning. In addition, the company has a Global Sustainability Committee comprised of persons in leadership positions representing various disciplines throughout the company. The Global Sustainability Committee is managed by our Vice President of Global Communications and Sustainability and regularly reports progress to the CEO, who is the Chairman of the Board. The Committee provides input and guidance to our sustainability strategy and activities; and reviews metrics and strategies that can be used to measure advancement with environmental and other sustainability initiatives. In addition, the chairman of the Global Sustainability Committee provides periodic updates to the Board and senior executive management. In addition, we continually engage with stakeholders, including our shareholders, and monitor current and proposed climate and environmental related policies, laws and regulations and best practices to help us shape effective business strategies.

C2.2a

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Our biofuels business may be affected by energy policies of U.S. and foreign governments. Pursuant to the requirements established by the Energy Independence and Security Act of 2007, the EPA finalized regulations for National Renewable Fuel Standard (RFS2) in 2010. The regulation mandated the domestic use of biomass-based diesel (biodiesel or renewable diesel) of 1.0 billion gallons in 2012. Beyond 2012, the regulation requires a minimum of 1.0 billion gallons of biomass-based diesel for each year through 2022, which amount is subject to increase by the Administrator of the EPA. The volume mandates for 2019 were 2.1 billion gallons for biomass-based diesel, 4.29 billion gallons for advanced biofuel and 19.29 billion gallons for renewable fuel. The EPA has also established a final volume mandate for biomass-based diesel for 2020 of 2.43 billion gallons. In December 2019, the EPA finalized the volume mandates for 2020 advanced biofuel at 5.09 billion gallons and for renewable fuel at 20.09 billion gallons. In addition, the EPA established the 2021 biomass-based diesel mandate at 2.43 billion gallons. Biomass-based diesel qualifies to fulfill the biomass-based diesel requirement, the non-specified portion of the advanced biofuel requirement and the total renewable fuel requirement. In order to qualify as a "renewable fuel" each type of fuel from each type of feedstock is required to lower greenhouse gas emissions ("GHG") by levels specified in the regulation. The EPA has determined that biofuels (either biodiesel or renewable diesel) produced from waste oils, fats and greases result in an 86% reduction in GHG emissions, exceeding the 50% requirement established by the regulation. Prices for our finished products may be impacted by worldwide government policies relating to renewable fuels and GHG. Programs like RFS2 and low-carbon fuel standards (LCFS) (such as in the state of California) and tax credits for biofuels both in the United States and abroad may positively impact the demand for our finished products, the demand for and price of renewable and biodiesel.
Emerging regulation	Relevant, always included	Our operations are highly dependent on the use of natural gas, diesel fuel and electricity. As carbon pricing schemes develop, we could see impacts through carbon taxes, cap and trade programs and environmental regulations. We consume significant volumes of natural gas to operate boilers in our plants, which generate steam to heat raw materials. Natural gas prices represent a significant cost of facility operations included in cost of sales. We also consume significant volumes of diesel fuel to operate our fleet of tractors and trucks used to collect raw materials. Diesel fuel prices represent a significant component of cost of collection expenses included in cost of sales. We also require a significant amount of electricity in operating certain of our facilities, a disruption of which or a significant increase in the cost of which could have a material adverse effect on the business and results of operations of the affected facility.
Technology	Relevant, sometimes included	Our DGD Joint Venture, which was formed to design, engineer, construct and operate the DGD (Diamond Green Diesel) Facility, which as a result of the expansion project completed in August 2018 is now capable of processing approximately 20,000 barrels per day of input feedstock to produce renewable diesel fuel and certain other co-products. The operation of a joint venture such as this involves a number of risks that could harm our business and result in the DGD Joint Venture not performing as expected, such as: the risk that one or more competitive new renewable diesel plants are constructed that use different technologies from the DGD Facility and result in the marketing of products that are more effective as a substitute for carbon-based fuels or less expensive than the products marketed by the DGD Joint Venture.
Legal	Relevant, sometimes included	We are a party to various lawsuits, claims and loss contingencies arising in the ordinary course of business, including assertions by certain regulatory and governmental agencies related to climate risks such as permitting requirements and/or air, wastewater and storm water discharges from the Company's processing facilities. The outcome of litigation, particularly class action lawsuits, and regulatory proceedings is difficult to assess or quantify. Plaintiffs (including governmental agencies) in these types of lawsuits and proceedings may seek recovery of very large or indeterminate amounts, and the magnitude of the potential loss relating to such lawsuits or proceedings may remain unknown for substantial periods of time. The costs of responding to or defending future litigation or regulatory proceedings may be significant and any future litigation or regulatory proceedings may divert the attention of management away from our strategic objectives. There may also be adverse publicity associated with litigation or regulatory proceedings that may decrease customer and investor confidence in our business, regardless of whether the allegations are valid or whether we are ultimately found liable. As a result, litigation or regulatory proceedings may have a material adverse effect on our business, results of operations and financial condition.
Market	Relevant, always included	Our principal finished products include MBM, PM, BFT, YG, PG, and BBP which are feed grade commodity ingredients. We also manufacture and sell a number of other products that are derived from animal by-products and many of which are commodities or compete with commodities. The prices of these commodities are quoted on, or derived from prices quoted on, established commodity markets. Accordingly, our results of operations will be affected by fluctuations in the prevailing market prices of these finished products or of other commodities that may be substituted for our products by our customers. Historically, market prices for commodity grains, fats and food stocks have fluctuated in response to a number of factors, including global changes in supply and demand resulting from changes in local and global economic conditions, changes in global government agriculture programs, changes in energy policies of U.S. and foreign governments, changes in international agricultural trading policies, impact of disease outbreaks on protein sources and the potential effect on supply and demand, as well as weather conditions during the growing and harvesting seasons. While we seek to mitigate the risks associated with price declines, including by diversifying our finished products offerings, through the use of formula pricing tied to commodity prices for a substantial portion of our raw materials (which may not protect our margins in periods of rapidly declining prices) and hedging, a significant decrease in the market price of any of our products or of other commodities that may be substituted for our products would have a material adverse effect on our results of operations and cash flow. Furthermore, rapid and material changes in finished goods prices, including competing agricultural-based alternative ingredients, generally have an immediate and, often times, material impact on the Company's gross margin and profitability resulting from the brief lapse of time between the procurement of the raw materials and the sale of the finished goods.
Reputation	Relevant, sometimes included	Reputation is sometimes included in our climate risk assessments. Media campaigns related to feed and food ingredient production's impact on climate change presents potential risks to our corporate name and brands. Individuals or organizations can use social media platforms to publicize inappropriate or inaccurate stories or perceptions about the feed and food ingredient production industries or our company. Such practices could cause damage to the reputations of our company and/or the feed and food ingredient production industries in general.
Acute physical	Relevant, sometimes included	Seasonal factors and severe weather changes can impact the availability, quality and volume of raw materials that we collect and process from the agri-food industry. Seasonal factors include holidays, when raw material volumes decline; severe weather changes of excessive snowfall, cold weather, hurricanes and flooding, which can impact our ability to collect the raw materials. In addition, extended warm weather can adversely affect the quality of raw materials processed and the yield on production due to rapidly degrading raw materials.
Chronic physical	Relevant, sometimes included	Depending upon the location of our processing facilities and those of our suppliers, operations could be subject to weather impacts, including the physical impacts of climate changes, to include changes in rainfall patterns, water shortages, changing sea levels, changing storm patterns and intensities and changing temperatures levels. Physical damage, flooding, excessive snowfall or drought resulting from changing climate patterns could adversely impact our costs and business operations, the availability and costs of our raw materials, and the supply and demand for our end products.

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?

No

C2.3b

(C2.3b) Why do you not consider your organization to be exposed to climate-related risks with the potential to have a substantive financial or strategic impact on your business?

	Primary reason	Please explain
Row 1	Risks exist, but none with potential to have a substantive financial or strategic impact on business	At this stage of our evaluation Darling has not found any risks with potential for substantive financial or strategic impact on our business.

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) 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?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

In August 2018, the DGD Joint Venture completed an expansion project that increased the DGD Facility's annual production capacity from 160 million gallons of renewable diesel to 275 million gallons and expanded outbound logistics for servicing the many developing low carbon fuel markets in North America and worldwide. In November 2018, the joint venture partners approved the DGD Joint Venture moving forward with another expansion project, which is expected to grow the facility's annual production capacity by an additional 400 million gallons from the current capacity of 275 million gallons of renewable diesel to 675 million gallons of renewable diesel and provide the capability to produce 60 million gallons of renewable naphtha for sale into low carbon fuel markets. DGD estimates completion and start-up of the expansion project in the fourth quarter of 2021. The expansion will be in the form of a parallel facility located next to the current facility. The planned expansion will also include expanded inbound and outbound logistics for servicing the many developing low carbon fuel markets around North America and worldwide. The total cost of the expansion project, including the naphtha production and improved logistics capability, is estimated to be approximately \$1.1 billion entity level which 50% would be Darling's share \$550.0 million of the costs. Note that Diamond Green Diesel is debt free and expansion costs have been sourced from earnings at DGD.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

759375000

Potential financial impact figure – maximum (currency)

810000000

Explanation of financial impact figure

The Diamond Green Diesel II expansion project due for completion Q4 2021 will estimate production of renewable diesel at 675 million gallons using a conservative EBITDA assumption of \$2.25 per gallon in physical year 2022 (this assumes the governmental energy policies and programs like the low-carbon fuel standards (LCFS) continue worldwide through 2022) calculating a total EBITDA of \$1,518,750,000 which 50% is Darling's share at \$759,375,000 EBITDA thus making the conservative minimum estimate \$759,375,000 EBITDA in 2022 from DGD II expansion. The maximum potential figure using EBITDA assumption of \$2.40 per gallon in the same physical year 2022. Those figures would be 675 million gallons at \$2.40 per gallon arriving at a total EBITDA of \$1,620,000,000 which 50% is Darling's share at \$810,000,000 EBITDA thus making the maximum financial potential estimated at \$810,000,000 EBITDA in the year 2022 when DGD II is fully operational.

Cost to realize opportunity

550000000

Strategy to realize opportunity and explanation of cost calculation

Diamond Green Diesel ("DGD"), our 50/50 joint venture with Valero Energy Corporation, has proven to be the lowest-cost and highest green premium producer of renewable diesel in the world. The demand for low carbon alternative fuels to meet the ever growing demand from governmental programs, such as the National Renewable Fuel Standard Program (RFS2) and low carbon fuel standards (LCFS) (such as in the state of California) has driven the decision for expansion at DGD. We remain confident in its positioning to service both the U.S. renewable fuel standard demands as well as to satisfy the growing global demand for low carbon markets, which will drive enhanced margin opportunities. The evaluation of the DGD expansion determined that the DGD JV has evolved into an integral and integrated part of the company's ongoing operations. Our partnership with Valero through DGD has created a sustainable and efficient process of converting Darling's feedstocks of waste fats and oils to high quality renewable fuels to meet the needs of our customers around the world. Darling's strategy to remain the largest most efficient collector and processor of animal fats and oils as a vertical integration with DGD to enhance its ability to be the best low-cost producer of the greenest fuel to the world market place.

Comment

Impacts and costs are estimates for the expanded production of 400 million gallons of renewable diesel to a total of 675 million gallons of renewable diesel and additional 60 million gallons of renewable naphtha at the entity level of the DGD JV in 2022 full run year. EBITDA estimates of \$2.25 to \$2.40 per gallon have been achieved in production at DGD for 2020 thus provided a conservative estimate for the 2022 production of renewable fuels.

C3. Business Strategy**C3.1**

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?

Yes, and we have developed a low-carbon transition plan

C3.1a

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

Yes, qualitative

C3.1b

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

Climate-related scenarios and models applied	Details
Other, please specify (GSC - Risk Analysis Process)	Darling's Global Sustainability Committee (GSC) includes senior executives responsible for day-to-day management of strategic, operational and compliance risks, including the creation of appropriate risk management policies and the assignment of responsibility and accountability for their implementation. With respect to climate related risks and opportunities, the GSC assesses scenarios that may impact Darling's future financial position. These climate related risks and opportunities include those risks related to the transition to a lower carbon economy, those risks related to the physical impacts of climate change as well as opportunities associated with efforts to mitigate and adapt to climate change.

C3.1d

(C3.1d) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Risks and opportunities related to the growing demand for alternative fuels to meet the low-carbon fuel standards rising around the world; led Darling to the original investment in Diamond Green Diesel (DGD) our 50/50 joint venture with Valero Energy. This initial investment has expanded since 2011 to the point that it is now integral to how Darling operates its business. Darling traditionally collected and converted used cooking oil and animal fats into feed ingredients which were sold on a caloric value to feed animals as well as for industrial technical uses. Over the past decade, the world's increasing focus on climate change and greenhouse gas has provided a new finished market for the Company's finished fats ingredients. With Darling's significant fats ownership, this has and continues to transform how Darling operates. In 2018, a large portion of Darling's total U.S. finished fats products were sold to the DGD Facility as feedstock for renewable diesel. This percentage is expected to noticeably increase both in 2019 and beyond due to the recent DGD capacity expansion completed in August 2018 and the even larger expansion to be finished in late 2021. In 2019 and 2018, DGD was Darling's largest finished product customer in terms of sales, with Darling recording sales of \$208.7 million and \$131.8 million to DGD, respectively.
Supply chain and/or value chain	Evaluation in progress	Climate-related risks and opportunities have not yet influenced our supply chain and/or value chain, as we are initially focused on evaluating the risks and opportunities relating to our own operations. We plan to develop a supply chain management program in the next few years and have begun that process with a Supplier Code of Conduct adopted in 2020.
Investment in R&D	Yes	Risks and opportunities related to the growing demand for alternative fuels to meet the low-carbon fuel standards rising around the world. Darling Ingredients has taken the lead in developing new opportunities in renewable energy. Whether from re-purposed animal fats, organic residuals or the oil and grease we collect from restaurants; our energy solutions are one more contribution towards a paradigm shift in the world's long-term energy balance. Our many years of experience in acquiring organic co-products and residuals and converting them into innovative, high-value products have positioned us as a global leader in renewable energy development. We were the first in the USA to pioneer the commercial production of biodiesel utilizing animal fats and used cooking oils. In 2005, we became Canada's first producer of biodiesel from animal fats and cooking oils. In 2013, together with Valero Energy Corporation, we constructed North America's largest facility to convert animal fats, used cooking oils and distiller oils into renewable diesel. Our investment in DGD as of December 28, 2019 was approximately \$661.5 million with an additional expansion under construction to add another 400 million gallons of renewable diesel taking the entity level of production to 675 million gallons of renewable diesel by the end of 2021. In Europe, we are leading the way with innovative biofuel and renewable energy solutions. As of December 28, 2019, Darling has invested approximately \$661.5 million as a 50/50 joint venture partner in Diamond Green Diesel.
Operations	Evaluation in progress	Darling's Sustainability Committee established a target to reduce our Collagen/Gelatin business line's energy intensity per unit of production, and our Rendering & Specialties business lines' per unit of raw material processed, by 5% within 5 years, from our new baseline year of 2020. Several activities have been identified to help us work towards this goal and we will continue to look for innovative technologies that help us reduce energy use and associated GHG emissions.

C3.1e

(C3.1e) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues	DGD is a large factor EBITDA and it weighs heavily on where certain facilities will send their fats, oils, and feedstock material.

C3.1f

(C3.1f) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

C4. Targets and performance

C4.1

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

No target

C4.1c

(C4.1c) Explain why you did not have an emissions target, and forecast how your emissions will change over the next five years.

	Primary reason	Five-year forecast	Please explain
Row 1	We are planning to introduce a target in the next two years	Benchmark data is being collected and will be utilized for goal setting by 2020.	Our industry is often referred to as the "original recycler." Through our diverse global family of brands, we collect and repurpose millions of metric tons of inedible materials annually. Beef, poultry and pork by-product streams are converted into usable and specialty ingredients, such as gelatin, tallow, feed-grade fats, meat and bone meal, poultry meal, yellow grease, fuel feedstocks, green energy, natural casings and hides, which are sold to the pharmaceutical, food, pet food, feed, fuel, bio-energy and fertilizer industries around the world. The nature of this business is to sequester carbon into our products that would otherwise be emitted into the atmosphere through decomposition, composting, landfilling and the like. The net effect of Darling's operations is a negative carbon footprint where for every pound of carbon emitted we prevent the release of almost 5 pounds.

C4.2

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

No other climate-related targets

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.

No

C4.3d

(C4.3d) Why did you not have any emissions reduction initiatives active during the reporting year?

Darling is in the process of collecting data to establish benchmark values in order to determine appropriate emissions reduction initiatives.

C4.5

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

Yes

C4.5a

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

Level of aggregation

Company-wide

Description of product/Group of products

Our industry is often referred to as the "original recycler." Through our diverse global family of brands, we collect and repurpose millions of metric tons of inedible materials annually. Beef, poultry and pork by-product streams are converted into usable and specialty ingredients, such as gelatin, tallow, feed-grade fats, meat and bone meal, poultry meal, yellow grease, fuel feedstocks, green energy, natural casings and hides, which are sold to the pharmaceutical, food, pet food, feed, fuel, bio-energy and fertilizer industries around the world. The nature of this business is to sequester carbon into our products that would otherwise be emitted into the atmosphere through decomposition, composting, landfilling and the like. The net effect of Darling's operations is a negative carbon footprint where for every pound of carbon emitted we prevent the release of almost 5 pounds.

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

Low-carbon product and avoided emissions

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

Please select

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

100

% of total portfolio value

<Not Applicable>

Asset classes/ product types

<Not Applicable>

Comment

Many of the finished products that Darling produces have been analysed to determine carbon footprint or carbon intensity. These values are then utilized to compare with carbon footprint data on competing products in both the animal and petfood industry as well as our renewable diesel operations.

C5. Emissions methodology

C5.1

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

Scope 1

Base year start

January 1 2018

Base year end

December 31 2018

Base year emissions (metric tons CO2e)

1424018

Comment

Scope 2 (location-based)

Base year start

January 1 2018

Base year end

December 31 2018

Base year emissions (metric tons CO2e)

364823

Comment

Scope 2 (market-based)

Base year start

January 1 2018

Base year end

December 31 2018

Base year emissions (metric tons CO2e)

401690

Comment

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

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)

1433089

Start date

January 1 2019

End date

December 31 2019

Comment

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)

1424018

Start date

January 1 2018

End date

December 31 2018

Comment

Darling Ingredients Inc. is restating its 2018 Scope 1 emissions figures due to changes in the methodology use to calculate its emissions data.

C6.2

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

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

C6.3

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

Reporting year

Scope 2, location-based

365486

Scope 2, market-based (if applicable)

413432

Start date

January 1 2019

End date

December 31 2019

Comment

Past year 1

Scope 2, location-based

364823

Scope 2, market-based (if applicable)

401690

Start date

January 1 2018

End date

December 31 2018

Comment

Darling Ingredients Inc. is restating its 2018 Scope 2 emissions figures due to changes in the methodology use to calculate its emissions data.

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 gross global 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>

Please explain

We have made estimates for internal discussions but have not yet completed comprehensive accounting per the GHG Protocol. We hope to have this evaluation completed in the next two years.

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>

Please explain

We have made estimates for internal discussions but have not yet completed comprehensive accounting per the GHG Protocol. We hope to have this evaluation completed in the next two years.

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

Evaluation status

Relevant, calculated

Metric tonnes CO2e

17010

Emissions calculation methodology

Darling Ingredients follows the GHG Protocol's Corporate Value Chain (Scope 3) Standard to calculate Scope 3 Emissions. Covered in this category are transmission and distribution (T&D) losses associated with purchased electricity. T&D loss rates for US facilities are derived using data from US Energy Information Administration (EIA), "State Electricity Profiles," Table 10. Supply and disposition of electricity, 1990-2018 (megawatthours) (<https://www.eia.gov/electricity/state/>). T&D loss factors for countries other than the US come from IEA 2019, 2017 data.

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

0

Please explain

This category includes emissions related to the production of fuels and energy purchased and consumed by the reporting company in the reporting year that are not included in scope 1 or scope 2.

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>

Please explain

We have made estimates for internal discussions but have not yet completed comprehensive accounting per the GHG Protocol. We hope to have this evaluation completed in the next two years.

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>

Please explain

We have made estimates for internal discussions but have not yet completed comprehensive accounting per the GHG Protocol. We hope to have this evaluation completed in the next two years.

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO2e

8839

Emissions calculation methodology

Darling Ingredients follows the GHG Protocol's Corporate Value Chain (Scope 3) Standard to calculate Scope 3 Emissions. Business travel includes air travel, lodging and rental cars. Emissions are calculated using spend data and emission factors based on economic input-output (IO) tables from Carnegie Mellon Economic Input-Output Life-Cycle Assessment (EIO-LCA).

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

0

Please explain

This category includes emissions from the transportation of employees for business-related activities in vehicles owned or operated by third parties, such as aircraft, trains, buses, and passenger cars. Emissions from hotel stays are also included.

Employee commuting

Evaluation status

Relevant, calculated

Metric tonnes CO2e

2554

Emissions calculation methodology

Darling Ingredients follows the GHG Protocol's Corporate Value Chain (Scope 3) Standard to calculate Scope 3 Emissions. The commute emissions are calculated by deriving an average commute emissions per FTE in 2019 using the results of the Employee Commute Survey conducted by Darling Ingredients. This average emissions per FTE is multiplied to total number of FTE in 2019. Emission factors used come from US EPA Emission Factors for GHG Inventories.

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

100

Please explain

This category includes emissions from the transportation of employees between their homes and their worksites.

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>

Please explain

We have made estimates for internal discussions but have not yet completed comprehensive accounting per the GHG Protocol. We hope to have this evaluation completed in the next two years.

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>

Please explain

We have made estimates for internal discussions but have not yet completed comprehensive accounting per the GHG Protocol. We hope to have this evaluation completed in the next two years.

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>

Please explain

We have made estimates for internal discussions but have not yet completed comprehensive accounting per the GHG Protocol. We hope to have this evaluation completed in the next two years.

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>

Please explain

We have made estimates for internal discussions but have not yet completed comprehensive accounting per the GHG Protocol. We hope to have this evaluation completed in the next two years.

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>

Please explain

We have made estimates for internal discussions but have not yet completed comprehensive accounting per the GHG Protocol. We hope to have this evaluation completed in the next two years.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Franchises

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

No franchises

Investments

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Darling does not have significant investments in other companies that fall under category 15.

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>

Please explain

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>

Please explain

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

(C-AC6.6/C-FB6.6/C-PF6.6) Can you break down your Scope 3 emissions by relevant business activity area?

No

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

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

Row 1

Primary reason

We are planning to include in the next two years

Please explain

We are in the early stage of our Scope 3 GHG emissions evaluation and we hope to have this evaluation completed in the next two years.

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

(C-AC6.8/C-FB6.8/C-PF6.8) Is biogenic carbon pertaining to your direct operations relevant to your current CDP climate change disclosure?

Yes

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

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

CO2 emissions from biofuel combustion (processing/manufacturing machinery)

Emissions (metric tons CO2)

158985

Methodology

Default emissions factors

Please explain

We used default emission factors from the EPA, "Emission Factors for Greenhouse Gas Inventories," Table 1 Stationary Combustion Emission Factors, March 9, 2018 (<https://www.epa.gov/climateleadership/center-corporate-climate-leadership-ghg-emission-factors-hub>).

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

Other (Food Ingredients such as gelatin & hydrolyzed collagen peptides, food grade fats, natural casings, functional proteins, bone and heparin.)

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

We take the meat by-products from the production of our animal-based diets, and process them to reclaim valuable and essential bio-nutrients, fats, oils, proteins, meals and more that are used daily in personal, commercial, and industrial products. Our natural and sustainable ingredients are marketed internationally to the pharmaceutical, food, animal feed, pet food, biofuel, fertilizer, sports nutrition and cosmetic industries. We have calculated GHG emissions from some of these products but not all.

Agricultural commodities

Other (Feed Ingredients such as fats, proteins, used cooking oils, blood products, pet food ingredients, bakery by-product meals and insect fats and proteins.)

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

We take the meat by-products from the production of our animal-based diets, and process them to reclaim valuable and essential bio-nutrients, fats, oils, proteins, meals and more that are used daily in personal, commercial, and industrial products. Our natural and sustainable ingredients are marketed internationally to the pharmaceutical, food, animal feed, pet food, biofuel, fertilizer, sports nutrition and cosmetic industries. We have calculated GHG emissions from some of these products but not all.

Agricultural commodities

Other (Fuel Products such as green energy, green electricity, biogas, biodiesel and renewable diesel.)

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

We take the meat by-products from the production of our animal-based diets, and process them to reclaim valuable and essential bio-nutrients, fats, oils, proteins, meals and more that are used daily in personal, commercial, and industrial products. Our natural and sustainable ingredients are marketed internationally to the pharmaceutical, food, animal feed, pet food, biofuel, fertilizer, sports nutrition and cosmetic industries. We have calculated GHG emissions from some of these products but not all.

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

0.172

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

1798575

Metric denominator

Other, please specify (unit of Raw Material)

Metric denominator: Unit total

10486965

Scope 2 figure used

Location-based

% change from previous year

1

Direction of change

Decreased

Reason for change

Change is not substantive and we believe it's due to our improved data assurance.

Intensity figure

5.531

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

1798575

Metric denominator

unit of production

Metric denominator: Unit total

325188

Scope 2 figure used

Location-based

% change from previous year

1

Direction of change

Decreased

Reason for change

Change is not substantive and we believe it's due to our improved data assurance.

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	1430372.62	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	1191.56	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	1524.49	IPCC Fifth Assessment Report (AR5 – 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)
Argentina	6
Australia	2016
Belgium	57946
Brazil	43
Canada	95211
China	180971
France	34040
Germany	82519
Italy	2029
Netherlands	130016
Poland	32377
Portugal	9
Spain	10713
United States of America	676044
United Kingdom of Great Britain and Northern Ireland	543
Other, please specify (No specific country (all facilities))	128607

C7.3

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

By activity

C7.3c

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

Activity	Scope 1 emissions (metric tons CO2e)
Stationary Combustion	1304482
Mobile Combustion (transport)	128607
Fugitive emissions	

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

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

Activity

Processing/Manufacturing

Emissions category

<Not Applicable>

Emissions (metric tons CO2e)

1433089

Methodology

Default emissions factor

Please explain

For the mechanical emissions figure, we accounted for the emissions from all the machinery in our processing operations. We used default emissions factors as inputs in the GHGs Accounting tool to calculate our total CO2e figure.

C7.5

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

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
Argentina	62	62	175	
Australia	1873	1873	2511	
Belgium	9902	7197	50735	
Brazil	4619	4619	39518	
Canada	1736	1736	73057	
China	62886	62886	100504	
France	3471	2496	46917	
Germany	21412	38099	52284	
Italy	822	1354	2780	
Netherlands	62580	80087	150146	
Poland	12283	16302	18021	
Portugal	53	47	150	
Spain	3357	5406	11988	
United Kingdom of Great Britain and Northern Ireland	829	1280	3360	
United States of America	179601	189989	388068	

C7.6

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

By activity

C7.6c

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

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Purchased Electricity	365486	413432

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		<Not Applicable>		
Other emissions reduction activities		<Not Applicable>		
Divestment		<Not Applicable>		
Acquisitions		<Not Applicable>		
Mergers		<Not Applicable>		
Change in output		<Not Applicable>		
Change in methodology		<Not Applicable>		
Change in boundary		<Not Applicable>		
Change in physical operating conditions		<Not Applicable>		
Unidentified	9734	Increased	0.54	Our absolute emission increased by 0.54%, change is not substantive and we interpret a fluctuation is due to normal business variation and improved data assurance. Calculation is Total gross Scope 1+2 emissions for the current reporting year - previous year's total gross Scope 1+2 emissions / previous year's total gross Scope 1+2 emissions * 100
Other		<Not Applicable>		

C7.9b

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

Location-based

C8. Energy

C8.1

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

Don't know

C8.2

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

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	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 (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	569628	7277320	7846948
Consumption of purchased or acquired electricity	<Not Applicable>	12670	927544	940214
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>		<Not Applicable>	
Total energy consumption	<Not Applicable>	582298	8204864	8787162

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	No
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)

Animal Fat

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

262423

MWh fuel consumed for self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

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>

Emission factor

0.26649

Unit

kg CO2e per million Btu

Emissions factor source

EPA, "Emission Factors for Greenhouse Gas Inventories," Table 1 Stationary Combustion Emission Factors, March 26, 2020 (<https://www.epa.gov/sites/production/files/2020-04/documents/ghg-emission-factors-hub.pdf>).

Comment

Fuels (excluding feedstocks)

Coal

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

539004

MWh fuel consumed for self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

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>

Emission factor

228.722

Unit

kg CO2e per million Btu

Emissions factor source

EPA, "Emission Factors for Greenhouse Gas Inventories," Table 1 Stationary Combustion Emission Factors, March 26, 2020 (<https://www.epa.gov/sites/production/files/2020-04/documents/ghg-emission-factors-hub.pdf>).

Comment

Fuels (excluding feedstocks)

Wood

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

286366

MWh fuel consumed for self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

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>

Emission factor

12.9455

Unit

kg CO2e per million Btu

Emissions factor source

EPA, "Emission Factors for Greenhouse Gas Inventories," Table 1 Stationary Combustion Emission Factors, March 26, 2020 (<https://www.epa.gov/sites/production/files/2020-04/documents/ghg-emission-factors-hub.pdf>).

Comment

Wood and wood residuals

Fuels (excluding feedstocks)

Diesel

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

58542

MWh fuel consumed for self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

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>

Emission factor

12.14031

Unit

kg CO2e per gallon

Emissions factor source

EPA, "Emission Factors for Greenhouse Gas Inventories," Table 1 Stationary Combustion Emission Factors, March 26, 2020 (<https://www.epa.gov/sites/production/files/2020-04/documents/ghg-emission-factors-hub.pdf>).

Comment

Diesel Light-duty trucks

Fuels (excluding feedstocks)

Diesel

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

423945

MWh fuel consumed for self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

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>

Emission factor

13.57711

Unit

kg CO2e per gallon

Emissions factor source

EPA, "Emission Factors for Greenhouse Gas Inventories," Table 1 Stationary Combustion Emission Factors, March 26, 2020 (<https://www.epa.gov/sites/production/files/2020-04/documents/ghg-emission-factors-hub.pdf>).

Comment

Diesel-Medium-and heavy-duty vehicles

Fuels (excluding feedstocks)

Fuel Oil Number 2

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

1141

MWh fuel consumed for self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

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>

Emission factor

16.8146

Unit

kg CO2e per gallon

Emissions factor source

EPA, "Emission Factors for Greenhouse Gas Inventories," Table 1 Stationary Combustion Emission Factors, March 26, 2020 (<https://www.epa.gov/sites/production/files/2020-04/documents/ghg-emission-factors-hub.pdf>).

Comment

Diesel fuel/Distillate Fuel Oil No. 2

Fuels (excluding feedstocks)

Jet Kerosene

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

27038

MWh fuel consumed for self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

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>

Emission factor

9.75

Unit

kg CO2e per gallon

Emissions factor source

EPA, "Emission Factors for Greenhouse Gas Inventories," Table 1 Stationary Combustion Emission Factors, March 26, 2020 (<https://www.epa.gov/sites/production/files/2020-04/documents/ghg-emission-factors-hub.pdf>).

Comment

Fuels (excluding feedstocks)

Natural Gas

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

6227651

MWh fuel consumed for self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

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>

Emission factor

61.657

Unit

kg CO2e per million Btu

Emissions factor source

EPA, "Emission Factors for Greenhouse Gas Inventories," Table 1 Stationary Combustion Emission Factors, March 26, 2020 (<https://www.epa.gov/sites/production/files/2020-04/documents/ghg-emission-factors-hub.pdf>).

Comment

Fuels (excluding feedstocks)

Biogas

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

20839

MWh fuel consumed for self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

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>

Emission factor

51.9911

Unit

kg CO2e per million Btu

Emissions factor source

Comment

Other Biomass Gases

C8.2d

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

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	47373	12670	34703	12670
Heat	7337422.85	7337422.85	569628	569628
Steam				
Cooling				

C8.2e

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

Sourcing method

None (no purchases of low-carbon electricity, heat, steam or cooling)

Low-carbon technology type

<Not Applicable>

Country/region of consumption of low-carbon electricity, heat, steam or cooling

<Not Applicable>

MWh consumed accounted for at a zero emission factor

<Not Applicable>

Comment

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 third-party verification or assurance

C10.2

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

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

C11. Carbon pricing

C11.1

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

Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

Canada federal fuel charge

Other carbon tax, please specify (Quebec CaT)

Other carbon tax, please specify (Nova Scotia CaT)

C11.1c

(C11.1c) Complete the following table for each of the tax systems you are regulated by.

Canada federal fuel charge

Period start date

January 1 2019

Period end date

December 31 2019

% of total Scope 1 emissions covered by tax

Total cost of tax paid

Comment

Other carbon tax, please specify

Period start date

January 1 2019

Period end date

December 31 2019

% of total Scope 1 emissions covered by tax

Total cost of tax paid

Comment

Quebec CaT

Other carbon tax, please specify

Period start date

January 1 2019

Period end date

December 31 2019

% of total Scope 1 emissions covered by tax

Total cost of tax paid

Comment

Nova Scotia CaT

C11.1d

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

Our strategy would include primarily efficiency upgrades and then purchase of carbon credits as needed. We are in the process of creating an internal carbon price as a tool to help manage future potential carbon costs.

C11.2

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

No

C11.3

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

Yes

C11.3a

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

Objective for implementing an internal carbon price

Drive energy efficiency

GHG Scope

Please select

Application

We would use the existing carbon prices applied through the Carbon Tax or Cap & Trade when evaluating payback for energy efficiency/equipment upgrade projects.

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

Variance of price(s) used

Type of internal carbon price

Please select

Impact & implication

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our customers

C12.1b

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

Type of engagement

Education/information sharing

Details of engagement

Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

% of customers by number

10

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

Portfolio coverage (total or outstanding)

<Not Applicable>

Please explain the rationale for selecting this group of customers and scope of engagement

We have engaged with select customers regarding carbon footprint of our petfood ingredients to determine interest in low-carbon footprint ingredients.

Impact of engagement, including measures of success

We have planted the seed and started customers thinking about this aspect of their finished product and how our low carbon footprint ingredients play a significant role.

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?

Trade associations

Funding research organizations

C12.3b

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

Yes

C12.3c

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

Trade association

North American Renderers Association

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

As Congress continues to consider the implementation of a national cap and trade scheme, the rendering industry should be considered a viable source of emission offsets. Allowing the rendering industry to participate would create financial incentives for farmers and ranchers to properly dispose of dead animals while avoiding additional greenhouse gases, reducing concerns over the spread of disease and freeing up limited landfill space. Also, discriminating against products already recycled through rendering as "not new," but recognizing protocols for placing fallen animals in anaerobic digesters or in landfills to trap and burn off the methane produced as "new" would put rendering at a competitive disadvantage and drive these organic materials to a much less productive and environmentally advantageous end. The result would be awarding offsets for shifting carbon from recycling to disposal with no net reduction (and a probable increase) in greenhouse gas emissions.

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

Yes we support the position of the NARA.

C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund?

Yes

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?

Any such activities, should they occur, are coordinated through our executive leadership team, and/or our Board of Directors, which ensure consistency with our overall climate change strategy.

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

Underway – previous year attached

Attach the document

dar012720_Darling_ESG_Factsheet_print_297x167mm.pdf

Page/Section reference

Sustainability Factsheet pages 1-7

Content elements

Governance
Emissions figures
Other metrics

Comment

Our 2020 ESG Factsheet with 2019 climate related metrics will be due out Sept. 1, 2020, which will include strategy, energy and water intensity targets.

C15. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Vice President Global Communications & Sustainability	Other, please specify (Officer of the Company)

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission
I am submitting my response	Investors	Public

Please confirm below

I have read and accept the applicable Terms