

JBS USA Holding  
Lux S.à.r.l

Limited Assurance Report of  
Scope 1 and 2 Greenhouse Gas  
Emissions Inventory Statement



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### **Independent Practitioners' Limited Assurance Report**

To Board Members and Directors ("Management") of  
JBS USA Holding Lux S.à.r.l

Report on the Scope 1 and 2 Greenhouse Gas Emissions Inventory Statement of JBS USA Holding Lux S.à.r.l ("JBS Lux" or "Company") operations related to the year ended December 31st, 2019. This engagement was conducted by a multidisciplinary team including assurance practitioners and engineers.

#### **Conclusion**

We have performed a limited assurance engagement on whether the Scope 1 and 2 Greenhouse Gas Emissions Inventory Statement and accompanying notes (the "Scope 1 and 2 Greenhouse Gas Emissions Inventory Statement") of JBS USA Holding Lux S.à.r.l for the year ended December 31st, 2019, has been prepared in accordance with the following "Criteria":

- The Greenhouse Gas (GHG) Protocol - Corporate Accounting and Reporting Standard - Revised Edition from WRI (World Resources Institute) and WBCSD (World Business Council for Sustainable Development) - (2004 Revised Edition)
- 2006 IPCC (Intergovernmental Panel on Climate Change) Guidelines for National Greenhouse Gas Inventories
- 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories

Based on the procedures performed and evidence obtained, nothing has come to our attention to cause us to believe that JBS USA Holding Lux S.à.r.l's Scope 1 and 2 Greenhouse Gas Emissions Inventory Statement for the year ended December 31st, 2019 is not prepared, in all material respects, in accordance with the Criteria.

#### **Basis for conclusion**

We conducted our engagement in accordance with International Standard on Assurance Engagements (ISAE) 3410, Assurance Engagements on Greenhouse Gas Statements, issued by the International Auditing and Assurance Standards Board (IAASB) and NBC TO



3410 – Assurance Engagements for Declarations of Greenhouse Gas Emissions (GHG) and Climate Change, issued by the Brazilian Federal Accounting Council, which is equivalent to the ISAE 3410 standard. Our responsibilities under those standards are further described in the “Our responsibilities” section of our report.

We have complied with the Code of Ethics for Accountants and the Professional Standards issued by the Brazilian Federal Council of Accountants, which include independence requirements and other requirements based on the fundamental principles of integrity, objectivity, professional competence and due diligence, confidentiality and professional conduct.

Our firm applies International Standard on Quality Management (ISQM) 1, Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements, issued by the IAASB and Brazilian Standard Quality Management (NBC PA 01) issued by the Brazilian Federal Accounting Council. Those standards requires the firm to design, implement and operate a system of quality management, including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

### **Responsibilities for the Scope 1 and 2 Greenhouse Gas Emissions Inventory Statement**

Management of JBS USA Holding Lux S.à.r.l., are responsible for:

- designing, implementing and maintaining internal control relevant to the preparation of the Scope 1 and 2 Greenhouse Gas Emissions Inventory Statement that are free from material misstatement, whether due to fraud or error;
- selecting or developing suitable criteria for preparing the Scope 1 and 2 Greenhouse Gas Emissions Inventory Statement and appropriately referring to or describing the criteria used; and
- preparing the Scope 1 and 2 Greenhouse Gas Emissions Inventory Statement in accordance with the **Criteria**.



## **Inherent limitations in preparing the Scope 1 and 2 Greenhouse Gas Emissions Inventory Statement**

As described in the Scope 1 and 2 Greenhouse Gas Emissions Inventory Statement, GHG emissions quantification is subject to significant inherent measurement uncertainty because of incomplete scientific knowledge used to determine emissions factors and the values to combine emissions of different gases. Greenhouse gas quantification is unavoidably subject to significant inherent uncertainty as a result of both scientific and estimation uncertainty. Estimation uncertainty can arise because of:

- the inherent uncertainty in quantifying inputs, such as activity data and emission factors, that are used in mathematical models to estimate emissions (measurement uncertainty);
- the inability of such models to precisely and accurately characterise under all circumstances the relationships between various inputs and the resultant emissions (model uncertainty); and
- the fact that uncertainty can increase as emission quantities with different levels of measurement and calculation uncertainty are aggregated (aggregation uncertainty).

The selection by management of a different but acceptable measurement method, input data, or model assumptions, or a different point value within the range of reasonable values produced by the model, could have resulted in materially different amounts or metrics being reported. Furthermore, the information included in the GHG Statement is based on historical information that is both quantitative and qualitative in nature. Accordingly, it does not provide information about future reporting periods.

## **Our responsibilities**

We are responsible for:

- planning and performing the engagement to obtain limited assurance about whether the Scope 1 and 2 Greenhouse Gas Emissions Inventory Statement is free from material misstatement, whether due to fraud or error;
- forming an independent conclusion, based on the procedures we have performed and the evidence we have obtained; and
- reporting our conclusion to the Management of JBS USA Holding Lux S.à.r.l

We exercised professional judgment and maintained professional skepticism throughout the engagement. We designed and performed our procedures to obtain evidence about the Scope 1 and 2 Greenhouse Gas Emissions Inventory Statement that is sufficient and appropriate to provide a basis for our conclusion. Our procedures selected depended on our understanding of the Scope 1 and 2 Greenhouse Gas Emissions Inventory Statement and other engagement circumstances, and our consideration of areas where material misstatements are likely to arise. In carrying out our engagement, we:

- A) Evaluated the suitability in the circumstances of JBS USA Holding Lux S.à.r.l's use of the Criteria, as the basis for preparing the sustainability information;



- B) Through inquiries, obtained an understanding of JBS USA Holding Lux S.à.r.l's control environment, processes and information systems relevant to the preparation of the sustainability information, but did not evaluate the design of particular control activities, obtain evidence about their implementation or test their operating effectiveness;
- C) Evaluated whether JBS USA Holding Lux S.à.r.l's methods for developing estimates are appropriate and had been consistently applied, but our procedures did not include testing the data on which the estimates are based or separately developing our own estimates against which to evaluate JBS USA Holding Lux S.à.r.l's estimates;
- D) Undertook site visits at three of JBS USA Holding Lux S.à.r.l's ninety-eight manufacturing sites and one administrative site; we selected these sites based on the contribution of the site sustainability information to the aggregate sustainability information, and include an site as unexpected random sample to visit;
- E) Inspected, at each site visited, a limited number of items to or from supporting records, as appropriate;
- F) Considered the presentation and disclosure of the sustainability information; and
- G) Reperform the calculation data of greenhouse gas emissions taking into consideration Scope 1 (direct greenhouse gas emissions) and Scope 2 (indirect greenhouse gas emissions from energy purchased using the location-based and market-based methods).

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

São Paulo, April 4, 2024

KPMG Assurance Services Ltda.

CRC 2SP023228/O-4

Sebastian Yoshizato Soares  
Accountant CRC 1SP257710/O-4

# Attachment I - Scope 1 and 2 Greenhouse Gas Emissions Inventory Statement



Monitoring Year  
2019

# Scope 1 and 2 Greenhouse Gas Emissions Inventory Statement

**JBS USA Holding Lux  
S.à.r.l**

1770 Promontory Circle

Greeley, CO – USA – 80634

## OVERVIEW

As a major focus area, JBS USA Holding Lux S.à.r.l (“JBS USA”) is dedicated to improving our collection, and calculation of greenhouse gas (GHG) emissions. The following GHG data are included in the assurance scope where JBS USA intends to use this GHG data in future corporate sustainability reporting.

JBS USA collects, calculates, and reports GHG emissions in accordance with *The Greenhouse Gas (GHG) Protocol – Corporate Accounting and Reporting Standard – Revised Edition* from the World Resource Institute (WRI) and WBCSD (World Business Council for Sustainable Development) – (2004 Revised Edition) and using the criteria included in Appendix 1.

### 2019 Market-Based Emissions (Metric Tons of CO<sub>2</sub>e):

Business Unit	Scope 1	Scope 2	Total Scope 1 and 2
JBS USA - USA	889,736	540,745	1,430,481
JBS USA - Canada	188,073	47,700	235,773
JBS USA - Australia & New Zealand	863,848	283,363	1,147,211
<b>Total Emissions</b>	<b>1,941,657</b>	<b>871,808</b>	<b>2,813,465</b>

Totals may not match due to rounding.

### 2019 Location-Based Emissions (Metric Tons of CO<sub>2</sub>e):

Business Unit	Scope 1	Scope 2	Total Scope 1 and 2
JBS USA - USA	889,736	604,005	1,493,741
JBS USA - Canada	188,073	47,700	235,773
JBS USA - Australia & New Zealand	863,848	283,363	1,147,211
<b>Total Emissions</b>	<b>1,941,657</b>	<b>935,068</b>	<b>2,876,725</b>

Totals may not match due to rounding.

## APPENDIX I

- JBS USA has selected the Operational Control Approach to define our organizational boundaries for GHG reporting.

- JBS USA reports scope 1 emissions including stationary fuel combustion, mobile combustion, refrigerants, process – industrial CO<sub>2</sub>, wastewater, agriculture (manure management and enteric fermentation), and fertilizer emissions.
- JBS USA reports scope 2 emissions using the location-based and the market-based approach including purchased electricity, heat, and steam.
- For market-based scope 2 emissions, contractual energy purchases or instruments recognized by Greenhouse Gas Protocol are considered in this analysis. When available scope 2 emissions are calculated using supplier-based or residual mix emission factors, otherwise if unavailable JBS USA uses the location-based emission factors associated with our given regions.
- Negligible sources of emissions equivalent to less than 1% of the total JBS USA Scope 1 and 2 emissions may not be included.
- Emissions data is collected for CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and refrigerant gases in metric tons and is converted into metric tons of CO<sub>2</sub> equivalent (tCO<sub>2</sub>e) using global warming potentials set by the United Nations Intergovernmental Panel on Climate Change (IPCC) in their Fourth Assessment Report (AR4) and Fifth Assessment Report (AR5).
- Based on GHG Protocol, biogenic emissions are to be accounted for separately from the scopes' inventory and therefore are not included herein.
- In addition to GHG Protocol, JBS USA follows the 2006 IPCC (Intergovernmental Panel on Climate Change) Guidelines for National Greenhouse Gas Inventories, 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, as well criteria set forth by the US Environmental Protection Agency (EPA).
- GHG emissions quantification is subject to significant inherent measurement uncertainty because of incomplete scientific knowledge used to determine emissions factors and the values to combine emissions of different gases. Greenhouse gas quantification is unavoidably subject to significant inherent uncertainty because of both scientific and estimation uncertainty. Estimation uncertainty can arise because of:
  - The inherent uncertainty in quantifying inputs, such as activity data and emission factors, that are used in mathematical models to estimate emissions (measurement uncertainty).
  - The inability of such models to characterize under all circumstances the relationships precisely and accurately between various inputs and the resultant emissions (model uncertainty).
  - The fact that uncertainty can increase as emission quantities with different levels of measurement and calculation uncertainty are aggregated (aggregation uncertainty).
  - Lastly, the selection by management of a different but acceptable measurement method, input data, or model assumptions, or a different point value within the range of reasonable values produced by the model, could have resulted in materially different amounts or metrics being reported. Furthermore, the information included in the GHG Statement is based on historical information that is both quantitative and qualitative in nature. Accordingly, it does not provide information about future reporting periods.