

JBS S.A.

Limited Assurance Report on  
Scope 3 Greenhouse Gas  
Emissions Inventory Statement



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

To the Board of Directors and Shareholders of  
JBS S.A.

Report on the Scope 3 Greenhouse Gas Emissions (GHG) Inventory Statement of JBS S.A. ("the Company") for the year ended December 31, 2021. 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 3 Greenhouse Gas Emissions Inventory Statement and accompanying notes (the "Scope 3 Greenhouse Gas Emissions Inventory Statement") of JBS S.A. for the year ended December 31st, 2021 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 S.A.'s Scope 3 Greenhouse Gas Emissions Inventory Statement for the year ended December 31, 2021 was 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 require 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 3 Greenhouse Gas Emissions Inventory Statement**

The management of JBS S.A., are responsible for:

- designing, implementing and maintaining internal control relevant to the preparation of the Scope 3 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 3 Greenhouse Gas Emissions Inventory Statement and appropriately referring to or describing the criteria used;
- preparing the Scope 3 Greenhouse Gas Emissions Inventory Statement related to the year ended December 31, 2021 in accordance with the Criteria;

### **Inherent limitations in preparing the Scope 3 Greenhouse Gas Emissions Inventory Statement**

As described in the Scope 3 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);



- the fact that uncertainty can increase as emission quantities with different levels of measurement and calculation uncertainty are aggregated (aggregation uncertainty); and
- inherent uncertainty due to incomplete scientific knowledge used to determine emission factors and values that are needed to combine emissions of different gases.

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 3 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 S.A.

We exercised professional judgment and maintained professional skepticism throughout the engagement. We designed and performed our procedures to obtain evidence about the Scope 3 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 3 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 of JBS S.A.'s use of the Criteria, as the basis for preparing the sustainability information;
- B) Through inquiries, obtained an understanding of JBS S.A.'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 S.A.'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 S.A.'s estimates;



- D) We conducted visits to three administrative units, taking into consideration which business units are the most representative in terms of emissions, as follows:

Company	Site	Type
JBS S.A. BRAZIL	São Paulo - SP Corporativo	Corporate
JBS USA Holding Lux S.A.R.L and Pilgrim's Pride Corporation	Greeley, CO - Corporate	Corporate
JBS USA Holding Lux S.A.R.L	Australia - Corporate	Corporate

- 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;
- G) Reperform the calculation data of greenhouse gas emissions taking into consideration Scope 3 and;

The procedures performed in a limited assurance engagement vary in nature and timing from and are less exhaustive than those used in 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, February 28, 2025

KPMG Assessores Ltda.

  
Sebastian Yoshizato Soares  
Accountant CRC 1SP257710/O-4



Monitoring Year  
2021

# Scope 3 Greenhouse Gas Emissions Inventory Statement

**JBS SA**

1770 Promontory Circle

Greeley, CO – USA – 80634

Date: February 28, 2025

## OVERVIEW

As a major focus area, JBS SA (“JBS”) 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 intends to use this GHG data in future corporate sustainability reporting.

JBS 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.

### 2021 Scope 3 Emissions (Metric Tons of CO<sub>2</sub>e):

	JBS Brazil	JBS USA + Canada	JBS Australia	Pilgrims US	Pilgrims Mexico	Pilgrims Moy Park	Pilgrims UK	Pilgrims Food Masters	Consolidated JBS Global (JBS S.A.)
<b>Scope 3</b>	<b>60,077,249</b>	<b>51,159,618</b>	<b>20,920,967</b>	<b>9,689,965</b>	<b>1,726,651</b>	<b>4,812,333</b>	<b>2,773,447</b>	<b>1,057,321</b>	<b>152,217,551</b>
Category 1	56,035,980	46,434,396	18,264,970	6,769,275	1,255,957	3,905,930	1,974,103	817,857	135,458,468
Category 2	225,526	149,485	22,233	189,146	7,093	18,888	25,136	8,176	645,683
Category 3	129,123	278,345	48,953	241,398	62,757	34,417	12,958	11,186	819,138
Category 4	1,550,820	1,225,011	784,853	576,973	139,184	142,674	16,777	50,897	4,487,189
Category 5	201,005	80,279	8,433	12,038	51,550	8,995	527	5,238	368,065
Category 6	2,401	2,514	414	1,094	331	722	683	2,593	10,752
Category 7	55,229	48,464	40,606	34,543	5,146	4,843	2,941	1,670	193,442
Category 8	-	-	75,970	-	-	-	260	-	76,230
Category 9	1,550,820	830,898	873,415	326,702	159,533	253,395	48,521	85,534	4,128,819
Category 10	9,498	817,670	221,659	26,348	1,835	95,360	136,680	9,441	1,318,491
Category 11	5,085	641,358	490,247	1,119,438	25,687	322,556	532,682	27,765	3,164,818
Category 12	311,762	651,197	60,631	393,010	17,578	24,553	22,179	36,964	1,517,873
Category 15	-	-	28,583	-	-	-	-	-	28,583

Totals may not match due to rounding

## APPENDIX I

- The standards or protocols for calculating land use change emissions associated with the raising of livestock are still a matter of scientific and academic debate. The current application of a global methodology to discrete locations was found by JBS to exceed an acceptable margin of error. As such, JBS has not included these emissions in this inventory assurance. However, JBS is currently working diligently with academic experts to develop reliable solutions and methods for estimating these emissions from our supply chain and help improve the accuracy of these emissions calculations.
- JBS has selected the Operational Control Approach to define our organizational boundaries for GHG reporting.
- JBS reports the following scope 3 categories including Category 1: Purchased goods and services, Category 2: Capital goods, Category 3: Fuel- and energy-related activities, Category 4: Upstream transportation and distribution, Category 5: Waste generated in operations, Category 6: Business travel, Category 7: Employee commuting, Category 8: Upstream leased assets, Category 9: Downstream transport, Category 10: Processing of sold products, Category 11: Use of sold products, Category 12: End of life treatment of sold products, and Category 15: Investments.
- Category 13: Downstream leased assets and Category 14: Franchises were not applicable to JBS hence these two categories were not included herein.
- Negligible sources of emissions equivalent to less than 1% of the total JBS Scope 3 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 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 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 our respective government agencies.
- 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.