JBS has excelled in different scenarios, using a clear strategy of diversifying its business and geographic locations, with a strong commitment across the entire food industry production chain and with a varied portfolio of brands and products.

**With locations in 15 countries across a global production and distribution platform, JBS has over 400 production units and offices on five continents – the Americas, Asia, Europe, Africa and Oceania – serving over 275,000 customers in more than 190 countries worldwide, while meeting consumer needs, aligned with local cultures and with operational flexibility in each market.**

From the standpoint of sustainable management, one of the main goals at JBS is to ensure the most efficient allocation of capital. That is why our aim throughout this publication is to discuss the factors that allow the Company to generate social, environmental and economic value.

The aim of this Annual and Sustainability Report is to provide updates on how the Company conducts business and carries out its mission of ensuring the best products and services for customers, a relationship of trust with our suppliers, profitability for our shareholders and the opportunity for a better future for all of our team members.

In line with its operations, JBS recognizes the importance of an open dialog with stakeholders across the many sectors of the production chain. That is why the Company has restructured the report to provide updates by business unit. In chapters 1 and 2, the reader will find global information on best practices adopted and comprehensive results achieved. Content in chapter 3 is more specific to each business. This will make it possible to open up space for a discussion that allows for a closer reading of each topic: description of activity, operational performance, sustainable practices, animal welfare and product integrity. Major themes, such as quality, innovation, savings, productivity, competitiveness, sustainability and governance, will therefore be discussed.

Accounting results follow the International Financial Reporting Standards (IFRS), issued by the International Accounting Standards Board (IASB), and are prepared by Grant Thornton Auditores Independentes.

Comments, suggestions, questions or criticism can be sent by e-mail to annual.report@jbs.com.br. The Investor Relations area can be reached by phone at +55 (11) 3144-4224 and by e-mail at ir@jbs.com.br, while the Sustainability area can be contacted by e-mail at sustainability@jbs.com.br.
The certainty that comes from the right choices

In recent years, I’ve had the great satisfaction of sharing in the results and advancements at JBS, especially the progress we’ve made in our sustainability policies and practices. In a year as fertile and victorious as 2019 was, this satisfaction is even greater.

Personally, being part of this story and helping to tell it at every possible chance, as in this sustainability report, is cause for joy.

These results reflect the accuracy of our strategy as a global food platform and the decision to continually invest in developing and producing a wide-ranging portfolio of products and brands while growing the share of value-added products.

These achievements and the entire evolution of JBS are sustained by deep roots that are translated into our Values. From the start, we’ve always acted according to Simplicity and Humility, while also using an Attitude of Ownership and applying a strong sense of Determination and Discipline to deal with challenges. When these attitudes are multiplied by our over 240,000 team members, this becomes a powerful competitive edge, with the certainty that major goals will be reached.

Among the multiple aspects at the core of our action and performance, two are particularly strengthened by this collective vision: sustainability and innovation.

In sustainability, we are extremely proud of our role in helping to feed billions of people around the world. To do this, we have undertaken a commitment to produce food with the least possible environmental impact and by efficiently using resources - this has not only helped to make JBS a benchmark in multiple respects, but also a leader in advancing practices in this sector.

Our sustainability activities work with three lines of action: a focus on what we can influence directly, leadership in transformative actions in our supply chain and the continued evolution of our activities.

Focused on the sustainability of our business, we have made significant investments in compliance, in developing systems and processes, and in reinforcing a culture of compliance, with the belief that each team member serves to multiply good practices. Our growth in this area is evident in the implementation of a due diligence system, developed by the Company in partnership with an international consulting firm to assess supplier reputation. In the last year, we have done over 9,000 analyses using this system, making partner contracts more reliable. Also worth highlighting is our team’s total involvement - over 45,000 training hours were spent on compliance practices in Brazil, with dozens of specific actions for leadership worldwide in 2019.

Innovation has been fundamental to our growth strategy and to improving margin. Management of a global innovation platform allows us to monitor trends and leverage innovations in every region where we operate. From our day-to-day operations to building a portfolio that serves the needs of customers and consumers around the world, we invest in sharing knowledge and accelerating adoption of best international practices.

When combined, all of these elements form the base of our operational excellence, which is, in turn, converted into results. Financially, these achievements are represented by net revenue of R$204.5 billion, EBITDA of R$19.9 billion and free cash flow of R$9.5 billion. Over the year, we brought our financial leverage in US dollars down to 2.15x.

The solidity of these numbers has provided us with the ability to make substantial investments in advancing our strategy - as is the case with Pilgrim’s acquisition of Tulip in Europe in the second semester of 2019 and Seara’s acquisition in Brazil of Marba and Bunge, established producers of mortadella and margarine, respectively.

The performance JBS has attained creates value across the value chain and in Company relationships with team members, integrated producers, farmers and other suppliers, as well as with customers, consumers and the communities where JBS is found, in a business partnership offering opportunities for growth and development for everyone.

As a leader, we are especially pleased to see our team fulfilling our mission every day of producing food with passion, quality and humility, seeking to be better and better at what we do.

This message could end no other way but with thanks to all of those who have helped along the way, particularly our team members, producers and business partners. Successfully confronting the challenge of providing sustainable food solutions to millions of consumers around the world is only possible through the commitment and determination of these people.

Finally, on behalf of the JBS team, I would like to thank you for your interest in learning more about JBS and our perspectives for guaranteeing growing, sustainable and innovative production over the coming years.

Enjoy your reading!
The success of JBS over recent years, particularly in 2019, has come with constant evolution in the Company’s management.

The Board of Directors is honored to play the role of supporting a company like JBS, which has made significant progress in matters beyond economic and financial aspects.

Over the last year, we have closely monitored growth in the Company’s global Compliance program and enhancement of risk control management, in addition to ESG initiatives focused on rural sustainability, while remaining focused on social and governance issues.

JBS is already skilled at allocating the right people to the right places, with the autonomy to make decisions. Yet defining clear roles and responsibilities for management was also an important part of the process of consolidating governance at the Company. This has contributed to the Company’s excellent performance in its global operations.

In this sense, the role of the JBS Board of Directors is to oversee and support the executive board in complying with the guidelines and policies that keep the Company’s growth in line with its purpose and values. Board members’ diverse career experiences add to building harmonious and relevant work, with active participation by the various committees supporting the Board of Directors.

By achieving an increasingly relevant global position, JBS is reaffirming its commitment to an efficient strategy, with a global platform diversified by geography and protein types, which ensures flexibility and guarantees adaptation to market demands.

For 2020, our dedication to an agenda of enhancement will remain firm, aimed at guaranteeing that year after year JBS continues to exceed market expectations and make a difference to its partners, customers, consumers, team members and shareholders around the world.

The challenge of continuing to move forward
### The year's highlights

**R $698.82 million** was invested in topics related to environmental stewardship.

CDP results for 2019 position JBS as one of the best companies in its sector in all aspects measured: *Climate Change, Water Security, Forests, Livestock, Soy and Timber Products.*

Over **105,000** team members underwent safety training.

**R $930.8 million** was invested in food quality and safety, with over **2,460 people** trained.

Approval of the **Global Policy on Conflicts of Interest** implemented worldwide. Approval and implementation of the **Anti-Corruption Policy** is set for 2020.

#### In Brazil

In Brazil, the number of team members with leave due to accident who registered with the **Social Security system** was down by **24.2%**

**116,645 people** were trained in the **Code of Conduct and Ethics,** which comprises **98.4%** of the JBS team in Brazil, with **37,432 hours** of training.

**R $698.86 million** was invested globally in health and safety, up **133%** year-over-year.

**R $59.6 million** was put toward energy efficiency projects.

**137,165 people** were trained in development programs, **11%** more than in 2018.

JBS monitors an area of **450,000 km²** in the Amazon, to guarantee the origin of raw materials sourced from cattle suppliers.

**R $32 million** was globally invested in social responsibility and sponsorships.

Due diligence **9,486 analyses** were done by JBS software.

Global investments in innovation surpassed **R $120.5 million.**

Animal welfare: **R $474,712,791** invested and **19,542 people** trained.

16,075 professionals in the administrative area of JBS in Brazil, representing **94%** of total administrative staff, received anti-corruption training, with **8,084 hours** of training.

Over **1 million tons** of waste were reused, with 121,000 metric tons to generate energy.

**3.9%** drop in water consumption per ton of product

**R $129 million** invested in wastewater treatment.

Global investments by JBS in sustainability totaled **R $1.90 billion.**

The Incredible Seara range made Seara Brazil's first major food company to offer a complete range of products made with **100% plant-based protein.**

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### Main indicators

#### Financial and economic indicators - R$ millions

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<tbody>
<tr>
<td><strong>Net operating revenue</strong></td>
<td>204,523.6</td>
<td>181,680.2</td>
<td>163,170.0</td>
<td>170,380.5</td>
<td>162,914.5</td>
</tr>
<tr>
<td><strong>Cost of products sold</strong></td>
<td>172,977.2</td>
<td>155,540.1</td>
<td>139,597.7</td>
<td>140,066.7</td>
<td>140,524.2</td>
</tr>
<tr>
<td><strong>Gross earnings</strong></td>
<td>31,946.4</td>
<td>26,340.2</td>
<td>23,772.2</td>
<td>21,313.8</td>
<td>22,590.2</td>
</tr>
<tr>
<td><strong>Gross margin</strong></td>
<td>15.6%</td>
<td>14.5%</td>
<td>14.6%</td>
<td>12.5%</td>
<td>13.9%</td>
</tr>
<tr>
<td><strong>EBITDA</strong></td>
<td>19,881.1</td>
<td>14,849.8</td>
<td>13,415.9</td>
<td>11,286.9</td>
<td>13,300.4</td>
</tr>
<tr>
<td><strong>EBITDA margin</strong></td>
<td>9.7%</td>
<td>8.2%</td>
<td>8.2%</td>
<td>6.6%</td>
<td>8.2%</td>
</tr>
<tr>
<td><strong>Net earnings</strong></td>
<td>6,068.4</td>
<td>25.2</td>
<td>534.2</td>
<td>233.6</td>
<td>4,640.1</td>
</tr>
<tr>
<td><strong>Net margin</strong></td>
<td>3.0%</td>
<td>0.0%</td>
<td>0.3%</td>
<td>0.1%</td>
<td>2.8%</td>
</tr>
<tr>
<td><strong>Investments</strong></td>
<td>5,854.5</td>
<td>1,742.7</td>
<td>2,426.4</td>
<td>3,649.0</td>
<td>5,637.9</td>
</tr>
<tr>
<td><strong>Net debt</strong></td>
<td>42,994.1</td>
<td>47,217.7</td>
<td>45,283.3</td>
<td>46,904.8</td>
<td>47,038.7</td>
</tr>
<tr>
<td><strong>Operational cash flow</strong></td>
<td>17,098.4</td>
<td>11,466.6</td>
<td>8,698.4</td>
<td>3,667.4</td>
<td>7,384.8</td>
</tr>
<tr>
<td><strong>Free cash flow</strong></td>
<td>9,502.7</td>
<td>4,545.6</td>
<td>2,092.0</td>
<td>14.4</td>
<td>1,746.9</td>
</tr>
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#### Social environmental indicators

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<tbody>
<tr>
<td><strong>Number of team members</strong></td>
<td>242,105</td>
<td>250,086</td>
<td>235,787</td>
<td>227,060</td>
<td>227,368</td>
</tr>
<tr>
<td><strong>Total GHG emissions, by weight (tCO2e) - Scope 1</strong></td>
<td>4,935,547.51</td>
<td>4,379,331.82</td>
<td>5,504,609.52*</td>
<td>6,553,358.36</td>
<td>4,445,098.00</td>
</tr>
<tr>
<td><strong>Total GHG emissions, by weight (tCO2e) - Scope 2</strong></td>
<td>1,615,477.85</td>
<td>1,550,526.56*</td>
<td>1,780,515.80*</td>
<td>1,814,793.76</td>
<td>1,779,980.77</td>
</tr>
<tr>
<td><strong>Volume of water captured (thousands of m³)</strong></td>
<td>174,973.80</td>
<td>176,125.68*</td>
<td>180,396.18*</td>
<td>190,961.16</td>
<td>165,606.02</td>
</tr>
<tr>
<td><strong>Investments in environmental stewardship and improvements (R$ millions)</strong></td>
<td>698.82</td>
<td>721.10</td>
<td>806.50</td>
<td>855.20</td>
<td>716.60</td>
</tr>
</tbody>
</table>

* Revised numbers in relation to the last report.
JBS is the largest animal protein company and second largest food company in the world. Because of its global production platform diversified by geographic location and protein types, the Company has greater access to raw materials.

Working to process animal protein and value-added products in the beef, pork, lamb and poultry segments, the Company also operates related businesses, such as leather, biodiesel, personal care and cleaning, solid waste management solutions, and metal packaging.

With locations in 15 countries and over 400 production units and commercial offices on five continents (the Americas, Asia, Europe, Africa and Oceania), JBS serves around 275,000 customers, in over 190 countries, ranging from supermarket chains to small retailers, wholesale clubs and food service companies.

With over 240,000 team members, the same sustainability (economic, social and environmental), innovation, quality and food safety guidelines are followed in every region, adopting best practices based on the Company’s mission and values and a focus on operational excellence.

JBS has a widely diversified product portfolio, from fresh and frozen meats to ready-to-eat (prepared) dishes, with leading brands that are recognized for excellence and innovation in-market, such as Friboi, Just Bare, Pilgrim’s Pride, Plumrose, Primo, Seara and Swift.

Company operations in the United States, Australia, Canada, Mexico, Puerto Rico, the United Kingdom and mainland Europe are controlled by JBS USA, which includes the JBS USA Beef, JBS USA Pork and Pilgrim’s Pride Corporation (holder of the Moy Park and Tulip operations, with production units in the United Kingdom, France, the Netherlands and Ireland) business units. See more at https://sustainability.jbssa.com/chapters/who-we-are/about-our-company/.

In Brazil, the Company develops beef, poultry, pork and prepared food businesses, split among the Friboi and Seara brands. Friboi has 37 production units and five feedlots spread throughout regions with intensive livestock farming, guaranteeing broad access to raw material.

As the best-selling Brazilian beef brand in the foreign market, Friboi product offerings serve a wide variety of consumer profiles and needs, such as the eponymous Friboi, Reserva Friboi, Do Chef Friboi, Maturatta Friboi, 1953 Friboi, Bordon and Anglo, among others.

Seara is the country’s second largest chicken and pork meat producer and exporter. It has 30 poultry and eight pork processing plants, in addition to 20 prepared foods units.

Seara products are sold under brands that are widely recognized for their quality, notable among which are Seara, Seara Gourmet, Incrível Seara, Seara Nature, Rezende, LeBon, Doriana, Agrovêneto, Massa Leve, Excelsior, Frangosul, Confiança, Pena Branca, Marba, Wilson, and Macedo.

The brand is also exported to more than 100 countries, especially in the Middle East, Europe and Asia.

Aligned with the strategy of adding value to the production chain, JBS Brasil is found in the leather segment, where it is a global leader, which currently has 21 production units and three cutting units, with a production capacity of 84,000 hides daily in Brazil, Argentina, Uruguay, Vietnam, Germany, Italy, USA and Mexico.

JBS also has related businesses in the food sector. In Brazil, through JBS Novos Negócios, there are 11 business units which mostly use by-products – including biodiesel, collagen, pharmaceutical inputs, personal care and cleaning items, animal nutrition ingredients and natural casings. JBS Novos Negócios also offers complementary services and products to the Company’s value chain, such as metal packaging, trading, environmental management solutions and transportation services.

Headquarters in São Paulo (SP)
Mission and Values

OUR MISSION
To be the best in all that we do, completely focused on our business, ensuring the best products and services for customers, a relationship of trust with our suppliers, profitability for our shareholders and the opportunity of a better future for all of our team members.

OUR BELIEFS:
- Focus on details
- Take a hands-on approach
- Our achievements are based on hard work
- The right person in the right place
- Passion for what we do
- Attitude is more important than knowledge
- Leaders must gain their team’s trust
- Lead by example
- Focus on results
- Work with people better than us
- Belief makes the difference
- Product quality

OUR VALUES:
- Ownership
- Determination
- Discipline
- Availability
- Simplicity
- Sincerity
- Humility

Sônia Maria C. Monteiro (Feed plant), Ederson Rodrigo Blanc (JBS Transportadora) e Eder José da Rosa (deli meats)
Team members at the Montenegro unit (RS)
Global operations and business strategy

Locations in 15 countries and over 400 production units and commercial properties on five continents (the Americas, Asia, Europe, Africa and Oceania).

3% CANADA
48% UNITED STATES
4% MEXICO
14% BRAZIL
1% SOUTH AMERICA
3% AFRICA AND MIDDLE EAST
3% AUSTRALIA AND NEW ZEALAND
17% ASIA
7% EUROPE
Aimed at enhancing the governance structure and assuring transparency in all relations, JBS continually promotes refinement of its corporate practices, creating an environment of trust with shareholders, investors and other stakeholders.

The governance structure at JBS is made up of the Board of Directors, the Global Compliance Department, a permanent Fiscal Council and advisory committees to the Board of Directors, who focus on specific topics including sustainability, auditing, financial and risk management, governance and stakeholders.

There are also three strategic areas, reporting directly to the Global CEO: Food Safety and Quality; Global Sourcing; Human Resources and Center of Excellence; and Innovation.

The Board of Directors is the Company’s highest governance body. At the end of 2019, there were nine members serving on the board, including four independent members, which is above the minimum set forth in regulations for the B3 Novo Mercado – the segment in which JBS shares are traded, which contains companies committed to compliance with corporate governance practices beyond those required by law. Board members are elected at a general shareholders’ meeting to serve unified two-year terms and they are responsible for determining business policies and guidelines as well as economic, social and environmental commitments, among other matters.

The Company’s Chairman of the Board and CEO, positions held by different people, both receive fixed monthly compensation based on their job performance. No payments are made by way of direct or indirect benefits or profit sharing. Compensation for other leadership positions at JBS is based on performance indicators, in an effort to encourage sustainable growth of the organization in the medium and long term, while also reaching short-term targets. Pay is periodically compared with market practices, and in line with the interests of the Company and its shareholders.

**Shareholder and corporate structure**

Last updated on December 31, 2019

- **39.78%** Controlling Group (J&F + Formosa)
- **2.33%** Treasury shares
- **36.57%** Other minority shareholders
- **21.32%** Brazilian Development Bank (BNDES)

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Headquarters in São Paulo (SP)
While Novo Mercado rules stipulate that 20% of board members be independent, independent members make up 44.4% of the Company’s Board of Directors. Moreover, the Company’s capital consists solely of common shares, giving all shareholders equal rights, with tag-along rights given to all in the event of transfer of Company control.

**JBS shares are included in the theoretical portfolios of the following B3 indices:**

- Special Corporate Governance Stock Index (IGC)
- Special Tag-Along Stock Index (ITAG)
- Brazil 100 Index (IBrX 100)
- Brazil 50 Index (IBrX 50)
- Brazil Broad-Based Index (IBra)
- Carbon Efficient Index (ICO2)
- BM&FBovespa Consumer Stock Index (Icon)
- Valor BM&FBovespa Index (IVBX-2)
- MidLargeCap Index (MLCX)
- Corporate Governance Trade Index (IGCT)
- Novo Mercado Corporate Governance Equity Index (IGC-NM)
- BM&FBovespa Industrials Index (INDX)
- Ibovespa Index

1 The Company ceased to be part of the Valor BM & FBovespa (IVBX-2) index in January 2020.

In the United States, JBS shares are traded on the OTCQX over-the-counter market as Level I American Depositary Receipts (ADRs). The Company communicates with shareholders and investors through the Investor Relations area, which has its own website (https://ri.jbs.com.br/en/) and periodically releases results, through phone conferences and events with members of the capital markets and specialized media outlets.

Total subscribed and paid-in capital is **R$ 23,572.6 million**, divided into **2,728,747,412 common shares**. Each common share equals one vote in General Shareholder Meeting resolutions.
General Shareholder Meeting

As the highest body in the Governance structure, it holds powers to decide on Company business and propose solutions that are suited to its development. Members meet annually as well as on an ad hoc basis as necessary, to elect members to the Board of Directors, consider accounts submitted by administrators and financial statements, decide on disbursement of the fiscal year’s net income and distribution of dividends, among other matters.

Board of Executive Officers

This body is responsible for conducting the general business of JBS as well as for deliberative processes and implementation of policies and guidelines, as periodically established by the Board of Directors. Members of the Board of Executive Officers are elected by the Board of Directors to serve three-year reelectable terms. The Board of Executive Officers may remove any director at any time, with or without cause. Pursuant to Law 6.404/76, directors must reside in Brazil, but they need not be Company shareholders. The JBS Board of Executive Officers meets whenever called by the Chief Executive Officer or by the majority of its members.

Fiscal Council

This is an independent management body of external auditors, which is able to function in both permanent and non-permanent capacities. The Fiscal Council is responsible for monitoring management activities, providing opinions on proposals made by administration bodies for submission to the General Shareholder Meeting for consideration, examination of accounting statements, and reporting to administrative bodies and the General Shareholder Meeting of any errors, fraud or crimes it discovers.

On December 31, 2019, the members of the Board of Executive Officers were:

- Gilberto Tomazoni: Chief Executive Officer
- Jeremiah O’Callaghan: Director without a specific designation
- Eliseo Santiago Perez Fernandez: Director of Administration and Control
- Guilherme Perboye Cavalcante: Chief Financial Officer and Investor Relations Officer
- Wesley Mendonça Batista Filho: Director without a specific designation

Board of Directors

There are currently nine members serving on the JBS Board of Directors: one president, one vice president, three permanent directors without a specific title and four independent directors. During periods of absence or temporary unavailability of the president, the president’s activities will be performed by another member of the Board of Directors, as appointed by the president.

The Company’s Board of Directors is the body responsible for, among other matters, establishing policies and guidelines for the businesses and their implementation by the Board of Executive Officers. According to Law 6.404/76, the Board of Directors is also responsible for hiring independent auditors.

In this first year serving on the Board of Directors, I have found JBS to be a company with excellent managerial competency and which holds quality as a fundamental tenet of its operations. The Company is experiencing a cycle of major possibilities to evolve in various dimensions and its main strength is its corporate culture: the people in contact with me during this time convey engagement and enthusiasm.

One of the Board’s main areas of focus in 2019 was appropriate and fundamental oversight of environmental, social and governance actions and policies.

José Guimarães Monforte
partner at Emax Consultoria and a member of the Board of Directors since April 2019

The members of the Board of Directors are elected at the general shareholder meeting to a unified two-year term and are eligible for reelection. They are also subject to removal at any time, with or without cause, at a general shareholder meeting. JBS does not elect alternate members to the board.

The Board of Directors meets once each quarter and at any time when an extraordinary meeting is called by the president or by any other member. Each board member is entitled to vote on this body’s resolutions, which are made through a majority of votes.
Board of Directors Committees

Sustainability Committee
Advises the Board of Directors in relation to sustainability risks and opportunities. Accordingly, the committee is responsible for connecting all topics related to the company's business in a global perspective, including: identification, addressing and treatment of critical issues that result in risks or impacts on business; monitoring and implementation of policies, strategies and specific initiatives; and evaluation of proposed sustainability investments. There are four members on the Committee.

Audit Committee
Advises the Board of Directors on the norms, rules and procedures for disclosure and transparency of Financial Statements, in addition to being responsible for evaluating the performance of internal control systems and internal and external audits. The Audit Committee reviews the work conducted by the internal audit team on an annual basis and approves guidelines and action plans for the current year. There are three members on the Committee.

Financial and Risk Management Committee
Assists the Board of Directors and Executive Officers in analyzing the impacts of the global economic scenario on JBS's financial policy. The Committee acts in order to improve rules and procedures for the control and management of market and credit risks, in addition to helping mitigate other risks to which the company is naturally exposed. There are four members on the Committee.

Compensation and Governance Committee
An internal advisory body, plays a technical role aimed at implementing practices and policies based on the highest international standards of corporate governance and compliance, in addition to monitoring compliance by the company with these practices and policies. There are three members on the Committee.

Related Parties Committee
Aims to ensure that the transactions of JBS and its subsidiaries and affiliates, involving related parties are performed taking into account the best interest of the company, under normal market conditions, negotiated independently, through a transparent and ethical process, in accordance with current laws and on terms not less favorable to the company than a transaction held with third parties that are not considered related parties, under the same circumstances or in similar scenarios. There are three members on the Committee.

Jeremiah O'Callaghan
Chairman
Having worked in the meat industry since 1983, he is a specialist in global trade strategies for the sector. He started at JBS in 1996, developing the International Business area. For 10 years, he served as the Director of Investor Relations at JBS, representing the company with its local and international investors and stakeholders.

José Batista Sobrinho
Vice President
The Board’s current Vice President, he is one of the founders of JBS and has over 50 years of experience in beef production development at the Company. He also currently serves as an effective member of the Board of Directors for the Eldorado Brasil Celulose S.A. company.

Aguinaldo Gomes Ramos Filho
Member
With experience in the beef sector in Brazil and Latin America, he began his career with the Friboi sales team. He has led operations at JBS Uruguay and JBS Paraguay, where he spearheaded the project to build Latin America’s most modern meatpacking plant. He is now the CEO at VL Participações, which operates in agribusiness.

Gilberto Meirelles
Xandó Baptista
Member
With his significant multidisciplinary experience, he developed a career in the Finance, Control, Trade Marketing, Marketing, Sales (Brazilian and Foreign) and Business Unit Management areas at the Natura, Sadia S.A. and Coopers & Lybrand companies. He was the CEO of Vigor Alimentos S.A. until December 2019 and is currently a member of the Board of Directors of Itambe.

Wesley Mendonça
Batista Filho
Member
He began his career at JBS 10 years ago as a trainee. In South America, he was responsible for Asian exports and later served as the Head of operations at JBS Uruguay and JBS Paraguay. He served as the President of JBS operations in Canada and led the beef operations in Canada and the United States. He is currently the President of JBS Brasil and Seara.

José Guimarães Monforte*
Member
A partner at Ermak Consultoria, Chairman of the Board of Directors at Eletrobrás and of the Advisory Boards of Premix and Instituto Elos. He is a member of the Board of Directors at Cyrela and has worked as an executive at companies such as BANESPA, Banco Merrill Lynch, Banco Citibank NA, VBC Ener- gia S/A and Janos Comércio, Administração e Participações Ltda., in Brazil and abroad.

Cledorvino Beliní*
Member
Having worked for 44 years at Fiat, he served as the automaker’s chief executive in Brazil and Latin America over 11 years, from 2004 to 2015. He was also the President of Brazil’s National Association of Motor Vehicle Manufacturers (Anfavea), from 2010 and 2013.

Alba Pettengill*
Member
Dedicated to the food industry for over 30 years, she is a specialist in production processes. She is the founder and President of the Paraguayan Meat Chamber and is a member of the Steering Committee of the Rural Association of Paraguay and the Animal Health Commission of Paraguay, where she owns land.

Márcio Guedes Pereira Júnior*
Member
A partner at Pangea and a Director of the Brazilian Financial and Capital Markets Association (Anbima). He led the investment banking group at Banco J. Safra and also served as the director of investment banking at Unibanco, Citigroup and Credit Suisse. He has vast experience with M&A and Capital Markets.

To see the Committee’s Internal Procedures By-Laws and members, visit: https://ri.jbs.com.br/en/esg-investors/corporate-governance/board-council-and-committees/
In early 2020, humanity began to face the Covid-19 pandemic, possibly the greatest global challenge in recent decades. Committed to its mission of feeding people around the world, JBS took measures to protect the health of its team members, while at the same time adopting a rigorous disease control and prevention protocol at its units to keep operations running.

Procedures were defined according to healthy agencies and according to protocols defined by the Ministries of Agriculture, Health and Labor, in addition to standards in effect at the state and municipal levels. Additionally, the Company contracted specialized medical consulting from Hospital Albert Einstein, a reference in Brazilian medicine, which has provided support for constant enhancement of the measures the Company has implemented at its units and other facilities.

Notable among actions included in the protocol adopted by JBS are:

- **Risk Group** - Leave granted to all team members belonging to risk groups - those aged 60 and over, pregnant women and people with a medical condition. Team members showing signs of a cold, those with a medical recommendation and those who have tested positive for Covid-19 should also be granted leave. In all cases, team members’ benefits are guaranteed and they receive care and comprehensive assistance from the Company.

- **Information and awareness** - Clear and permanent communication using audiovisual media, murals, internal radio and media outside of the factory environment, with campaigns to raise awareness on this topic, including: guidance on prevention measures adopted by the Company, such as correct hand cleaning and use of hand sanitizer, mandatory mask use, social distancing, PPE use and others.

- **Transportation** - Expansion of the bus and van fleets that carry team members and sanitation and disinfection of vehicles in the periods between trips, assigned seating and other control measures.

- **Control** - Control of everyone’s temperature and hand cleaning upon accessing the plants and during production shift breaks, with an abundant supply of soaps, sanitizers and hand sanitizer for all employees. The Company has also started free H1N1 vaccination for all team members.

- **Sanitation** - Daily disinfection of all facilities (internal and external).

- **Distancing** - Application of rules and clear signage to prevent agglomerations and promote safe distancing among team members. Demarcation and spacing, with controlled access at gates, in locker rooms, in leisure areas and in other areas.

- **Cafeterias and breaks** - Creation of new routines and alternating times, implementing distancing rules, installing dividers and visual signage, and requiring the use of masks until meals begin.

- **Personal Protective Equipment (PPE)** - Implementation of new protective equipment, such as ninja-style masks, acrylic face-shields and fabric masks in the administrative area. Mask use is required by everyone in all Company areas.

- **Other measures** - Creation of emergency protocols for any team member showing symptoms. In the event that a team member tests positive for Covid-19, the Company will provide immediate care and comprehensive follow-up for the team member and their family until they recover. During this time, according to health agency guidelines, the team member will be placed on leave and will only return pending medical/clinical approval. Full disinfection and additional sanitation of common areas and the location where the team member works are also part of the Company’s protocol, along with comprehensive monitoring of team members.

- **Education** - Educational and awareness programs and outreach to the local community, employees and families. The Company promoted the use of masks in the home environment and in the workplace.

- **Medical care** - Access to medical care for everyone who shows signs of being sick or has been exposed to Covid-19. The Company provides immediate care and comprehensive monitoring of team members.

- **Communication** - Continuous and transparent communication with the local communities, employees and families. The Company informed the community about the measures taken to protect the health of its team members.

- **Support** - Support from the Company to the local communities, employees and families. The Company provided masks and hygiene products to the local communities and to the employees.

- **Care** - Care for the health of its team members. The Company provided immediate care and comprehensive monitoring of team members.

In addition to the top priority of its team members’ health, JBS is fully dedicated to supporting the fight against the coronavirus and will donate R$ 700 million exclusively for use against the Covid-19 pandemic.

In Brazil, this plan stipulates donation of R$ 400 million in three areas: public health, social care and support for science and technology. These funds will go toward directly benefiting 162 municipalities and 17 states with donations of masks, personal protective equipment, food kits, ICU beds, construction of hospitals and more. Special committees have been created to validate the projects and resources to be delivered within the various spheres of the project, containing independent members who are specialists in their area of action.

Abroad, JBS will earmark R$ 300 million for local communities, mostly in the United States, to support food assistance and critical infrastructure, such as supplying personal protective equipment (PPE) for paramedics, as well as efforts to combat COVID-19.

The company has been carrying out other actions since the start of the pandemic through “Good Deeds Are Good”, its nationwide Social Responsibility program. JBS sent 200 metric tons of products - including food and hygiene and cleaning items - to hundreds of organizations, hospitals and communities in over 100 municipalities in Brazil. The Company also delivers protective materials and uniforms to the different locations where it maintains operations, in addition to having produced and donated another 2 million bars of soap to homes for the elderly, institutions supporting vulnerable populations and hospitals.
Risk management

The Risk Control Department structure is responsible for identifying, assessing, mitigating and monitoring the financial risks inherent to JBS operations.

Main financial and socio-environmental risks

<table>
<thead>
<tr>
<th>Category</th>
<th>Types</th>
<th>Definition</th>
<th>Mitigation method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial risks</td>
<td>Market</td>
<td>Currency, interest rate and commodity price risks when price fluctuations could affect JBS businesses.</td>
<td>Exposure is mapped in real time.</td>
</tr>
<tr>
<td></td>
<td>Credit</td>
<td>The risk of default on accounts receivable, financial investments and hedge contracts.</td>
<td>Accounts receivable portfolio is diluted and secure credit parameters are set (always based on proportional limits, financial and operational ratios and credit agency queries).</td>
</tr>
<tr>
<td></td>
<td>Liquidity</td>
<td>The possibility of imbalances appearing between negotiable assets and enforceable liabilities that could affect the ability to fulfill future financial obligations.</td>
<td>Capital structure management focuses on immediate, modified liquidity metrics - i.e. cash on hand and financial investments, divided by short-term debt - and working capital, to maintain leverage for the Company and its subsidiaries.</td>
</tr>
<tr>
<td></td>
<td>Raw material procurement</td>
<td>The risk of purchasing raw materials from suppliers involved in deforestation of old-growth, invasion of protected areas - such as indigenous land or environmental conservation units - use of child or forced labor or products that could pose a risk to consumer health.</td>
<td>Cattle purchase: adopt and notify the market of the social and environmental criteria adopted for purchases and support for the use of best farming practices. In Brazil, supplier farms located in the Legal Amazon States are monitored using a geospatial system capable of identifying non-conformities and barring raw material purchases from non-compliant suppliers. [<a href="https://jbs.com.br/en/sustainability/product-integrity/cattle-responsible-purchase/">https://jbs.com.br/en/sustainability/product-integrity/cattle-responsible-purchase/</a>]</td>
</tr>
<tr>
<td>Social and environmental risks</td>
<td>Poultry and pork</td>
<td>The Company’s integrated relationship with animal breeders assures the origin and quality of raw materials and maintains high food quality and safety standards and remain eligible to serve all markets.</td>
<td>Product quality: a global area dedicated to monitoring all production processes, which are audited internally by various regulators and customers to maintain high food quality and safety standards and remain eligible to serve all markets. [<a href="https://jbs.com.br/en/quality/home/">https://jbs.com.br/en/quality/home/</a>]</td>
</tr>
<tr>
<td></td>
<td>Climate change</td>
<td>Climate change could have a negative impact on the Company’s businesses. Resources like water, electricity and animal feed (which is dependent on farming) are critical for production of raw materials (cattle, poultry, pork and lamb). Businesses could also be affected by new legislation and regulation in this area.</td>
<td>We monitor the environmental impacts from direct (industrial, logistics and shipping) operations, taking steps to minimize these impacts on the Company’s own and its suppliers’ operations. Monitoring involves taking a global inventory of direct and indirect GHG emissions using the International GHG Protocol methodology. The results of the inventory are published annually on the CDP platform. JBS also monitors indicators representing the volume of water and electricity used by its operations in order to optimize production processes and gradually reduce consumption. To reduce impacts of its operations and create opportunities, JBS has an annual plan to invest in environmental improvements aimed at optimizing use of natural resources, water and waste energy recycling and other issues. Water risks were also mapped for JBS USA operations, with the help of the Aqueduct tool from the World Resources Institute (WRI). [<a href="https://jbs.com.br/en/sustainability/environmental-management/climate-changes/">https://jbs.com.br/en/sustainability/environmental-management/climate-changes/</a>]</td>
</tr>
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Based on the guidelines of the Financial Risks and Commodities Management Policy, as approved by the Board of Directors, this area also supports operational units in identifying and monitoring risks specific to their own activities, supported by specialist staff and specific systems.

The matrix below lists the risks JBS has identified by category and severity level, as well as the efforts made to mitigate them.
Ethics and compliance

Since 2017, the Company has had an independent global department at the forefront of the compliance topic, reporting directly to the Board of Directors. The Company monitors the maturity of processes and assesses the efficiency of actions adopted year after year, in every region where it operates. In this sense, 2019 was an important year for upper management to reiterate a commitment to continual improvement processes implemented.

All practices and policies related to compliance are available in the Code of Conduct and Ethics (https://jbs.com.br/en/compliance-en/codes-and-policies/codes-of-conduct/). This document provides guidelines for team members to work in compliance with the Company in every situation, outlining the behavior and conduct acceptable and required by JBS. The Code, available in Portuguese, English, Italian and Spanish, was created to consolidate and unify the global guidelines in place at the different JBS operations around the world. The Company also has a Business Associate Code of Conduct (https://jbs.com.br/en/compliance-en/codes-and-policies/codes-of-conduct/). Third parties carrying out any kind of transaction with JBS, such as customers and suppliers, must follow this Code.

In 2019, the Company continued to spread its “Always Do the Right Thing” program in every sphere of the business. This initiative was built to foster an environment of ethics and integrity in all Company processes, following local and international guidelines on the following pillars:

- Risk assessment
- Leadership and governance
- Policies and procedures
- Ethics hotline
- Controls
- Training and communications
- Third-party due diligence
- Assessment, oversight and discipline

With each training cycle, training makes them curious and, more than anything, confident. They understand that this closer relationship is a plus and that they can speak their minds, ask questions and even complain. They are confident that all issues will be taken seriously and, above all, the entire team is available and transparent.

Ana Cláudia Fernandes
HR Manager in Amparo (SP)
JBS held their first compliance meeting, in partnership with J&F, at the Company's headquarter in São Paulo. The event was attended by around 150 participants, including team members from JBS and from other group companies, in addition to market professionals, who gathered to debate challenges and trends of compliance in Brazil. The Global CEO of JBS, Gilberto Tomazoni, and the Chairman of the Company’s Board of Directors, Jeremiah O’Callaghan, were also in attendance. Some of the Brazil’s top compliance professionals exchanged ideas and experiences over eight hours, in an effort to enhance their knowledge of compliance programs and good corporate governance practices. Another topic discussed was the role of compliance in fighting corruption.

The Company also focused its activities on training and education for team members, aimed at reinforcing guidelines and ratifying a culture of compliance. A series of training sessions on the Code of Conduct and Ethics were held, with 116,645 people participating, which accounts for 98.4% of JBS team in Brazil and 37,432 training hours.

Anti-corruption training was held in Brazil for administrative staff, with 16,026 people, or 94% staff participation, taking part in 8,084 training hours. Single-topic training for specific teams was also developed, such as competition compliance for those working directly with public sales.

To build on existing policies, JBS revised the Promotional Items, Gifts, Travel and Entertainment Policy and a new policy, the Third Party Due Diligence Policy, was launched.

Throughout the year, over 9,000 reputational analyses were done on suppliers, including not only a historical assessment of partners, but also of their respective associates, making contracts more reliable. This was done using a tool developed by JBS in partnership with an international consulting firm, allowing for a comprehensive analysis of partners’ reputations.

The Company also invests in the Supplier Training Program. The 10 largest carriers with whom the Company holds contracts for transportation went through a pilot program in 2019. With this training, they understand and are committed to the rules and policies of JBS in Brazil, as well as what is expected of them as suppliers. The goal of the initiative, which is still under development, is to continue in 2020 with the entire value chain to encourage transparency and integrity as strategic elements of the business.

The Company has also adopted internal policies, which must be adopted at every Company unit. The Global Policy on Conflicts of Interest was approved and implemented worldwide. The Anti-Corruption Policy is in the approval phase and should be implemented in 2020. The Company also carried out a review of existing controls and created new controls to verify compliance with internal rules and scenarios for any breach of rules.
Other initiatives developed in 2019:

• Launch of a global compliance website (https://jbs.com.br/en/compliance-en/), dedicated to Company activities in this area;
• Internal communications campaign;
• Risk assessment for controls and rules for each business.

Policy for Offering and Receiving Promotional Items, Gifts, Travel and Entertainment

Updated in August 2019, the Policy for Offering and Receiving Promotional Items, Gifts, Travel and Entertainment provides rules on exchanging gifts and entertainment between the Company’s team members and partner companies. The new guidelines provide more security, control and transparency in relations for the Company's business partners in Brazil and for the purpose of the gift offered and/or received.

Ethics Committees

JBS Brasil has five business Ethics Committees (Friboi, Seara, Swift, JBS Couros and JBS Novos Negócios) and one Institutional Committee. Process improvements were implemented across these committees. The business committees meet on a quarterly basis to discuss the most relevant grievances received via the Ethics Hotline, jointly establishing solutions in addition to resolving other matters related to compliance. Members of the Institutional Ethics Committee, which meets on a quarterly basis, include the CEO of JBS in Brasil, Administrative Director, Legal Director, HR Corporate Director, one of the Company’s BU Presidents (rotating seat) and the Global Compliance Director. This committee carries out a variety of activities which are defined and pre-established in the internal policy, such as discussing and resolving highly relevant grievances received and considering progress made in the compliance program.

JBS Ethics Hotline

The JBS Ethics Hotline guarantees transparency in internal and external relations. The hotline is consolidated, well-structured and fully outsourced - which protects and guarantees user anonymity. It is available everywhere in the world where the Company is located, in 4 languages, 24 hours a day, 7 days a week, and it is a fundamental part of the Company's compliance program. This channel is the chief vehicle for grievances related to irregularities and violations of the Company’s Code of Conduct and Ethics, both for its team members and JBS’s external public.

Business Pact for Integrity and Against Corruption (Ethos)

JBS has been a signatory to the Instituto Ethos Business Pact for Integrity and Against Corruption since 2018. This initiative aims to join companies with the goal of promoting a market of greater integrity and ethics and to eradicate bribery and corruption. In the last year, the Company also signed the Business Movement for Integrity and Transparency. The movement encompasses creation by business sectors of conditions to deepen and consolidate integrity programs, risk management and anti-corruption activities, while also demanding enhancement of laws.

Compliance Highlights 2019

• 37,000 hours of training in the Code of Conduct and Ethics, with more than 115,000 team members in Brazil.
• Over 8,000 anti-corruption training hours for more than 16,000 team members, through an online platform.
• Due diligence: In 2019, 9,486 analyses were done by JBS software. When any nonconformance is found in a supplier assessment, the supplier is automatically barred and undergoes a second verification procedure by the compliance area.
• In 2020, there will be training on topics such as conflicts of interest and a review of anti-corruption content.
Our People

JBS is a Company made of people, and focused on developing its team members, in the different locations where it operates. That is why the Company works tirelessly to promote workplace health, safety and welfare for its entire team, offering equal opportunities to all and continuously investing to develop its talents and leadership. The Company moreover strives to hire, retain and develop professionals who are dedicated to operational excellence and identify with the Company’s mission. At the end of 2019, JBS had over 240,000 team members in 15 countries.

Promoting development of human capital is a major goal at JBS. With this in mind, the Human Resources area works regionally, following local laws and norms, with the support of Corporate HR. In addition to working to attract the best talent in the market, maintaining the highest standards of career selection and development within the Company is also a managerial guideline at JBS. Operations are quite diverse, spread across five continents, adherence by everyone to the Corporate Culture is the foundation for the success of the Company’s businesses.

To uphold corporate governance in adopting policies and procedures as well as in developing macro strategies, the HR area revises people management policies and programs on an annual basis, along with the key indicators of health and safety, turnover, absenteeism and overtime. This allows the Company to make necessary adjustments and guarantee that health, safety and working conditions for team members are implemented according to the high standards adopted by the Company.

JBS remains committed to hiring regardless of race, religion, color, nationality, sex, sexual orientation, gender identity or age, including people with disabilities. The same principle applies to training talent and to team member career development and promotion.

The Company believes in the value of dialog between managers and teams, and fosters interpersonal relationships. In the USA, JBS has an Open Door Policy encouraging team members to talk to supervisors or the HR area about any problems affecting the workplace in general. This policy allows for identification of work-related issues, such as compensation and benefits, working hours, safety and relationships with leaders.

In Brazil, 845 team members work in the corporate and approximately 128 thousand work in the business units. In the Brazilian operation, the Company saw lower rates of absenteeism and turnover. Absenteeism was at 2.48% versus 2.62% in 2018, with turnover at 21.38% versus 22.07%. Moreover, 90% of team members in Brazil were covered by collective bargaining agreements.
Diversity

Diversity is very important at the Company, given that its success depends on the collective skills, backgrounds and experiences of its team members. The Company values variety in backgrounds, languages and cultures, which is why it promotes diversity and inclusion at all of its plants and offices, aimed at creating a reliable, pleasant and productive workplace.

There are 120 different nationalities among the 2,500 team members at JBS in Canada. As the largest employer in the city of Brooks, Alberta, the Company absorbs professionals from around the world: around 60 different languages are spoken at this unit alone.

In an effort to ensure a sense of unity and promote a multidisciplinary environment, the Company develops communications covering a wide range of topics, including benefits, safety and training, in a variety of languages and dialects. Furthermore, each facility provides unlimited access to Language Lines, available in over 200 languages, providing access to clear communication between everyone.

JBS in Brazil has a training program for people with disabilities, contributing to their placement in operations as well as in the job market. A Company initiative maintains 12 schools in 11 cities, where people with disabilities are recruited, trained and given opportunities. In 2019, 150 professionals were trained. JBS currently has around 2,000 people with disabilities on staff in Brazil.

The project has a very positive impact on the lives of participants and their families. Because someone with a disability has a physical, mental, intellectual or sensory impairment, which oftentimes comes along with other issues, this causes difficulties for them to be inserted in society. The project is here to say otherwise: that people can have a job, can be part of society and can interact with others.*

Fernanda Silva
HR Manager in Itumbiara (GO)

* From the first time we came to the plant, everyone told us: ‘come here,’ ‘let’s do this,’ ‘let’s eat dinner together.’ In this short time we’ve been working here, I think a family has been born at JBS: it’s made up of Brazilians, Venezuelans and Haitians.

We’ve been in Brazil since the end of 2018.

From the first time we came to the plant, everyone told us: ‘come here,’ ‘let’s do this,’ ‘let’s eat dinner together.’ In this short time we’ve been working here, I think a family has been born at JBS: it’s made up of Brazilians, Venezuelans and Haitians.

Fernanda Silva
HR Manager in Itumbiara (GO)
JBS Without Borders

In an effort to value the specialized work done by deboners, the program offers Friboi team members the chance to work at the JBS Canada unit, in the city of Brooks. There are a multitude of advantages in this project: the Company’s global position is reinforced and opportunities are created along with international experience, retention and sharing of knowledge between team members.

Among those selected in 2019 was Mahamadou Sissoko, a native of Mali, Africa. At just 27 years old, the single father worked at Seara, in Brazil, over five years. He came to the Ipumirim (SC) unit in 2015, and has consistently served as an example of determination, humility, simplicity, an attitude of ownership, discipline and interpersonal relations. When he started working at the Brazilian unit, he helped out with different activities, including translating, since he is able to speak five languages.

"I’ve been in Canada for three and a half years. I started as a deboner and was promoted to monitor and then supervisor. In January 2020, I began to work in my new position as General Foreman. I was in the first JBS Without Borders group and everything was very new, but I had the support I needed from the Recruitment team and from people in other departments, who were even willing to help me on weekends."

Mahamadou Sissoko
Deboner at JBS Canada and a participant in JBS Without Frontiers

The 5th edition of JBS Without Borders was held in 2019, and for the first time, Seara team members also took part in the selection process. In October 2019, 16 team members were approved to work in Canada. JBS provides support to team members during the entire process of immigrating to a new country, in addition to a benefits package that includes housing and local support with English classes. With the success of this initiative, the program has been expanding in recent years. For 2020, the Company aims to also open positions at the supervisory level.

"I’ve been in Canada since September 2019 and I work in the deboning section. When I left my country to live in Brazil, I really loved it and was planning to bring my family to live there. But after four and a half years, I heard about the JBS Without Frontiers program. Coming to Canada will help me to develop other talents."

Mahamadou Sissoko
Deboner at JBS Canada and a participant in JBS Without Frontiers
With the goal of investing in developing qualified technical manpower for the business and of these young people working as specialists or in an entry-level leadership role, JBS has developed the **Valued Youth program** in Brazil. Governed by the Company’s values, Valued Youth provides learning opportunities based on practical activities. In 2019, the Company expanded the program to those obtaining degrees in Engineering to work at Friboi. Out of the 27 young people hired, 26 are currently leaders or specialists. This program uses on-the-job training and is accompanied by a project of improvements, shared supervision, technical training provided according to the area’s needs and personnel management workshops.

The Company also promotes the **in-house talent program** in Brazil. Its aim is to select operational staff members and develop supervisors for the maintenance, production, transportation and logistics business units. There are currently 318 team members who have gone through the program. 181 are active as supervisors and 37 team members are undergoing development in the program. In 2019, 55 spots were opened, with 37 internal team members hired at the end of the six-month period.

**People development programs at JBS**

In 2019, JBS trained a total of 137,165 people, up by 11% year-over-year.

**Summit:** A JBS USA program dedicated to gathering company executives for intensive learning on topics geared toward leadership. The program provides opportunities for executives and leaders from different JBS businesses to exchange good practices and to gain knowledge on the Company’s business units.

**Leadership Academy:** An initiative of JBS Couros to develop leaders in Brazil on themes of people management with a focus on the challenges at JBS. Modules are held with an in-house multiplier team, using the synergy between the HR departments at the different business units. In 2019, 16 topics were developed, with a total of 850 people trained.

**Seara University:** A distance learning platform that offers various career development tracks, discussing topics related to leadership, operational and administrative activities. Available to all Seara team members.

**Quality Academy:** A development program for Seara Quality staff, aimed at assuring up-to-date technical knowledge; developing multipliers, in an effort to harmonize concepts and fundamentals; and providing training to support Quality Assurance – “Know what you do and what really needs to be done.” A total of 157 professionals were trained in 2019.

**Labor Lawyer:** A program geared toward selecting and developing attorneys to work in the labor area at JBS in Brazil. The program is open to lawyers who have recently graduated in the last two years. Training, which lasts 90 days and takes place at JBS headquarters in São Paulo, consists of theoretical and practical portions and covers behavioral, technical and legal topics. Since 2016, 32 attorneys have gone through the course. The program is currently developed at 11 group units.
JBS USA Trainee Program: A 12-month program to identify and develop future leaders by having recent graduates rotate through Company operations in the United States, Canada and Mexico. The goal is to contribute to developing their knowledge and abilities in the leadership, process management and people management areas.

JBS USA Internal Talent Program: Created to identify production team members who possess leadership skills, offering them the tools they need to accelerate their careers at JBS. The program includes a four-month training rotation at a JBS USA facility, training on leadership skills and the opportunity to meet and learn from other leaders across the Company.

JBS USA Leadership Warehouse Program: This includes six different programs for JBS USA leaders, broken down into different profiles – leaders with high potential, mid-level managers, production supervisors, and managers who have been recently promoted or hired.

JBS USA Way of Leading: A professional development program aimed at team members who have leadership skills. After they are mapped, these team members undergo a six-month training rotation at a JBS USA plant, in preparation to take on management positions.

Valued Youth: Aimed at developing young Brazilians to work as specialists or in entry-level leadership positions in engineering and labor law areas, the program offers technical training, shared supervision and project development. The initiative includes the online Valued Youth platform (jovensdevalor.jbs.com.br) and a Facebook profile (facebook.com/JovensDeValorJBS). The Company currently has 32 labor attorneys and 26 young leaders and engineering specialists who have gone through the program.

Trainee: With its industrial focus, the program recruits young people who have graduated in the last two years with the potential to serve as leaders, capable of managing processes and teams at different JBS business units in Brazil. The selection process is done by plants, in the places where they are located.

Internal Talent Program: The 8-year-old program develops Company professionals to undertake supervisory positions in the Production, Maintenance, Logistics and Transportation areas. JBS currently has 318 team members who have gone through the program. In 2019, 37 in-house talents were placed in positions after completing the six-month training program.

JBS USA Internship Program: A JBS USA internship program in the United States, offering university students the chance to gain practical industry experience and develop leadership skills. It is held over 10 weeks in the summer, with approximately 150 participants, using practical learning and projects that provide relevant workplace experience, while also helping to identify future leaders at JBS.

Elective Learnings: Supplementary online training courses offered by JBS USA to any team member interested in improving their skills, in areas that include Cross-Generational Communications, Responsibility and Ownership, and Creating Engaged Teams.

People First: This program provides specific training for all frontline JBS USA supervisors in four sessions held throughout the year, focused on practical leadership techniques and team management tools. Topics include building trust and respect, the cost of turnover, responsibility, delegation and prioritization, communication and information sharing.

Leadership Fundamentals: Leadership Fundamentals is a new manager training program designed for team members who have been recently promoted or hired by the Company. This one-day program is held eight times a year, offering new leaders exposure to the values, mission and beliefs of JBS USA, in addition to basic leadership skills, such as effective team communication, delegation and performance management.

Development Workshops: A program created in 2018 for team members in corporate positions at JBS USA, to meet their personal and professional needs.
As a global company committed to sustainability across the business, JBS ensures quality in all of its processes, from suppliers and producers to customers and consumers. This is why the Company invests in promoting continual enhancement of operating, manufacturing and product distribution standards in all of its businesses.

These guidelines cover a variety of work fronts, from comprehensive compliance with the various regulatory and certification requirements in the Company’s 190+ markets, to policies and processes related to value chain management (including responsible procurement of raw materials), partnerships with suppliers and team health and safety, training and other activities permeating work routines.

The Global Sourcing Department is the area tasked with developing and distributing policies on supplier relations and responsible procurement; however, each business has the autonomy to create relationship actions specific for its partners. This is done to make partnerships more effective, while also guaranteeing uniform criteria, practices and objectives across the entire production process.

In Brazil, selection and maintenance of all JBS suppliers is based on the South America Supplies Policies, which covers the rules, guidelines and best practices for safe, upstanding and competitive business. This policy is furthermore aimed at assuring product quality, supply, total competitive cost, governance and traceability across the hiring and procurement process, which is also guaranteed through Electronic Market, a procurement system.

Friboi applies best sustainability and quality practices across its value chain and to cattle suppliers in particular, with the use of monitoring via satellite imagery, georeferenced maps of farms and monitoring of official data from public agencies. See more on Chapter 2/Commitment to sustainability/ Product integrity.

Seara also has a robust quality auditing process, for certifying new suppliers as well as monitoring active suppliers. Included in this process is a commitment to quality and food safety, maintenance and training, in addition to requirements related to good manufacturing practices. The Company assesses its suppliers from breeding to receipt of inputs at production units, in relation to quality and punctuality.

The nature of JBS businesses around the world means that a broad and diversified base is used for suppliers of raw materials and inputs as well as for manufacturers of materials such as packaging, ingredients and services, information technology (IT) and recycling, among others.

In the United States, suppliers for JBS USA who come into direct contact with food undergo a strict assessment before becoming Company partners, in addition to Global Food Safety Initiative (GFSI) audits. The Company values new local suppliers who are cost-competitive and have the ability to work with the Company’s requirements and standards. This helps in further stimulating the economy in the communities where the Company operates. JBS Australia has a Supplier Relationship Management Program to assess matters including safety, collaborative business updates, demand and precision forecasting, service and quality, sustainability and innovation, among others.
Animals are farmed intensively or extensively by partner producers.

JBS has a specialized warehousing and distribution systems, suited to its products and guaranteeing that quality is maintained.

Domestic and foreign markets
With its global structure, JBS produces food that supplies local markets and serves 275,000 customers in the world.

Points of sale
From small markets to major retail chains, JBS products are found in 190 countries.

Purchase of raw material
JBS acquires animals from livestock farmers, fostering adoption of good practices by its suppliers.

BEEF VALUE CHAIN

Livestock farming and feed
Animals are farmed intensively or extensively by partner producers.

Transport
JBS uses specialized transportation to bring animals from the field to the plant, following the tenets of animal welfare.

Processing / Industrialization
All production procedures at the Company follow strict standards of food health and safety.
After going through the genetic selection, incubation and reproduction phases, birds are raised on Company farms as well as integrated producers and integrated producer farms.

Feed is produced at Company factories in order to meet all animals’ growth and health needs at every stage of life.

JBS uses specialized transportation to bring animals from the field to the plant, following the tenets of animal welfare.

All production procedures at the Company follow strict standards of food health and safety.

JBS has a specialized warehousing and distribution systems, suited to its products and guaranteeing continued quality worldwide.

From small markets to major retail chains, fresh poultry, poultry cuts, and prepackaged and processed poultry products are found in 190 countries.
After undergoing the genetic selection and reproduction phases, hogs are raised on Company farms as well as integrated producer farms. Feed provided to hogs is produced at Company factories, meeting all animal needs in relation to growth, maintenance and health.

JBS uses specialized transportation to bring animals from the field to the plant, following the tenets of animal welfare.

All production procedures at the Company follow strict standards of food health and safety.

JBS has a specialized warehousing and distribution systems, suited to its products and guaranteeing continued quality worldwide.

With its global structure, JBS produces food that supplies local markets and serves 275,000 customers in the world.

From small markets to major retail chains, fresh pork, pork cuts, and prepackaged and processed pork JBS products are found in 190 countries.

JBS uses specialized transportation to bring animals from the field to the plant, following the tenets of animal welfare.
Specialized transport to protect this raw material, using trucks with solar protection, for example.

A processing plant to transform raw materials into wet blue leather.

Wet blue: leather that goes through an initial tanning process that uses chromium; wet white: leather pre-tanned using aldehyde or phenolic synthetic tannin, giving the leather a lighter color; semi-finished: leather that is re-tanned, dyed, polished and then dried; finished: leather that is ready to use, after undergoing processes that give it a homogenous softness, color and sheen.

Wet blue leather is sold to customers on the domestic and foreign markets.

Purchase of sustainable raw material, respecting social and environmental as well as animal welfare practices.

Leather is separated into a JBS beef processing plant for use as a raw material.

Purchase of sustainable raw material, respecting social and environmental as well as animal welfare practices.

Sales to domestic and foreign footwear, automotive, furniture and leather goods customers, among others.
Customers

JBS creates value in the products and services it supplies around the world, earning the trust of customers. This is the result of a commitment to produce and provide the highest quality of products and services, as well as the goal of having close relations with every stakeholder.

JBS operates globally in both the B2B (business to business) and B2C (business to consumers) segments and now has over 275,000 customers in more than 190 countries. The Company’s relations with stakeholders range from final consumers to corporate customers who make up major retail chains and food service. This is done by making it a priority to sustain close, harmonious and constant relationships in order to learn about and fulfill the wants and needs of each group in different markets with excellence.

The Company invests in customized development of high-quality products for corporate customers, providing services that support them in making their businesses more profitable.

Through the Top Grade Butcher channel, Friboi, for example, promotes training for butchers at major retail chains and supports management and creation of a customized environment. In 2019, the program surpassed the milestone of 1,000 stores. During the year, Seara also joined Top Grade Butcher, while also relying on the Perfect Store program (learn more about this program on page 20).

Another innovation was the development of 1953 Friboi by Pão de Açúcar, held in some of the retail chain’s stores in São Paulo, Rio de Janeiro and the Federal District. One highlight of this model is its dry-aged beef products, sold at some of these stores. Swift, in turn, has an in-store program, with personalized brand-managed spaces in major retail chain stores.

At the JBS USA operation, Just Bare®, a Pilgrim’s brand, became a sales leader in fresh chicken sales on Amazon Fresh, an Amazon.com subsidiary specialized in food sales, with product deliveries in select cities in the United States.

For end consumers, market surveys and relationship channels, such as Customer service and social media, are a valuable source of information on public needs and trends. In the United States, consumers have access to a range of tools, such as the Consumer Hotline, phone lines and e-mail accounts that provide options for communicating with the Company. Service teams monitor feedback, interact with consumers to answer questions, and keep a database to track trends and supply performance reports.
Food safety and quality

“\nFor Seara, food quality and safety means doing the right thing, going beyond customer and consumer expectations, though excellence in processes and compliance with standards. Quality and R&D are interconnected from the start, establishing the best options, from product development, deciding on the unit and packaging, to process and product standards to guarantee our customer and consumer total satisfaction.”
\nLuciara Peit
Executive Quality and R&D Director at Seara

Providing safe, nutritious, flavorful and high-quality foods to consumers around the world is at the heart of JBS’s purpose and is a fundamental element in its strategy. This means providing an operating model aimed at continual enhancement of operating, manufacturing and product supply activities.

To achieve this goal in the 15 countries where the Company operates, meeting local regulatory requirements and international quality standards, JBS has a Global Food Safety and Quality Assurance Department, headquartered in the United States.

Specialized Food Quality and Safety teams who are active in each business unit are responsible for implementing the policies, strategies and procedures developed by the Global Department.

Notable among the tools that monitor quality and safety assurance for JBS products are value chain oversight processes, such as ensuring raw material origin and quality, production control and monitoring of distribution. Training and refresher courses are provided to teams, customers and other agents in the process, qualifying them to perform their roles throughout the process.

The Company invests in laboratories at its units around the world that specialize in microbiological analyses and biotechnology, providing indicators of food safety for its various brands, assuring product quality. By modernizing infrastructure and equipment used, JBS is able to achieve more and more precise results, with increasingly faster analysis times.

For instance, excellence in JBS operations is certified by the British Retail Consortium (BRC), a global reference in quality in protein production, and plants are ISO 9001 certified.

In 2019, R$ 930.8 million was invested in quality, with over 2,460 people trained.
**Different controls in each market**

- **United States**: All units are inspected by the U.S. Department of Agriculture’s Food Safety and Inspection Service (FSIS).

- **Mexico**: Pilgrim’s factories follow the guidelines defined by the Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA) and the National Service for Agro-Alimentary Public Health, Safety and Quality (SENASICA). In addition, each factory in Mexico is TIF (Federal Inspection Type) certified, as issued by the government for food that meets the standards established by the World Animal Health Organization and by the Codex Alimentarius, a publication of the Food and Agriculture Organization of the United Nations.

- **Canada**: The Canadian Food Inspection Agency (CFIA) inspects all facilities to guarantee compliance with federal food safety standards.

- **Australia**: Department of Agriculture and Water Resources (DAWR) representatives perform inspections at export facilities daily to guarantee that the unit is in compliance with all federal food safety and foreign market requirements.

- **Brazil**: All JBS units hold seals from the Federal Inspection Service (Serviço de Inspeção Federal - SIF) of the Ministry of Agriculture, Livestock and Supply (MAPA), certifying the Company to export and sell its products on the domestic market.

- **Europe**: Production facilities are inspected and audited by third parties according to European Food Hygiene regulations and any additional customer quality requirements to verify compliance. Pilgrim’s Moy Park supports the Food Standards Agency campaign to reduce the spread of Campylobacter and has invested over £1 million in cutting edge research and practices to help the poultry industry fight the bacteria.

- **United States**: Different controls in each market
Innovation

The growing demand around the world for consumption of animal protein has driven markets where JBS operates. With its global platform of operations, located in 15 countries and with more than 400 production units and offices, JBS is able to serve a variety of markets with high value-added products.

Changes to people’s lifestyles and upward trends in protein-based diets have been notable factors in JBS taking even more of a leading role in the food market over the last year. To promote best practices, JBS started the Global Innovation Team (GIT) in 2018.

Monitoring of global trends in the food market also provides vast business opportunities for JBS. The GIT furthermore allows for the Company to leverage its competitive advantage, promoting global knowledge sharing, rapid adaptation in adopting global trends, raising and launching innovative products.

FOR FAMILY AND FRIENDS: foods that are easy to cook, making it easier to spend time with family and friends.
Examples: Reis da Grelha (Mexico), Zap Wings (England), ready-to-serve and canned Bordon and Seara Rotisserie (Brazil) products.

HEALTHY PRODUCTS: functional products with high standards of traceability and low social and environmental impact.
Examples: Just Bare and Naked Meats (USA) and Seara Nature (Brazil).

DIVERSIFIED OPERATING STRATEGY

INDULGENCE AND SENSES: high-quality foods that delight the senses and provide unique experiences.
Examples: Friboi 1953, Swift Black and Seara Gourmet (Brazil).

PREPARE, COOK AND EAT: products that are quick and easy to make, with high nutritional performance.
Examples: AdapTable (USA) and Pilgrim’s (Mexico).

Investment of over R$ 120.5 million in Innovation and Research and Development
In 2019, the Company began to use management tools to optimize development efforts for products with higher demand among customers. International food mega trends, such as reduced sodium and fat, smaller portion sizes and others, were also included in the project assessment. During this same period, an analysis of consumer demand for vegetable proteins led to Seara launching the Incredible Seara range, making it Brazil’s first major company to offer a complete range of products made with 100% plant-based protein. This new product came to supermarket shelves in the states of São Paulo and Rio de Janeiro in late 2019 and will be available nationwide in 2020. Another highlight in this range was the Incredible Burger Seara Gourmet, a 100% plant-based burger. These innovative products have the exclusive i Biomolecule, guaranteeing that the flavor and texture of plant-based products is identical to meat.

There are seven products in the Incrível line, ranging from hamburgers to ready-to-serve plant-based meals, enriched with iron and vitamin B12. The line is 100% plant-based and transgenic-free, serves as a source of iron and fiber, is rich in vitamin B12, has zero trans fats, is lactose-free and contains no egg or milk products.

In the United States, Pilgrim’s Pride is a leading supplier of organic chicken. With maintenance of long-term investments in innovation in mind, JBS opened its JBS Global Food Innovation Center in 2019, in partnership with Colorado State University (CSU). The Center is an educational and research unit geared toward enhancing food safety practices, meat sciences and animal welfare, while also developing educational and training activities in addition to performing equipment testing.

In Brazil, Friboi has a pioneering program on improvements to production processes, which allows for internal recognition of projects and their creators. The Continual Improvement Circle (or CMC, its acronym in Portuguese) program leverages knowledge by using the PDCA (Plan, Do, Check and Act) methodology. In some cases, when adaptable, the Company implements the winning initiative at other units or even in other businesses.

**Global Innovation Team**

The Global Innovation Team (GIT) aims to offer JBS’s knowledge by sharing information, accelerating innovation through cross-border exchanges and creating global platforms that support innovative practices. GIT team members include innovation professionals from JBS business areas around the world, whose work is based on three pillars: product innovation, process innovation and technological innovation. Innovations conducted by the GIT in 2019 resulted in gains in raw material profitability, improved product quality and reduced plastic usage during production.

**GIT Mission**

- Share knowledge globally
- Quickly adapt to global trends
- Raise and launch successful innovations
- Bigger, better and faster global platforms
- Make technology feasible worldwide
- Share global talent
Partnerships and associations

JBS is a member of food industry associations and trade groups and a member of some of the largest industry and sustainability organizations in the countries where it operates.

Global
- Global Roundtable for Sustainable Beef (GRSB)
- International Meat Trade Association
- International Consortium for Antimicrobial Stewardship in Agriculture
- International Institute of Ammonia Refrigeration
- Leather Naturally
- Leather Working Group (LWG)
- Sustainable Agriculture Initiative
- Global GAP

Australia
- Australian Beef Sustainability Framework
- Australian Environmental Business Network
- Australian Food and Grocery Council
- Australian Lot Feeders’ Association
- Australian Meat Council
- Australian Meat Processor Corporation
- Australian Pork Limited
- Cattle Council of Australia
- Meat and Livestock Australia

Brazil
- Poultry Growers Association of Bahia (ABA)
- Brazilian Association of the Food Industries (ABIA)
- Brazilian Beef Exporters Association (ABIEC)
- Brazilian Agribusiness Association (ABAG)
- Brazilian Association of the Plastics Industry (Abiplast)
- Brazilian Association of Vegetable Oil Industries (Abiove)
- Brazilian Animal Protein Association (ABPA)
- Brazilian Association of Broiler Chick Producers (APINCO)
- Poultry Growers Association of Minas Gerais (AVMIC)
- Industrial Association of Meat and Meat Byproducts of Santa Catarina (SINDECARNE-SC)
- Centre for the Brazilian Tanning Industry (CICB)
- Brazilian Coalition on Climate, Forests and Agriculture
- Packaging Coalition
- Brazilian Roundtable on Sustainable Livestock (BRSL)
- Instituto Ethos
- Institute for the National Pact to Eradicate Slave Labour – IMPACTO
- Trade Association of the Poultry Products Industry of the State of Paraná (SINDIAVPAR)
- São Paulo State Cold Products Industry Association (SINDIFRIO)
- Sindicato Nacional da Indústria de Alimentação Animal (SINDERAÇÕES)
- Tropical Forest Alliance (TFA)
- União Nacional das Indústrias e Empresas de Carne (UNIEC)
- Brazilian Roundtable on Sustainable Livestock (BRSL)

Canada
- Alberta Motor Carrier Association
- Canadian Cattlemen’s Association
- Canadian Meat Council
- Canadian Renderers Association
- Canadian Roundtable for Sustainable Beef
- Cattle Council of Australia
- Fats and Protein Research Foundation

United States
- Alabama Feed and Grain Association
- Alabama Poultry and Egg Association
- American Association of Avian Pathologists
- American Association of Swine Veterinarians
- American College of Poultry Veterinarians
- American Fats and Oils Association
- American Feed Industry Association
- American Leather Chemist Association
- American Meat Science Association
- American Society of Animal Science
- American Veterinarian Medical Association
- Asociación de Industriales de Puerto Rico
- Association of National Advertisers
- Beef Industry Food Safety Council
- Colorado Motor Carrier Association
- Food Safety Preventative Controls Alliance
- Georgia Association of Water Professionals
- Georgia Poultry Federation
- Georgia Veterinarian Medical Association
- Institute of Food Technologists
- Kentucky Poultry Federation
- Kentucky Rural Water Association
- Missouri Pork Producers Association
- National Cattlemen’s Beef Association
- National Chicken Council
- National Oilseed Processor Association
- National Pork Board
- National Pork Producers Council
- National Renderers Association
- North American Meat Institute
- North Carolina Poultry Federation
- Organic Trade Association
- Palmetto Agribusiness Council
- Pet Food Alliance
- Poultry Science Association
- Research Chefs Association
- South Carolina Poultry Federation
- Southern Poultry Science Association
- Southwest Meat Association
- Tennessee Poultry Association
- Texas Broiler Association
- Texas Grain and Feed Association
- Texas Poultry Improvement Association
- Trucking Industry Defense Association
- Uniform Intermodal Interchange Agreement
- USA Poultry and Egg Export Council

United Kingdom and European Union
- Bord Bla
- British Frozen Food Federation
- British Poultry Council
- Campden BRI Food and Drink Initiative
- Chilled Food Association
- European Federation for Beef and Pork Meat
- French Meat Federation
- French Meat Interprofessional Federation
- French Poultry Federation
- Institute of Livestock or INRA (French National Institute of Agricultural Research)
- Northern Ireland Food and Drink Association
- Northern Ireland Poultry Federation
- Northern Ireland Food Chain Certification
- Organic Farmers and Growers
- Red Tractor
Commitment to sustainability

Materiality and stakeholder engagement
Product integrity
Social responsibility
Environmental stewardship
Animal welfare
Aware of its role in engaging the entire value chain, global activities at JBS are based on sustainable development and management of the impacts of its operations.

The Company’s global sustainability priorities are: product integrity, animal welfare, environmental stewardship, and social responsibility. This chapter will show guidelines, policies and global results in these topics. However, in line with the Company’s vision of “thinking globally, acting locally” and its strategy of providing business areas regional autonomy, these topics will also be discussed within the context of each business, with their specificities and results.

To conduct sustainability management at the corporate level, JBS has established leaders in Brazil and the USA, in addition to locally designating people to this theme at each business. Regional leaders are also tasked with engaging business areas with a commitment to sustainable action and with spreading this same vision across the value chain, serving as an interface for the Company’s communications with its stakeholders.

The Company maintains an important governance authority for this topic through the JBS Sustainability Committee, which is responsible for discussing strategic issues at the global level. This group reports directly to the Board of Directors. The Board’s Chairman, Jerry O’Callaghan, also joined the Sustainability Committee in 2019.

Brazilian directors are also responsible for monitoring all operations in Brazil and the Couros business unit in other countries. Operations for the United States, Canada, Australia, New Zealand, Mexico and Europe are monitored from the United States.

Global investments in sustainability in 2019: R$ 1.9 billion

JBS Couros unit in Itumbiara (GO)
Materiality and stakeholder engagement

JBS has developed a materiality matrix that prioritizes sustainability topics for the Company and its stakeholders. In 2019, these topics were revised and grouped into four new pillars that better represent the Company’s global challenges.

To create this new matrix, a series of interviews were held with Company leaders from around the world and select customers in Australia, Brazil, Canada, the United States and Europe over six months, based on the materiality process and studies that have been being carried out since 2014. Based on this consensus-building methodology, items in the JBS materiality matrix are given equal weight and no prioritized.
Sustainable Development Goals - SDGs

JBS manages sustainability in alignment with the international scenario and the 17 Sustainable Development Goals (SDGs) launched by the United Nations (UN) as a platform and reference for its sustainability actions. The UN’s 2030 Agenda defines the SDGs as an action plan for making the planet more sustainable for people.

Relationship between strategic sustainability themes and SDGs

Activities are also linked to GRI indicators, with information on these indicators available in the summary, starting on page 286.
Relationship between JBS projects and SDGs

**PRODUCT INTEGRITY**

**IN THE VALUE CHAIN**
- Super Agro Program (p. 206)
- Integrated partnership (p. 205)
- Supply Chain Protocol (p. 158)
- Friendly Oil Program (p. 174)
- Decarbonization Credits (CBio) (p. 175)
- Social Fuel Seal (p. 154)
- JBS 360° (p. 158)
- BRSL, GSRB and Araguaia League (p. 152)
- Monitoring of cattle suppliers (p. 88)
- InPacto (p. 92)

**INNOVATION AND QUALITY**
- Kind Leather (p. 142)
- LWG and CSCB Certifications (p. 139)
- Whow! Innovation Award (p. 193)
- Seara Incrível Line (p. 71)

**COMPLIANCE**
- JBS Ethics Hotline (p. 40)
- Instituto Ethos (p. 41)
- Policies, Codes, Due Diligence and Compliance Training (p. 37)

**SOCIAL RESPONSIBILITY**

**JBS USA TEAM MEMBERS**
- Internship Program (p. 50)
- Management Trainee Program (p. 50)
- Leadership Warehouse Program (p. 50)
- Tomorrow Fund (p. 252)

**JBS BRASIL TEAM MEMBERS**
- Internal Talent Program (p. 48)
- Valued Youth Program (p. 48)
- JBS Without Borders Program (p. 46)

**COMMUNITY**
- Good Deeds Are Good (p. 159)
- Instituto Germinare (p. 161)
- Agro Against Cancer Campaign (p. 159)
- Special Chefs (p. 159)
- Favelas Cup (p. 159)
- Social action in Vietnam (p. 160)
- Refugee support and regularization (p. 44)
- Inclusion of people with disabilities (p. 45)
- JBS Canada Centre (p. 252)

**Legend:**
1. No Poverty
2. Zero Hunger
3. Good Health and Well-being
4. Quality Education
5. Decent Work and Economic Growth
6. Industry, Innovation, and Infrastructure
7. Affordable and Clean Energy
8. Clean Water and Sanitation
9. Responsible Consumption and Production
10. Reduced Inequalities
11. Peace and Justice
12. Life on Land
13. Climate Action
14. Life on Land

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ENVIRONMENTAL STEWARDSHIP

- Sapling nursery in Marabá (PA) (p. 160)
- Recycling (p. 180)
- Sustainable packaging (p. 104)
- Tropical Forest Alliance (p. 92)
- Instituto Recicleiros (p. 214)
- Use of cardboard pallets (p. 261)
- Use of recyclable plastic wrap (p. 133)

ENERGY AND EMISSIONS

- Renewable energy (p. 177)
- TRP Optimized Route Program (p. 176)
- Photovoltaic panels and energy management at Swift (p. 177)
- Biolins, renewable resource thermolectric plant (p. 177)
- Open market acquisition of 65% of energy by JBS (p. 177)

ANIMAL WELFARE

- Certified feedlots (p. 265)
- Animal welfare care, targets and training (p. 106)

Team member Patrícia Locatelli Baron, from the Ipumirim (SC) unit.
Stakeholder communication channels

Some of the many channels of communication maintained by JBS companies to communicate with stakeholders are:

INTERNAL

- **JBS INTRANET:** provides information and news on the Company, as well as other team member services.
- **FIND OUT MORE:** a newsletter sent twice a week to team members in Brazil.
- **FIND OUT MORE SUPER AGRO:** a newsletter sent monthly to integrated producers in Brazil.
- **HR REPORTS, ALWAYS DO THE RIGHT THING NEWS, MESSAGE FROM THE PRESIDENT, JBS TV, AMONG OTHERS:** covering what is happening in relation to Company and Corporate business.
- **GLOBAL NEWS ROUNDUP:** a newsletter with stories and topics of global interest to JBS.
- **JBS NEWS ROUNDUP:** an internal newsletter with the main news on JBS USA, the competition and the market, distributed three times a week.
- **PILGRIM’S MOY PARK MAGAZINE:** a quarterly magazine.
- **OMBUDSMAN:** takes criticism, questions and suggestions on operations and internal processes as well as other topics related to day-to-day work.
- **HOTLINES:** for anonymous reporting of matters related to the workplace or ethics.
  - JBS USA: Best Work Environment Hotline
  - Pilgrim’s: Prideline
  - JBS Australia: Complaints Hotline
  - Moy Park: Support Assistance Helpline
- **ENGAGEMENT SURVEYS**
- **OPEN DOOR POLICY:** a program for communicating directly with leaders, allowing team members to submit questions related to performance and the workplace.
- **SUSTAINABILITY SPOTLIGHT:** a weekly report highlighting sustainability in the JBS USA and Pilgrim’s business.

CUSTOMERS AND CONSUMERS

- **FOOD NEWS:** communicating news on JBS brand products and Food Service channel actions for customers and partners in Brazil. Every two months.
- **CUSTOMER SERVICE 2.0:** Friboi, with a toll free hotline (+55 0800 11 5057), and a channel for online interaction (available at http://www.friboi.com.br)
- **Customer Service:**
  - Seara, with a toll free hotline (+55 0800 47 2425), e-mail and social media.
  - Consumer Hotline: 1-800-312-1470, available Monday through Friday, during business hours, in the United States
  - FreshTrace™
  - SAP Cloud for Customers
  - Website for each business and brand
- **JBS NEWS:** monthly report on sustainability actions being carried out by JBS in Brazil and leather operations around the world.

MEDIA

- **SPECIALIZED SERVICE AREAS** for each business unit and corporate business.
- **MEDIA ROOM**
  https://jbs.com.br/comunicacao/ultimas-noticias
- **INVESTORS AND SHAREHOLDERS**
- **SERVICE AREAS** in Brazil and the United States (Pilgrim’s)
- **JBS IR WEBSITE**
  ri.jbs.com.br
- **PILGRIM’S IR WEBSITE**
  ir.pilgrims.com
- **QUARTERLY EARNINGS CALLS**
- **JBS DAY**

SUPPLIERS

- **CONNEXÃO FRIBOI**
  https://www.friboi.com.br/pecuarista
- **GIRO DO BOI PROGRAM**
  www.girodoboio.com.br
- **SEARA’S “CONNECTED & INTEGRATED” PROGRAM**
- **WEBSITE** for each business
At JBS, product integrity means respecting the highest food safety, quality and sustainability standards. This means being committed to and investing in enhancing operations, manufacturing and product supply adopting good social and environmental practices and enhancing certification by independent auditors to ensure implementation of good practices, processes and routines.

One of JBS’s main characteristics in the context of its value chain is its role as a benchmark, especially in responsible procurement of raw materials. This position has a significant influence on the value chain, from raw material suppliers adopting good practices to the final quality of products.

In this sense, JBS encourages and develops actions geared toward enhancing supplier management and practices, by working on two fronts: supplier relationships and guarantee of origin.

“We have a nearly seven year long partnership with JBS, always based on innovation and on finding the best technological solutions for monitoring its supplier chain and detecting deforestation. During this entire period, we’ve developed countless challenging projects with JBS, which have helped the beef sector in Brazil as a whole to move forward when it comes to sustainability.”

Breno Félix
Product Director at Agrotools

Supplier relationships

JBS understands that its relationship with suppliers is essential and relevant to the prosperity of the value chain. That is why the Company developed a series of actions to build closer relationships with its stakeholders that are based on confidence, respect, ethics and transparency. Learn more about what is being done by each business in Chapter 3 - Our Businesses.

With a regular dialog with its suppliers, especially in relation to matters related to respecting human rights and national and local labor laws, JBS has been a signatory of the National Pact to Eradicate Slave Labour since 2007, and has been a member of the Institute for the National Pact to Eradicate Slave Labour (InPACTO) since 2014.

The Company’s approach to managing impacts in its supply chain includes constant and consistent collaboration with our suppliers. The majority of whom, are bound by contract to follow state laws and regulations, JBS also establishes long-term relationships in different locations, which contribute to the continued progress of its supply programs.

In integrated poultry and pork chains, JBS units works with producers, partnering to guarantee the origin of raw materials. The inputs needed to develop safe and healthy breeding are provided through this relationship. In addition, regular technical visits are held, providing advice on production management, environmental practices and animal welfare.

At every stage, from genetic selection of animals to transportation of products for sale, a management system guarantees compliance with the strictest standards. Having greater control over animals’ health and nutrition makes it possible to minimize the risk of contamination and diseases, while simultaneously augmenting quality assurance, food safety, product cost efficiency and fulfillment of customer specifications.

In Brazil, all livestock in the beef chain is acquired from third-party suppliers in order to guarantee best practices, and the Company develops relationship programs and training materials for its suppliers around the world.
Amazon

JBS is committed to combating, discouraging and eliminating deforestation of its supply chain in the Amazon. A pioneer in sustainable development initiatives in the region, the Company’s activities are based on a Raw Material Responsible Procurement Policy, which establishes social and environmental criteria for selecting cattle suppliers.

Over the last 10 years, JBS has made substantial investments to make one of the largest private supplier monitoring systems in the world viable. Using satellite images and georeferenced data on supplier farms, the system monitors an area of 450,000 km² (45 million hectares) located in the Legal Amazon, equal to the size of Germany.

The Company assesses 50,000 farms daily to avoid purchasing animals from properties involved with deforestation of old growth forests, invasion of indigenous lands and environmental preservation areas or areas listed as under embargo by the Brazilian Institute for the Environment and Natural Resources (Ibama). JBS does not acquire cattle from suppliers involved with rural violence or agrarian conflicts or that use child or forced labor. During this period, around 9,000 cattle supplier farms have been blocked by the monitoring system for failing to comply with social and environmental requirements.

Guarantee of origin

At JBS, the acquisition of raw materials is based on the principles of responsible procurement; this means they are based not only on compliance with federal and local regulations, but also in line with the most sustainable practices in the sector. This is where the Company’s guarantee of origin begins.

This commitment could result in cancellation of contracts when irregularities or incompatible practices are found. That is why there are control mechanisms at various stages of the process.

In integrated poultry and pork chains, efforts to guarantee origin is through oversight of farms and producers. In Brazil, Seara uses tracking systems to quickly identify and, if necessary, isolate farms with any problems related to quality or safety. Technology also helps monitor treatment of birds at every stage of their lives and the production process.

For three years, Imaflora has been working with JBS to enhance monitoring of meat purchases coming from the Amazon as well as audits of Conduct Modification Agreements, which are done with the Federal Public Prosecutor’s Office, other NGOs, meatpacking plants and retailers. Because JBS is the world’s largest animal protein company, it has this huge potential to positively impact on the entire sector, especially in the Amazon, monitoring its cattle purchases and ensuring less deforestation and elimination of slave labor in Brazil, and it even has the potential to bring all of these examples of projects to other biomes.”

Marina Piatto
Climate and Agricultural Chains Manager at Imaflora
As part of its commitment to transparency, the Company’s cattle procurement operations and its entire supplier monitoring system are audited annually by independent auditors, with results published to the Company’s website. Audits have shown that in recent years, over 99.9% of JBS’s cattle purchases from farms located in the Amazon region were compliant with the Company’s social and environmental criteria.

In 2019, the DNV-GL company of Norway, an international reference in social and environmental auditing, consulting and certifications, confirmed that 100% of cattle acquisitions made by the Company in the Amazonian biome were socially and environmentally compliant.

JBS makes efforts to enhance industry standards, through open dialog and by engaging stakeholders in order to improve sustainability across the industry’s entire value chain. The Company is a founding member of the Brazilian Roundtable on Sustainable Livestock (BRSL), part of the Global Roundtable for Sustainable Beef (GRSB), and a member of the Tropical Forest Alliance (TFA), an initiative connected to the World Economic Forum, fostering and promoting actions aimed at ending deforestation in the world.

The Company is also a member of the Brazilian Coalition on Climate, Forests and Agriculture, which works collaboratively on issues connected to climate change. It is also a supporter of the “Be Legal in the Amazon” initiative, led by the Brazilian Agribusiness Association (ABAG), the Brazilian Beef Exporters Association (ABIEC), and other institutions who work to combat illegal occupation of public lands and deforestation in the Amazon.

JBS was the first company in the food industry in Brazil to become a member of InPACTO, a multi-stakeholder organization combating the use of forced labor in the country’s main production chains.

In partnership with the Federal Prosecution Office of Brazil and the Institute for Forest and Agricultural Management and Certification (Imaflora), JBS has made important contributions to building industry strategies for responsible cattle procurement in the Amazon, called Boi na Linha (www.beefontrack.org), which establishes criteria for purchasing raw material for the Company’s operations in the region.

The Company’s goal for 2020 and beyond is to develop a project for reforestation of environmental liabilities in the Legal Amazon in partnership with its cattle suppliers and civil society organizations.

JBS believes that the industry can continue to prosper by using new technologies and through greater productivity, without deforestation in the Amazon, and invites all industry players to join its commitment to protect this important biome and remove incentives that could encourage deforestation.
JBS understands that its corporate social responsibility should be exercised in every aspect, especially in communities where it operates and with a focus on the health and safety of its team members.

JBS has a major social impact on the regions in which it operates. Facilities are mostly located in areas that lie far away from major urban centers, where the Company naturally has a bigger economic and social influence. Among other things, this means that the Company has the chance to play a role in developing the local community. Through which its production units provide people without specific educational backgrounds with access to differential professional education, in a fast and effective process of inclusion.

The Company’s approach is based on community development actions and donations that allow it to positively impact the places where JBS team members live and work, therefore benefiting the community where it is located. Along these same lines, JBS supports initiatives geared toward educating and developing children and young people, through professional training for young people and adults and training and social inclusion of people with disabilities. As with other areas, each business platform has the autonomy to establish their own programs in this area - through sponsorships, team member volunteering activities and direct investments.
Occupational health and safety
GRI 103-1 GRI 103-2 GRI 303-3

Occupational health and safety are essential to business development at JBS. As with other themes, this follows the Company’s global principles, complying with regional programs and local action plans. In addition, the Company strictly complies with Occupational Health and Safety regulations established by local standards and laws in every region where it operates.

Management policies and programs are revised annually, along with key indicators. This measure makes it possible for the Company to make the adjustments needed to assure compliance with corporate requirements for occupational health and safety conditions. The Company works to train its team members on accident prevention, compliance with legal requirements, spreading a culture of occupational health and safety and continual improvement of its processes.

JBS also monitors key safety indicators on a daily, weekly and monthly basis, so that health and safety decisions are made quickly and prioritized.

Monthly verification makes it possible for the Company to monitor the evolution of frequency and severity rate indicators as well as improvement actions. Likewise, action plans are monitored and a check is done on any pending matters related to legal nonconformance found in safety inspections, as well as on the mandatory training indicators for each job.

Training on occupational health and safety was provided to 105,000 team members, with R$ 698.86 million invested in this area, 133% more than in 2018.

### Occupational health and safety rates
GRI 403-2

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>2019</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Brazil/ South America</td>
<td>JBS USA</td>
<td>Pilgrim's USA</td>
<td>Pilgrim's Mexico</td>
<td>Pilgrim's Moy Park</td>
<td>Pilgrim's Tullip*</td>
<td>Australia</td>
<td>Canada</td>
<td>Brasil/ South America</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accidents</td>
<td></td>
<td>455</td>
<td>283</td>
<td>114</td>
<td>29</td>
<td>25</td>
<td>N.A.</td>
<td>273</td>
<td>29</td>
<td>456</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3,806</td>
<td>1,792</td>
<td>797</td>
<td>257</td>
<td>97</td>
<td>N.A.</td>
<td>4,57</td>
<td>N.A.</td>
<td>4,002</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>4,261</td>
<td>2,075</td>
<td>911</td>
<td>286</td>
<td>122</td>
<td>N.A.</td>
<td>710</td>
<td>N.A.</td>
</tr>
<tr>
<td>Injuries</td>
<td></td>
<td>2.12</td>
<td>0.81</td>
<td>0.36</td>
<td>0.38</td>
<td>0.21</td>
<td>N.A.</td>
<td>13.29</td>
<td>1.07</td>
<td>1.99</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rate of injuries with leave</td>
<td>2.12</td>
<td>0.81</td>
<td>0.36</td>
<td>0.38</td>
<td>0.21</td>
<td>N.A.</td>
<td>13.29</td>
<td>1.07</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rate of injuries without leave</td>
<td>17.77</td>
<td>5.14</td>
<td>2.53</td>
<td>2.46</td>
<td>1.69</td>
<td>N.A.</td>
<td>24.62</td>
<td>N.A.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total rate of injury</td>
<td>19.89</td>
<td>5.95</td>
<td>2.89</td>
<td>2.73</td>
<td>1.07</td>
<td>N.A.</td>
<td>37.91</td>
<td>N.A.</td>
</tr>
<tr>
<td>Lost workdays (severity rate)</td>
<td></td>
<td>22,219</td>
<td>N.A.</td>
<td>N.A.</td>
<td>398</td>
<td>193</td>
<td>N.A.</td>
<td>830</td>
<td>N.A.</td>
<td>16,752</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lost workdays due to accidents</td>
<td>22,219</td>
<td>N.A.</td>
<td>N.A.</td>
<td>398</td>
<td>193</td>
<td>N.A.</td>
<td>830</td>
<td>N.A.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lost workday rate (LWR)</td>
<td>95</td>
<td>N.A.</td>
<td>N.A.</td>
<td>0.01</td>
<td>1.69</td>
<td>N.A.</td>
<td>N.A.</td>
<td>30.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DART (Days Away, Restricted or job transfer rate)</td>
<td>N.A.</td>
<td>4.15</td>
<td>1.56</td>
<td>0.2</td>
<td>0.11</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>Fatalities</td>
<td></td>
<td>Typical accidents</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>N.A.</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*N.A. - Not available
*In 2018, Tulip did not yet belong to the JBS group
Environmental stewardship

GRI 103-1 GRI 103-2

Similar to other topics, the environmental stewardship process at JBS involves the utilization of resources, such as water and energy, lowering greenhouse gas (GHG) emissions and treating waste generated by the operation, with a focus always on improved eco-efficiency through innovative solutions and efficient management. In 2019, JBS invested R$ 689.82 million in environmental improvements.

Publishing of the results and assessments of practices adopted through the CDP, the largest and most respected global platform for corporate sustainability information, is part of the Company’s monitoring and analysis of improvements it has made. In 2019, results identified in the CDP showed that JBS had above average performance in all criteria assessed.

The platform allows the Company to report on its performance, policies and good practices in sustainability. Since 2015, the Company has used the tool to report on its performance in managing water resources (CDP Water program), to manage GHG (CDP Carbon) emissions and corporate actions and policies preventing deforestation associated with obtaining key agricultural commodities – cattle, soybeans, timber and palm oil (CDP Forests).

The study used five criteria to assess companies grouped in the food, beverage & tobacco industry. JBS had better than average results compared to companies in the industry working in the biggest animal protein markets and compared to other sectors, meaning that the Company’s performance is among the best in the world in relation to corporations.

Data used in the assessment is gathered through questionnaires built around topics that cover risks and opportunities, governance, strategies, compliance, traceability, procurement policies, chain engagement and establishment of targets. All of these efforts are geared toward the Environmental Management Policy and by the Environmental Management Systems of its various businesses, which set guidelines and provide indicators to direct actions. Corporate environmental teams supervise environmental performance of operations and provide assistance for specific problems, in the event they arise. Cases on the most relevant results are shared and replicated whenever possible, regionally and globally.

Globally, R$ 698.82 million was invested in environmental stewardship at JBS factories.
Water management
GRI 103-1 GRI 103-2 GRI 303-3

JBS reiterates its commitment to sustainable water use as a priority in all of its units and also develops strategies and projects to guarantee maximum efficiency in using and reusing this resource. Water resource management is the foundation of the JBS production chain. This resource is considered essential to the development of animals and feed, as well as to assuring sanitary standards for processes and products in addition to sanitation of areas, equipment and tools. The guidelines around water resource management are carried out at the corporate level and the actions are executed by plant environment teams. Specific targets and procedures are defined for each business, respecting their particularities. It is worth noting among indicators monitored are control of water collection sources and of disposal sites for treated effluents, effluent treatment programs and reuse and recycling strategies, as well as water use based on production intensity.

In addition to monitoring rainwater collection, which reached 125 million liters in 2019 as a premise, the Company reuses water at various moments in the process. Many of these actions are shared by JBS operations around the world. Water reuse and recycling initiatives represent the biggest opportunity for saving this resource. Water reuse is chiefly employed in processes used in cleaning external areas and for cooling equipment, in accordance with existing sanitary standards. It is important to note that the specific local laws in each country outline the types of operations where gray water can be reused. In 2019, over 3.3 billion liters of water were reused in Company operations around the world, accounting for approximately 2% of water captured. This amount of water reused is equal to 1,320 Olympic-size swimming pools.

In addition, through eco-efficiency efforts and process management, JBS lowered the amount of water used in its operations per ton of product produced by 4%.

Efluentes

Liquid effluents resulting from the production process at units are appropriately treated and undergo a process that meets legal requirements. All effluents are treated, whether internally or by the public system. The Company constantly monitors the performance of effluent treatment stations, complying with the physical and chemical standards stipulated by law, with oversight from the respective governmental agencies in each country.

The volume of effluents generated by JBS was 151.7 million m³. JBS returns 87% of water collected and used in its industrial processes back to the environment safely. The only exception is the effluent volume sent to the public system for treatment.

Investments in water management totaled R$ 39.1 million

Investments in effluent management and treatment totaled R$ 129 millions

Volume of effluents generated and treated
GRI 102-48 GRI 306-1

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount (in m³)</td>
<td>%</td>
<td>Amount (in m³)</td>
<td>%</td>
</tr>
<tr>
<td>Volume discarded - water body</td>
<td>79,581,190.65</td>
<td>52.32</td>
<td>72,165,406.03</td>
</tr>
<tr>
<td>Volume discarded - fertigation</td>
<td>18,312,871.46</td>
<td>12.07</td>
<td>19,827,579.71</td>
</tr>
<tr>
<td>Volume discarded - public system</td>
<td>46,749,741.05</td>
<td>30.81</td>
<td>49,505,829.21</td>
</tr>
<tr>
<td>Volume discarded - other disposal source</td>
<td>7,287,937.79</td>
<td>4.80</td>
<td>5,474,609.14</td>
</tr>
<tr>
<td>Total</td>
<td>151,731,740.96</td>
<td>(*)</td>
<td>146,973,424.09</td>
</tr>
</tbody>
</table>

* Data changed in relation to the last report

Water withdrawn by source
GRI 102-48 GRI 303-1

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount (in m³)</td>
<td>%</td>
<td>Amount (in m³)</td>
<td>%</td>
</tr>
<tr>
<td>Surface water</td>
<td>44,881,977.80</td>
<td>25.65</td>
<td>53,495,029.89</td>
</tr>
<tr>
<td>Groundwater</td>
<td>60,191,977.88</td>
<td>34.40</td>
<td>55,999,013.82</td>
</tr>
<tr>
<td>Public and third-party supply</td>
<td>69,659,103.35</td>
<td>39.81</td>
<td>10,668,979.34</td>
</tr>
<tr>
<td>Rainwater</td>
<td>158,451.27</td>
<td>0.07</td>
<td>172,538.48</td>
</tr>
<tr>
<td>Other sources</td>
<td>115,805.00</td>
<td>0.07</td>
<td>56,204,208.47</td>
</tr>
<tr>
<td>Total</td>
<td>174,973,806.75</td>
<td></td>
<td>176,125,682.99</td>
</tr>
</tbody>
</table>

* Data changed in relation to the last report
Climate change
GRI 103-1 GRI 103-2

For the last 11 years, JBS has conducted an annual GHG emissions inventory, according to the international GHG Protocol methodology and has published its global inventory on the Brazil GHG Protocol’s Public Emissions Registry Platform.

JBS monitors and accounts for its operations’ GHG emissions and reports them within scopes 1, 2 and 3.

*Scope 1 emissions* – Emissions coming from the Company’s own fleets, fuels used to generate energy or heat in operations, effluent treatment ponds and enteric fermentation from animals on feedlots or Company farms, among others.

*Scope 2 emissions* – Indirect energy emissions from sources over which the Company has no responsibility or indirect responsibility. These emissions come from the use of electricity.

*Scope 3 emissions* – Indirect emissions resulting from the third-party fleet, commercial air travel, decomposition of waste on third-party properties and others. Emissions in this scope are therefore considered to be emissions over which the Company has no responsibility or indirect responsibility.

JBS is constantly looking for new applications and best practices to reduce the carbon footprint of its operations. Initiatives by JBS to reduce direct emissions are mainly focused on the volume of fossil fuels and energy consumed. A major effort is also being made to achieve a cleaner energy matrix, to use waste in generating energy, to gain more efficiency in treating industrial effluents and to increase the logistics efficiency of the Company’s own and third-party fleets.

**GHG emissions by scope**
GRI 102-48 GRI 305-1 GRI 305-2 GRI 305-3

<table>
<thead>
<tr>
<th>(in tCO₂e)</th>
<th><strong>2019</strong></th>
<th><strong>2018</strong></th>
<th><strong>2017</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope 1</td>
<td>4,593,547.51</td>
<td>4,379,351.82 (*)</td>
<td>5,504,609.52 (*)</td>
</tr>
<tr>
<td>Scope 2</td>
<td>1,615,547.85</td>
<td>1,550,524.56 (*)</td>
<td>1,780,515.80</td>
</tr>
<tr>
<td>Scope 3</td>
<td>930,672.31</td>
<td>704,850.13 (*)</td>
<td>580,081.37</td>
</tr>
</tbody>
</table>

(*) Data changed in relation to the last report

Absolute emissions at JBS rose slightly from 2018 to 2019. This was mainly due to the acquisition of new operations by the Company, such as Tulip, in Europe.

Energy
GRI 103-1 GRI 103-2

JBS invests in adopting best practices related to energy consumption. The Company is conscious of its responsibility to use renewable energies in order to reduce emissions in its value chain. This item is a priority for management, in terms of both the Company’s emissions and eco-efficiency, and it relies on a definite strategy as well as resources for implementation.

**In 2019, JBS investments in energy efficiency projects worldwide reached R$ 59.6 million.**

**Energy matrix**
GRI 102-48 GRI 302-1

<table>
<thead>
<tr>
<th>(in GJ)</th>
<th><strong>2019</strong></th>
<th><strong>2018</strong></th>
<th><strong>2017</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct energy*</td>
<td>69,978,035.37</td>
<td>67,804,701.67(**)</td>
<td>67,742,846.23(**)</td>
</tr>
<tr>
<td>Total GJ</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% non-renewable</td>
<td>54.23%</td>
<td>53.49%</td>
<td>57.19%</td>
</tr>
<tr>
<td>% renewable</td>
<td>45.77%</td>
<td>46.51%</td>
<td>42.81%</td>
</tr>
</tbody>
</table>

(*) Considers direct energy to be electricity generation, use of fuel in steam generation and thermal heating (stationary combustion) and fuel consumption to operate the Company’s vehicle fleet (mobile combustion).

(**) Data changed in relation to the last report
Waste management is done at every JBS unit around the world, based on a commitment to reduce waste generated, appropriately dispose of waste, lower the amount of waste sent to landfills and decrease costs, always in accordance with current laws in the countries where it operates.

Management of solid waste generated during internal production processes at JBS is part of the strategy to reduce GHG emissions. The creation of methane (CH4), a greenhouse gas, is a byproduct of waste that the Company works to carefully dispose and treat to lessen its environmental impact.

JBS has undertaken a commitment to recycle or reuse the greatest possible amount of waste, so as to reduce waste sent to landfills and other destinations, in addition to supporting initiatives to promote recycling of post-consumer packaging in Brazil, using reverse logistics programs.

For JBS, the closed cycle system of reusing and recycling waste is fundamental to the sustainability of its operations. The Company develops a variety of initiatives to identify these opportunities.

Packaging is essential, especially when it comes to JBS’ responsibility to protect food and keep it safe from processing to the consumer’s table. That is why the Company promotes returning packaging to the production chain, in an effort to contribute to recycling and diminish the impact of landfill disposal.

All Company operations invest in research and development to find ways to reduce and optimize the use of packages, lowering the amount of waste generated by customers and consumers.

In 2019, JBS reused over 121,000 metric tons of waste to generate energy, which is 9% more than the previous year. This reinforces the Company’s commitment to optimize the use of resources in processes, using the circular economy as a premise. Over 1 million tons of waste generated by the Company were also reused, accounting for approximately 50% of all waste generated. This volume was used in composting, recycling, energy reuse and cogeneration.

**Waste generated in operations** GRI 102-48 GRI 306-2

<table>
<thead>
<tr>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous waste</td>
<td>32,706.95</td>
<td>15.0%</td>
</tr>
<tr>
<td>Non-hazardous waste</td>
<td>2,144,268.94</td>
<td>98.50%</td>
</tr>
<tr>
<td>Total volume of waste</td>
<td>2,176,975.87</td>
<td></td>
</tr>
<tr>
<td>1. Company landfill</td>
<td>19,260.53</td>
<td>0.88%</td>
</tr>
<tr>
<td>2. Third-party landfill</td>
<td>469,654.1</td>
<td>21.57%</td>
</tr>
<tr>
<td>3. Composting</td>
<td>588,655.27</td>
<td>27.04%</td>
</tr>
<tr>
<td>4. Incineration</td>
<td>13,288.89</td>
<td>0.61%</td>
</tr>
<tr>
<td>5. Recycling</td>
<td>304,952.38</td>
<td>14.01%</td>
</tr>
<tr>
<td>6. Energy reuse</td>
<td>121,763.63</td>
<td>5.90%</td>
</tr>
<tr>
<td>7. Cogeneration</td>
<td>54,873.48</td>
<td>2.52%</td>
</tr>
<tr>
<td>8. Fertigation</td>
<td>527,768.68</td>
<td>24.22%</td>
</tr>
<tr>
<td>9. Other</td>
<td>77,568.91</td>
<td>3.55%</td>
</tr>
</tbody>
</table>

(*) Data changed in relation to the last report
JBS has a commitment to ensure animal welfare and develops actions related to this theme as a global, strategic and priority agenda. Animal health and safety are top priorities and best animal welfare practices are encouraged, because it is the right thing to do.

The main procedures used to reinforce the adoption and applications of Company guidelines include internal and external training for team members and suppliers, periodic internal audits, indicator panels, and constant verification of the need for investments and adjustments to processes.

The Company believes that product quality is directly related to animal welfare and health. This is what is behind its dedication to fostering and making sure appropriate treatment and care at every stage of the animals’ lifecycle.

All of the Company’s business units have animal welfare programs, prioritizing this topic from breeding to processing and including transport of animals. These programs involve adopting appropriate processes and practices, in addition to monitoring, training and documentation at every step in its extensive value chain.

Actions and initiatives, carried out with extreme rigor and care by each JBS operation, are in line with the five fundamental freedoms of animals, as defined by the Farm Animal Welfare Council (FAWC).
All of the business units at JBS have multidisciplinary teams specialized in each species of animal, as well as teams who are responsible for animal welfare at the corporate level. These teams focus on constant improvement and development. They are responsible for ensuring compliance with the policies and procedures required by animal welfare programs, for creating and enhancing Company practices, and for developing the technical specifications that suppliers must adopt.

In 2019, over 19,500 people worldwide underwent training on animal welfare, which is 47% more than in 2018. Internal training involves field teams, factories and drivers. Integrated and third-party poultry and pork producers and cattle suppliers are also given technical instructions, training and support on animal welfare guidelines, procedures and policies to adopt.

Every JBS production unit has Quality Assurance professionals and corporate teams, who are responsible for overseeing the implementation of the animal welfare program, from facility and equipment assessments and training programs to ongoing monitoring of procedures. All team members involved with animal contacts receive specific training on humane animal handling and slaughter.

Those responsible for Quality Assurance at beef processing operations in the United States, Canada and Brazil are specialized in humane handling and hold certification issued by the Professional Animal Auditor Certification Organization (PAACO). In Australia, certification is provided by the Australian Animal Welfare Certification System (AAWCS).

All operations comply with local technical standards and laws, as well as the principles of animal freedom and humane slaughter. Due to commercial issues, JBS follows religious guidelines to respect the cultural characteristics and diversity of the markets in which it operates.

JBS works to reduce the use of antibiotics in animals year after year, across the entire supply chain. Antibiotics are currently only administered in cases where they are needed, always following veterinarian recommendations. Antibiotics are not routinely used preventively in production; they are only used as needed and pending an assessment by veterinarians. Use of medications is registered and tracked throughout the integrated and Company chains.

JBS’s animal welfare programs are assessed using key performance indicators (KPIs), which are audited by both internal teams and independent consulting firms, as well as by customers in the domestic and foreign markets. Most are focused on practices beyond those required by current laws, indicating JBS’s commitment to adopting best practices. There are also certification audits, such as Global GAP and Certified Humane, applied to Seara units, the National Feedlot Accreditation Scheme (NFAS), for Australian operations, and PAACO, at JBS USA and Fríboi operations.

Any team member or supplier violations of the JBS Animal Welfare Program result in disciplinary processes that could lead to termination of employment or contracts to supply raw materials.

Global animal welfare ranking

Caring for food quality and safety is an ongoing process that JBS applies at every stage of its production chain and it starts with caring for animals. The results of these initiatives can be found in the Business Benchmark on Farm Animal Welfare (BBFAW), an annual global report of best practices in animal welfare that is developed by two international NGOs, World Animal Protection and Compassion in World Farming (CIWF), and by Coller Capital, a global private equity firm. In 2018, JBS remained one of the best companies in the world in relation to Animal Welfare practices, placing in tier 3.

In 2019, R$ 474.7 million was invested in animal welfare, with 19,542 team members trained on this topic.
The Company oversees every stage in the animal control and welfare process, from breeding to transportation to production.

**Breeding**

Breeding is a fundamental to animal welfare. Each protein chain is served according to best local practices, in line with their particularities.

Breeding of poultry, hogs and cows involves Company or third-party operations. Animal health and safety are top priorities and are common to every product line, which is why they are guaranteed through technical visits, manuals, procedures and policies, audits and training.

Practices such as cloning and genetic engineering are not used in the JBS supply chain. The Company also does not use any type of growth hormone, in accordance with Brazilian laws.

**Transportation**

At JBS, animals are transported by specialized and trained drivers using Company or third-party vehicles, designed to promote animal welfare. This procedure prevents injuries and minimizes animal stress during transportation, from departure to arrival. Maximum transport distances and times are pre-established, with procedures for resting, feeding and supplying water adopted according to the timeframes set. Drivers are trained on safety procedures in the event of emergencies while transporting animals.

How are animals transported?

Animal transport between ranches and farms and the slaughter units uses the following practices:

- **Distances or route times between ranches and farms and production units are pre-defined, providing animals with more comfort.**

- **Trained teams are responsible for loading trucks, performing loading and unloading in way that minimizes animal stress.**

*The transport routine is managed using indicators, such as animal density, so as to guarantee that appropriate practices are adopted.*

**Production**

The Company is constantly investing in improving facilities, in acquiring the best equipment available and in training specialized teams, who are at plants to oversee receipt of animals and guarantee their welfare up to the moment of processing. Performance in every stage is regularly evaluated and audited, internally and externally, using specific metrics.
Our Business
Care from every aspect

JBS Brasil
Friboi, Swift, JBS Couros and JBS Novos Negócios

Seara

JBS USA
JBS USA Beef, JBS USA Pork and Pilgrim’s Pride
JBS develops its global business strategy based on seven pillars: strong brands, a leading position in the markets where it operates, production in locations with competitive advantages, distribution structure in the largest consumer markets, diversification by protein and geography, operational excellence, and value-added products.

JBS has two main structures: one headquartered in Brazil and another in the United States. JBS in Brazil includes Friboi, Swift, JBS Couros and JBS Novos Negócios, in addition to Seara. While operations headquartered in the United States are grouped under JBS USA and include JBS USA Beef, JBS USA Pork and Pilgrim’s Pride, a conglomerate of companies with significant operations in Central and North America, Europe and Oceania.

The goal of this organization is to optimize the Company’s competitive advantages in the biggest markets in the world, with a broad portfolio of products, synergies in the value chain and high consumer brand recall.

Business have the autonomy to implement choices related to management, innovation and treatment of themes material to JBS, based on their regional realities, provided they are aligned with the values and principles, as well as the global strategy, that guide the Company’s action. At the same time, with the support of the corporate area, business units share knowledge, good practices and management systems with each other.

The result is a model geared toward agile decision-making, operational excellence, and resilience in the face of challenges, whether situational or commercial. This is what enables JBS to meet market demands and fulfill its purpose of providing quality food, with ethical action and more sustainable production.
JBS Brasil
Friboi, Swift, JBS Couros and JBS Novos Negócios

Comprised of four business units headquartered in Brazil, operating in the beef market and with consumption-related items (Friboi and Swift), leather (JBS Couros) and on a series of activities related to the value chain at the other businesses (JBS Novos Negócios), JBS has approximately 54,000 team members, supplying its products and services to the entire world.
Business description

FRIBOI

A market leader in Brazil, Friboi revolutionized the market by “de-commoditizing” Brazilian beef and becoming a reference in the industry. The Company offers some of the brands most recognized by Brazilian consumers, such as Friboi, Reserva Friboi, Maturatta Friboi, Do Chef Friboi and premium brands 1953 Friboi and Swift Black. With offices in over 150 countries, it is the best-selling Brazilian beef brand on the foreign market.
Founded in 1855, in the United States, Swift is a part of the lives of thousands of people worldwide. Using a unique and innovative strategy to provide services, the brand fulfills its mission of changing how the world’s people consume and purchase protein. Swift is found in a variety of categories, with a broad portfolio of nearly 500 products, including beef for everyday grilling, sustainability-certified fish, pork, lamb, poultry, snacks, side dishes, vegetables, desserts, seasonings for grilling and more. The Company has its own stores and stores at partner retailers, in addition to mobile and online shops, aimed at providing more comfort and practicality in making purchases at over 120 points of sale.

NUMBER OF TEAM MEMBERS: 2,214
JBS COUROS

Founded in 2009, JBS Couros is the world’s largest leather processing manufacturer in the wet blue, wet white, semi-finished and finished segments, with offices in South and North America, Europe and Asia and production units, distribution centers and commercial offices serving the automotive, furniture, footwear and leather goods sectors, among others, around the world. Company brands, such as Authentic, aimed at the furniture segment; Cambré, for footwear and leather goods; and Virgus, for the automotive sector, respond to market trends. In 2019, the revolutionary Kind Leather was launched, a product characterized as being even more sustainable and that uses a production process that reduces water and energy consumption, as well as CO₂ emissions during transport.

1 Leather types, classified by stages and techniques.
JBS NOVOS NEGÓCIOS

JBS Novos Negócios develops operations dedicated to transforming coproducts and animal protein processing waste into high value-added products, such as biodiesel, collagen, casings for deli meats, animal feed, pharmaceutical inputs, hygiene and cleaning materials and more, sold in the Brazilian market and exported to over two dozen countries. It also includes companies providing strategic services to JBS, in the metal packaging, trading, transport, recycling and waste management segments.

The rationale governing JBS Novos Negócios is to allow a closed cycle to be formed, where waste from one particular operation serves as the raw material for another, in a movement of innovation, efficiency and sustainable practices, promoting a circular economy.

Map of operations

- JBS Ambiental
- JBS Biodiesel
- Novaprom
- JBS Natural Casings
- JBS Higiene & Limpeza
- JBS Transportadora
- JBS Embalagens Metálicas
- Complexo JBS Novos Negócios - JBS Feed Solutions and Orygina

NUMBER OF TEAM MEMBERS: 4,195
JBS Ambiental has ten recycling units, in the states of Goiás, Minas Gerais, Mato Grosso do Sul and São Paulo. In 2019 alone, two waste centers were opened, including plants in Senador Canedo (GO) and Nova Andradina (MS). The Company provides products and solutions developed from industrial waste, such as plastic, wood and metal, which are transformed into trash bags, tarps, bags or plastic covers to be used in JBS operations. Manages and treats non-recyclable post-industrial solid waste, tracking its lifecycle and providing for correct disposal of this waste.

The largest producer of natural cattle-based casings in the world and a supplier for the largest food manufacturers, with two processing units in Brazil: Goiânia (GO) and Ituiutaba (MG). Recognized for its supply capacity, quality and the traceability of its products, used to make deli meats, like salamis, and to manufacture strings for musical instruments, tennis rackets and surgical sutures, among other things.

JBS Embalagens Metálicas
The Company’s two plants, located in the cities of Lins and Barretos, in the interior of the state of São Paulo, make steel cans for products that need to be protected from physical, chemical and biological actions, like in the food industry, for example. With an annual production capacity of approximately 1 billion cans, it is among the largest in its sector. Cans for pre-cooked meats (luncheon meat), sardines and tuna (pull tabs), vegetables and tomato-based products, in addition to aerosol packaging, are among the items manufactured by JBS Embalagens Metálicas.

Sells raw materials in the food, hygiene and cleaning, and biodiesel segments. Among products offered are vegetable oils, animal fats and chemical products.

Transportadora
Serves JBS and other customers through 35 branches spread across Brazil. It has its own fleet of 1300 trucks, tracked and with real-time telemetry control. Operating in the live animal cargo, containers, dry and refrigerated cargo and leather segments.

The production unit, in Campo Grande (MS), produces plasma and blood products made using chilled adult bovine blood, serving 100% of the demand from JBS’s own units. With their high nutritional value, products serve as ingredients for manufacturing poultry and hogs feed.

The factory, in Campo Grande (MS), is a reference in facilities and technology. It’s geared toward production of inputs for the pharmaceutical industry, with a focus on supplying raw materials for research centers, molecular development, genetic therapies and vaccines. The source of supplies is JBS itself, which guarantees that products are 100% traceable.

Operates in acquisition of new vehicles for JBS companies and in the sale of used trucks and trailers, with average annual sales of 2,000 vehicles.

The world’s largest producer of highly functional beef proteins. Located in the city of Guaiçara (SP), this unit offers innovative solutions in ingredients for a variety of food industry sectors. Through its international operations, exports are sent to over 20 countries on every continent except Antarctica. This business unit operates in a range of segments, such as meat (hamburgers, fresh and cooked sausages, hams, seasoned cuts, etc.), dairy and baked goods, as well as special applications, such as food supplements and pharmaceutical products.
Performance

Highlights for the year

Friboi

In 2019, Friboi grew to fulfill an increase in protein consumption worldwide and in the domestic market. One of the main highlights was the Top Grade Butcher channel, which reached over 1,000 stores during the year. This service is aimed at developing a special sales channel at partner retailers, helping them to manage their meat departments, training professionals and preventing losses. In Rio de Janeiro, for example, Supermercado Guanabara began the year with a pilot project at its Barra da Tijuca store, and by the end of 2019, the program had been implemented in 100% of stores.

Friboi also saw an opportunity for a unique experience with 1953 Friboi by Pão de Açúcar, implemented in 34 retail stores in São Paulo, Rio de Janeiro and Brasília. The initiative features the premium brand, including, in some of them, dry-aged beef. The experience of forming this product mix was a high point for the brand this year.

Partnerships were held with supermarkets as well as with restaurants and the largest restaurant chains in Brazil, guaranteeing Friboi’s place as a market leader. Major partnerships such as those with McDonald’s, Bobs and Burger King were renewed based on performance in service, sustainability, quality and safety, among other factors.

The premium beef segment was another highlight for the year, with sales volume up 46% year-over-year. One factor behind this growth is consumer access to this product, led by 1953 Friboi, which was made easier when the brand became available at retailers with gourmet butchers.

On the foreign market, the Company decided to segment brands by market, with major investments in premium and high value-added products, such as Grill Steakhouse, for Europe, and Friboi Black in China, as well as in segmenting customers by brands and channels, serving niche markets such as food service, B2B, retail and e-commerce. In Dubai and China, the Company segmented brands by customer, a strategy that has had positive results. The 1953 Friboi line grew by 100% in the foreign market in 2019.

In the last year, Friboi has entered the digital world with the launch of an Instagram profile, aimed at bringing its brands even closer to consumers. By December 2019, it already had 10,500 followers, 14 million impressions from posts published on Instagram and 7.5 million interactions (likes and comments).

The Friboi Pecuarista app, available for iOS and Android, is aimed at simplifying the connection between suppliers and the Origination area at Friboi, while also allowing producers to communicate with the Company with the same quality and speed. Prior to the app’s release, all cattle acquisitions were done using two business modalities: spot pricing and cattle futures contracts. Now, livestock producers have a third option, trading via a digital market.
Swift

In 2019, Swift created new products and lines, aimed at serving customer demand. In addition, there continues to be a focus on practicality, with the launch of prepared dishes and seasoned meats, reinforcing the brand’s concept of being there at every meal.

Swift reinforced its Gran Reserva premium line of grilling products, with cuts of beef carefully selected from British breeds. Launched in January 2019, it quickly became a success in sales. Another investment is in the sustainable fish line, with guaranteed origin and environmental conservation.

To reinforce a day-to-day presence in the lives of Brazilian families, other innovative products were launched, such as frozen fruit, a frozen mushroom mix and frozen vegetables, and healthy snacks. For 2020, Swift will work to expand, especially by consolidating store-in-a-store service, where the Company partners with major retail chains to assemble personalized spaces managed by Swift.

JBS Couros

The launch in March 2019 of Kind Leather, a revolutionary type of leather, mostly due to its sustainable attributes, was one of the main highlights of the year for JBS Couros. With a patent filed by the Company, Kind Leather uses a production process that reduces water consumption by 46%, energy consumption by 20%, and CO₂ emissions during transport by 65%.

Another high point for the year was expansion of the Company’s Vietnam unit. With an over US$ 5 million investment during the period, the plant practically doubled its built-up area and opened a showroom, a space where customers have the chance to see and handle finished furniture items.

Conceria Priante (www.conceriapriante.com) is focused on the luxury and premium markets, with collections featuring innovative interpretations for leather goods, joining creativity and tradition. Today, it is an international reference in the leather industry, as one of the biggest players in the fashion, leather and furniture segments.
In 2019, JBS Biodiesel saw record production of 265.7 million liters of biodiesel, 2% more than in 2018. Of raw material used in production, 18% (around 47.5 million liters) was from reused cooking oil. This reuse means that around 12 trillion liters of water is prevented from being contaminated, enough to meet the daily needs of nearly 30 million people for an entire year, according to the United Nations1.

JBS Biodiesel became the first biodiesel company authorized to take part in a new Brazilian policy to reduce greenhouse gas emissions, with the authorization of the country’s National Agency of Petroleum, Natural Gas and Biofuels (ANP). Through this certification, the Company is now qualified to issue decarbonization credits, called CBios, within the RenovaBio program for the biodiesel it produces, the raw material of which is bovine tallow.

In October 2019, Lins (SP) was the first program-certified efficient biofuel plant, and in February 2020, the Campo Verde (MT) branch was also certified. RenovaBio is a federal government program launched by the Ministry of Mines and Energy, aimed at expanding biofuel production in Brazil to meet the demands of the Paris Agreement.

In 2019, JBS Ambiental managed 23,904 metric tons of solid waste, including plastics, metals, paper and other types of waste along with 5,457 light bulbs. It also produced over 2,189 metric tons of recycled plastic products, such as trash bags, protective pallet covers, trays and shrink wrap, in addition to more than 2,432 metric tons of recycled plastic resins, for a total of approximately 5,000 metric tons of recycled plastic products. This is 11% more than the previous year.

In 2019, JBS Biodiesel - loading biodiesel into the plant

The Company has also developed new products using recycled plastic products for use by JBS businesses, such as tarps and plastic racks for lining truck beds, plastic pallets for transporting products and oxo-biodegradable shrink film. This last product meets the requirements of SASO standards regulating the supply of plastic packaging to the Saudi Arabian market.

JBS Embalagens Metálicas invested over R$ 80 million to build a new plant, geared exclusively to production of steel (tinplate) and aluminum cans. The operation is set to start in the first half of 2020. Located in the interior of São Paulo, in the city of Guaçara, the new plant will contribute to creating new job opportunities in the region. With cutting-edge technology and a focus on Industry 4.0, the unit has three production lines dedicated to serving the domestic market.

JBS Embalagens Metálicas has also invested R$ 25 million in expanding lithographic printing capacity and modernization of the Lins unit’s production lines. The new, latest generation equipment uses German and Swiss technologies and started operating at the end of 2019.

JBS Transportadora purchased 408 new vehicles to replace 397 used ones. This took the Company’s fleet from an average age of 1.89 years at the end of 2018 to 1.23 years old in 2019.

With the plant’s opening, aerosol production capacity will be increased to over 220 million packages annually. Moreover, the move into the aluminum packaging segment, with a focus on the cosmetics - deodorant market, will be a milestone for the Company. JBS Embalagens Metálicas has also invested R$ 25 million in expanding lithographic printing capacity and modernization of the Lins unit’s production lines. The new, latest generation equipment uses German and Swiss technologies and started operating at the end of 2019.

JBS Transportadora purchased 408 new vehicles to replace 397 used ones. This took the Company’s fleet from an average age of 1.89 years at the end of 2018 to 1.23 years old in 2019.

Products and services

Quality assurance for products and services is a non-negotiable commitment at JBS. Based on pillars that include innovation, quality and guarantee of origin, the Company tracks from production to sale. A multi-channel system receives any grievances and complaints customers and consumers may have in relation to products and the many aspects of the business.

All Friboi production units hold certifications from the Federal Inspection Service (SIF) of the Ministry of Agriculture, Livestock and Supply (MAPA), certifying the Company to export and sell its products on the domestic market.

“
I’ve been eating Swift products for around four years. I buy the brand because it has a standard of quality that I know is right for me. In my view, the Swift difference is the stores and the service the people provide. It’s practically another part of my home.”

Romeu Bianchi Junior
Swift costumer

Mechanisms for grievance and complaints

- Phone: 0800 11 5057
- E-mail: sac.alimentos@jbs.com.br
- Social media: Facebook, Instagram, Twitter
- Reclame Aqui
- Institutional websites: Friboi and JBS

Quality

JBS business units in Brazil develop actions oriented toward fulfilling quality commitments in the foods area as well as in products and services. At all JBS foods business units, this process is connected directly to the Global Food Safety and Quality Assurance Department, headquartered in the United States and reporting to the Global CEO (learn more in Food Safety and Quality).

Each Business Unit has a specialized team who oversee the Food Safety and Quality Assurance Programs, in collaboration with the Global Department.
Friboi

The quality assurance process at Friboi is based on rigorous management, built on four pillars: safety, quality, protection against fraud and protection against contamination.

**FOOD SAFETY**

Food safety
Protect food from contamination by agents that could be found in the production chain.

**FOOD FRAUD**

Protection against food fraud
Protect against deliberate food fraud caused to generate economic gains by tampering with products or providing false information.

**FOOD QUALITY**

Food quality
Assure compliance with pre-established food characteristic and performance standards, and meet industry, customer and consumer specifications in an effort to standardize products.

**FOOD DEFENSE**

Food defense
Protect food from international contamination that is unlikely to occur in the production chain.

Food Safety and Quality Assurance management at JBS is based on monitoring three areas:

- **Value chain**
- **Financial results**
- **Indicators related to consumer relations and satisfaction**

Friboi has a policy of continual quality improvement for its processes and products, perfectly meeting the needs of its customers and shareholders, and of investing in team member training, consumer safety assurance, and following legal, community and environmental requirements, with a focus on sustainable development.

Actions include everything from careful procurement of raw materials to audits of product display standards at points of sale, up to strict controls in the production and distribution process. To assure each step of the process, teams and customers are trained, with annual refreshers for other process agents, including exchange of experiences on best practices.

Among the main actions adopted to ensure that the products that reach consumers meet the highest standards of quality and safety are management and food-related risk assessment systems, committees and discussion forums with area specialists, certification processes, and accurate labeling systems, in addition to regular internal and external audits and inspections of the Company’s facilities by health missions as well as by customers.

Friboi invests in modernization and continual improvement of its Food Safety and Quality Assurance area, investing R$ 214 million in 2019.

The Company maintains laboratories at its units around the world that specialize in microbiological and biotechnology analyses, providing indicators of food safety for its various brands, assuring product quality.

Friboi has been RA 1000 Seal-certified by Reclame Aqui since 2018. One of the most important initiatives in the Customer Service sector in Brazil, this seal is proof of certified companies’ commitment to after-sales service, in addition to a high degree of trust in their brands, products and services. One of the initiatives that helped to consolidate Friboi in this ranking was social media monitoring, done in an effort to understand consumer needs, from involvement to final resolution with the Customer Service Center.

Internally, Friboi developed its Continual Improvement Cycle (CMC) program, fostering studies on improvements to production processes and allowing for recognition of projects and their creators, replicating some of these good practices at other units. The program is based on formation of teams by Company team members, who map opportunities for improvements, to develop and apply solutions. Results are measured and presented at local and national conventions, where there is an intense exchange of knowledge and suggestions, aimed at enhancing and replicating the best projects.

In 2019, the Company strengthened relations between customers and livestock producers, reinforcing transparency in adopting good sustainability and production practices. In addition, a partnership agreement was signed with the Brazilian Nelo Breeders Association (ACNB), participating in 26 rounds of the Nelo Circuit, allowing producers to closely monitor performance and quality.
A JBS INITIATIVE CERTIFIED BY SBC

During the year, Friboi also made progress in its Supply Chain Protocol program (https://jbs.com.br/en/quality/supply-chain-protocol/), certifying compliance with criteria that assure food safety and meet the highest standards of customers and consumers. Notable among improvements is the creation of a specific page for this topic on the JBS intranet, to consult certifications, a check list, training and other documents related to the protocol; its application to a group of fresh and prepared food products for export; and, moreover, establishment of a new visual identity, to facilitate communication and understanding of the importance of this initiative.

The Supply Chain Protocol brings together strict protocols on topics such as animal welfare, traceability, sustainability, operation, production, quality, industrialization and marketing. Parameters for the Protocol are adopted based on internationally recognized initiatives, such as the British Retail Consortium (BRC), European Union Regulation 1099 on Animal Welfare, the AMI Protocol on Animal Welfare in the United States, and the European Union Regulation on Traceability.

In order to guarantee certification, the production units undergo a five-step process that includes, among them, a gap analysis, which is done by an outside consulting firm, and specific training. All Brazil units operate according to the guidelines of the Protocol and undergo annual external audits, performed by the Brazilian Certification System (SBC). In 2019, all 36 Friboi production units passed and kept their seals.

JBS Couros

It is a policy at JBS Couros to perfectly meet its customers’ needs, investing in team member development and continually improving processes and products. To do this, quality management is built on four guiding pillars:

**Management and standardization systems**: aimed at assuring that all JBS Couros units work in a standardized and systematic manner, aimed at attaining minimum variability in processes and products, resulting in customer satisfaction.

**Customers**: quickly and effectively meet, process and respond to customer requests.

**Quality control**: guarantee that products are always authorized according to customer specifications and the JBS Couros quality standard.

**Laboratory**: assuring that products are tested according to standards set by JBS Couros, the customer and nationally and internationally recognized standards.

To assure leather quality, constant monitoring should be applied across the chain, which is why Quality team members undergo frequent training and are present from control and survey of raw material data, to verifying all inputs used in the process, and up through detailed assessment and authorization of the final product according to global standards. To do this, the company has laboratories specialized in leather analysis at its units around the world, providing indicators showing that products meet the strictest standards of quality.

JBS Couros holds ISO 9001:2015 quality management system certification at 12 plants, in addition to IATF 16949:2016 (auto industry standards) certification at three plants and SIF (Federal Inspection Service) approval to supply shavings and clippings at ten production units. One plant holds NBR 16296 certification, the national Brazilian Leather Certification of Sustainability (CSCB) standard.

The Company moreover has 17 units certified by the Leather Working Group (LWG), all of which received top marks in traceability, in which the Company is a market leader. The LWG is an international initiative made up of companies, retail chains and suppliers, promoting efficient and sustainable environmental practices in the leather industry.

JBS Couros also invests in quality, aimed at modernizing its processes and services. In 2019, R$ 57 million was invested.
JBS Couros

Aimed at developing products with greater added-value, such as semi-finished and finished products, JBS Couros constantly invests in research, development and innovation. The Company’s Conceria Priante unit serves luxury and premium markets, with a production facility and research and development center in Italy. This region is a reference in leather and a hub of innovation development, bringing together the world’s top specialists in materials, machinery and equipment, and chemical products, in addition to its proximity to the Milan fashion market.

With 20 dedicated professionals, the Conceria Priante R&D center is tasked with creating disruptive and incremental innovations for the Company’s products and processes, with a capacity to create four product innovations daily. Notable among them are the use of biopolymers in the production process and the use of renewably-sourced finishes like waxes, caseins and protein- and silica-based products.

To boost the production process and results, JBS Couros has established partnerships with customers, the chemical and equipment industries and academic researchers. One of the partners, who conducts radical innovations aimed at saving water and chemicals in retanning leather, supported JBS Couros in the production of Kind Leather, a type of leather with a 46% savings in water and a 41% reduction in formulation costs (see more on the following page).

In 2019, over 4,000 projects and 2,000 R&D samples were made in the leathers division. The chief improvements included creating new leather goods for customers, optimizing industrial processes, samples to increase new customer numbers and analytical procurement of statistical databases.

Targets aimed at items such as planning assertiveness, deadlines for submitting developments and samples, approval levels for projects and costs, and others, were all met by the business. Investments in innovation totaled R$ 1.9 million.

Swift

One of the most innovative businesses at JBS, Swift has a business model with a unique and differential strategy to providing services, with Company stores and stores at retail partners, in addition to online stores.

With a comprehensive control system across its production chain, from selecting animals to strict temperature controls during transport and display at points of sale, Swift’s mission is to change how people consume and purchase protein.

This same care is found in the production process. Alternative distribution models, such as vans that function as mobile points of sale, and delivery service, offering a unique experience, with almost immediate delivery or the ability to schedule deliveries, also show the business’ capacity for innovation.

Innovation

Friboi

At Friboi, innovation seeks to differentiate products in the market, it involves technology and a relationship of intense partnership with suppliers, including learning about all of the possibilities in its portfolio and working to develop them. Demands related to this topic are forwarded to Research and Development (R&D) teams, which then study solutions.

In the area of packaging, the main results were gains in increasing the number of products per box shipped, resulting in fewer cardboard boxes being used. In financial terms, savings from innovations in cardboard boxes equaled R$ 10 million per year, not to mention the environmental gains from reducing raw material usage based on transported product weight.

One highlight of innovation at Friboi is in the Sourcing area. The Company developed an unprecedented service and sales platform for feeder cattle, Friboi Pecuarista (see more on page 129).

Another initiative worth mentioning is logistical transport via train, which currently accounts for 36% of Friboi’s operations. This investment lowers operation costs and guarantees logistical agility, while also reducing the greenhouse gas emissions used in transporting the same product volume.

Innovation
Kind Leather project

In 2019, JBS Couros launched Kind Leather sustainable leather. With a more efficient and innovative production process, this new leather offers the industry and society a range of relevant environmental, social and economic benefits, through smart use of raw materials and resources, traceability, sustainable origin and eco-efficiency.

The Kind Leather philosophy consists of a belief that in order for a material to be truly sustainable, the entire production chain should be considered in its use. That means that it is not enough for a given material to be produced sustainably throughout the process if a considerable amount of it is discarded at the factory as waste. That is why JBS Couros, through Kind Leather, has offered the industry the solution kindest to the world: remove the hide parts that are not as frequently used right at the start of the process, since this material can still be used as raw material in other industries, such as the pharmaceutical and food industries. This means waste is turned into raw material, making a significant contribution to the entire chain’s sustainability.

The Company only works with raw materials produced according to the highest sustainability global standards. This guarantees that leather comes from areas not affected by deforestation, invasion of indigenous lands or conservation unit, forced labor conditions, rural violence and agrarian conflicts.

Project sustainability data

**Traceability**

The highest score in traceability from the LWG:

100%

**Sustainable origin**

Over 90,000 farms monitored

590,000 km² monitored

100% compliance in the last raw material (livestock) purchase audits.

**Eco-efficiency**

Carbon emissions lowered by

65%

Water consumption in the tanning stage reduced by

46%

Chemical consumption is 42% more efficient

Energy consumption fell by

20%

**Productivity**

Efficiency in finishing stages raised by

9%

Chemical product consumption lessened by

28%

Cut yield 8 to 10% higher

90,000 farms

590,000 km² monitored

100% compliance in the last raw material (livestock) purchase audits.
JBS Novos Negócios works with management of related businesses and seeks to add value to coproducts of animal origin, such as biodiesel, collagen, personal care and cleaning products, natural casings, solid waste management solutions, recycling, metal packaging and transportation.

The goal of the Company’s Research & Development (R&D) team is to transform resin generated by the Company into new products.

In 2019, the following innovations stood out in the JBS Ambiental pipeline:

- **Plastic tarp development for the JBS Transportadora**: used to line beds on trucks carrying inputs to Seara operations, the tarp is made from plastic waste generated at JBS operations and collected by JBS Ambiental management units.
- **Development of oxy-biodegradable shrink wrap**: a product made using recycled material, which meets the requirements of SASO standards regulating the supply of plastic packaging to the Saudi Arabian market.
- **Development of recycled plastic pallets**: used to move materials or as packaging at meatpacking units. Recycled pallets are made from plastic waste collected by JBS Ambiental management units.
- **Recycled plastic racks**: used to line JBS Transportadora truck beds used in transporting leather to JBS units. This product is made from plastic waste collected by management units.

In 2020, JBS Ambiental hopes to move forward in growing its share of recyclable products and expanding the number of waste management branches at JBS units.
With factories in Lins (SP) and Campo Verde (MT), JBS Biodiesel was the first company in the industry to receive authorization from the National Agency of Petroleum, Natural Gas and Biofuels (ANP) to participate in a new policy to reduce greenhouse gas emissions in Brazil, through certificates to sell Decarbonization Credits (CBio), as established by the RenovaBio program, which are obtained from production of biodiesel, the main raw material of which is bovine tallow.

JBS Transportadora has its own fleet of approximately 1,100 trucks, all of which are tracked and controlled using real-time telemetry, an innovative procedure for route management and optimization of the transport process. In addition, the cattle transport fleet is entirely adapted to guarantee animal welfare. In line with the complementary JBS Transportadora business, TRP Seminovos works with acquisition of new vehicles for JBS and with the sale of used trucks and trailers.

Orygina produces pharmaceutical industry inputs, with a focus on developing raw materials for research centers, molecular development, genetic therapies and vaccines. The Company currently invests in over 100 assets for pharmaceutical inputs made using cattle organs, such as the pancreas and liver. Geared toward production of plasma and powdered blood, processed using refrigerated adult bovine blood, which serve as ingredients in manufacturing poultry and pork feed, JBS Feed Solutions meets 100% of the demand from JBS production units.

NovaProm has two food ingredient factories and is ISO 9001-2015 and FSSC 22000 certified. In addition, it has a comprehensive system for tracing raw materials and its products are halal certified. While JBS Natural Casings provides high-quality casings of animal origin for the entire deli meats segment, including salami, sausages and more, the Company is the world’s largest producer of this product and is certified according to the strictest quality standards using state-of-the-art tracing technology.

The use of technology to favor improvement to processes is a hallmark of JBS Higiene & Limpeza, the largest producer of soaps and bar soaps in the B2B segment, whose customers include the biggest hygiene and beauty brands in Brazil and around the world. The Company also works to produce soap base for plant or animal based and glycerin soaps.

JBS Trading sells raw materials to the food, hygiene and cleaning, and biodiesel segments, such as animal fats, vegetable oils and chemical products, in addition to supplying other segments.

One of the largest producers in this segment in Latin America, JBS Embalagens Metálicas has the capacity to produce 1 billion cans annually to hold products, geared toward providing protection against physical, chemical and biological actions, for food products as well as a line of aerosols for different segments.
Awards and recognition

**Friboi**
- Ranked as the best beef by 34% of respondents for the fourth time in a row in a survey by Datafolha. The city of São Paulo is one of the biggest markets for the premium ranges, such as 1953 Friboi and Swift Black, as well as for Maturatta Friboi products.
- The business was also chosen as the best supplier in the meats segment in the APAS Acontece Awards for the third year running, in addition to winning the Tito Muffato Award.
- Nominated for the second consecutive year in the Epoca Negocios Reclame Aqui Award, created to highlight companies with excellent service rates on Reclame Aqui Award. Friboi was among industry companies with the best assessments on the website, a reference in fulfillment of consumer rights. Communication channels are evaluated in rankings or consumer defense initiatives. Reclame Aqui also publishes a ranking that highlights the 20 companies with the best scores in rates for: best solution. I would repeat business and best average scores. In 2019, Friboi was ranked in the three rates mentioned.
- "The best-selling beef in Brazil" seal, given by the Nielsen consulting firm.
- Recognized in two categories at Nelore Fest 2019, an award given out annually by the Brazilian Nelore Breeders Association (ACNB).
- First place as the Top Supplier 2019 in the packaged beef cuts category, an award given out by SA Varejo Magazine.
- Chosen by the Prezunic chain of Rio de Janeiro supermarkets as the best supplier in the beef segment.

Friboi also carries out customer satisfaction surveys every two years. The last survey, held in 2018, found a 78% rate of satisfaction.

**Swift**
Named the most beloved beef brand in the city of São Paulo, according to a survey done by Veja São Paulo magazine in partnership with the Market Research and Intelligence area of Abril. According to the survey, taken among over 1,000 internet users, 36.7% said that Swift was their favorite beef brand, garnering it 1st place in the Comer&Beber 2019/2020 ranking - and is proof of the good experience consumers have with its products and services.

**JBS Biodiesel**
The first factory certificated to sell Decarbonization Credits (CBio), as established by the RenovaBio program, as a result of biofuel produced from renewable resources.

JBS Biodiesel is the first and only company in Brazil to hold ISCC (International Sustainability and Carbon Certification), allowing it to make sales to Europe, since 2013.

**JBS Couros**
- Leather Working Group (LWG) Certification
- Couro Brasileiro Sustainability Certification
- ISO 9001:2015 Certification at twelve plants;
- IATF 16949:2016 Certification, related to auto industry requirements, at three plants;
- SIF (Federal Inspection Service) approval to supply shavings and cuttings at ten production units.
- In Germany: Supplier of IATF 16949 / ISO 9001 automotive parts
Sustainability is a business value and a priority at JBS in all the Company’s global operations. Among the duties of the Sustainability area are serving as an interface for JBS with its main stakeholders - the market, suppliers, customers, partners, consumers, and others - making constant dialog possible among stakeholders.

See more on Chapter 2, Commitment to sustainability.

JBS conducts sustainability management based on four objectives:

- Enhancing risk management
- Reducing the environmental footprint of the business
- Improving eco-efficiency and relationships with society
- Fostering innovation

In fulfilling the points expressed in the Company’s materiality matrix, sustainability of JBS Business Units will be shown from four aspects: product integrity, social responsibility, environmental management and animal welfare.
Friboi develops actions to support enhanced management and development of good social and environmental practices across its entire value chain. This attitude not only results in a smaller environmental footprint, but also brings gains in quality in the raw materials the Company uses.

In 2019, Friboi surpassed the mark of 2 million head contracted in forward and fixed price purchases, models that allow producers to plan better and, as a result, gain more efficiency in future deliveries.

With a commitment to being a reference in this area, through actions in the axes of supplier relationships and product origin, Friboi seeks to contribute to enhancing management and social and environmental practices across its value chain through a variety of programs.

**Management of Friboi cattle suppliers**

+ 20 in-person and online meetings about the subject
+ 91,885 head of cattle monitored
+ 360 indicators found

**Partnership with the Araguaia League**

Eta 2019, Friboi entered into a partnership with the Araguaia League, whose members include around 60 livestock producers in the Médio Vale do Araguaia region, located in the state of Mato Grosso. The goal is to promote sustainable livestock development in the region, with the support of local producers. Within the so-called Araguaia Herd project, Friboi funds contracts for firms providing consulting on livestock management to help in the process of intensifying farm pasture lands, therefore guaranteeing better productivity and contributing to environmental and local biodiversity conservation while reducing greenhouse gases in the livestock chain.

**Product integrity**

*GRI 308-1*

*GRI 414-1*

Within the logic that supplier relationships and guarantee of origin are the main axes for guaranteeing product integrity, Friboi has invested in closer and closer relationships with producers, in addition to enhancing and expanding its tools and processes to guarantee the origin of raw materials.

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The Araguaia League was an initiative to call on the region's livestock producers to take more of a leading role in environmental conservation and sustainable production. We are now working with JBS to develop the Araguaia Herd project, which also runs along these lines of constant promotion of sustainable intensification of livestock and working within environmental laws. Under this model, our challenge is to show consumers and the world that it is possible to have production in Mato Grosso with leading action by livestock producers spearheading this process.*

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Giro do Boi Platform: An initiative that includes a website with content aimed at livestock producers, profiles on social media and a daily TV show in Brazil. Broadcast by Canal Rural, the Giro do Boi program remains a reference among industry professionals. Communication initiatives on social media and content developed for the Giro do Boi program, which has the highest ratings among Brazil’s agribusiness TV programming, help to strengthen relations and dialog with this public. Surveys carried out by Friboi indicate that 22% of the Company’s cattle suppliers watch the show. Online, the platform had over 3.5 million pageviews.

Quality ranking: A tool that reconciles quality management of processed cattle and communications with livestock producers, by linking technical parameters for raw material, such as sex and age, with a quality-based bonus policy. Depending on indicators found, animals are classified using a green light (desired standard), yellow light (admissible standard) and red light (undesirable standard). This standard simplifies producers’ understanding of the importance of product quality for Friboi. As a result, the Company pays a variable bonus, proportional to the quality of animals supplied.

Conexão Friboi Website: The goal is to improve relations between Friboi and livestock producers, whether or not they are suppliers. This tool promotes discussions, distributes relevant content and helps producers advance their business. It also makes it easier to access JBS, providing information on the Company’s culture and work methods to those interested in establishing partnerships.

Social Fuel Seal

Over the course of the year, 19,056 head of cattle were acquired from family farmers through the Social Fuel Seal program, a 60% increase year-over-year. This initiative is a partnership between Friboi and JBS Biodiesel in the São Miguel do Guaporé (RO) region and in 17 other municipalities in Rondônia, which is developed by training small livestock producers in an effort to improve pastures, property management, herd management and genetic improvement, with purchases guaranteed by the Company. Total revenue for the 338 families surpassed R$ 38.5 million for the year. Around 30,000 head of cattle are expected to be purchased in 2020, involving more than 400 families.

The Social Fuel Seal was offered exclusively to farmers, in order to foster development and generation of biodiesel based on oilseed sources, such as soybeans. Because beef tallow, a coproduct of meat processing, is the second most important source of raw material for the production of Brazilian biodiesel, inclusion of the livestock chain in the National Program of Biodiesel Production and Use (PNPB) could generate an even greater stimulus for the economy.

The Social Fuel Seal (SCS), given by the Ministry of Agriculture, Livestock and Supply (MAPA), is connected to the National Program for Biodiesel Production and Use (PNPB). Support for the project has qualified JBS Biodiesel for the Brazilian government’s Social Fuel Seal. Two JBS Biodiesel units hold the seal.

Connection Management Project

As an offshoot of Conexão Friboi, the project is aimed at bolstering management skills for mid-sized livestock producers, who are responsible for supplying between 300 and 2,000 animals each year. The project uses tools to support increased efficiency in the beef production chain, from livestock producing suppliers to the end consumer.

During the year, the program held animal welfare campaigns, delivering management kits to over 20,000 producers, promoting correct practices for vaccination against hoof and mouth disease as well as zero waste livestock production. The program also makes it easier to access JBS, providing information on the Company’s culture and work methods to those interested in establishing partnerships.
The National Pact to Eradicate Slave Labour

was created in 2005 as an initiative of the productive sector and civil society in an effort to provide responses to the challenge of human rights violations in production chains. We recently partnered with JBS and developed a vulnerability index to the occurrence of slave labor that will be of great help to companies, with efficient and effective information to help in the challenge of preventing and eradicating slave labor in production chains.

Mércia Silva
Executive Director of InPACTO

Guaranteed origin and responsible procurement

The entire process of acquiring raw materials for JBS operations needs to be in compliance with federal and local regulations. In addition to complying with laws and standards, JBS uses a variety of mechanisms to guarantee that raw materials in its production chain become products whose integrity is assured.

Friboi has a robust system of social and environmental monitoring, to analyse and verify whether its livestock supplying farms follow the criteria stipulated in its Policy on Responsible Procurement of Raw Materials, aimed at guaranteeing a sustainable supply chain. There are about 45 million hectares monitored in the Amazon region. See more in Chapter 2/Product integrity/Amazon.

The system covers the identification of deforestation of old growth forests, invasion of indigenous lands and environmental conservation areas or areas under embargo by the Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA), in addition to cases where forced labor is used.

Another instrument for guaranteeing raw material integrity and quality is the Supply Chain Protocol. See more in Products and Services, on page 158.

Auditing

An audit done in 2019 of livestock purchases made by the Company throughout 2018 showed that 100% of processes complied with external and internal regulations.

Timber procurement

JBS applies internal and/or external audits to the timber supply chain. Biomass purchases are split into two types: acquisition from corporate suppliers and acquisitions made via local purchases. Corporate suppliers are visited once yearly, with no prior notice given. While local suppliers are visited on-demand, prior to contracting, or during supply, when any deviations are found.

Moreover, clearance certificates are required by the Company at the regional level, issued by IBAMA/Competent State Environmental Agency and by the Federal Labor Prosecution Office. Suppliers also may not be listed on lists related to slave labor.

As a result of these actions, JBS received an outstanding assessment from CDP Forests in 2019, when the Company had the best performance among South American companies.
Community relations
With operations in over 120 municipalities in Brazil, JBS has relations with communities and respects the characteristics of each location. To gain a deeper understanding of this context, all of the social initiatives carried out by Brazilian units were mapped using a qualitative survey that showed the main needs in each region where the Company operates. Based on these results, the Company prioritized five areas on which to focus efforts and investments: Health, Education, Basic Conditions, Catastrophes and Others. Scoring criteria were also established to list good practices developed for the communities. With this, over 100 initiatives were identified at different levels of maturity, resulting in a comprehensive panorama of this local action.

One goal of the survey is to allow the strengthening of existing projects and the construction of an identity of institutional action. The results helped to provide the structure for the Good Deeds Are Good (Fazer o Bem Faz Bem) institutional program, whose first unified action was the 2019 Christmas Campaign. Over 75 municipalities were registered, with over 90 institutions benefiting, and between the total raised and JBS contributions, this resulted in more than 100 metric tons of food donated, helping around 6,600 families.

A total of R$ 16.3 million in funding was provided by JBS in Brazil for social investments in 2019.

Friboi
Friboi supports the Agro Against Cancer Campaign, created to raise funds for Hospital de Amor, in Barretos (SP) - considered the largest specialized cancer center in Latin America, serving over 4,000 patients daily, free of charge. In the campaign, Friboi serves as a channel for its cattle suppliers to participate in the program by donating R$ 1.00 per animal sold to the Company. This initiative earmarked over R$ 500,000 for the hospital in 2019. That is 57% more than the total raised in 2018. The number of participating livestock producers also rose. 44% more suppliers engaged in the campaign in 2019.

Instituto Chefs Especiais, another initiative supported by Friboi since 2013, promotes bringing together flavorful cuisine and social inclusion. This project offers cooking classes to people with Down Syndrome and encourages them to develop independence while learning new skills in the kitchen. The project currently serves 300 students annually. JBS contributes financial donations, product donations and classes.

In 2019, the Company sponsored the first São Paulo edition of the traditional Favelas Cup, the largest competition in the world among communities. This event is organized by Central Única das Favelas (CUFA) and produced by InFavela, with the goal of reinforcing social inclusion through sports.

Source: https://www.friboi.com.br/pecuarista/campanha?id=5
JBS Couros

JBS Couros has operations in Brazil and eight other countries, with extensive local social activities. In Vietnam, for example, the company promotes social actions every year in the Dak Lak province, with the goal of distributing kits of basic staples to families and toys to kids, among other initiatives. In 2019, furniture built of recycled materials was donated to the province’s school and the school was painted by the leather unit employees.

At Argentina, a partnership with the prison system lets the company send raw materials from its production to penitentiaries, where this material is turned into products that are donated to the Fire Department, regional hospitals, arts and crafts classes and the prisons themselves.

In Uruguay, JBS promotes a leather goods manufacturing workshop and academic support classes. The workshop is held at Company facilities and its target audience is team members and neighbors. Academic support classes are, in turn, aimed at the children of team members and students in the community neighboring the unit.

In Brazil, in Marabá (PA), the company takes part in the city’s seedlings nursery through a partnership with the Secretariat of Agriculture. It provides 70% of its production of fertilizer, which comes from management of the unit’s solid waste. The nursery has an annual production capacity of over 1 million saplings, helping to maintain and preserve the region’s native plants, such as açai and cupuaçu.

Instituto Germinare

Instituto Germinare is a non-profit organization, with the goal of providing full-day high-quality education free of charge to students from 6th grade to high school seniors. There were 585 students registered in 2019, 39 of which concluded their cycle upon graduating at the end of the year, with a total of 270 students having graduated since the school’s activities began in 2010.

JBS Brasil is the biggest sponsor of Instituto Germinare, having invested nearly R$ 16 million in 2019. However, the company provides more than financial support: in 2019, Company executives spent 2,273 hours tutoring the school’s students. On the other hand, 42 former and current Germinare students were hired during the year by JBS Brasil and Seara.

The school’s methodology supplements the traditional curriculum with activities geared toward entrepreneurship, including business manager training. Upon finalizing high school coursework integrated with professional training, students receive technical diplomas in Business Administration.
Occupational health and safety

JBS works with responsibility in health and safety for its team members, partners, suppliers and stakeholders. The Company has a Self-Management Health and Safety Program (PSSAC) that contains standards and principles, applied at each production unit with the goal of standardizing procedures, processes and programs in accordance with occupational health and safety laws and best practices.

The Company remains committed to performing preventive exams and monitoring team members’ health. In addition, healthy habits and practices are encouraged through awareness campaigns, two of which are annual. JBS furthermore has ergonomics programs and quality of life initiatives inside and outside of the Company. Each year, two nationwide campaigns are held, with themes that are relevant to team health and safety, in addition to occasional campaigns at each plant.

Among the safety tools used by the Company, the following deserve mention:

- **DDS**: Health and Safety Dialog is one way to raise awareness among team members to foster prevention of accidents and the occurrence of occupational diseases. It is aimed at alerting team members to the safety procedures that must be followed by all workers involved. This is done daily, in each sector at units.
- **Behavioral Audit**: an assessment of deviations in team member behavior in relation to safe practices in performing their activities. A discussion is held with the team member who has committed a deviation in an effort to warn them about working safely and of the possibility of accidents occurring. Deviations are immediately corrected.

To promote the health and well-being of its team members, JBS develops measures to prevent occupational accidents and diseases. One indicator of the efficacy of these actions has been a drop in the number of team members with leave registered with the Social Security system for this reason. In 2019, there was a reduction of 18.9% at JBS Brasil.

Human Resources department also develops legal training to comply with Regulatory Standards and the Specialized Services in Safety Engineering and Occupational Medicine (SESMT). In 2019, the SESMT worked significantly with the "It’s Time to Take Care" campaign focusing on mental health. A variety of in-house events were developed at businesses to instruct team members not to avoid seeking help, showing the Company’s support for employees and, by doing this, reducing rates of absenteeism across the entire process.

In addition to leaders contributing to raising team member awareness of safety on a daily basis, by being present and holding frequent dialogs focused on team behavior, the SESMT works to monitor team members day-to-day.

At each unit, the size of the SESMT depends on the degree of risk and number of team members. Teams are made up of safety engineers and technicians, physicians and occupational nurses, as well as ergonomists.

In 2019, total investments in health and safety in Brazil were over R$ 169.7 million.
Other important authorities in governing health and safety at the Company include:

**Internal Commissions for Prevention of Accidents (CIPAs):** CIPAs commission members are elected by employees and Company representatives. The CIPAs observe and show risk conditions in the workplace, requesting mitigation and control measures or even neutralization of existing risks, discussing accidents that occurred and asking for measures to keep these situations from being repeated.

**Emergency Brigade:** Present at every JBS unit, emergency brigades are made up of volunteer team members, who receive training and education to act in a variety of emergency situations.

**Safety Committee:** A multidisciplinary committee whose members include top leaders, the goal of which is to discuss key actions, accidents, indicators and other topics related to team member health and safety. Meetings are held monthly at each unit and at the corporate level.

**Incident Investigation:** For investigation of serious accidents, a committee is formed with the participation of the SESMT, leader/team member (when possible), witnesses and CIPA members. The main goal is to create a program of prevention to reduce or eliminate risks in the work routine. After investigating the causes of the incident, preventive measures can be applied to all business units.

In order to guarantee that these principles guide every activity and all team members, in Brazil, the Company has a Health and Safety Policy, which lists the five basic principles in its commitment to stakeholders.

**The five principles of the Health and Safety Policy:**

- Motivate, inform, develop, train and qualify team members, making them responsible for ensuring and promoting a healthy and safe working environment;
- Anticipate and prevent accidents, understanding that all accidents can be avoided;
- Seek to continually improve processes, machinery and equipment, promoting control actions to eliminate or minimize incidents;
- Ensure compliance with legal requirements, the Self-Management Health and Safety Program, and other items applicable to health and safety;
- Build and disseminate a culture of Health and Safety as a value by leading through example, individual responsibility and shared vigilance.
Training and control

Through investment in training and education, the Company works to prevent risks and remedy the impacts caused by accidents. Activities follow the guidelines set forth in Regulatory Standards (NRs) published by the Ministry of Labor and are monitored daily by leaders in the workplace. In 2019, 93,000 team members received health and safety training, and "safe behavior" was one of the themes most discussed during the year.

Audits are based on laws and internal procedures. Any nonconformance is monitored by the safety committees at the local level and by the corporate committee (whose members include all business unit HR directors and managers from the Specialized Services in Safety Engineering and Occupational Medicine - SESMT). These committees analyze information from all of the divisions; additionally, audits are done by the Ministry of Labor and regular independent audits are carried out by the Company’s customers.

Indicators are monitored by JBS daily, with periodic analyses of data and constant evaluation of each operating unit’s performance as a form of control. The Company closely monitors accident frequency and severity rates. Although rates at JBS are comparable to market rates and the Frequency Rate has fallen, the Company continues to make efforts to lower these numbers, particularly those related to severity.

In 2020, the Company will implement a predictive system that uses artificial intelligence, in order to warn of possible accidents that may occur. A pilot project was implemented in 2019 at JBS Couros.

Likewise, JBS monitors action plans and checks on any pending matters related to legal nonconformance found in safety inspections as well as mandatory training indicators for each job.
JBS Ambiental in Lins (SP)

The Company relies on a computerized system that manages environmental and sustainability indicators at production units, such as water usage, effluent generation and analysis, energy consumption, steam generation, waste generation, transportation, gas coolants, production data, and indicators on greenhouse gas emissions, among other items. Data is periodically entered into this system by teams at each unit. This allows for oversight of plant performance and listing of goals to reduce the Company's consumption and generation of waste, making better management possible so as to create plans to prevent and reduce environmental impacts.

The Environmental Management System is audited internally and is based on ISO 14001 specifications. The Campo Grande II (MS) unit is certified in this standard, which it uses to develop the environmental stewardship tools applied to all Friboi production units, according to the needs of each unit. JBS Couros uses the requirements of LWG certification and its Kind Leather program as its base. All JBS Couros team members undergo environmental training at least once a year.

In 2019, in order to take another step forward in managing and increasing the transparency and reliability of information supplied to the market, water consumption, energy consumption, greenhouse gas emissions (scope 1 and 2), and production data were audited by SGS, a Swiss company that is a world leader in inspection, verification, testing, and certification, according to standards established by ISO 14064-1:2007 and the Brazilian GHG Protocol Program.

A total of R$ 99.7 million was invested in environmental management at JBS Brasil in 2019, up by 83% from the previous year.

Environmental stewardship

JBS Brasil is committed to environmental protection, which includes preventing pollution, sustainable use of natural resources and mitigation and protection of biodiversity and ecosystems. At minimum, this means operating in compliance with legal requirements and national standards, with a dedication to authenticity of products and product specifications and to the safety of customers and other stakeholders.
Management of water resources at Brazilian JBS operations is in line with the Company’s view that water is at the base of its production chain and its sustainable use is a priority. That is why it works to develop strategies and projects to guarantee maximum efficiency in using and reusing water, in addition to minimize the need for new sources of collection. The greatest reference in the Company for this management is the Sustainable Water Management Program (PGSA). The program is mainly tasked with identifying JBS units and critical high-priority water micro-basins; developing projects; deciding on allocation of investments and establishing targets to reduce water consumption; engaging leaders and team members; and creating innovative solutions to reuse water.

The work done by JBS to manage its water resources has been recognized by the CDP Water platform, to which the Company also sends annual reports on its performance in water management. The Company’s performance in 2019 placed it among the 14 best companies in South America regarding this topic.

All JBS production units in Brazil comply with specific municipal and state laws, as well as guidelines from oversight agencies. Production units are also subject to federal laws under the auspices of water management, such as discharge of effluents (Conama 430/2011) and water supply (Consolidation Directive no. 5/2017).

The biggest management challenge in relation to this topic has to do with quality; however, availability can also be a challenge at some specific locations. To control this risk, investments have been made in automatic equipment to control operations/disinfection, as well as in structural improvements and standardization of controls at wastewater treatment stations. Strategies to fulfill any emergency demands during droughts include building raw water storage reservoirs and reducing water consumption.

JBS Brasil invested over R$ 6.7 million in improvements and eco-efficiency related to water, 86% more than in 2018. These investments, along with operational procedures adopted by teams, resulted in a 3% drop in water consumption per ton of product in 2019, year-over-year.

In addition to efforts made to lower water use, JBS has also invested in increasing reuse. In 2019, JBS in Brazil reused over 178 million liters, which is equal to the monthly consumption of a city with a population of 50,000.

When it comes to liquid effluents from the production process, plants use modern wastewater treatment stations for collection and appropriate treatment, in compliance with legal requirements. In 2019, over R$ 18.2 million was invested in modernizing and improving wastewater treatment efficiency. All effluents coming from operations are sent to each operation’s own treatment stations or to public treatment systems. The Company constantly monitors the performance of effluent treatment stations, complying with the physical and chemical standards stipulated by law, with oversight from the respective governmental agencies in each state and municipality.

JBS Brasil guarantees that 84% of the volume of water collected and used in its industrial processes is safely returned to the environment with quality, with the sole exception of wastewater sent for treatment in the public system.
In 2019, water consumption per metric ton produced at Friboi was down by 4% compared to 2018. The Company carries out initiatives to lower consumption, especially in those processes where water use is substantial, such as in stockyard operations, cleaning, boilers and heat exchangers. Key projects in this area included reducing pressure in the water supply line, which automatically lowers consumption; automation of specific points within the production process; and raising awareness among and providing environmental education to team members.

In the area of reuse, the Company has projects for reuse of water from cooling systems, equipment cleaning and back-washing of water treatment stations. Studies are being done on a project to reuse treated effluent water as well. All water reused is sent to areas outside of the production unit, free of any contact with the production area.

Regarding its effluents, Friboi works to bring down the total generated, based on actions established in its management system. Among the most notable initiatives are:

- All units reuse solid waste collected following sedimentation of effluents, which is then used as a raw material for byproducts or in rendering (collection and recycling of waste from the animal protein production process).
- All tallow generated in the red lines1 at production units with a tallow collection system goes to incorporation in rendering.
- Rumens coming from the green line2 are sent for composting and are applied to soil or used as fuel in boilers.

1 Water with blood.
2 Water with manure and rumen.

JBS Couros

At JBS Couros, the protocol for Leather Working Group (LWG) certification, one of the most important in the industry, contains a section dedicated especially to water consumption for Gold and Silver certifications, reinforcing the commitment of the Company’s units to improving its rates. In Argentina, for example, water consumed during leather processing fell by 5.6% year-over-year.

In relation to effluents, there are projects for fertigation and to use some waste as fertilizers. An investment of US$ 1 million has also been made in Argentina to expand the anoxic treatment system to improve liquid effluent quality and remove contaminants.
This project has to do with people, education and the environment. Over these four years, the project has reached over 21,000 students, including children, youth, teens and even university students. There are over 217 collection points, among which are 47 schools and charity institutions. They learn that recycling is an act of love: love for the environment, love for others and love for future generations. Not to mention contributions to schools and hospitals, since all the money raised from the Friendly Oil project goes to improvements in the institutions.

Friendly Oil project goes far beyond collecting oil. This project has to do with people, education and the environment. Over these four years, the project has reached over 21,000 students, including children, youth, teens and even university students. There are over 217 collection points, among which are 47 schools and charity institutions. They learn that recycling is an act of love: love for the environment, love for others and love for future generations. Not to mention contributions to schools and hospitals, since all the money raised from the Friendly Oil project goes to improvements in the institutions.

The main highlight among actions aimed at lowering emissions in 2019 was qualification of JBS Biodiesel as the first biodiesel company authorized to take part in a new Brazilian policy to reduce greenhouse gas emissions, with the authorization of the country’s National Agency of Petroleum, Natural Gas and Biofuels (ANP). This means that the Company now is authorized to issue Decarbonization Credits (CBio), as established by the Renewable program, which are obtained from production of biodiesel, the main raw material of which is bovine tallow. The Company will sell CBios from 2020.

In October 2019, Lins (SP) was the first plant certified, followed by Campo Verde (MT), in February 2020. Biodiesel produced by these units prevents around 80 grams of carbon dioxide-equivalent per megajoule of energy generated by vehicles, when compared to the same energy generated from diesel use. For every 370 liters of biodiesel produced at its two plants, JBS will be able to issue 1 CBio, the equivalent of preventing one metric ton of carbon dioxide. Considering that JBS maintains the same biodiesel production level as in 2018 (260 million liters), the Company will be able to issue around 800,000 CBios per year.

Under the program, producers start measuring and qualifying all of its greenhouse gas emissions in order to obtain an energy and environmental efficiency score to issue decarbonization credits, for sale on the stock exchange. Earnings should be invested in expanding and maintaining the production system.

The result is yet another step forward in JBS’s history of creating value by reusing bovine tallow and other inputs, like recovered cooking oil, to produce biodiesel.

Climate change GRI 305-4 GRI 305-5

JBS Brasil takes part in platforms with a global and local scope, providing transparent performance in controlling greenhouse gas (GHG) emissions, such as the CDP, the Brazil GHG Protocol program, the Carbon Efficient Index (ICEO) of the B3 (São Paulo Stock Exchange), and the Paraná Secretariat of Environment’s Paraná Climate Seal. All of these initiatives have annual reporting of JBS’s GHG emissions inventory.

During 2019, JBS joined the Coalition named for Brazil, Climate, Forest and Agriculture, a multi-sector movement whose goal is to propose actions and influence public policies that lead to the development of a low-carbon economy, resulting in the creation of quality jobs, fostering innovation, making Brazil more competitive globally and generating and distributing wealth.

The Friendly Oil program, conducted by JBS Biodiesel in partnership with JBS Ambiental, collects used cooking oil from over 200 collection points in 37 municipalities in São Paulo. In 2019, 4.7 million liters of cooking oil were recovered to be reused in biodiesel production, 34% more than in 2018. This amount is equal to lowering emissions by 5,800 tCO2e, when projecting savings of the same amount of diesel fuel used in machinery and vehicles, in addition to preventing contamination from cooking oil of around 120 billion liters of water, the equivalent amount used by 5 million people per year.
JBS Transportadora promotes optimization of distribution routes as one of its biggest efforts to lower GHG emissions. Changing out the truck fleet resulted in savings of 33,000 liters of diesel fuel in the last quarter of 2019, equal to 5% of the total used. For 2020, savings are expected to reach 330,000 liters of oil during the year.

The Optimized Route program aims to bring more efficiency to cargo transport, by optimizing the trips made by its own trucks and in partnership with third parties, so that trucks that would return to factories empty then transport partner cargo. This means that the entire route back and forth is used 100%, contributing to reducing fuel use and consequent CO₂ emissions.

Other trends are:
• An increase in migration to the Open Energy Market due to better performance;
• Automation, due to savings on resources from using more efficient equipment;
• Replacement of conventional light bulbs with LED models;
• Reduced natural gas consumption, in favor of cleaner fuels.

In 2019, two 75 kilowatt voltaic plants were leased as part of a pilot project to meet consumption demands at the Swift store in Valinhos (SP), generating over 300,000 kWh of energy during the year. In early 2020, a 1,200 kilowatt-peak photovoltaic plant was leased in Ibirá/SP, currently serving six Swift stores. The Company continues to look to partner with more plants to serve 100% of energy consumed at Swift stores by using renewable electric energy in its activities.

JBS has a cogeneration unit in Lins (SP), called Biolins, which uses biomass (sugarcane bagasse, sawdust, peanut shells, rice hulls and eucalyptus chips) to generate thermoelectric and steam energy. The thermoelectric plant has the capacity to generate 45 megawatts of energy per hour, a volume sufficient to supply a city with a population of 300,000.

Around 33% of electricity generated by Biolins supplies the Frisbio, JBS Couros and JBS Novos Negócios production plants the same industrial complex where it is installed. The rest is distributed to JBS facilities and is sold to the national market. Steam generation, in turn, is solely used to supply adjacent JBS production plants. Biolins alone generates the equivalent of 20% of total energy used by all JBS factories in Brazil.

Other strategies include ongoing improvement in energy efficiency at production plants and expanded use of energy from renewable sources. Right now, 65% of energy the Company acquires on the open market comes from renewable sources. To generate steam, just 11% of fuel used comes from fossil fuels. To generate electricity, 1.6% of energy consumed comes from diesel.

Out of all direct energy used in JBS Brasil processes, 85% comes from renewable sources, considering electricity use and fuel used in the Company fleet and to generate thermal energy. When only considering the use of thermal energy generated by Company boilers, over 98% is renewable fuel.
At JBS Brasil, every area is committed to working to recycle, reuse and reduce solid waste generated in industrial processes as efficiently as possible. All production units comply with the National Solid Waste Policy and waste management is based on the Solid Waste Management Plan (PGRS), created by the team members tasked with environmental duties at the unit. This plan defines procedures for collection, transportation and correct disposal, along with good practices to lower the amount of waste generated in specific points in the process.

The Company uses research and development projects to work on bringing down the weight of packing material used, changing out packaging materials for materials that are more easily recycled and reused as well as for projects to recycle materials for use in other products within the process. JBS Ambiental’s overriding commitments are management of solid waste generated by JBS production units, aimed at compliance with current laws; reuse to add value to waste generated by the Company, consolidating the circular economy concept; and development of products and processes using recycled raw materials and promoting the sustainability of the business. In 2019, JBS Ambiental managed 23,904 metric tons of solid waste, including plastics, metals, oil, cardboard and non-recyclable waste.

<table>
<thead>
<tr>
<th>Material</th>
<th>Volumes managed (metric tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardboard</td>
<td>3,696</td>
</tr>
<tr>
<td>Plastic</td>
<td>3,568</td>
</tr>
<tr>
<td>Metal</td>
<td>8,031</td>
</tr>
<tr>
<td>Oil, similar waste</td>
<td>49</td>
</tr>
<tr>
<td>Others</td>
<td>1,657</td>
</tr>
<tr>
<td>Non-recyclable and hazardous waste</td>
<td>7,103</td>
</tr>
<tr>
<td>TOTAL</td>
<td>23,904</td>
</tr>
<tr>
<td>Lamps</td>
<td>5,457 (units)</td>
</tr>
</tbody>
</table>

In 2019, centers in Goiânia (GO) and Senador Canedo (GO) were opened, with facilities in Andradina (SP), Barretos (SP) and Lins (SP) modernized. These investments resulted in a 32% increase in the amount of waste managed, going from 18,000 metric tons in 2018 to 24,000 in 2019. For 2020, challenges at JBS Ambiental include opening new operations at Seara production units and developing circular economy products with multi-layer packaging.

At JBS in Brazil, approximately 387,000 metric tons of waste generated at factories were reused and sent for composting, recycling, energy reuse and cogeneration. Of this total, 21,300 metric tons were used to generate energy.

The tire analysis process was revised at JBS Transportadora, resulting in a lower rate of premature disposal and reusing tires that would have previously been discarded. Around 300 tires were reused in 2019, through this new process to extend useful life.
Environmental Labeling

Since 2014, Research and Development (R&D) teams in Brazil have worked to adapt packaging to meet the environmental labeling rules set forth by the Brazilian National Standards Organization (ABNT NBR 16182). This regulation standardizes symbols used to inform consumers on how to correctly dispose of post-consumer packaging. This makes it possible to separate dry waste from wet waste, for instance, sending them for separation followed by sorting. This contributes to ongoing improvement in the recycling chains in the various materials sectors.

Prolata

In compliance with Law 12,305, which instituted the National Solid Waste Policy in 2014, JBS joined, in Brazil, the Industry Package Agreement and the Prolata Program, an initiative of the Brazilian Steel Packaging Association (Abeço), based on three pillars: reception/deposit centers, whose structure is geared toward receiving large volumes; recyclable material collectors cooperatives, responsible for social inclusion work; and Voluntary Delivery Points (PEV), which interface with the end consumer. According to data from Abeço, the program has already recycled over 31,000 metric tons of steel.

JBS Brasil also takes part in the City* Program. Learn more in Seara/Environmental Stewardship.

Prolata Program areas of action:

JBS is a Prolata program member

and has supported the program since it was created in 2012. Investments are made based on member contributions to the program, and from the start JBS has supported and backed the program’s three pillars. We now have over 50 cooperatives operating, spread nationwide.”

Thais Fagury
CEO of Prolata, an organization managing reverse logistics for steel cans in Brazil.
In Brazil, Friboi uses the Animal Handling Guide, written by Dr. Temple Grandin in partnership with the animal welfare committee at the North American Meat Institute (NAMI), as one of the main technical standards on animal welfare at processing units. Other national and international laws also serve as references, such as European Union Regulation 1099/2009, instructions from Brazil’s Ministry of Agriculture, Livestock and Supply on this topic, and the new Industrial and Health Inspection Regulation for Products of Animal Origin (RIIS-POA), in addition to Contran Resolution 675/2017, which contains provisions on animal transport.

Internally, there is a specific policy for team members who work with animals, in addition to a Company protocol that is part of Supply Chain Protocol certification [see more in Chapter 3/JBS Brasil, page 138]. Professional Animal Auditor Certification Organization (PACCO) certification is also third-party audited and is another important reference in setting guidelines for animal welfare activities.

Committed to practices to comprehensively comply with animal welfare guidelines, JBS Brasil trained 2,177 people in Brazil on this topic in 2019. Training involved factory teams and Company and third-party drivers. At some units, it was done by BEA Consultoria e Treinamento, while at others it was provided by Soluções Palestras e Treinamentos. The Company uses a liability agreement, where team members attest to their awareness of the Animal Welfare Policy and the guidelines and responsibilities related to animal treatment - as well as the penalties applied in the event they are not fulfilled. Animal welfare guidelines at JBS Brasil for third-party drivers are covered in the respective service provider contract. Drivers are not allowed to handle live animals before learning the Animal Welfare Policy and signing a liability agreement. There is also a platform available to employees that contains videos and other technical materials on good handling practices.

**Investments in animal welfare by JBS Brasil during 2019 totaled R$ 74 million** and went to initiatives ranging from acquisition of a new cattle transport fleet by JBS Transportadora to certifications, campaigns and training.

**Breeding**

With approximately 90,000 registered livestock supplying farms in Brazil, all of Friboi’s supply comes from third-party farms. Of total cattle acquired in Brazil, one-fourth spend 90 to 120 days of their lives on a feedlot, with the rest of their lifetime spent on pastureland, until they reach two and a half to three years of age. The other 75% are wholly raised on pastureland.

JBS encourages the adoption of the best practices at these rural properties. To do this, the Company also holds training, following the Good Management Practices Guidebook, issued by the Ethology and Animal Ecology Studies Group (Grupo Etco) and sponsored by JBS. These guidebooks are the result of work done by the School of Agricultural and Veterinary Sciences at São Paulo State University (FCAV-Unesp), aimed at animal welfare.

Starting in 2016, maximum dissemination of good practices was aimed at reiterating to cattle suppliers the importance of correctly managing animals, preventing suffering and injuries. The project will continue over the coming years and will cover more farms.

Moreover, through a technical and scientific cooperation agreement established with two of the biggest references in the world in this matter, Dr. Temple Grandin and Dr. Mateus Paranhos, JBS also makes constant investments in research and scientific studies related to animal welfare.
**Production**

The Friboi beef operation is the only one in Brazil equipped with cameras to remotely monitor animal welfare indicators at all production units. Control goes from unloading to slaughter.

A video on this topic is available on YouTube (https://www.youtube.com/watch?time_continue=55&v=u3v1NEZ5T0k&feature=emb_logo)

In 2019, team members were trained by external companies on good handling practices at processing units. To register the results of animal welfare indicators, Friboi has daily and weekly checklists.

During the year, team members were trained in Colônia (GO) at the local units of Senador Canedo and Mozarlândia, focusing on animal welfare. Training was given by Erika Voogd, an international authority and guest, in partnership with the Certified Humane Brasil Institute.

Some of the training covered the Recommended Animal Handling Guidelines and Audit Guide, written by Dr. Temple Grandin along with the animal welfare committee at the North American Meat Institute - NAMI. While the practical module consisted of a simulated audit focused on handling, from loading to slaughter of animals, as well as document verification, including traceability aspects.

**Transport**

On average, JBS supplier farms are located 167 km away from the Company’s production units. To guarantee quality in transportation, drivers are trained annually by JBS and by a third-party company (SBC).

As a routine procedure, 100% of JBS cattle transport vehicles are audited using a specific form and drivers are given periodic guidance on the importance of good maintenance on cattle transport pens.

JBS Brasil invests in modern fleets, designed with the goal of lessening the risk of animal injuries and falls, in addition to optimizing transport. This includes investments in research, aimed at continual improvements to the 2-floor trailer model, launched in 2016, geared toward promoting animal welfare during cattle transport. The fleet of around 250 trailers, operated by JBS Transportadora, has tip-less partitions, a no-slip floor and a hydraulic elevator that makes animal loading and unloading quieter, less agitated and, consequently, less stressful for animals and for the driver.

Animal welfare highlight for 2019

Over the year, the main actions related to this topic that deserve mention were:
- Maintenance of the Supply Chain Protocol Certification at 36 units;
- Internal animal welfare audits held at 36 units (Operational);
- Maintenance of PAACO certification at 10 units and certification of 5 additional units;
- Visit by Dr. Temple Grandin to JBS in Brazil, in order to enhance practices;
- Launch and dissemination of the Good Stockyard Management Practices manual (Grupo Etco) at Friboi units and JBS feedlots, at events with cattle suppliers and through digital means;
- Friboi highlighted as a case of success in the Animal Welfare book in Brazil and in Germany, as a result of investments in the animal welfare area, with distribution of books to units.

The topic of animal welfare is now one of the topics that can be handled by the JBS Ethics Hotline. This leading role reiterates the Company’s interest in holding dialogs with stakeholders on this topic and any opportunities for improvement connected to it.

In 2019, JBS worked to approve and launch a new unified visual identity for animal welfare, which includes the JBS Animal Welfare Seal. This initiative functions as a way to provide visibility and raise awareness among all team members of the value this theme holds for the business.

Reinaldo Ferrera, driver at JBS Transportadora in Andradina (SP)
SEARA

OUR BUSINESS
Business description

Served at Brazilian tables for over 60 years and now also at thousands of tables around the world, Seara has an extensive portfolio of fresh poultry and pork products and prepared, processed and frozen foods, with leading brands. Quality and innovation are strategic pillars at the Company, which is dedicated to offering products that bring flavor and practicality to consumers’ tables. At Seara, quality goes beyond products and should apply to personal relationships.

Production is run by a team made up of 75,000 team members, supplying retail, foodservice, B2B, cash and carry and e-commerce customers in the Brazilian and foreign markets, especially Europe, the Middle East and Asia, with over 100 million consumers and 150,000 corporate customers.

Offices in China, Japan, South Korea, Singapore, the Netherlands, the United Kingdom, the United Arab Emirates and South Africa help to make Seara a global brand, found in over 130 countries.

Fresh poultry meat accounts for around 85% of the total volume exported by the unit. In Brazil, chicken meat is one of the most widely consumed proteins. It is found in 97% of homes. In the pork segment, the Seara portfolio includes fresh meat and prepared foods, which go to the domestic and foreign markets, meeting the growing demand for this protein.

As with other JBS business units, Seara uses the strategy of diversifying its product portfolio, prioritizing items with greater added-value.

Main brands

Map of operations

NUMBER OF TEAM MEMBERS: 75,561
In 2019, Seara consolidated its business strategy, based on innovation, quality, customer service and relationships. In the area of innovation, for example, over 187 products were launched, including some in brand new lines such as Organic Chicken, Seara Nature and Incrível Seara (with plant-based protein products), in addition to expanding existing ranges, like Seara Gourmet. The Incredible Seara range, released at the same time in three countries, was Seara’s first international launch.

The year also marked the launch of Seara's first promotion in five years, called Home with Seara, aimed at retailers and consumers. Another innovation, Seara Top Grade Butcher Channel, was implemented at over 250 stores at the end of its first year at Seara.

These achievements are reflected in the brand’s value, which saw higher regular consumption (72%), preference (up three-fold since 2015), share of shelf, home penetration (77%), repurchase rate (74%) and recall: Seara is now the second ranked Top of Mind brand in its sector.

In relation to quality, customer complaints were down by 20%, on Brazilian and foreign markets.

On the foreign market, the success of the DaGranja range (100% natural) in the Middle East has opened the doors for exports, which are now also focused on organic, gourmet and the Incredible Seara range.

Partnerships with companies that are already locally consolidated have helped Seara to gain penetration in these markets. One example is an alliance with Carrefour to expand the Company’s online offerings to the United Arab Emirates (UAE). Seara products are now also available at the online Carrefour store, where consumers can conveniently purchase a wide range of products that include whole chickens and chicken parts, in addition to prepared items, with just the click of a button.

On the Brazilian market, Seara purchased a plant in Seberi (RS) in order to boost its pork processing capacity. Another business acquired was the Frigorífico Marba (SP), as part of the Company’s strategy to expand into products with higher added value and established brands on the market. Also worth noting is expanded production of Nhô Bento free-range chickens, a higher number of farms using environmental enrichment (techniques that raise animal comfort in an environment) and start-up on organic chicken production at Nova Veneza (SC).

In the area of research and development, Seara is committed to investing 1% to 2% of its annual revenue. Projects developed by the Company allow for advancements in animal welfare and sustainability, while traceability projects are preparing to use blockchain technology.

In another line of action, the Super Agro project is bringing technology to the rural sector, providing updates to aviaries and to farms raising hogs and automation to improve performance and quality of life for integrated producers, in addition to recognizing good practices.
Awards and recognition

• **Whow! Innovation Award:** Awarded as the most innovative company in the ‘Food’ category. The second edition of the award, organized by the Padrão Group and the Padrão Intelligence Center, is aimed at identifying and recognizing companies and institutions that produce consistent, incremental and disruptive innovations, based on a focus on generating new ideas to benefit the population, economy and society. The brand’s innovations in the sector related to packaging, marketing position and merchandising, as well as sustainability, were considered in the award, since Seara Alimentos was the world’s first company to be certified by the World Health Organization, a testament to food biosafety. Some recent innovations made direct contributions to this achievement: Seara Nature, Seara Organic Chickens and the Incredible Burger Seara Gourmet.

• **Embanews Award 2019:** Seara won five awards at the biggest awards ceremony in Brazil’s packaging industry. The exclusive “Power Vac” technologies in the Seara Rotisserie range and the “Heats Evenly” tray in the Lasagnas range were responsible for these recognitions, which reinforced the brand’s commitment to quality and to innovation.

**Category: Marketing**
Sub-category: Packaging-Based Product Line Differential
Product: Seara Lasagna with ‘Heats Evenly’ technology

**Category: Technology & quality**
Sub-category: Packaging production process technique
Product: Seara Lasagna with ‘Heats Evenly’ technology

**Category: Technology & quality**
Sub-category: Inter-related packaging process technique
Product: Rotisserie Line - Prepared Refrigerated Dishes

**Category: Innovation**
Product: Rotisserie Range - Prepared Refrigerated Dishes
Customer of the Year, with the Seara brand: end user, packaging user of the year.
Focused on the pillars of Quality and Innovation, with efforts that go far beyond products, Seara has achieved results that indicate a growing preference for the brand among consumers. The Company consolidated its leadership in share value in the Frozen Products category in the last three surveys, rising eight percentage points in brand preference from 2014 to 2019, reaching second place in Top of Mind, with the brand attaining penetration in 78.4% of homes and a 78.7% rate of repurchase.

Seara offers customers and consumers channels for contact, such as a toll free number and the Contact Us area on the brand’s website, as well as contacts by e-mail, on social media like Facebook and Instagram, and on specialized service sites, such as Reclame Aqui. Contacts are captured directly through the Seara Customer Service Center, except for those made through social media, where the first contact with the consumer is made by a team specialized in this relationship.

In 2019, the Customer Service Center took 49,131 contacts, 11.8% of which were from the foreign market, with the rest from the Brazilian market. The service level reached by the toll-free number in 2019 was 97%. During the year, the total number of complaints fell by 25%, with complaints related to the plants dropping by 30%, year-over-year. For the foreign market, the response time for complaints was 10% faster than in 2018.

In addition, the Company has the Seara Academy, promoting actions and consumer panels, the results of which are reflected in innovations and product improvements. Also worth noting is the Seara brand’s maintenance of the Reclame Aqui RA1000 seal, which is given to companies with an excellent rate of service. During the year, the Rezende and Massa Leve brands were also given the seal. Seara was a finalist in the Revista Época Reclame Aqui Award for excellence in consumer services, placing 3rd in the Perishable Food - Frozen and Fairy Products category.

1 SOURCE: Nielsen Base Retail Index - ON’19.
3 SOURCE: Kantar World Panel - CROSS Categories Basket.
Quality

The Seara Quality and Food Safety Management System (SGQSA) can be broken down into three major groups: food safety, perceived quality and supplier/customer. These themes are covered in documents developed by Seara and aimed at management of these aspects, including the Food Quality and Safety Policy, which expresses the Company’s commitment to producing quality, healthy and safe food.

In 2019, R$ 274.4 million was invested in actions connected to this topic and 2,462 people were trained.

Seara undergoes regular audits by the Federal Inspection System (SIF) by the Ministry of Agriculture, Livestock and Supply (MAPA), which performs official verification regarding compliance with the regulations and standards applicable to production of poultry meat and pork and their byproducts. During 2019, the Company welcomed international missions at 16 production units.

The public receives regular information about Seara products through the websites: • www.seara.com.br • www.searainternational.com

And it has a Customer Service Center, providing online services and direct contact with consumers and customers interested in finding information on products and processes. A team of technicians at offices abroad assure that key legal and market demands are gathered, along with transparently communicating the main technical topics of interest to their customers. Seara has professionals dedicated to guaranteeing expected service levels for its so-called Global Accounts, which include major chains such as KFC, McDonald’s, Subway and Burger King, among others.

A network of 14 food labs are ISO 17025 accredited, specifically for this type of unit, have developed 854 certified methods which have been implemented according to international standards and audited by the National Institute of Metrology, Quality and Technology (INMETRO).

Quality programs

Seara establishes a series of programs aimed at assuring the quality of its products. Notable among these are:

**Plant Excellence Award**: based on Quality and Food Safety Management System (SGQSA) Audits at plant units. The results help in managing the 15 aspects of quality, represented by mandalas, allowing for fast visualization of key points for attention.

**Compliance Index**: a tool to assess Seara products that shows the quality status in relation to product standards (sensory, appearance, size, physical and chemical properties and contaminants), primary and secondary packaging and palletization (arrangement, presentation, weight, identification, traceability, protection, validity and others).

**Quality route**: allows for verification of whether the production process and intermediate products are in compliance with the technical standards for the process and whether monitoring is being appropriately conducted, in addition to providing guidance when deviations are found.

**Project Q**: a multifunctional group whose members include top management and support areas, to assess execution of production activities while reinforcing the need to comply with product and process standards.

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Healthiness

In 2019, Seara worked to lower sodium, fat and sugar content in products, as part of a commitment to meet the Brazilian regulatory agency (Anvisa) standards and promote consumer health.

Highlights during the year include the kick-off of seven projects related to reducing sodium and fat and the development of product categories aimed at increased healthiness, such as Seara Nature – made using only natural ingredients, Seara Rotisserie and Organic Chicken, in addition to awards for innovation in the Seara Rotisserie and Seara Nature ranges.
**Innovation**

Seara uses a wide variety of efforts to foster development of innovation at the Company. One of its biggest challenges is the ability to forecast food consumption trends, through a close relationship with consumers and by making them feel connected, listened to and respected. To do this, the Company also invests in innovative management via an ongoing and wide-ranging digital transformation process.

One high point in 2019 was the Incredible Lab, a hub for innovation formed by Company researchers in partnership with scientists, universities and even consumers. The Incredible Lab was created with a focus on developing plant-based protein products for the Incredible Seara range, but its activities will be extended to innovations related to other lines.

The Incredible Lab’s biggest find was the i Biomolecule, which combines natural aromatic molecules with fermentation of existing natural ingredients to guarantee similarity to animal protein. The Incredible Seara range of products are 100% plant-based and are made with pea and soy base, but have the flavor and texture of meat.

Made using soybeans and beets, the Incredible Burger, in the Seara Gourmet Range, was launched in May 2019. It was the Company’s first plant-based product and its popularity was one of the reasons why Seara developed an entire range of plant-based products.

To guarantee this synchronicity with consumer needs and interests, opportunities to innovate at Seara are identified in a variety of ways: at national and international trade shows, through technical visits, research and in-house workshops, through partnerships with suppliers and more. Research prepared by a group of internationally respected institutes helps in understanding market trends and consumer behavior. Internally, the Perceived Quality project applies research to monitor the performance of Seara products compared to other options on the market.

The innovative project pipeline at Seara is managed on a monthly and quarterly basis. Investment in this area in 2019 totaled R$ 54 million spread across process, brand and trade improvement actions. During the year, 187 products were launched in Brazil and around the world.

Projects are aimed at fulfilling global trends and needs related to the platforms of healthiness, indulgence and convenience. Performance in reaching these goals is measured using indicators that include perceived quality, percentage of margin, reduced variable cost and shorter project execution time.

The results of this system geared toward innovation was a variable cost reduced by R$ 74 million, with items tested for perceived quality performing equal to or above the competition 93% of the time, in addition to a 25% faster project development time when compared to 2018.

At Seara Academy, events make it possible to gain direct access to customer and consumer opinions, collaborating to enhance products. The Q Lab, Seara’s data intelligence center, consolidates data from dozens of different sources, processing and delivering analytical studies with a consumer-focused vision, which helps in gaining more efficiency in marketing activities.

The Q Lab also contributes interpretation of consumer movements and trend analysis. The use of data intelligence and social listening allow the Company to take the pulse of discussions, taking stock of what people are saying on social media and seeing whether any opportunities can be seized in real time.

**Perfect Store**

The mission of Seara’s Perfect Store program is to enhance and monitor the Company’s product performance at points of sale, by promoting a unique consumer experience.
Product integrity

Among commitments related to product integrity at Seara is respect for the highest food safety, quality and sustainability standards. The Company develops a range of actions to contribute to enhancing management processes across the supply chain, by adopting good social and environmental practices. To do this, it relies on internal controls in each of its contracts with integrated producers.

In the supply chain, 100% of integrated producers receive visits and technical assistance from the Company. During the supply process, checklists are applied to close lots and, at the end, a lot form is entered into records that are held by the Company, containing key production information.

All advisory and training actions carried out by Seara are adopted by poultry as well as pork producers, through work by around 500 extension agents and veterinarians who make technical visits to guarantee that all suppliers adopt practices and structures suited to production and in compliance with necessary environmental laws.

Formal monitoring between the Company and integrator is stipulated in the producer integration contract, which is in line with Law 13.288/2016. A group of checklists, divided by theme, are applied to all integrated producers, with a variable frequency, according to the topic’s relevance. In all of these processes, if any failure to comply with the quality or sustainability criteria is found, the appropriate sanctions are applied.
Supplier relationship

Seara wants its raw materials suppliers to be partners in business. That is why it develops activities, in line with the use of best social and environmental practices across the value chain, a measure that assures continued enhancement of the quality of inputs that arrive to the Company.

In late 2019, the Company had nearly 9,000 integrated production suppliers in Brazil.

Seara is an active participant in forums and debates held by trade associations in order to influence dialogs of importance to the supply chain.

Livestock Technical Committee

Seara is a member of the Livestock Technical Committee, promoted by the GlobalGAP quality certification organization, which aims to discuss and define animal welfare trends, requirements and parameters worldwide.

Seventeen years ago, we started out with 13,000 birds, and now we have 160,000 housed. The last investment we made last year was to install solar energy to lower production costs. Our partnership with Seara first began with hogs, 40 years ago. Later, we started the avairies. We’ve always had help from the Company with incentives.”

Nelsindo Grosser
Producer

Integrated Partnership

Seara works in an integrated fashion with producer families to guarantee the origin of poultry and hogs (which can also be acquired, to a lesser extent, through purchases from independent producers). Seara is committed to providing the inputs needed for animals to be raised safely and healthily; in addition, the Company provides advice on production management, environmental practices and animal welfare.

Production costs in the system are also shared. The producer is responsible for 7% - which corresponds to infrastructure, manpower and electricity, for example. Seara bears the remaining 93% of costs, as they relate to supplying feed, chicks, medications, technical assistance and transportation, among other things.

Agriculture fosters investments in sustainable technologies that offer the chance for activities to be done at a lower cost and with increased efficiency. Seara provides financial incentives to transform conventional aviaries into automated aviaries, developing compensation policies that help to maintain cash balances for partner integrated producers over the investment’s entire amortization period. The Company moreover develops logistics projects, providing the chance to share the gains resulting from implementation of competitive differentials.
Super Agro Program

Created in 2017, the goal of Super Agro is to consolidate the JBS Culture and establish the Seara brand in Integration and in the Community, with a range of audiences, such as integrated producers, extension agents, managers and Agriculture Team members. There are two fronts of action: the Agriculture Extension Award and the Best Producers Award.

The former is geared toward formation of high-performing, motivated and competitive teams. They are recognized for excellence in practices and for rural extension results, contributing to attracting and retaining the best professionals and to improving productivity in the poultry and pork chain. Approximately 500 agricultural technicians and veterinary medical officers, who work with rural extension activities at poultry and hogs units, participate in this award.

The second front of action is focused on the relationship between the integrated producer and the Company, with monthly and annual recognition of producers who have the best results and current management practices, motivation and retention of producers, contributing to attracting new producers and to appreciation of the integration system in the community.
Social responsibility

In the city of Ipumirim

JBS received Corporate Citizen certification for two consecutive years, in 2018 and 2019. This program is part of the Novos Caminhos (New Paths) Program, benefiting minors living in shelters. In addition to taking classes at Senai, 2 or 3 days a week, they work at the Company on other days. In the project, they have theoretical and practical classes, in education as well as music, geared more toward routine day-to-day activities.

Patricia Locatelli Baron
HR Manager in Ipumirim (SC)

Community relations

In its relationships with the communities in which it operates, Seara follows the practices established by JBS; in other words, it understands that its social responsibility actions should be focused on developing local manpower, on supporting education, particularly professional training, on sponsoring projects compatible with the Company’s priorities, on encouraging volunteering by its team members or, furthermore, on making direct investments towards the community.

Seara aims to monitor and share actions at JBS Brasil, taking advantage of the synergy between companies and the similarity between strategies and challenges.

See more in JBS Brasil / Sustainability / Community relations, on page 159.

Occupational Health and Safety

The health and safety of its team members, partners, suppliers and stakeholders is a priority at Seara. The Company applies the principles and standards used by JBS Brasil.

Tools like the Health and Safety Dialogs, behavioral audits, events and training are used to continually enhance performance and each person’s commitment to preserving the physical and mental integrity of all stakeholders.

Actions to prevent occupational accidents and illnesses have resulted in 28% fewer Seara team members with leave registered with the Social Security system for these reasons, based on data from 2019 compared to 2018.

To learn more about health and safety management at JBS and Seara’s performance in this topic, see Sustainability/Health and Safety, on page 96.

The efforts, policies and procedures adopted by JBS in Brazil are equivalent to those adopted by Seara, since corporate guidelines are the same for all Group companies in Brazil. The investments of around R$ 169.7 million reported by JBS in Brazil also extend to Seara units.

Within the Seara business, one highlight is the campaigns to raise awareness that we carry out along with all of our team members. We have a timeline that all of the units follow to get organized: we schedule meetings, during an entire week, doing countless activities, with involvement, interaction, learning and training. It’s a time for us to pass along a very strong message of health and safety to our team members, so that they not only practice this at our units, but are also able to take this beyond our plants and to their homes.

Robison Raniere Martins
Corporate Occupational Health and Safety Manager at Seara
In environmental stewardship, Seara, always based on its Environment Policy, works to keep the matrix of environmental aspects and impacts up to date, along with its environmental programs, in an effort to monitor them in an ongoing and efficient manner. Investments in this area in 2019 totaled R$ 136.2 million, 37% more than in 2018.

The Company has an environmental policy and relies on a management system and indicators to guide development of short- and long-term strategies. Just like at JBS Brasil, Seara has one production unit in Itapiranga (SC), which is ISO 14001-certified. This facility serves as a reference for the others, which replicate the main projects and actions developed at this production unit in their own activities, whenever applicable. They undergo an internal audit process in order to monitor compliance with best practices and performance of environmental indicators.

Seara developed a platform to assist in managing environmental indicators. In 2019, in order to take another step forward in managing and increasing the transparency and reliability of information supplied to the market, water consumption, energy, greenhouse gas emissions (scopes 1 and 2) and production data were audited by SGS, a Swiss company that is a world leader in inspection, verification, testing, and certification, according to standards established by ISO 14064-1: 2007 and the Brazilian GHG Protocol Program.

Practices such as only acquiring firewood from registered suppliers, prohibiting receipt of old-growth timber, controlling energy indicators, greenhouse gas emissions, water and water reuse, in addition to the quality of effluents treated, as well as preferring use of biofuel, are among the main aspects of Seara’s environmental management.
**Water and Effluents**

Water is essential to production at Seara, making it a priority. In particular, the Company monitors risks related to water volume and quality: reduced availability makes it necessary to have tighter operational controls to ensure quality standards. For effluents, the challenge is guaranteeing the discharge standards for treated effluents, using appropriate operation of treatment stations.

Seara also works with daily goals for water consumption per ton of product, which are revised annually. Furthermore, work is done to identify opportunities to reuse water in its processes, aimed at lowering the demand for water collection. In 2019, Seara reused 1.7 billion liters of water, 31% more year-over-year. This amount is equal to 680 Olympic-size swimming pools.

A specific checklist provides guidelines for surveying any points of water waste and for respective solutions, with action plans that stipulate responsible parties and timeframes. Reuse is one possibility; however, because effluents come from food processing, initiatives for reuse must be authorized by the Federal Inspection Service (SIF). One example of projects in this area are reverse osmosis, reuse in vacuum pumps and reuse of water used to clean sieves.

Effluent treatment, another fundamental theme in managing water resources at Seara, received investments of R$ 13.3 million, 108% more year-over-year. With this structure and funding, Seara guarantees that 83% of the volume of water captured and used by the Company is returned to the environment in compliance with quality and safety standards.

In order to reduce the volume and guarantee the quality of effluents produced, Seara invests in procedures to lower the organic load in effluents, using appropriately sized treatment systems that guarantee maximum efficiency. Floater systems and anaerobic ponds help to bring down emissions coming from effluents. At the Três Passos and Seberi production units, both located in Rio Grande do Sul, biodigesters are used to burn methane gas in the boiler and to flare methane gas, respectively.

**Climate Change**

As part of JBS, Seara monitors, accounts for and reports its greenhouse gas (GHG) emissions. Find out more in Commitment to sustainability/Environmental stewardship/Climate change. In an effort to reduce its carbon footprint, the Company invests in developing innovations and in adopting best practices in its operations.

In 2019, Seara lowered its scope 1 GHG emissions (direct emissions) by 21% in relation to the previous year, considering its emissions per metric ton of product produced.

**Energy**

Energy management at Seara is monitored by a multidisciplinary team of engineers who work in partnership with plant teams and the corporate area, assessing performance and adopting strategies to bring down consumption and make the Company more energy efficient.

Seara sets individual annual targets to reduce energy, by branch, with monthly supervision by the executive board and daily management by units. Electricity purchased on the open and incentivized markets as well as the use of biomass to generate steam are some of the actions aimed at diversifying the Company’s energy mix.

Seara’s energy matrix includes 91.7% renewable energy, considering direct energy use (electricity, thermal energy and use of fuel in general). If we consider fuel use in boilers to generate thermal energy, renewable energy use rises to 97.4%. In 2019, investments of R$8 million were made in energy efficiency projects at the Company.
Waste management

Based on the guidelines of specific JBS policies for this theme and by the National Solid Waste Policy, Seara aims to reduce waste generated and consequently sent to industrial landfills. This necessarily includes application of the Company’s critical suppliers program, which establishes correct disposal of all waste generated by suppliers and carriers along with final waste disposal. Centers at Seara units receive waste and correctly dispose of it, including recyclable waste, which is sorted and sold to specialized companies.

With the goal of enhancing this procedure, in 2019, mapping began on Seara production units qualified to receive JBS Ambiental projects, which will make it possible to better sort and use waste, along with applying specialized management of this topic.

In the area of reverse logistics, the pallet center manages the processes involved in collecting, purchasing, shipping and supplying plants with this material. The result of this initiative is wider reuse of wood through actions such as changing the logistics system to reduce shipping, performing supply studies for plants, collecting pallets from customers in various regions in Brazil and improving accountability management with carriers.

At Seara, 286,000 metric tons of industrial waste were reused for composting, recycling, energy reuse and cogeneration, accounting for over 70% of total waste generated. Of this total, 1,000 metric tons were used to generate energy. In addition, Seara lowered waste generation by 7% in 2019, compared to the previous year. In 2019, Seara invested over R$ 440,000 in waste management improvements.

Packaging

Packaging is an essential item when it comes to guaranteeing quality and to the consumer experience with Seara products, since it is responsible for providing food with safety and protection from the moment it is prepared to consumption. Nevertheless, its disposal may create an environmental liability that should be proactively managed in compliance with local and national laws.

To make this possible, part of the Company’s investment in research and development is aimed at finding ways to reduce and optimize packaging use, particularly when it is not in direct contact with food, helping to lower waste volumes and the costs associated with this.

It is important to note that approximately 80% of packaging volume for Seara products come from renewable sources.

Cidade+ Program

Seara and JBS Brasil support the work of the Cidade+ Program, which is developed and managed by the Recicleiros NGO, that advises municipal governments on implementing smart selective collection while at the same time allowing companies to comply with the requirements of the National Solid Waste Policy, which requires that they invest in reverse logistics actions for post-consumer packaging.

The values espoused by Cidade+ become the subject of training for municipal managers, so they can be able to implement and manage their selective collection programs.

JBS, through Seara and JBS Brasil, supports our selective collection and recycling programs, which should serve nearly 1 million new people per year. Four million will have access to sustainable channels to dispose of solid urban waste and 2,000 qualified jobs will be created for people in vulnerable situations by the end of 2023.”

Erich Burger
Recicleiros Institutional Director
Rodrigo Bisolo
Integrated hog producer

On this farm, we work with collective pens; animals are together for much longer, in much larger pens. With this, we see improvements to their quality of life, with better results consequently. And, in addition to collective pens, we have a climate control system for sows and piglets."

Rodrigo Bisolo
Integrated hog producer

Animal welfare

Animal welfare is a material and priority theme at Seara and JBS as a whole. To be in line with best practices, the Company looks to the most relevant initiatives around the world on this theme as references, including the concept of the five freedoms of animals, applying them end-to-end in its production process. With around 9,000 integrated chicken, turkey and hog producers in Brazil, split among Company farms and integrated producer farms, Seara desires to be a reference in animal welfare in the country.

Among the international standards adopted as a reference by Seara, in addition to national and international laws related to the countries to which the Company exports, it is worth mentioning technical standards, decrees, ordinances, directives and regulations issued by multiple agencies connected to the Brazilian government, in addition to standards proposed by organization such as The Welfare of Broiler Chickens in the European Union, Humane Poultry Slaughter - STEPS, Farm Animal Welfare Council (FAWC), The World Organization for Animal Health: Slaughter of Animals - Terrestrial Animal Health Code and National Chicken Council Animal Welfare Guidelines and Audit Checklist for Broilers, published by the Professional Animal Auditor Certification Organization (PAACO).

Seara uses external and internal guidelines to manage this area, guaranteeing fulfillment of requirements and alignment with best practices in the most demanding markets, such as the European Union. Company units are constantly audited and are certified based on the world’s most stringent initiatives, some of which are developed by customers. All producers, catching teams, carriers and technical teams are trained annually on animal welfare practices. During the year, about 9,000 producers and 100% of the internal team underwent training, with a total of 14,000 people trained.

The value chain is engaged with actions related to animal welfare through public and internal campaigns, technical visits, programs to raise awareness, animal welfare seminars and committees, operational training seminars, animal welfare committees and, moreover, with the help of a reporting channel, the JBS Ethics Hotline.

Worth mentioning among the commitments undertaken by Seara in relation to this topic are implementation of collective gestation stalls in 100% of the pork chain by 2025 and the exclusive use of eggs from chickens raised free of cages by 2020 in their products.

Seara works with the practice of desensitizing 100% of animals, with the exception of cases where religious requirements apply. The practices employed by Seara are monitored internationally by certifying institutions and customers holding stringent animal welfare requirements, such as Certified Humane, McDonald’s, Migros, Moy Park, Global GAP and WQS, among others.
Breeding

One of the main practices at Company and integrated producer farms is that animals are fed using only feed formulated by the Company, by nutritionists specializing in poultry and pork, with ingredients that include corn, soy and other grains and which contains no hormones of any kind, in compliance with Brazilian law.

All inputs needed for production, such as chicks, vitamins, chlorine, disinfectants and, when necessary and prescribed by a Seara veterinarian, medications are provided to producers, who also receive ongoing assistance and training, in addition to periodic visits from the Seara technical team. There are around 500 field professionals, working to ensure that practices adopted comply with the Company's principles, in addition to advising producers on best practices.

For production of day-old chicks, all hens are raised “cage-free.” In addition, at poultry farms (parent stock and grandparents), only roosters are de-beaked. This procedure aims to improve animal welfare conditions by preventing hens from suffering scratching or injuries during copulation. All poultry transport is monitored to doesn’t exceed 12 hours from fasting to the final stage.

Seara uses Technical Guidelines (OTs) to define the criteria producers need to follow. Other control forms are used in addition to Technical Guidelines and checklists, so that Animal Welfare indicators can be systematically monitored and controlled. Certification audits, such as Global GAP, are also done at Seara production units.

Indicators such as housing density, percentage of calluses on birds' feet, initial and final viability percentage, nutritional levels, appropriate feed availability, water quality control and availability, compliance with the five fundamental freedoms and environment control (temperature, humidity, ventilation, lighting and “bedding” quality) are on the list of factors controlled by producers, in an effort to guarantee animal welfare during production.

Animal health and safety are top priorities and are common to every line. Seara has a very strict internal policy on antibiotic use. The entire process of acquisition, use, registration and traceability is maintained in the production chain. The Company follows the premises of all of the markets and customers with which it works, while also complying with all items required by law in Brazil. Seara does not use antibiotics preventively at any stage in its production.

The Company made investments of around € 77.8 million in animal welfare, particularly in initiatives aimed at climate-control, comfort and availability of animal feeding equipment.

As extension agents, our role is fundamental and relevant in relation to our producer, as an intermediary in harmonizing the interests of the Company and the producer. Day-to-day, we seek to maximize results, optimizing the farm to be highly productive, creating satisfaction for our integrated producer.

Ivan Cunico
Extension Agent

Seara Commitments to Animal Welfare

1 - Transition from individual to collective gestation pens in pork production by 2025. Current status: 58% adapted

2 - Maintenance of low densities in raising birds, with the maximum level set at 39kg/m2. Current status: less than 35kg/m2.

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Poultry practices

1. **Farm densities**
   Comply with a maximum limit, according to best market practices, so that all animals have room to move around freely and have access to substrate, the so-called aviary litter, which allows them to manifest their natural behavior.

2. **A dark period**
   Of at least six hours a day, is used at all farms to allow for appropriate resting.

3. **The debeaking process**
   Is not done at broiler farms. At production farms, the procedure is only used on roosters, preventing hens from being injured during copulation. This is a more modern practice that is used in the market and is in line with best global animal welfare practices.

4. **Seara has gradually reduced**
   The amount of antibiotics used in production, prohibiting preventive use.

5. **Humidity and ambient temperature**
   Are monitored at all farms, which are controlled using a set of visual, electronic and thermal indicators.

6. **Upon arrival at the production unit**
   Birds are kept in a holding warehouse under thermal comfort conditions based on the use of the ventilation and/or nebulization system with appropriate coverage against direct sunlight and adverse weather, such as rain, wind, hail, etc.

To learn more, visit the ‘Hoje tem Frango’ platform (https://www.hojetemfrango.com.br/), created by Seara to provide information on poultry production.
Pork practices

1. Farm density also respects a maximum limit, providing animals with space to freely move around and express their natural behavior.

2. The practice of tooth-clipping is not used at Seara piglet production farms. Adaptations to management have allowed this practice to be stopped.

3. Tail docking is still used in an effort to prevent problems in adult hogs, since an intact tail can facilitate cannibalism among animals. This procedure is internationally recognized as the best practice for guaranteeing production within modern animal welfare standards.

4. Surgical castration is also not used. The Company uses immunological castration, promoting greater animal comfort and less stress.
Transportation

Animals are transported from farms to production units using a team trained to minimize animal stress, prevent injuries during transport and guarantee appropriate spacing inside transport crates or trucks. Drivers are instructed on emergency procedures in the event that a vehicle breaks down, the route is interrupted or blocked, the trailer is involved in an accident, there is a fire or when tires need to be changed.

The transport routine follows a series of indicators, such as crate density and weight in loading, as well as mortality percentage, so as to guarantee appropriate practices are adopted.

Production

For the production stage, each plant has at least one person responsible each shift with animal welfare training.

All team members who come into contact with animals are trained on preventing injuries and stress. The plant’s managers are responsible for ensuring that a sufficient number of team members are used on the hanging line during the entire process, which runs at a speed that does not cause stress to birds. After hanging, the animals undergo a desensitization process and continue to processing.

In the case of hogs, their skin must be moist and be free of excessive dirt. In the event that CO2 is used, the right concentration must be applied, respecting the minimum time and maximum number of animals in the chamber.

In addition to these measures, the Company invests in improvements to its production process. In 2019, approximately R$ 14.5 million has been invested in animal welfare improvements at Seara production units.

Special production

Seara maintains continual investments to assure a portfolio of high-quality products, in line with global market trends. To do this, the Company offers antibiotic-free, organic, vegetarian and natural products, in addition to its traditional product line.

Animal health and safety are top priorities and are common to every product range. Seara has a very strict internal policy on antibiotic use. The entire process of acquisition, use, registration and traceability is maintained in the production chain. The Company follows the premises of all of the markets and customers with which it works, while also complying with all items required by law in Brazil. Seara does not use antibiotics preventively at any stage in its production.

Notable in the Seara special portfolio are the Da Granja range, with antibiotic- and anticoccidial-free products and chickens fed using green feed; Organic Chicken range, with organic certification and free range animals; and the Nhô Bento line, with free-range chickens.

Corporate Animal Welfare Committee

The Company has a Corporate Animal Welfare Committee, which is responsible for assessing and discussing topics relevant to businesses, with the goal of guaranteeing ongoing improvement in animal welfare at production units and in relation to matters strategic to the Company. The Committee describes procedures and implements the controls needed across the production chain to ensure that animal welfare is appropriately maintained. The committee also discusses strategies to inform and engage team members with this theme. This year, the committee developed the corporate animal welfare seal, to be used by Seara and Friboi, establishing a commitment by JBS as a company.
Headquartered in Greeley, Colorado, JBS USA has three major lines of business, which comprise all of JBS’s locations outside of Brazil: JBS USA Beef, JBS USA Pork and Pilgrim’s Pride (JBS is a majority shareholder). Our operations are spread across the United States, Canada, Mexico, Australia and – following the acquisitions of Moy Park and Tulip – France, the Netherlands and the United Kingdom. JBS provides food for more than 280 million meals every day to customers in more than 100 countries.

In partnership with farmers and ranchers from rural communities globally, the more than 100,000 team members at JBS USA work to provide flavorful, healthy and high-quality meals to retailers, distributors and restaurants around the world. JBS USA is currently one of the largest processors of beef and prepared foods, the second largest pork processor in the United States, a leading processor of beef and prepared foods in Canada, and one of the top processors of beef, lamb and prepared foods in Australia.

Consumer know and trust our brands: Swift, Plumrose, Pilgrim’s Pride Moy Park and Tulip.

As with every operational front at JBS, JBS USA champions the global values of the Company while localizing culturally and creating a model that combines synergy and autonomy to deliver operational excellence and passion for the foods people love.

Driven by the passion to be present at family meals across five continents, JBS USA is a global leader in the beef and prepared food markets. The Company works to make the lives of its consumers more tasty through a success story that reflects three qualities that sit at the heart of its operations: a commitment to innovation, a strong culture and entrepreneurial spirit.
JBS USA BEEF

JBS USA Beef is the world’s largest beef company, and is focused on beef, lamb and prepared foods production and distribution in the United States, Canada and Australia (through our Primo business in Australia). With approximately 36,000 team members, the Company offers a broad portfolio fresh and prepared foods products from well-known brands, serving markets in these countries, as well as export markets. In Australia, JBS is a leader in animal protein processing and prepared foods, exporting to more than 70 countries.

18 beef processing facilities
8 transportation facilities
8 distribution centers
11 prepared foods facilities
6 feedlots
2 leather facilities
2 lamb facilities
1 pork facilities

NUMBER OF TEAM MEMBERS: 36,000

Main brands:

- Swift
- Showcase®
- 1855
- Certified Angus Beef®
- Grass Run Farms®
- Aspen Ridge®
- Four Star®
- thinkpure®
The world’s second largest pork producer, JBS USA Pork provides high-quality fresh and pre-packaged, ready to cook products, from bacon and ham to deli meats and pork cuts. The Company has approximately 11,000 team members. Plumrose, respected for its high-quality prepared products, was acquired by JBS in 2017.
PILGRIM’S PRIDE

A publicly traded Company listed on the NASDAQ, Pilgrim’s Pride Corporation produces and sells fresh meats and high-added-value prepared and pre-packaged consumer foods. It is a global leader in chicken production and processing, and the world’s largest producer of organic chicken, through its subsidiary Moy Park the Company makes one out of every five chickens eaten in the United States; one out of every four in Mexico and one out of every three in the United Kingdom. Pilgrim’s is also the owner of Tulip Limited, a leading pork and prepared foods company in the U.K. Pilgrim’s approximately 60,000 team members work from locations in the United States, Puerto Rico, Mexico, the United Kingdom and Europe.
Performance

Annual highlights

During 2019, JBS USA Beef maintained its investment strategy, investing US$ 1.8 billion over the past 10 years. The investment strategy includes a focus on scale, diversification, unique sales and distribution capacity, and high-quality products.

Also in 2019, JBS USA Pork reached a milestone of US$ 500 million invested over the last 10 years. Strong growth during this period allowed the Company to gain a 15% share of global industry exports.

During the year, in the U.S. alone, more than 200,000 hours and US$ 33 million were invested by the Company in leadership training and development programs for its team.

Pilgrim’s acquired Tulip Limited in 2019 for approximately US$ 392 million. As one of the largest pork and prepared foods companies in the United Kingdom, the Tulip acquisition positioned Pilgrim’s as a global leader in pork and prepared foods, these categories now account for 17% of Pilgrim’s global sales.

In Australia, sales increased 6.5%, export revenue increased 10.4% and domestic revenue decreased 2.4% from 2018 to 2019.
Products and services

Stakeholder engagement

JBS USA’s commitment to excellence starts with the strict quality control standards incorporated throughout its operations. The Company’s facilities have adopted robust safety measures and advanced technologies to deliver high quality products, including multiple options that meet the breadth of consumers’ nutritional needs and purchase expectations, from traditional products to organic and ready-to-serve dishes.

To guide innovation and ensure our portfolio aligns with and anticipates global trends, JBS USA closely listens to what consumers have to say. In addition to market surveys, the Company has a variety of communication resources, particularly digital, that enable us to engage consumers, as well as customers and other stakeholders. To simplify these conversations, we organize customer and consumer resources into protein-specific, customer-focused and consumer-focused websites and communication channels. In addition to websites and profiles on social media, the Company provides Customer Service hotlines and an e-mail contact.

Many business units have developed websites with resources geared toward customers, allowing them to create personalized accounts. Through these websites, they can access information about point of sale materials, packaging specifications, brands, premium programs, value-added products, food safety, quality and animal welfare.

There are also brand-specific sites and social media channels through which consumers can learn more about the Company’s products, brands and value chain. Those interested, can interact with the Company’s profiles, while also using the “contact us” forms on websites to learn more about the brand and gain a better understanding of the food product they are interested in.

In 2019, JBS in Australia continued to grow its marketing strategy, embracing the power of digital communication channels to expand opportunities to engage with customers and consumers around the world. Most of the beef brands now have their own individual websites, that connects and is attached to the Company's main marketing initiative: aussiebeef.com.au, a website regularly publishing relevant and updated content on beef products, along with tips on cooking and serving them. In addition to the website, aussiebeef.com.au has a strong social media presence, including on Facebook, Instagram and WeChat.

Primo Foods uses all of the main tools of communication, whether traditional, digital, person-to-person, e-mail, website search, telephone (i.e. customer service) or social media platforms, including private and public messages. Depending on the query, responses are provided to different teams, such as sales, marketing, quality and customer service. There were 15% fewer consumer complaints at Primo Foods in 2019.
Quality

Food safety and quality is at the heart of our business. We continuously review every aspect of our daily operations to make sure we provide safe, high-quality, nutritious products for our customers and consumers.

The JBS USA management structure for Food Safety and Quality Assurance is designed to ensure leading performance, relying on corporate oversight at the highest level. The team is led by the Global Head of Food Safety and Quality Assurance, who oversees the Company’s global food safety efforts.

Each JBS USA production facility has a robust food safety and quality program that consists of Standard Operating Procedures, Sanitation Standard Operating Procedures, Hazard Analysis and Critical Control Point (HACCP) procedures and technology interventions designed to eliminate or reduce food-borne pathogens. These processes are monitored by specially trained team members and government officials in each production facility.

All facilities also adhere to good manufacturing practices, recall/market withdrawal procedures, which offer traceability resources to ensure that the proper products and dates can be identified, pest control and food security programs, and annual certification to the Global Food Safety Initiative (GFSI) standards at almost all processing plants.

Critical to our global approach to food safety and quality assurance is the ability to share and leverage best management practices across the Company. Within this effort, each business unit is tasked with communicating best practices in relation to regulatory compliance, pathogen control, modernization and other innovations. In addition, JBS hosts a Global Food Safety and Quality Conference with area professionals to identify common challenges, industry trends and opportunities for improvement.

In the USA and Canada, the Food Safety and Quality Advisory Committee is responsible for providing oversight and guidance to our food safety and quality assurance programs as well as regulatory compliance. Senior JBS USA and Pilgrim’s team members serve on the committee, as well as academics who specialize in the areas of animal science, meat science, epidemiology, food microbiology and veterinary medicine.
Legal compliance

In the USA, the U.S. Department of Agriculture’s (USDA) Food Safety and Inspection Service inspects every JBS USA production facility daily to guarantee that food products meet federal food safety standards.

In Canada, the Canadian Food Inspection Agency (CFIA) regularly inspects and actively monitors plants to ensure compliance with food safety standards.

In Australia, Department of Agriculture and Water Resources (DAWR) representatives are permanently located at the company’s plants and perform inspections of facilities daily to guarantee compliance with food safety requirements for foreign consumption and export.

In Europe, production units are inspected and audited by third parties in accordance with the European Union Food Hygiene regulations and any additional customer quality requirements to verify compliance with the economic bloc’s laws.

In Mexico, Pilgrim’s follows the best practice guidelines for chicken production, as defined by the Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA) and the National Service for Agro-Alimentary Public Health, Safety and Quality (SENASICA). Five of the six Pilgrim’s facilities in Mexico have a Federally Inspected Type (TIF) certification.

In addition, many of our facilities are also subject to additional customer quality requirements.

Training and auditing

JBS USA teams undergo extensive food safety management training to ensure that quality products reach customers and consumers. Newly hired team members receive training on quality assurance and food safety management systems, and participate in additional job-specific training. Everyone working at the company’s production facilities receives ongoing training on food safety policies and practices.

Food safety and quality system audits are conducted annually using accredited and independent auditing firms. All production facilities in the United States, Canada, Europe and Australia, and 86% of Mexico operations, have been audited and certified by audit schemes recognized by the GFSI, one of the most stringent food safety-related standards. Internal audits and inspections are conducted by corporate Quality Assurance team members.

In North America, we require that all suppliers who provide products or services that have direct contact with food must pass the ISNetworld and GFSI audits.

In 2019, the global Food Safety and Quality Assurance team developed a five-year strategic plan that included the creation of its values, mission and seven strategic pillars. These are comprised of a performance recognition program, organizational structure improvement, partnership mapping, a global training program and platforms for collaboration, sanitation and technology.
A passion for innovation sits at the core of JBS USA - it’s the key to unlocking greater value from our products and adding flavor to consumers’ lives. But it’s also the critical tool that will help us feed the world today while also improving the lives of future generations. Innovation allows the Company to develop more-efficient and sustainable practices while adapting to changing customer tastes. The Company’s approach to innovation is built upon consumer insights and customer needs found through opinion surveys and market growth opportunities.

**United States**
In the United States, Plumrose is one of the leading suppliers of pork meat, ribs and bacon to both retail and foodservice customers. JBS USA Retail Ready, a business that specializes in processing meat and pork-based products, includes two production facilities strategically located on opposite coasts of the United States to provide fresh, processed beef and pork products to customers across the country. The JBS USA Consumer Value Added (CVA) team is focused on retail growth, offering fully packaged and ready-to-be-cooked products for consumers. Pilgrim’s U.S. includes a case ready divisions with eight production facilities that specialize in producing traditional tray pack, deli and boneless dark meat poultry products for retail. Pilgrim’s U.S. also includes four prepared foods production facilities that specialize in producing marinated, battered and breaded, par-fried and fully-cooked frozen chicken products for leading foodservice and retail customers.

**Mexico**
Pilgrim’s Mexico has two facilities that produce value-added poultry products, including fully cooked products.

**Canada**
In Calgary, Canada, JBS provides case-ready beef, pork and poultry solutions to Canadian supermarkets and foodservice customers.

**Australia and New Zealand**
In Australia, Primo Foods is the largest manufacturer of ham, bacon, salami and deli meats. JBS is also a leading Australian meat supplier, producing ready-to-serve meals and sous vide meat options for major retail stores and foodservice clients. Beehive, part of Primo Foods, is the number one brand for bacon and ham in New Zealand.

**Europe**
In the United Kingdom and Europe, Moy Park is a leading provider of innovative convenience products, including chicken and beef products, vegetarian products, like spring rolls and onion rings; and desserts, including donuts and apple pies. Also in the United Kingdom, Tulip provides a wide range of high-quality and innovative products such as sausage, slow cooked and BBQ, gammon, bacon and cooked meats to the retail and foodservice sectors.
The JBS USA sustainability approach is guided by the mission to be the best in all that we do while securing the opportunity of a brighter future for JBS team members, shareholders, suppliers, customers and the next generation. Sustainability involves continuously improving social responsibility, economic viability and environmental stewardship. Using these pillars to guide the JBS USA process, in addition to input from internal and external stakeholders, the Company have five key areas of focus: product integrity, team member health and safety, animal welfare, water, and energy and climate change. To fully integrate Company key priority areas into business operations JBS USA set aggressive goals for 2020.

**Sustainability**

**Pilgrim’s Sanford, NC, Family Farm Partner Barn with Broiler Chicks**

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**2020 goals set for U.S. and Canadian facilities only.**

**Environmental goals established based on 2013, 2014, 2015 average baselines.**

- **Reduce GHG emission intensity by 20%**  
  **AS OF 2019:** 17% of reduction.

- **Reduce water-use intensity by 10%**  
  **AS OF 2019:** 10% of reduction.

- **Reduce electricity-use intensity by 12%**  
  **AS OF 2019:** 17% of reduction.

- **Reduce natural gas-use intensity by 20%**  
  **AS OF 2019:** 16% of reduction.

- **Reduce GHG emission intensity by 20%**  
  **AS OF 2019:** 17% of reduction.

- **Score 90% or better on our JBS USA animal welfare scorecard**  
  **AS OF 2019:** We’re on track to meet this goal.

- **100% supplier adherence with our Supplier Code of Conduct**  
  **AS OF 2019:** We’re on track to meet this goal.

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**AS OF 2019:** We’re on track to meet this goal.
Supplier relationships
The nature of our business demands a diverse supplier base; we work in partnership with more than 81,000 suppliers to ensure the highest-quality inputs. Our suppliers range from small family farms and ranch partners who supply us with livestock and poultry to large multinational companies that manufacture and provide materials and services. Impacts related to environmental and social aspects differ for each supplier based on the materials they manufacture, the animals they raise or the services they provide. Directly affecting these impacts chain is often outside of the immediate control of JBS USA, which is why we strive to form partnerships with suppliers who share the Company’s values and mission to achieve more sustainable food production.

For example, in Europe, Moy Park takes part in the Meet the Buyer initiative to meet with local companies and discuss opportunities for collaboration. Meetings are held by local councils to support small regional companies, creating business opportunities.

Guarantee of origin
JBS USA works in partnership with suppliers to guarantee the quality of the raw materials used in its production.

Chicken suppliers
More than 4,900 family farms have partnered with Pilgrim’s in the United States, Puerto Rico, Mexico and Europe to raise our chickens. In the United States, we work in partnership with independent family farmers to raise our chickens; we provide the chickens and feed, as well as technical and veterinary services. In Europe and Mexico, in addition to our own poultry facilities, the Company works in partnership with family farmers who maintain the Pilgrim’s standards of excellence on their farms.

Committed to quality across its value chain, Pilgrim’s conducts audits on a sub-set of family farm producers in the United States according to the Company’s Animal Welfare Program, with the support of a team of internal and external auditors.

In Europe, all farms are certified by the Red Tractor initiative, the largest food standards scheme in the United Kingdom, with performance that meets or exceeds the criteria of this initiative, as well as of other certifications. Pilgrim’s Moy Park has developed a Policy for Supply Chain Assurance for meat and ingredients, ensuring that meat products come from suppliers certified by the Red Tractor initiative or an equivalent initiative.

Guarantee of origin
JBS USA works in partnership with suppliers to guarantee the quality of the raw materials used in its production.

Additional Information:
- Rural Development, Fisheries and Food (SAGARPA), the Ministry of the Environment and Natural Resources (SEMARNAT) and the State Civil Protection.
- In Europe, all farms are certified by the Red Tractor initiative, the largest food standards scheme in the United Kingdom, with performance that meets or exceeds the criteria of this initiative, as well as of other certifications. Pilgrim’s Moy Park has developed a Policy for Supply Chain Assurance for meat and ingredients, ensuring that meat products come from suppliers certified by the Red Tractor initiative or an equivalent initiative.
Beef suppliers

In 2019, JBS USA Beef and JBS Food Canada purchased more than eight million head of cattle from approximately 32,000 family farms and ranches to supply 10 beef production facilities. This allows animal movements to be recorded in a national database and ensures the assurance of livestock trace-back to the property of birth and trace-forward from the property of birth. All hogs are sourced from Australia Pork Industry Quality Assurance Program (APIQ) accredited farms with industry best-practice animal welfare standards. Moy Park purchases pork from approved suppliers, which are audited annually for food safety and animal welfare.

At Tulip, stringent control of the supply chain guarantees that all livestock are treated according to the high animal welfare standards. Our Tulip hog farms and hog and lamb suppliers are assured to either Royal Society for Prevention of Cruelty to Animals (RSPCA), Red Tractor or Quality Meat Scotland (QMS) standards. Our Tulip owned hogs are outdoor bed and raised according to the RSPCA higher welfare standards. In a privately commissioned, standalone assessment Tulip has been awarded the highest rating, a Tier 1 ranking, for its animal welfare standards, under the ‘Business Benchmark on Farm Animal Welfare’ (BBFAW).

In the United States and Canada, cattle suppliers are required to sign an affidavit assuring their compliance with government regulations and animal-welfare certification according to the Beef Quality Assurance (BQA) or equivalent program. We also encourage feedyard partners to add their feedyard to the precompetitive National Cattlemen’s NCBA Feedyard Assessment Database. We anticipate 60% of our feedyard partners will participate by January 1, 2021. In addition, we will ensure third-party verification of the Beef Quality Assurance (BQA) Feedyard Assessment for 25% of our cattle supply.

In Australia, livestock are required to have a NVD to be sold. In addition, before cattle leave their property of birth, they must be tagged with an approved National Livestock Identification System (NLIS) device. In Europe, Moy Park in Orleans, France, only purchases beef from approved suppliers, who are audited annually for food safety and animal welfare. The Company has developed contracting initiatives along with French beef breeder associations, with the goal of ensuring a stable market for producers. Moy Park also encourages its suppliers to purchase cattle from farms with good farming practices, which in France are certified by the “Charte des Bonnes Pratiques d’élevage,” established by the National Livestock Confederation. Meat from the Netherlands and Ireland also comes from programs that guarantee Good Farming Practices.

All 1,600 contracted farm partners are audited for animal welfare and environmental performance.

In 2019, JBS USA Finishing Hog

Pork suppliers

In 2019, our U.S. based business purchased more than 24.8 million hogs from approximately 800 family farmers to supply our five U.S. pork production facilities. Pilgrim’s Tulip sourced more than 2.9 million hogs from 930 family farm partners. Approximately 50% of Tulip’s hogs are sourced from our integrated supply chain.

In the U.S., we require all family farm partners that supply hogs to our facilities to be certified and site-assessed according to the Pork Quality Assurance Plus (PQA+) Program. We conduct third-party audits of a subsample of our partners according to the PAACO-certified Common Swine Industry Audit. We also conduct internal animal welfare audits on a sub-sample of our suppliers.

Hogs that are consigned for sale in Australia must be tagged with an approved NLIS device. National Vendor Declaration (NVD), which is the main document that upholds the Australian meat and livestock food-safety reputation and product traceability. When the NVD is signed, the producer declares compliance with the Livestock Producer Assurance (LPA) program, which is an independently audited on-farm food-safety certification program. The NVD contains important information on the husbandry of livestock consigned for harvest. In addition, before livestock leave their property of birth, they must be tagged with an approved National Livestock Identification System (NLIS) device. This allows animal movements to be recorded in a national database and provides the assurance of livestock trace-back to the property of birth and trace-forward from the property of birth. All hogs are sourced from Australia Pork Industry Quality Assurance Program (APIQ) accredited farms with industry best-practice animal welfare standards.

Moy Park purchases pork from approved suppliers, which are audited annually for food safety and animal welfare.

At Tulip, stringent control of the supply chain guarantees that all livestock are treated according to the high animal welfare standards. Our Tulip hog farms and hog and lamb suppliers are assured to either Royal Society for Prevention of Cruelty to Animals (RSPCA), Red Tractor or Quality Meat Scotland (QMS) standards. Our Tulip owned hogs are outdoor bed and raised according to the RSPCA higher welfare standards. In a privately commissioned, standalone assessment Tulip has been awarded the highest rating, a Tier 1 ranking, for its animal welfare standards, under the ‘Business Benchmark on Farm Animal Welfare’ (BBFAW).
Delivering high-quality products would not be possible without team members and supplier partners in rural communities globally. Actions that develop transparent and close relationships with communities, and ensure the health, safety and well-being of team members, are top priorities at JBS USA. The ability to deliver high-quality products so well reflects our culture, which is a key point to JBS USA. There is a passion for the business throughout the Company, and it manifests itself in multiple ways. It’s what makes operational excellence possible. It fuels our never-ending drive to innovate. It provides the confidence behind our team members’ will to win. It’s seen in the spirit of entrepreneurship – and the qualities of sincerity, discipline and humility – that we prize. And it’s the reason we care so much about our team members and the communities where it maintains its operations.

**Social responsibility**

GRI 203-2

**Conduct**

JBS USA is committed to conducting all activities in compliance with labor and human rights laws; a series of internal and external policies guarantee this process. For example, a [Supplier Code of Business Ethics and Conduct has been developed, which ensures that vendors meet or exceed our high standards when conducting business with JBS USA](#). Learn more in JBS/Ethics and compliance, on page 36.

We have a 2020 goal for all of our partners with agreements entered into since 2018 to be in agreement with this code.
Community Relations

JBS USA prioritizes work with partner organizations that support the disadvantaged and those in need, improve the development and wellbeing of youth, promote agriculture, support the Company’s team members, promote acceptance and diversity, and support local communities.

The Company particularly recognizes the important role it plays in the communities where team members live and JBS USA operates. In addition to its role as a major job creator, the Company has a long history of partnering with local non-profit organizations and encourages team members to take every opportunity to be active stewards of their community. The goal is for our hometowns around the world to consider JBS USA a good neighbor.

To make sure volunteering, sponsorships and donations have the most meaningful impact, the Company always seeks to support local initiatives, many of which benefit community schools, hospitals and youth organizations. This approach to community involvement allows the Company to have an impact where its team members live and work, with the greatest possible benefit.

The Company does not set consolidated giving or volunteering targets. Instead, each JBS USA unit has an annual budget dedicated to supporting local initiatives and communities, based on an assessment of regional priorities. They are encouraged to follow basic guidelines for partnering with the community and determining the best use of funds. For example, while some facilities focus on working to better the lives of patients in their homes and at nine hospitals. Marie Curie nurses provide 24-hour practical support day and night to patients in their homes and at nine hospitals.

In Australia, Primo Foods supports Foodbank, an initiative aimed at serving people living with food insecurity, by donating products valued at approximately AUD $590,000. The Company also collaborated in the CEO CookOff, another project geared toward vulnerable communities to provide food to six million people through donations of cash and products. At an event to commemorate the project, the CEO of Primo cooked for 1400 guests from Sydney’s most impoverished communities, along with 300 business leaders and 50 of the best chefs in Australia. Throughout the year, JBS’s Australian operations sponsored more than AUD 648,000 and donated 122 metric tons of food.

Pilgrim’s Moy Park, invested in initiatives targeting education in rural communities, which include scholarships, job placement support and training in business disciplines to better qualify young people for meaningful employment. The Company also partnered with the Marie Curie Foundation, an institution committed to providing care to people with terminal illnesses and their families. Marie Curie nurses provide 24-hour practical support day and night to patients in their homes and at nine hospitals.

Since 2015, Moy Park has also partnered with FareShare, the largest food redistribution institute in the United Kingdom, whose goal is to combat hunger by redistributing excess food to charitable institutes. In 2019, products amounting 350,000 meals were donated for redistribution across FareShare’s entire network of 21 Regional Centers, reaching homeless shelters, breakfast and lunch clubs, domestic violence shelters and community cafes throughout the United Kingdom.

Other JBS USA actions

- **Tomorrow Fund** – A Pilgrim’s Pride new scholarship program, which will give company workers and their direct dependents an opportunity to be awarded funds for their education. Starting in 2020, Pilgrim’s will award one person representing each of 31 facilities across the USA and Puerto Rico, a full scholarship to an institution of their choice. Each person will receive mentorship from someone at Pilgrim’s to guide them in higher education.

- **United Way** - As a long-term Partner of United Way, the JBS USA corporate headquarters in Greeley, CO, champions an annual campaign to support the local community through United Way of Weld County (UWWC) efforts. In 2019, the Company raised US$ 406,555 – the highest amount since 2015. To ensure 100 percent of team member donations go straight to the programs, JBS USA covered all administrative and fundraising costs for the resources under UWWC’s management.

- Worthington United Way – JBS USA Team Members at our Worthington, MN pork production facility pledged US$ 167,000 to the United Way for Nobles County 2020 fund raising campaign.

- **Pork Product Donation** - JBS USA Pork and their producer partners teamed up to provide over 50,000 pounds of pork and US$ 10,000 to Food Bank of the Rockies. This donation is part of the annual Hams Across America program. The 200,000 servings of pork will be distributed by Food Bank of the Rockies. The organization is the largest hunger relief organization in Colorado, providing food and supplies to more than 700 hunger-relief programs.
Occupational health and safety

JBS USA believes that safety is critical to operational excellence. The Company does not tolerate unsafe work conditions and is committed to providing an appropriate environment for its team members, in addition to implementing policies and procedures to guarantee best safety practices at every JBS USA facility.

JBS USA has a Director of Occupational Health, who provides continual improvements to our health protocols and ongoing training to our Occupational Health Staff to further share and implement best practices across all of our facilities.

Personal protective equipment (PPE) for team members is standard across all facilities. Facility Safety Managers conduct workplace hazard assessments regularly to survey PPE needs and provide training and technical assistance to team members, ensuring effective PPE usage.

JBS USA’s Ergonomic Improvement Program was designed to reduce the effects of repetition, contact stress and static postures. The program is tailored for each facility to control or eliminate potential conditions or work activities that pose ergonomic risks at each particular site. Annual training and assessments continually improve the program. Additionally, each plant undergoes an ergonomics audit annually, where ergonomic issues are identified, logged, and remediated within a reasonable period of time.

Each facility also has a safety committee, the members of which are team members from that same location, who meet regularly to assess workplace risks and propose mitigation strategies. Safety data is shared internally and each year there are specific safety targets for the Company, business units and facilities.

In the U.S., we conduct comprehensive safety audits to identify and reduce potential hazards. Based on the results of these audits, each year, we identify three high-priority initiatives—one that is companywide, one that is business unit-wide and two that are prioritized by each facility. In 2020, our company-wide initiative is machine guarding with a focus on conveyor belt guarding.

Regulations

The JBS USA General Safety and Health Policy focuses on training and educating our team members and eliminating work hazards. Safety management programs meet government requirements in each country.

Our U.S. and Puerto Rican facilities are in alignment with the U.S. Occupational Safety and Health Administration (OSHA) standards.

In Europe, programs meet the Regulations on Reporting of Incidents, Diseases and Dangerous Occurrences (RIDDOR), put out by the Health and Safety Executive, a governmental agency in the United Kingdom responsible for fostering, regulating and applying health, safety and wellness actions in the workplace.

In Australia, each jurisdiction enacts its own Work Health and Safety Act and Work Health and Safety regulations, which the Company’s facilities comply with in each region. The overarching safety management system framework in the country is aligned with the National Audit Tool (NAT), which is based on Australian Standard 4804 for Occupational Health and Safety Management.

In Mexico, the Company complies with the requirements of the Labor Secretariat and with Safety and Health instructions, which are compliant with OSHA standards.

In Canada, the JBS Health and Safety Management System is aligned with the Alberta Occupational Health and Safety (OH&S) law. In addition, the Company’s facility holds a Certificate of Recognition (COR), granted by the Alberta Food Processing Association (AFPA); this means that the JBS Canada Health and Safety Management System has been evaluated by a certified auditor and meets the provincial standards established by Alberta OH&S.

Corrective actions

The health and safety of JBS USA team members is of the upmost importance to the Company. While the Company focuses on actions aimed at education, training, process improvements and cultural accountability, accidents do occur, and they must be acknowledged, reported and serve as a source for learning. There is a formal Incident Investigation Procedure aimed at clarifying incidents and geared toward reducing, mitigating or eliminating injuries, illnesses and fatalities.

The investigation process assists operations in preventing similar incidents from occurring and in identifying injury and illness trends as well as potential points for improvement in safety management.

See more in Chapter 2/Health and Safety.
JBS USA is committed to helping society rise to the global challenge of meeting humanity’s growing nutritional needs in a sustainable and environmentally responsible manner, with efficient operations and less environmental impact. The Company’s vision is to be an industry leader in conserving and minimizing the use of natural resources, minimizing their use as well as waste generated.

To this end, JBS USA has set aggressive 2020 goals. Each facility has developed water, energy and greenhouse gas reduction goals, which have been aggregated to form corporate goals.

The management approach at JBS USA is focused on continuous improvement in operational efficiency, innovation and compliance with applicable environmental laws and regulations. The Company’s internally audited Environmental Management System (EMS) is based on the specifications of ISO 14001 and directs specialized environmental teams to: recognize the environmental aspects and impacts of their specific facility, establish objectives and targets to reduce potential impacts, assign roles and responsibilities, identify team members and positions whose responsibilities may impact the environment and provide them the appropriate operating procedures, and addition to implementing an efficient monitoring and measurement program for each environmental aspect.
Water

Water availability and quality are pillars in our sustainability program. We work to improve water-stewardship efforts by monitoring use at facilities, while always preserving high standards for food safety and sanitary conditions and continuing to advance water reclamation efforts. Some facilities are located in water-stressed areas and require a more strategic focus to ensure proper management of this resource.

At JBS USA operations, in addition to a corporate target to reduce water consumption intensity by 10% from 2015 to 2020, there are also individual targets by business unit and facility. Every facility has ownership to work toward its individual reduction goals by managing critical topics and is tasked with responding to unique local challenges and determining the most effective approach within its context, including withdrawal sources, discharge destinations, wastewater treatment programs and reuse and recycling strategies. JBS USA works closely and collaboratively with federal, state and local municipalities to address complex issues and jointly develop solutions.

Water risk assessment is an element in the management strategy and allows us to identify and prioritize specific water resource projects that are locally relevant to each watershed and reduce the Company's overall water impact.

The Company tracks both total water use and water intensity (water use per pound of finished product, including co-products) to consistently identify opportunities for improvements, irrespective of changes in production. The greatest opportunity for water reduction is through water recycling projects, in addition to increased operational efficiency. Our facilities focus on reuse initiatives, including elaborate recycle systems that allow previously used water to be reused in other areas of the facility, wastewater to be reused to flush animal pens to potable water to be used to recover wasted heat (from rendering cookers, for example) before being reused as heated water throughout the facility.

Effluents

The quality of water returned to nature is also a priority. That is why the Company continues to work to make sure that reclaimed water meets or exceeds all regulatory requirements.

Each production unit has a water reclamation treatment program specifically tailored to that facility’s effluent discharge permit requirements. These programs help to reduce total discharged water volume and address noncompliance issues. All feedlots and hog operations are managed in accordance with legally mandated nutrient-management plans or equivalents. Manure also generated plays an important role, since it is composted and used by local farmers to enhance soil quality in place of synthetic fertilizers.

In feedlots and hog operations, surface water and groundwater are protected by appropriately sized and sealed retention ponds that hold all storm water runoff. Collected water is then used for dust control or to irrigate surrounding farmland.

The Company strives to capture the greatest amount of reusable product from wastewater treatment to reduce nutrient loading in discharged water. In 2019, the Tolleson, Arizona facility reduced organic waste production by removing and capturing a greater amount of tallow during the water reclamation process. The project captures on average 12 pounds of tallow per head, saving the facility significant water treatment costs.

JBS facilities by water risk category

- Low risk
- Low to medium risk
- Medium to high risk
- High risk

Source: Aqueduct

*does not include data regarding Tulip's operations

JBS USA has a target to reduce water use intensity by 10% by 2020.
Emissions and energy GRI 305-4 GRI 305-5

JBS USA continuously invests in technologies that result in better recovery and monitoring of data from equipment with high energy consumption. In addition, the Company continues to invest in energy efficient technologies including LED lighting, real-time measurement devices and predictive maintenance, more efficient equipment, electrification of heating systems and transportation and more efficient refrigeration systems.

JBS USA issues annual public reports on greenhouse gas emissions as well as data on fuel use, fuel use intensity, electricity use and electricity use intensity.

Eleven of the Company’s facilities use biogas as a renewable energy source and two have implemented solar systems. The share of indirect energy from renewable sources used at facilities in U.S. varies between 5% and 25%, depending on where the facilities are located.

Waste and packaging

JBS USA’s commitment is to reuse or recycle the maximum amount of materials, with the goal of sending as little to landfills as possible. Each facility works to recycle material and reduce waste by optimizing facility logistics and team member training.

One waste management, recycling and cost reduction strategy has been to work with third-party companies in each facility. They are responsible for conducting a gap analysis, identifying opportunities for continued improvement and adopting best practices. Working with our local teams and third-party partners at the facility level has resulted in a greater capacity for JBS USA to tailor its waste and recycling approach.

One important attribute of our business is to make use of byproducts, such as blood, meat and bones, to serve as raw materials for new products. Nearly 100% of inedible byproducts are rendered to produce tallow and blood meal, which are sold to other companies to be used in consumer goods, such as cosmetics and pharmaceuticals or in livestock or poultry feed.

Unfortunately, packaging poses a unique challenge for the food industry, as appropriate recycling facilities are not available to all customers or end-users. In addition, packaging materials that come into contact with blood, meat or fat cannot be recycled. We are working across a number of industry collaborations to partner on ways to enhance recyclability of our packaging materials.

In Europe, Moy Park was the first poultry company to undertake a commitment to reduce packaging and food waste in its value chain. The initiative is part of an ambitious campaign to combat the use of plastics and packaging in its business and in the industry. The Company plans to lower its global use of packaging by 5% each year, while simultaneously raising the percentage of recyclable packages by 5%. This target is part of the “Remove, Reduce, Recycle and Research” strategy adopted by the Company.

Among actions planned, Moy Park will collaborate with researchers and supply chain partners to develop sustainable packaging for its entire product portfolio and will eliminate single use plastic from its office and restaurants by 2020. The business will begin using 100% recyclable rigid packaging by 2022. All other packaging will be widely recyclable by 2025.

JBS USA recycling data

- 80% of clean cardboard is sent to recycling centers or paper mills to be reused
- 95% of pallets are returned to suppliers for reuse
- 95% of all metal is sent to a salvage yard
- 95% of clean, non-contaminated plastic is collected in bins and then sent to either a recycling center or repurposed to make new products
- 95% of plastic high-density polyethylene (HDPE) bags are sold to the original manufacturer and then reused by JBS USA, creating a closed loop system
- In 2019, Pilgrim’s Moy Park kept its commitment of sending zero waste to landfills
Animal welfare

Ensuring the well-being of the livestock and poultry under our care is an uncompromising commitment at JBS USA. Animal welfare is embedded in the framework of our culture, and we continually strive to improve our welfare efforts through the use of new technologies and the implementation of standards that meet and exceed regulatory requirements and industry guidelines.

The Company’s animal welfare programs are often reviewed by animal handling and welfare experts at Universities across the globe. These lasting academic partnerships have assisted JBS USA in identifying and investing in upgrades to both its facilities and team member training programs.

Proper treatment of animals is addressed through Standard Operating Procedures (SOPs), in addition to verification and process improvements designed to promote animal welfare and product quality. Animals processed at JBS USA facilities are treated in accordance with national and local regulations, such as the U.S. Department of Agriculture (USDA) and Food Safety and Inspection Services (FSIS), Canadian Food Inspection Agency (CFIA) Meat Inspection, Buenas Prácticas Pecuarias en Producción de Pollo de Engorda de SADER y SENASICA, Council Regulation N°1099/2009, Australian Animal Welfare Standards and Guidelines and Australian Standard for the Hygienic Production and Transportation of Meat and Meat Products for Human Consumption.

To continually improve the care and well-being of our livestock and poultry, we have set aggressive 2020 animal welfare goals. The goals are based on our JBS USA Animal Health and Welfare Scorecard that is part of our Sustainable Management System. The scorecard uses a combined 19 indicators, selected for their importance to the health and welfare of animals. The indicators are weighted on a 100-point scale across eight main areas of importance, including compliance, annual audits (internal and third-party), losses, priority indicators, investment, transportation, management and health.

From procurement and transportation to operations and quality assurance, every JBS USA team member is accountable for treating our animals in a humane and ethical manner. We have a zero-tolerance policy for abuse of any kind, and all team members are required to report any violations directly to management, which they may do anonymously. Team members or family farm and ranch partners who violate our Animal Welfare Policy and associated procedures are subject to disciplinary action, up to and including termination of employment, termination of a supplier’s contract and/or reporting to the government authority responsible for overseeing animal welfare.

Management

JBS USA has created management structures that encourage accountability and promote proactivity on quality assurance and humane handling teams. Nearly every production unit has a full-time Quality Assurance Manager, Animal Welfare Manager or Animal Welfare Officer (AWO) who is responsible for overseeing the implementation of the animal welfare program, which includes facility assessments, training programs and ongoing monitoring. For beef and pork production facilities in the United States and Canada, this team member is a PAA- CO-trained humane handling specialist. In Australia, Quality Assurance managers are trained according to industry AWO skills and are Australia Livestock Processing Industry Animal Welfare Certification System (AAWCS)-approved.

In Europe at our Moy Park facilities, our AWOs at our poultry facilities are certified through Animal Welfare Training Ltd. In addition, all personnel handling chickens must have a certificate of competency (COC), which is an assessed qualification issued by the regional regulatory authorities. Food Standards Agency (FSA) in Great Britain or the Department of Agriculture, Environment and Rural Affairs (DAERA) in Northern Ireland. At our Tulip pork facilities our AWOs are accredited according to Bristol University or Livestockwise.

Each production facility has team members from processing, quality assurance, operations, procurement and human resources, who make sure that the policies and procedures required by the Animal Welfare Program are being followed, including annual training of all team members.

The goal at JBS USA is a score of 90% or better on their Animal Health and Welfare Scorecard.
Certificates and audits

All of our facilities are audited regularly to guarantee compliance with our animal welfare programs. Quality assurance personnel conduct daily audits to verify adherence to USDA, NAMI (North American Meat Institute) Animal Handling Guidelines, National Chicken Council (NCC) Guidelines, CFIA Meat Inspection Regulations, Buenas Prácticas Pecuarias en la Producción de Pollo En Engorda de SAGARPA y SENASICA, Council Regulation N°1099/2009 standards on animal welfare and Australian Meat Industry Council (AMIC) Industry Animal Welfare Standards for Livestock and Processing Establishments, depending on region and protein. Government inspectors also monitor animal welfare practices daily to guarantee compliance with regulations.

Every production facility also undergoes annual third-party animal handling audits. If a deficiency is identified, immediate corrective action is taken and internal follow-up audits are scheduled until the issue is resolved. We share corrective action strategies across the Company so that all facilities can benefit from new knowledge and perspectives to drive continuous improvement in our approach to animal welfare.

Livestock transporters are audited daily to verify adherence to JBS USA humane handling standards, NAMI Transportation Guidelines, CFIA Health of Animal Regulations Livestock Transport Requirements and Australian Standard for the Hygienic Production and Transportation of Meat and Meat Products for Human Consumption, depending on the region.

We also prioritize animal welfare standards within our supply chain. In the U.S., we require all of our partners who raise the cattle and hogs that we purchase to be Beef Quality Assurance (BQA) certified or Pork Quality Assurance Plus (PQA+) certified and site assessed and verify compliance by conducting third-party audits according to the BQA Feedyard Assessment and the Common Swine Industry Audit (CSIA). Our sow and finishing farms are regularly assessed by field managers, veterinarians and the Director of Animal Welfare. When necessary, corrective actions are outlined with caretakers and additional training is administered as needed. The Director of Animal Welfare and Animal Welfare Manager conduct second-party site assessments as part of the National Pork Board’s Pork Quality Assurance Plus (PQA+) program to verify that caretakers are providing care in accordance to industry standards. In addition to internal audits, JBS USA Live Pork participates in third-party animal welfare audits using the PAACO-certified CSIA tool.

In Australia, our feedlots are subject to annual third-party audits as part of the National Feedlot Accreditation Scheme (NFAS), which includes mandatory biannual internal animal welfare audits according to Australian Animal Welfare Standards and Guidelines for Cattle. At Pilgrim’s, farms are visited and assessed weekly according to our Animal Welfare Program by field technicians. In the U.S., a subset of farms are audited by a PACCO-certified auditor according to NCC guidelines. Our Mexico complexes are compliant with the Federally Inspected Type (TIP), a voluntary food-quality certification of the Mexican government. In Europe, poultry farms are Red Tractor approved and meet or exceed Red Tractor, Bord Bia or equivalent welfare standards. Annually, an external auditor audits each farm to Red Tractor standards, which results in Assured Chicken Production (ACP) Certification. Our Tulip higher welfare hogs are raised according to Royal Society for Prevention of Cruelty to Animals (RSPCA) higher welfare standards and all the hogs supplied to Tulip are either Red Tractor, Quality Meat Scotland (QMS) or Red Tractor/ QMS and RSPCA Farm Assured.

In addition, we have implemented a video auditing system in most of our sheep, lamb and pork production facilities. This allows us to conduct real-time internal auditing from a viewing room and provide team members with immediate feedback for improvement. Our video footage and process is audited remotely by an independent third party and alerts and daily summaries are provided to facilities for process improvement.
Humane handling

JBS USA animal welfare programs include specific requirements and procedures to protect the health and welfare of livestock and poultry during transportation, unloading, handling and processing, as well as the safety of team members.

During transport and handling, there are standard procedures for animal handling and delivery that include both daily operations and emergency situations. Mandatory reporting and regular auditing are used to make sure that these procedures are being followed. Any practice during transportation and handling that could cause harm to the animal is a major failure and corrective actions are implemented immediately. Team members who work with live animals are carefully trained on proper handling techniques.

Quality assurance personnel at each JBS USA production facility conduct daily audits to ensure adherence to industry standards and government regulations. Animal welfare performance is shared weekly with all facilities and senior management to guarantee constant and consistent oversight, sharing of best management practices and corrective actions, if necessary.

In addition to properly training team members, the design and maintenance of pens is critical to low-stress handling. Pens are designed to ensure smooth livestock flow along with team member training to identify and correct potential problems.

In the United States, beef and pork production facilities implement animal welfare programs that align with the NAMI guidelines and are compliant with USDA FSIS Directives 6.100.1, 6.900.2 and 9 CFR Part 313. Compliance with our programs is verified through daily and third-party audits. Our facilities are also voluntarily implemented the USDA’s recommended program for animal handling: “A Systematic Approach to Humane Handling and Slaughter.”

In Canada, the beef production unit implements animal welfare programs that align with NAMI guidelines and comply with Canadian Food Inspection Agency (CFIA) Meat Inspection Regulations.

In Australia, the production facilities implement animal welfare programs that comply with the AMIC Industry Animal Welfare Standard – Livestock Processing Establishments and The Australian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption AS4696.

Regarding Pilgrim’s chickens, the U.S. animal welfare programs exceed or meet PACCO-certified NCC Guidelines for our breeders, hatcheries, broilers and at slaughter. Our Mexico complexes are compliant with the Federally Inspected Type (TIF), a voluntary food-quality certification of the Mexican government. Our facilities in Europe are compliant with Council Regulation N°1099/2009 standards on animal welfare. In two poultry production facilities in the U.S. and all production facilities in Europe, controlled atmospheric stunning methods are used, and the chickens are not handled before being stunned.

Pilgrim’s Tulip higher welfare supply chain raises hogs according to the RSPCA higher welfare standards as a minimum and has been awarded the highest ranking, Tier 1, by the global ‘Business Benchmark on Farm Animal Welfare’ (BBFAW) for its animal welfare performance, through an independently commissioned private review. Tulip approved processing facilities also process lambs. Handling of hogs and lambs is done using low-stress techniques and facilities are maintained to ensure appropriate animal flow. Controlled atmospheric stunning is utilized for all hogs. Animal welfare practices at production facilities are in compliance with Council Regulation N°1099/2009 standards which are monitored daily by Food Standards Agency [FSA] inspectors.
Housing

JBS USA is committed to providing the animals under its care with comfortable and safe housing that meets their needs. Housing is key to protecting and improving the health and well-being of our animals.

The Company’s facilities meet or exceed industry guidelines to make sure that the animals are comfortable and safeguarded from extreme weather events, predators and vermin. In beef and pork production facilities, pen stocking rates are set according to NAMI Animal Handling Guidelines, CFIA Meat Inspection Regulations and AMIC Industry Animal Welfare Standards, and livestock have access to clean water at all times.

Cattle in JBS Australia feedlots are housed in groups in open-pen, dirt lots. Pen stocking rates meet or exceed industry standards and are based on the animal’s expected final weight. The pens are sloped for proper drainage during winter months and wet periods to provide cattle a dry place to lie down and reduce mud in the pens. For feedlots that are located in regions with extreme weather, shade is provided to prevent heat stress, and bedding is supplied to provide a dry and warm place to lie down in winter months. Most of our feedlots are also equipped with a sprinkler system to reduce dust.

The hogs raised in the U.S. are housed indoors and health and welfare are prioritized. Sows are provided with unlimited access to clean water and are fed a nutritionally balanced diet based on life stage and individual body condition. Weaned and growing hogs in the nursery and finishing stages of production are provided with unlimited access to clean water and feed. Specific SOPs for maintaining animal comfort and housing are further defined in the Live Pork Production Manuals. Climate-controlled ventilation systems are expected to be maintained to promote animal comfort, control humidity, deliver quality air and maintain desirable temperature according to hog size and life stage. One hundred percent of U.S. owned sows are housed in open pen systems.

Pilgrim’s contracts with more than 4,900 family farm partners who raise breeder hens and broiler chickens. From the farmers’ barns to the Pilgrim’s production facilities, we require our team members and family farm partners to provide proper care to our chickens. Our family farm partners who raise our breeder hens which produce hatching eggs use fresh shavings as bedding material in hen houses. These shavings are clean, absorbent, free of sharp objects and resistant to fungal growth.

Across all of our farms, our service technicians visit our breeders weekly to monitor chicken health. At our hatcheries, the temperature in the chick-holding room is targeted for chick comfort based on the chicks’ internal temperature. We monitor and document temperatures on an hourly basis, making any needed changes as soon as possible. We make sure our chicks have enough space and are not under direct air flow to prevent overheating. Before placing any chicks at a farmer’s broiler farm, we go through our Pre-Placement Checklist to make sure the farm and houses are neat and orderly, ventilation is ideal for brooding, ammonia levels are appropriate and lighting and bedding are in line with program requirements. In addition, in Europe, we are pioneering industry-leading initiatives to continually improve the housing of our poultry by providing environmental enrichment, windows and provision activities, such as perches and bales.

Pilgrim’s Tulip higher welfare supply chain contracts with farmers who raise all sows according to the RSPCA higher welfare outdoor bred standards as a minimum. Sows are free from confinement during gestation and farrowing.

Hogs are born outdoors and are provided with shelter, where they remain until they are weaned at approximately 28 days of age. All of hogs in higher welfare supply chain have permanent access to environmental enrichment. Tulip also sources hogs from independent farm partners. Those partners meet, and often exceed, the requirements of the Red Tractor or QMS assurance schemes and must provide hogs with permanent access to environmental enrichment. Tulip also requires that sows are housed in open pen systems during gestation.
Animal health

At JBS USA, all antibiotics are used under the supervision of licensed and accredited doctors of veterinary medicine and only for the purposes of preventing, controlling, or treating disease, rather than growth promotion or feed efficiency. The Company’s antibiotic policies also require written veterinary permission before the use of any antibiotics, enhanced record-keeping and tracking of all antibiotic use and training programs for JBS USA team members to guarantee compliance with our comprehensive health and disease-prevention programs, including animal husbandry, hygiene, monitoring, and vaccination.

Pilgrim’s does not administer antibiotics for routine medical treatment and is focused on producing healthy chickens through good hygiene and husbandry practices. Any use of antibiotics is strictly governed by national regulations and requires authorization by the overseeing doctor of veterinary medicine or veterinary surgeon who care for the poultry. Any medication used is licensed by the FDA or U.K. Veterinary Medicines Directorate and undergoes intense scrutiny before being approved for use.

In the U.S., Pilgrim’s has been antibiotic free in all Company hatcheries since 2016 and is fully compliant with the FDA Guidance 209 and 213 VFD rule. Any antibiotic use is under the strict guidance of the Company’s licensed, USDA accredited and board certified veterinarians and is strictly for disease prevention, control or treatment. The Pilgrim’s antibiotic policy is reviewed annually.

In Europe, records of medications used on farms are inspected by the auditors of the Red Tractor Scheme and by the local authority Animal Health inspectors as legally required. In addition, Pilgrim’s Moy Park has an Antimicrobial Stewardship Forum focused on the education of poultry producers in antimicrobial resistance and best practices to reduce antimicrobial usage and collects comprehensive data to give the poultry industry and regulators a clear picture of poultry-usage trends. Pilgrim’s Moy Park established a Food Safety Forum and Antibiotics Stewardship Forum, to ensure that our chickens are healthy and our products are safe. These forums include external experts who assist us with the latest scientific developments.

Pilgrim’s Tulip has introduced an industry leading initiative in our own higher welfare farming supply chains to reduce the need for antibiotic use by improving hog management and health. We have voluntarily implemented stringent controls on the use of Critically Important Antibiotics (CIA’s). Since implementing our antibiotic stewardship strategy in 2013, we have reduced use by more than 70 percent. Antibiotic usage within our own higher welfare supply chain has been consistently below the U.K. swine sector target for 2020. Tulip’s independent supply partners, as part of the U.K. swine industry, have achieved the Responsible Use of Medicines in Agriculture Alliance (RUMA) target for the responsible use of antibiotics since its start in 2017.

As part of our long-standing commitment to safeguard the welfare of our livestock and poultry, we treat all sick animals with antibiotics if necessary and then remove them from our antibiotic-free/NAE, natural and organic programs. We do not allow sick animals to suffer.

The commitment by JBS USA to reducing antibiotic use in raising animals is limited by the fact that it is still not possible to fully replace these medications to treat and prevent diseases. JBS USA veterinary and nutrition teams continue to work closely with companies that produce alternative compounds, as well as with universities and private researchers, ensuring that the Company is on the leading edge of innovation in this area.

Veterinarians work to mitigate or eliminate pain for the animals. In the U.S., the procedures performed on our hogs prevent injuries later in life and improve meat quality and include tail docking and castration and are consistent with our animal welfare program. At JBS Australia feedlots, we work diligently to purchase cattle that have been pre-conditioned, which means that cattle have been previously castrated and disbudded (if necessary) at a young age, vaccinated and weaned before arriving at our feedlots.

At Tulip, routine tail docking is not performed and is only permitted with veterinary approval and castration is not permitted. Tulip continues to lead the industry in research to advance animal welfare, for example, our current research includes a project examining hog behavior and its impact upon tail biting. The objective is to understand more about causal factors associated with tail biting and how tail docking can be reduced.
Transportation

As a component of the animal welfare programs at each production facility, livestock transporters are audited daily to verify adherence to JBS USA humane handling standards, and, depending on the country, the NAMI Transportation Guidelines, CFIA Humane Transport Guidelines, Australian Welfare Standards and Guidelines – Land Transport of Livestock and RSPCA, Red Tractor or QMS.

U.S. beef and pork production facilities also require all transporters to present documentation that demonstrates their understanding of and adherence to the JBS USA guidelines and in the U.S. certification with Beef Quality Assurance Transportation (BQAT) the Canadian Livestock Transport (CLT) and the National Pork Board’s Transport Quality Assurance (TQA) programs. Improper handling of livestock results in immediate corrective actions and can result in the transporter being permanently banned from delivering livestock to JBS USA facilities in the future.

In Europe, our pork and approved lamb production facilities require that livestock are moved in their social groups, and hog trailers are equipped with lifting decks to make loading as stress-free as possible. Trailers are bedded with straw and in the summer months extra drinking water is provided. We monitor transport time, current average journey times are four hours and our position is that no animal should be in transit to a Tulip production facility for longer than eight hours.

JBS USA Carriers business is responsible for providing safe transportation to more than 1.5 million cattle each year. Delivering cattle in a manner that promotes humane handling during loading at the feedyard, a safe journey for both drivers and animals and minimal stress on cattle during unloading at our facilities is our priority. JBS USA Carriers takes pride in the safe and efficient transport of animals to production facilities across the country, and our drivers bring a passion for the industry to work with them every day.

JBS USA Carriers, in conjunction with Five Rivers Cattle Feeding (JBS USA’s largest producer partner) and both of their animal welfare teams, provides drivers with animal-handling and safety training. The training materials are based on the BQAT program, which is widely recognized as the industry standard for truck driver training.

During transport at Pilgrim’s, we work to protect our chickens from temperature extremes and provide them with adequate ventilation. During cold weather, we add side and front panels to the transport cages to keep chickens warm. During the summer months, we reduce the number of chickens per cage, keep them shaded and provide fans and misters to keep them cool and minimize heat stress. We strive to minimize the amount of time chickens spend in cages, consistent with regionally appropriate animal welfare practices. We also monitor handling and transport animal welfare metrics of our chickens.
Performance and perspectives

Financial result

Future outlook

Business unit results

Achievements
Financial result

NET REVENUE

Net revenue at JBS was R$ 204.5 billion, equivalent to US$ 51.7 billion, a record high. This amount is 12.6% higher than in 2018, which was formerly the year with the highest net revenue.

R$204.5Bi
Up 12.6% year-over-year

GROSS PROFIT

Gross profit reached R$ 31.9 billion, growing by 21.3% compared to 2018. Gross margin rose from 14.5%, in 2018, to 15.6%.

R$31.9Bi

NET INCOME

In 2019, net income grew by 241 times over 2018, reaching R$ 6.1 billion. Earnings per share for the year was at R$ 2.28.

In 2019, JBS ended 2019 with revenues of R$ 204.5 billion, the highest figure on record for the Company. This performance shows the importance of engaging the entire Company and of management focusing on operational excellence, innovation and sustainability.

R$6.1Bi
Up 241% compared to 2018

ADJUSTED EBITDA

Adjusted EBITDA also hit a record high. R$ 19.9 billion. EBITDA margin rose from 8.2% in 2018 to 9.7%.

R$19.9Bi

OPERATIONAL CASH FLOW

In 2019, JBS operational activities generated R$ 17.1 billion in cash, 49.1% higher year-over-year.

R$17.1Bi
Up 49.1%, year-over-year

FREE CASH FLOW

Free cash flow was R$ 9.5 billion, 109.1% more than in 2018.

R$9.5Bi
Growth of 109.1% compared to 2018

NET DEBT AND LEVERAGE

Net debt in Brazilian reais fell by R$ 47.2 billion to R$ 43.0 billion in 2019, lowering leverage from 3.18x to 2.16x during the period. In US dollars, net debt dropped from US$ 12.2 billion to US$ 10.7 billion - leverage went from 3.01x to 2.13x.

Leverage in US$ at the end of 4Q19 was 2.13x

Leverage in R$ at the end of 4Q19 was 2.16x

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Business unit results

**Seara**

In 2019, Seara had net revenues of R$ 20.4 billion, rising 15.2% compared to 2018. The Company’s EBITDA during the year was R$ 2.5 billion, with a margin of 11.1%.

There is a growing preference for Seara among Brazilian consumers (99% Brand Knowledge), based on the quality of its products and its innovation. Throughout 2019, over 180 products were launched, notably in the Seara Nature (products made with natural ingredients and no artificial preservatives), Seara Rotisserie (offering convenience and products with clean label ingredients), and Incredible Seara (providing a range of 100% plant-based products), not to mention expansion of the Seara Gourmet range, with products focused on indulgent moments.

**JBS USA Beef**

JBS USA Beef had net revenue of R$ 87.2 billion in 2019, which is 10.9% more than in 2018, and EBITDA of R$ 8.0 billion, 27% higher year-over-year, with a margin of 9.2%. These results include the impact of depreciation in the average exchange rate (BRL vs USD) of 7.4%, which went from R$ 3.65 in 2018 to R$ 3.95 in 2019.

The industry fundamentals in North America remain solid, supported by an ample supply of cattle in the US market as well as by favorable economic conditions, which have sustained demand for beef in the domestic and export markets. In addition, one highlight at JBS USA Beef was enhancement of the product mix, as a result of innovation in value added programs, such as Aspen Ridge Natural Beef, Grass Run Farms, Imperial Wagyu and Adaptable brand products.

In line with a strategy to expand value-added product offerings, JBS USA recently announced the acquisition of the Empire Packing Company, with case-ready production units in the United States, and the Ledbetter brand. Within the diversification strategy and to meet new consumer trends, the Company recently launched the OZO brand of plant-based protein products, adding to its portfolio of innovative and high-quality products.

In Australia, the highlight was performance of beef and lamb exports directly to China, which were 80% higher in 2019. Primo Foods, a leader in the prepared foods market in Australia and New Zealand, continued to drive consumer behavior through innovations during the year, such as, the “Stackers” line of appetizers and the “Balanced Blend” line of sausages, with a mix of animal and plant-based proteins.

1 Considering the results in IFRS and Brazilian reais.

**JBS Brasil**

In 2019, JBS Brasil had revenues of R$ 32.0 billion, up by 15.9% year-over-year. EBITDA was at R$ 1.7 billion, representing a 39.1% increase over 2018.

JBS has invested in expanding partnerships with key customers through initiatives such as Top Grade Butcher and 1953 Friboi Gourmet Butchers, as well as with its mix of higher added-value products, such as the launch of the 1953 Friboi Hamburger and Steak Maturatta products and the Friboi Beef Skewers range, aimed at offering more convenience to consumers, delivering quality products in a ready-to-make format.

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1 Considering the results in IFRS and Brazilian reais.

Headquarters in São Paulo (SP)
JBS USA Pork had net revenue of R$ 23.5 billion in 2019, 13% higher than in 2018, and EBITDA of R$ 2.6 billion, with a margin of 11.1% compared to 9.6% in 2018, considering the impact of a 7.4% depreciation in the average exchange rate (BRL vs USD), which went from R$ 3.65 in 2018 to R$ 3.95 in 2019.

In 2019, pork export volume in the United States grew by 10% in relation to 2018, highlighting the demand from China, which saw a substantial rise in the second half of the year. Larger export volumes, along with favorable economic conditions in the domestic market, sustained growth in demand for pork products.

JBS USA Pork remains focused on operational performance, with cost controls at production units and an outstanding capacity to convert primary products into products with greater added-value, contributing to better margins. Added to this context is the expansion of the case-ready business in the United States, with the acquisition of the Empire Packing Company.

Plumrose has continued to increase its presence in the prepared foods segment, by scaling up and developing innovative and branded products. In 2019, net revenue for the business was up by 10%. In line with a strategic plan to increase production capacity, especially in bacon, Plumrose opened a new production line in Ottumwa - Iowa in April 2020. The business unit will also begin construction on a new production plant for ready-to-eat products in 2020, in the state of Missouri, in the United States.

Pilgrim’s Pride saw net revenue of R$ 45.0 billion in 2019, up 12.9% compared to 2018, while EBITDA was at R$ 5.3 billion, with a margin of 11.8%. This result includes the impact of depreciation in the average exchange rate (BRL vs USD) of 7.4%, which went from R$ 3.65 in 2018 to R$ 3.95 in 2019.

In the United States, operational performance continued to move upward, driven by partnerships with key customers and by a focus on operational excellence. Strong market demand in the case-ready and small birds businesses continued to outpace supply. The commodities sector continues to pose challenges, despite improvement in market conditions compared to 2018. The prepared products operation in the USA continued to grow, as a result of investments made in recent years.

In Europe, results continue to be driven by greater operational efficiency, investments in automation, higher yields and mitigation of the costs of inputs. Integration of recently acquired operations in Europe is still moving forward and has already generated a positive EBITDA. Better results were driven by strong pork exports and good domestic demand, in addition to implementing operational improvements and capturing synergies.

In Mexico, more challenging conditions in the macroeconomic scenario over the last quarter of the year impacted consumer spending, affecting demand in traditional markets. Despite the market environment, operations saw good operating performance in relation to the sector and were able to generate an even better year-over-year result.

2 Considering the results in IFRS and Brazilian reais.
3 Considering the results in IFRS and Brazilian reais.
Achievements

In 2019, JBS was recognized in a variety of areas, as a result of its commitment to the continued improvement and sustainability of its operations. The awards also show the continual dialog the Company holds with its stakeholders to contribute to their constant evolution.

Awards and recognition

Embana Awards 2019: Seara won five prizes at the biggest packaging industry awards in Brazil, with its exclusive technologies: “Power Vac” in the Seara Rotisserie range and the “Heats Evenly” tray in the Lasagnas range.

Who’s! Innovation Award: Seara was named the most innovative company in the ‘Foods’ category at the second edition of the award, which is organized by Grupo Padrão and the Padrão Intelligence Center.

Revista Época Reclame Aqui Award: Seara was a finalist in the award given for excellence in consumer services, placing 3rd in the ‘Perishable Food - frozen and dairy products category’. Friboi was also highlighted during the award and was nominated for a second year.

Datafolha: Friboi has now been named the best beef four times straight, garnering 34% of survey respondents.

APAS Acontece Award: Friboi was chosen as the best supplier in the meats segment for the third year running.

Tito Muffato Award: Friboi won in the ‘Butcher’ category.

“The best-selling beef in Brazil” seal: Friboi was given this title by the Nielsen consulting firm.

Nelore Circuit 2019: Friboi was recognized in two categories of the award, which is given out by the Brazilian Nelore Breeders Association (ACNB).

Top Supplier 2019: Friboi came in first place in the packaged beef cuts category, in the award given out by SA Varejo Magazine.

Prezunic: Named by the supermarket chain as the best supplier in the beef segment.


Certifications

Various JBS production units hold additional certifications, which guarantees better quality processes and products, while also opening up access to new markets.

Animal welfare:
- National Feedlot Accreditation Scheme (NFAS) – certification granted by a committee whose members include representatives of the Australian industry, certifying that product documentation and auditing practices comply with the standards established by the association.
- Animal Welfare Certification System (AAWCS) – an independently audited certification that shows compliance with preexisting standards in best animal welfare practices for the cattle processing industry.
- ACP (Assured Chicken Production) – certified by Red Tractor, the UK’s largest platform for assessing good practices in farms and food companies.
- Free-range Chicken – assessment done of the production chain (farm, hatchery, feed plant and meatpacking plant) by a certification agency in relation to ISO 16589:2015.
- Global GAP – an audit focused on the agribusiness chain (parent stock / hatcheries / broiler chicken farms).
- Halal – certification of the food production chain (processing of poultry and processed foods), which certifies if the production process complies with religious precepts, as well as current laws.
- Federally Inspected Type (TIF) – certification that sets the standards for best poultry production practices in Mexico.
- Organic Chicken – assessment through which a certifying organization assures that the product and process comply with organic production and animal welfare practices and standards.
- Global Food Safety Initiative (GFSI) – certifies that the company meets the food safety standards established by the organization, which joins the biggest global actors related to this area.
- Red Tractor – the biggest initiative standardizing food norms in the United Kingdom.

Food safety:

BRC (British Retail Consortium) – ensures supplier compliance and assures the capacity to guarantee the quality and safety of the food products.
- Organic Chicken – assessment through which a certifying organization assures that the product and process comply with organic production and animal welfare practices and standards.
- Global Food Safety Initiative (GFSI) – certifies that the company meets the food safety standards established by the organization, which joins the biggest global actors related to this area.
- Red Tractor – the biggest initiative standardizing food norms in the United Kingdom.

Social responsibility:
- Empresa Cidadã – a certificate granted by the Santa Catarina State Childhood and Youth Coordination based on execution of community programs.
- Smeta – Sedex Members Ethical Trade Audit (SMETA) – certifies that companies are using best practices in ethical auditing techniques.
- RA1000 (Reclame Aqui) – seal granted to companies with excellent rates of service.

Environmental:

- Leather Working Group (LWC) – certifies companies with good environmental practices at tanneries around the world.
- NBR 16296 – national standard of Brazilian Leather Certification of Sustainability (CSCB).

ISOs:
- ISO 14001 – environmental quality management standards.
- IATF 16949:2016 – standards related to automotive industry requirements.
- ISO 50001 – it certifies that the company adopts the best energy efficiency practices.
- ISO 17025 – requirements for standardization of testing and calibration laboratories.
Future outlook

At the heart of the Company’s purpose and business strategy is the fact that humanity faces the challenge of guaranteeing quality food for the over 7.7 billion people living on the planet – which should reach 10 billion in 2050, according to projections from the United Nations⁴. Reinforcing this scenario, animal protein consumption is expected to increase by 70%, along with a rise in global population⁵, wealth and urbanization, as well as changes in dietary trends to protein foods, which were previously absent from most people’s diets.

Even in this scenario of radical changes caused by the COVID-19 pandemic, this challenge remains. Because of this, in addition to the measures we take to protect jobs and the health of team members and communities, we continue to build a global model, supported by a fast relationship with the value chain and by the diversity of our geography and portfolio, focusing on value-added products. This global model makes it possible to capture important synergies and improve operating performance. While portfolio diversification allows for growth and improved margins, in addition to benefits from integrating the various chains that make up the Company’s product mix. The Company’s growth strategy moreover includes seeking out value-added services and products, based on financial discipline and the sustainability of operations.

To maintain a continual trajectory of growth, without putting the differentials at risk that made the Company a market leader, JBS invests in strengthening its values and beliefs as well as its people, who are the main vehicles of this vision of business and who work knowing what it means to be a group and having a common purpose.

Investments in training, safety and close communication are some of the strategies to strengthen and share the JBS Culture. The same logic extends to producers and suppliers, who are more than just a part of the value chain, they are fundamental to implementing the Company’s business model and to guaranteeing the sustainability of its operations.

When it comes to the environment, the Company works to reduce its footprint, especially in relation to water use, carbon emissions and generation of waste. After all, the very existence of the Company and its businesses are intimately connected to nature and to the ecosystem services nature provides.

The main path to attaining this goal is through a process of ongoing improvement, where priorities are the aspects the Company is able to control and enhance in its operations. In the value chain, JBS holds a leading position where it can contribute to improvements across the industry through innovations and projects that shift the current model.

To deal with this movement of expansion, JBS invests in agile and qualified governance, simplifying decision-making while at the same time growing stronger in principles such as compliance, innovation and product quality.

All of this shows that JBS and its over 240,000 team members are taking the mission of feeding the world very seriously and will continue to work and invest to achieve this goal.

⁵ SOURCE: World Resources Institute
For the Materiality Disclosures Service, GRI Services reviewed that the GRI content index is clearly presented and the references for Disclosures 102-40 to 102-49 align with appropriate sections in the body of the report.
### GRI STANDARDS | ITEM REPORTED | PAGE/RESPONSE | RELATED SDG
---|---|---|---
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| 302-3 Energy intensity | 176 | 7, 8, 12, 13
| 302-4 Reduction of energy consumption | 176 | 7, 8, 12, 13

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| 103-3 Evaluation of the management approach | 77

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| 305-2 Energy indirect (Scope 2) GHG emissions | 102 | 3, 12, 13, 15
| 305-3 Other indirect (Scope 3) GHG emissions | 102 | 3, 12, 13, 15
| 305-4 GHG emissions intensity | 175, 260 | 13, 15
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Credits

Coordination
JBS Sustainability, Investor Relations and Corporate Communication areas

Text and consultancy
Approach Comunicação

Design
Approach Comunicação

Photos
JBS Brasil and JBS USA image bank