



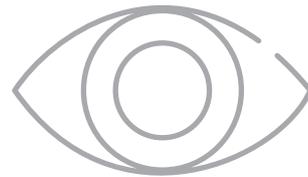
Annual and Sustainability
Report 2017



Summary

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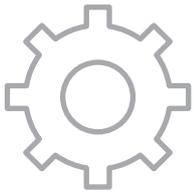
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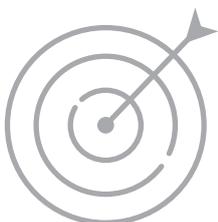
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GRI Content
Summary





Messages from Management

GRI 102-14

Focus on work, commitment to people and progress in transparency

When we started this business over six decades ago, we always believed that focusing on our work and making a commitment to our people were the basics we needed to focus on to build a successful Company. We also believed these were the main tools we would use to address any challenge. The events of 2017 bore this out.

Last year drove us to be even better. The values we share with our colleagues and the trust of our business partners were critical factors in achieving one of the Company's best ever operational results.

The values we share with our colleagues and the trust of our business partners were critical factors in achieving one of the Company's best ever operational results.

In 2017, we achieved consolidated sales of R\$ 163.2 billion, with 27% of global sales, or US\$ 13.8 billion, generated from exports particularly to Greater China, Africa and the Middle East. EBITDA was R\$ 13.4 billion, up 18.9% versus the preceding year, with an EBITDA margin of 8.2%. Annual net profit showed a marked increase, reaching R\$ 534.2 million, a 128.7% improvement compared to 2016 and equivalent to R\$ 0.19 per share.

In addition to these robust results, we also increased our commitment to transparency, creating a global Compliance Department that operates independently and reports directly to the Board of Directors.



R\$ 163.2 billion

In consolidated sales

This year the area has made headway in several areas by improving our control mechanisms and activities. New policies and procedures were introduced in line with best global practices. Our many initiatives include Compliance training courses for all leadership positions in Brazil and the decision to outsource our whistleblower hotline, which is now called the JBS Ethics Line.

The sustainability of our operations was confirmed by our financial results as well as our environmental conservation projects and policies. One example was our performance in the assessment by the CDP, a global organization that provides sustainability process analyses. We are also one of the leading proponents of programs to reduce deforestation and manage water resources.

It has taken a lot of hard work to build this Company. Our progress is based on the efforts of the more than 230 thousand team members who share our values and the strength of our culture and the steadfast focus on our mission: to be the best in all that we do.

So we arrive in 2018, a symbolic year for the Company, with pride in our achievements and plenty of energy as we look ahead. We celebrate our 65th anniversary with even greater belief in our future, supported by a capable team as we prepare to write another chapter in our history. To all of you who have supported us along this journey and those who have been a part of it, my heartfelt thanks.



**José Batista
Sobrinho
President
of JBS**

People and Culture

From the very beginning, JBS has always worked hard to be the best at whatever it sets its mind to. It is part of the Company's DNA that good is just not good enough. We constantly try to surpass our customers, investors and business partners' expectations, wherever we are.

The constant pursuit of excellence encompasses the Company's focus on creating innovative products, processes and relationships. This includes the decision to create the Global Quality and Food Safety Department, which will raise food safety and product quality standards and reinforce JBS's position as a global leader in these areas.

It is part of the Company's DNA that good is just not enough and we constantly try to surpass our customers, investors and business partners' expectations, wherever we are.

We have focused on understanding consumer trends and demands. For example, we are the world's largest producer of natural, organic chicken. In Brazil, satellite monitoring of cattle supplier properties ensures our raw materials are properly sourced. These sustainable practices, which are constantly evolving, are also a common thread across all our businesses and increasingly a part of our strategies.

2017 was an atypical year. In Brazil, we faced market perceptions that the Company was losing liquidity towards the end of the first half of the year. We also felt a number of temporary impacts alongside the economic crisis in Brazil. We quickly resumed normal production volumes in Brazil and our business proved resilient given strong performance in our global operations. The



**More than
230
thousand**
team members

factors that affected our Brazilian operations were offset by positive performance from our operations in other countries, especially in North America, which host the majority of our operations and generates the vast majority of our revenues. In Brazil, we also reached a stabilization agreement with local financial institutions.

We drew up a strategy that was easy to understand and execute, based on four pillars: people, cash generation, reduced leverage and readying the Company for a new era of prosperity. JBS's character, resilience and success this year was driven by our personnel and the Company's relationships with its customers, suppliers and other partners.

Leadership in several of our markets, our scale, our geographic and portfolio diversity, our product quality, partners and brands, our

streamlined, highly focused and independent management structure and especially the attitude of our team of more than 230,000 team members fully engaged with our culture, have been the biggest differentials in helping deliver great results this year, while filling us with hope of a better future ahead for everyone involved.



**Gilberto
Tomazoni**
Global COO



This Year's Highlights



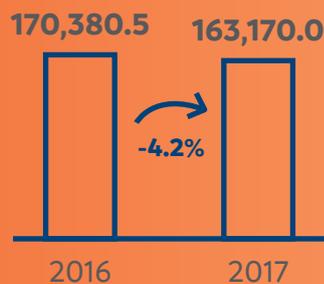
JBS 2017 Highlights

Net Revenue

R\$ 163.2 billion*

Down 4.2% vs. 2016

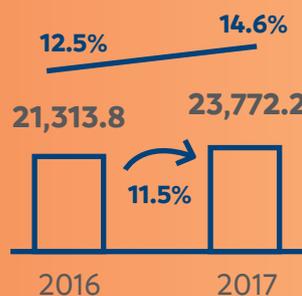
*equivalent to US\$ 51.5 billion



Gross Profit

R\$ 23.8 billion*

An 11.5% increase and gross margin growth from 12.5% in 2016 to 14.6% in 2017.



Adjusted EBITDA

R\$ 13.4 billion*

EBITDA rose from 6.6% in 2016 to 8.2% in 2017.



Net Profit

R\$ 2.1 billion*

Reported net profit was R\$ 534.2 million, up 128.7% vs. 2016, with EPS of R\$ 0.19.

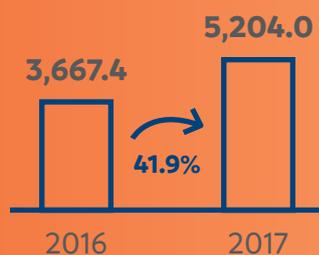
*Excluding the effect of signing up to PERT (for further details, see here: <http://jbss.infoinvest.com.br/enu/4389/JBS%20-%20Material%20Fact%20-%20PERT.pdf>)



Operational Cash Flow

R\$ 5.2 billion*

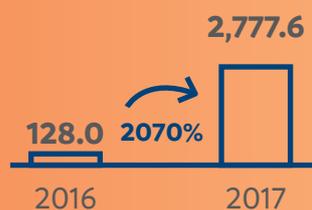
Up 41.9% compared with 2016



Free Cash Flow

R\$ 2.8 billion*

Up 2070% compared with 2016



* In millions of R\$.

* In millions of R\$.

Main Indicators

	2017	2016	2015	2014	2013
Economic/financial Indicators – R\$ millions					
Net Operating Revenue	163,170.00	170,380.53	162,914.53	120,469.70	92,902.80
Cost of Products Sold	139,397.70	-149,066.70	-140,324.20	-101,796.30	-81,056.10
Gross Profit	23,772.20	21,313.83	22,590.30	18,673.40	11,846.70
Gross Margin %	14.60%	12.50%	13.90%	15.50%	12.80%
EBITDA	13,415.90	11,286.90	13,300.40	11,090.00	6,130.30
EBITDA Margin (%)	8.20%	6.60%	8.20%	9.20%	6.60%
Net Profit	534.20	233.60	4,640.10	2,035.90	926.9
Net Margin (%)	0.30%	0.10%	2.80%	1.70%	1.00%
Investments	2,426.42	3,539.40	21,603.87	4,276.85	1,905.91
Net Debt	45,283.30	46,904.80	47,038.70	25,168.70	23,748.20
Operational Cash Flow	5,204.00	3,667.40	21,206.40	8,987.00	2,541.05
Free Cash Flow	2,777.60	128.00	-397.47	4,710.16	635.13
Social and Environmental Indicators					
Number of Team Members	233,797	237,061	227,168	208,503	191,426
Total GHG emissions, by weight (tCO ₂ e) - scope 1	6,051,350.26	6,553,358.36 ³	4,445,098.00	4,411,977.13	3,877,792.00
Total GHG emissions, by weight (tCO ₂ e) - scope 2	1,780,144.14	1,814,793.76 ³	1,779,980.77	1,457,679.79	2,423,078.00
Volume of Water Consumed (thousand m ³)	180,438.23	190,961.16 ³	165,606.00 ³	66,709.00 ²	67,813.00 ²
Investments in Environmental Management and Improvements (R\$ million)	806.50	855.20	716.60	N/D ¹	N/D ¹

1 No data available.

2 Data referring only to JBS operations in Brazil.

3 Revised numbers.



About this Report

The JBS S.A. Annual and Sustainability Report presents the Company's 2017 business results (from January 1 to December 31). In this document, the Company will highlight the initiatives that influenced its economic, social and environmental performance throughout the year. The document also includes information on our corporate structure, global business strategy, the markets where we operate and our management and governance practices, among other topics. The global scope of the report – first adopted in 2015 – reflects the Company's position as one of the world's largest food companies.

GRI 102-45, 102-48, 102-50, 102-52

This is the eighth consecutive year that JBS S.A. has voluntarily reported this information in its annual report, in accordance with guidelines from the Global Reporting Initiative (GRI). In this edition, the Company has adopted the new GRI Standards methodology. As a result, this report was prepared in accordance with the GRI Standards: Essential Option. Our financial statement audits adhere to International Financial Reporting

Standards (IFRS) issued by the International Accounting Standards Board (IASB) and audits are performed by BDO RCS Independent Auditors.

GRI 102-48, 102-49, 102-51, 102-52, 102-54

GRI performance (environmental, social and economic) indicators reported in this document refer to the results achieved on each of the JBS business platforms, divided into JBS South America and JBS North America.

GRI 102-49, 102-48

JBS is always looking to improve its annual report. Hence, several channels are available for any comments, suggestions, questions or criticism related to this document, including relatorio.anual@jbs.com.br. The Investor Relations area (www.jbs.com.br/ri) is also available by phone + 55 (11) 3144-4224 and e-mail ri@jbs.com.br.

GRI 102-53

1 JBS South America (Seara and JBS Carnes, which includes JBS Couros and JBS New Business) and JBS USA (JBS USA Beef, which includes the operations of JBS Australia, JBS USA Pork and Pilgrim's Pride Corporation, which extends to Pilgrim's Moy Park)

This is the eighth consecutive year that JBS S.A. has voluntarily reported this information in its annual report, in accordance with guidelines from the Global Reporting Initiative (GRI).



Materiality Matrix

GRI 102-46

In order to report information using the GRI Standards, JBS S.A. has selected five issues that are of significant importance for both global sustainability of its businesses and for its principal stakeholders (GRI 102-47):

- Team Members Health and Safety
- Product Integrity
- Animal Welfare
- Water Management
- Climate Change

These global issues reflect the materiality matrix underlying each Company business in each of the countries where it operates. As such, the matrix includes the methodologies used by JBS South America and JBS North America, based on one-on-one interviews with top Company executives and hundred of external stakeholders to identify what factors lie behind the success of the business. Based on this information, representatives were selected from our network (suppliers, internal and external customers, government and civil society) whose requirements and opinions were surveyed in person or by telephone. These groups were selected

based on their highly demanding approach to sustainability and their level of engagement in each particular category. GRI 102-40, 102-42, 102-43 102-44, 103-1

The materiality matrices' from each business were discussed by the respective sustainability departments, which came to a consensus that the five issues listed above are the most important the Company currently faces. GRI 103-1

Indicadores GRI

Based on the selected issues, JBS has defined the GRI reporting topics for this report. The information provided is the outcome of interviews and questionnaires applied to the Company's top executives at the South America and North America platforms, as well as the managers responsible for activities related to each particular issue.

The GRI Content Summary contains further details on these indicators. GRI 102-55

Global material issues



**Team Member
Health
and Safety**



**Animal
Welfare**



**Water
Management**



**Product
Integrity**



**Climate
Change**

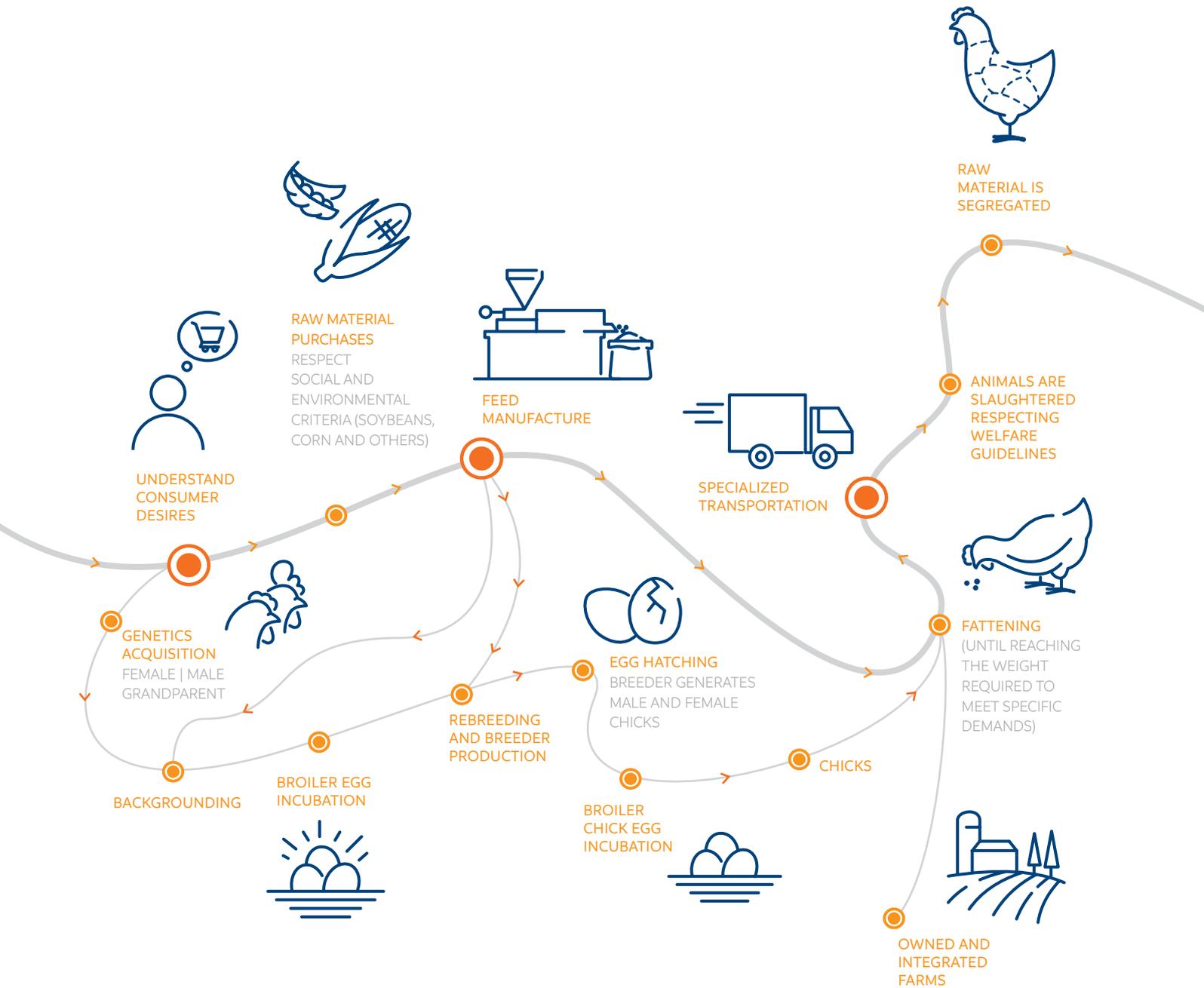
Materiality and its boundaries

GRI 103-1, 102-47

Issue	Description	Where it occurs	GRI Topics related
Team Members Health and Safety	Occupational Health and Safety; Culture of Prevention and Engagement; Legal Compliance; Training	Team Members; Third parties; Operational Units; Administrative Units	103-1; 103-2; 103-3; 403-1; 403-2; 403-3; 403-4
Animal Welfare	Management and Governance; Best practices for Animal Breeding, Transport and Slaughter; Certification; Audits	Raw Material; Producer Farms; Environment; Suppliers; Operational Units; Administrative Units	103-1; 103-2; 103-3
Water Management	Usage Reduction Targets; Management and Governance; Capture Sources; Eco-Efficient Practices; Reuse; Effluent Treatment; Educational Activities	Environment; Operational Units; Administrative Units; Team Members; Third Parties	103-1; 103-2; 103-3; 303-1; 303-3; 306-1
Product Integrity	Responsible Social And Environmental Practices; Responsible Raw Material Procurement Supplier Environmental Assessment; Supplier Employment Practices Assessment; Forced Labor; Supplier Human Rights Assessment; Supplier Evaluation re. Impacts on Society; Certificate of Best Practices, Processes and Routines; Supplier-oriented Educational and Management Support Actions; Participation in Local and Global Issue-Related Forums	Environment; Producer Farms; Suppliers; Operational Units; Administrative Units; Customers; Consumers; Society in general	103-1; 103-2; 103-3; 304-2; 308-1; 308-2; 409-1; 414-1; 414-2; 416-1
Climate Change	GGE Emissions Management; Supplier and Producer Engagement; Logistics Efficiency; Energy Efficiency; Renewable Energy Investments; Energy Usage Reduction Targets; Solid Waste Collection; Materials Reuse and Recycling; Reduction in Product Packaging Volumes	Environment; Operational Units; Administrative Units; Suppliers; Producers; Team Members; Third parties; Customers; Consumers; Society in general	103-1; 103-2; 103-3; 201-2; 302-1; 302-4; 305-1; 305-2; 305-3; 305-4; 305-5; 306-2; 306-4

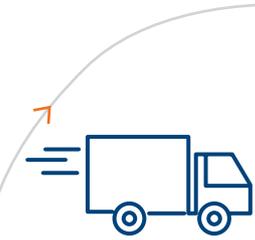
Value Chains GRI 102-9

Poultry



JBS HAS PRODUCTION UNITS AND COMMERCIAL OFFICES IN OVER 20 COUNTRIES

PREPARATION FOR FOOD
JBS PREPARES READY-TO-EAT, FRESH, FROZEN, PORTIONED AND OTHER CATEGORIES OF FOODS



SPECIALIZED TRANSPORTATION

DISTRIBUTION CENTER



SPECIALIZED TRANSPORTATION



FOREIGN MARKET

STRIVING FOR CUSTOMER SATISFACTION (B2B)



STRIVING FOR CONSUMER SATISFACTION (B2C)

JBS SELLS ITS PRODUCTS TO OVER 150 COUNTRIES

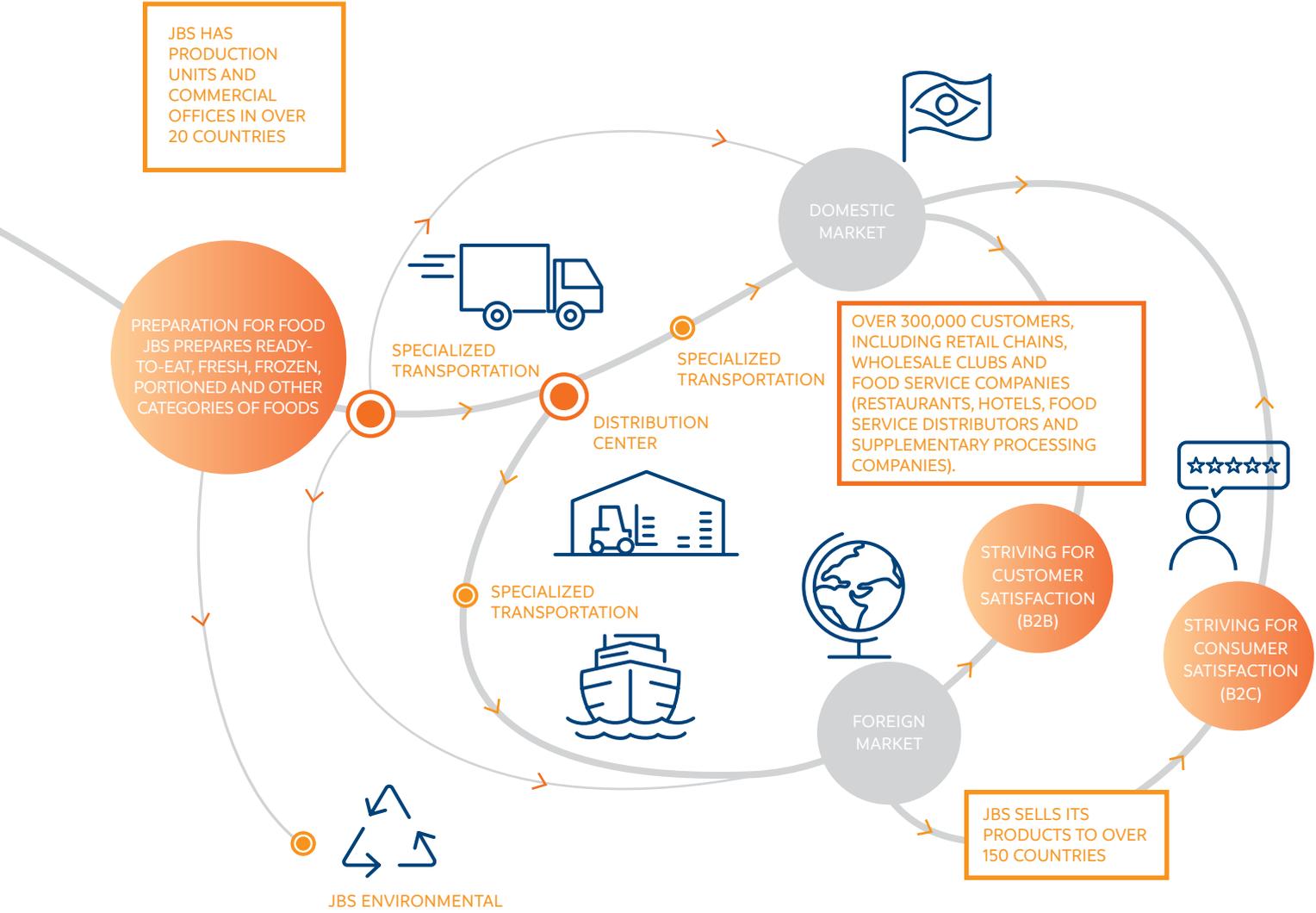


JBS ENVIRONMENTAL

DOMESTIC MARKET

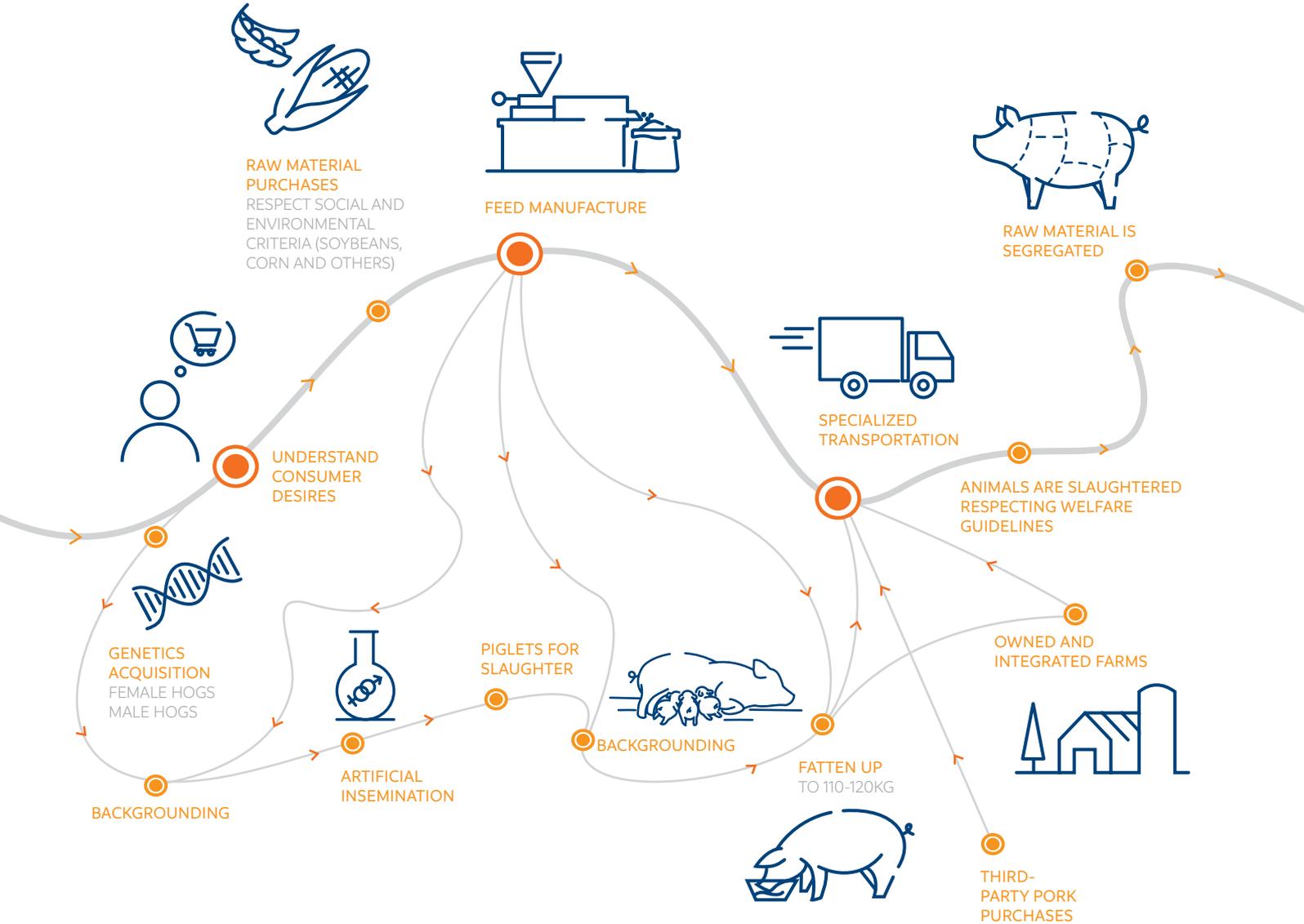


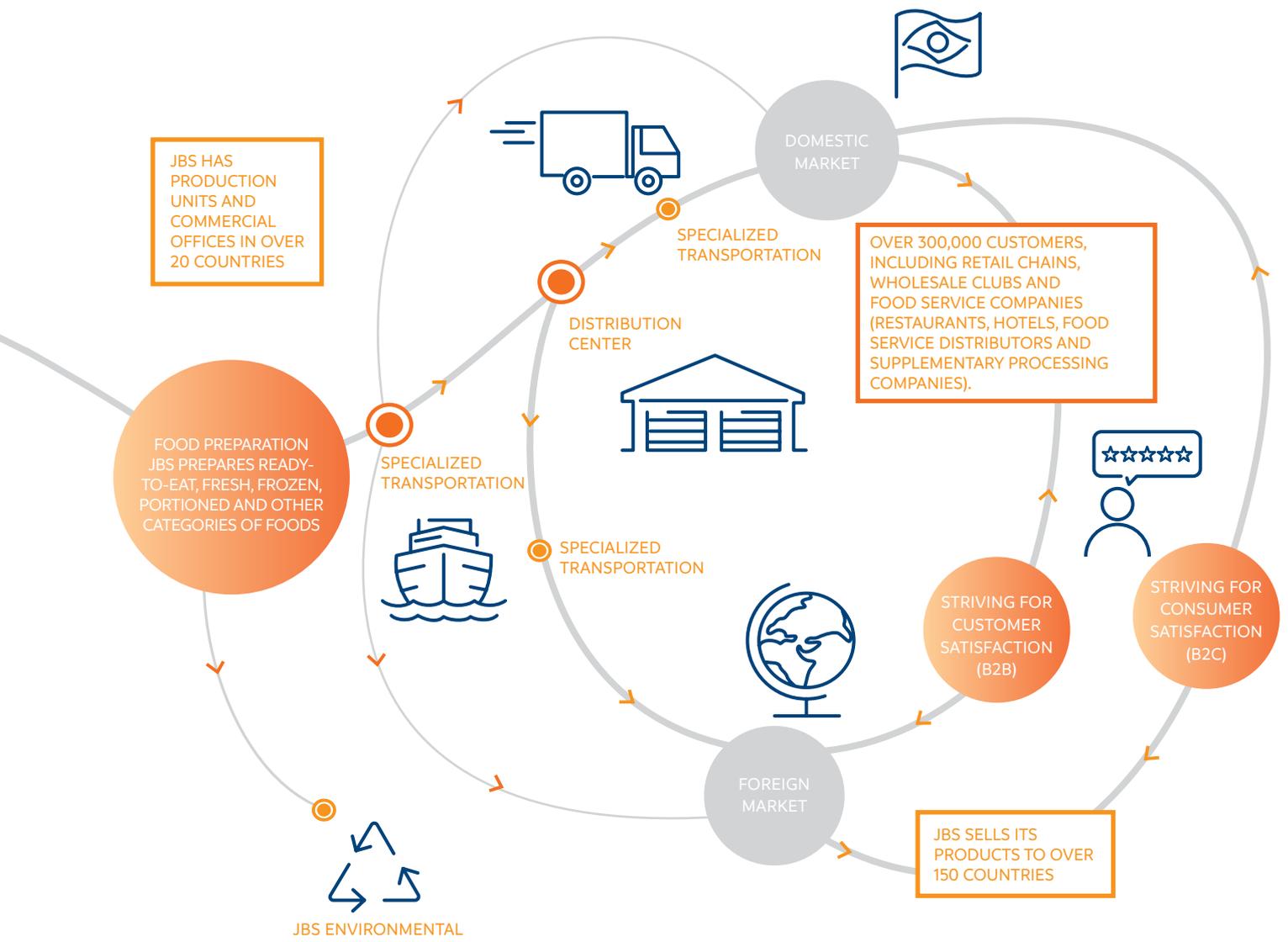
OVER 300,000 CUSTOMERS, INCLUDING RETAIL CHAINS, WHOLESALE CLUBS AND FOOD SERVICE COMPANIES (RESTAURANTS, HOTELS, FOOD SERVICE DISTRIBUTORS AND SUPPLEMENTARY PROCESSING COMPANIES).



Value Chain GRI 102-9

Pork





Value Chain GRI 102-9

Cattle

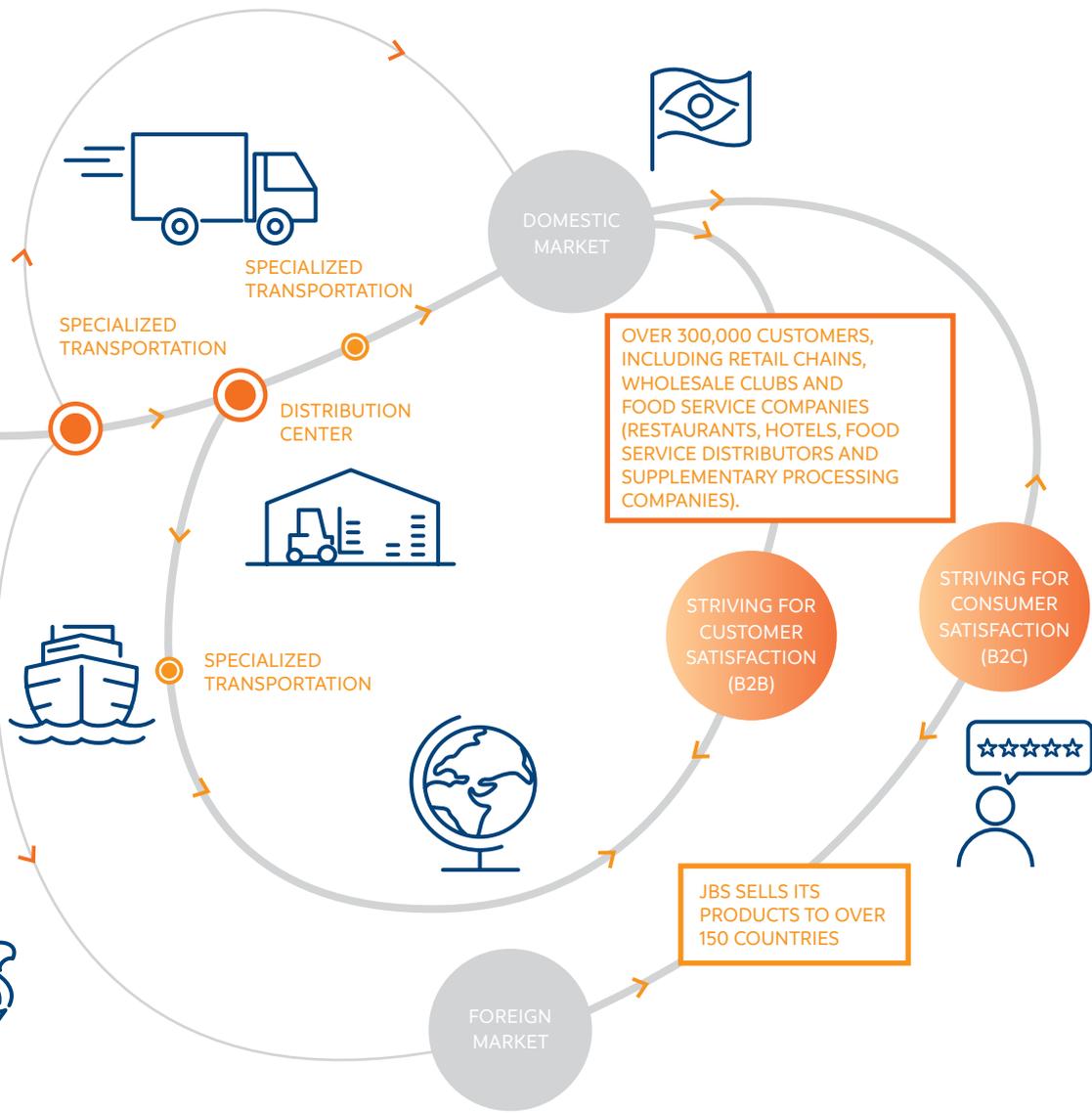


JBS HAS PRODUCTION UNITS AND COMMERCIAL OFFICES IN OVER 20 COUNTRIES

FOOD PREPARATION
JBS PREPARES READY-TO-EAT, FRESH, FROZEN, PORTIONED AND OTHER CATEGORIES OF FOODS



JBS METAL PACKAGING





JBS





Our mission GRI 102-38

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



Determination

Discipline

Availability

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 earn trust
- Lead by example
- Focus on results
- Work with people better than us
- Belief makes the difference
- Product quality

Profile

JBS is based in Sao Paulo, Brazil and is the country's largest private sector non-financial Company. JBS stock is traded on the BM&FBovespa and the Company's ADRs (American Depositary Receipts_ are traded on the OTCQX over-the-counter market. GRI 102-3, 102-5

JBS S.A. is the world's second largest food Company and a global leader in several of its businesses. The Company has a diverse brand and product portfolio with options ranging from fresh and frozen meat to added value, ready-to-eat, prepared and processed products. It sells these products under brands well-known for their excellence and innovation, and which are leaders in their respective markets, including Friboi, Seara, Swift, Primo, Pilgrim's Pride, Moy Park, Just Bare, and others. GRI 102-1, 102-2

The Company also focuses on the highest possible food safety and quality standards and has adopted best sustainability practices throughout its value chain, operating a global and diverse food production and distribution platform, with production units and commercial offices in over 20 countries and approximately 235,000 team members. We serve over 350,000 customers in more than 150 countries, managing a customer portfolio that includes various types of retailers,

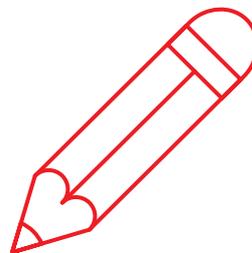
from major regional chains to small-scale retailers, as well as wholesale clubs and food service companies (restaurants, hotels, food service distributors and supplementary processing companies). GRI 102-2, 102-6, 102-7, 102-8

The Company's commitment to innovation also reflects its management approach to related businesses such as leather, biodiesel, collagen, personal hygiene and cleaning products, natural casings, solid waste management solutions, metal packaging and transportation, as well as the sustainability practices adopted throughout the value chain. One example is the constant cattle supplier monitoring using satellite imagery, georeferenced maps of supplier farms and official data from government agencies. GRI 102-2

2 Source: Valor Econômico newspaper

3 Source: Bloomberg

4 In this report, the expression "team members" refers to our direct hires. i.e., workers who have a formal working relationship with JBS. Contract labor will be identified as third-party or outsourced labor in this report.



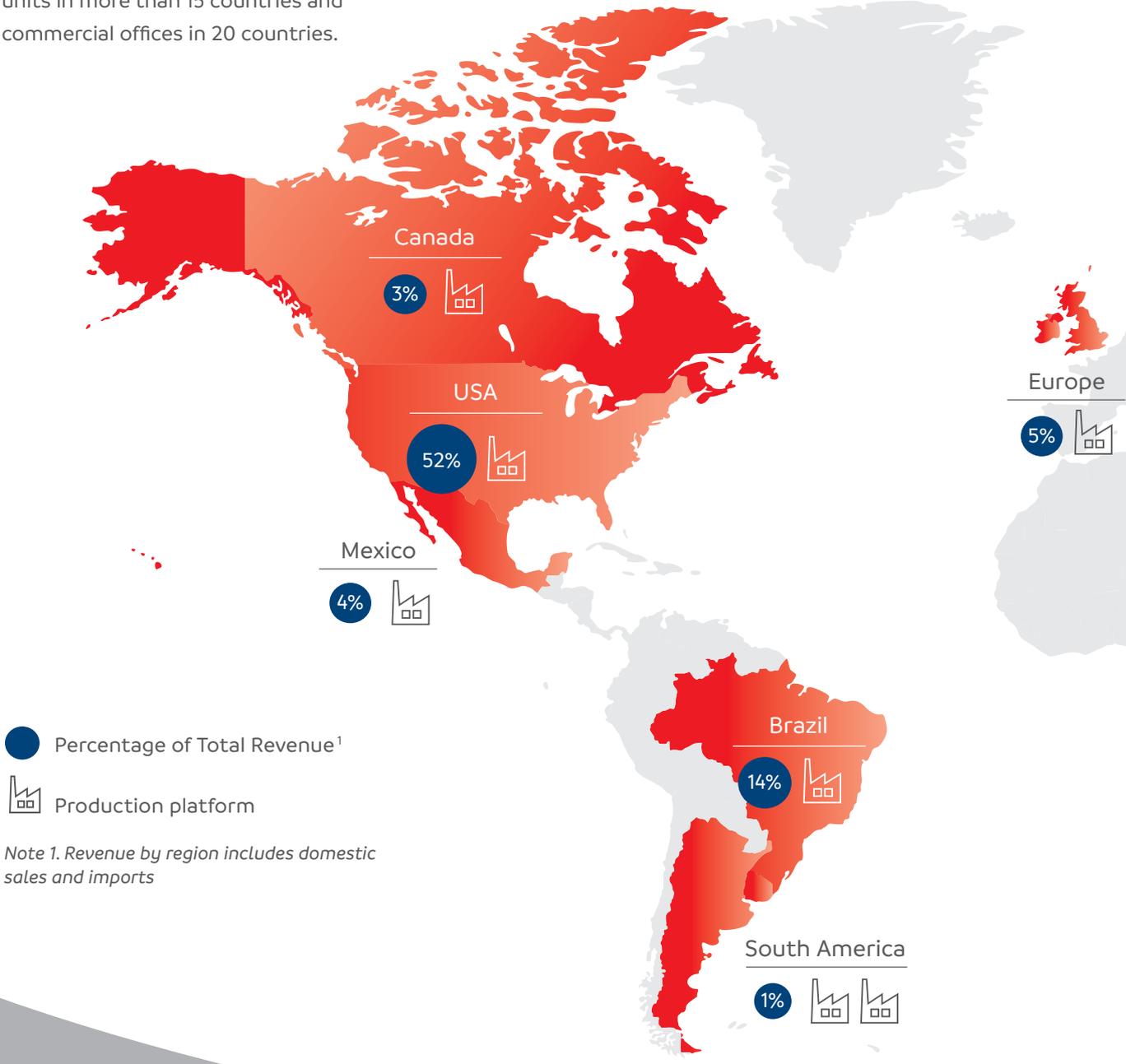
In 2017, JBS headquarters in São Paulo achieved the Green Building green level in the “new construction” category, complying with the LEED (Leadership in Energy and Environmental Design) system, the most widely recognized seal for sustainable construction in Brazil which has also been adopted by over 160 countries. This certificate states the building complies with civil construction sustainability

principles – before, during and after construction. The 12,000 m² building optimizes energy usage, improves quality of life and ensures lower operating and maintenance costs. It also uses water responsibly, with equipment installed throughout the building to reduce drinking water consumption, as well as a system that collects rainwater to reuse for cleaning and irrigation.



Global Production and Sales Platform GRI 102-4

The Company has over 400 production units in more than 15 countries and commercial offices in 20 countries.



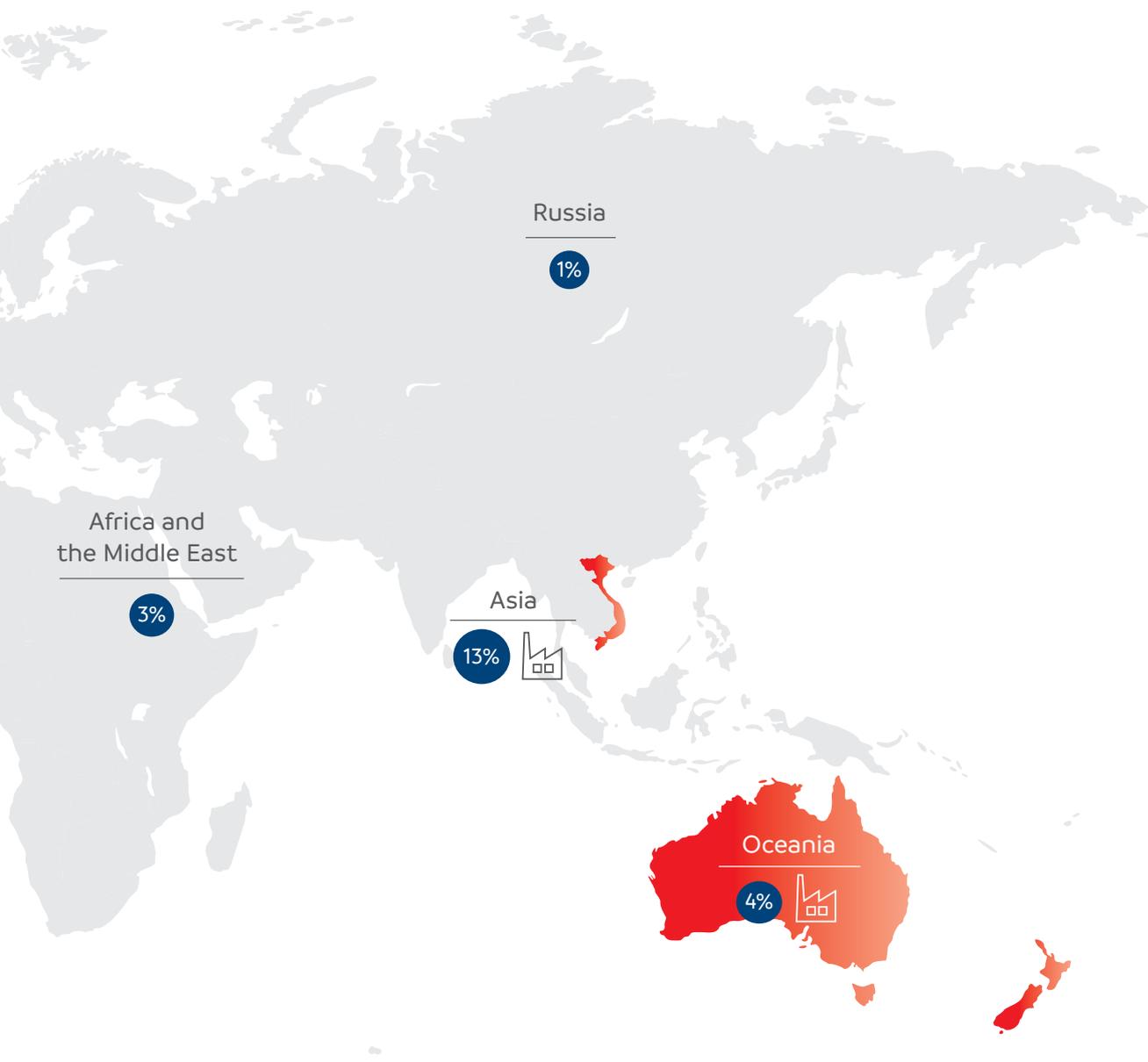
● Percentage of Total Revenue¹
 🏭 Production platform

Note 1. Revenue by region includes domestic sales and imports

Global leader in each business sector



- World's largest beef producer
- World's largest leather processing Company
- World's largest chicken producer
- World's largest organic chicken producer



Largest pork producer in the world
Largest lamb producer in the world



Ethics and Integrity



Ethics and integrity play a very important role supporting JBS's business sustainability. As such, both principles underpin the Company's global strategies.

All JBS practices reflect the best sustainability standards currently available. One example is the Company's commitment to constantly improving its corporate governance practices, resulting in the highest ever number of independent directors representing 44% of the Board. Last year, the Company also reviewed the operation and structure of the Board's Advisory Committees and related policies. In parallel, JBS also took steps to improve its Compliance practices, restructuring another area focusing on this issue. Reflecting ongoing changes in the business environment in Brazil, Compliance will now report directly to the Board of Directors and is now a global department.

This Year's Highlights

- The **Board of Directors** - the Company's highest-ranking governance body - **ended 2017 with nine members, including four independent directors (44%)**. In 2016, the Board had eight members - two of whom were independent (25%). Board members represent the shareholders and are elected to serve a two-year term. In

accordance with their powers under the Company's bylaws, they provide overall guidance for Company business and set economic, social and environmental targets.

- **Two new Board advisory committees: Related Parties and Governance.** The first, Related Parties, is responsible for ensuring that Company transactions and those of its subsidiaries and affiliates reflect JBS's interests and comply with ethics and transparency guidelines, as well as applicable legislation. The Governance Committee is an advisory committee responsible for instituting best governance practices based on the highest global standards and for monitoring compliance.

These new committees joined the three pre-existing non-statutory committees: Sustainability, Audit and Financial and Risk Management. All of the committees were restructured during the course of the year, reviewing their respective charters and work agendas. For more information about these committees and their members, please visit the JBS IR website (<http://jbss.infoinvest.com.br/>).

- **The Compliance area was restructured** to create the **Global Compliance Department**, which reports directly to the Board of Directors (for further information, see pages 42 to 47).

- **A policy was adopted for Related-Party Transactions**, providing guidelines on the procedures JBS, its subsidiaries and its affiliates, as well as their team members, management and shareholders, are required to observe during transactions with related parties. This document now exists alongside four other policies governing Material Information Disclosures, Securities Trading, Dividends and Privacy. A full version of these policies, which support management in the ordinary course of business, is available on the Company website (<http://www.jbs.com.br/ri/>), in Corporate Information / Codes and Policies).

- **Three strategic areas** were created, reporting directly to the President of Global Operations: **Food Safety and Quality, Center of Excellence and Innovation and Global Sourcing** (for further information, see page 71).

Three strategic areas were created, reporting directly to the President of Global Operations: Food Safety and Quality, Center of Excellence and Innovation and Global Sourcing.

Management and Governance GRI 102-18

The right person in the right place
JBS believes this attitude gives the Company a competitive edge. In fact, human capital is so important to the business that it is one of the main pillars of our Company culture (see page 27).

This principle also applies to our Company leaders: the business is led by experienced professionals who have an extensive track record in their respective areas. This, alongside ongoing efforts to improve Corporate Governance practices, guides Company efforts to generate sustainable results for JBS stakeholders.



In fact, human capital is so important to the business that it is one of the main pillars of our Company culture.



**JBS Management Team
at the end of 2017**

**Global
Compliance
Department**

**Board of
Directors**

Jeremiah O’Callaghan*
José Batista Sobrinho
Aguinaldo Gomes Ramos Filho
Gilberto Meirelles Xandó Baptista
Wesley Mendonça Batista Filho
José Gerardo Grossi**
Sérgio Roberto Waldrich**
Cledorvino Belini**
Roberto Penteadó de
Camargo Ticoulat**

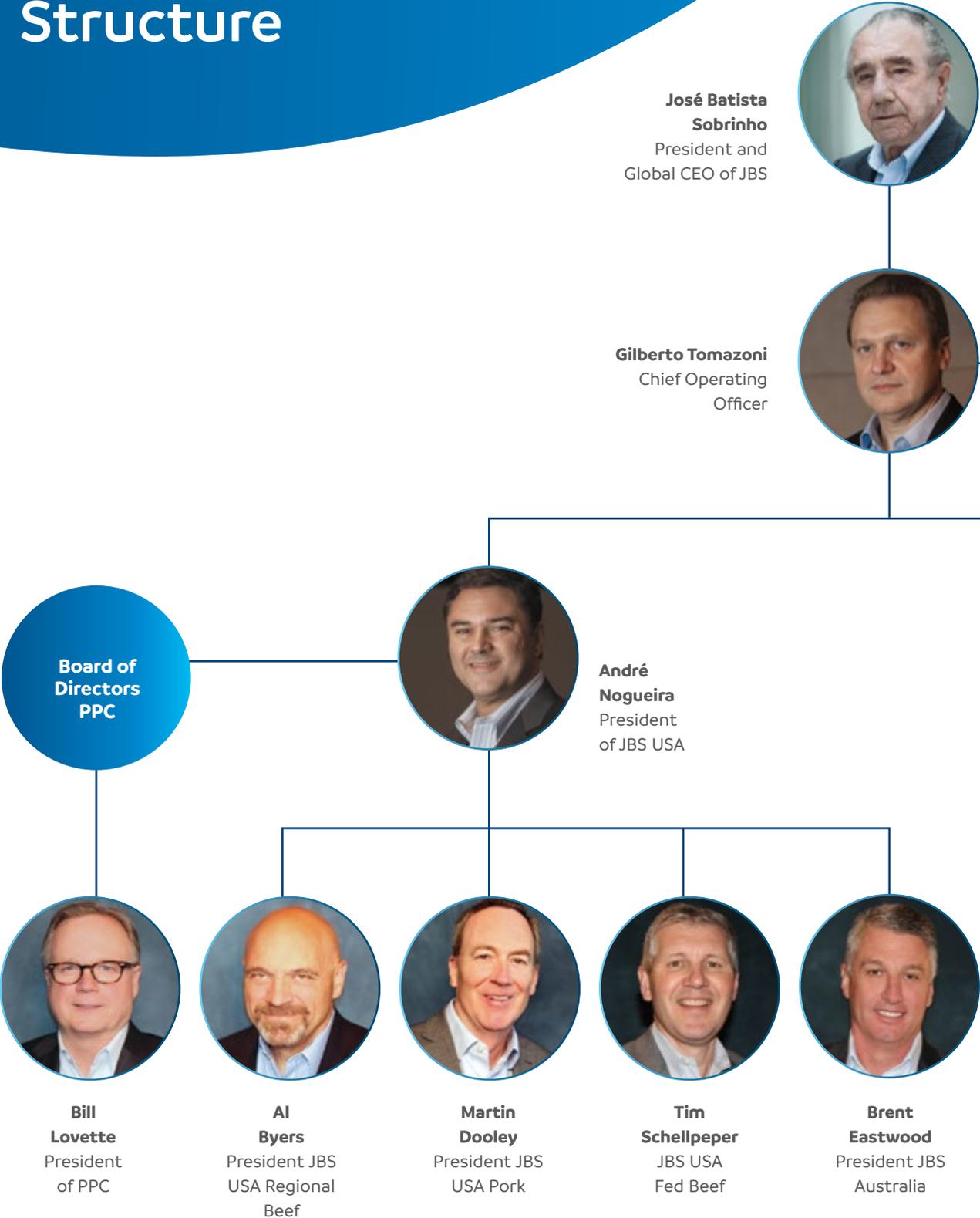
**Advisory
Committees**

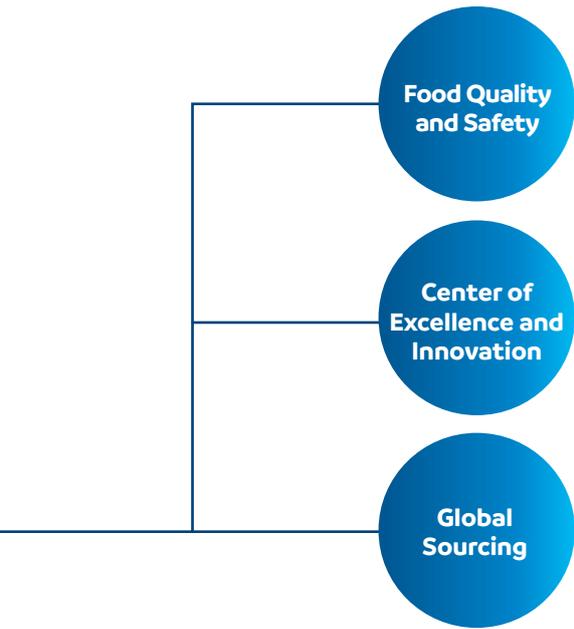
Sustainability
Audit
Financial and Risk Management
Governance
Related Parties

*AC President
**AC independent members



Global Management Structure





Wesley Batista Filho
President of South America Operations



Joanita Karoleski
President of Seara



Renato Costa
President of JBS Carnes



Nelson Dalcanale
CEO of JBS New Business



Roberto Motta
President of JBS Leather

JBS's Reference Forms contain further information on our Governance bodies and their leadership teams. View the

document here <http://jbs.infoinvest.com.br/ptb/4414/70224.pdf>, and see pages 446 to 536.



Best Governance Practices



44%

of the Board members are independent

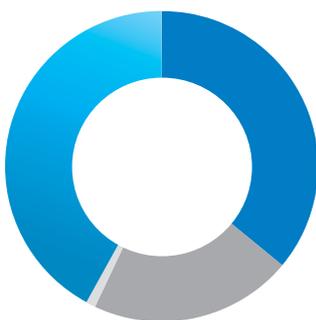
- For over 10 years, JBS stock has been listed in Brazil on the B3 New Market, a listing segment for companies that have adopted a higher standard of Corporate Governance. This means the Company has undertaken certain governance commitments which go beyond current legislative requirements.
- The Company's equity is made up exclusively of common stock, giving all shareholders equal rights.
- 35.86% of all shares issued are held by minority shareholders, exceeding the 25% figure required under New Market regulations.
- 44% of board members are independent directors, exceeding the 20% minimum requirement under New Market rules.
- The chairman of the Board of Directors and the Company CEO are separate posts held by different people.
- All shareholders are granted tag along rights if a controlling stake in the Company is sold. This means that anyone acquiring control of the Company is required to make a public offering to acquire the shares of all shareholders, offering the same price per share paid for the controlling block.
- Permanent Fiscal Committee
- All members of the Board and the Company's committees, as well as the Fiscal Committee, receive a fixed, monthly, performance-based salary. This means they do not receive any direct or indirect benefits nor do they receive a share in the Company profits. Other management compensation is performance-driven to encourage



sustainable medium and long-term growth at JBS while incentivizing efforts to reach short-term targets, guaranteeing long term business continuity. Compensation is based on market research and is intended to attract and retain highly qualified staff who are aligned with the interests of the Company, its executives and shareholders.

Financial Markets

At the end of 2017, JBS S.A. had the following equity position:



- **41.91%** Controlling Group*
- **36.08%** Minority Shareholders
- **21.32%** BNDES Participações S.A. (BNDESPAR)
- **0.70%** Treasury Shares

* Including FB Participações and Banco Original

Stock Market Listing

JBS stock is also included in theoretical portfolios by the following BM&FBovespa indices:

- Differentiated Corporate Governance Stock Index (IGC)
- Differentiated Tag Along Stock Index (ITAG)
- Brazil Index (IBrX)
- Brazil Index 50 (IBrX -50)
- Wider Brazil Index (IBrA)
- Carbon Efficiency Index (ICO2)
- BM&FBovespa Consumer index (ICON)
- BM&FBovespa Value Index (IVBX-2)
- Mid-Large Cap Index (MLCX)
- Trade Corporate Governance Index (IGCT)

In addition to trading on the B3 New Market, JBS stock is also traded as Level 1 ADRs (American Depositary Receipts) on the OTCQX over-the-counter market.

At the end of 2017, JBS had a market value of R\$ 26.8 billion.

Compliance

GRI 102-16

JBS restructured its Compliance area in 2017. Previously a management area, Compliance became a Global Department reporting directly to the Board of Directors. This helps JBS improve its existing control mechanisms and activities and develop new policies and procedures in line with best global practices.

A robust Compliance program offers greater long-term business continuity, supports corporate development and is an important asset in helping to improve medium and long-term economic/financial

results. Indeed, this approach has underpinned many of our 2017 initiatives and others forecast for the next several years.

Compliance Culture

The “Always Do It Right” Compliance program includes a number of activities intended to expand a compliance-based culture with a view to avoiding unlawful conduct and helping to anticipate possible irregularities.

As a result, communication and dialogue play a strategic role with in-house and external audiences. Special emphasis has therefore been given to disclosing and disseminating compliance-related information and the relevant policies and procedures. The Company’s various management-related activities have also been an important tool in efforts to multiply best practices.

All of these efforts exist in parallel with the other verticals that form the basis of the JBS Compliance Program:

Leadership and Governance

JBS believes a Compliance culture involves a wide range of approaches that focus on management and it has developed initiatives to ensure everyone understands the Company’s current policies and procedures and the management team is able to multiply this knowledge across its teams.



The “Always Do It Right” program includes a number of actions aimed at advancing a Compliance culture.



**Marcelo Proença,
Global Compliance
Director**

Proença has 27 years experience. He has previously worked as an attorney and holds a master’s degree and doctorate in Law from the São Paulo University Law Faculty, where he is currently a professor of Commercial Law. He is also a professor teaching on the Getúlio Vargas Foundation GVLaw course and has published eight books.

Pillars of the JBS Compliance Program



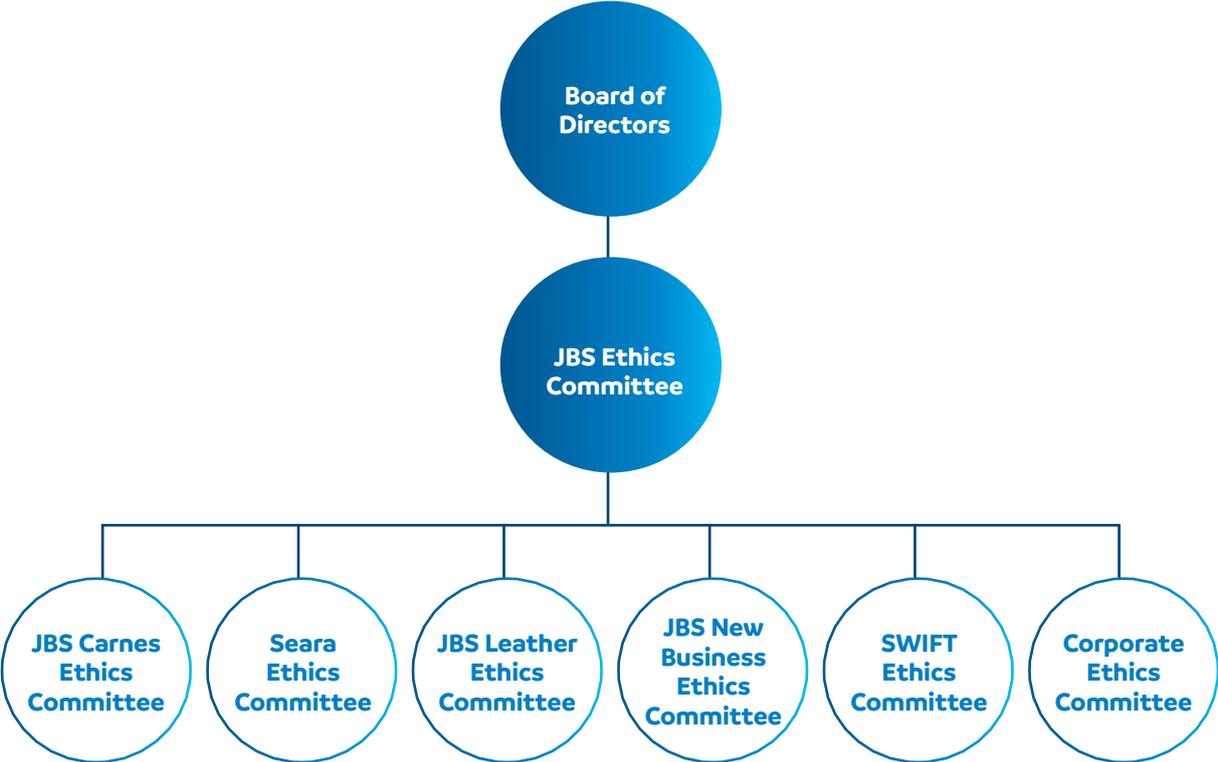
Some of the activities organized in 2017 to improve the Leadership and Governance pillar include:

- The “Speak to Compliance “ event held between June and August in Brazil. This initiative was organized to inform people that the Compliance area had been restructured and explain the corresponding roles and responsibilities. Approximately 800 members of the management team were involved.
- Leadership training – throughout the year, various interactions were organized for the leaders of the Company’s various businesses:
 - › Specific training courses were held for 120 directors in Brazil;
 - › Leadership events such as Compliance Program Disclosure were arranged;

- › Training courses were organized for the Board and its respective advisory committees, as well as the Fiscal Committee, addressing their duties and responsibilities and reinforcing the issues set out in the **Ethical Conduct Manual**. The initiative also addressed other areas such as corruption, money laundering, conflicts of interest, antitrust matters and employment compliance. This training course, which will be mandatory from 2018, was brought forward by JBS in line with efforts to build a Company-wide Compliance culture.

- Ethics Committees – these committees are responsible for monitoring the “Always Do It Right” program at each business unit and assessing investigations triggered through the reporting channel. The committees are organized as follows:

Ethics Committees Structures



Policies and Procedures

Reviewing and publishing policies and procedures was a priority issue in 2017. These activities helped further implementation of compliance rules at all Brazil units, in accordance with best market practices. The new documents include:

- Sponsorship Policies
- Product Donation Policy
- Product Donation Procedure
- Related Party Transactions Policy
- Consequences Policy
- Reporting Investigation Policy
- Ethics Committees’ Charters

Ethics Reporting Channels

JBS created a new ethics reporting channel at the end of 2017. Called the JBS Ethics Line, it is available to all Company stakeholders (team members, suppliers, customers, investors and others). This channel, which was set up so that people could report unlawful behavior or activities contravening the **JBS Ethical Conduct Manual**, is available in three languages (Portuguese, English and Spanish) and is managed by a specialist provider from outside the Company to ensure complete independence and security for any whistleblowers, who can also file reports anonymously, if they so wish.

The Company responsible for the JBS Ethics Line registers the report, classifying it based on the issues involved and incident severity, and submits the information to the JBS Compliance area, which will take appropriate action.



Controls

Procedures for sponsorship or donations involving products or other goods and services have also changed. A new policy has now been published specifically addressing these issues, setting out guidelines and responsibilities at all JBS businesses in Brazil.

Among other issues, the document states that all donations must be requested by a philanthropic organization helping to improve its local community, where JBS must also have a significant number of team members. Donations to government agencies or officials are prohibited, to avoid preferential treatment, undue advantages, conflicts of interests or any effort to influence decisions taken by a government or private sector officials.

Third-Party Due Diligence

Beginning in the third quarter of 2017, the Company improved its third-party due diligence procedure. In 2017, more than 280 third parties went through this new process and 13% were rejected because they failed to comply with the Company's new rules. A consultancy Company was hired at the end of 2017 to automate this process, which means the Company will be able to analyze a larger pool of third parties. A pilot project for this new tool is scheduled to start in 2018.



Best transparency and anti-corruption practices

In the Transparency in Corporate Reporting study by Transparency International (TI), which was based on information from the 100 biggest companies in Brazil and the largest Brazilian banks, JBS was ranked 23rd.

The survey analyzed each organization's transparency and anti-corruption practices. JBS was ranked as having an average of 8.1, two points above the 5.7 average classification for all Brazilian companies. The ranking is calculated using the ACP (Anticorruption Program - 73%) + OT (Organizational Transparency - 88%) indices. The TI ranking shows that JBS's initiatives, which are aligned with best global practices, reinforce the Compliance efforts the Company has adopted and will support the Company's ongoing and firm intent to be a global benchmark in this area.

Compliance Progress in 2017

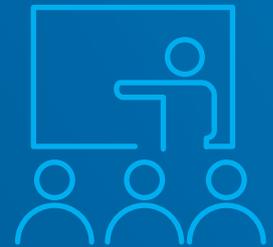


July

- Leadership events such as Compliance Program Disclosure were put in place
- The “Speak to Compliance” event was held at the JBS head office for around 600 Company leaders, providing information on the department’s restructuring process and relevant roles and responsibilities

September

- Leadership events, such as Compliance Program Disclosure, were concluded
- **Internal communications were expanded** to keep all Company team members abreast of Compliance-related issues
- **New staff were hired** for the Compliance area, which now has a total of 8 team members.



June

- The Global Compliance Department was created
- The Global “Always Do It Right” Compliance Program was announced
- Three new committees were set up (the Executive, Governance and Related Parties Committees)



August

- **Training courses began for the JBS Board of Directors and the Fiscal Committee in Brazil.** These courses were held on five different days and at varying times for groups of around 30 directors, addressing Compliance, Anticorruption, Antitrust and Conflict of Interest matters

October

- Presentations and training courses were organized at the Annual JBS Carnes meeting (held at the Company’s head office), at units in Cuiabá (MT) and Campo Grande (MS) and during the Seara Supply Leaders meeting in Itajaí (SC). Around 270 leaders were involved and were subsequently responsible for transmitting the information they received to their respective units
- The Compliance department attended Quality Week, offering training courses on consumer rights

November

- A consultancy Company was hired to implement a new third-party due diligence methodology
- Training courses were held for whistle-blowing investigators
- Training courses were organized for the JBS Ethics Committees
- Ethics Committees were created to handle ethics reporting
- The Company began mapping possible conflicts of interest among JBS S/A Team Members (at management level)

Targets for 2018

The Compliance Program includes ongoing efforts to improve practices, policies and procedures. As such, JBS will continue existing initiatives in order to:

- Expand all of the ongoing initiatives in Brazil into other regions where JBS has operations
- Expand and improve communications globally
- Expand and improve third-party due diligence procedures
- Expand and improve team member training programs
- Carry out ongoing analysis of and address compliance risks, which will include creating and reviewing internal policies
- Improve internal controls based on risk assessments
- Monitor the Compliance Program on a continuous basis through existing Ethics Committees

December

- The new ethics reporting channel (the JBS Ethics Line) was launched
- **The Compliance Program was presented during JBS Day**, an event for Company investors.
- A **global risk assessment** was carried out by a specialist Company
- In-house rules were created governing the activities of all 7 Ethics Committees and setting out the repercussions and investigation policies
- Training courses were organized for the Board and its respective committees, as well as the Fiscal Committee, addressing their duties and responsibilities and reinforcing the issues set out in the Conduct Manual.



Risk Management

GRI 102-11, 201-2

Given the nature and diversity of its business, JBS and its subsidiaries are exposed to several financial, social and environmental risks as part of their day-to-day operations. Financial controls are based on the Financial and Commodities Risk Management Policy, approved by the Board of Directors. Using these guidelines, the **Risk Management Department** takes steps to identify, evaluate, mitigate and monitor financial risks inherent to JBS's activities. Risks in other areas, such as environmental and operational risks, are addressed in a series of Regulatory Instructions and In-House Procedural Manuals. These documents are approved by each business and describe the procedures team members are required to adopt in their specific areas and businesses in order to map all possible risks the Company may face.

Risk Management helps operational areas monitor and identify their respective financial risks, using specific systems and appointing professionals trained to assess, analyze and manage them. These measures improve efficiency and productivity, reduce costs and help develop new business, helping set JBS apart from its competitors. Another

example of our risk management efforts is the georeferencing system developed in Brazil to monitor supplier farms located in the Legal Amazon. Using this system, JBS can identify non-conformities and avoid purchasing of raw material from suppliers who fail to adopt relevant social and environmental practices.

Risks are classified using predefined categories and severity levels. The Company can then use this information to evaluate existing scenarios and prioritize any corrective measures that might be required. As such, risk management helps support towards operational sustainability and business continuity.

The Financial and Commodities Risk Management Policy is produced by the Risk Management Committee and approved by the Board of Directors.



The main financial, social and environmental risks* identified and monitored

Category	Types	Definition	Mitigation method
Financial Risks	Market	Currency, interest rate and commodity price risks when price fluctuations could affect JBS businesses.	<ul style="list-style-type: none"> Exposure is mapped in real time Hedging instruments, including derivatives, are used, subject to approval from the Board of Directors.
	Credit	The risk of default on accounts receivable from customers, financial investments and hedge contracts.	<p>Accounts receivable: portfolio is diluted and secure credit parameters are set (based on proportional limits, financial and operational ratios and credit agency queries) to reduce risks.</p> <p>Financial transactions with financial institution counterparties: exposure thresholds are defined by the Risk Management Committee and approved by the Board of Directors, based rating agency classifications.</p>
	Liquidity	The possibility of imbalances appearing between negotiable assets and enforceable liabilities that could affect the Company's ability to fulfill future financial obligations.	Capital management structure focuses on immediate, modified liquidity metrics - i.e. cash on hand and financial investments, divided by short-term debt - and working capital, to maintain natural leverage for the Company and its subsidiaries.
Social and Environmental Risks	Raw Material Procurement	The risk of purchasing raw materials from suppliers involved in deforestation of native forests, 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.	<p>Cattle purchases: Notify the market of the social and environmental criteria adopted for cattle purchases and support for the use of best farming practices. In Brazil, monitor supplier farms located in the Legal Amazon States using a geospatial system capable of identifying non-conformities and barring raw material purchases from non-compliant suppliers (http://jbs.com.br/sustentabilidade/dialogo-transparencia-e-comunicacao/).</p> <p>Poultry: the Company's relationship with animal breeders assures raw material quality. Suppliers are visited periodically and are audited to ensure production practices are in line with the JBS's criteria. (http://jbs.com.br/sustentabilidade/dialogo-transparencia-e-comunicacao/).</p> <p>Product quality: a global area that focuses on 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.</p>
	Climate Change	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.	We monitor the environmental impacts from our direct (industrial, logistics and shipping) operations and taking steps to minimize the impact of our own and our 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 the impact from JBS operations and create opportunities, the Company has an annual plan to invest in environmental improvements that focuses on use of natural resources, water and waste recycling and other issues.

*All potential risk factors known to the Company are presented and detailed in sections 4 and 5 of the JBS S/A Reference Form, available at <http://jbs.infoinvest.com.br/ptb/4414/70224.pdf>



Food Quality and Safety



Improve and pioneer raw materials, manufacturing and food supply quality standards worldwide

The JBS business strategy is predicated on quality excellence and food safety. Continuous efforts are made to constantly improve manufacturing, operational and supply standards. In 2017, the Company took another major step in this direction: it created the **Global Food Quality and Safety Department**, which is responsible for improving deployment of global quality programs and procedures and surpassing requirements in even the most demanding markets.

By applying the same standards to all Company products and processes, the new area - based in Greeley, Colorado (USA) - is intended to expand JBS's access to global export markets, efficiently meeting and exceeding the most stringent quality control and safety standards.

These efforts are part of JBS's global strategy to set the bar on food quality and safety. The Global Food Quality and Safety Department - which reports directly to the President of Global Operations - has therefore been studying the specific characteristics of each market.



In 2017 the Company created the Global Food Quality and Safety Department.





Al Amanza, Global Head of Food Safety and Quality Assurance

Amanza spent almost 40 years working for the USDA's FSIS (Food Safety and Inspection Services) department. His career began as a food safety inspector at a small plant in the city of Dalhart, Texas (USA), before he rose to Under Secretary for Food Safety at the US Department of Agriculture, a position he held

from September 2014 until December 2016. Over the past 10 years, Amanza has been a Food Safety administrator for the US Inspection Service, leading scientific efforts to modernize food safety, regulatory strategies and public health at the USDA, as a means of preventing diseases caused by food poisoning.





Ivone Delazari, Food Safety and Quality Assurance Director for South America

Delazari has over 40 years' experience in this area. She began her career at the Campinas Food Technology Institute in Sao Paulo, where she worked at the Analysis and Research Laboratory. After 10 years, she moved to the food industry, where she pursued a career working in the Quality Assurance area.

She is also a member of various food safety scientific associations, such as the International Association of Food Protection, and Anvisa working groups focused on Food Quality and Safety. She is also a representative for the Brazilian Food Industry Association (ABIA).

The Company takes the approach that quality is a continuous process, which means **the best practices and processes we have already adopted are being prioritized throughout the Company, particularly at its Brazilian operations.** Created in 2015 for its cattle operation, the innovative management model guarantees rigorous control of the value chain based on financial results, customer satisfaction and relationship indicators. The process includes several phases, from raw material procurement controls to auditing product presentation standards at the point-of-sale and includes tightly controlling its production and

distribution activities. The initiative includes training for factory teams and customers and annual refresher courses for other personnel, as well as opportunities to exchange experiences on best practices and thereby provide additional support during each stage of the process.

The quality management model is based on software that collects information in real time across various stages of the management process. Al Almanza, JBS's Global Head of Food Safety and Quality Assurance, analyzed the project during a visit to Brazil at the end of 2017.



R\$ 2 mi

In training and audits in Brazil

Customer satisfaction indices indicate the management model's effectiveness: in the past two years, JBS has observed a substantial reduction in the number of complaints on Reclame Aqui - the website customers use to review different companies – and had overall very good reviews in 2017. Another positive aspect is how consumers perceive the Company. Studies carried out by the marketing area recently found that 61% of interviewees associate the Brazilian Friboi brand with quality.



Quality Control Certificate

In 2017, JBS Carnes launched the **Supply Chain Seal**, an initiative that certifies compliance with international standards and common customer requirements in all markets the Company serves. The certification system has further improved quality controls across the production chain. The seal addresses issues that go

beyond current regulations and includes some of the most stringent global certificates and protocols.

The seal focuses on certifying Guaranteed Sourcing, streamlining the process of verifying customer and consumer requirements. It provides a simple and effective method of checking that the Company has complied with all requirements put in place by its various markets and consumers.

Seal audits are carried out by the Brazilian Certification Service (SBC), an independent Company with 16 years' experience in product sourcing. Of the 36 JBS Carnes production units in Brazil, 13 are already operating and have been audited in accordance with Supply Chain Seal protocols. The Company invested more than R\$ 2 million in training and audits. The goal is to have all JBS Carnes units following a single, standardized protocol by the end of 2018.





Quality Commitment

GRI 102-2, 308-1

JBS implements the initiatives mentioned at all its businesses. This focuses efforts on ensuring that the products consumers put on their tables are safe and meet the highest possible quality standards. These guidelines apply to a number of areas, from ensuring full compliance with regulatory and certification requirements on the more than 150 consumer markets the Company currently serves – and not selling prohibited products in these locations – to value chain management processes and policies (including responsible raw material procurement), supplier partnerships, team health and safety, training courses and other areas. As a result, these activities are a common thread through all of the Company's processes and are discussed in page 136.

Quality management is an ongoing process and health missions and customers frequently audit Company facilities.

JBS has more certificates from the BRC (British Retail Consortium), a global benchmark for protein production quality, than any other Brazilian Company. The Company is also certified in ISO 9001 quality management standards.

In Brazil alone, there are more than 2,000 JBS staff focusing exclusively on quality assurance. Around 70,000 team members undergo annual quality assurance training every year.



Different markets, different requirements: GRI 416-1

- In **Brazil**, all plants face municipal, state or federal health inspections. This means all Company units are inspected by the Federal Inspection Service (FIS), which represents the Brazilian government's Ministry of Agriculture, Livestock and Supply (MAPA) certifying the Company to sell and export products that comply with the highest food safety standards.
- In the **US**, all beef, pork and poultry processing units are regularly inspected by the U.S. Department of Agriculture's Food Safety and Inspection Service (FSIS), to ensure food products comply with federal standards. Food safety procedures – Hazard Analysis and Critical Control Point (HAACP) - are based on certain prerequisites set out in the Hygiene Best Practices Programs, which establish specific regulations addressing (Best Manufacturing Practices, Standard

Operating Procedures – SOPs - and Sanitation Standard Operating Procedures - SSOP).

- In **Mexico**, Pilgrim's plants comply with best chicken farming practices published by the Secretariat for Agriculture, Livestock, Rule Development, Fishing and Food (SAGARPA) and the national Agriculture and Food Health, Safety and Quality Service (SENASICA). Additionally, each Mexican plant holds a TIF (Federal Inspection Certificate) which is issued by the government to certify that foodstuffs comply with World Animal Health Organization standards and the Codex Alimentarius of the United Nations' Food and Agriculture Organization. Units that do not have the TIF seal follow highly specific food quality and safety guidelines as well as general guidelines issued by the Ministry of Health and only TIF-accredited plants are allowed to export.

All JBS units focus on continuously improving their processes.

Best Practices and Infrastructure

All JBS units focus on continuously improving their processes. Efforts are focused on ensuring product quality and integrity, protecting team members health and safety and guaranteeing animal welfare, as well as adopting practices that are intended to minimize the impact of our operations, including measures to reduce water consumption at our facilities and greenhouse gas emissions. The Company has also expanded the number of initiatives focused on waste recycling and renewable energy. These initiatives are detailed in pages 193 and 198.

In addition to the day-to-day efforts to address food safety and quality, JBS is constantly investing in state-of-the-art infrastructure. For example, in 2017, it concluded construction of its Campo Grande II (MS) laboratory. This is one of Brazil's most modern laboratories and is equipped with latest generation

biotechnology equipment and provides molecular biology support. It is able to carry out 12,000 analyses per shift and it serves the six JBS Carnes units in the region.

This lab, alongside another 9 laboratories the Company manages across the country, are used for official and microbiological analyses to provide food safety indicators and guarantee quality. Together, they support the 36 JBS Carnes plants around Brazil.

By modernizing its infrastructure and equipment, JBS is able to achieve increasingly accurate analyses in shorter time frames. There was an 8% increase in the number of analyses carried out and a 17% drop in cost per analysis in 2017. As the 10 laboratories are located all around the country, the Company has been able to reduce logistics costs by 10% year on year.



Labeling

All JBS products comply with a wide range of labeling requirements in accordance with local regulations.

Labels contain information on product composition, a nutritional table, the product name, net weight, conservation instructions, the manufacturing date, sell-by date and manufacturing unit data. In Brazil, the Company's product labeling also carries the Federal Inspection Service (FIS) seal from the Ministry of Agriculture, Livestock and Supply (MAPA). Labels also state products contain or may contain one of 18 possible allergens, in accordance with

the relevant ANVISA (the National Health Regulator) resolution.

In the US, all products carry the United States Department of Agriculture, Food Safety and Inspection Service (USDA, FSIS) seal. Certain products also present information on how they should be prepared and consumed, as well as a variety of recipes and suggested accompaniments. Labels also provide information about any ingredients and additives, specifically any that may contain allergens, added vitamins, minerals, fiber etc.

Seara also has its own in-house food analysis laboratories. Analysis results are included on the Laboratory Information Management System (LIMS), which generates a periodically updated database of performance and standards compliance information used by the entire Company. This allows the Company to view results from each individual unit – including products and processes as well as microbiological and physical/chemical analyses – and any monthly changes in results. This is in line with Seara's commitment to validating its processes in order to guarantee a high standard of product quality and safety.

Pilgrim's Moy Park, in Europe, manages a network of accredited laboratories that offer fast, efficient and high quality microbiological testing solutions. All analyses are carried out using standardized methods or are verified using fully documented quality control procedures to guarantee their accuracy, which includes double checking all results. All Moy Park operations are assessed on criteria including product and service health and safety. The laboratories are accredited up to CLAS standard and comply with BS EN ISO / IEC 17025: 2005.

JBS Carnes (Brazil) has a Safety Advisory Committee to improve products and processes.

Quality Management Systems and Governance

GRI 103-2

JBS Carnes (Brazil) has a **Safety Advisory Committee** which who discuss issues related to the beef and derivative production in order to improve products and processes. Committee members include a number of reputable industry and academic experts as well as government representatives.

Since 2011, Pilgrim's Moy Park (Europe) has been supported by its **Antibiotic Stewardship Forum**, made up of independent experts. Its work focuses on reducing the need for antibiotics, training and investment on farms, to provide higher levels of animal welfare and help develop innovative alternatives.

Environmental management System (EMS). In Europe, Moy Park facilities (processing, incubating and feed manufacturing units) adopt an Environmental Management System (EMS) based on ISO 14001. The EMS covers important aspects of each operation, maps improvement plans and monitors our initiatives to support ongoing environmental performance improvement at all our operations.

In Brazil, Seara has implemented a Quality System, which includes the best and most up-to-date approaches from domestic and international agencies.

Product Quality Strategy. Created by Moy Park in 2016, this strategy focuses on the product quality index and is the main tool used to measure the quality of unit products. The strategy is based on six pillars: operational performance, tasting, training courses, audits, sales results and consumer surveys. The Company also has a Safety Forum comprised of outside specialists who support ongoing improvement and present opportunities, technologies and ideas that focus on guaranteeing poultry health and safety.

Environmental Microscore. This initiative has been adopted by Moy Park to monitor production unit hygiene. The score is calculated using the results of microbiological analyses of equipment and installations in all processing areas, immediately after general cleaning and before production begins.

Product Microscore. Also created by Moy Park, this tool centralizes information from product sampling results. Using this data, an indicator is produced showing product quality throughout the product lifecycle. The Product Microscore is influenced by three factors: raw material quality, environmental and handling hygiene and product storage, prior to packaging. As part of the supply chain, the Company also uses an ingredient risk assessment tool.

HACCP. Pilgrim's (in the US and Mexico) has voluntarily adopted the Hazard Analysis and Critical Control Point (HACCP) system, a control system that reinforces animal quality and safety by prioritizing and controlling potential physical, chemical and microbiological hazards during the production process, detecting any preventive steps that may be required to guarantee the highest possible level of consumer

protection. The Company joined the system in 1989, 10 years before it was adopted by the US Department of Agriculture (USDA) as a rule for industrial meat and poultry processes. Since then, Pilgrim's has invested millions of dollars in new poultry processing equipment and programs to improve its products' microbiological profile. As a result, the Company has exceeded USDA pathogen reduction standards.

Seara has also adopted HACCP in Brazil to underpin periodic quality audit settlements plants. The program supports continuous improvement for processes, products and the quality system throughout the organization. The program evaluates best production, cleaning and equipment practices as well as operational and allergen health controls.

Quality System. In Brazil, Seara has implemented a Quality System, which includes the best and most up-to-date approaches from domestic and international agencies. To help implement the system, the Company complies with guidelines in the "Quality Book", a set of 15 management tools that support planning, execution, control and improvements, in addition to defining roles and responsibilities throughout the production chain.

Ravex System. This is used by the Seara Logistics area to provide real-time monitoring of the distribution fleet cold chain. The system has reinforced food safety and quality.

Excellence Pillars. Seara's Excellence Pillars have standardized industrial management procedures to achieve additional growth and profitability, while continuously improving product quality.

Self-management of Pests. The Seara quality area invests in pest control management systems that comply with a wide range of prerequisites for safe food production. Staff are trained by consultancy Company that also provides technical supervision at all units.

Audits GRI 416-1

All **Pilgrim's Moy Park** (Europe) plants undergo an independent technical audit and are required to meet the most stringent industry standards in order to ensure the best food safety practices are in place and certify compliance with our customers' quality requirements. Additionally, the Company offers team members technical training in their particular areas of expertise.

In France, **Moy Park Beef Orleans** works directly with 28 meatpacking companies. The Company Quality Department approves and audits suppliers annually. This routine – supported by annual external audits – verifies compliance with traceability, safety, hygiene, animal welfare and meat quality best practices. All beef comes from suppliers on the approved supplier list. Spot market purchases are prohibited. All of this raw material is used to supply a key customer. This means all suppliers (including meat packing and deboning) must comply with the customer's Europe

specifications; these criteria are audited twice year by Moy Park and external auditors. These checks cover issues such as animal welfare, traceability and HACCP, and others.

Over the past two years, JBS units in Brazil have undergone 340 quality audits and the Company acted robustly to ensure the same commitment from its suppliers.

In 2017, all JBS Carnes (Brazil) units underwent 178 audits to retain current certificates or obtain new ones. The Company depends on these certificates to continue exporting to many of its markets. Industrial plants obtained 97% approval and were audited in accordance with international standards such as BRC Global Standards, ISO9001, ISO17025, and were audited by the Brazilian Ministry of Agriculture, clients and market organizations (sanitary missions from other countries).

Various food quality and safety systems are audited annually at JBS USA. All US plants and most Mexican units are audited and certified by the British Retail Consortium (BRC), one of four auditing systems recognized by the Global Food Safety Initiative (GFSI). Most of our retail customers currently require these audits. Quarterly internal audits are also carried out by the respective corporate quality assurance teams.

All Pilgrim's Moy Park (Europe) plants undergo an independent technical audit and are required to meet the most stringent industry standards.



Certification

In addition to operational certificates, several JBS units also hold additional certificates that guarantee access to an even larger market, including international customers. These certificates include:

- The British Retail Consortium (BRC) – this certificate is a prerequisite for supplying European customers. Recognized by the Global Food Safety Initiative, this is one of the most rigorous certification processes in the industry, looking at 326 different plant safety and quality criteria. Today, **13 JBS Carnes (Brazil) units, 16 Seara units (also in Brazil) and most US and Australian plants hold BRC certification.** The plants in the US and Australia are also audited for compliance with GFSI criteria. The GFSI is a global initiative supporting continuous improvement in food safety management systems and ensure people worldwide can trust the food they buy is safe.
- McDonalds – certification monitors animal welfare, food safety and best manufacturing practices, among other criteria. Today, seven **JBS Carnes (Brazil)** and four **Seara** units are certified to supply the raw materials used to manufacture McDonald's hamburgers. One of the Company's units is certified to produce a hamburger in accordance with the SQMS (Supplier Quality Management System) and the other, in the city of Colíder, in the state of Mato Grosso, is certified to produce McDonald's sustainable hamburger.
- ISO 9001 – refers to set of technical guidelines that establish a quality management model for organizations in general, whatever their size or business. Currently, five JBS Carnes (Brazil) have adopted this standard.
- ISO 17025 – this standard is used to standardize laboratory testing and calibration. JBS has three laboratories in Brazil with this certificate and the others are currently going through the certification process.
- Leather Working Group (LWG) – a British organization which certifies companies that have adopted best environmental practices at tanning plants worldwide. In Brazil, over 85% of the **leather** produced by JBS was made at units that have achieved the LWG's gold standard. In the US, 100% of JBS leather produced in Cactus, Texas and Tannery have achieved the gold standard.
- Global Gap – this is an external audit focusing on the farming production chain (breeders/incubators/broiler chicken farms). Two **Seara** units have been certified.
- CFM – **Seara** holds this certificate, which is a standard for food component standards to guarantee product safety.
- SMETA – this is a social responsibility and sustainability audit required by European

Today, 13 JBS Carnes (Brazil) units, 16 Seara units (also in Brazil) and most US and Australian plants hold British Retail Consortium (BRC) certification.

customers. It assesses working conditions (number of hours worked, special equipment conditions, hazards, etc.), contract Team Members and relevant legislation. Nine **Seara** units have been certified.

- **YUM!** – this audit is carried out by the Company that owns the KFC, Pizza Hut and Taco Bell Brands. There are three audits required for YUM! approval: quality system, food safety and farming (management, best practices and animal welfare). 13 **Seara** units have been certified.
- **Seara** also holds certificates from KFC Agropecuária – UK, McDonald's, Swiss Law, GlobalGap and other organizations, including certificates and audits carried out by Brazilian and foreign customers.
- In 2016, **JBS Trading** obtained the ISCC (International Sustainability and Carbon Certificate). This seal attests that companies are taking a responsible approach to reducing greenhouse gas affects, sustainable soil usage, protecting natural biospheres and increasing social sustainability. This audit was carried out by the Control

Union, a Company that specializes in cargo inspection, supervision and transportation globally. The certificate means JBS Trading is now able to sell its products to the European Union.

- **Pilgrim's Moy Park** holds the following certificates, including: FSC, Roundtable on Sustainable Palm Oil (RSPO); Sustainable Agricultural Initiative and QS Standard. (<https://www.moypark.com/en/sustainability>)





Business



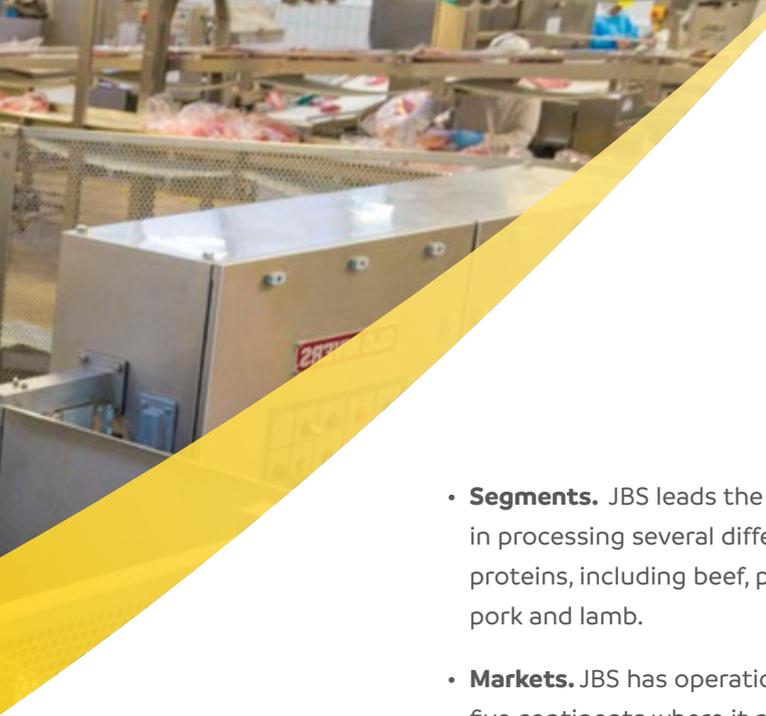
Business Strategy

GRI 102-2, 102-7, 102-10

The Center of Excellence and Innovation was created to support and expand synergies and exchange experiences across businesses.

The Company runs its business in accordance with the following guidelines:

- **Continuous enhancement of the brand and product mix.** JBS owns many brands that are leaders in their respective markets and is constantly working to increase the number of items in each portfolio in line with consumer demand. It offers many products, from fresh and frozen meat to ready-to-eat products and is constantly investing in new, healthier and high quality options.



- **Segments.** JBS leads the market in processing several different proteins, including beef, poultry, pork and lamb.
- **Markets.** JBS has operations on five continents where it manages processing units, distribution centers and commercial offices. This gives JBS a global competitive edge, it minimizes exposure to health, business, economic or policy risks in any given region.

The goal of being the best at what we do is the backbone of JBS's business model. JBS constantly focuses on improving its practices in order to surpass the latest standards in all its markets. The business strategy adopted in 2017 exemplifies JBS's commitment to continuous improvement. Four areas were prioritized throughout the year:

- **Compliance** – JBS has improved its existing control mechanisms and activities and developed new policies and procedures in line with best global practices. It also created the Global Compliance Department, which was discussed in chapter Compliance (page 70).
- **Food Quality and Safety** – JBS has focused on increasing its quality leadership, offering customers and consumers the best possible experiences with its products. To do so, it created the Global Food Quality and Safety Department, which is responsible for expanding

access to global export markets and ensuring compliance with the highest food safety and quality control standards. For further information, see page 52.

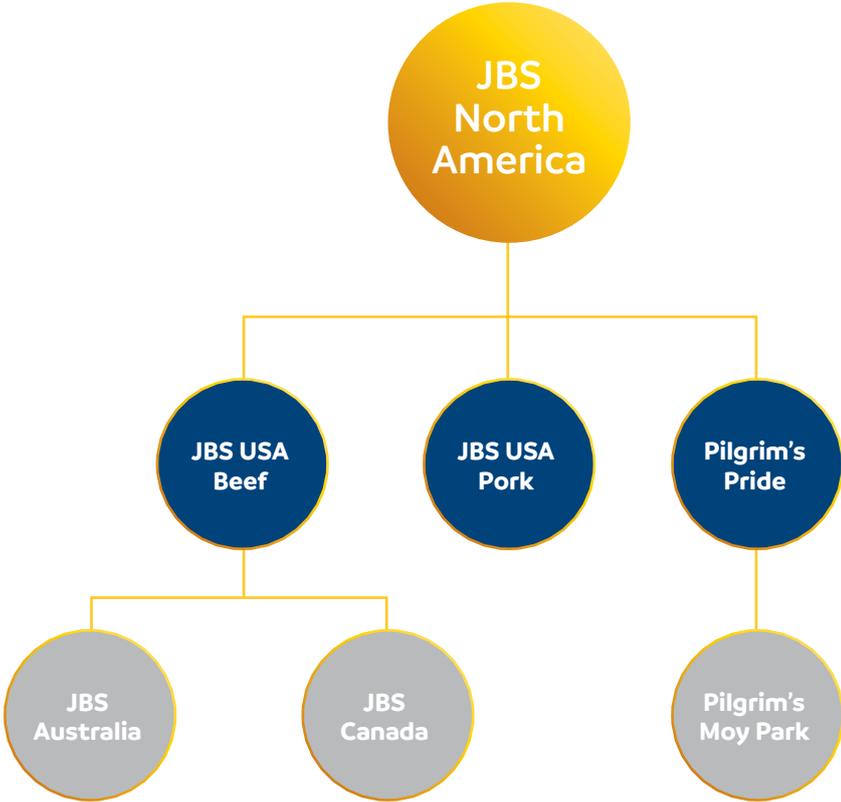
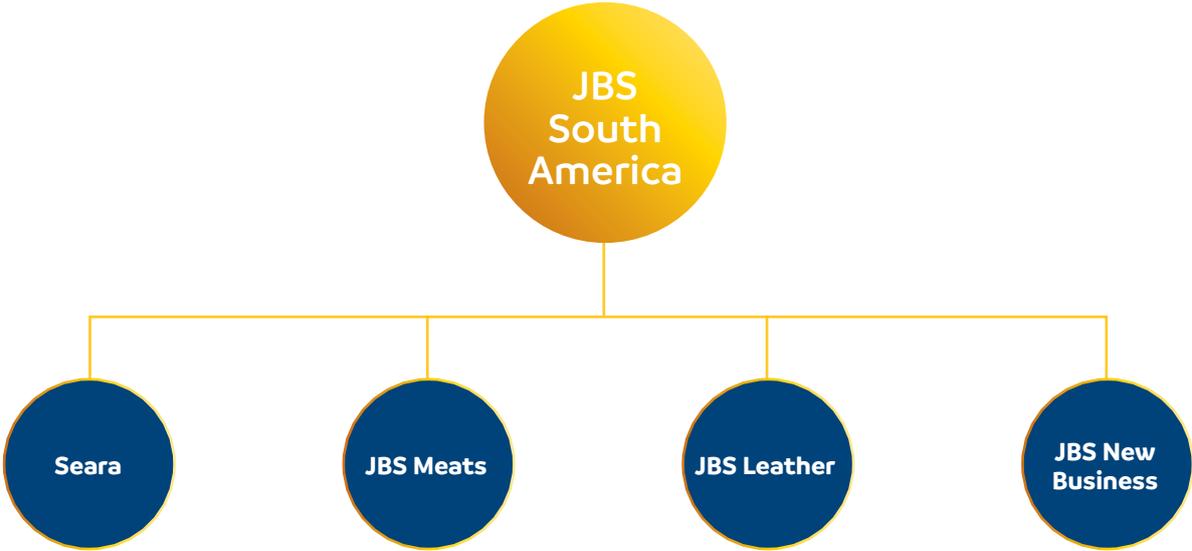
- **Innovation** – Innovation is a means of expanding the product and brand mix, which is one of the Company's ongoing goals. The Center of Excellence and Innovation was created to support and expand synergies and exchange experiences across businesses. This is a global Center that will speed up adoption of best practices and execution of new ideas worldwide.
- **Global Sourcing** – JBS created the Global Sourcing area to capture synergies by consolidating volumes, which should improve the Company's negotiating position and encourage cross-pollination of best supply practices. Based in Greeley, in the US, the area also runs five regional offices in South America, North America, Mexico, Europe and Australia. Created in 2016, but consolidated since 2017, this area initially focused on the livestock and chemicals segments for tanning plants and has already seen positive results in other areas with significant cost reductions for ingredients used to make feed, chemicals, packaging and food ingredients.

Operational structure

GRI 102-7, 102-10, 102-45, 102-49

Businesses are run with a certain amount of autonomy, which allows them to make quicker decisions. JBS has a unique operational structure

that competes on highly competitive markets with companies well-known for their management skills and best practices. This structure is split into two business platforms:



In addition to the businesses distributed across the platforms that are based in Brazil, JBS also acquired Rigamonti, in 2010. Based in Italy (Montagna/Valtelina), Rigamonti is the leading producer of Bresaola - a processed beef product - which is exported to 20 countries.

To bolster JBS's liquidity and divest itself of certain non-core businesses, the Company changed its operational structure in 2017 in accordance with the divestment plan announced on June 20 last year. The Company sold its beef operations in Argentina, Paraguay and Uruguay. These units, alongside JBS Brazil, were previously

part of JBS Mercosul. The assets were sold for US\$ 300 million. The Company also sold its Five Rivers Cattle Feeding feedlot operation in Canada for around US\$ 40 million, and Moy Park, in Northern Ireland, was acquired by Pilgrim's Pride, for around £ 1 billion pounds. In March 2018, it also concluded the sale of its entire Five Rivers Cattle Feeding feedlot operation in the US to affiliates of Pinnacle Asset Management. This transaction generated US\$ 200 million. The buyer also signed a long-term contract to supply cattle to JBS's US meatpacking units.

£1 bi

**This was
how much
Moy Park's
operations
were sold to
Pilgrim's Pride.**



JBS South America

GRI 102-2, 102-7

JBS's South American operations including leading companies in their respective segments. This operation includes the Brazilian beef units (JBS Carnes); pork and poultry, including fresh and processed, prepared and frozen products (Seara); leather (JBS Leather) and related businesses (JBS New Business), including biodiesel, collagen, personal hygiene and cleaning products, natural casings, solid waste management solutions, metal packaging and transportation.

This operation reported R\$ 23.4 billion in 2017 revenues, representing 14% of the Company's total revenues.

Last year, exports represented around 45% of JBS's results in South America. Its fresh products were mainly exported to Hong Kong, China, Russia, Iran, Chile and Europe. Its processed products were shipped principally to the US, Europe and Canada.

▶ 1993

Increased production capacity

After acquiring the Planaltina-DF and Luziânia units - GO in the 80s, the Company increased its production capacity by buying the Anápolis-GO plant, capable of processing 1,000 animals a day. This was a big step forward, as it was here the first deboned meats were sold and first small-scale exports took place.

JBS South America: more than 60 years of history

▶ 1953

Casa de Carnes Mineira is founded

José Batista Sobrinho, also known as "Zé Mineiro", created what is now JBS in the city of Anápolis -GO. At the small butcher's shop known as Casa de Carnes Mineira he started building the foundations of the Company's current Values and Culture.

▶ 1957

Off to Brasília-DF

When construction of Brasília began, there were plenty of opportunities for Brazilians to improve their lot. José Batista Sobrinho took the opportunity and became one of the first beef suppliers to the construction sites building Brazil's future capital.

▶ 1970

The first meatpacking plant is acquired and the Friboi name is born

When Brasília, Brazil's capital, had been built, the Company's founder saw an opportunity to expand his business and purchase his first meatpacking plant in the city of Formosa, in the state of Goiás. The Friboi brand was launched the same year.





▶ 1997

The JBS management system pillars are born.

The foundations of the JBS management system were created at the unit in Barra do Garças-MT, including the budget systems, management matrix, the Zero Base Budget (ZBB), routine management and Friboi Total Quality (FTQ).

These tools improved the Company's ability to operate its plants distributed throughout the country.

▶ 2007

IPO and Swift acquisitions in the US and Australia.

JBS held what was, at the time, the biggest ever IPO on the Brazilian stock market. The Company name was changed to JBS in honor of its founder, José Batista Sobrinho. JBS also acquired Swift in the US and Australia the same year (for more details, see page 106).

▶ 2017

Returning to run the JBS Board of Directors,

JBS unanimously approved the appointment of José Batista Sobrinho, the Company founder, to chair the Company. In addition to his return, the Company also improved its Compliance practices, creating an independent global department that reports directly to the Board of Directors.



▶ 1996

Exports to the European Common Market begin

Buying the Goiânia-GO unit meant the Company was able to start exporting to a demanding European Common Market. This meant the Company substantially improved all its quality standards, increased staff training and adopted more sophisticated logistics, financial and commercial systems.

▶ 1999

First steps into the processed product market

The Andradina-SP unit acquisition gave the Company a foothold on the processed foods and US markets. This was a major step for the Company as its first plant based in the state of Sao Paulo.

▶ 2013

Seara Acquisition in Brazil

As a result of the Seara acquisition, JBS became one of Brazil's biggest companies in Brazil's poultry, pork and processed foods business. With brands such as Seara, Fiesta, Rezende, Massa Leve, LeBon, Doriana, Frangosul and others, the Company created what has become one of the biggest chilled and frozen product manufacturing, innovation and distribution platforms.



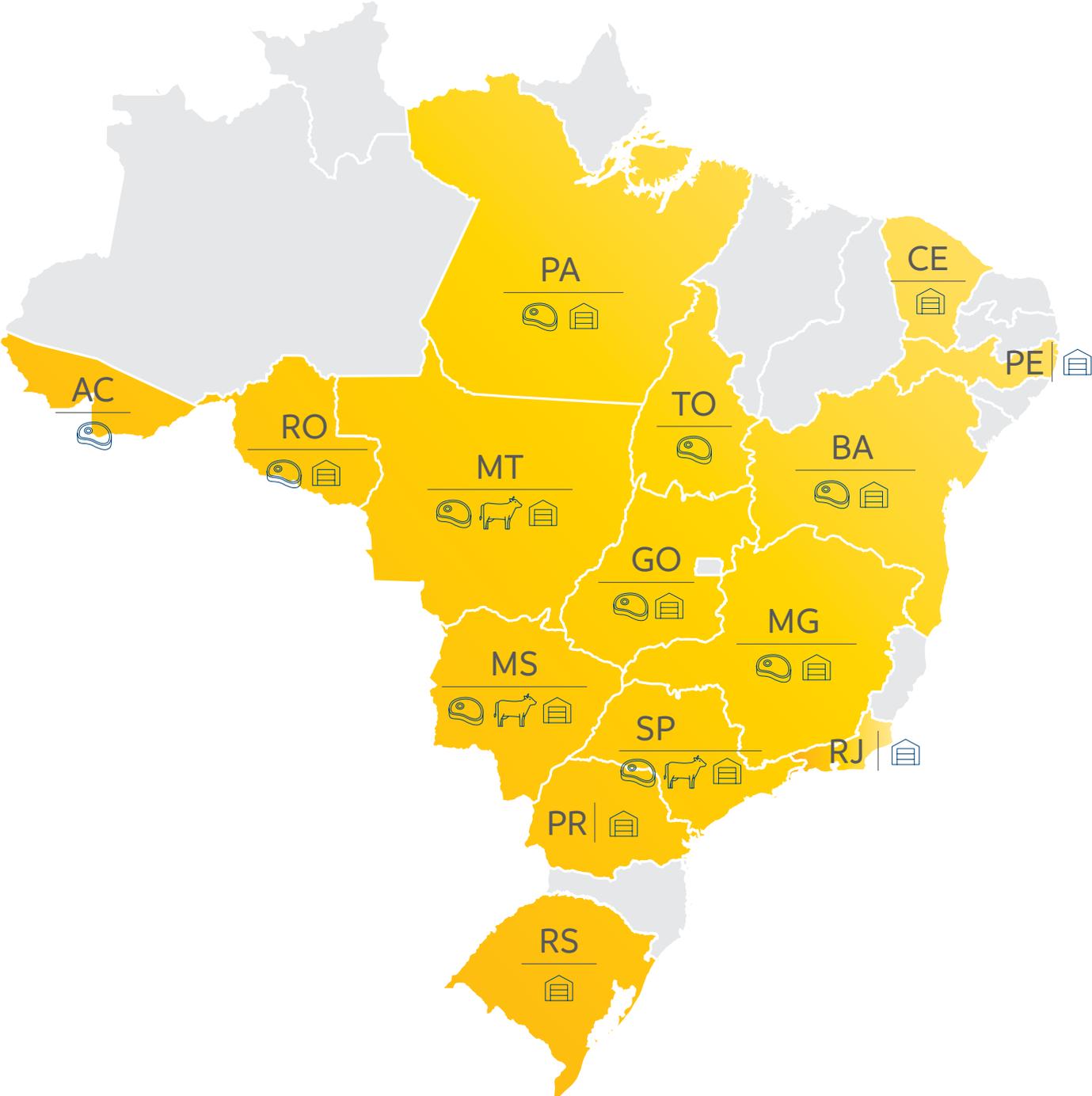
JBS Meats GRI 102-2

Main Brands GRI 102-2



The JBS Carnes business unit controls some of Brazil’s favorite meat brands. It owns well-known brand names include market leaders like Friboi. Consumers say that the brand’s foremost characteristic is its quality. This information was collected during a survey carried out during the second half of last year. The survey interviewed around 1000 consumers in the Southeast, South, Midwest and Northeast regions and found that Friboi is still top of mind in Brazil and was mentioned by 60% of interviewees. Additionally, over 40% of participants said the brand’s biggest attribute is its quality.





35

beef processing units



3

Feedlots



27

Distribution centers





JBS Carnes created category management and explored the advantages of each brand and its respective products.

JBS Carnes' business strategy is to stand out from the competition based on its product quality and service excellence, in addition to highlighting the value of its product mix, which last year resulted in an average 12% increase in average prices of fresh meat. In 2017, it concentrated on added value products (AVP) with the dual objective of including more options in its portfolio and boosting sales. In order to achieve these goals,

JBS Carnes created a category management system, it explored the advantages offered by each brand and its respective products. Examples are the Ribs, GIBLETS, Jerked Beef and Salt Beef ranges, as well as cuts offered in MAT (Modified Atmosphere) packaging, which offers retailers products that are ready for sale, such as ground meat, hamburgers, steaks, strip steaks and medallions.

Another highlight was the 1953 brand launch, expanding premium beef offerings available to consumers by including major retail chains among the various outlets used to distribute this category of product, which was previously restricted to food service and boutique channels. The 1953 name refers to the year JBS was founded and the range will offer 14 cuts with unique standardization and trimming, including: Baby Beef,

Rib Eye, Chorizo Steak, Rump, Eye of Rump, Skirt, Sirloin, Filé Mignon, Chuck Eye Roll, Sirloin Steak, Short Loin, Shoulder Steak, Brisket and Short Rib. The brand unveiling also reflects the synergies across JBS operations: it was inspired by Swift's 1855 brand in the US, which also refers to the year the Company was founded.

In addition to launching 1953, JBS also invested in other new product launches supporting its strategy to expand the product mix. The new products include:

- A superchilled range from Friboi: beef croquettes and mini beef kafta, to meet growing demand for easy to prepare products.
- Pulled beef jerky: Friboi launch this product in November, in a 200 g package which has already been desalted and is ready-to-eat.
- New canned products from Bordon, Brazil's leading producer of hashed beef and poultry protein. There were eight new products: beef meatballs in sauce; ribs with manioc; hot dog sausages in sauce; spicy aperitif sausages; smoked aperitif sausages and sirloin flavored ham. It also invested in items sold in modern pouch packaging. This type of packaging is not only easy to open, it keeps products fresh without using preservatives. They also need no refrigeration and can be placed directly into the microwave. This format was used to launch (gluten-free) cooked and shredded chicken breast as well as sausages with black beans.

2017 Highlights

- **Jerked and dried beef unit expansion** - The Company invested R\$ 18 million to increase production capacity and reinforce environmental controls at its plant in Santana de Parnaíba (SP). The plant has modernized its deboning, salting, drying and waste treatment processes and has been expanded so that it can house additional machinery; the plant has also optimized a number of processes and increased output from 1,000 to 1,600 tons/month. In addition to the domestic market, the plant – the most modern jerked beef factory in the country – also exports jerked beef to Angola and Cuba.
- **Cargo terminal capacity doubled** - The Company invested R\$ 23 million to double capacity at its logistics terminal in Cubatão (SP), which processes approximately 50% of the group's exports. Following expansion, it will be able to handle 1.2 thousand containers simultaneously, equivalent to 34,000 tons. Additionally, instead of only receiving beef containers, it will also handle chicken, pork and leather products.

R\$ 23 million

Cargo terminal capacity investment



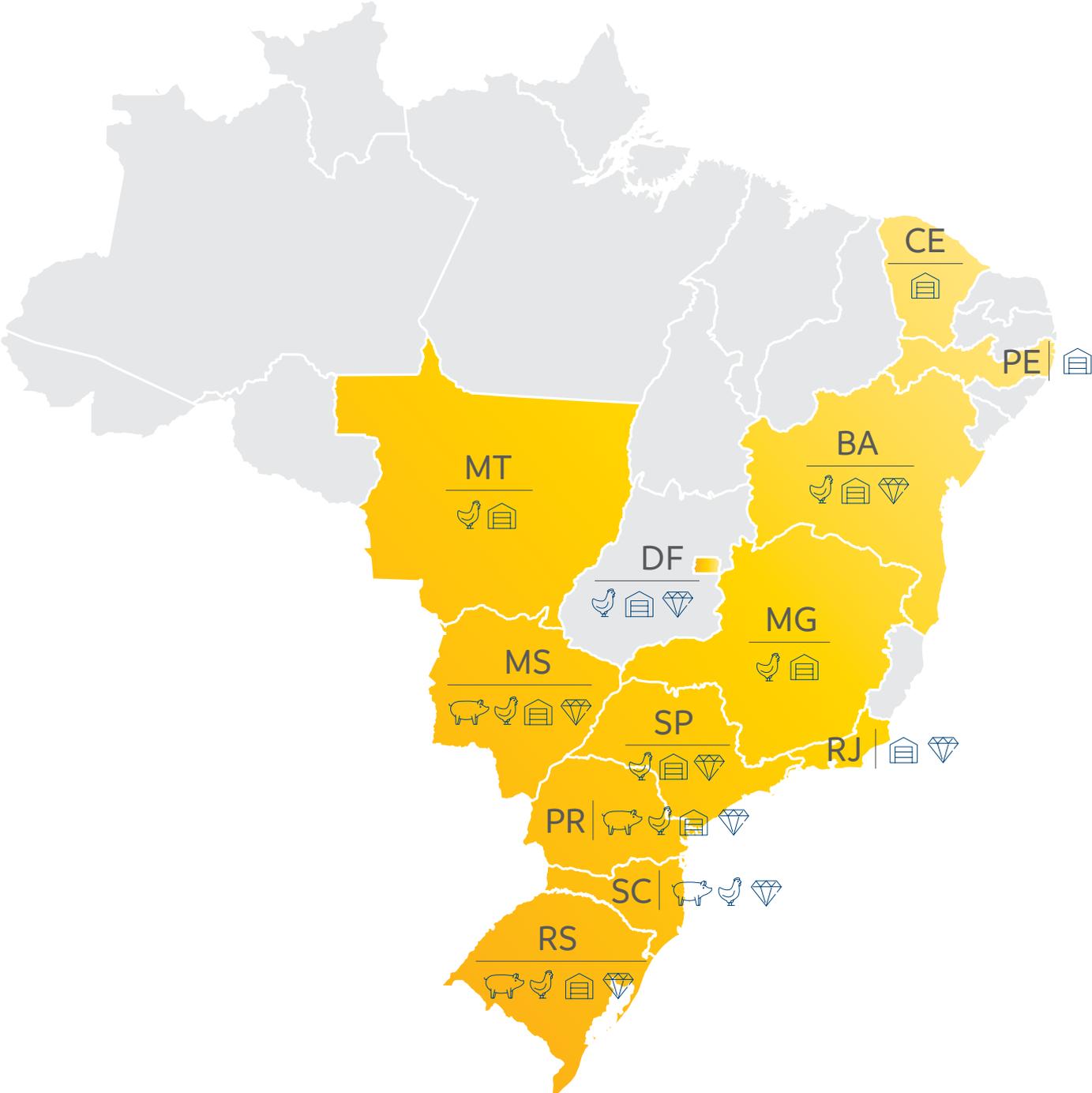
Seara Alimentos GRI 102-2

Main brands GRI 102-2



This unit centralizes JBS business in **the fresh pork and poultry, as well as processed, prepared, industrialized and frozen foodstuffs segments.** It owns **leading brands** in the various markets where it operates and manages 65 production units and 14 distribution centers around Brazil. In 2017, it produced 1.2 billion poultry, 5.1 million pigs and 712,000 tons of prepared products. Approximately half this output is exported to around 125 countries, particularly China, where there is growing demand for pork and chicken in both the retail and food service sectors. Other markets, such as Japan and Europe, have also increased demand for Seara products, particularly highly customized and processed products that offer greater added value. Commercial departments were created in eight different markets as exports make such a significant contribution to the Company's results. Offices were opened in China, Japan, Singapore, Europe (the Netherlands and the UK), Brazil, the United Arab Emirates and South Africa. The Johannesburg (South Africa) office was opened in 2017. Each office is equipped with its own customer service structure.

Production infrastructure GRI 102-7



29

Poultry processing units

8



Pork processing units

21



Added-value processing units

14



Distribution centers

Innovative products gained greater emphasis, offering healthy as well as practical and convenient options.

2017 output:

 **1.2 billion**
head of poultry

 **5 million**
head of pork

 **712,000**
tons of product



In addition to strengthening Seara's commercial approach abroad, its 2017 business strategy also included:

- **Product mix diversification, prioritizing higher added value items.** Innovative products gained greater emphasis, offering healthy as well as practical and convenient options. Some examples are:

- › Lasagna that uses “uniform heating” technology, allowing heat waves from the microwave to penetrate more centrally into the product, which means it warms from the inside out and the heat is distributed evenly across the lasagna. This technology – a new food preparation and consumption experience – does not use preservatives and is available in Bolognese, four cheeses, ham & cheese and chicken versions.
- › The Company also expanded its portfolio of IQF (Individually Quick Frozen) products which are offered in Ziploc packaging so that consumers only need to defrost what they want to eat and return the package to the freezer safely sealed. Products

such as chicken cubes, chicken fillets, chicken breast (sassami) and others are now sold in this format as part of the Seara DaGranja Turma da Mônica range. The product is manually cut to an appropriate size for children and sold in 600g packages.

- › The “Cold Cut Trio” campaign was also launched, focusing on turkey breast, ham and smoked mortadella. The promotional campaign emphasized the fact that Seara offers a number of different options to cater to different tastes via a full range of products across the category.
- **“Seara Gourmet” Portfolio expansion.** The premium product range, which targets gourmet offerings, included a number of new options, such as special German sausages (Weiss, Frankfurt and Schublign) and Bologna Mortadella, which, like traditional Italian mortadella, is handmade using high-quality ingredients. The product is steamed and contains 44% pork, from the Large White breed, and 31% beef as well as Italian spices and white pepper grains. Seara Gourmet was launched in 2016 and sales have shown consistent growth.

- **“Q for Quality” campaign.** Launched in 2017, the Seara communication campaign focused on reinforcing the brand’s main attribute in recent years: its excellence and position as a quality benchmark across the food industry. Using the slogan “quality that will surprise you”, the campaign emphasizes the fact that Seara products offer that little extra: flavor, freshness, delicious aromas, carefully selected ingredients and principally quality.
- **Regional brands.** Seara Alimentos has also invested in its regional brands in order to cater to demand around the country and expand its portfolio. For example, Big Frango, the leading poultry supplier in Parana, is now selling in the states of São Paulo and Minas Gerais, where it is already the second most popular brand. Nhô Bento has also made headway in new markets and is currently Brazil’s top of mind free range chicken. Agrovêneto, a traditional brand from southern Brazil, became the leading chicken brand in Santa Catarina in 2017 with a complete portfolio of fresh products.

In conjunction, these initiatives helped Seara reinforce its position as one of Brazil’s preferred brands. According to a survey by Kantar MillwardBrown, it is the second most recalled brand in the segment. Seara has also increased product penetration in Brazilian homes, rising from 71.5 percentage points in 2015 to 73.5 percentage points in 2017, which is clear evidence of its increasing market share. Across this period, the rate of repetition has hovered around 9.3 percentage points. Both of these figures are from the Kantar WorldPanel.

This performance produced revenues of R\$ 17.5 billion and EBITDA of R\$ 1.6 billion, with the EBITDA margin rising from 8.8% to 9%. This expansion was mainly achieved with support from the positive grain cycle, with corn prices recovering and production costs subsequently falling.

In conjunction, these initiatives helped Seara reinforce its position as one of Brazil’s preferred brands.

A SEARA FAZ QUESTÃO DE COLOCAR UM



DE QUALIDADE
EM TUDO QUE FAZ.



2017 Highlights

Investments. The Company invested R\$ 140 million to expand production capacity and update its technology infrastructure at units in Dourados (MS), which focuses on pork processing, and Lajes (SC), which produces pizza and lasagna.



85%

Increased sales at Seara DaGranja

Seara DaGranja product sales rise

85%. The Seara DaGranja range of chicken, which is produced without using any antibiotics, hormones or preservatives, saw sales rise 85% in 2017, an increase attributed to the global trend towards increasingly healthy products, as well as the Company strategy to expand its portfolio to meet this demand. Today, the Seara DaGranja range includes 18 products, from whole chickens, multipack cuts and zip lock bags with individually frozen products (IQF) to an exclusive range of dishes seasoned using natural ingredients and innovative packaging that can go straight from the freezer to the oven. These products hold international certification from WQS – a leading Brazilian Company in the supplier control and monitoring sector – to guarantee animal welfare and certify that chickens are not given any antibiotics, hormones or preservatives at any

stage of the breeding process, backed by traceability throughout the production chain. Animal feed, which is specially made from 100% vegetable sources, is also strictly controlled and poultry farm climate conditions are monitored.

Preference for coastal shipping.

The volume of cargo Seara transported using coastal shipping between Brazilian ports rose significantly throughout the year. In October, Seara shipped 265 containers, up 125% on the first semester average of 118 containers/month. This figure rose again in December: it shipped 312 containers, up a further 17% on October. Altogether, the Company shipped 2,135 containers using coastal routes, 45% up on the previous year. The Company is increasing its focus on this mode of transportation because of the cost and service advantages it offers. Containers are connected to power outlets and temperatures are monitored until arrival at the destination, helping guarantee product freshness and quality.

Partnerships. Seara has continued its strategy of partnering with global customers, an initiative that leverages the quality of its products, its extensive portfolio and its scope of operations. For example, it has become a major supplier of hamburgers to McDonald's in Brazil, supplying 75% of the chain's requirements, and was also voted supplier of the year. In Japan and Europe, the Company has been building partnerships with food services chains, offering customized products for each specific market. The Company also partners with other global customers, such as McDonald's, Burger King, Subway, Outback, **KFC, Pizza Hut** and Wendy's, among others.

Seara has continued its strategy of partnering with global customers, an initiative that leverages the quality of its products, its extensive portfolio and its scope of operations.

Yum! restaurants awarded Seara its "Standout Product" trophy for the Pizza Hut brand. One of the main reasons for the award was the Company's development of a specific type of pepperoni especially for Pizza Hut. In Brazil, Yum! manages the Taco Bell, KFC and Pizza Hut brands which are all JBS Carnes and Seara customers.

JBS Leather GRI 102-2

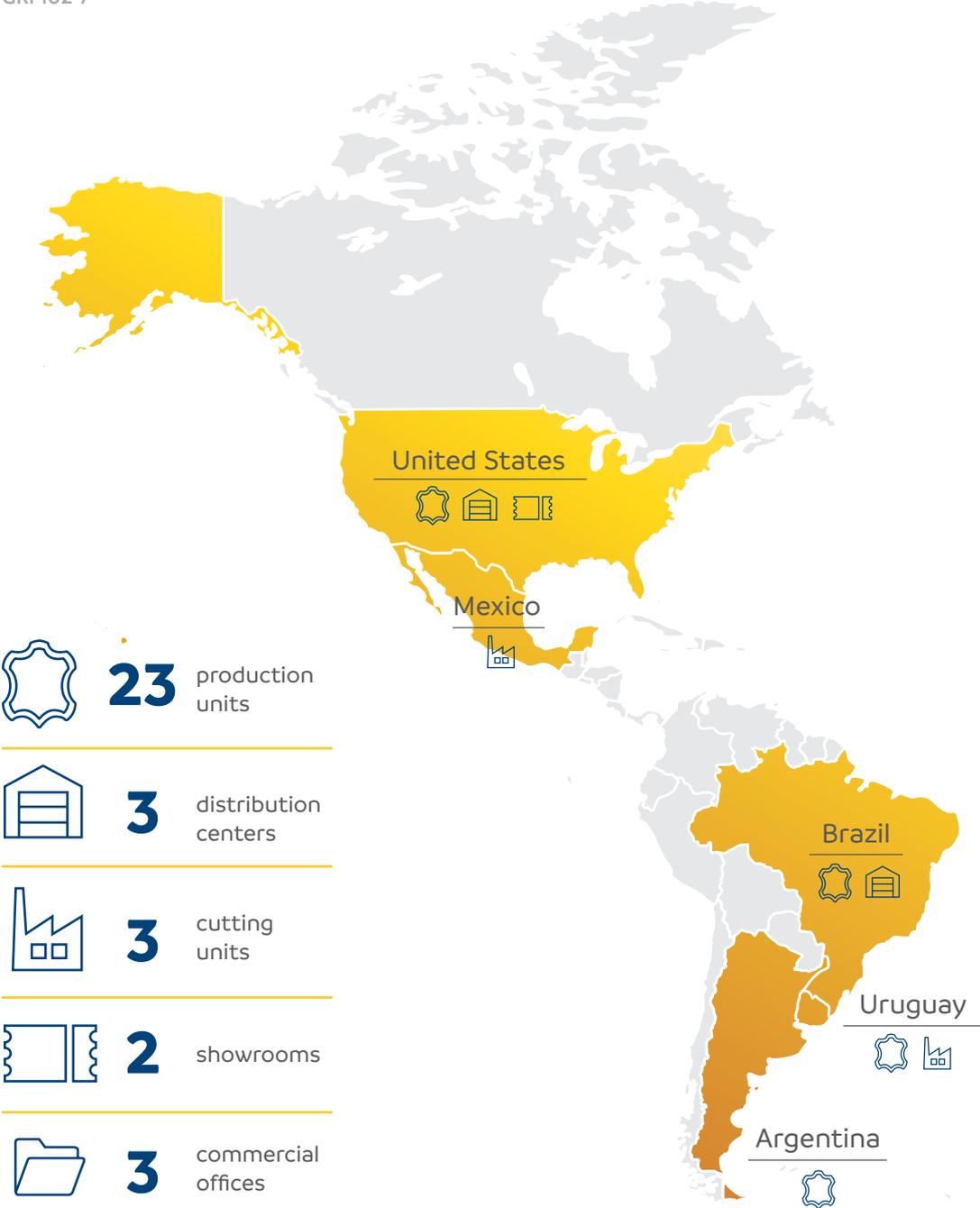
JBS Leather’ 2017 highlights include a significant increase in leather production at its Vietnam unit and its investment in a US tannery.

The Vietnamese unit operated at full capacity throughout the year,

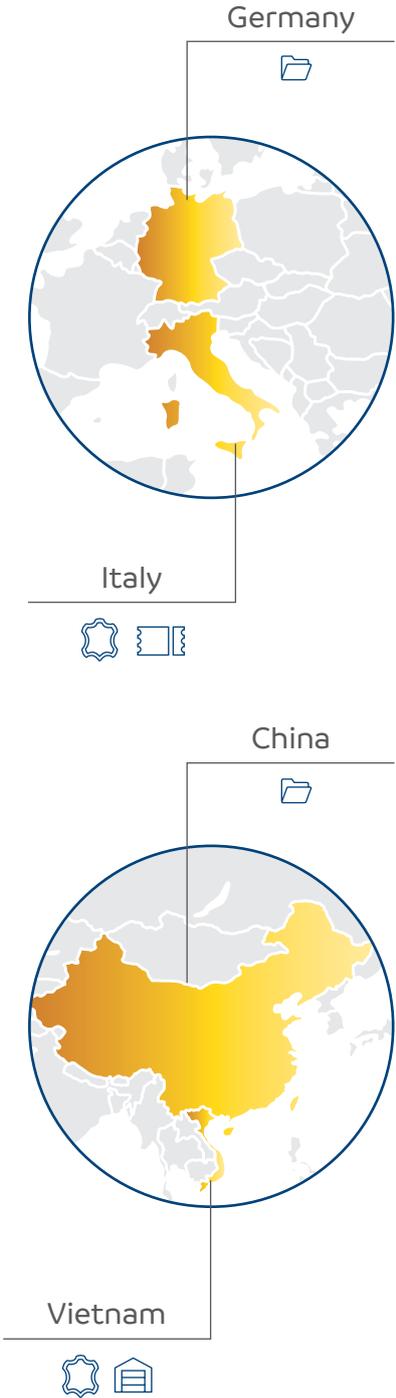
producing 6 million square meters of finished leather. This is over seven times its 2014 volumes, when JBS Leather took over the unit. The leather produced here is marketed to the furniture markets in Asia, Europe and the United States.

Operational platform

GRI 102-7



Unit growth has benefitted from the unit's strategic location. It is based near Ho Chi Minh, the country's largest city and main financial, corporate and trading centre, it is located in a major Asian industrial hub, offering easy logistical access to the region's main leather consumer markets.



JBS is the world's largest producer of wet blue, semi-finished and finished leather. It operates 23 production units, distribution centers and commercial offices in North and South America, Europe and Asia, serving several markets around the world with automotive, furniture and footwear products and artifacts. Synergy with the Company's other operations and close proximity to the world's largest commercial cattle producers affords it privileged access to raw materials. Operations are managed with a high level of control over all processes, which includes a robust traceability system. This system can track products from the time cattle are loaded at farms, through leather removal at meatpacking plants, up to final product delivery, which is a major advantage over any other leather supplier.

In addition to producing leather, the Company also develops leather artifacts and goods and studies trends, which enables JBS Leather to innovate when displaying products in its showroom in High Point, North Carolina (USA). It displays the leather in use, on sofas and armchairs, rather than displaying hides, which is the normal practice throughout the industry. This reflects the approach taken at another showroom the division manages in Arzignano, Italy, which is normal industry practice. The year JBS also introduced its own collections, including the "Authentic Collection", which is focused primarily on the furniture market and leverages raw materials from all Company sources - South America, North America and Europe - alongside products from all its global manufacturing bases (Asia and Europe).

JBS New Business GRI 102-2

JBS New Business is responsible for JBS operations that are directly and indirectly linked to the Company's core business. The Company transforms byproducts and waste from processed beef, pork and chicken into high added-value products, generating value for the Company and developing more sustainable production methods for the entire group.

With ten fully independent business units, it provides JBS with certain competitive advantages and one of its main attributes is the closed cycle, which means it can reintroduce these products onto the market, leading to significant cost savings and increasing sustainability throughout the production chain. The JBS New Business structure currently includes 12 plants and 49 affiliates.

Based on this strategy, in 2017 the Company announced it was launching another fertilizer product

made using organic waste from its factories. The new business will receive around R\$ 30 million in investment and is expected to start operating in 2018, making it JBS Brazil's first food Company to enter the agricultural market - the fertilizers can be used on major crops including soybeans, corn, coffee and cotton, or on vegetable and fruit plantations. This business will also benefit Brazilian farmers who currently import much of their fertilizers.

The fertilizer unit will stand alongside the other 10 businesses JBS New Business has built. They all help to develop more sustainable production methods across the group as they focus on solutions that range from waste recycling to tallow-based biodiesel, as well as products such as collagen or hygiene and cleaning materials. These products are sold in Brazil and exported to over 20 countries.

The JBS New Business structure currently includes 12 plants and 49 affiliates.

A JBS é líder global: GRI 102-7



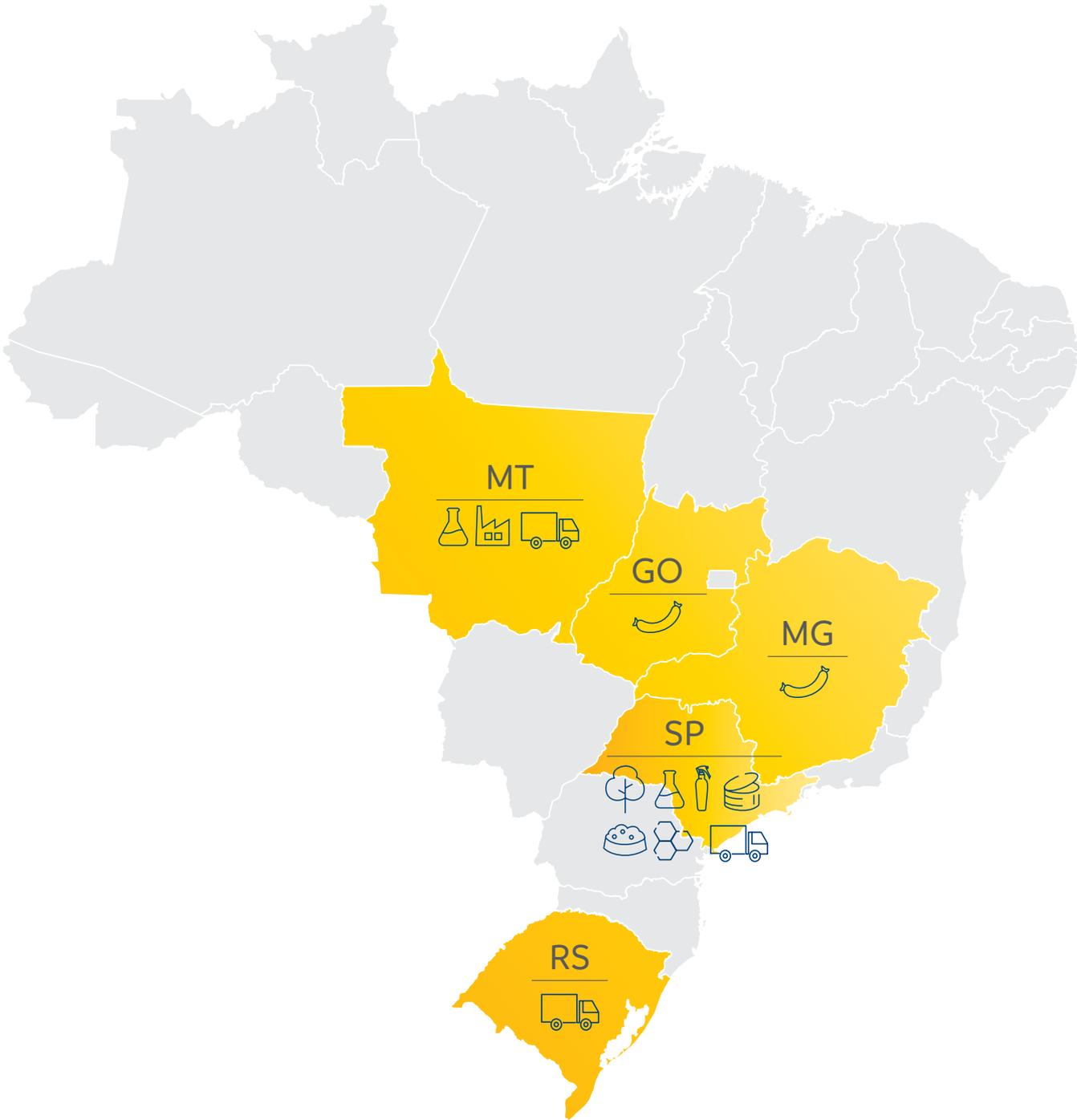
Verticalized **biodiesel** production using **beef tallow**

Manufacture and supply of **animal-based casings**



Production of **beef collagen**

Operational Platform GRI 102-7



 Environmental

 New Business Complex

 Pet Food

 Biodiesel

 Hygiene and Cleaning

 Collagen

 Casings

 Can Plant

 Transport

Making full use of raw materials

Meat is the main product we obtain from cattle and chicken, but not the only one. These animals also provide raw materials for other value-added products. Fat, bone, blood, feathers, skin and intestines can all be used to make a wide variety of products, like shampoo, because metrics, soap, glass, animal feed and fertilizer. They can also be used to produce pharmaceuticals, clothing and accessories or as a renewable source of energy. Estimates show that one steer can generate raw material for 260 different industries.

For example, beef tallow can be used to produce biodiesel or cleaning and hygiene products. Intestines are transformed into casings, which is the name used for the membrane used to wrap items like sausages. Skin is used to produce collagen. Internal organs, like the intestinal mucosa, bile and trachea can be used to make anticoagulants as well as drugs to control

cholesterol, arthritis and arthrosis. Cattle or chicken manure generates biogas after it decomposes. By using every part of each steer or bird, the Company reduces waste and minimizes its impact on the environment.

In Brazil, JBS has a specific business unit focusing on these products: JBS New Business⁵ - Using cutting-edge technology and highly trained teams, the unit focuses on developing products and solutions that are used in-house and exported to over 20 countries.

At our US operations, co-products are also reused either to produce tallow and flours or as raw material sold to other companies, like animal feed manufacturers.

⁵ <http://jbs.com.br/novos-negocios-int/>

CATTLE AS A RAW MATERIAL

58%

of the carcass is sent for deboning and transformed into meat



17%

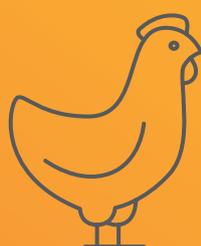
is converted into leather



25%

is used for other purposes, such as cosmetics, rubber, enzyme and animal and human supplements

POULTRY AS A RAW MATERIAL



80%

80% of the bird is used as food

20%

is used for animal feed products, detergent, fertilizers and drugs, among other products



JBS Environmental – This Company is focused on the circular economy and develops products and solutions for industrial waste such as plastic, wood and metal. **Some of these inputs are recycled and return to JBS industrial plants** as trash bags, tarpaulins, bags or plastic coverings (<http://www.jbsambiental.com.br/>).

The Company is also responsible for managing and processing non-recyclable solid waste, disposing of it correctly and obtaining the requisite legal certificates. It employs a smart system to track waste from source to final disposal. In 2017, it handled around 26,000 tons of solid waste, including plastics, metals, paper and hazardous and non-recyclable materials.

In 2017, JBS Environmental increased its product range and now also manufactures trays and plastic covers for leathers, investing around R\$ 3.5 million to increase the infrastructure at its plant in Lins (SP). However, the process of creating this new area began two years previously,

when the division **began adapting to Anvisa's Best Manufacturing Practices (BMPs)** - a range of measures companies (particularly in the foodstuff industry) should adopt in order to guarantee health quality and product compliance with Anvisa's technical regulations. These rules include recommendations for everything from personal hygiene and cleaning the workplace, to detailed written procedures for product processing and team training.

JBS Environmental has nine waste processing centers in the states of São Paulo, Rio de Janeiro, Goiás and Mato Grosso do Sul.

JBS Biodiesel – Created in 2007, JBS Biodiesel is the world's largest verticalized producer of biodiesel using beef tallow. The goal of the business is to properly process and add value to tallow, the main byproduct from beef processing. As the biodiesel program has evolved, other byproducts have also been used to make biofuel.

JBS Environmental has nine waste processing centers in the states of São Paulo, Rio de Janeiro, Goiás and Mato Grosso do Sul.



With two factories, located in Campo Verde (MT) and Lins (SP), JBS Biodiesel produced 210 million liters of biodiesel in 2017. 20 million liters were made using recycled cooking oil. In 2017, partnering with JBS Environmental, the Company created the Friendly Oil project to start using cooking oil as a raw material and increase society's awareness of the importance of proper used oil disposal. The project collected around 2 million liters of cooking oil throughout the year. Estimates show that each liter collected avoids contaminating 20,000 to 25,000 of water, or avoids treatment by sewage companies, reducing costs for the government and taxpayers. The program was successful, attracting a R\$ 5.5 million investment at the Lins plant, where the cooking oil is processed, to expand the initiative.

The biodiesel unit also supports family farming through the Social Fuel Seal, a federal government program – which

JBS has supported for nine years – that ensures small-scale family farmers and livestock breeders are able to sell their produce and livestock to biodiesel companies. In 2016, JBS Biodiesel took steps to extend these benefits to small-scale livestock breeders in the São Miguel do Guaporé (RO). In 2017, it purchased 1.9 thousand head of cattle produced by family farmers based in the region, generating R\$ 3.5 in revenues for around 100 local families. Contracts are already in place to purchase over 6,000 head of cattle per year in 2018 and 2019 and the target is to reach 50,000 head of cattle every two years. This initiative will further support social and economic development in farming communities throughout the country and create additional opportunities for the Company, as beef tallow is the second most important source of raw material for the Brazilian biodiesel industry.



JBS Natural Casings – The world’s largest producer of natural cattle-based casings in the world operates to processing units in Brazil: Goiânia (GO) and Ituiutaba (MG). These units supply some of the biggest companies in the world, serving highly demanding customers and markets for a variety of casing products, such as salami and sausages. Internationally recognized because of their supply capabilities as well as product quality and traceability, all raw materials are controlled from source and selected and calibrated by specialists, which is all part of their market-leading structure. Some of the business unit’s output includes non-food products, such as raw materials used to manufacture cords for musical instruments, tennis rackets and surgical stitches.

Novaprom Food Ingredients – A global leader in beef collagen, was founded in 2002 and pioneered manufacturing of powdered and fiber collagen in

Brazil; it can produce 5000 tons of collagen and 4000 tons of functional ingredients for industrialized products annually. The business unit supplies a number of industries, such as fresh processed meat products, baking, cosmetics and pharmaceutical sectors from its unit in Guaiçara (SP). In 2017, the business unit celebrated its 15th anniversary and saw exports rise 68% as it opened up new markets and reached customers in the Americas, Asia, Africa, Oceania and Europe.

JBS Metal Packaging – With two factories in the interior of São Paulo, in Lins and Barretos, this business unit produces steel cans for products that need protection from physical, chemical and biological interactions. The Company therefore **serves the food industry and other areas, such as the aerosol sector**. It is capable of producing approximately 1 billion cans annually, making it **one of the biggest can manufacturers in Latin America**.



210
million liters

of biodiesel were produced in two factories located in Campo Verde (MT) and Lins (SP).

JBS Personal Hygiene & Cleaning Products is the biggest producer of liquid and bar soaps in the B2B segment, its products are supplied to some of Brazil's foremost beauty and hygiene brands.

In recent years, JBS Metal Packaging has invested over R\$ 48 million to launch new products and increase production capacity; in 2017, it also invested to acquire three new production lines for its unit in Lins (SP). By expanding its manufacturing structure, it has been able to start making cans for luncheon meats, sardines and tuna (extruded) and increase its current capacity for the vegetable and tomato segment, among others.

Metal packaging is not only high quality and robust, is also considered highly sustainable: it is **100% recyclable** and can be returned to market without downcycling, which involves transforming it into a lower value product by recycling.

JBS Personal Hygiene & Cleaning Products – The biggest producer of liquid and bar soaps in the B2B segment, its products are supplied to some of Brazil's foremost beauty and hygiene brands. Beginning in 2016 and moving quickly ahead in 2017, the business unit has invested in industrial automation as a strategy to improve its business: it purchased 12 robots, five used to box products and seven to stack boxes on wooden pallets and they all include features which can be used to monitor production line yields. The unit's goal is to reduce fixed costs and subsequently offer customers even more competitive prices.

With a production unit in Lins (SP), it also produces base mass for vegetable or animal and glycerin based soaps. The unit not only serves major brands in Brazil, it has customers in Nigeria, Cape Verde, Angola, Cuba, Argentina, Peru, Colombia, Paraguay, Venezuela and Uruguay.

JBS Trading – Centralizes sales of raw materials to the food, hygiene, cleaning and biodiesel industries. It manages products such as vegetables oils, animal fats and chemicals. It is responsible for selling 35% of the tallow produced in Brazil and in 2017 it imported and exported around 110,000 tons of products.

JBS Carriers – This unit serves JBS and outside customers via its fleet of 1,100 trucks, all of which are tracked by satellite. The business unit has 35 affiliates located around Brazil and serves the entire country, particularly the Mid-West, Southeast, South and North regions, providing logistics services to a variety of industries and guaranteeing product integrity.

JBS Carriers renewed part of its fleet in 2017 and invested in monitoring systems:

- It purchased 273 trucks, updating around 25% of its fleet. Its R\$ 57 million investment was focused on guaranteeing cost competitiveness and increasing team members safety.

- It renewed the Animal Welfare cattle truck fleet, purchasing more than 100 new trucks capable of transporting 54 head of cattle each while reducing diesel consumption.
- It installed telemetry systems on all 1,100 trucks across the fleet. The technology, which can be operated by satellite or mobile phone, provides real-time driver performance controls and helps reduce operating costs and traffic fines. By increasing predictability, this tool helps meet delivery deadlines, increase safety and ensure cargoes arrive intact. The next challenge will be to use the tracking information to predict the possible mechanical problems. Predictive maintenance will create savings, reduce material wastage and increase the trucks' working life.

- It adopted a new tire control system. The system, called TOP 10 Tire Management, monitors tires throughout their lifecycle, from purchase to disposal. In addition to minimizing environmental impacts, this tool helps reduce fleet maintenance costs by between 15 and 20%.

TRP Preowned Trucks – This unit is responsible for negotiating new vehicle purchases for JBS companies and selling an average of 2,000 used trucks and trailers a year.

For the third consecutive year, JBS Carriers received the “Right Way” award, which is an agreement among businesses to combat the sexual exploitation of children and adolescents on Brazilian highways. This award for the unit’s compliance with certain program criteria, such as the organization of Team Members awareness campaigns.

Human Resources Management – South America

As guardians of the Company Culture, JBS's Human Resources areas focus on strategies to promote corporate values across the Company. For example, the Company Culture is the basis for Team Members Performance Assessments, new staff hiring and all area strategies.

At its South American businesses, the Human Resources Department is responsible for all team members hiring, retention and development at JBS Brazil – including JBS Carnes, JBS Leather and JBS New Business - and Seara.

At the end of 2017, the platform had around 120,000 team members, distributed as follows:

Business units	Team members
JBS Brazil (includes JBS Carnes, JBS Leather and JBS New Business)	+ 49,000
Seara	+ 73,000

- All team members are covered by collective bargaining agreements.
- All have full-time contracts with the Company.
- All units respect team members' right to unionize or organize.
- JBS does not allow or tolerate child or forced labor.



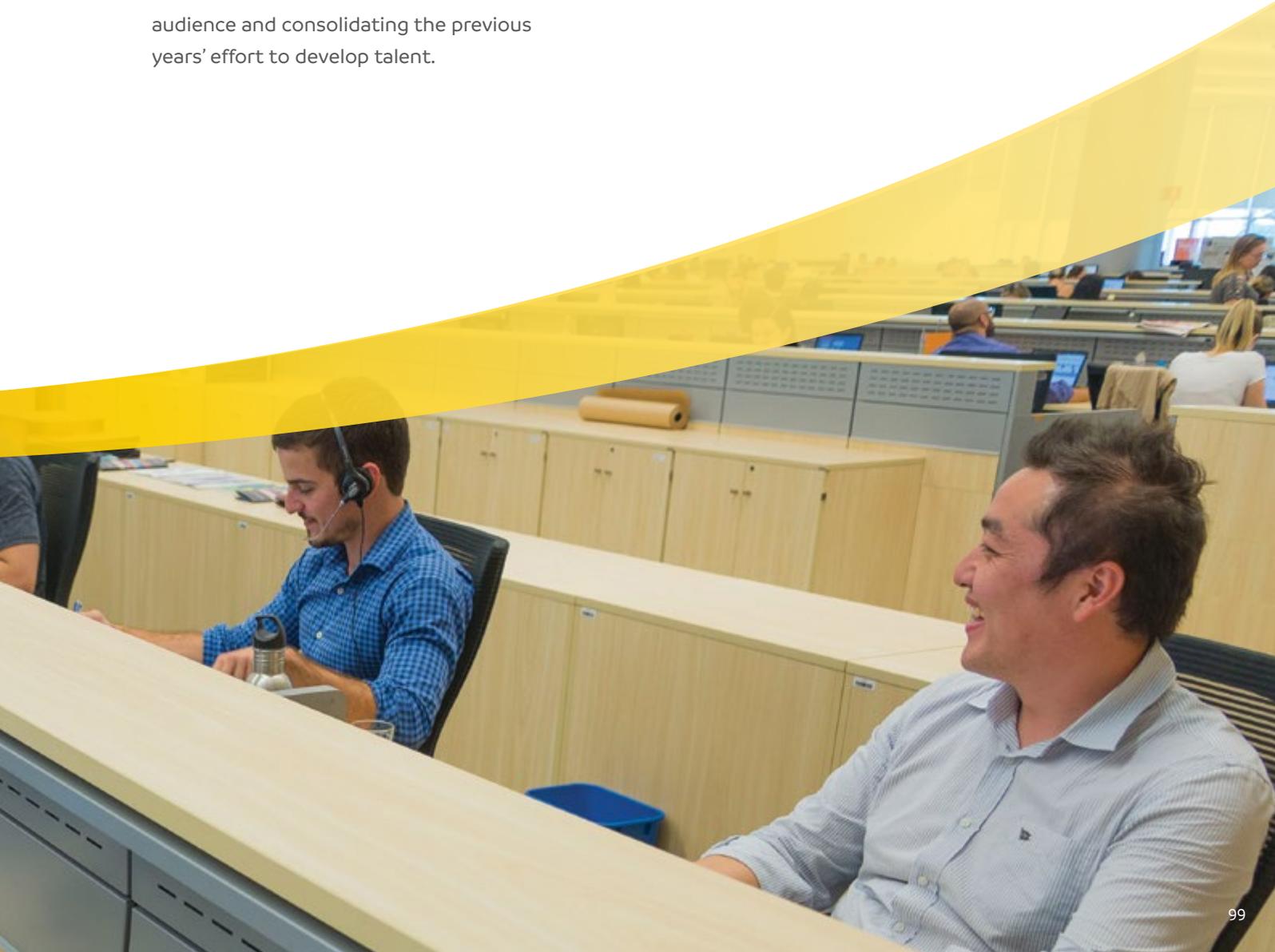
Inclusion is a major issue at JBS. For example, it works hard to attract people with disabilities. Here, the Company works alongside Senai (the National Industrial Learning Service) and the Office of the Public Prosecutor to map opportunities, raise awareness at factories and work with nearby community. These initiatives help the Company ensure legal compliance and fulfill its social commitments.

At the end of 2017, the Company had 2,462 disabled team members. For example, 83% of Seara plants hired team members with disabilities. The target is for all units to hire disabled team members in 2018.

In 2017, the South America HR platform was focused on reinforcing communication channels with this audience and consolidating the previous years' effort to develop talent.



At its South American businesses, the Human Resources Department is responsible for all team members hiring, retention and development at JBS Brazil.





With this in mind, it developed a number of initiatives throughout the year, including:

Leadership Training

- **Leadership Academy.** A career development program for leaders with outstanding performance assessments. The program is intended to increase knowledge and skills and ready these team members for new challenges at JBS. 1,065 team members joined the program in 2017, divided into 47 groups.
- **In-house Talent.** This project aims to develop and train team members who show potential for future supervisory positions. People looking for new challenges at the Company can contact their managers and enroll in the project. The program initially focused on Carnes and Seara, but was extended

to Leather and New Business in 2016. The training process takes between six-eight months and in addition to leadership issues, it also addresses technical areas and routine management matters. 70 team members were trained in 2016 and another 27 are still on the course. At Seara, the program was expanded from just the operational area to include the commercial and logistics areas.

Technical training

- **Seara University** – This is a distance learning platform available to approximately 7,000 team members, including administrative and technical as well as management staff. The platform offers various career development tracks and looks at operational and administrative activities.



- **Quality Academy.** This is a development program for Quality personnel at Seara.
- **Labor Lawyer.** This course was created in 2016 to train labor lawyers. It is for attorneys who graduated at least two years previously and involves a 90-day training course at JBS headquarters in Sao Paulo. During the course, trainees will gain theoretical and practical experience and receive behavioral and technical training and refresher courses on legal issues. 12 attorneys out of the 1620 who enrolled on the program concluded the course and are now working in various regions around the country.
- **Trainee.** This program has a more industrial focus and selects youngsters who show potential (and who have graduated from university within the past two years) to join the Company's business units. The idea is to help them develop and produce leaders capable of managing teams and processes. The program was revisited in 2017 and is now applied regionally. This means that talent hiring is now carried out locally by factories. It attracted 6000 candidates to the JBS Leather and JBS New Business units running the program. 11 of these candidates were selected. The program takes a year to complete.

- **Valued Youth.** This is an initiative created to keep university students better informed about JBS. It includes the Valued Youth platform (jovensdevalorjbs.com.br) that had 9,416 registered users in 2016, called the JBS at Uni program, which offers talks at universities about JBS values - it held 34 talks and visits to universities throughout the year, speaking to 3,300 students - and the JBS Values' Immersion program, a project that selects students to find out more about the Company following a social media competition. Over 1,200 students enrolled for the program. 20 were selected to visit JBS headquarters in Sao Paulo. The initiative also has a Facebook profile, which has published over 3,000 posts and has around 37,000 followers.



360° performance assessment methodology. Based on meritocracy, it is used to diagnose and analyze professional attitudes and interpersonal relationships.

Performance Review

Based on meritocracy, the 360° methodology is used to diagnose and analyze professional attitudes and interpersonal relationships. In addition to revealing talent that could later take up management responsibilities within the Company, the assessment results are used as a benchmark for future training and development programs. All team members at the JBS head office and production unit leaders (coordinators, supervisors, managers and directors) undergo assessment. In 2017, 6,624 team members from all businesses were evaluated.

Stakeholder Relationships GRI 102-40, 102-42, 102-43

JBS maintains communications channels with various target markets:

Audience	Channels
In-house	<ul style="list-style-type: none"> • JBS Intranet - gathering news and information about the Company and HR-related information. • Learn More - bi-weekly newsletter • Stay Tuned - leadership newsletter • HR Reports, Always Do The It Right News, Releases, e-mail marketing, JBS TV, among others - aimed at informing the in-house audience about events involving JBS businesses and operations. • Ombudsman - intended to deal with day-to-day work-related matters, such as criticism, questions and suggestions about internal processes and procedures. • JBS Ethics Line* - managed by a specialist third-party Company, the hotline receives reports of misconduct or situations that may imply a violation of the Code of Ethics and Conduct.
Customers	<ul style="list-style-type: none"> • Customer Services 2.0 (JBS Carnes), adding an online, interactive channel alongside its traditional customer service system, available at http://www.friboi.com.br • 0800 JBS Carnes: 0800 11 5057 • Seara Customer Service available via a toll-free number (0800 47 2425), e-mail and social media.
Media	<ul style="list-style-type: none"> • Specialized support services in each business • Press room (http://jbs.com.br/imprensa/)
Shareholders and investors	<ul style="list-style-type: none"> • IR areas in Brazil and the US • IR website • Quarterly results telephone conferences • JBS Day • Visits to JBS facilities
Suppliers	<ul style="list-style-type: none"> • JBS Connection (http://www.conexaojbs.com.br/)

**The JBS Ethics Line is available to all of the Company's stakeholders. The line is available to team members and can also be reached by customers, suppliers, investors, shareholders and other stakeholders 24 hours a day, 7 days a week, in Portuguese, English or Spanish. Complaints are made via the 0800 377 8055 number. For further information, visit www.linhaeticajbs.com.br*

Aimed at domestic customers and consumers, the **Seara Customer Service** center is available on a toll-free number and six internal email channels covering the Seara, Macedo, Rezende, Massa Leve, Doriana, Frigor Hans, Big Frango and other brands. It also responds via Reclame Aqui and supports social media interactions. In 2017, these channels received an average of over 54 thousand contacts per month. Customer support interactions covered several topics, such as product and services queries, compliments, criticism and customer dissatisfaction, among other issues. The Customer Service system generates daily reports that are sent to factory leaders for follow-up.

One differential in JBS' customer and supplier support interactions is the **QR Code**. These codes are included on Friboi meat packaging and provide information about producer farms (name and location). Consumers simply scan the code using a smartphone or visit the www.confiancadesdeorigemjbs.com.br website, where they insert the manufacturing date and FIS (Federal Inspection Service) number.

One differential in JBS' customer and supplier support interactions is the QR Code. These codes are included on Friboi meat packaging and provide information about producer farms (name and location).



JBS is the main sponsor of the Germinare Institute. It is a nonprofit organization that offers children and teenagers a high-quality, full-time, education in a business school setting at no cost to young people with development potential.

Communities

Due to the scale and scope of operations, JBS has an important role to play creating direct and indirect jobs in many locations. By contributing to development across these regions, the Company's activities have a very significant social impact.

The Company also supports education and training courses for children and youngsters, professional training courses for teenagers and adults and training and social inclusion for the disabled.

Germinare Institute – JBS is the main sponsor of the Germinare Institute. It is a nonprofit organization that offers children and teenagers a high-quality, full-time, education in a business school setting at no cost



to young people with development potential. The Institute's main differential is its methodology, which has been approved by the Ministry of Education, supplementing the traditional curriculum using themes and activities to encourage students to develop an entrepreneurial outlook and teach them about business management. The goal here is to create future leaders. It offers free, high-quality and full-time education to children and adolescents between 12 and 18 years of age (students from the 6th year of Elementary School to the 3rd year of High School). Ranked 9th on the city of São Paulo schools ranking, according to the National Middle School Exam (ENEM), which monitors learning achievement among students concluding high school in Brazil, it is one of the top 100 schools nationwide. The institution ended 2017 with 485 students enrolled (<http://www.escolagerminare.org.br/>).

Recycling industry training – JBS is committed to support for professional training in the recycling industry and raising the incomes of team members who engage in these environmental activities. The Company support several initiatives aimed at generating social, economic and environmental benefits that are in line with the National Solid Waste Policy, including training recyclable waste collectors and improving cooperatives and associations through investments in fixed assets and equipment. In 2017, JBS extended these initiatives to recyclable material collector cooperatives in Mato Grosso do Sul, adding to those it already supports in the Paraná and Sao Paulo states.

Special Chefs – This initiative focuses on increasing social inclusion for youngsters with Down's Syndrome through gastronomy and has been sponsored by Friboi since 2013. The Institution's campaigns include free workshops with well-known chefs, who teach youngsters recipes and how to use ingredients, as part of an effort to transform cooking into a tool to increase their independence, self-esteem and motor coordination.

JBS North America GRI 102-2

In 2017, JBS's US and Australia operations celebrated their 10th anniversary. The Company, which opened up a number of new markets after acquiring Swift, is now a major global player in

the beef, poultry, lamb and pork segments. It has operations in North America, Europe and Oceania and is one of the top two companies in each of its markets. **GRI 102-6, 102-7**

- ▶ **2010**
- The Company expanded its operations in Australia when it acquired Tatiara Meats, with its extensive lamb operations, and Rockdale Beef.
 - Acquires McElhaney Feedyard in Welton, JBS USA: Arizona (USA), expanding its feedlot operations.

JBS USA: A 10-year journey of quality products and leadership GRI 102-10

▶ **2007**

Swift & Company acquisition.

This transaction kicked off JBS activities in the US and Australia, in the beef, pork and lamb markets.



▶ **2008**

- The Company expanded into Australia following acquisition of the Tasman Group, which has three beef processing plants in Victoria and another three in Tasmania.
- The Company expanded its US beef business when it acquired the Smithfield Beef Group, including its Five Rivers feedlot operations. This transaction increased JBS's footprint across the US, adding four slaughterhouses in the northeast and southeast of the US to those already operating in the country.

▶ **2009**

- The Company entered the poultry market when it acquired a controlling stake in the Pilgrim's Pride Corporation, which was the second-largest US Company in the sector at the time, with operations in Mexico and Puerto Rico as well.





▶ 2012

- JBS increased its Pilgrim's Pride shareholding to 75.3%.
- It acquired XL Foods, its first foray into the Canadian beef market.



▶ 2015

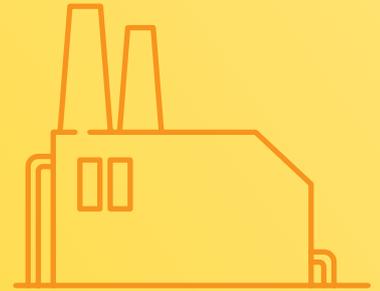
- Pilgrim's Pride acquired Tyson, in Mexico, which included three vertically integrated processing plants across the country.
- In the US, it acquired the Cargill pork business, which included two processing

plants in Iowa and Illinois, five genetic units, two in Missouri and the others in Arkansas, Iowa and Texas, as well as four pork farms, two in Arkansas and one each in Oklahoma and Texas.



▶ 2016

- The Company acquired a controlling stake (51% of the equity) in Scott Technology Ltd., based in New Zealand, and focused on developing deboning technologies for cattle and sheep and other solutions.



▶ 2014

- It expanded its US case ready operations when it took over Alex Lee, in North Carolina, and acquired Fresh&Easy, a case ready factory based in California.
- It acquired a controlling stake in Andrews Meat Industries, located in Sydney, Australia, which focuses on premium red meat products for the food service and export markets.

▶ 2017

- JBS USA acquires Plumrose, which makes bacon, ham and other processed meat products. The acquisition included five case ready food plants and two distribution centers in the US.
- Pilgrim's Pride acquired the GNP Company, a leading supplier of chicken products with premium brands in the US Midwest. The transaction included two chicken processing plants in Minnesota and Wisconsin, as well as an added value processing unit in Minnesota.
- Pilgrim's Pride also acquired Moy Park, the largest privately held Company in Northern Ireland and a leading poultry producer in Europe. After absorbing both operations – GNP and Moy Park – **Pilgrims became the world's largest poultry Company, capable of producing 8.6 million birds a day. It is also the world's leading producer of organic chicken.**

In 2017, the best period for the Company, business performance improved in both absolute and percentage terms, posting record figures for beef and pork.

2017, the best results in a decade

In 2017, JBS USA had the best year in a decade in North America and Oceania: business performance improved in both absolute and percentage terms, posting record figures for beef and pork. It performed strongly in the poultry sector and became the world's leading poultry supplier through the Pilgrim's Pride Corporation, which achieved this position after acquiring Moy Park, in Northern Ireland. Pilgrim's is also the world's largest producer of organic chicken.

Other acquisitions also took place throughout the year, in line with its market consolidation and portfolio diversification strategy. Plumrose, a major producer of ham, bacon and other products in the US, was folded into the business, as was GNP Company, a US chicken producer integrated into the Pilgrim's portfolio.

Following these acquisitions, the JBS USA portfolio of assets changed: the Five Rivers Cattle Feeding feedlot operations were sold in Canada and the US as part of the JBS S.A. divestment plan disclosed to the market on June 20, 2017 (<http://jbss.infoinvest.com.br/ptb/4182/Fato20Relevante20-20Plano20de20Desinvestimento.pdf>).

JBS USA therefore ended the year managing the JBS USA Beef business, which focuses on beef production in the US, Canada Australia, JBS Pork, which focuses on producing pork and added value products in the US, and Pilgrim's. All of the businesses are run on a strategy that prioritizes ongoing performance improvements, product and service quality and building partnerships with customers.



Construction of the Global Food Innovation Center at the University of Colorado

One of the highlights for JBS USA last year was innovation and this included investing in the Global Food Innovation Center at the Colorado State University (CSU). This teaching and research unit is the outcome of a partnership between the Company and University and is intended to further advance development

of best practices in food safety, meat sciences and animal welfare. The Center will also be a venue for industry dialogue and collaboration, which will include ongoing education and training as well as equipment development and testing.



JBS USA Beef

GRI 102-2

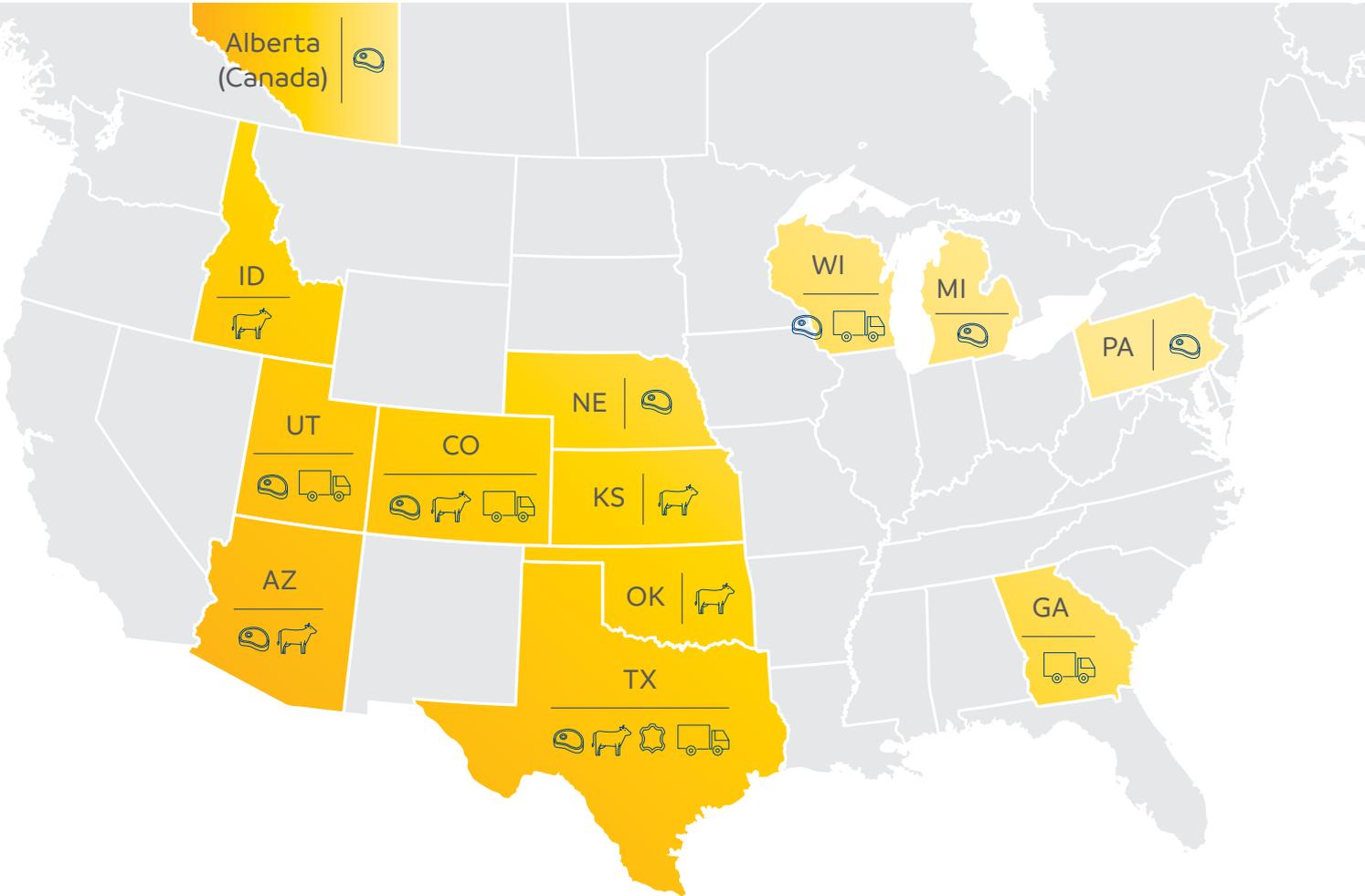
This unit includes JBS beef operations in the US, Canada and Australia.

The Company offers a wide and varied portfolio of fresh products under well-known, leading brands in the US and Canada sold locally and for export. It has 19 units producing for the domestic and export markets.

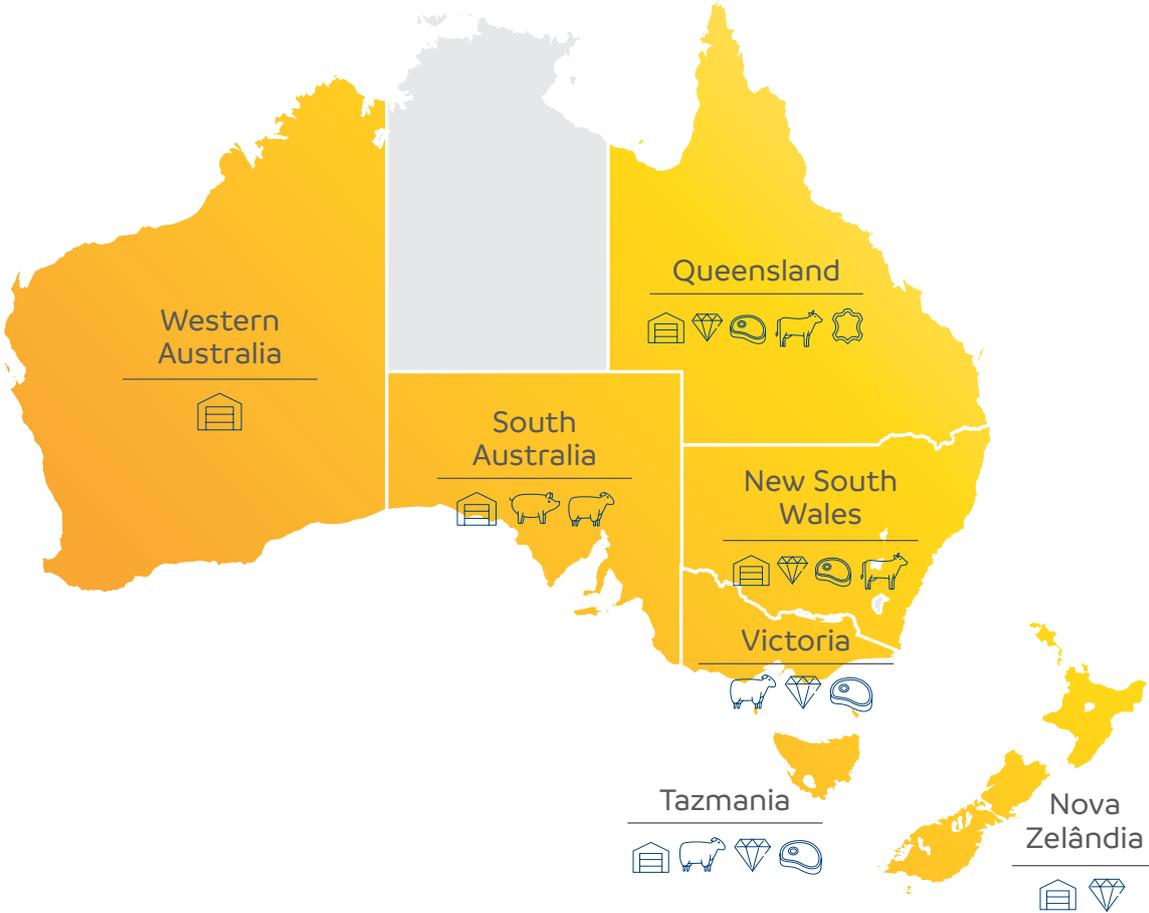
In turn, JBS Australia is the country's biggest animal protein processing Company. It runs 13 strategically located processing units and five feedlots across the country and is capable of processing more than 8000 head of cattle per day. Its products are exported to over 80 countries and it also has a significant share of the domestic beef and lamb markets.

It exports to more than **80** countries.

Operational Structure GRI 102-7 United States and Canada



Australia and New Zealand



19
Beef processing units

6
Feedlots

2
Leather units

6
Logistics units

8
Case ready product units

8
Distribution centers

3
Lamb units

1
Pork unit





Production capacity GRI 102-7

- **42,400 heads a day**
 - › 28,000 in the USA
 - › 4,200 in Canada
 - › 10,200 in Australia
- **12,900 hides a day**
 - › 5,000 in the USA
 - › 7,900 in Australia
- **6 feedlots**
 - › 6 in Australia / Capacity to process 150,000 heads
- **8 distribution centers**
 - › 7 DCs in Australia
 - › 1 DC in New Zealand
 - › 6 logistics units in the US

Another JBS USA asset in Australia is Primo Smallgoods, the leading local maker of ham, sausage and bacon, focusing on higher added value items that are developed through investment in research and development. Its operational structure is spread across Australia and New Zealand and includes

meatpacking plants, processing units, distribution centers and retail stores.

JBS USA Beef focuses on continuously improving business performance, paying special attention to product and service quality. The Company also works hard to build partnerships and add value to customer businesses.

Record Results

Jointly, in 2017, the North America and Oceania operations generated a record US\$ 21.7 billion, compared with US\$ 20.6 billion in 2016. EBITDA was US\$ 1.308 billion, 177% up year on year, and the EBITDA margin was 6%.

These results were attributed to three factors. First was market conditions, as cattle supplies increased in the US and Canada alongside strong demand for protein on the back of rising employment and incomes in North America. Operational efficiency also increased across the Company and improved quality, increasing performance ahead of its peers. This is the business strategy adopted by the Company, which focuses on quality, service and partnering with the Company's best customers while working to expand the product mix in both North America and Oceania, including a growing number of added value and more profitable options in its portfolio.

In Australia, JBS USA Beef is still going through a period of herd rebuilding.

This meant that supply conditions made 2017 a challenging year in Oceania for both cattle and lamb operations. However, this is expected to change in 2018, especially in the second half of the year, and improve further over the two following years.

Robotics for lamb deboning

One of last year's highlights was the lamb deboning process, which came online in 2017 at the Brooklyn, Australia lamb unit. The process uses robotic technology, operates at high speed and is able to debone 10 carcasses/minute. US\$15.7 million was invested in the new, fully automated production line, which was developed by Scott Technology, a Company from New Zealand controlled by JBS. The robotic technology developed for this project uses DEXA (dual energy x-rays) which are able to measure the percentage of lean meat, fatty meat and bone in each lamb carcass. This information can also help producers adjust or change animal feed or reproductive practices and obtain better results.

Jointly, in 2017, the North America and Oceania operations generated a record US\$ 21.7 billion, compared with US\$ 20.6 billion in 2016.

Mains US brands GRI 102-2



Main Australian brands GRI 102-2

Beef



Lamb



Processed foods



JBS USA Pork

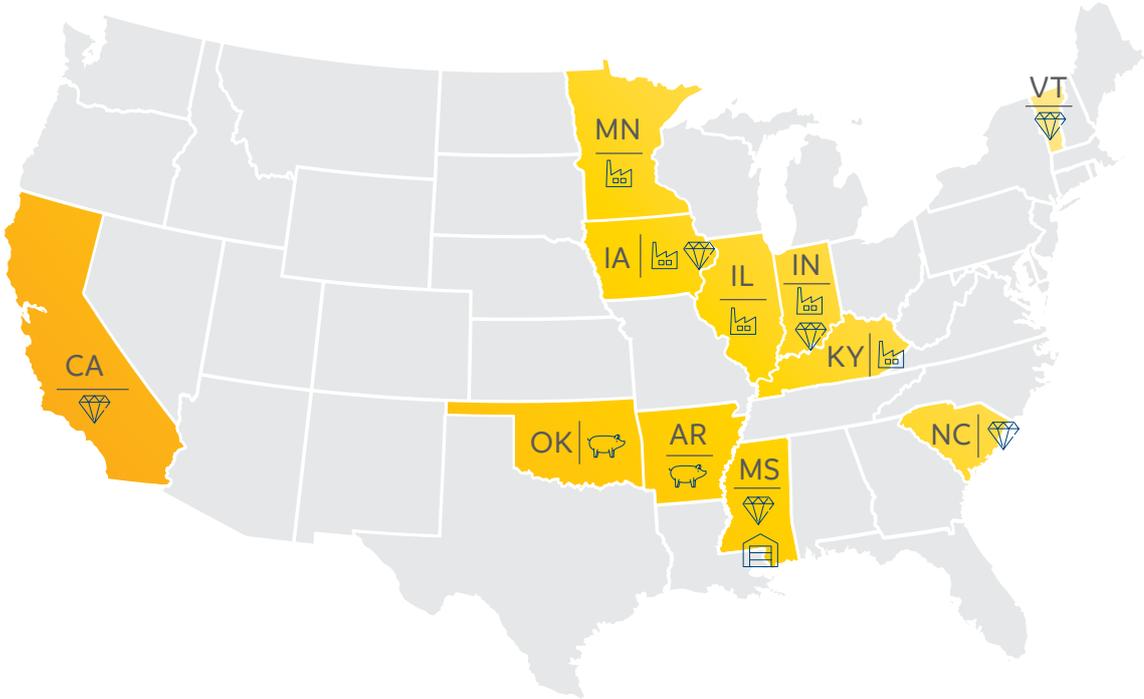
GRI 102-2

The second-largest pork producer in the US, JBS USA Pork operations are mainly concentrated in the west of the country. Its product portfolio includes leading brands such as Swift® and Swift Premium® as well as options ranging from fresh meat up to ready to cook products.

The key issue in the JBS USA Pork strategy is performance. Continuous improvement means focusing on product and service quality as well as customer partnerships.

Operational Structure GRI 102-7

United States



5 pork processing units 

7 case ready product units 

2 genetics units 

2 distribution centers 

Production Capacity

- **92,000 pigs a day**
 - › 100% in the USA
- **7 case ready product units**
 - › Examples include ham, bacon, pork fillet and deboned chops

Main brands GRI 102-2



Unmatched Results in 2017

In 2017, the unit achieved record net revenues of US\$ 6.2 billion, up 16.2% compared with 2016. EBITDA was R\$ 780 million with a margin of 12.6%.

Business was driven by market conditions, with a significant supply of pork and growing demand for products, as well as ongoing gains in operational efficiency. This means that animal output is growing in step with increased processing capacity. Additionally, the Company reinforced its strategy to expand the product range and areas of operation when it acquired Plumrose, further strengthening its range of fresh and processed products.

Plumrose is involved in the case ready and high added value product segment, which includes bacon,

ham, sliced meats and pork cuts.

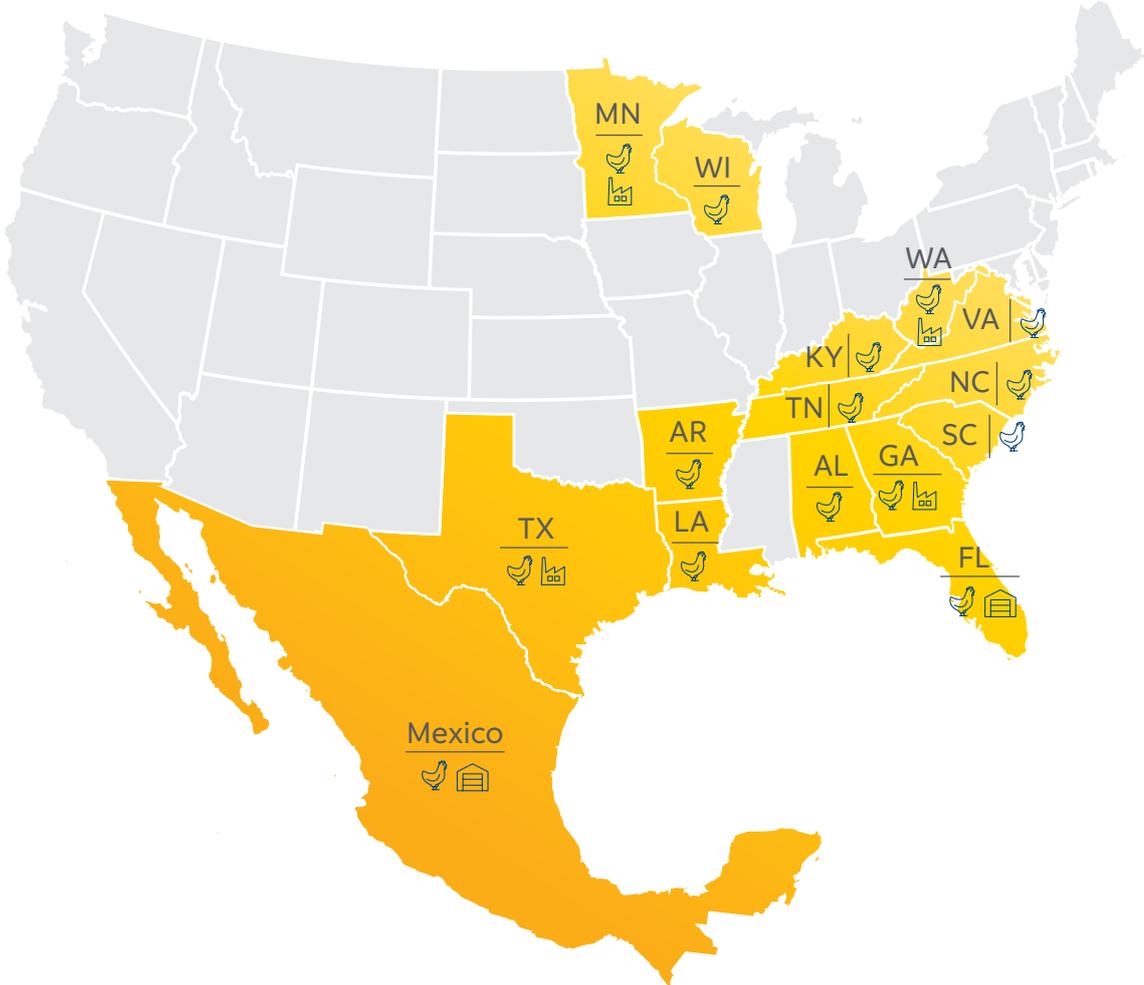
The US\$230 million acquisition included five factories in the states of Iowa, Vermont, Indiana and Mississippi as well as two distribution centers, also located in Indiana and Mississippi. Although this transaction only took place recently, Plumrose's operations have already been integrated with JBS USA Pork and performance has improved, highlighting JBS's positive approach to acquisitions. An example of this is the pork processing plant acquisitions in recent years. In 2015, prior to these acquisitions, the units employed 5,500 people and processed 18,500 pigs/day, manufacturing few added value products. At the end of 2017, these same units were processing over 21,000 pigs using 4,500 people and added value items represented around 30% of output.

Pilgrim's Pride Corporation GRI 102-2

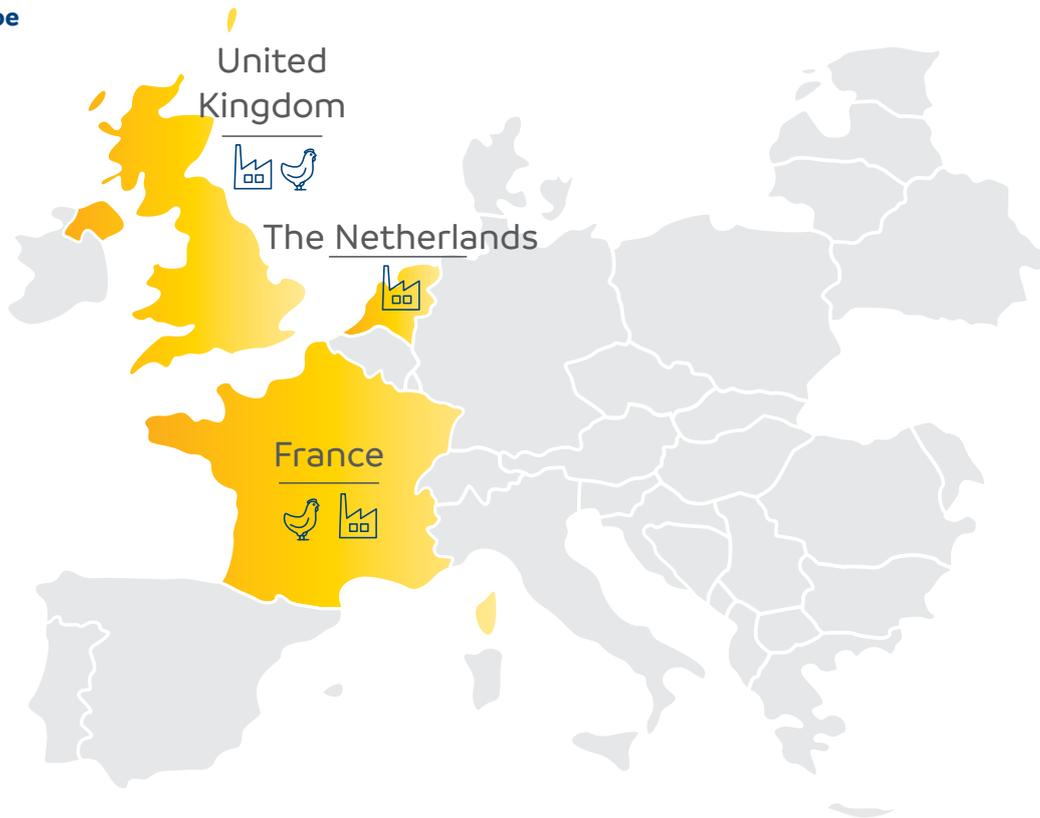
Pilgrim's is the world's leading chicken producer and processor and the largest producer of organic chicken in the world. Its operational structure is distributed across 14 US states and it has operations in Puerto Rico, Mexico, the UK and continental Europe as well. It produces fresh meat – including segmented products based on poultry size – as well as high added value items, including ready-to-eat and ready to cook options.

Pilgrims was founded over 60 years ago and during this time, it has focused on offering safe, nutritional, healthy and high quality chicken products. Its business strategy is to focus on continuously improving performance and building partnerships with its customers. It has a wide-ranging product portfolio from natural chicken to ready-to-eat, processed and ready to cook products.

Operational Structure GRI 102-7 United States and Mexico

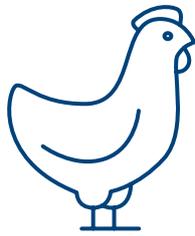


Europe



36

poultry processing units



14

case ready product units



21

distribution centers



Production capacity

• 8.3 million birds/day

- › 25 units/6.6 million birds in the US
- › 1 unit/66,000 birds in Puerto Rico
- › 6 units/820,000 birds in Mexico
- › 4 units/860,000 birds in the UK

• 34,000 tons of case ready product/month

- › 4 units in the US
- › 2 units in Mexico

- › 4 units in the UK

- › 3 units in France

- › 1 unit in the Netherlands

• 21 distribution centers

- › 20 in Mexico

- › 1 in Puerto Rico

Pilgrims was founded over 60 years ago and during this time, it has focused on offering safe, nutritional, healthy and high quality chicken products.

Market leadership consolidation

In 2017, Pilgrim's achieved net revenues of US\$ 10.8 billion, up 9% on 2016. EBITDA was US\$ 1.388 billion, 34.8% higher than in 2016, with an EBITDA margin of 12.9%. These results reflect lower input costs, record grain crops and rising output to meet increasing demand in both the retail and food service markets, particularly in the US and Mexico.

Pilgrim's is listed on the NASDAQ. By the end of 2017, its market cap was US\$ 7.7 billion, 61.9% up on the previous year. Its shares traded at US\$ 31.6.

The 2017 highlights for Pilgrim's were the expansion of its business model, with additional investment in added value products and brands. Additionally, the Company invested in acquisitions to consolidate its leadership position on the markets where it operates. In 2017, another two companies joined its portfolio: GNP Company and Moy Park. Both acquisitions are already integrated with Pilgrim's, showing synergy gains and improved performance in terms of cost, production capacity and sales.







Moy Park was voted the biggest Company in Northern Ireland for the sixth consecutive year by the Ulster Business Top 100 Companies, organized by the Ulster Business magazine

The Pilgrim's chicken production plant in Mayfield, Kentucky (USA) underwent a modernization and expansion project.

- GNP Company specializes in premium chicken products made with organic and antibiotic free raw materials. The acquisition reinforces Pilgrim's position in two areas: it is now the leading global producer of organic chicken and it has expanded its footprint, as GNP sells across the North of the US Midwest and has production units in Minnesota and Wisconsin.
- Moy Park is the largest privately held Company in Northern Ireland and one of Europe's leading poultry producers. This acquisition raised Pilgrim's to the position of world's largest chicken producer. Additionally, Pilgrim's portfolio now includes a Company recognized for its innovation. Moy Park pioneered the free range system, where chickens are left to run free, and also developed an organic chicken production system. It was also the first Company to launch ready-to-eat and pre-cooked vegetarian products.
- Although better known for its chicken protein operations, the Company also does significant business in beef, ready-to-eat dishes including entrées, main courses and desserts, and in the private label sector, producing items sold under retailer brands. Furthermore, the Company is continuously investing to improve its production processes. One example is its 2017 investment in the Ashbourne unit in Ireland. The £ 4 million injection was used to install new processing lines and refurbish classification and warehousing areas and purchase advanced refrigeration and other equipment, which increased productivity and boosted output by over 30% to 1 million chickens a week.

Chicken unit modernization

The Pilgrim's chicken production plant in Mayfield, Kentucky (USA) underwent a modernization and expansion project. This was intended to increase chicken production, process larger birds and serve key customers more efficiently. Following the unit's expansion – which included building over 75 chicken cages to be used by local family farms –

weekly chicken production rose by 450,000 kg. 155 new jobs were also created. The modernization project was part of the Company's cash flow reinvestment plan which will invest around US\$ 190 million in order to continue improving operational efficiency and strengthen partnerships with key customers, offering them the opportunity to accelerate sales.

Main Brands GRI 102-2



Human Resources Management – North America

Human Resources Management at our companies on the North American platform focus on safeguarding the JBS Culture and promoting our corporate principles.

In order to be the best at what it does, JBS USA manages this issue by acting as responsible employer and taking steps to ensure team members are proud they work for the Company. This includes efforts to hire, retain and develop team members who are dedicated to operational excellence and identify with the JBS mission, vision and values. JBS is also committed to improving team members welfare, providing safe and healthy working conditions and adopting diversity and inclusion

policies, as well as continuously investing to develop talent and leaders.

The Company has an Equal Employment Policy, reaffirming its commitment to recruiting and hiring staff regardless of race, religion, color, origin, gender, sexual orientation, gender identity or age. The same principle applies to team member training and career development. JBS USA is committed to offering equal opportunities to everyone, including veterans and the disabled.

The Company gives great emphasis to dialogue and building trust. In order to maintain a culture of trust and respect, it offers team members opportunities to put their points of view to their leaders and colleagues. The Company

organizes a number of periodic meetings referred to as Roundtable, Townhall and Safety and Production Meetings. All team members from every department are invited to these events and are encouraged to put forward their ideas and concerns. An action plan is drawn up for each issue identified and the team members presenting these issues are kept abreast of subsequent developments.

At the end of 2017, the platform had around 98,000 team members, distributed as follows:

Unit	No. Team Members
JBS USA ¹	32,640
Pilgrim's USA ²	30,993
Pilgrim's Mexico	10,248
Pilgrim's Moy Park	13,738
JBS Australia	10,841

1 Includes operations in the US and Canada, except poultry only factories
 2 Includes factories in the US and Puerto Rico

- JBS respects team members' right to unionize or organize. In 2017, 62% of JBS USA team members working in the US and 90% in Canada, 75% in Mexico, 35% in Europe and 100% in Australia and New Zealand were covered by collective bargaining agreements. GRI 102-41
- Respect for diversity, reinforced by the Equal Employment Policy. For example, at women occupy 18% of the executive positions at JBS USA and 15% at Pilgrim's. GRI 102-41
- JBS USA has a Corporate Policy setting out the procedures that must be followed to comply with local, state and federal laws on slave labor and human trafficking.

JBS USA is committed to offering equal opportunities to everyone, including veterans and disabled team members.

HR Management Practices

- **The Code of Conduct** provides guidelines for ethical behavior in the workplace. It aims to ensure appropriate conduct, safe and efficient operations and the well-being of all team members. The Code of Conduct adopted by JBS USA, Pilgrim's and JBS Australia applies to all team members at any level of the Company and sets out their responsibilities. There are also sanctions for noncompliance. All team members receive a copy of the document when they join the Company. Failure to comply with these guidelines results in corrective action, warnings and, depending on the severity of the incident, dismissal.
- **Open Door Policy:** this program encourages team members to present any problems affecting the overall work environment to their supervisors or the HR area. The discussions and debates that take place as part of this program also help Company leaders understand how team members view a variety of work-related topics, including payments and benefits, scheduling, safety and satisfaction with Company leaders.
- **Hotlines:** toll-free numbers managed by third parties that team members can use to safely and anonymously report any workplace concerns, unethical behavior or policy violations. At JBS USA, this channel is called the Best Work Environment Hotline. At Pilgrim's

it is called the Prideline. At JBS Australia, the channel is called the Complaints Hotline, while Moy Park refers to it as the Support Assistance Helpline. Every case raised in 2017 has been resolved.

- **Engagement Surveys.** The Company carries out regular engagement surveys to frequently assess team member satisfaction with the workplace environment and their jobs. Managers also speak to team members on a regular basis to ensure everyone's expectations remain in alignment. The results of the surveys are not disclosed.

Training and Professional Development Programs

In 2017, JBS USA held a number of Leadership training programs. The coursework was split across eight programs 1) Summit, 2) JBS Way of Leading, People First, 4) Elective Learnings, 5) Leadership Fundamentals, 6) JBS Trainee Program, 7) External Trainee program, and 8) the Intern Program.

The Summit program lasts ten weeks over the summer and challenges university students with a range of practical learning experiences and significant projects that provide valuable workplace experience. The program also helps to identify future team members. 110 students took part in the 2017 program. 20% of them are likely to return to the Company in the future as permanent hires.

At the beginning of 2016, Moy Park (Europe) created a strategic skills development program.

JBS Way of Leading – this program identifies team members with leadership skills at our plants. After mapping, they undergo a professional development program that involves a 6-month rotation at a JBS plant. In 2017, we promoted and trained 53 in-house talents as part of the program, with an 88% retention rate.

JBS Trainee Program – develops future leaders as part of a program where people rotate through the Company's US, Canadian and Mexican operations over a twelve month period. In addition to building project management, problem-solving and collaboration skills, the program also provides skills and knowledge in leadership and process and people management. The program had 90 trainees in 2017, 93% of whom were hired. The program attracted over 1,500 candidates in the US and Canada.

JBS Leadership Warehouse Program – launched in 2016, it consists of five different leadership programs for different profiles. The program is for leaders with high potential, mid-level managers, production supervisors and recently promoted or hired managers.

At the beginning of 2016, Moy Park (Europe) created a strategic skills development program. The project included various training and learning initiatives for the entire work force, including leadership and management training and refresher courses for technical and operational skills.

The Company also organizes the Moy Park Food Skills Academy. Launched as a pilot program in 2016, it is being tested at the Anwick unit and trains team members on processing operations, ensuring that everyone is properly prepared to help improve productivity and innovation. The Graduate Management Trainee Program is also an important project. The program develops the next generation of leaders and focuses on recent university graduates. It covers several areas of the Company to help participants' communications and interpersonal skills as well as their commercial nous and financial awareness. Participants also receive guidance from top management executives.



110 students
took part in the Summit program

Stakeholder Relationships GRI 102-40, 102-42, 102-43

The JBS companies in the North America platform maintain

communications with their various stakeholders:

Audience	Channels
In-house	<p>Direct lines to anonymously report work-related or ethical issues:</p> <p>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 to communicate directly with Company leaders where team members can present specific issues affecting their performance or the workplace environment.</p> <p>JBS USA: News Roundup, a daily newsletter with the main events involving JBS USA, competitors and the market.</p> <p>Moy Park Magazine, published quarterly</p>
Customers and Consumers	<p>A website for each business. Consumer Hotline: 1-800-312-1470, available from Monday to Friday in the USA during business hours</p> <p>FreshTrace™. SAP Cloud for Customers Chicken Check In Platform</p>
Media	<p>Specific media teams for each business.</p>
Shareholders and investors	<p>United States customer service areas (Pilgrim's): IR website (Pilgrim's)</p>
Suppliers	<p>A website for each business.</p>

JBS has a differential in its communications with customers and suppliers: it can identify the source of all products from the Pilgrim's Pride Corporation. The FreshTrace™ mechanism can identify the producer farm and it complies with related requirements determined by the FDA. Simply type in the code on a specific website. Click here to find out more.

Additionally, Pilgrim's offers other consumer communication tools:

- SAP Cloud for Customers – can track and monitor consumer issues and complaints in real-time. This customer service channel can be used to send videos, photographs or text, helping the Company respond to customer queries more quickly and take operational steps, as and when required.
- Chicken Check In Platform - produced by the National Chicken Council - a nationwide, nonprofit trade association representing the North American broiler industry – offers information on the chicken production process, from the farm to the table, and includes useful videos, information on the latest chicken trends and real farmers' stories.

Corporate Responsibility Leader

Moy Park received the CORE Standard for Responsible Business in 2017 and was recognized for its corporate responsibility practices in Northern Ireland. The award, which is issued by the institution carrying the same name, is the only one in the country highlighting companies that have adopted best corporate responsibility practices.

Communities

JBS USA understands that the biggest influence it can have is to create jobs and generate income, thereby helping to support development in the communities where it operates. It therefore sponsors or joins community activities to improve education and training for children and adolescents and help provide adolescents and adults with professional training.

Pilgrim's does not set donation or volunteership targets. The issue is managed independently at each

unit, which has an annual budget to support local communities and initiatives. For example, some units choose to support initiatives that focus on children and adolescents, and sponsoring school sports events. Others may find it makes more sense to support projects to combat hunger. These efforts are supported by initiatives to raise funds from team members and their families or through volunteering programs, which are organized by the units themselves. This means that each strategy reflects the needs of each unit's local community and helps to engage team members.

The Prince's Countryside Fund.

Moy Park sponsors social, economic and environmental development in rural communities near its units through donations and support for this initiative. The Prince's Countryside Fund is currently running over 120 projects in the UK that benefit around 100,000 people.

Feeding Britain's Future. This program trains young adults looking for employment opportunities in the food industry, which is the UK's biggest employer with over 3.7 million jobs. Created and managed by the IGD Association, the program includes professional training courses and visits to production units.





Financial Performance



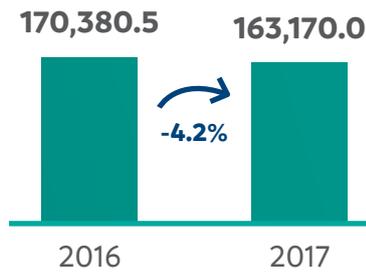
2017 Financial Highlights

In 2017, JBS reported its best ever operating results, led by the excellent performance of its US operations.

Net Revenues

R\$ 163.2 billion*

Down 4.2% vs. 2016.

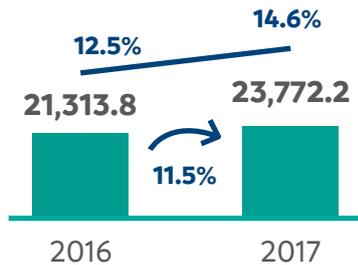


*equivalent to US\$ 51.5 billion

Gross Profit

R\$ 23.8 billion

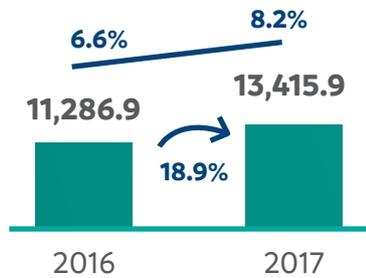
An 11.5% increase and gross margin growth from 12.5% in 2016 to 14.6% in 2017.



Adjusted EBITDA

R\$ 13.4 billion

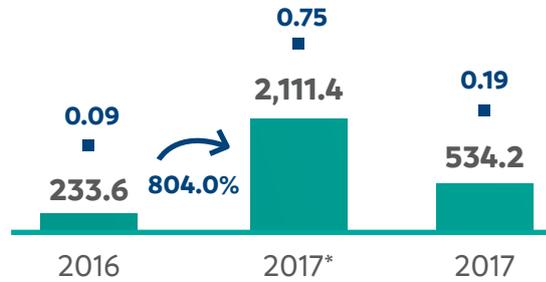
EBITDA rose from 6.6% in 2016 to 8.2% in 2017.



Net Profit

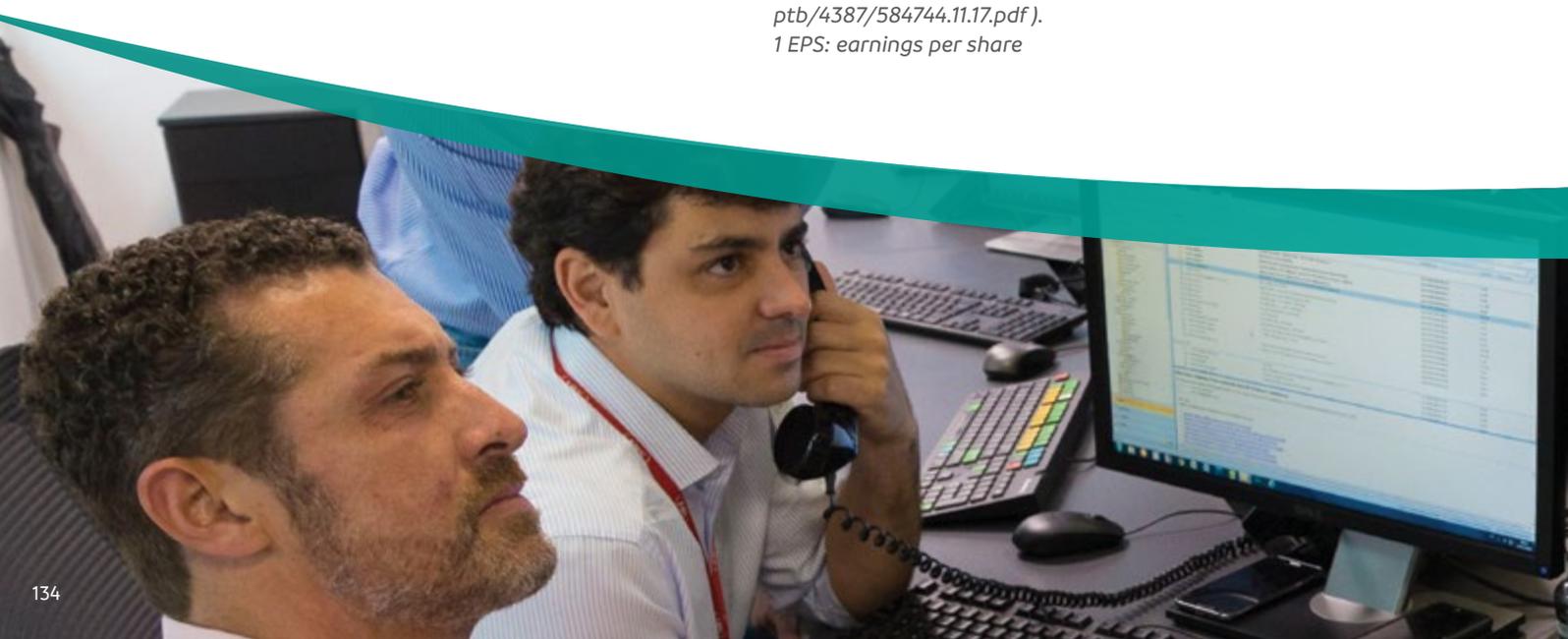
R\$ 2.1 billion*

Reported net profit was up 128.7% vs. 2016, with EPS¹ of R\$ 0.19.



*Excluding the effect of signing up to PERT
(for further details, see here: <http://jbs.infoinvest.com.br/ptb/4387/584744.11.17.pdf>).

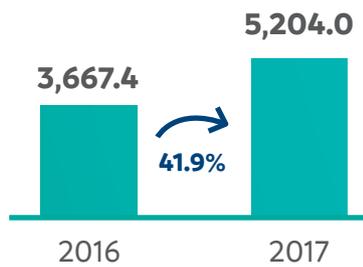
¹ EPS: earnings per share



Operational Cash Flow

R\$ 5.2 billion*

Up 41.9% compared with 2016.

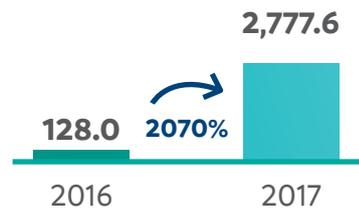


* In millions of R\$

Free Cash Flow

R\$ 2.8 billion*

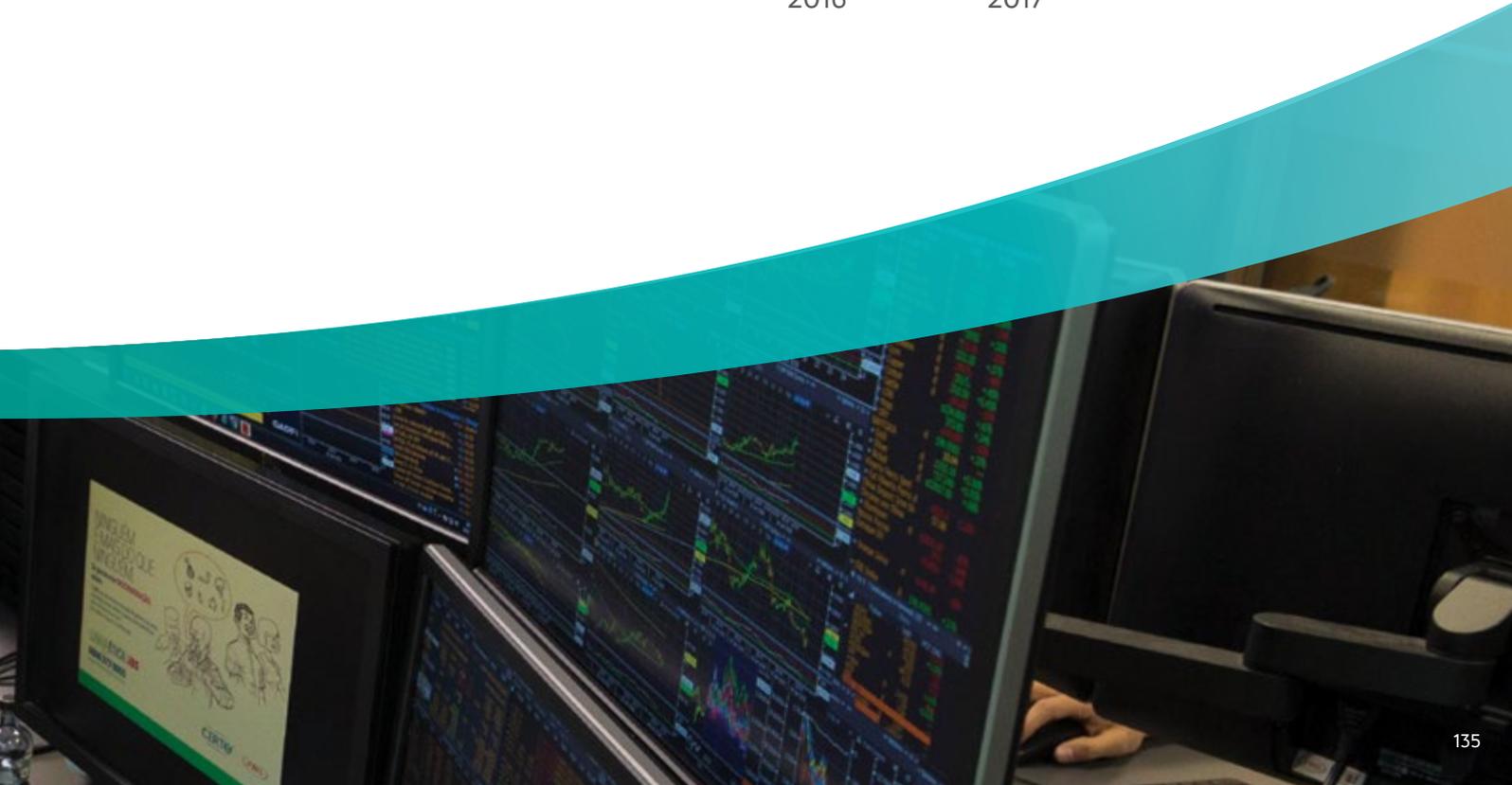
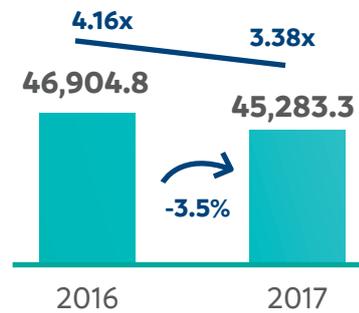
Up 2070% compared with 2016.



* In millions of R\$

New Debt and Leverage

Leverage fell by 3.38x in 2017, despite the impact from dollar appreciation at the end the year.





Sustainability

GRI 102-2



JBS
M/08/16

JBS
M/06/16

The commitment to supplying safe, high-quality food includes a number of strategies and initiatives that are developed and applied at various stages of the value chain. They include eco-efficiency initiatives and environmental responsibility activities intended to constantly improve the operational, manufacturing and supply standards for the Company's food products, in order to support JBS business sustainability.

These activities and strategies are applied from the time we source our raw materials up to the point where we dispose of post-consumption product packaging. As such, they help reduce the environmental impacts from the Company's various business units and support of social, environmental and economic development in local communities, creating value for stakeholders.

Each business unit has the autonomy to identify relevant issues and develop the necessary action plans for their respective operations. These issues are addressed by the respective Sustainability Departments on both business platforms – South America and North America. These are multidisciplinary areas that employ specialist staff who are experts in JBS's various businesses, which means they are able to help the companies make decisions in this area.

As sustainability is a strategic business issue with global repercussions, the Company has also created a Sustainability Committee, reporting to our Board of Directors. The Company also focuses on continuously creating synergies based on best management practices at operations in every country. As a result, five issues have been identified as material and strategic for JBS as they are critical to the business's success and highly relevant to Company stakeholders. GRI 102-46

Global material issues

GRI 102-47



**Team Member
Health and Safety**



**Animal
Welfare**



Water



**Product
Integrity**



**Climate
Change**



Each business unit has the autonomy to identify relevant issues and develop the necessary action plans for their respective operations.

Although global guidelines exist instituting regional sustainability strategies, each Company manages these issues autonomously in accordance with local challenges and the regulatory environment in each market. For example, the South America platform has adopted a sustainability strategy to support risk management, reduce the Company's environmental footprint and manage relationships with society and stakeholder engagement.

Business Risk Management. In terms of sustainability, the Company's biggest risk in Brazil is raw material, particularly cattle, procurement. In order to address this issue, JBS employ a satellite system to monitor supplier farms which helps it purchase cattle from livestock breeders who are not harming the environment or operating illegally. In order to assist suppliers and address environmental compliance issues, the Company also has a wide-ranging sustainability program for integrated supplies, which focuses on encouraging them to adopt best sustainability practices and improve governance of third-party contracting processes.

Reducing the Environmental

Footprint – This is a group of actions intended to reduce emissions, water consumption and waste. Every year, JBS has improved its eco-efficiency and has worked to support innovative initiatives related to its processes, governance and products. JBS made progress in this area during 2017 when it prioritized investments at plants in Brazil posing a water risk. Actions such as this resulted in the Company in Brazil being recognized for its approach to the issue and it was ranked as one of the leading food industry companies by the CDP (Driving Sustainable Economies).

Relationships with society and stakeholder engagement –

Society demands increased transparency throughout the production chain. In response, JBS Brazil has implemented a robust strategy and a variety of tools to offer high-quality products and high standards of animal welfare, health, sustainability and traceability. This helps to build trust with customers and consumers and makes sustainability – alongside Compliance and Corporate Governance – a central issue in JBS's reputation and image management.

The sustainability strategies adopted by JBS USA also includes a number of initiatives throughout the value chain

intended to engage with stakeholders. The Company believes sustainability is an ongoing process of continuous improvement that involves increasing business performance in the short and long terms while balancing and managing economic, social and environmental factors.

Since 2015, as part of efforts to manage this issue the Company has adopted over 30 key performance indicators (KPI's) in high-priority areas at over 50 US and Canadian facilities. Each facility is responsible for identifying improvement targets and drawing up an implementation plan to achieve these objectives. The program has brought about measurable change, driving continuous improvements in responsible resource usage, meeting the expectations of both the Company's management team and its stakeholders.

To learn more about JBS USA's comprehensive approach to sustainability, including 2017 performance and 2020 goals, please visit: <https://sustainability.jbssa.com/>

The Pilgrim's Pride sustainability strategy is based on a range of goals involving animal welfare, team member health and safety, the environment and suppliers, which it plans to achieve by 2020.

Sustainability is an ongoing process of continuous improvement that involves increasing business performance in the short and long terms while balancing and managing economic, social and environmental factors.

2020 Goals

Pilgrim's Pride Corporation (PPC) is committed to achieving a range of sustainability goals by 2020:



To learn more about Pilgrim's comprehensive approach to sustainability, including 2020 goals, please visit: <https://sustainability.pilgrims.com>.

Team Member Health and Safety

GRI 103-2, 103-3, 403-2, 403-3, 403-4

All **South America** operations use mapping, analysis, monitoring and control processes to guarantee the health, safety and quality of life of all our team members. In order to address these issues on a preventive and corrective basis, JBS Brazil also takes steps to continuously improve industrial routines, which include offering the best possible working conditions, including personal protective equipment, safe machinery and facilities, ergonomics programs and quality-of-life initiatives. The careful approach to issues such as these, which is critical to improving team member performance, is not only intended to eliminate workplace accidents, but also to improve team member well-being at the Company and elsewhere.

The South America operations have therefore invested R\$ 130.8 million to structurally adapt their facilities and purchase equipment. The biggest advance last year was the creation of the health management system, allowing business areas to address the issue autonomously and speed up their responses. The system, which offers standardized Occupational Health & Safety processes, had been introduced at 95% of JBS plants by the end of the year. The standards were digitized, having only been available in print format previously, which also meant that specific training courses were needed for unit health teams and engineers. The training programs on offer include ergonomic training at JBS Carnes and medical team training at Seara.

Health and safety issues in the **North America and Australia** operations are addressed through a culture of prevention and team member

The South America operations have therefore invested R\$ 130.8 million to structurally adapt their facilities.

engagement. There are ongoing efforts to identify risks and correct any shortcomings before incidents can occur, which includes team training and education and meets Occupational Safety and Health Administration (OSHA) standards issued by the US Department of Health.

Health and safety are also critical factors in any business decisions taken by Pilgrim's Moy Park. The Company involves its workforce in its health and safety programs and encourages leaders to take an active role in identifying and managing risks as well as analyzing performance.

In Brazil, last year's activities focused on social security leave, an issue that came under much stricter control, as well as inclusion programs for people with disabilities and the communication and awareness activities that took place across all businesses to raise team member awareness of this issue. JBS North America also improved its controls in this area. The Company adopted indicators (KPI's), in line with the 2015 three-year plan to identify and reduce potential risks.

Health and Safety Management

- Across all our South American businesses, this issue is addressed by the Occupational Health and Safety Service (SESMT), a department that focuses specifically on Occupational Health. This area reports to the Corporate Human Resources Department.
 - › Business performance is monitored and assessed by the SESMT committee, which is made up of Company executives and monitors Workplace Safety and Occupational Health indicators on a daily basis.
 - › JBS Brazil's activities in this area must comply with Regulatory Standards (RSs) published by the Ministry of Labor.
 - › Team member health and safety issues are also addressed by 158 collective bargaining agreements and other arrangements. This represents 84.95% of all agreements and arrangements for the year.

Health and safety award winner for the third consecutive year

Moy Park received the Food and Drink Health & Safety Award for the third consecutive year. The award, organized by the RoSPA, recognizes best accident prevention practices and companies' commitments to making ongoing improvements in this area. It also received the Gold Fleet Safety Award for its highway and traffic risk management efforts.

- › The SESMT, alongside the legal compliance and internal audit areas, is intended to guarantee application and enforcement of legal rules involving workplace environments, machinery and team members, including third parties.
 - Due to the importance of health and safety, there is a specific subcommittee in **North America** reporting to the Company's executive leadership team, which holds quarterly meetings to oversee, monitor and support a robust and effective safety management structure. The Safety Index, which is tailored for each local operation, monitors all of these activities and the resulting performance.
- Operational units in North America employ safety management teams that are constantly working to improve current programs.**
- Operational units in **North America** employ safety management teams that are constantly working to improve current programs, setting aggressive annual health and safety targets for the entire Company and directly monitoring related indicators. There is a daily, weekly and monthly routine for reporting unit performance to these teams, supporting fast and effective health and safety decisions.
 - › Each year, additional key or preventive performance indicators (KPI's), are included in line with the three-year plan to identify and reduce potential risks implemented in 2015. This initiative includes an in-depth analysis of all policies and programs related to walking surfaces, protection against falls and electrical safety, among various other issues. For example, a specific inspection program was created to improve machinery protections. All items encountered have been resolved.

- › The Company has adopted best industry management practices and guidelines, in line with recommendations from institutions including the North American Meat Institute, the National Chicken Council and the National Pork Producers Council, and other organizations.

Health and Safety in Practice

GRI 403-1

At each of the **South America** operations, all of these issues are managed using a standardized internal process, in line with the Self-Management Health and Safety Program (PSSAG), which brings together the rules and principles used to standardize internal processes, programs and occupational health and safety legislation. Part of the PSSAG was computerized in 2017 and ended the

year with 42 procedures, included a number of specific health-related procedures developed throughout the year. This is in addition to the pre-existing issues it addressed, such as Labor, Machinery, Workplace Environment, Methods and Measurement. These procedures are aligned with the relevant regulatory standards on each of these topics.

All **Brazil** units have Internal Accident Prevention Committees (CIPA) whose members are elected by team members and have representative appointed by the Company, representing team members in ongoing workplace environment improvement efforts. During regular meetings with the SESMT, the CIPA address team member health and safety issues.



PREFIRA SEMPRE
O CAMINHO
DA SEGURANÇA.
É ELE QUE LEVA VOCÊ
DE VOLTA PARA CASA.

Ao circular nas áreas da JBS:

- Ande pela faixa.
- Utilize sempre o corrimão.
- Respeite as sinalizações de risco.

E leve seu comportamento seguro do dia a dia da JBS para casa com você: não digite no celular enquanto anda ou dirige. Contamos com seu exemplo, dentro e fora da empresa, para garantir o bem-estar de todos ao seu redor.

**SUA ATITUDE É O
EXEMPLO QUE FICA.**



There are also Health and Safety Committees at all JBS Carnes, JBS Leather, JBS New Business and Seara plants in Brazil. The multidisciplinary approach, which includes the plant manager and representatives from HR, SESMT and CIPA and other organizations, looks at team member issues as well as infrastructure conditions, including machinery and equipment. These committees also verify safety indicators, monitor accident action plans, address outstanding nonconformities raised during safety inspections, assess mandatory training indicators specified by the NRs and deal with other matters.

At JBS **North America**, each Company unit also has a safety committee made up of local team members.

JBS USA and Pilgrim's also have Occupational Health Medical Services, staffed by experts who support ongoing improvement in our practices; they also support specific programs at each individual facility to reduce team member exposure to issues such as ergonomic problems, repetitive stress injuries or incorrect posture.

Each plant undergoes three different annual audits focusing on safety management systems, fleet safety and occupational health. Each Pilgrim's unit undergoes daily safety assessments (five times a week) based on the DuPont Behavior Based Observation (BBS) process.

Occupational Health and Safety
Global Performance¹
GRI 403-2

		South America ²	North America			
			JBS USA	Pilgrim's	Australia	Canada
Accidents	Accidents with leave	885	260	276	279	8
	Accidents without leave	3138	1412	816	426	245
	Total number of accidents	4028	2290	1092	705	253
Injuries (Frequency)	Rate of Injuries with leave (RI)*	4.23	0.75	0.58	14.6	0.32
	Rate of Injuries without leave (RI)*	15	N.A.	N.A.	22.22	N.A.
	Total injuries (frequency)		6.6		33.77	N.A.
Lost Days (Severity Rate)	Lost days with accidents	22191	6,973	2,296	N.A.	661
	Lost days rate (LDR)	359	20.11	9.91	N.A.	26.95
Dart Rate	Days away, restricted or job transfer rate	N.A.	4.82	2.46	N.A.	N.A.
Deaths	Work accidents	3	0	1	1	0
	Accidents on the route to work	5	N.A.	N.A.	0	NA
	Total number of deaths*	8	0	1	1	0

1 The indicators for each region/business are calculated using specific formula, in accordance with current legislation in each country.

2 JBS Carnes, JBS Leather, Seara and New Business. N.A. - Not applicable
N.A. - Not available



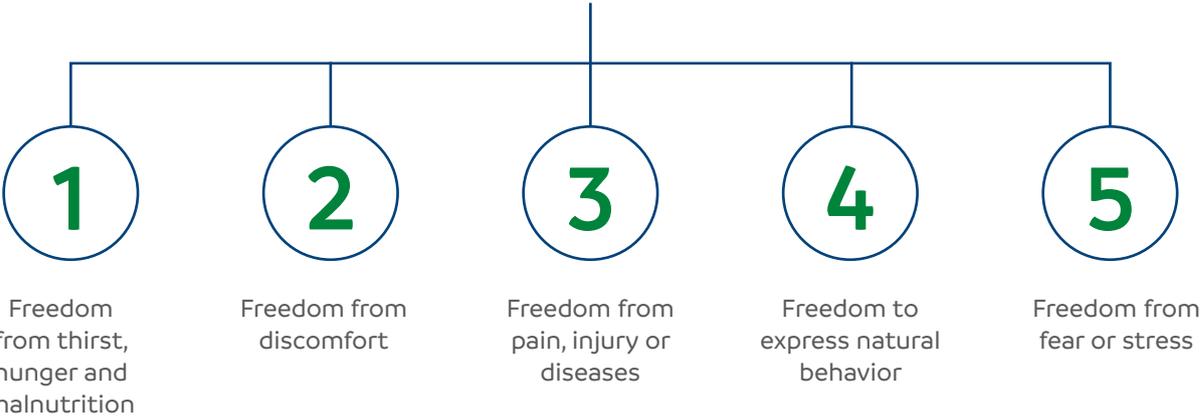
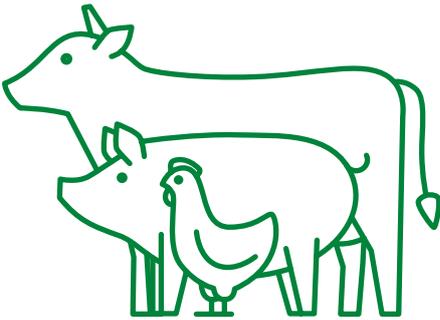
1 million accident-free hours

In 2017, the Dungannon unit (Northern Ireland) reached 1 million accident-free hours. This was achieved by adopting a work plan that set parameters for work routines and motivated teams by setting achievable targets and objectives.

Animal Welfare GRI 103-2, 103-3

This issue, which is also critical for global level business sustainability, is addressed by every JBS operation

in order to guarantee the five fundamental animal freedoms:

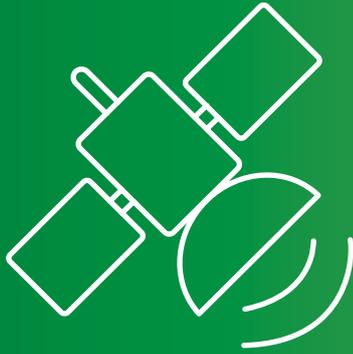


In order to support and improve its practices, in 2017 JBS invested R\$ 14.7 million in Brazil and US\$ 19.6 million in the US and Canada in animal welfare to strengthen and improve current practices.

Animal Welfare Governance and Management

JBS employs specialist teams for each type of protein to manage this issue. These **multidisciplinary teams** are constantly refining their approach in accordance with best market practices.

Workplace routines at all of the Company’s operations follow specific procedures and policies to guarantee animals’ five fundamental freedoms. In Brazil, Seara and JBS Carnes have their **own specific Animal Welfare policies**, drawn up in line with best practices and legislative requirements. For example, Seara has an Animal Welfare and Biosecurity Manual that provides guidelines on mandatory practices at all own and integrated poultry farms.



JBS Carnes is also one of the only food industry companies in Brazil that uses cameras to monitor animal welfare indicators at all units, covering all phases from disembarkation through slaughter. This also helps encourage team members to adopt best animal management practices.

The Company believes training is a critical process to ensure best practices.

Pilgrim's Pride Corporation has its own Animal Welfare Program. Developed by a Corporate Committee focusing specifically on this issue, the program is revised annually to ensure poultry well-being is respected at all stages of the process, including hatching, growth, transportation and slaughter. The practices adopted in the US reflect guidelines published by the National Chicken Council (NCC). In Mexico, production complies with the government's *Buenas Prácticas Pecuarias en la Producción de Pollo en Engorda*, program, which is published by the Secretariat for Agriculture, Livestock, Rule Development, Fishing and Food (SAGARPA) and the National Agriculture and Food Health, Safety and Quality Service (SENASICA). The Company has trained staff at each production location to ensure that animal welfare practices are implemented at these facilities.

Each operation also has production policies and techniques intended to comply with humane slaughter principles and ensure appropriate pre-slaughter procedures, including proper animal stunning. The Company has adopted technical and religious approaches at all meatpacking units (in specific markets) to comply with stringent animal freedom principles. JBS exports to many markets around the world and is therefore required to adopt strict quality and animal welfare controls to meet the international standards required by its customers.

The Company believes **training** is a critical process to ensure best practices. It therefore carries out routine training for its team members and integrated producers, that may include specific training courses emphasizing particular animal welfare issues. Over 14,800 JBS team members and producers in Brazil attended these training courses during 2017.



In Brazil, JBS operations have a checklist used by industrial unit quality teams to evaluate animal welfare indicators on a periodic basis. This checklist is based on current legislation and complies with customer and certification requirements. This routine includes:

- developing structured action plans to address any issues that arise
- indicators such as transportation density and appropriate unloading conditions
- ambience and waiting conditions
- stunning efficiency
- fasting times
- bleeding efficiency
- poultry injuries and hog slips/falls
- transportation mortality records (with root cause studies when required)

In addition to routine training courses, all Seara units in Brazil underwent more extensive training in 2017. The program included six specific training courses on animal welfare – five for poultry and one for hogs, attended by 176 team members. The training courses focused on humane slaughter and addressed issues such as slaughterhouse waiting times, animal unloading, leading to slaughter (hogs) and hanging (poultry), as well as stunning and bleeding. All participants received the animal welfare certificate issued by WAP - World Animal Protection, a nongovernmental organization (NGO), valid for five years. WAP is a global benchmark in this area.

JBS Carnes has also adopted a document that team members sign to acknowledge they have been informed of the Company's guidelines, which is intended to increase team members' knowledge of those guidelines and promote engagement with animal welfare practices. There is also an e-learning platform with courses on animal welfare best practices,

which includes videos on related techniques. These courses are part of the animal welfare training programs offered to factory teams.

JBS USA also focuses on training programs and initiatives to guarantee that animals are treated humanely and ethically. Additionally, all team members are encouraged to report any program violations anonymously or take them to their immediate superiors.

Various initiatives have been taken to ensure that animal welfare programs have been deployed efficiently. The process begins with producers, who must comply with the Company's rules and policies, and include transport, offloading and handling at JBS facilities. Any breach of animal welfare program policies by suppliers will result in disciplinary actions and may lead to termination of employment or the relevant raw material supply agreement. These programs, like the animal care programs, are constantly evaluated by internal and external auditors. Performance under these initiatives is measured by monitoring key performance indicators (KPI's).

JBS USA focuses on training programs and initiatives to guarantee that animals are treated humanely and ethically.



JBS Brazil also offers animal handlers special clothing, setting it apart from other companies in the industry and demonstrating its commitment to this area. In Brazil, Seara and JBS Carnes team members working in positions that involve animal welfare use different uniforms, making it easier to identify them and monitor their workday routines.

Company operations are subject to animal welfare audits carried out by in-house or third-party auditors. In Brazil, the Company receives frequent audits from domestic and foreign customers, who check sanitation, animal welfare, quality

and other criteria during the verification process. Internal audits are mainly intended to monitor animal welfare practices and drive ongoing improvement. Most of the items that are verified involve practices that go beyond what is legally required, reinforcing JBS's commitment to pursuing best practices in this area.

The Company's operations are subject to a number of certification audits (see page 66). They include the Global GAP (Good Agricultural Practices) at Seara units, focusing on the agribusiness chain (breeders/incubators/broiler chicken farms) and PAACO (Professional Animal Auditor Certification Organization). The PAACO audit of JBS Carnes operations is based on the NAMI (Animal Handling- Guidelines & Audit Guide) checklist. In 2017, JBS Carnes

also developed the Supply Chain Seal (jbs.com.br/sustentabilidade/bem-estar-animal). The seal focuses on certifying Guaranteed Sourcing (which includes animal welfare), streamlining the process of verifying customer and consumer requirements. Program audits are carried out by the Brazilian Certification Service (SBC).

The Company's practices in this area are intended to meet predetermined targets and results are measured using performance indicators.

In 2017, JBS Brazil created the Animal Welfare Committee as part of its efforts to continuously improve its management of this issue. The initiative is run by representatives from the Sustainability, Quality, Animal Welfare, Agriculture and Livestock and Corporate Communications areas. In 2017, the Committee was responsible for organizing a week-long in-house campaign on animal welfare, which included various activities at JBS Brazil factories and the head office in São Paulo. The group also structured content for the new animal welfare page on the JBS S.A. website (<http://jbs.com.br/sustentabilidade/bem-estar-animal>), an important step in increasing transparency of related activities, commitments and policies.

Animal Welfare in Practice

In order to offer high-quality products and guarantee that products that arrive on the consumer's table comply with best animal welfare practices, JBS Brazil implements a number of initiatives throughout the value chain, including:

- In-house and supplier animal breeding
- Animal transportation
- Slaughter

From breeding to slaughter, including transportation, JBS Brazil has invested in techniques that avoid animal suffering and provide comfort and welfare.

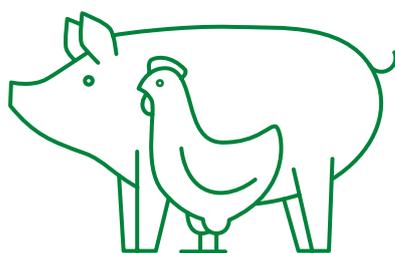
In addition to these various initiatives, the South America operation also emphasized educational and informational activities throughout the year for both its team members and the value chain. For example, JBS Brazil published an institutional video on animal welfare (jbs.com.br/sustentabilidade/bem-estar-animal), highlighting the standards adopted during workday routines at cattle operating units and during audits and customer visits.



In 2017, JBS Brazil created the Animal Welfare Committee as part of its efforts to continuously improve its management of this issue.

There was also a wide-ranging communication campaign in Brazil with bulletins periodically emailed and displayed on murals at Company units and the head office, as well as an in-house campaign on world animal day to inform team members about how the issue is addressed with cattle suppliers, at its own and integrated pork and poultry farms, during animal transportation and at factories. This included presentations at the JBS head office in São Paulo by animal welfare specialists, ending with a round table that provided a highly beneficial discussion and knowledge sharing session. In addition to promoting in-house engagement by distributing information on ethical, commercial and quality issues, the initiative also reinforced the importance of animal welfare and JBS's responsibility as the largest animal protein processing Company in the world.

All raw materials acquired by Seara (chickens, pork and turkeys) are produced at our own or integrated farms.



Animal Breeding

Process Oversight

All raw materials acquired by Seara (chickens, pork and turkeys) are produced at our own or integrated farms. This allows the Company to monitor the entire animal breeding process in detail. Additionally, Seara is responsible for producing and supplying all inputs used by producers, such as chicks, feed and medication, and provides all necessary technical support. It has a team of farm management specialists and veterinary surgeons who periodically visit all poultry farms to ensure that the correct practices are being adopted.

In 2017, a specific animal welfare management panel was introduced at poultry units. Used by 30 plants, it includes 20 animal welfare indicators including team training, handling, aviary infrastructure and transportation, among others. Used internally, it consolidates the monthly self-assessments carried out at each of the units and provides data that can be used to monitor ongoing practices and drive continuous improvement. Most of the items that are verified involve practices that go beyond what is legally required, reinforcing JBS's commitment to pursuing best practices in this area. The management panel will be extended to the pork units in 2018.

Seara is the only member representing Brazilian poultry farming on the 'Livestock Technical Committee', an initiative organized by Global GAP, an independent global certification agency, which discusses global animal welfare parameters.

US beef and pork production facilities have adopted animal welfare policies in line with North American Meat Institute (NAMI) guidelines and local regulations. Program compliance is verified daily by third-party auditors. All facilities have voluntarily instituted the "Systematic Approach to Humane Handling and Slaughter" program. The program, recommended by the USDA, covers four aspects of animal handling:

- (1)** An initial site assesses the circumstances in which cattle may face excessive emotion, discomfort or accidental injury during transportation, containment or slaughter;
- (2)** Adoption of facilities, training courses and practices based on rules intended to minimize the risk of undue excitement, discomfort or accidental injury;
- (3)** Periodic audits of facilities and practices to ensure cattle are treated humanely; and

- (4)** Ongoing process improvements, based on internal and external audits, adoption of regulatory changes, performance trends and improvement opportunities identified during Animal Welfare meetings.

More than 90% of Pilgrim's chicken farms provide electronic climate control to maximize comfort and protect birds from poor weather and disease. Internal and external audits were carried out in 2017 at all facilities. The audits were carried out to ensure compliance with the Animal Welfare Program and verify appropriate capture, handling and transportation procedures. In the US, Pilgrim's target is to achieve a score of 95% or higher in all audits. The results of 2017 internal audits resulted in grades varying between 90% and 100%. The results of external audits produced grades varying between 97% and 100%.

The Moy Park Beef Orleans unit, which produces hamburger patties, has a special tool to evaluate animal welfare on farms. By 2018, all 1,500 beef suppliers will be required to implement these controls.

Technical Guidelines. Seara uses Technical Guidelines (TGs) to define the best and most up-to-date handling practices its more than 8,500 pork and poultry producers should adopt, including animal welfare practices.

Technical parameters such as housing density, the number of feed and drinking troughs, the heating and cooling system, water quality, nutritional levels, compliance with the five fundamental freedoms and environmental controls (temperature, humidity, ventilation, lighting and “bed” quality) are monitored by the Seara technical team. In addition to the TGs and checklists, producers use other control forms providing animal welfare indicators that can be monitored and controlled on a periodic basis.

In Brazil, JBS organized a first-of-a-kind educational campaign on the correct method of vaccinating cattle against foot and mouth disease.

Cage-free Eggs. By 2020, all eggs used as ingredients in Seara products in Brazil will be purchased exclusively from egg-laying chickens bred outside cages. In 2017 JBS committed to a short-term suspension on purchasing eggs from chickens bred in cages in Brazil.

Gestation Crates for Reproductive Hogs. In 2014, JBS is also committed to adopting collective gestation for pork production throughout Brazil and abandoning the individual gestation format. By the end of 2017, 45% of animals were also being bred using the system and all producers in Brazil are expected to adopt it by 2025. The South American operations are supporting integrated suppliers during this transition.

Foot and Mouth Vaccination Campaign. In Brazil, JBS organized a first-of-its-kind educational campaign on the correct method for vaccinating cattle against foot and mouth disease. As mistakes made during vaccination can have repercussions for the entire production chain, the Targeted Vaccination campaign was not restricted to Company suppliers. The goal was to reach livestock breeders throughout Brazil. The 30-day campaign ran on digital channels and also employed relationship actions. A specific website



(www.vacinapeao.com.br) was used to host content developed for the initiative, including posters, presentations and ready-to-print folders. High technology syringes were also distributed to JBS suppliers in Brazil responsible for 50% of the Company's meat processing volumes. The syringe, which is recognized worldwide as the safest method on the market because it reduces accidents with needles, is protected by a plastic capsule that creates a fold in the cattle's skin that means the dose is injected correctly. The kit was presented to farmers in person, alongside a bag and posters to display in corrals.

Animal Welfare Manuals. JBS is supporting the relaunch of the Animal Welfare Manuals to provide high quality content on best handling practices in Brazil. The Manuals were developed by the Animal Ecology and Etiology Study and Research Group (Etcó) at the Sao Paulo State University (Unesp)

Faculty of Agricultural and Veterinary Sciences. As the raw material JBS uses in Brazil comes from supplier farms, this material is intended to educate breeders about best animal welfare practices and offer guidance for six phases of the value chain: calving, vaccination, shipping, identification, transportation and corral design and construction.

Use of Antibiotics. Seara is committed to reducing antibiotics throughout its supply chain every year. This means antibiotics are only administered when strictly required and on veterinary recommendation, to avoid comprising animal welfare and food safety.

Pilgrim's has adopted its own antibiotics policy. Updated in 2016, it complies with FDA guidelines 209 and 216, which include discontinuing use of antibiotics in animals if they are critical to human health, in line with the guidelines issued by the World Health Organization (WHO), unless prescribed by a veterinarian to treat a specific disease. All sub-therapeutic use of antibiotics has also been discontinued. As a result of its efforts, Pilgrim's is a worldwide leader in No Antibiotics Ever (NAE) production.

Seara and Pilgrim's are committed to reducing antibiotics throughout its supply chain every year.

Pilgrim's Moy Park (Europe) medical routines no longer include the use of antibiotics. The Company focuses on producing healthy chickens and turkeys using best hygiene and breeding practices. Use of antibiotics is still strictly regulated by the industry and requires authorization from the veterinarians who care for the birds. All drugs used are licensed by the UK Veterinary Medicines Department and are subject to an intensive set of tests prior to being approved for use. Approvals for drugs used at poultry farms are inspected by auditors from the Red Tractor Scheme and local animal health inspectors, as required by law. Moy Park also maintains an Antimicrobial Handling Forum focused on educating poultry farmers about antimicrobial resistance and adopting best practices to reduce the use of antimicrobial products. It also collects a wide range of data to give the poultry industry and regulators a clear understanding of antimicrobial trends. Pilgrim's Moy Park also has a Food Safety Forum and an

Examples of best practices adopted by Pilgrim's Moy Park

- All poultry farms must provide natural lighting
- Over 84% of chicken facilities have water heaters
- All chickens at the Hénin Beaumont (France) facility are bred on "enriched" farms, where animals have access to natural light, objects to distract them, perches and balls of straw

Antibiotics Management Forum to implement practices that protect chicken and turkey health and support food safety. These forms are staffed by outside specialists who provide the Company with the latest scientific developments.

Transport

This is an important phase for animal welfare and is carried out by trained teams using vehicles that have been specially developed to protect animals against injury during transportation and minimize stress during embarkation, transportation and disembarkation.

At Seara, pork and poultry transportation from farms to meatpacking units complies with the following practices:

- In order to reduce the time animals spend in transit, logistics planning teams look at the best routes, starting points and destinations.
- Maximum distances between farms and meatpacking units are defined to guarantee animal comfort.
- Transport routines are managed using indicators, such as cage density and weight during loading to guarantee appropriate practices are adopted.
- Trained teams are used to load trucks, using techniques that minimize animals stress.

The JBS Carnes fleet is constantly being renewed with more modern and efficient vehicles, which are built to provide better space and accommodation for cattle, with appropriate ceiling heights and a hydraulic elevator, better organizing the animals' entry and departure. These features help to improve animal welfare, facilitating team

members' jobs, reducing the number of carcass injuries and thereby ensuring better quality products for consumers. In 2017, the second year that trucks with elevators were in operation, the fleet purchased another 158 new vehicles complying with more modern standards. Alongside those introduced in 2016, they now represent around 50% of the Company's entire Brazilian cattle transportation fleet. The first stage of a project focusing on cattle transportation was concluded in 2017 and resulted in structural changes to the most recently acquired trucks. The study was carried out in partnership with the ETCO Group from the Paulista State University (UNESP). A second stage of assessments will take place in 2018 to test the alterations implemented after the first phase.

The entire cattle transport fleet is now equipped with a tracking system. This new feature means animal welfare can now be controlled directly as, among other functions, it detects sharp braking or acceleration, vehicle speed, curve handling and is able to lock the doors, making transportation more comfortable for the animals and reducing the risk of injury or accident en route.



In the USA, **JBS USA Carriers** is responsible for safely transporting over 1.5 million cattle a year. The Company offers driver training on animal handling and safety. The training material is based on the Master Cattle Transporter Guide, which is part of the Meat Quality Assurance program from the National Cattlemen’s Beef Association (NCBA), a well-known industry standard for truck driver training.

University Partnerships. JBS partners with Universities and well-known research centers and researchers to develop projects aimed at generating new solutions and/or improving current practices.



The entire cattle transport fleet is now equipped with a tracking system.

Slaughter

JBS's guiding principle in this area is humane slaughter, guaranteeing appropriate handling from the time the animal arrives up to the time it is slaughtered, including animal stunning. JBS therefore uses the best equipment available on the global market.

In 2017, JBS Carnes sponsored a cattle stunning project to improve stunning efficiency. The study was carried out by Unesp researchers with the direct involvement of Neville Gregory, a professor at the University of London and one of the foremost specialists in the area. At Seara, pigs and poultry are kept in temperature controlled waiting bays or warehouses. Routines involving pigs now have improved pre-slaughter handling procedures. Based on the best practices already in place, JBS partnered with a manufacturer to develop new equipment that minimizes animal discomfort during this stage of the process.

GNP's brands include Just Bare, which focuses on organic chicken. In the US, the Company pioneered the use of high technology chicken production techniques, with processes that include gas-based stunning and automated deboning, among others. All GNP products carry the American Humane Certified seal, which certifies the animals were bred humanely.

Pilgrim's Moy Park has breeding processes that feed poultry a vegetable-based diet that includes cereals, like corn and wheat, as well as soybeans and other oilseed proteins, without any growth promoters or added antibiotics. The birds are a variety that grows more slowly. The longer time it takes to reach maturity creates a more succulent bird with better flavor. Pilgrim's is the leading producer of organic poultry in the U.S. and Europe. Differentiated animal welfare practices create market opportunities for growth and differentiation, including some specialized product lines that provide birds free-range access to

Leading Producer of Organic Products

Higher-quality animal welfare practices have allowed JBS to expand its organic and premium offerings. In 2017, through the efforts of Pilgrim's Pride, it became the top global producer of organic chicken. This was achieved via PPC's 2017 acquisitions of GNP Company, which specializes in producing premium chicken products made with organic, antibiotic-free raw materials, and Moy Park, which is based in Northern Ireland.

pasture during the day. These farms also provide natural ventilation and lower density occupancy, giving the animals freedom to move around.

Pilgrim's Moy Park is the UK and Ireland's largest producer of free-range, organic poultry. It has over 110 small-scale farms producing organic chickens. Apart from being the biggest organic chicken producer, it was also the first to deploy this breeding method in the UK in the 1980s. The following decade it started breeding organic chicken. Turkeys are also produced using the same breeding methods. For more than 20 years the Company has been breeding turkeys from different lineages at naturally ventilated farms, using diets based entirely on wheat and soybeans, produced at the Company's own feed factory and transported using special trucks. Animal breeding is supervised by qualified Company staff and all farms are certified by Quality British Turkey and Bord Bia.

JBS Brazil offers similar products. The Seara DaGranja range - which carries international animal welfare certification - supplies chickens bred on exclusive farms without the use of antibiotics or anticoccidials. The animals also receive 100% vegetable feed to guarantee traceability throughout the production chain. Seara also has a special breed of free range chicken: Frango Caipira Nhô Bento.

JBS Australia Launches Certified Organic Meat

In addition to producing organic chicken, JBS has gone a step further and transferred this approach to the beef market. In 2017, it started processing its first certified organic herd in Australia, sold under the Acres brand and bred specially for this type of product. The meat is produced at the Rockhampton plant in Queensland and will serve Australian and other major international customers. For example, this brand will be supplied to both the food service and retail sectors in the US. The initiative is in line with the business strategy focused on developing stronger brands reflecting domestic and international customer expectations. The decision to launch an organic beef product will help JBS Australia serve rising demand in this niche market and increase its international competitiveness. Organic beef is produced on certified farms that comply with strict environmental and animal handling regulations.

In 2017, JBS started processing its first certified organic herd in Australia, sold under the Acres brand and bred specially for this type of product.

Water and Water Management GRI 103-2, 103-3

Animal feeding and breeding, as well as JBS’s other operating procedures, depend, to a great extent, on water availability. Water is essential for the production chain and the wider industry to guarantee process and product health standards and to clean facilities, equipment and tools. This means it is an input that runs through all other material issues identified by the Company.

Water management on the South America platform is based on corporate and water reduction guidelines that include water usage awareness and encompassing the entire water cycle. In 2017, the Company progressed in the following areas:

- A 12% reduction in overall water consumption in its Brazil operations as a result of increasingly efficient production processes. This has saved over 8.2 trillion liters of water.

- A 6% reduction in water use intensity in its global operations outside of Brazil.
- A 2.8% increase in water reuse in Brazil compared with the previous year, avoiding the capture of 1.7 million liters.
- A 34% year-on-year increase in rainwater capture in Brazil.

JBS is also working to encourage and engage the value chain in efforts to adopt best water usage practices. One example is the incentive in Brazil to use cisterns to capture and store rainwater on Seara’s integrated poultry farms.

JBS USA works closely with local, state and federal agents and authorities in the countries hosting its operations, developing joint solutions. All Company production units employ water reuse programs and mechanisms.

Evolving Eco-Efficiency Practices

In 2017, the CDP Water program recognized the ongoing improvements of JBS’s water management strategies and policies. JBS was ranked in the Leadership category with an A- grade, improving on its performance in recent years. The CDP Water methodology is based on a structured questionnaire that assesses water usage reduction risks and opportunities, governance, strategies, compliance, performance, initiatives and targets. Companies are classified in eight categories (A to D-), with A considered the “Leadership” category and D the “Disclosure” category.

CDP Water



Highlight among McDonald's top suppliers

Arcos Dorados (McDonald's)

acknowledged JBS's outstanding performance in the **CDP Supply Chain Water 2017** program. The CDP program, developed exclusively for companies that evaluate and incentivize their suppliers, looks at policies, strategies and opportunity and risk management, as well as water

usage performance indicators. Over 310 of McDonald's Latin American suppliers were assessed in 2017, which included food and packaging suppliers, logistics providers and others. JBS was the only animal protein industry Company to be highlighted during the assessment.

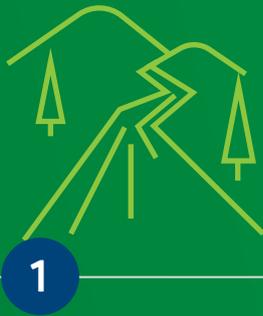
The projects and initiatives we have adopted require more than innovation and specialized engineering from the operational and environmental teams. They also require commitment and partnership across teams, which include food safety experts, USDA team members, business analysts and financial managers. Every effort is made to engage and educate teams on the approach they are expected to have towards correct water use and conservation.

Management and Governance

Water reuse procedures at our South America operations comply with the **Sustainable Water Management Program (SWMP)**. This initiative, which has been implemented at all the Company's Brazil businesses (Meats, Seara, Leather and New Business) is used to identify critical areas and prioritize facilities and hydrographic basins as Company operations, which are spread across over 100 units around the country, use water from many of Brazil's major hydrographic basins.

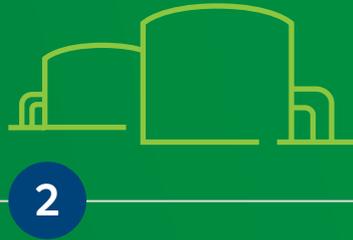
It is also used to mitigate the risk of shortages and increase target-based usage efficiency. The SWMP is also used to measure water-related financial impacts, provide strategic tools and methodologies to support investment decisions. SWMP actions in 2017 prioritized environmental education and awareness, with initiatives that focus on changing team member behavior. One example is the Water Campaign in Brazil, which ran throughout the year, engaging team members and their families on conscientious water usage. Content highlighting the importance of water and how to use water responsibly at work and at home was distributed during various phases of the campaign. A drawing competition for team members' children and other initiatives was also organized. The issue was also discussed at the WSD (Weekly Safety Dialogue), an occasional meeting for sector leaders and their teams.

The JBS Water Cycle



1 Catchment

Mainly from surface and underground sources



2 Treatment (input)

Before being used, the water is treated to guarantee the necessary quality



3 Monitoring

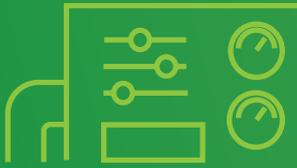
Water consumption is measured and controlled by a number of devices and systems

The **JBS USA** water management mechanisms are defined by unit leaders and they reflect that unit's goals and objectives. It is up to each unit to meet local challenges and establish the most effective approach, which includes water sources, disposal sites, wastewater treatment programs and reuse/recycling strategies. All units make annual investments to achieve their goals and overcome their various local challenges.

All JBS USA facilities include the following in their routines:
GRI 303-3

- Environmental Management System (EMS) monitoring, which includes ongoing audits and opportunity mapping for best practices.
- Overall water usage and water intensity (water usage per ton of products or per animal) are closely monitored. This methodology helps to support ongoing improvements.

JBS Canada employs Key Performance Indicators (KPIs) to constantly monitor water consumption. Operational leaders are trained to track and measure monthly and weekly progress, relaying the results to management. In the production area, the units rely



4

Management

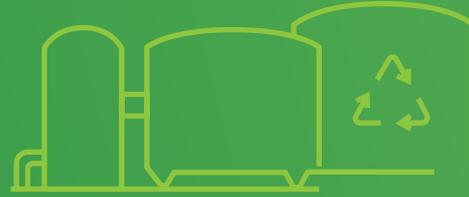
Usage reduction targets



5

Usage

Water is used in our production and cleaning processes



6

Treatment (output)

As wastewater – this is what water is called after industrial usage and the pollutants are removed at in-house effluent treatment stations

7

Disposal

Captured water is returned to the environment and discharged into bodies of water or on to soil used for crop farming (a system called fertirrigation)

on various flow meters. Information is collected at the end of every shift and relayed to area supervisors. Flow restrictors are also used on hoses. Regular audits identify inefficiencies such as faucet leaks and quickly arrange for maintenance.

In 2017, **Pilgrim's Moy Park** achieved a goal initially set for 2020: decreasing water usage by 20%.

The Company achieved a 23% water flow decrease compared to 2010, three years earlier than expected.

One of the Company's showcase projects is being deployed at the Ashbourne unit in Ireland. The unit has installed air extraction and purification systems, aimed at reducing airflow, thereby saving 14 gallons of water per day.

To learn more about JBS USA's approach to water management, including the Company's 2020 water reduction target, please visit <https://sustainability.jbssa.com>

The JBS USA water management mechanisms are defined by unit leaders and they reflect that unit's goals and objectives.



Capture Sources

The Company reduced the amount of water captured by 6%, equivalent to 10,522.93 m³ of water. Another standout issue is the increase in rainwater capture in Brazil, which reflects efforts in a variety of areas: they include environmental

education and awareness campaigns, as well as constant waste efficiency initiatives, which include replacing equipment, identifying improvements and adopting water reuse initiatives. All water is treated to ensure it provides the quality levels required by our production process.

Total JBS water capture, by source GRI 303-1

					JBS Global
		2017	2016		Variation / year
Source	thousand m ³	%	thousand m ³	%	
Surface	53,363.79	29.57%	91,403.56*	47.87%	
Underground	47,410.50	26.28%	68,147.16*	35.69%	-30%
Public supply	16,886.96	9.36%	31,202.68*	16.34%	-46%
Rainwater	172.54	0.10%	128.79	0.07%	34%
Other sources	62,604.44	34.70%	78.97	0.04%	79,180%
Total water volume	180,438.23		190,961.16*	-6%	-6%

*Revised figures



Reuse. Business areas are encouraged to develop programs and projects that improve sustainable water usage as part of our industrial processes. These eco-efficient practices have helped operations reuse 3.24% of all water, improving on the 3% reported in 2016 by 2%.

For example, four major water recycling projects have been implemented by the beef production unit in Greeley, Colorado (USA), to optimize water usage across all processes. These initiatives include water reuse systems at various stages of the process. Following a US\$ 1.3 million investment, these mechanisms now save 1 million gallons a day at the unit and have also helped save a significant amount of energy. As the recycled water undergoes a prior heating process, the temperature stays the same throughout the process, removing the need for natural gas to maintain the required temperature. Following the positive outcomes from these measures, the Company will expand these approaches to other beef-producing units in the country.

The Brooklyn unit, in Australia, invested in its wastewater treatment system and deployed two three-phase decanters to improve the Dissolved Air Flotation and sludge management performance. Now, it can treat up to 4 megaliters of wastewater per day, besides generating 400 kilos of sludge with dehydration. This project is able to produce a solid mass ready for the fertilizer market, reducing annual waste costs by half and saving US\$ 2.5 million.

Effluent. All water used by our industrial processes is sent to effluent treatment stations at Company units or discharged into the public network. Plants that carry out their own treatment invested in their plants to modernize treatment stations and improve treatment efficiency. One example is the mechanism JBS Carnes adopted at the jerked and dried beef unit in Santana de Parnaíba (SP), which modernized several stages of the production and wastewater treatment process in 2017. All water used by our industrial processes is sent to effluent treatment stations at Company units or discharged into the public network. The unit has been supplied with new wastewater treatment equipment, which means

All water used by our industrial processes is sent to effluent treatment stations at Company units or discharged into the public network.



that water used during the process can be returned to the environment in a 97% pure state, thanks to new electrolytic panels installed in the tank. Treatment capacity has also been increased to match additional output capabilities.

In 2017, there was an even greater improvement in unit effluent treatment efficiency resulting in a significant reduction in greenhouse

gas emissions. Equipment and processes were installed at various plants to further improve treatment.

GRI 303-3

In 2017, JBS's global operations reduced effluent volumes by 20%. The drop at "other sources" reflects improved information collection with effluent disposal now being reported in other categories.

Volume of Wastewater Generated and Treated GRI 306-1

	2017		2016		JBS Global
	thousand m ³	%	thousand m ³	%	Variation/year
1.1. Volume discarded – body of water	59,887.05	51.24%	63,754.35	43.68%	-6%
1.2. Volume discarded – Fertirrigation	19,010.57	16.27%	12,401.48	8.50%	53%
1.3. Volume discarded – Public supply network	22,917.22	19.61%	23,862.25	16.35%	-4%
1.5. Volume discarded – other type of disposal	15,052.39	12.88%	45,947.57	31.48%	-67%
Total wastewater volume discarded	116,867.24		145,965.65		-20%

Team members are the protagonists in awareness activities

Water's importance to the value chain has triggered a range of initiatives at JBS's Brazilian operations in order to optimize water usage. Team members have developed projects to effectively battle water waste and encourage reuse. Some examples are:

- The JBS Leather unit in Cascavel has implemented a water reuse project developed by a unit team member, saving 90% of the water used during the leather opening process, called semi-finished stretch. The tanks use a filtering system equipped with refurbished parts from maintenance operations. The system now filters the approximately 3 thousand liters of water used in the tank - which was previously changed out three or four times a day - and the water can now be reused for several days, without affecting process quality. To date, the mechanism has only been installed on one machine, but will also be used on the other three machines at the plant. The initiative will save the unit around R\$ 60 thousand a year.
- Seara's unit in São Gonçalo dos Campos (BA) implemented a separate initiative to identify reuse opportunities. Called Water Guardians, the program includes daily facility inspections to ensure, for example, that taps have been closed or whether flow reducer nozzles need to be replaced. The initiatives also include fixing leaks and installing equipment to reduce water consumption. This has reduced water usage by 44%.
- The JBS Leather unit in Lins (SP) replaced the material used to build its tanning drums (that produce a mechanical effect triggering a chemical reaction between the chemicals, water and leather) used during the retanning process. Instead of wood, the drums are now made of polypropylene, an inert and smoother, as well as less porous material, which saves water during washing.
- This initiative has saved 16 million liters of water a year, sufficient to fill seven Olympic swimming pools. Lower consumption has reduced water costs by R\$ 130 thousand a year.
- JBS Leather has also developed a project which, instead of disposing of the water used to process cattle skins, treats it and pumps it out to fertirrigate pasture. Three units - Colíder, Barra do Garças (MT) and Itumbiara (GO) - have already joined this initiative. For example, the Colíder plant treats around 700 cubic meters (or 700 thousand liters of water) per day which is then used on a farm that has up to 1.6 thousand on 240 hectares of land and productivity of 6.6 head per hectare/year. This contrasts with average productivity in the region of just two head per hectare/year, because of the lack of rain. This increase in output is the result of both irrigation during the dry season and the water's characteristics. After being used as part of our production processes, the treated water contains nutrients that fertilize the soil. The Company carries out soil analyses on a regular basis to increase quality and evaluate the impact from fertirrigation. Following the success of this project, three other farms in the region will also receive this water, subject to appropriate regulations and obtaining the relevant environmental licenses.
- JBS Carnes has been saving 3 million liters of water a month - equivalent to the amount of water 200 families would use at home every month - because of an animal hygiene and carcass washing automation project implemented in the slaughter area and the use of timers. The project was developed by Company team members and has been replicated at another 15 plants.



Product Integrity GRI 103-2, 103-3

At JBS, product integrity means respecting the highest standards in food quality and safety. To comply with these criteria, the Company is constantly improving its operational, manufacturing and supply methods, which includes its social and environmental practices, such as responsible raw material procurement and third-party certification of best practices, processes and routines.

JBS's value chain management sets the industry bar and it is constantly encouraging suppliers to adopt best practices. Another area where JBS stands apart from the competition is in responsible raw material procurement. For example, the Company is constantly monitoring cattle supplier farms

in Brazil by satellite using an in-house system, helping ensure it only purchases cattle from breeders who do not employ forced labor, carry out deforestation or encroach on indigenous lands or environmental conservation areas. GRI 308-1

a. Value chain management

GRI 103-2, 308-1, 308-2

The fact that JBS's suppliers adopt best sustainability practices has a direct impact on product quality. JBS acts as an agent of change and innovation in each of its production chains, supporting suppliers and offering guidance on how to improve quality as well as reduce environmental impacts. JBS organizes a number of initiatives to transform suppliers into business partners,



such as helping to improve their management processes and develop best social and environmental practices, which subsequently improve the quality of the raw material they supply to the Company.

Quality Ranking

This tool is used to manage raw material quality and communicate with livestock breeders in Brazil. It was developed by JBS Brazil to establish a link between carcass technical parameters - such as weight, animal age, fat finish and gender - and a quality-based bonus policy. This means carcasses obtain either a green light (desired standard), yellow light (admissible standard) or red light (undesirable standard), making it easier for breeders to understand the importance of improving the quality of cattle supplied to the Company. 45% of cattle purchased in Brazil in 2017 were classified using this system.

Following classification, JBS offers breeders bonuses linked to carcass quality. In 2017, livestock breeders received R\$ 34.3 million in bonuses under the policy. This sets JBS Brazil apart from the rest of the market and has increased the number of green light classifications, i.e., it is receiving higher quality carcasses, while reducing the number of red light classifications. When the Quality Ranking was launched in 2014, 14% of animals were green lighted while 33% were given the red light. In 2017, these figures were 21% and 10%, respectively.

JBS's value chain management sets the industry bar and it is constantly encouraging suppliers to adopt best practices.



Connection Management

The Connection Management initiative was launched in Brazil to improve management capabilities of mid-size livestock breeders supplying between 300 and 2,000 animals annually. It offers a range of tools that help increase efficiency in every link of the beef production chain, from breeders to the end consumer. Run in partnership with the Inttegra Institute, the initiative was launched in 2017 and initially assisted ten livestock breeders based in the state of Mato Gross do Sul. Another nine groups of ten breeders each will be organized in 2018 elsewhere in the country.

The Sustainable Hamburger

JBS Brazil has been an exclusive McDonald's partner and supplier since 2016, when the Sustainable Hamburger program was launched as a pioneering effort to produce hamburgers that meet certain social and environmental criteria applied throughout the value chain. For example, based on McDonald's quality requirements, the initiative only allows cattle purchases from farms not involved in deforestation, not located on indigenous land or in conservation areas and that do not use any type of forced labor. It also requires cattle monitoring from birth, compliance with the Sustainable Livestock Breeding Guidelines (GIPS), produced by the Sustainable Livestock Working Group (GTPS), and independent verification of the project's entire management system.

Legal Supplier Program

This is a JBS Brazil campaign to help meat suppliers arrange environmental enrollment with the government's Rural Environmental Registration (CAR). In order to comply with Brazilian legislative requirements, the Company also offers assistance through a group of consultants specializing in the CAR, helping farmers adapt to the Brazilian Forestry Code.

Livestock Breeder Communications Actions

JBS Connection Website

The JBS Connection Website in Brazil (www.conexaojbs.com.br) was launched in 2017 to strengthen relationships with livestock breeders, whether or not they supply the Company. The website content is intended to support discussion, distribute relevant information and help producers generally improve their businesses. It also offers producers that would like to partner with JBS more information about the Company and the way it works. The website provides a dynamic interface that is easy to browse and is divided into three main sections:

- I Want to Sell - this section offers a number of options for contacting the Company in order to sell cattle. It also provides additional information on selling options as well as the livestock improvement projects implemented by JBS (for example, the Quality Ranking and Carcass Grading).

- I Want to Find out More - in this section, livestock breeders can find information, news, daily prices and technical information they can save, share or print.
- I Want to Connect - here, visitors to the website can contact their nearest meatpacking plant and find answers to frequently asked questions.

Additionally, JBS Connection provides access to the Cattle Breeder Website (pecuarista.jbs.com.br) where producers have free access to all slaughter figures from each of their farms, the status of JBS social and environmental criteria and photographic information on finishing classes with validation from academics, industry associations and specialists to ensure that carcass grading is transparent and auditable.

JBS has been an exclusive McDonald's partner and supplier since 2016, when the Sustainable Hamburger program was launched as a pioneering effort to produce hamburgers that meet certain social and environmental criteria applied throughout the value chain.





In 2017, 50% of JBS livestock suppliers followed the Giro do Boi program, broadcast on the Rural Channel.

Giro do Boi Platform

This platform includes a website for livestock breeders with market information, news and prices as well as other data, a social media profile and daily TV program. Broadcast on the Rural Channel, the Giro do Boi program is an important source of information for people across the industry. One of the main highlights is the Brazil Tour, with information on the daily prices JBS practices throughout the country. In 2017, 50% of JBS livestock suppliers followed the program. The website received over 150,000 visits a month, three times as many as the previous year. One of the main website content items was the Cowboy Vaccination campaign, raising awareness and providing guidance on cattle handling techniques for foot and mouth vaccination. One of the videos available on the website was viewed 260,000 times.

Producing Technical Content for the Supply Chain

JBS sponsored an edition of “The Economics of Livestock Breeding”, a book by Ivan Wedekin, who has extensive experience in agribusiness, and looks at issues from the meat production chain to meat exports. Two thousand copies of the book were sold and the author gave 25 talks to livestock breeders around the country. Eleven short videos were also produced for the Giro do Boi website (www.girodobo.com.br) on each chapter in the book.

Sensory Analysis Events

A number of group dynamics were held for breeders throughout the year to encourage comparisons between meat quality versus production systems. Blind testing was carried out at seven events organized around Brazil - attended by 217 livestock breeders - during which participants tasted cuts of meat from different systems, from the castrated to the entire zebu.

Social Fuel Seal

JBS Biodiesel, a JBS New Business Company, supports family farming through the Social Fuel Seal, a federal government program – which the Company has supported for nine years – ensuring that small-scale family farmers are able to sell their produce to biodiesel manufacturers. In 2016, JBS Biodiesel took steps to extend these benefits to small-scale livestock breeders in the São Miguel do Guaporé region of Rondônia. This initiative will further support social and economic development in farming communities throughout the country and create additional opportunities for the Company, as beef tallow is the second most important source of raw material for the Brazilian biodiesel industry. Additionally, in 2017, JBS Biodiesel purchased 1,900 head of cattle produced by family farmers in São Miguel do Guaporé (RO), generating R\$ 3.5 in revenues for around 100 local families. Contracts are already in place to purchase over 6,000 head of cattle per year in 2018 and 2019 and the target is to reach 50,000 head of cattle every two years.

Integrated Supply Chain Management

GRI 304-2, 409-1, 414-1, 416,1

Seara (Brazil) has adopted a commercial integration methodology which offers producers all the consumables they need to rear safe and healthy pork and poultry and guidance on production processes and environmental practices. There is a strictly controlled system in place to manage every stage of the production process, from genetic selection of breeding animals and processing to point-of-sale delivery. This system affords greater control over sanitary and nutritional issues and guarantees product quality, food safety and cost efficiency.

Seara has a group of 300 farm management specialists who:

- provide integrated producers with production management assistance.
- The specialists frequently visit farms and offer help implementing responsible production practices, including quality standards that comply with animal welfare principles.
- They also verify environmental practices adopted at breeding and poultry farms to ensure compliance with the relevant contract terms. This includes using cisterns to capture rainwater, biodigesters and composting.

Seara has also implemented several biosafety initiatives. Adaptations to farm infrastructure and facilities help protect flocks from contaminants;

- Water supply system shielding, from source to trough, to avoid organic contamination;
- And a ban on water from rivers, lakes, streams or other sources that have not been protected. Protections must be approved by the Company's technical team
- Sealing poultry warehouses using lateral and gate screens to stop other birds from gaining access.
- Sanitary protections for vehicles and trucks arriving at chicken farms, with disinfection systems and training courses to ensure vehicles do not become vectors for contamination.
- Aviary bed fermentation, which significantly reduces the number of contaminants and improves poultry health.
- Each unit holds at least two annual health workshops to increase poultry breeder awareness of best practices. There are frequent simulations for emergency disease prevention procedures.

Seara's production system is vertically integrated, which means the Company produces 100% of its own breeder stock. This provide significant advantages, such as:



- Greater control over poultry health, reducing the risk of disease;
- Greater control over poultry nutrition, offering gains from food conversion, lot uniformity and reduced mortality; and
- Lower poultry breeding costs compared with the rest of the industry.

The Company also focuses on maintaining high levels of food safety and quality, which are essential to meet customer specifications, prevent contamination and minimize the risk of animal disease epidemics, which means the Company:

- employs **modern traceability systems** to quickly identify and isolate any farm posing a quality or health risk;

- **monitors pork and poultry breeding** through all phases of the process and throughout the animals' lifecycle;
- **structures each phase in the production chain** in order to support sustainable development.

Seara (Brazil) has adopted a commercial integration methodology which offers producers all the consumables they need to rear safe and healthy pork and poultry.

Pilgrim's Moy Park (Europe) and Pilgrim's Pride Corporation (North America) partner with breeder families to guarantee safe and healthy pork and poultry breeding and appropriate raw material sourcing. This involves offering producers all the consumables they need to rear safe and healthy pork and poultry and providing guidance on production processes and environmental compliance. Pilgrim's tightly manages every stage of the production process, from genetic selection of breeding animals and animal processing to point-of-sale delivery. This affords us greater control over sanitary and nutritional issues and guarantees product quality, food safety and cost efficiency.

- The Pilgrim's Pride Corporation (PCP) currently partners with

more than 4000 family farmers in the US and Mexico and supplies poultry, feed and technical/ veterinary services to producers. This means Pilgrim's is able to ensure customers receive safe, high quality products.

- In turn, Pilgrim's Moy Park is the only poultry Company in the United Kingdom or Europe with a fully integrated system covering three generations of animals – grandparents and parents (for reproduction) and broiler chickens (to produce meat). The Company also has a tracking system for animal feed and raw materials covering the production, processing and distribution phases. These tools help the Company guarantee food quality and safety.



Pilgrim's Moy Park (Europe) and Pilgrim's Pride Corporation (North America) partner with breeder families to guarantee safe and healthy pork and poultry breeding and appropriate raw material sourcing.

b. Responsible Raw Material Procurement⁵

GRI 103-2, 103-3, 308-1, 308-2,
GRI 414-1, 414-2

JBS Carnes (Brazil) does not purchase animals from farms that are involved in deforestation of native forests, encroach on indigenous land or environmental conservation projects, or have been embargoed by the Brazilian Institute for the Environment and Natural Resources (IBAMA). It also refuses to work with suppliers that employ child or forced labor, which are specifically prohibited under our agreements. The Company has adopted a number of rigorous contractual controls to uphold these principles and is continuously monitoring its service providers and suppliers.

5 This item, which is included in the global material issue "Product Integrity", only refers to animal procurement

For example, **Seara** (Brazil) carries out technical and health visits before and during any procurement activity and when certifying new suppliers, who must also hold the requisite environmental licenses. The Company also carries out on-site checks to ensure suppliers fulfill their contractual obligations. In turn, JBS Carnes employs a satellite monitoring system to certify that it sources meat from farms that are operating legally and comply with relevant labor and environmental legislation.

At **JBS USA**, all raw materials purchases comply with federal and local regulations and adhere to responsible procurement principles. If any wrongdoing arises or any service fails to comply with best practices, the supplier's contract is terminated. Initiatives at Company's units include:



- At **Pilgrim's Moy Park**, the new supplier approval process includes prequalification, where all companies must comply with the Company's environmental requirements and receive approval from the Quality Department. For example, all poultry suppliers must be certified by the British Retail Consortium (BRC) or an equivalent organization, such as IFS or FSSC 22000. All poultry suppliers must be certified by Red Tractor and comply with Red Tractor, Bord Bia or equivalent criteria. Suppliers are audited by independent and approved certification bodies.

Meat-based product suppliers must at least hold Red Tractor or equivalent certification. The Company also checks whether its suppliers employ child or forced labor.

- **JBS USA** is developing a Supplier Code of Conduct covering issues such as human rights, forced labor, freedom of association and collective bargaining, as well as health and safety, animal welfare, environmental and business integrity issues and other factors. The Company has set a target of 100% compliance from all suppliers by 2020.
- Suppliers are also monitored by ISNetwork, a system that evaluates criteria to assess product quality and occupational safety.



Raw Material Procurement Criteria

GRI 103-2, 103-3, 308-1, 308-2, 409-1,
GRI 414-1, 414-2

JBS South America requires suppliers to present a range of certificates proving compliance with local labor regulations. These include employment contracts and Social Security registration, evidence of FGTS and INSS payments, a clearance certificate from the Labor Courts, proof of technical expertise, vehicle and equipment safety compliance documents and so on.

- The United States and Canada units require all cattle suppliers to provide a statement expressing their compliance with government regulations and national animal welfare and quality certification programs.
- In the United States, the Animal Welfare Program requirements are monitored through supplier audits, which are carried out by internal (PAACO-certified auditors) and external third party auditors.
- In Mexico, all suppliers are audited in compliance with Mexican government standards.
- In Australia, all animal suppliers must provide the National Vendor Declaration (NVD), a document allowing product tracking. When the NVD is signed, the producer declares it is compliant with the Livestock Production Assurance (LPA) program, which is an audit-independent food safety certification program adopted by suppliers. The NVD contains important information about cattle breeding.

Compliance with contract terms is regularly audited, based on a monthly check list requiring proof of payment for team member salaries and (INSS and FGTS) contributions, relevant business taxes (IR, CSSL, PIS, COFINS, ISS and others) and a daily check list for contractor vehicles and equipment. Transport vehicles and equipment are also verified daily.

Beef purchases must comply with the **Public Livestock Commitment**. This commitment is intended to ensure that the Brazilian beef industry does not purchase raw materials from farms involved in Amazon forest deforestation from October 2009 onwards, that use forced labor or occupy indigenous land or conservation units.

At Pilgrim's Moy Park, the new supplier approval process includes prequalification, which means all applicants must comply with the Company's environmental requirements and receive approval from the Quality Department.

This commitment is intended to ensure that the Brazilian beef industry does not purchase raw materials from farms involved in Amazon forest deforestation from October 2009 onwards, that use forced labor or occupy indigenous land or conservation units. The Company also verifies whether its procurement activities comply with the Commitment. Every year, a representative sample of all beef raw material purchases is taken. During the last inspection, published in 2017, 99.97% of purchases were found to be in compliance. The analysis, which samples nine thousand cattle purchases from supplier farms in the Amazon Biome, was carried out by independent auditor DNV GL, which is internationally recognized for its environmental work.

In Europe, **Pilgrim's Moy Park** bases its policy on the ETI Base Code, an internationally recognized document which itself follows the guidelines issued by the International Labor Organization (ILO) to address illegal working conditions by working with suppliers and team members. The Company has an Ethics Leadership Forum made up of Company team members to maintain, develop and continuously improve these practices.

Around 70,000 Brazilian cattle suppliers are assessed daily using satellite imagery, farm geo-referencing data and information from government agencies.

JBS operations in the **US** and **Mexico** are governed by a corporate policy setting out procedures on forced labor and people trafficking. The document sets out criteria for ensuring all related matters are addressed by Company team members, staff, third parties and suppliers in accordance with local, state and federal law. Suppliers also sign a document attesting that they comply with all related laws and regulations. In the US, farmer relationships are regulated by the U.S. Department of Agriculture's Grain Inspection, Packers and Stockyards Administration.

JBS USA Pork units require all family-based suppliers that provide pork fattening services to obtain certification and evaluation from Pork Quality Assurance (PQA) Plus, which is managed by the National Pork Board. Random audits are also carried out by an independent third-party under the "Common Food Industry Audit" principles, a PAACO-certified pork industry platform aimed at producers, packers and processors. These guidelines offer greater welfare and food safety guarantees to consumers.

At **JBS Australia**, cattle and pork are tagged with a device (called an NLIS) before leaving the property, which means they can be traced from the farm where they were bred using a national database.

Social and Environmental Monitoring at Supplier Farms

GRI 103-2, 103-3, 304-2, 308-2, 409-1, 414-1, 414-2

JBS has a robust monitoring system that it uses to monitor and verify whether supplier procedures comply with social and environmental criteria, which includes ensuring they are not involved with deforestation of native forests, occupation of indigenous land or environmental conservation areas and that they do not use forced labor.

Around 70,000 Brazilian cattle suppliers are assessed daily using satellite imagery, farm geo-referencing data and information from government agencies⁶. This exclusive JBS monitoring system covers over 59 million hectares in the Amazon region and 437 Brazilian cities. If it detects farms that fail to comply with any of the Company's social and environmental criteria, the system suspends trading with the supplier and blocks and purchases until the situation has been corrected.

6 To monitor deforestation, the Company consults data published by the National Space Research Institute (INPE). In order to monitor embargoed areas, the Company consults data published by the Brazilian Environmental and Renewable Natural Resources Institute (Ibama) and monitors forced labor using figures published by the Ministry of Jobs and Employment (MTE).

Based on these analyses, 6,244 suppliers have suspended, of which:

- 3,849 were barred because their farms are located in areas where deforestation native forest (since October 2009) and/or invasion of indigenous lands or environmental conservation areas has occurred;
- 2,379 were blocked because they were included on Ibama's List of Embargoed Areas; and
- 16 were suspended because they were listed as using forced labor.

The entire cattle procurement process and the JBS Carnes' Social and Environmental Monitoring System are audited annually by independent, third-party auditors. The audit reports can be viewed on the Company website and are available at <http://jbs.com.br/sustentabilidade/dialogo-transparencia-e-comunicacao/>.

Institutional advocacy

GRI 102-12, 102-13

Both the South American and North America operations are member of several major local and global sustainability forums. Some address product integrity issues:

National Pact Institute for the Eradication of Forced Labor

(InPACTO) - An initiative intended to strengthen efforts to combat forced labor in Brazil. JBS has been a signatory of the National Pact Institute for the Eradication of Forced Labor in Brazil since 2007 and a member of the Institute since 2014.

Leather Working Group (LWG) –

This is a leather industry initiative involving international brands, tanners, suppliers and retailers to promote industry-appropriate and sustainable environmental management practices. JBS Leather has taken an active role on the Technical Sub-Group and Trader Working Group, actively supporting development of LWG certification.

Of the 15 units in South America, eight factories have maximum traceability certification and production processes at seven production units and a distribution center were certified as having best environmental practices. The Barra do Garças (MT), Cacoal (RO), Colorado do Oeste (RO), Porangatu (GO) and São Luiz de Montes Belos (GO) units in Brazil retained their gold medals. The units in Uberlândia (MG) and Buenos Aires (Magdalena), in Argentina, retained their silver medals in this round of audits. The Campo Grande (MS) distribution also achieved top marks (100%) following its first audit under the LWG distribution protocol. All of the units mentioned above achieved the highest ranking for traceability, with all processed leathers physically marked and traceable. Six other plants in the region will renew their certificates in 2018 and already hold a gold medal and the highest possible ranking for traceability. The Montenegro (RS) and Montevideo unit, in Uruguay, will undergo their first audits this year.



This is a leather industry initiative involving international brands, tanners, suppliers and retailers to promote industry-appropriate and sustainable environmental management practices.

British Poultry Council (BPC) – The Council represents the European poultry industry and works to create closer ties between companies, other stakeholders, governments and regulators. The organization holds debates on best food safety practices, focusing on poultry health and welfare. In addition to taking an active role on BPC committees, Pilgrim's Moy Park is also a member of its Board of Directors.

The Canadian Roundtable for Sustainable Beef (CRSB) – This organization connects leaders throughout the sector to drive advances in sustainability for the Canadian meat industry. JBS USA is one of its founding members and currently sits on the Board of Directors.

The Global Roundtable for Sustainable Beef (GRSB) – This organization focuses on ongoing sustainability improvements throughout the global beef value chain through leadership, science, engagement and collaboration. In addition to being a founding member, JBS USA also has a seat on the Executive Committee.

U.S. Roundtable for Sustainable Beef (USRSB) – The USRSB supports continuous sustainability improvements throughout the US beef value chain, helping to engage companies and organizations with this issue. JBS is one of its founding members and is inline to chair the Board of Directors.

Australian Beef Sustainability Framework – JBS is a member of the Australian Beef Sustainability Framework, which focuses on driving prosperity across the Australian meat industry by constantly improving community, animals and environmental well-being.

The Sustainable Agriculture Initiative - Pilgrim's Moy Park is a member of the SAI platform which develops secure and prosperous agricultural supply chains and protects natural resources through the adoption of sustainable practices that generate value for members, farmers, farming communities and consumers.



Climate Change GRI 103-2, 103-3

One of the areas JBS works on to reduce its environmental footprint is greenhouse gas emissions (GGE). It uses various greenhouse gas indicators to manage the issue, as well as several operational initiatives that include:

- reducing dependence on fossil fuels
- conscientious energy usage
- increasing use of clean energy
- reusing waste to generate power
- implementing efficient industrial effluent treatments
- increasing logistics efficiency for own and contracted fleets
- preventing deforestation throughout the supply chain.
- Operational Greenhouse Gas Emissions
- Emissions Management

Gestão de Emissões

Management depends on measurement. This means the Company measures direct emissions (scope 1), indirect energy emissions (scope 2) and indirect emissions (scope 3) annually. The resulting information is used to produce an emissions profile and assess the effectiveness of our initiatives.

In 2017, JBS emitted 6,051,350.26 tCO₂e corresponding to scope 1, 1,780,144.14 tCO₂e corresponding to scope 2 and 593,089.12 tCO₂e corresponding to scope 3.

Looking at scope 1 and 2, there has been a 1% and 2% reduction in respective greenhouse gas emissions, representing gross emission of 67,782 tons of CO₂e.

Operational Greenhouse Gas Emissions GRI 305-1, 305-2, 305-3, 305-4

		JBS Global		
		2017	2016	Variation / year
Scope 1	tCO ₂ e	6,051,350.26	6,084,483.08*	-1%
Scope 2	tCO ₂ e	1,780,144.14	1,814,793.76*	-2%
Scope 3	tCO ₂ e	593,089.12	627,850.78*	-6%

*Revised figures



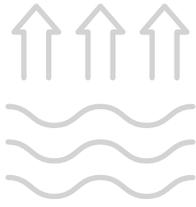


JBS highlighted by CDP Forests

JBS's deforestation prevention initiatives have been noted by CDP Forests, a program developed by the CDP, a global organization that evaluates corporate actions and policies to prevent deforestation linked with the main agricultural commodities (cattle, soybeans, timber and palm oil). JBS received an A- for cattle and timber and a B for soybeans. The data survey used by the study is collected using a

theme-based questionnaire that assesses risks and opportunities, governance, strategies, compliance, traceability, procurement policies, chain engagement and target-setting. Companies are classified in 8 categories (A to D-), with A considered the "Leadership" category and D the "Disclosure" category.





The annual inventory, which can be viewed on the Public Commissions Records Platform maintained by the Brazil GHG Protocol Program and on the CDB Platform, has been taken since 2009. Initially, the inventory focused only on the Company's Brazilian operations, but in 2012 it was expanded to include all global operations. Emissions data are reported to B3 (formerly BM&FBovespa), as JBS stock is included on the Carbon Efficiency Index (ICO2), and to the Sao Paulo and Paraná State Environment Secretariats in Brazil as part of a voluntary annual reporting process that has been in place since 2015. In the US, emissions are reported to the Environmental Protection Agency (EPA) as part of the SmartWay program for Shipping companies and via 40 CFR 98 (the Greenhouse Gas Reporting Rule) for beef, pork and poultry facilities, as required by law.

The data is used as a basis for Company strategies and to underpin actions implemented throughout the value chain. In 2017, initiatives adopted by our South America operations focused on engagement with suppliers and producers, logistics efficiency, waste management and industrial effluent treatment, as well as energy efficiency gains. GRI 305-5

- **Supplier Engagement**

- › **Preventing Deforestation** based on satellite monitoring of cattle supplier farms.
- › **Environmental Compliance** for livestock breeders based on the Legal Supplier Program.

Global Sustainability Forum

During the 8th International Conference on Lifecycle Management (LCM 2017) in Luxemburg, JBS presented a first-of-a-kind study on the Company's carbon footprint across its beef (Picanha Maturatta Friboi) and chicken (Seara DaGranja Whole Chicken) product manufacturing cycle. Carried out in partnership with the Getulio Vargas Foundation's Sustainability Study Center (GVces) as part of the Applied Lifecycle (CIViA) initiative, the study was used as a

benchmark for the Lifecycle Assessment (ACV) methodology, a technique used to analyze industrial performance (for goods and services) based on natural resource usage across various stages of the value chain: from raw material production to product disposal, including processing, distribution and consumption. Using this information, the ACV is able to identify environmental impacts from these processes and support strategic decisions to minimize them.



- **Logistics Efficiency**

- › **Redução do Consumo de**

- › **Reducing Fuel Consumption** by

- › cutting journey distances for our own and third-party fleets. One example is the Route Optimizing project at JBS Carriers. The fleet of trucks that ships JBS products makes the return trip carrying cargo from partner companies. As a result, the trucks save over 2.8 million liters of diesel and avoid 2,811.85 tons of CO₂e emissions.

- › **Less Pollutant Shipping Options,**

- › such as coastal shipping, which Seara is using with greater frequency. In 2017, coastal shipping volumes rose 45% year on year. According to data from the Brazil GHG Protocol, a ship emits 15 times less greenhouse gas, on average, to ship the same cargo as a refrigerated truck.

- **Energy Efficiency Projects**

- › More energy from renewable sources.

- › Reusing waste to generate energy and manufacture new products.

- › Industrial wastewater treatment efficiency improvements.

In 2017, initiatives adopted by our South America operations focused on engagement with suppliers and producers, logistics efficiency, waste management and industrial effluent treatment.



North America adopts similar strategies to those implemented in South America. There is a significant emphasis on value chain engagement and adoption of best practices, as well as a number of actions at various operations to improve energy efficiency, such as power generation using renewable sources, reusing waste to generate energy, operational effluent treatment and disposal solutions and logistics efficiency projects. For example, **Pilgrim's Moy Park** has also made headway reducing fleet emissions. Since 2011, gCO₂/km metrics have fallen 16%, generating significant reduction in greenhouse gas emissions. The Company is a signatory of the Federation House Commitment. It is also a member of the EU Emissions Trade System (ETS) and the Climate Change Agreement Scheme for the industrial and agricultural sectors, reinforcing its commitment to finding solutions for the sector. It also drives team member

collaboration via targets that offer financial bonuses for senior operational and sustainability managers. It is also involved in external initiatives as a means of influencing public policy in this area, engaging directly with policymakers and industry associations such as the British Poultry Council and Confederation of Business and Industry, among others. It is also a member of the European Union's Emissions Trading System and complies with the Energy Saving Opportunities Plan and the industrial and farming Climate Change Agreement.

The Company is a signatory of the Federation House Commitment. It is also a member of the EU Emissions Trade System (ETS) and the Climate Change Agreement Scheme for the industrial and agricultural sectors.



Energy

GRI 103-2, 103-3, 302-1, 302-4

JBS believes that investing in renewable energy and energy efficiency can help reduce greenhouse gas emissions. As a result, the Company is constantly investing in more efficient equipment, increasing use of renewable energy sources and its operations have adopted energy usage reduction targets.

In 2017, JBS operations reduced energy consumption by 20% (GJ), as shown in the following table. This reflects the 23% drop in the use of renewable

energy and shows an overall increase in the share of renewable energy, rising from 14% to 17% in 2017.

Analyzing Brazil operations separately, the percentage of renewable energy rises to 88% as the Company has prioritized renewable fuels to produce steam from its boilers. This is also up on the 86.7% reported in 2016. For example, 98.6% of all energy used by Company boilers in Brazil comes from renewable sources.

Energy Consumption by Source

						JBS Global
		2017		2016		Variation/ year %
Total GJ* - Direct Energy	GJ	179,558,105.58		224,892,963.81**		-20%
Renewable GJ	GJ	30,428,735.28	17%	30,600,873.00**	14%	-1%
Non-renewable GJ	GJ	149,129,370.30	83%	194,292,090.82**	86%	-23%

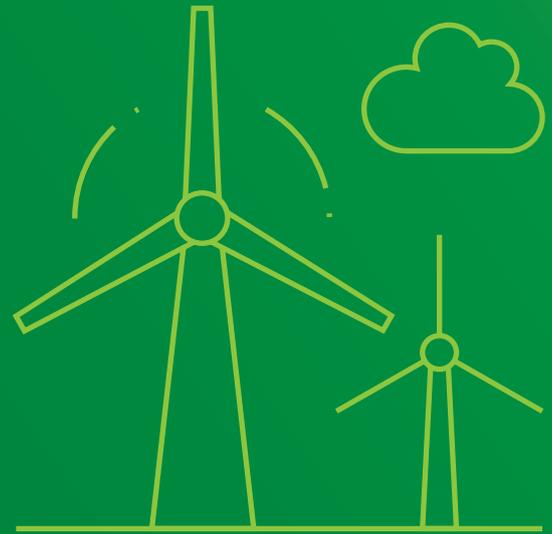
* Including electricity generation, fuel used to generate steam, thermal heating (stationary combustion) and fuel used to operate the Company fleet (mobile combustion).

** Revised figures

Action Taken in 2017

In addition to the energy consumption reduction targets adopted across all operations, in 2017 JBS invested in more efficient equipment and introduced new practices based on new technologies and solutions, placing a much greater emphasis on clean energy sources.

Energy Efficiency Projects



1

▶ Migrating to the Open Market

Over the year, JBS noted a significant reduction in energy costs across its Brazilian businesses after several plants migrated to the open market and replaced obsolete electrical equipment. It also reduced energy consumption at peak hours, when electricity prices are higher.



2

▶ Facility Automation

In 2017, JBS Carnes invested R\$ 15 million to automate the machine rooms at nine factories. Half of this investment was repaid within the year after the initiative generated R\$ 7.5 million in savings.

Elsewhere, the Pilgrim's Moy Park Ashbourne unit installed air treatment v units which reduce air flows and save 96 thousand KWh annually.



▶ **Incentivized Energy Purchases**

In Brazil, JBS has a specialist team purchasing incentivized energy on the open market from small hydroelectric power stations or other sources of renewable energy, such as wind parks, solar parks or biomass energy plants. In 2017, the team purchased 1.5 million MWh on the open market. 46% was produced using renewable sources. These energy purchases are certified using the Sinerconsult methodology, which is based on the “GHG Protocol Corporate Standard” protocol, itself part of the “The Greenhouse Gas Protocol Initiative”.

3

▶ **Reduced Natural Gas Consumption**

JBS USA Beef unit reduced natural gas consumption by approximately 4.3% and electricity usage by around 3% per animal. At Pilgrim's, natural gas consumption fell 4.6% and electricity usage was reduced by 1.3%, per animal. These results reflect a number of metering and monitoring initiatives put in place at all facilities as well as ongoing investment in higher efficiency equipment. For example, the Plainwell plant received two new boilers, cutting consumption by 15%. At the Greeley factory, the Company partnered with suppliers to create the “Focus on Energy” program, cutting costs by 10%. Another goal is to residual heat as a means of cutting boiler natural gas consumption. JBS Canada has implemented specific technology to recycle heat and achieve this objective.

5

▶ **Replacing Convention Lights with LEDs**

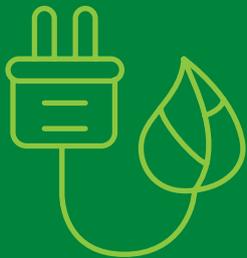
JBS Leather has decided to gradually replace all conventional lights with LED bulbs. All new projects are equipped with LED lighting from the outset. This type of lighting reduces electricity consumption by 75% compared with conventional bulbs.

JBS Canada adopts regular preventive maintenance to ensure all equipment operates at maximum efficiency. Energy-efficient LED lamps are used in all factory areas and team members are advised to turn off all equipment when not in use. A number of projects were implemented at Pilgrim's to switch lamps to an LED system, including the US factories in Lufkin, Sanford, Natchitoches, Marshville, Mt. Pleasant, Sumter, Atenas and Moorefield.

4



Reusing Waste for Energy



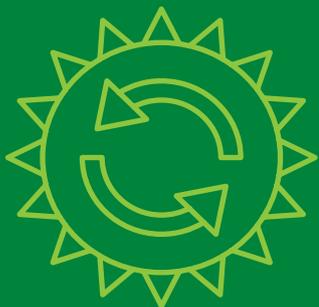
Energy cogeneration

In Brazil, JBS owns a cogeneration unit which employs biomass (sugarcane bagasse, sawdust, peanut and rice husks and eucalyptus chips) to generate thermal energy and steam. Cogeneration takes place at Biolins, which is located in the Lins Industrial Park, based in Lins (Sao Paulo), in the interior of the state of São Paulo. Biolins runs a thermal plant capable of generating around 45 MW of energy per hour, sufficient to supply a city of 300,000 inhabitants. Around 33% of this electricity is used to supply the Meat, Leather and New Business plants based at the Lins industrial complex. The remainder is distributed to JBS units and sold on the domestic market. The steam produced by the plant supplies the adjacent JBS units. Biolins alone generates the equivalent of 22.5% of all energy used by every JBS plant in Brazil.

1

Reusing Waste for Energy

South American units reused 16 tons of waste to produce energy and reduce their greenhouse gas emissions. Waste such as cattle rumen (9 tons) and poultry tallow (7.5 tons) was not sent to landfills or disposed of using less sustainable methods

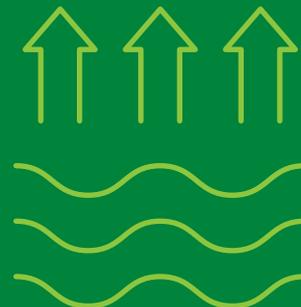


2

3

Biogas

10 JBS USA units are using biogas produced by the Company's own wastewater treatment systems. For example, the pork processing unit located in Marshalltown, Iowa, is recovering biogas from an anaerobic treatment to Lake. The Hyrum unit has a biogas collection and usage system that provides around 15% of the natural gas used at its facilities.



Biomass

Moy Park (JBS Europe) is using biomass technology as an alternative energy source for its poultry processing units' heating systems.



4

5



Effluent

The beef plant in Brooks, located in Alberta, Canada, has expanded its effluent treatment systems, investing over US\$ 2.5 million in improving recovery of grease, which is a byproduct. As a result, the plant recovered an additional 25% grease and removed over 25,000 tons of CH₄ from the effluent treatment process. The beef plant in Dinmore, located in Queensland, Australia, has modernized its effluent treatment system, investing over US\$ 8.7 million in a biogas capture system. This offset over 74,140 GJ of natural gas per annum and reduced GGE emissions from the effluent treatment system by more than 97% (burned using a flare or used in the boiler), equivalent to over 44,000 tCO₂e.



Solid Waste

GRI 103-2, 103-3, 301-1, 301-2, 306-4

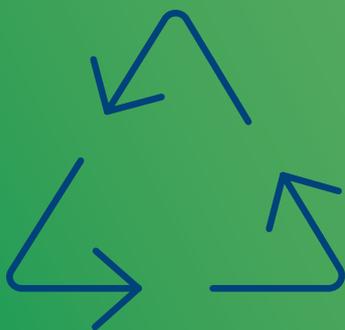
Greenhouse gas emission (GGE) reduction also involves solid waste management. This includes (post-industrial) waste produced by Company operations and post-consumption packaging. A number of initiatives have been implemented in order to properly treat this waste and avoid environmental impacts such as methane (CH₄) emissions from decomposition, which is one of the causes of global warming.

The Brazil operations, which are part of the South America platform, comply with the local National Solid Waste Policy (PNRS), which focuses on reducing the amount of waste

generated, increasing recycling and reuse of materials and encourages environmentally appropriate waste disposal

This policy also creates shared responsibilities for all parties generating post-industrial and post-consumption waste (packaging). JBS signed up to the Ministry of the Environment's Industry Packaging Accord in 2014 alongside over 300 companies from around the country, who are now committed to supporting recycling nationwide. The Company also signed a Consent Decree with the State Environmental Secretariat in Paraná, towards the same objective (www.coalizoembalagens.com.br).

Greenhouse gas emission (GGE) reduction also involves solid waste management.



Post-consumption Recycling

In Brazil, JBS includes symbols on all product packaging to identify the type of packaging material used and provide proper disposal instructions. This complies with the Environmental Labeling rules issued by the Brazilian Association of Technical Standards in ABNT NBR 16182.

Volume of Operational Waste Generated GRI 306-2

						JBS Global	
		2017		2016		Variation / year	
Total Non-Hazardous Waste	ton	1,865,196.52	99.5%	2,065,488.07*	92.35%	-10%	
Total Hazardous Waste	ton	9,356.68	0.5%	171,159.63*	7.65%	-95%	
Total Waste	ton	1,874,553.20		2,236,647.70*	-16%	-16%	
Industrial/Sanitary Landfill - Own	ton	22,828.20	1.22%	34,474.01	1.54%	-34%	
Industrial/Sanitary Landfill - Third Party	ton	245,691.31	13.11%	409,161.39*	18.29%	-40%	
Composting	ton	637,852.68	34.03%	712,265.16*	31.85%	-10%	
Incineration	ton	7,456.44	0.4%	11,328.59*	0.51%	-34%	
Recycling	ton	399,072.37	21.29%	324,983.79	14.53%	23%	
Energy Reuse	ton	57,438.97	3.06%	51,324.57	2.29%	12%	
Cogeneration	ton	28,277.42	1.51%	7,371.52*	0.33%	284%	
Fertirrigation (Land Farm)	ton	387,726.40	20.68%	465,224.24*	20.8%	-17%	
Others	ton	88,209.40	4.71%	220,514.43	9.86%	-60%	

*Revised figures

There was a 16% reduction in operational waste volumes compared with the previous year. This change was mainly driven by a significant drop in waste volumes sent to landfills. 59.89% of post-

industrial waste generated by JBS operations was used for composting, recycling, energy reuse and energy cogeneration. In 2017, this system processed over 1.0 million tons of waste.

Main Activities in 2017

Biodiesel From Cooking Oil.

JBS Biodiesel produced 210 million liters of fuel in 2017. Partnering with JBS Environmental, the Company created the Friendly Oil project to increase society's awareness of the importance of properly disposing of used cooking oil and produced 20 million liters from this used oil. Throughout the year, the initiative collected around 2 millions of cooking oil. Estimates show that each liter of cooking oil that is collected avoids contamination of 20 to 25 thousand liters of water or treatment by sewage companies, reducing costs for the government and taxpayers. The program was successful, attracting a R\$ 5.5 million investment at the Lins plant, where the cooking oil is processed, to expand the initiative. The Company plans to collect around 3 million liters of used cooking oil in 2018.

Professional Training for the Recycling Industry. JBS has taken steps to provide training, improve infrastructure and

donate equipment to cooperatives and associations of recyclable material collectors nationwide. This is intended to help increase collectors' revenues and train industry professionals, boosting the number of recycling initiatives in Brazil.

For example, in 2017 JBS started sponsoring the **Separate. Don't Stop Initiative**. The project is run by the Packaging Coalition, a group of associations representing a number of packaging businesses - including JBS - which also created an Industry Agreement to expand recycling in Brazil and comply with targets in the National Solid Waste Policy (PNRS, Law 12,305/2010). The law creates tools for proper solid waste treatment nationwide.

Separate. Don't Stop is a public awareness initiative in Brazil set up to make people more aware about the importance of recycling, encouraging them to change the way they dispose of used packaging.

JBS Biodiesel produced 210 million liters of fuel in 2017. 20 million liter were made using used cooking oil, a result of the partnership with JBS Environmental.



Launched in 2017, **Separate. Don't Stop** initially focused on environmental education. It created a website and social media profiles on Instagram and Facebook aiming to educate people on proper packaging disposal methods. It also started a number of relationship actions, liaising with the Municipal Urban Cleaning Authority (AMLURB) in Sao Paulo, and with a number of condominiums via the Housing Association (SECOVI).

Separate. Don't Stop is now one of several initiatives organized by the Packaging Coalition between 2012 and 2017. This period represented PHASE 1 of the agreement, which obtained the following results in Brazil:

- 802 waste collection organizations received our support.
- recyclable material collectors' associations received 4,487 training, management, structural and adaptation initiatives.
- 2,082 Voluntary Delivery Points were implemented.
- 5,570 cities received our support.
- R\$ 2.8 billion was invested.

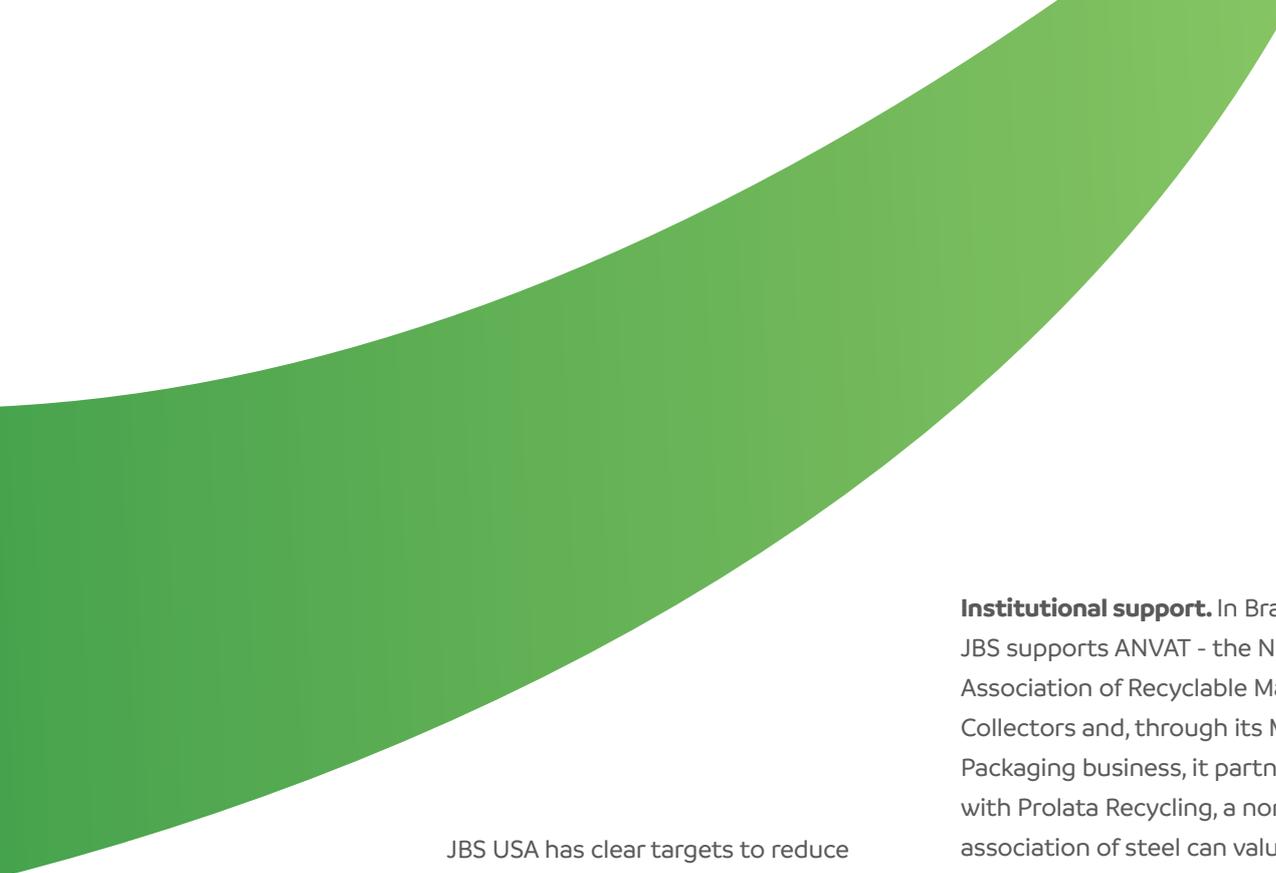
As part of these initiatives, JBS directly supports recyclable material collectors' associations in the states of São Paulo, Paraná and Mato Grosso do Sul.

In 2017, the projects JBS sponsors directly benefitted:

- 3,369 people, based on the population served by material collected and sold by cooperatives that signed up to the program in cities receiving our support
- 60 recyclable material collectors' associations (which received direct support from the JBS program and indirect support from ANCAT)
- 148 cooperatives.

Pilgrim's Moy Park unit, in Europe, no longer sends waste to landfills. Compare this with 2012, when the unit sent 80% of its waste to landfills. Reducing this to 0% has been a notable achievement for the Company and highlights its commitment to the environment and local communities.

The Craigavon unit at Pilgrim's Moy Park received the 'Investors in Zero Waste' 3-star category award. This award is for the continuous improvement initiative to expand use of recyclable materials within the unit, thereby reducing waste disposal. 'Investors in Zero Waste' is an initiative aimed at awarding innovative projects by companies, public agencies and the third sector that focus on reducing waste. Over 80% of waste produced in the Orleans unit is recycled or reused. By introducing new waste containers, team members now help to sort the waste. This means around 150 kg of organic waste is now sent for composting instead of incineration.



JBS USA has clear targets to reduce packaging volumes for each of its finished products. While complying with product safety requirements, the Company has examined alternative materials that can also be recycled, as well as technologies to reduce the amount of packaging used.

JBS USA and Pilgrim's reuse or recycle as much material as possible in order to reduce landfill. In 2017, they recycled:

- 80% of cardboard, which was sent to paper factories or recycling centers for reuse
- 95% of pallets, which were returned to their suppliers for reuse
- 95% of metal, which was recycled
- 95% of plastic, provided it was clean and uncontaminated, which was collected in boxes and sent to recycling centers
- 95% of high density polyethylene (HDPE) plastic bags were returned to manufacturers for reuse, creating a closed cycle

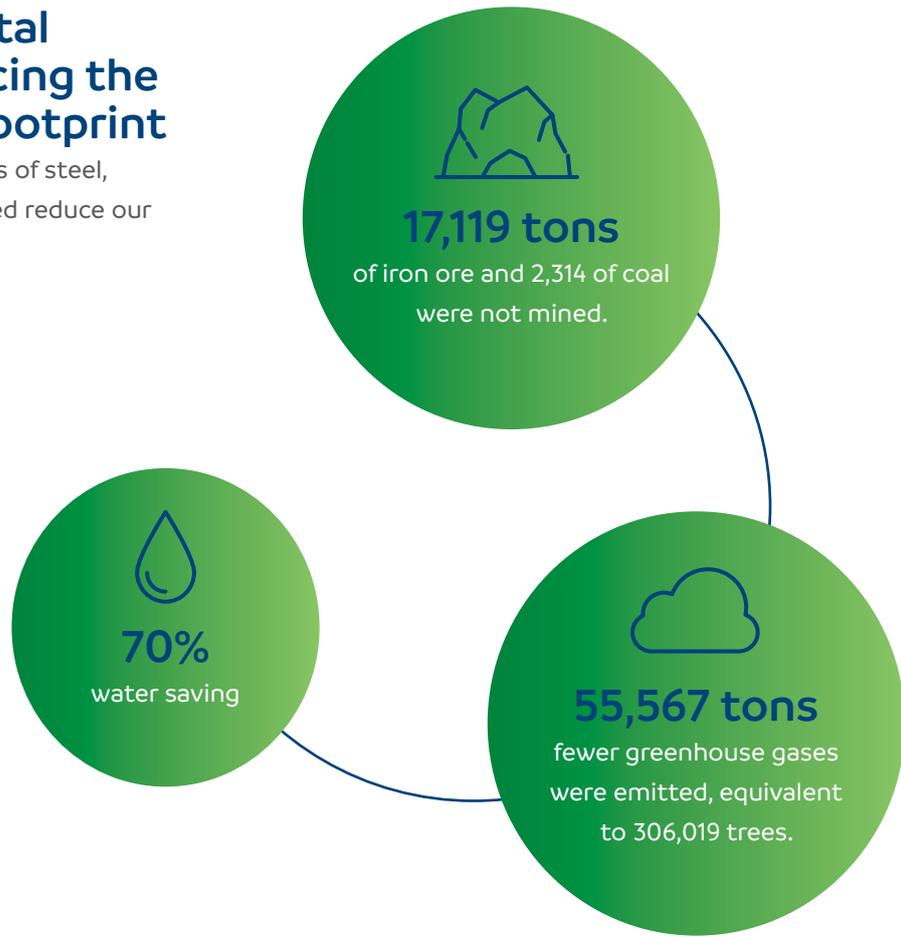
Institutional support. In Brazil, JBS supports ANVAT - the National Association of Recyclable Material Collectors and, through its Metal Packaging business, it partners with Prolata Recycling, a nonprofit association of steel can value chain manufacturers in Brazil whose goal is to increase the amount of steel recovered and reuse it in the value chain. This is an ongoing, post-consumption, steel can recycling program with no specific expiry date that has a number of goals. It is intended to facilitate returns of steel product packaging after a product has been used and encourage environmentally appropriate disposal of any returned materials, focusing particularly on steel waste recycling.

Prolata also partners with Cooperatives to create capillarity in 11 states and with 55 partner organizations. It also works with receiving centers that handle large volumes of material and sets up voluntary delivery points for consumers.

The Prolata Program was created in 2012 and has already invested around R\$ 3 million on monitoring, training and diagnostics programs and purchasing material from cooperatives.

Environmental Gains: Reducing the Ecological Footprint

By recycling 15,017 tons of steel, the Program has helped reduce our ecological footprint.



Social Gains

The Prolata program celebrated its 4th anniversary with the following results:



**More quality
of life for**

1,925

cooperative members
(better work
infrastructure, food and
income)



110%

improvement in
incomes from steel
sales



Greater value is now
given to the work
done by recycling
collectors, **increasing
their self-esteem**



Professional
training and higher
productivity

Results

The Prolata program celebrated its 4th anniversary in 2017 with the following results:



Reduction in Product Packaging

Volumes. The Research and Development (R&D) areas have been working to reduce product packaging. In 2017, there was a 4% reduction in packaging weight per product.

GRI 301-3

Packaging materials used in Brazil

(listed by volume – renewable and nonrenewable)

Tipo	%	Categoria
Plastic	18.40%	Nonrenewable
Paper	0.51%	Renewable
Cardboard	72.74%	Renewable
Metal	8.34%	Nonrenewable
Polystyrene	0.01%	Nonrenewable
Cellulose/ Wood	0.01%	Renewable

	%
Primary and secondary packaging	31.64%
Tertiary packaging	68.36%

We note that over 73% of Company packaging material comes from renewable sources.

Materials Reuse and Recycling

Tire Recycling. Tires phased out by JBS Carriers are reused as an alternative fuel by the cement industry or to manufacture shoe soles, sealing rubber, rain water ducts, sports flooring, industrial flooring and car mats. The Company partners with Reciclanip – a national tire industry organization responsible for collecting and disposing of tires that can no longer be reused or refurbished - which correctly disposes of any unusable tires. This means the Company avoided disposal of an average 1.1 thousand tires every month.

Tires phased out by JBS Carriers are reused as an alternative fuel by the cement industry or to manufacture shoe soles, sealing rubber, rain water ducts, sports flooring, industrial flooring and car mats.

Pallet Reuse. The Carnes and Seara units implemented a project to collect pallets used to transport their products and reuse them, instead of throwing them away. Apart from the financial benefits, the project also reduces landfill waste, cuts the volume of natural resources used to make new pallets and diminishes greenhouse gas emissions by avoiding decomposition. Seara created a Pallet Center as part of the program in 2017. This increased turnover by 41%, up from an average 6.4 in 2016 and 9.1 in 2017. 152.5 thousand more pallets were collected compared with 2016, eliminating procurement of 151 thousand pallets. The Seara project also eliminated 42.5 thousand tCO₂e emissions. The Carnes project cut 33.5 thousand tCO₂e in 2017 and reuse rose from 8.24 to 9.42.

In order to manage postindustrial waste produced by JBS and other companies in Brazil, JBS uses certified third parties or **JBS Environmental**.

JBS Environmental, a JBS Company, develops solutions, products and services using cutting-edge technologies that dispose of waste without impacting on the environment while providing the necessary legal certification. The Company uses a

closed cycle, which is a process where recycled waste returns to the market after being processed and converted into other raw materials or products (<http://www.jbsambiental.com.br/>).

In 2017, JBS Environmental **handled around 18 thousand tons of solid waste**, including plastics, metals, paper and hazardous and non-recyclable materials.

Some of this waste was recycled and returned to industrial plants as trash bags, tarpaulins, bags or plastic coverings (further information available here). The Lins Recycling unit alone processes around 260 tons of various types of plastics every month and transforms into recycled plastic resins, a raw material used to manufacture new plastic products. Output totaled 3,123 tons in 2017, up 1.3% on 2016.

The unit produced 4,694,450 plastic trash bags during the year, all used at other JBS plants. JBS Leather used 262,984 plastic covers produced by the plant to protect leather items from weather damage and contamination. JBS Environmental also produced 216,260 trays in 2017.

JBS Environmental Volumes Managed In 2017 (thousand tons)



GRI Content Summary

GRI 102-55

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Material Topic	GRI Standards	GRI Topic	Disclosure	Page/Response
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Credits

Coordination

JBS Sustainability, JBS Investor Relations and JBS Corporate Communications

Texts and GRI Consulting

Orbis Consulting

Design

Dragon Rouge

Photos

JBS Images