

# minerva foods

## Sustainability Report 2021





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# Introduction

**GRI 102-45, 102-46, 102-48, 102-49, 102-50, 102-51, 102-52, 102-53**

Minerva Foods is pleased to present to its stakeholders the Company's key results, projects and investments that have defined its journey throughout 2021 by means of this Sustainability Report.

This report covers the period from January 1 through December 31 of 2021 and was elaborated around the core topics of sustainability (*further details ahead*). This report is designed to provide a comprehensive account on the performance of the economic, environmental, and social governance of each production unit and administrative site in the Minerva Foods value chain.

The indicators presented in this report are based on the Global Reporting Initiative (GRI) standards, the Sustainability Accounting

Standards Board (SASB) of the Value Reporting Foundation, and on the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

This report also draws guidance from other frameworks, such as the Collier FAIRR methodologies; the Business Benchmark on Farm Animal Welfare (BBFAW); Insight Disclosure Action through the Climate Disclosure Project (CDP); and the reporting requirements for the Corporate Sustainability Index (ISE) and the Carbon Efficient Index (ICO2) of the B3. The latter being portfolios that the Company has participated in for the second consecutive year in 2022 and are composed by companies that have adopted the best ESG practices in the Brazilian market. Additionally, throughout the report, Minerva Foods' commitment to

the Sustainable Development Goals (SDGs) of the United Nations Organization is also referenced.

The financial data disclosed in this report are in line with the Financial Statements and adopt the accounting principles of the BRGAAP in accordance with the International Financial Reporting Standards (IFRS).

The scope of this report includes all units in Brazil, Argentina, Colombia, Paraguay and Uruguay. Exceptions and limitations related to indicators are described in footnotes. The most significant change in Company's scope is in regards to the acquisition of two sheep slaughter units in Australia, which are described as part of the operational structure, however, their social and environmental

indicators have not yet been integrated in this report, as their operations only began as of December 2021.

If you have any questions about the information contained in this report, please contact us through the following channels:

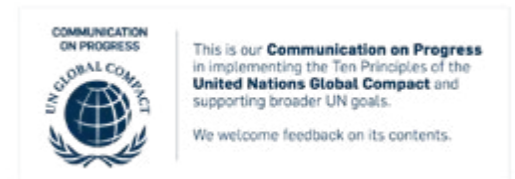
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We hope you find this report informative and useful.





A supplier ranch in Brazil

# Materiality

GRI 102-40, 102-42, 102-43, 102-44, 102-47

Toward the end of 2021, Minerva conducted a new materiality assessment to identify, prioritize, and define the most relevant topics that are material to ESG communication and based on industry trends, social and environmental challenges, and the perception of their impacts from the standpoint of its stakeholders.

Conducted with support from specialized consultants, the assessment was based on the GRI Standards and AA1000 AccountAbility Principles, taking into account social, economic, and environmental impacts that influence stakeholder evaluations and decisions. The exercise consisted of four steps—identification, prioritization, analysis and validation—and included:

- ▶ A review of internal documents (policies, risk assessment reports, studies, notices and presentations), market research, and benchmarking against other industry players;

- ▶ Stakeholder identification and engagement, including a panel with management-level employees (16 participants), an online survey (employees, customers, investors, NGOs and trade associations) with 297 responses, and internal interviews with senior leadership (7), and external interviews (5) with priority stakeholders. The stakeholders identified for this stage were customers, investors, the third sector (NGOs), industry entities, and employees;
- ▶ Review and prioritization of the material topics based on their social and business impact, as well as their emphasis rating given by stakeholders;
- ▶ Validation of the matrix by senior leadership.



### Market served

**Minerva ESG Pillar:** Product quality and respect for life

**Our focus:** Relationship with the international market, and compliance with policies, regulations and sanitary restrictions on exports

**Related GRI Aspects:** GRI 100 Series (102-Organizational Profile); 200 Series (202-Market Presence)

**Stakeholders that prioritized the topic:** Investors | Employees | Leadership team | NGOs | Trade Associations | Customers



### Animal welfare

**Minerva ESG Pillar:** Product quality and respect for life

**Our focus:** Relationship with the international market, and compliance with policies, regulations and sanitary restrictions on exports

**Related GRI Aspects:** GRI 100 Series (102-Organizational Profile); 200 Series (202-Market Presence)

**Stakeholders that prioritized the topic:** Investors | Employees | Leadership team | NGOs | Trade Associations | Customers



### Occupational health and safety

**Minerva ESG Pillar:** Benefiting our People

**Our focus:** Prosperity for our people

**Related GRI Aspects:** GRI 400 Series (401- Employment; 403-Occupational Health & Safety; 409-Forced or Compulsory Labor)

**Related SASB disclosures:** FB-MP-410a.1; FB-MP-410a.2; FB-MP-410a.3; FB-MP-260a.1

**Stakeholders that prioritized the topic:** Investors | Employees | Leadership team | NGOs | Trade Associations | Customers



### Deforestation and biodiversity

**Minerva ESG Pillar:** Dedication to the Planet

**Our focus:** Internal and external environmental training, engaging the beef value chain in managing environmental impacts, fires, legal restrictions, and monitoring areas at risk for deforestation, protected areas, and indigenous lands.

**Related GRI Aspects:** GRI 300 Series (304-Biodiversity)

**Related SASB disclosures:** FB-MP-160a.1, FB-MP-160a.2, FB-MP-160a.3, FB-MP-440a.3

**Stakeholders that prioritized the topic:** Investors | Employees | Leadership team | NGOs | Trade Associations | Customers



### Food quality and safety

**Minerva ESG Pillar:** Product quality and respect for life

**Our focus:** End-to-end quality assurance and food safety; physical, social and economic access to sufficient, safe and nutritious food; in food product innovation; policies on the use of antibiotics and other substances in animal production; and supply chain mapping.

**Related GRI Aspects:** FB-MP-250a.1; FB-MP-250a.2; FB-MP-250a.3; FB-MP-250a.4

**Stakeholders that prioritized the topic:** Investors | Employees | Leadership team | NGOs | Trade Associations | Customers



### Ethics and compliance

**Minerva ESG Pillar:** Dedication to the Planet; Benefiting our people; and Product quality and respect for life

**Our focus:** Ethical and responsible business conduct and relationships with business partners, including aspects such as anti-corruption and anti-bribery.

**Related GRI Aspects:** GRI 200 Series (205-Anti-Corruption); 300 Series (307-Compliance)

**Stakeholders that prioritized the topic:** Investors | Employees | Leadership team | NGOs | Trade Associations | Customers



### Process traceability

**Minerva ESG Pillar:** Product quality and respect for life | Dedication to the Planet

**Our focus:** Investment in and deployment of end-consumer traceability for raw materials.

**Related GRI Aspects:** GRI 300 Series (308-Supplier Environmental Assessment); 400 Series (409-Forced or Compulsory Labor); FP Sector Supplement (Outsourcing and Procurement)

**Related SASB disclosures:** FB-MP-430a.1, FB-MP-430a.2

**Stakeholders that prioritized the topic:** Investors | Employees | Leadership team | NGOs | Trade Associations | Customers



### Greenhouse gas emissions

**Minerva ESG Pillar:** Dedication to the Planet

**Our focus:** Measuring, managing and reducing GHG emissions in production and across the value chain; use of renewable energy sources

**Related GRI Aspects:** GRI 300 Series (305-Emissions)

**Related SASB disclosures:** FB-MP-110a.1; FB-MP-110a.2

**Stakeholders that prioritized the topic:** Investors | Employees | Leadership team | NGOs | Trade Associations | Customers



# Message from management

## GRI 102-14, 102-15

In addition to setting new records and achieving positive economic-financial indicators, 2021 represented a transformation in the way we, at Minerva Foods, have positioned ourselves within the environmental, social and governance (ESG) agenda, all the while creating a promising future for our business and our value chain.

Demand for high-quality food is on the rise, and we at Minerva Foods, through our global geographic presence, foresee opportunities for expansion. We are confident in our ability to meet the requirements of the world's most demanding markets through our focus on compliance and high quality; starting with breed selection, sanitary controls, animal welfare, environmental efficiency, up to innovation in our brands and products, all the while continuing to cater to our domestic market.

We are proud to have become a strategic operator in the balance of trade of the countries in which we operate, and a leading player in the global beef industry. Through our brands and business lines, we have an integrated production platform that has become the market leader in South America and is present in more than 100 countries around the world.



**We set a new record for consolidated EBITDA at R\$ 2.4 billion, a year-on-year increase of 12.6%.**

From 2008 to 2021, we have multiplied our revenue 13 times over and more than tripled our production volume. This performance reflects a solid business strategy, based on growth through geographic diversification, primarily in South America and more recently, into Oceania with the acquisition of two plants in Australia. We ended 2021 with strong performance consistent with our previous track record: we set a new record for

consolidated EBITDA at R\$ 2.4 billion, a year-on-year increase of 12.6%, and net revenue of R\$ 26.9 billion, up 39% on the previous year.

This journey has brought about a refinement in our understanding of our interactions with our surroundings, our assessment of impacts, and the design of a more ambitious ESG strategy which is increasingly sought after by the markets with which we interact,

especially in regards to climate change, sustainable beef, product traceability and combating deforestation.

Governed by a view of sustainability that brings together our dedication to the planet, a commitment to the prosperity of our people, the quality of our products, and respect for life, we have endorsed our commitment and ongoing support of the Ten Principles of the United Nations Global Compact and the Sustainable Development Goals (SDGs). We have worked diligently to develop our organizational culture and promote our Values: Results driven, Engagement, Sustainability, Innovation, and Recognition.

In a year of significant challenges and achievements, we announced the Minerva Foods Sustainability Commitment, a set of strategic initiatives to combat climate change and protect ecosystems, with a focus on the environmental efficiency of our operations; achieving zero illegal deforestation throughout the value chain in South America; and incorporating beef suppliers into our low-carbon program, *Remove*.

Among our commitments, we will reduce our scope 1 and 2 emissions intensity 30% by

2030 and achieve net zero by 2035—15 years earlier than called for in the Paris Agreement.

Although our strategy is extremely ambitious, we are keenly aware that the future of our business hinges on maintaining the vital ecosystems that support agriculture.

Our relationship with suppliers is another key issue: In Brazil, we are pioneers in verifying 100% of sourced cattle with regards to environmental, labor, and land-use compliance across all biomes, and in 2021, we finalized the implementation of geospatial monitoring for all cattle sourcing in Paraguay, achieving one of our targets for the year.

In 2021 we also launched a program, called *Remove*, to measure the carbon footprint on cattle supplier properties and implement more sustainable practices that improve productivity while providing access to the carbon credit market. The first projects within the program were implemented throughout the year, and have yielded very positive results.

The year was also marked by the creation of MyCarbon, a business dedicated to selling carbon credits as part of a transitioning economic and production model.

In occupational health and safety—a key topic in the food industry—we continued to achieve positive performance in our indicators, which serves to emphasize the commitment we have to our greatest asset: our people.

In 2021, our strategy focused on enhancing business intelligence and market positioning at Minerva Foods. In innovation, we deployed advanced analytics and artificial intelligence to optimize the sourcing, allocation and processing of animal protein; we made further advances on our marketplace and e-commerce platforms; we built closer engagement with end consumers; and we accelerated our venture-capital agenda, investing in startups and biotechnology companies such as Amyris.

Also in 2021, we announced the acquisition, through a joint venture with SALIC, of two sheep slaughter plants in Australia—an important step in our geographic diversification that will expand our arbitration capacity as we enter a new segment of the global protein market. Acquisitions like these not only mitigate our exposure to the risks and uncertainties that are inherent to our industry, but also enable us to plan and build a company that is more future-ready and has

the capabilities to supply sustainable, high-quality food products in different forms and across different production structures and value-chain configurations.

Our ESG strategy earned us important recognition in the year. We are the only beef company named to the Brazilian stock exchange B3's Corporate Sustainability Index (ISE) in 2022, alongside other companies demonstrating superior environmental, social, economic and governance practices. And our focus on ESG has had a positive effect on our investment ratings. We have also been recognized as one of the top five companies in Brazil for sustainability in Global Canopy's Forest 500 ranking.

Needless to say, 2021 was also a very challenging year for all of us at Minerva Foods due to the COVID-19 pandemic. As an undeniably essential business, we kept our operations running during the worst of the pandemic. This was made possible by stringent health protocols and the diligence, conscientiousness and resilience of each of our 21,000 employees and 21,300 ranchers. We implemented several initiatives to support our workforce and communities near our operations, in an investment of more than R\$ 43 million.

We expect 2022 to bring a challenging combination of sanitary, economic and political headwinds that will create volatility in the market. We are alert to these factors and well prepared to navigate them, supported by our solid risk management structure and a strategy centered on innovation and sustainability.



**Fernando Galletti de Queiroz**  
CEO

**Ibar Vilela de Queiroz**  
Chairman of the Board of Directors

# About Minerva Foods



A meatpacking plant in Palmeiras de Goiás, Brazil



# About Minerva Foods

GRI 102-1, 102-2, 102-3, 102-4, 102-5, 102-7

Minerva Foods is the leading beef exporter in South America and has adjacent operations in animal protein processing and sales, and live cattle exports. A Brazilian-based, publicly traded corporation, Minerva Foods has a global presence, exporting to more than 100 countries on five continents.

The Company's business model is based on an integrated platform, with geographic diversification, and flexibility in the access, processing, and commercialization of animal protein. With 25 cattle slaughtering units in Brazil, Argentina, Colombia, Paraguay, and Uruguay the Company holds a 23% market share in South America. In 2021, Minerva Foods expanded into Oceania with the acquisition of two sheep slaughter plants in Australia. Completing its assets are 14 distribution centers in South America, 16 sales offices in key markets, one meat processing plant (Minerva Fine Foods) in Brazil and two operating under the Swift brand in Argentina.

Starting a new chapter in its 30-year history, in 2021 the Company revamped its brand to reflect the evolution that has made Minerva Foods a modern, distinctive, and innovative business that is committed to creating a sustainable food future for our planet. All units are now identified with the renovated Minerva Foods brand. The Company has a 23% market share in South America.

As part of its business model, the Company supports the development of more than 21,000 cattle suppliers to meet the requirements of mature markets on issues such as traceability and environmental, labor and land-use compliance.



Minerva's Corporate Office in Barretos, Brazil



**Starting a new chapter in its 30-year history, the Company revamped its identity and united all operations under the Minerva Foods brand**

## Market presence and impact

GRI 102-7

▶ **21,215**  
employees

▶ **3**  
processing plants

▶ **1.001 million**  
metric tons of beef and  
processed meat produced  
across all regions

▶ **21,000**  
cattle suppliers

▶ **14**  
distribution centers

▶ **357,000**  
metric tons in Brazil

▶ **27**  
beef and sheep  
slaughter plants (South  
America + Australia)

▶ **16**  
sales offices

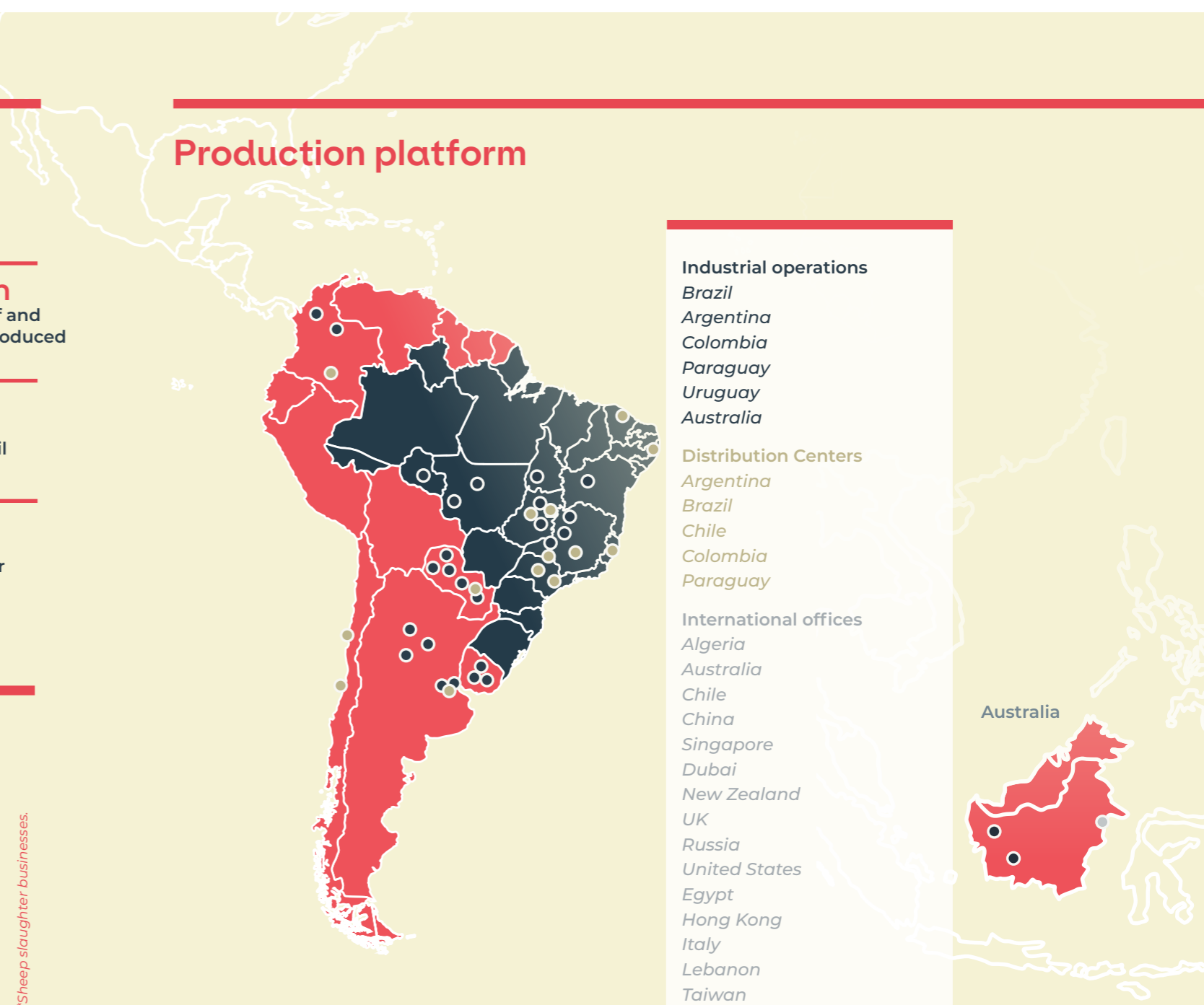
▶ **644,000**  
metric tons in other  
South American  
countries

## Slaughter capacity

Capacity by country	Head/day	% of total	Slaughter and deboning plants	Processing plants
Brazil	10,980	38%	10	1
Paraguay	5,400	18.7%	5	-
Argentina	5,050	17.5%	5	2
Uruguay	3,200	11.1%	3	-
Colombia	1,550	5.3%	2	-
Australia*	2,740	9.4%	2	-
<b>Total</b>	<b>28,920</b>	<b>100%</b>	<b>27</b>	<b>3</b>

\*Sheep slaughter businesses.

## Production platform



### Industrial operations

Brazil  
Argentina  
Colombia  
Paraguay  
Uruguay  
Australia

### Distribution Centers

Argentina  
Brazil  
Chile  
Colombia  
Paraguay

### International offices

Algeria  
Australia  
Chile  
China  
Singapore  
Dubai  
New Zealand  
UK  
Russia  
United States  
Egypt  
Hong Kong  
Italy  
Lebanon  
Taiwan

Australia

# Our culture, the Minerva Way

## GRI 102-16

As a leading player in the animal protein industry, Minerva Foods' commitment to creating a sustainable food future for the planet is integral to its identity. It ensures that the attitudes, ideas, and conduct of its team reflects the values of Minerva Foods and motivates them around a clear purpose, communicated in its business routines, and the strategic decisions of its leadership.

A survey in 2020 collected employees' views on organizational behaviors following a cycle of business growth, and confirmed that Sustainability remains among the core values for the Company. *Approximately 12,000 employees responded to the survey (read more in **Benefiting our people**).*



## Purpose

To create a sustainable food future for our planet.

## Values

- ▶ **Results-Driven:** we are tireless in striving for better results
- ▶ **Innovation:** we seek what is new or continuous improvement of processes and products to add value to the whole chain
- ▶ **Commitment:** we act with dedication and sense of ownership in everything we do
- ▶ **Recognition:** we value professionals for their contributions, aligning their needs with the company's needs
- ▶ **Sustainability:** we contribute to the conservation of the planet; the prosperity of people and the animal welfare



*Flávia Regina Ribeiro da Silva Villa, Legal Director and PMO for the Minerva Foods Cultural Transformation Program.*

# Markets and products

GRI 102-2, 102-6



## Brazil Division

encompasses operations in Goiás, Mato Grosso, Minas Gerais, Rondônia, São Paulo and Tocantins, and distribution centers;

## Minerva Foods Latam

a subsidiary aggregating the assets formally held by Athena Foods, including plants and distribution centers in Argentina, Chile, Colombia, Paraguay, and Uruguay;


## Trading

the Trading division operates the Company's live cattle, protein, energy, and third-party product resale segments.

## Our business lines




**Minerva Foods** – produces commodities and value-added products in Brazil, Argentina, Colombia, Paraguay, Uruguay and Australia



**Minerva Live Cattle Exports** – a live cattle exporter with operations in Brazil, Chile, Colombia and Uruguay



**Minerva Ingredients** produces and markets ingredients such as tallow, bone meal and blood meal, and bones for pet food, within a circular-economy model that allows the Company to process all parts of biological assets



**Minerva Fine Foods** – a business line focused on processed meats produced from poultry, hogs and beef using different preparation, freezing, cooking and packaging processes



**Minerva Leather** processes hides from the slaughtering process at Minerva Foods. The leather is marketed in both the wet blue and semi-finished states and shipped to tanneries certified by the Leather World Group (LWG) for compliance with environmental and quality requirements. The hides are traceable from farm to customer



**Minerva Energia** operates in the Brazilian power sector, managing contracts in the regulated and free electricity markets




**Minerva Foods Asia** – acquired in 2016, Minerva Foods Asia supplies premium meat to the global market, and operates a trading company for the import and export of frozen meats




**Minerva Casings** markets natural sausage casings as a co-product from the Company's slaughter operations. The casings are sold to the sausage market and are fully traceable from farm to customer



**Minerva Biodiesel** produces social responsibility-certified biodiesel from beef tallow as part of the Brazilian Biodiesel Program. All biofuel produced is sold at auctions organized by the National Petroleum Agency (ANP)



**Minerva Beef Shop** – a showroom in Barretos (SP) for end consumers



**MyCarbon:** a subsidiary Dedicated to selling carbon credits and products and services related to the transition to a low-carbon economy

## In Brazil and globally

Main  
brands

*Minerva*

*Minerva*  
SELEÇÃO

*Frigomerc*

ANA PAULA  
BLACK ANGUS

*almaLusa*

PLATE  
CARNE  
ARGENTINA  
SELECIONADA

ESTÂNCIA 92

*Minerva*  
do Mestre

*Frigomerc*  
ANGUS

*Pul*

GRAN PRADO

CABAÑA LAS LILAS  
CARNE DE  
CAMPEONES

*Minerva*  
ANGUS

*Frigomerc*  
ORGANIC

*Pul*  
ORGANIC BEEF

ABERDEEN  
FRIGOURI



View the complete Minerva  
Foods catalog [here](#)

# Innovation

At Minerva Foods, investments in new businesses and innovative processes are integral to the Company's strategy for sustainability and value creation. Minerva Foods' innovation pipeline spans across three inter-linked fronts:

**Advanced data analytics** – By means of the Beef Desk and strategic actions in pricing, allocation, and access to capital, our teams facilitate decision-making rooted in statistical data management and tools of artificial intelligence;

**E-commerce and marketplace** – exploring new channels and B2B (business-to-business), B2C (business-to-customer) and D2C (direct-to-customer) business models. In 2021, these efforts were focused on the Brazilian, Argentine and Paraguayan markets;

**Venture Capital** – an innovation front focused on investments in startups and tech firms that engage with the value chain to explore opportunities in the alternative proteins, beef, logistics, retail and agritech segments. Investments target new businesses that can enhance synergies, leverage Minerva Foods' capabilities, and unlock unique opportunities to strengthen the Company's market position and results.

## Our current investments:

### GRI 102-10

- ▶ **The EVERY Company** – Minerva Foods' first venture capital investment, The EVERY Company, formerly Clara Foods, is a biotechnology company that develops animal-free protein foods;
- ▶ **Shopper** – one of our investments in 2021, Shopper is a supermarket delivery startup that operates adjacent to Minerva Foods' market and can enhance its interactions with consumers and retailers;▶
- ▶ **Amyris** – under a joint venture agreement concluded in 2021 with Amyris, a biotechnology company, Minerva Foods will further develop

fermentation technology using genetically modified yeasts. The new technology will support emissions reductions by developing low-carbon raw materials such as sustainable packaging and fermentation-based, natural preservatives, improving logistics efficiency in the global beef value chain;

- ▶ **Traive** – announced in 2021, this investment will allow Minerva Foods to tap into Traive's expertise in artificial intelligence and data analytics, its financial solutions for agriculture, and its operations in the US and Brazil.

### MyCarbon

- ▶ In 2021 Minerva Foods created a subsidiary dedicated to selling carbon credits and products and services related to the transition to a low-carbon economy. In addition, MyCarbon works in partnership with the *Renove Program* (*read more about in **Sustainable beef***) to help farmers adopt better farming practices, supporting increased natural resource efficiency and low-carbon farming.

## New channels

**My Beef em Casa** – launched in 2021 on Ifood, a food delivery app, this channel offers Minerva Foods' premium cuts, fish, Alma Lusa olive oil and practical portioned products, including breaded products and French fries.

**Meu Minerva** – using a B2B e-commerce model, **Meu Minerva** is a portal where customers can quickly purchase Minerva Foods retail, wholesale and food service products.

**US\$ 30 million is Minerva's maximum venture capital ticket for investments of US\$ 1 million to US\$ 5 million**



# Sheep market

## GRI 102-10

Delivering on its strategy of business and geographic diversification, in December 2021 Minerva Foods announced the acquisition of two slaughter plants in Australia specializing in sheep meat: Shark Lake and Great Eastern Abattoir. The acquisitions were concluded through a joint venture with SALIC, in which Minerva Foods holds a 65% interest.

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### New geographies: Australia



**1 million**

head per year in slaughter capacity at our Australian plants when fully operational



# 2021 at a glance



## Supply chain management

**100%**

of ranches monitored in Brazil and Paraguay

**14 + million**

hectares monitored across all Brazilian biomes

**12 + million**

hectares monitored in Paraguay

**100%**

compliance in all supply-chain audits with respect to social and environmental criteria social and environmental criteria

**Industry-first**

deployment of Visipec, a traceability and monitoring tool for indirect suppliers

**91**

ranches included in Minerva Foods' low-carbon program



## Greenhouse Gas Emissions

**Zero**

net scope 2 greenhouse gas emissions, achieved through the purchase of renewable energy certificates

**Expanded scope**

New sources of scope 3 emissions accounted for, including cattle raising on ranches



## Eco-efficiency

**6,000+**

metric tons of waste recycled

**60,000+**

metric tons of waste composted

**In Brazil,**

a 4.8% reduction in absolute electricity consumption, and a 7.4% reduction in absolute water consumption



## Ethics & Compliance

**3,700**

employees in leadership and administrative positions trained on compliance policies

# 2021 at a glance



## Occupational Health and Safety

**100%**

of direct and third-party employees are covered by occupational health and safety management systems

**11,000+** tetravalent influenza+H1N1 vaccines administered to employees

**99%**

of employees vaccinated with at least two COVID-19 shots in Brazil, and 97% in other countries



## Food Quality and Safety

**100%**

of slaughter plants certified according to protocol recognized by the GFSI (Global Food Safety Initiative)

**Zero**

recalls in the year

**33**

food safety audits completed



## Animal Welfare

**99%**

average compliance in third-party audits

### Certification

operations audited by Professional Animal Auditor Certification Organization (PAACO)-certified auditors in all countries

**R\$3+** million

invested in animal welfare



## Corporate Sustainability Index (B3 ISE)

Minerva Foods is the only beef company named to the Brazilian stock exchange B3's Corporate Sustainability Index (ISE) in 2021/2022, reflecting our commitment to demonstrating best social, environmental and governance practices, with sustainability as a pillar of our management model. The new index will be effective from January 3 to December 30, 2022, comprising 46 companies in 27 industries.

# Economic and operational performance



Employee Wesley Giraldo Martins in Barretos, Brazil

# Economic and operational performance

In a booming yet increasingly competitive market, Minerva Foods posted positive results that are a testament to a successful strategy and a sound business plan.

From routine tasks at industrial plants to commercial planning using data analytics and scenario modeling, the Company uses a broad range of tools to protect its capital structure, create shareholder value and ensure the financial health of the business.

## BUSINESS ENVIRONMENT AND STRATEGY

According to the United Nations (UN) Food and Agriculture Organization (FAO), the global population is expected to exceed 8 billion people by 2024 and 9.5 billion people by 2050. At this rate, food consumption is expected to grow by 60%, which will require global agriculture hubs to adopt high-yield farming practices and expand their output.

Anchored in these opportunities and its commitment to help feed a growing world, Minerva Foods' strategic plan draws on deep insight into the global beef market—which continues to show positive fundamentals, especially for companies combining excellence in quality and service levels with strong ESG governance.

Within the Company, the Board of Directors is responsible for setting corporate strategy, which the Executive Board then translates into tactical plans.

In recent years, Minerva Foods has built an operational footprint and supply chain that spans across the major beef hubs in Latin America, a region that today accounts for more than 35% of the global herd—with Brazil alone accounting for 29%, as well as being the world's largest beef exporter by volume. Concurrently, we have built our sites' capabilities to serve the international market as well as domestic customers and consumers. Geographic diversification is among the strengths of our business model, helping to mitigate the Company's exposure to the risks inherent to our industry.

Three pillars underpin Minerva Foods' corporate strategy:

**Expanding production capacity** through organic growth while maintaining financial discipline and upholding high standards of productivity, quality and safety;

**Expanding the Company's domestic and global customer base**, delivering high

service levels and amplifying its offering of own-brand and third-party products;

**Improving operational efficiency and achieving cost savings**, retaining its position as a low-cost producer of high-quality beef products.

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## Geographic diversification is among the strengths of Minerva Foods' business model



Supplier farm, Amambay, Paraguay

# Our strengths

## Minerva Foods' competitive advantages

### Strong growth combined with a sound strategy and efficient risk management

In the last 10 years, the Company has invested heavily in expanding its production capacity and distribution network and diversifying its product portfolio, based on a strategic plan that has been developed and structured over the years, and tempered by stringent risk management.

### Strategically located operations

The Company has a diversified operational platform, with plants strategically located in Brazil, Australia, Argentina, Colombia, Paraguay and Uruguay—near export ports and domestic-market hubs.

### Efficient and integrated distribution logistics

Minerva Foods has integrated and efficient distribution logistics, which enables the company to target its sales to the most attractive markets and capture favorable shifts in demand and pricing to boost sales of higher-margin products.

### Capital efficiency and return on equity

Minerva Foods' efficient operational platform, combined with financial discipline and careful planning of expansions, has enabled the Company to maintain high rates of capacity utilization, even during this period of strong expansion.

### Being Sustainable, That's Minerva

Sustainability is among the Company's core values. The Company upholds its publicly-disclosed ESG commitments through policies and procedures that aim to develop a prosperous and sustainable supply chain, from raw materials to processing.

### Experienced management and a unique strategy

With cattle ranching experience going back to 1957, and meatpacking experience going back to 1992, the Company has become the South American market leader for exports, Brazil's third-largest beef producer by slaughter capacity, the second largest fresh beef exporter in Brazil and Uruguay, and the market leader for exports in Paraguay, Colombia and Argentina.



## Industry overview

A shrinking global herd, reflecting a series of climate, sanitary and other adverse factors in recent years, has impacted most producing countries and has contrasted with rising exports of and demand for animal protein. Conversely, Latin America remains the only region to expand its cattle herd, strengthening its position as the world's leading beef producing hub. In Brazil alone, for example, the herd size has grown by 68.8% in the last two decades.

In 2021, Brazil's beef exports fell 7% by volume, but rose 9% by revenue, according to data from the Brazilian Meatpacking Association (ABRAFRIGO).

## Latin America remains the only region to expand its herd size

Solid growth in emerging markets and the opportunity to expand business through higher value-added brands, offers sound fundamentals for Minerva Foods' operating segment. Asia recorded 72% growth in meat consumption and, as the world's most populous region, remains a primary driver of beef exports.

Brazilian producers, with their certification to supply beef to countries such as China and Indonesia, have important avenues for growth. The domestic market, however, remains challenging; among the risks in this market is declining purchasing power and record unemployment, coupled with an adverse macroeconomic environment and uncertainties linked to the pandemic.

Through its production platform in South America, coupled with its trading division, the Company has maintained a contingent of plants certified to export to Asian markets; in 2021, the company received new certifications for Japan, Singapore, Curaçao and the Middle East.

Other areas of opportunity include beef supply to markets with a higher premium and pricing on animal protein; and the sheep market, which the Company entered into recently.

Approximately  
40%

South America's share in global beef exports

24%

Brazil's share of exports

329 million head

the size of the South American herd in 2021, increasing from 319 million in 2020, and 299 million head in 2018

23%

Minerva Foods' market share in the South American market

68%

of Minerva Foods' revenue derives from exports

### New markets

Minerva Foods has been recently certified for the Saudi Arabia, Singapore, Japan and US markets

### How we manage market risks:

- ▶ Maintaining diversified plants and suppliers
- ▶ Targeting markets with a balanced market share
- ▶ Monitoring bans, commercial sanctions and sanitary restrictions
- ▶ Exploring opportunities to enter new geographies

### How we plan our growth:

- ▶ Focusing on emerging markets that are leading demand
- ▶ Complying with social and environmental requirements in our production operations and the broader supply chain
- ▶ Certifying new plants
- ▶ Exploring new business opportunities and value-added products

# Operational excellence

Through the Company's Integrated Management System (IMS), which is managed under a policy that is disseminated to all sites and operations, Minerva Foods standardizes processes and encourages a culture of continuous improvement across the organization. The system comprises a set of metrics, processes and initiatives spanning Occupational Health & Safety, Food Quality & Safety, the Environment and Social Responsibility.

Part of the purpose of the IMS is to standardize and harmonize processes across sites in order to improve productivity, which in turn drives cost savings—the key to success in our industry. The Company has encouraged its operations in Brazil and in other countries to share experience with each other, with a focus on standard operating procedures on HSE (Occupational Health & Safety and Environment) in production.

## Flagship initiatives

**Atitude Campeã** – this program engages employees in a healthy competition for operating excellence, as measured using key performance indicators, with the best-performing departments and sites receiving rewards. In 2021 the Company launched the program at sites in Brazil.

**5S Program** – this program aims to shape cultural and behavioral changes among employees and drive continuous improvement and efficiencies. The program was rolled out at three sites in 2020 and another four in 2021. Employees have demonstrated a clear commitment to the program and its goal to create an increasingly agile, safe and clean work environment.

**Minerva Quality Circle (CMQ)** – this program encourages plant employees to form groups of volunteers to develop projects for improvement in operational efficiency, occupational safety, eco-efficiency, and other areas. Employees receive training to support them in designing their projects. In 2021 CMQ was rolled out at all sites in Brazil, and 21 new groups and 92 new improvement projects were created.

**Target Cards** – 34 target cards were created in the year, encompassing all managers, coordinators and supervisors, in accordance with the results from the Atitude Campeã program and in line with our value of Recognition.

**Process Excellence** – this program is focused on standardizing plant processes to improve efficiency through daily monitoring, checklists and tracking against targets. In 2021 further progress was made on standardizing and formalizing plant processes, and trade schools were created at four sites, with 1,692 employees attending. These schools will equip our employees with technical and practical skills to help drive continuous improvement and excellence in production processes.

## Performance data

**75% growth** in new CMQ groups

**98% growth** in CMQ projects

**For 2022:**  
**5% Growth**



We have set a target to increase engagement in the CMQ program, with a minimum of 5% growth at sites in Brazil; and to roll out the 5S program at other sites (Mirassol d'Oeste and Minerva Fine Foods)



Employees Aparecido Souza, Ivan Molinas and Aida Maria Colman, Belén, Paraguay.

# 2021 Results

2021 was yet another year of strong operational and financial results, strengthening our position of leadership in South America and as one of the leading players in the global beef industry.

We posted a record-breaking net revenue of R\$ 26.9 billion, and an increase of 39% over the previous year, an EBITDA of R\$ 2.4 billion, the highest to date, with a margin of 9%, and a Net income of R\$ 598.9 million for 2021.

Despite the highly volatile market environment and the logistical constraints in global supply chains, the Company's strategy of geographic diversification has continued to sustain profitability and to maximize commercial performance, by enabling Minerva Foods to tap into 100% of global beef demand and reducing impacts from

temporary barriers, such as China's ban on Brazilian beef toward the end of 2021. This strategy was important in maintaining export volumes, which accounted for 70% of the Company's gross revenue. Asia remains the primary destination for Minerva Foods' products.

The Brazil Division slaughtered 1.3 million head of cattle, with an installed capacity utilization rate of 64.7%; other countries posted an aggregate slaughter volume of 2.2 million head, with a utilization rate of 76.3%.

Gross revenue in the Trading Division, which includes revenue from live cattle exports, protein trading, energy trading, and resale of third-party products, was a total of R\$ 1,754.2 million.

## The market leader in South America

**R\$ 2.4 billion**  
in EBITDA  
(the highest to date)

**R\$ 27 billion**  
in net revenue

**39% net revenue growth**  
compared to the previous year



### At a glance

	2020	2021
Total slaughter ('000 head)	3,177.0	3,572.2
Brazil Slaughter	1,484.8	1,375.2
LatAm Slaughter	1,692.2	2,197.1
Total sales ('000 t)	1,051.8	1,161.0
Brazil Volume	524.6	481.1
LatAm Volume	527.2	679.9
Gross revenue	20,554.3	28,572.3
Export	13,865.5	19,312.1
Domestic	6,688.8	9,260.2
Net revenue	19,406.3	26,965.4
EBITDA	2,142.8	2,413.2
EBITDA Margin	11.0%	9.0%
Net debt/LTM EBITDA (x)	2.4	2.4
<b>Net Income (Loss)</b>	<b>697.1</b>	<b>598.9</b>

## Capital expenditure

Capital expenditure was a total of R\$ 568.5 million for 2021, encompassing plant maintenance and upgrades, geographic expansion (Australia), and venture-capital initiatives throughout the year.

**39%**  
net revenue growth



**9.0%**  
EBITDA margin in 2021

**R\$ 1.0 billion**  
free cash flow

**2.4x**  
net debt leverage ratio



Employee Daniel Henrique de Oliveira Lacerda, at our Corporate Headquarters in Barretos, Brazil

# Governance and management practices



Employees Natalia Aguiar and Matheus Almeida, in Palmeiras de Goiás, Brazil.

# Governance and management practices

## GRI 102-18

Minerva Foods applies a professional management approach to the business, in line with good practices in corporate governance. Decision-making within the Company is guided by the pillars of transparency, equity, accountability and corporate responsibility. As a Company listed on Novo Mercado, an enhanced governance segment of the Brazilian stock exchange, Minerva Foods operates in accordance with the Brazilian Institute of Corporate Governance (IBGC) Code of Best Practices, the standards issued by the Brazilian Securities Commission (CVM), and the Brazilian Corporations Act (Law no. 6 404/76).

Minerva Foods is the only beef company named to the Brazilian stock exchange B3's Corporate Sustainability Index (ISE) in 2022, for the second consecutive year, alongside other companies demonstrating superior ESG performance. The Company is also a constituent of the Carbon Efficient Index (ICO2), created to raise discussion about climate change in Brazil. In addition, Minerva Foods is the only company in the industry that is currently financed by the International Finance Corporation

(IFC), a member of the World Bank Group. This reflects the maturity of the Company's governance structure, but also creates an added responsibility for the management team to demonstrate best practices. These practices include:

- ▶ Having independent members on the Board of Directors (at least 20%, in accordance with *Novo Mercado* listing rules);
- ▶ Policies on appointing members of the Board of Directors, Committees and Statutory Boards;
- ▶ Segregation of duties between the CEO and the chair of the Board of Directors;
- ▶ Policies on assessing the performance of the Board of Directors and Executive Board;
- ▶ Limits of authority for the Board of Directors and Executive Board, documented in the rules of procedure of governance bodies;

- ▶ Maintaining a percentage of shares as free float to ensure a diversity of providers of capital;
- ▶ Providing tag-along rights to shareholders.

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**The only beef company named to the Brazilian stock exchange's Corporate Sustainability Index (ISE)**



Edison Ticle de Andrade Melo e Souza Filho,  
Chief Financial and Investor Relations Officer.

## Learn about our governance bodies

### BOARD OF DIRECTORS



10 members

2 (20%)  
independent  
members

**Primary duties:** as the Company's highest governance body, the Board of Directors is responsible for establishing business policies and guidelines, overseeing the activities of the Executive Board, supervising execution of the Company's business plan, engaging independent auditors, and appointing and removing members of the Executive Board. The Board of Directors represents the interests of shareholders.

**Frequency of ordinary meetings:** quarterly

**Appointment criteria:** members of the Board of Directors are elected and removed by the General Meeting, and are required to have experience and expertise in the segments where Minerva Foods operates and in the food industry. The current members are serving a term extending to 2022.

**Performance review:** on an annual basis, the Human Resources department or independent consultants conduct a performance review via interviews with the Board of Directors both as a body and with individual members. The review covers, among other aspects, each member's attendance, participation and inputs into discussions. The review process is governed by a dedicated policy.



6 members

3  
independent  
members

### OVERSIGHT BOARD

**Primary duties:** exercise oversight of senior management activities and independently review the Company's financial statements and balance sheets at least on a quarterly basis

**Frequency of ordinary meetings:** Quarterly

**Appointment criteria:** members are appointed at the request of shareholders in a General Meeting. The board currently has three members and three alternate members, with a term ending in August 2022



6 members

### EXECUTIVE BOARD

**Primary duties:** legally represent the Company and execute and internally orchestrate tactical plans for execution of the Company's corporate strategy.

**Frequency of ordinary meetings:** whenever called by the CEO or by a majority of members. In 2021 the Executive Board held 15 meetings.

**Appointment criteria:** members are appointed and removed by the Board of Directors and serve a term of two years. Candidates must have proven experience in the Company's industry and must reside in Brazil.

**Performance review:** on an annual basis, the Human Resources department or independent consultants conduct a performance review via interviews with the Executive Board both as a body and with individual members. The review covers, among other aspects, each member's attendance, participation and inputs into discussions. The review process is governed by a dedicated policy.



## Advisory committees

### Financial & Risk Committee

The Financial and Risk Committee assists the Board in monitoring and assessing the effectiveness of the Company's financial policies and in assessing risks which could adversely affect its business, financial position and results of operations.

**7** members  
**5** meetings held

### Human & Organizational Development Committee

Exercises oversight of Human Resources practices, supporting increased efficiency and quality in Board decisions.

**8** members  
**3** meetings held

### Sustainability & Innovation Advisory Committee

Created in 2021, this committee advises the Executive Board and facilitates discussion on related issues at the executive level. The committee holds monthly meetings to discuss matters such as the Company's positioning and ESG programs.

**5** members from the leadership team  
**3** external guests  
**5** meetings held

### Strategic & Investment Committee

This committee reviews and provides recommendations to the Board on proposed strategic plans and business opportunities.

**7** members  
**4** meetings held



For detailed information about the members of the Board of Directors and Executive Board, including their resumes and residual terms, go to Minerva Foods' investor relations website [here](#).



Learn more about Minerva Foods' governance policies in the Company's Corporate Governance Report: [click here](#).



Employee Ibs Martins da Silva, Palmeiras de Goiás, Brazil.

# Risk management

## GRI 102-11, 102-15

Consistent with the complexity of the Company's industry and the nature of its value chain, Minerva Foods has a robust framework for managing business risks and opportunities that can affect the ability to achieve its long-term strategy.

The Board of Directors is responsible for protecting the Company's capital structure and for strategic planning, with assistance from the Strategic & Investment and Financial & Risk committees in assessing

scenarios, anticipating and mitigating risks, and evaluating the level of risk exposure over time.

Risk management is carried out by each department, under the oversight of the Chief Financial Officer in the case of economic and financial risks. The Executive Board annually assesses the effectiveness of risk management policies and systems, internal controls and the Company's Integrity Program, and reports to the Board of Directors on its findings.



Read the **Company's Risk Management Policy**, approved by the Board of Directors

## Below are some of the risks that were monitored in 2021

### FINANCIAL

**Risk description:** risks related to indebtedness levels, liquidity and access to credit and financing, affecting the health of the Company's capital structure.

**How it is managed:** by managing indebtedness levels; ensuring efficient capital allocation to improve revenues; issuing securities to raise funding; assessing the risk of default; and the Board of Directors defining hedging levels for long-term debt.

### OPERATIONAL

**Risk description:** risks related to operations safety, efficiency and resilience, and balancing production, supply and demand.

**How it is managed:** by using the Company's Beef Desk to optimize the allocation of biological assets, production and market targeting; and using insurance and other instruments to protect operational assets in terms their safety and stability.

### SUPPLY CHAIN

**Risk description:** image and reputation risks in the event of any violations committed by cattle ranchers or other suppliers, as well as risks involving access to biological assets and product availability and quality.

**How it is managed:** the Company has tools in place for monitoring the beef value chain for environmental, sanitary, labor, human rights, tax and financial risks, including industry-first systems for monitoring deforestation (*read more in **Progress on traceability***).

### MARKET

**Risk description:** risks related to market concentration, changes in the profile and structure of global customers, and the need for significant modifications to the Company's product portfolio and production processes.

**How it is managed:** through geographic diversification and by ensuring market needs are catered to, Minerva Foods seeks to reduce exposure to risk and ensure predictable cash flows, as well as exploring new avenues for growth through innovation.

### SANITARY AND COMMERCIAL BARRIERS

**Risk description:** issues involving foreign trade and trade barriers in key markets could adversely affect industry revenues. In addition, disease outbreaks could affect the quality, turnover and marketing of biological assets.

**How it is managed:** The Business Intelligence area monitors sanitary conditions in the markets served by Minerva Foods, and explores opportunities for plant certification creating additional avenues for production and marketing. Slaughter operations use a structured, internationally recognized process, and are inspected on a regular basis. The Company monitors its operations for diseases such as foot-and-mouth disease (FMD) and bovine spongiform encephalopathy (BSE), the latter not being considered a significant risk in the countries in which it operates.

### SOCIAL AND ENVIRONMENTAL

**Risk description:** risks related to noncompliance with social and environmental laws and regulations, leading to fines, sanctions and other penalties; and noncompliance with labor regulations within the business and across the value chain, affecting Minerva Foods' business performance, image and reputation.

**How it is managed:** by investing in improvements to environmental, land-use and labor controls at cattle ranches; by developing proprietary technology for monitoring environmental efficiency and compliance in the Company's operations; by maintaining controls for employee health, safety and well-being; and by developing community support programs.

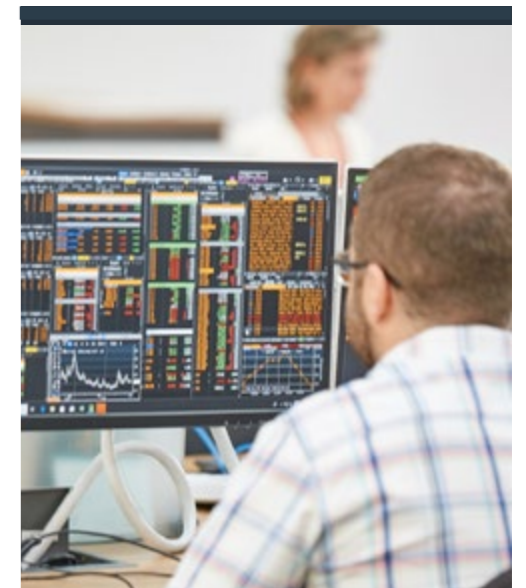
### CLIMATE CHANGE

**Risk description:** risks related to adverse and/or extreme weather events that could affect commodity cycles, production costs, the integrity of agricultural and industrial assets and the supply chain, potentially resulting in unavailability of cattle and animal protein. Water shortages, changes in rainfall patterns, temperature variation, floods, deforestation, forest fires, and greenhouse gas (GHG) emissions are among the factors that could have financial implications.

**How it is managed:** the Company has controls that range from supplier monitoring to internal systems and processes for managing and preparing to deal with the impacts of climate change, protecting the capital structure of the business. Geographic diversity protects Minerva Foods from and reduces its exposure to seasonal weather effect; another tool to manage this risk is Beef Desk, which the Company uses to monitor and identify global developments that could affect commodities and livestock production, including phenomena such as El Niño and La Niña. Minerva Foods carries out an annual, third party-verified GHG emissions inventory based on the GHG Protocol.



## The Board of Directors is responsible for protecting the Company's capital structure and for strategic planning





Fertigation in Palmeiras de Goiás, Brazil.

# Climate risk: resilience, governance and adaptation

GRI 103-2, 103-3 | 201, 201-2, TCFD

Climate-related risks and opportunities are managed with a focus on: ensuring business resilience under challenging climate-related circumstances; protecting Minerva Foods' capital structure and assets during adverse weather events; preparing the Company to transition to a low carbon economy; and capturing business opportunities while improving the Company's operations, based on commitments, targets and key performance indicators related to climate change, a key issue for the beef industry.

Climate governance is exercised by Minerva Foods' Financial & Risk Committee, a body composed of members of the Board of Directors, the Executive Board and employees, who work together to identify, quantify, assess and mitigate key risk factors; by the Sustainability Committee; and by the Sustainability & Innovation Advisory Committee, created in 2021 (*read more in Advisory committees*).

These structures work together to identify opportunities that arise as a result of climate

change and develop initiatives to address these issues through multidisciplinary working groups. In addition, they monitor the progress of these initiatives through direct and specific indicators in monthly meetings. Minerva Foods also maintains an area dedicated to the ESG agenda with a dedicated executive board.

## Managing risks and opportunities

The risk management structure allows Minerva Foods to work on identifying short, medium, and long term risks and opportunities arising from climate change. These risks include:

**Physical risks:** risks related to adverse and/or extreme weather events that could affect commodity cycles, production costs, the integrity of agricultural and industrial assets and the supply chain, potentially resulting

in unavailability of cattle in the short and medium term.

**Transition risks:** carbon regulations could adversely affect the agricultural sector and manufacturing in general resulting in higher costs; sales affected by behavioral changes of customers and consumers; and shortages of materials and inputs could impact production costs over the long term.

Currently, the Company has identified opportunities relevant to its strategy. These include the reduction of water consumption and an increase in water recycling, the use of renewable energy sources, carbon credit trading, and an expansion of the Company's portfolio of animal-free products.

With all of these factors in mind, Minerva Foods completed a decarbonization assessment and prioritized projects that have the greatest impact on the transition to a low carbon economy (*learn more in the section Eco-efficiency*).



## Strategy

In accordance with the Company's Risk Management Policy, the Business Intelligence area is responsible for conducting climate assessments in order to identify major impacts resulting from such events that may potentially affect the price of raw materials, and operating costs.

The Sustainability department is responsible for preparing the corporate inventory of greenhouse gas (GHG) in order to identify emission sources and to measure the carbon footprint of the Company and its value chain. In addition, within the scope of the department, the Company carries out cattle origin monitoring and traceability; and assessing, among other factors, compliance with the criteria for combating illegal deforestation in Brazil and Paraguay (read more in *Progress on traceability*). In 2021 the Sustainability team launched and began to oversee the Renove program. It is a program focused on engaging and working together with cattle suppliers in implementing low-carbon cattle ranching (read more in *Sustainable beef*).

Minerva Foods has maintained its efforts to capitalize on opportunities, such as the joint venture with Amyris, concluded in December 2021. Among the initiatives of this joint venture are more sustainable packaging and fermentation-based natural preservatives, which will increase the efficiency of the global beef supply chain and help to reduce carbon emissions from Minerva Foods value chain. Minerva Foods has also invested in the

efforts undertaken by The Every Company. It has developed a process for producing proteins via fermentation, as an alternative to animal-based protein. It is expected that as early as 2022, the first venture from this partnership will be ready for commercialization.

Another important milestone was the formation of MyCarbon (investment total of R\$ 13 million) This company was created for the purpose of developing and trading in carbon credits. In addition, it supports ranchers in implementing best practices in sustainable ranches, thereby helping to protect natural resources. In 2021, MyCarbon signed its first contract for certified reduction of greenhouse gas emissions.

## Metrics and targets

In 2021, Minerva Foods publicly disclosed its commitments to sustainability and helping to build a healthy planet and prosperous communities.

These targets include:

- ▶ Reducing the Company's carbon footprint;
- ▶ Using renewable energy in 100% of the Company's operations;
- ▶ More efficient wastewater treatment;

- ▶ Expanding geospatial monitoring of direct suppliers to all countries in which the Company operates;
- ▶ Developing and implementing a program to monitor indirect suppliers;
- ▶ Incorporating 50% of cattle suppliers into the Company's Renove low-carbon cattle ranching program.

Learn more about these commitments on page 39 onward; other targets and initiatives are described in detail throughout the report.

## Minerva Foods has set and publicly disclosed its commitments to build a sustainable planet and prosperous communities



Employees Taciano Custódio, Tamara Lopes, Gracie Selva, Daiane Garcia, Salomão Abib, Natália Rasteiro and Aline Tadano, Minerva Foods' Corporate Sustainability team

# Ethics and integrity

GRI 102-16, 102-17, 103-2, 103-3 | 202, 103-2, 103-3 | 205, 103-2, 103-3 | 405, 103-2, 103-3 | 406, 205-1

Minerva Foods endeavors to instill guidelines of ethics and integrity throughout its entire production chain, and adheres to them as premises for all business partner and market relations.

Integrity procedures are undertaken by a dedicated area and reported to the Board of Directors, which promotes and ensures application of the Code of Ethics Business Conduct Guide, Anti-Bribery and Anti-Corruption Policy, Conflict of Interest Prevention Policy, and the Prevention of Money Laundering and Financing of Terrorist Policy. Other management policies are in addition to Minerva Foods formal guidelines to its employees, and representatives. These are as follows:

- ▶ Material Disclosures Policy;
- ▶ Securities Trading Policy;
- ▶ Related-party Transactions Policy;
- ▶ Dividend Policy;

- ▶ Risk Management Policy;
- ▶ Compensation Policy;
- ▶ Policy on Appointing Members of the Board of Directors, Committees and Statutory Boards;
- ▶ Performance Assessment Policy;

In addition to awareness-raising initiatives, Minerva Foods has systems in place for receiving and investigating reports and complaints. The Company also conducts monthly reputation surveys of suppliers and customers, and blocks suppliers that are found to be on public blacklists.

The Ethics & Integrity Committee receives and investigates any reports over concerns, violations, or any other non-compliance with laws and regulations. The Committee is composed of five Company representatives, who serve a renewable term of two years, meeting on a monthly basis.

Conexão Minerva is the Company's ombudsman channel. The channel is managed by a third-party firm and anonymity of whistleblowers is kept if they so request. This service is provided 24/7 via telephone, internet, e-mail, or mail correspondence. All concerns received are addressed throughout the year.

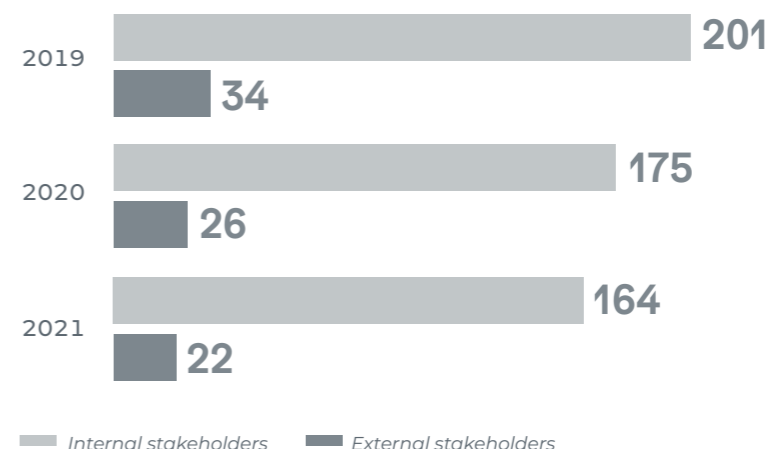
The Company has been strengthening its efforts against corruption, cementing them in its risk mapping. **In 2021, more than 3,700 employees were trained on anti-corruption policies, including 2,600 in Brazil** (see in the indicators annex).

Training was administered to both the leadership team and other employees in administrative roles, and will continue in 2022 until all employees have been trained.

The due diligence process was improved in 2021, and a new tool was deployed to identify and prevent reputational, legal and regulatory, operational, and social and environmental risks inherent to the Company's commercial relationships with suppliers and customers in Brazil.

**In 2021 there were no legal proceedings and/or investigations on corruption, bribery or fraud involving the Company's operations.**

## Reports received via ombudsman channels – all countries



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# Commitment to sustainability



Fazenda Colorado, Palmeiras de Goiás, Brazil.



Supplier farm, Centinela, Paraguay

# Commitment to sustainability

In recent years, Minerva Foods' corporate strategy has aimed to strengthen its efforts on the environmental, social and governance (ESG) front.

On one end, the Company's support for external commitments, agreements and pacts has helped to boost the visibility of its business and has accelerated projects in regards to sustainability. On the other, the internalization of sustainability-oriented practices has enhanced governance, leading to the definition of public goals and initiatives for the coming years, with an integrated approach to the value chain.

## Sustainability management

The Company operates in an industry in which there has been a growing demand for transparency and the disclosure of accurate data in regards to impacts, goals and targets. More than just managing risks, Minerva Foods strives to be a part of the solution in the transition to a low-carbon economy, by engaging partner producers

in initiatives to bring innovation, efficiency, quality, and sustainability to livestock breeding and production. The Sustainability area oversees ESG management and works transversally with the other teams across Minerva Foods.

In 2021 the Company joined the United Nations Global Compact. Coupled with Minerva Foods' commitment to the Sustainable Development Goals (SDGs), the Company's support for the Global Compact formalizes its efforts across ten principles in the areas of anti-corruption, labor, environment and human rights, as described in detail in this report.

In 2021 we also created a Sustainability & Innovation Advisory Committee, a non-statutory advisory committee that supports the Executive Board. The committee aims to enhance and advance discussions around sustainability at the executive level, in monthly meetings. Five chief executives are members of the committee, including two independent members, Marcos Sawaya Jank and Luiz Fernando do Amaral, as well as an external guest member, Alexandre Mendonça de Barros, a recognized expert in

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## In 2021 we joined the United Nations Global Compact

sustainability and agribusiness. The committee held five meetings in 2021, discussing the Company's ESG positioning and project pipeline.

As another development in governance, an internal, multidisciplinary ESG Communication Committee was created in 2021 to enhance and identify opportunities for external engagement and communication.

In process management, the Company's focus in 2021 was on delivering on its Commitment to Sustainability through programs to engage with and develop suppliers, with a particular emphasis on collaborations to develop low-carbon cattle production models (*read more in **Sustainable beef***) and implementing end-to-end supply chain management

and traceability systems for indirect suppliers, such as Visipecc and the SMGeo Prospec application. A new materiality assessment was also conducted in the year (*read more in **Materiality***). In 2021 the Company saw across-the-board improvement on indexes and ratings, including the following:





### 1. B3 Corporate Sustainability Index (B3 ISE):

Minerva Foods is the only beef company currently named to the index.

### 2. Carbon Disclosure Project (CDP):

achieved significant improvement in all three areas of assessment: Forests, Climate Change and Water Security all of which were in the category of Management.

### 3. Forest 500:

Minerva Foods ranked among the top 5 companies for sustainability policies in Brazil, indicating that the Company has one of the lowest levels of risk of being linked with deforestation or exposed to forest-risk supply chains.

## Agendas and initiatives GRI 102-12, 102-13

- |   |   |
|---|---|
| 1. United Nations Global Compact                    | 8. Mesa Paraguaya de Carne Sostenible (MPCS)                                      |
| 2. National Pact for the Eradication of Slave Labor | 9. Mesa de Ganadería Sostenible da Colombia                                       |
| 3. Global Roundtable for Sustainable Beef (GRSB)    | 10. Public Beef Commitment  |
| 4. Emerging Markets Investor Alliance (EMIA)        | 11. Terms of Adjustment of Conduct (TAC) with the Pará Public Prosecution Service |
| 5. Responsible Leather Round Table (RLRT)           | 12. Amazon Cattle Supplier Monitoring Protocol                                    |
| 6. Working Group on Sustainable Livestock (GTPS)    |   |
| 7. Working Group on Indirect Suppliers (GTFI)       |   |

## ESG reporting

To ensure transparency of the Company's ESG agenda, advances on the initiatives for sustainability are disclosed along with the financial results in meetings with investors.

# Our pillars of impact

Three pillars of sustainability have been defined, on which investments, projects, and partnerships are coordinated, so as to establish clear objectives and give a tactical and concrete approach to the principles of the Company's ESG strategy.



For further information on the three pillars, see the **Company's sustainability webpage**

## Dedication to the planet

- ▶ Reducing the Company's carbon footprint;
- ▶ Combating climate change and illegal deforestation through geospatial monitoring of cattle suppliers;
- ▶ Efficient use of natural resources in production processes.

### KEY PERFORMANCE INDICATORS:

- ▶ GHG emissions neutralized
- ▶ Water usage
- ▶ Renewable energy consumed
- ▶ Waste generated by type of disposal
- ▶ Compliance with social and environmental requirements in cattle sourcing

## Benefiting our People

- ▶ Local development, creating job, income and professional opportunities;
- ▶ Health, safety and well-being;
- ▶ Engagement with and support for neighboring communities and ranchers.

### KEY PERFORMANCE INDICATORS:

- ▶ Injury and incident management in operations
- ▶ Social investment in community programs
- ▶ Development, qualification and support for rural producers

## Product quality and respect for life

- ▶ Ensuring food quality and safety;
- ▶ Adhering to best animal welfare practices;
- ▶ Innovation and certification at each stage of the value chain.

### KEY PERFORMANCE INDICATORS:

- ▶ Number of animal welfare metrics monitored and progress year on year
- ▶ Compliance with the internationally recognized North American Meat Institute (NAMI) Animal Handling Guidelines
- ▶ Number of product safety incidents

# Roadmap



In April 2021, Minerva Foods publicly announced a series of goals and objectives centered around fighting climate change, one of its strategic focuses in sustainability.

These goals encompass the Company's operations and the broader value chain, and aim to achieve net zero emissions by 2035, 15 years earlier than called for in the Paris Agreement among other medium-term ambitions.

Learn below about the commitments we announced during 2021.

*Employee Wesley Giraldo Martins in Barretos, Brazil.*

## Minerva Foods' Commitment to Sustainability



### ENVIRONMENTAL EFFICIENCY IN OUR GLOBAL OPERATIONS

Minerva Foods is committed to building a healthy planet and is using a diversified approach to achieving its emissions goals. In its global operations, the Company will work to:

- ▶ Reduce scope 1 and 2 emissions intensity by 30% by 2030;
- ▶ Maintain net zero emissions in its electricity mix (scope 2), a goal already achieved in 2020 and maintained in 2021, with 100%

of electricity coming from renewable sources;

- ▶ Consider decarbonization scenarios and future emissions reduction pathways;
- ▶ Further invest in renewable energy, as exemplified by the Bucaramanga site's solar power plant in Colombia;
- ▶ Further invest in technologies to increase wastewater treatment efficiency and reduce emissions.



### ZERO ILLEGAL DEFORESTATION

Minerva Foods is committed to achieving zero illegal deforestation across its South American supply chain by 2030, through the following initiatives:

- ▶ By 2030, expand geospatial monitoring of direct suppliers to all countries in which the Company operates in South America.
- ▶ Implement geospatial monitoring of 100% of direct suppliers in Paraguay by December 2021 (**Target completed**), in Colombia by 2023, in Uruguay by 2025, and in the remaining South American countries by 2030.
- ▶ In Brazil, Minerva is the only company to monitor 100% of its direct suppliers using georeferenced maps in all biomes in which it operates (*Amazon, Cerrado, Pantanal*

and Atlantic Forest). This includes all full-cycle ranch operations, from birth to processing.

- ▶ By 2030, develop and implement a program for monitoring indirect suppliers for all South American countries in which the Company operates.
- ▶ Integrate Visipec into the geospatial monitoring system for the Amazon by December 2021 (**target completed four months in advance**).
- ▶ Implement a smartphone app for verification of indirect suppliers in partnership with Niceplanet Geotechnology, with deployment in Brazil by December 2021 (**target met**) and in other countries by 2030.



### ADVANCING A LOW CARBON ECONOMY

Minerva Foods is committed to having 50% of its beef suppliers participating in the low-carbon emission program, Remove. Launched in 2021, the program is using internationally recognized methodologies and techniques that are based on best available science, and has established important technical and institutional collaborations. The following initiatives are currently in progress:

- ▶ Strengthen partnerships with research institutions, such as the Brazilian Agricultural Research Corporation (EMBRAPA), CIAT in Colombia, INIA in Uruguay, and the Institute for Forestry and Agriculture Management and Certification (IMAFLOA) in Brazil, to ensure that robust, internationally verified methodologies are used across the Company;

- ▶ Implement a method to monitor, report and verify the carbon balance of South American ranches with preliminary results expected in 2021 (learn about early results from the initiative in **Sustainable beef**);
- ▶ Expand the Company's training and technical assistance to ranchers in implementing regenerative and low-carbon practices;
- ▶ Support efforts to rehabilitate native vegetation, in line with the United Nations Decade on Ecosystem Restoration, providing co-benefits for biodiversity;
- ▶ Strengthen partnerships with financial institutions to implement financing facilities that recognize and reward sustainable production practices;
- ▶ Support cattle ranchers in meeting Program requirements.



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# Dedication to the Planet



A plant in Belén, Paraguay.

# Dedication to the Planet

## Sustainable beef Progress in low-carbon cattle farming

GRI 103-2, 103-3 | 304

Cattle ranching is vital to the global economy and to feeding its population, as well as benefit the local communities.

The Company believes that it possible to sustain meat production in harmony with the objectives of reducing environmental impacts, therefore, it has strengthened training, and has provided technical support to producers, as well as technological and scientific expertise. This has opened opportunities for improvements such as the development of mechanisms for to measure the balance of greenhouse gas (GHG) emissions of suppliers.

In 2021, Minerva Foods created the Renove Program in order to promote engagement and collaboration with cattle suppliers adopting low-carbon practices, internationally recognized technologies, and methodologies to measure net carbon emissions from ranch properties. The program also includes technical support for the adoption of greater sustainable practices, which guarantee an increase in productivity and access to the carbon-trading market, including the carbon credit trading opportunities of MyCarbon (see *more about trading*).

renove

The investment in enhancing and in the application of recognized methodologies with key partners, has enabled us to measure the greenhouse gas emissions of a number of suppliers in our chain. We have found that these suppliers have a better average GHG emissions performance when compared to their national and global peers. The initiatives demonstrate, that during the evaluated agricultural year, a number of ranches have already achieved carbon neutrality or have even become carbon negative, i.e., they absorb more carbon than they release into the atmosphere during the cattle production cycle. These projects are still in pilot stages, however they do demonstrate their potential towards a positive impact. The results were presented during the COP26, held in November, in Glasgow, Scotland.



## Emissions assessment results were presented at COP26 in November, in Glasgow, Scotland



Click [here](#) to learn more.

Throughout the first year, with the participation of 91 ranches, Renove worked diligently on three projects geared towards the engagement of producers around low-carbon cattle ranching, (see map). The first project partnered with EMBRAPA and measured the net GHG emissions of 23 properties during the 20/21 season; utilizing assessment tools and protocols based on the GHG Protocol, and the definitions of the United Nations Framework Convention on Climate Change (UNFCCC). Of these, 22 ranche operations emitted lower emissions, per thousand head of cattle, than the average for Brazilian cattle farming. In addition nearly half managed to sequester carbon in their production system, making them carbon negative. These initial achievements demonstrate that the participating ranches of this project, which had supplied more than 50,000 animals to Minerva Foods, have adopted sustainable practices that sequester carbon, especially in regards to soil management, in order to avoid the erosion of pastures, and in implementing integrated systems. **These results also demonstrate that Minerva Foods is already selling products originating from production systems that are not only low-carbon but are actually carbon-negative, thus, helping to combat climate change and providing high-quality, safe food products.**

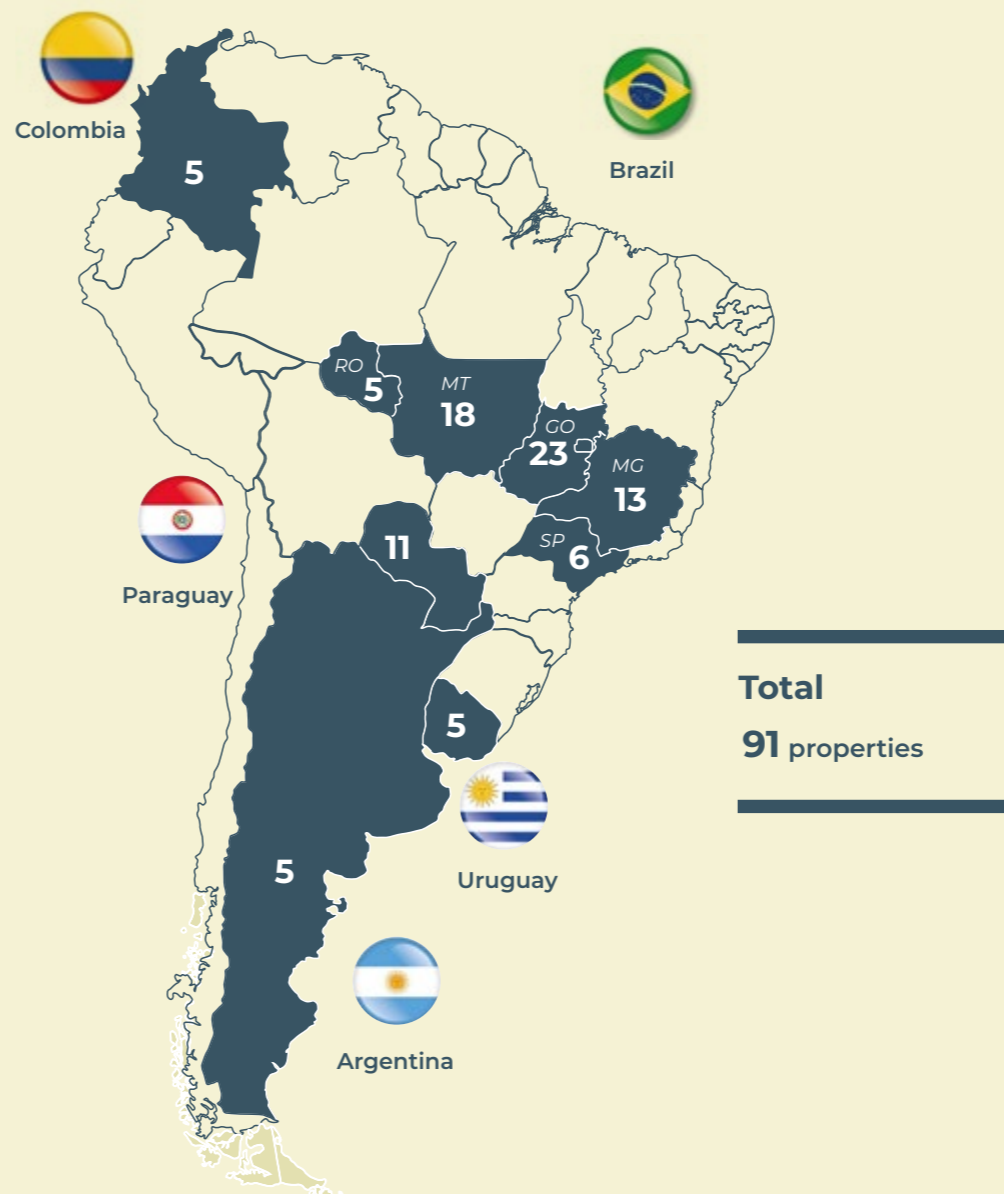
The project with EMBRAPA is also developing a version of the AgroTag application

which incorporates the GHG protocol to help ranchers quantify their emissions.

In partnership with Imaflora, the Renove Program's second project was developed on 25 ranches in the South American countries in which Minerva Foods operates. Net GHG emissions and emission intensity from beef production were calculated. The results were the only in the sector to be posted on the Carbon on Track platform. Thru the use of this platform, companies and ranches, that are measuring and monitoring their GHG emissions and removals, can track and publish their results for shareholders, investors, and other stakeholders.

The study covered 185 thousand hectares of pastureland and more than 232 thousand head of cattle. It found that the ranches emitted an average of 44% less emissions, associated with beef production, than the global average, which is estimated to be at 19.9tCO<sub>2</sub>e per ton of meat produced, according to an analysis of more than 30 scientific papers. This performance was possible due to the good practices adopted, including the Integrated Crop-Livestock-Forest Systems (ICLFS), soil conservation and pastureland management practices, and production intensification systems. These practices increase the capacity to sequester carbon into the ground, in sufficient quantities that offset production emissions - accounting for all relevant greenhouse gases.

## Renove Participants



**Supplier ranches participating in the Imaflora pilot produce 44% less greenhouse gas (GHG) emissions than the global average**

## Farmers helping the climate

### Fazenda Corumbiara (Rondônia, Brazil)

16,800 hectares

20,000 head

42% less emissions than the global average

**Good practices:** intensification of cattle production and integrated crop and livestock systems

**Emissions:** 33,609.2 tCO<sub>2</sub>e

**Intensity:** 11.53 tCO<sub>2</sub>e per metric ton of beef produced.

### Fazenda Santa Elena (Montería, Colombia)

1,790 hectares

2,500 head

45% less emissions than the global average

**Good practices:** pastureland improvement through rotation and supplementation. Native tree species preserved to maintain ecological balance on the property.

**Emissions:** -533.3 tCO<sub>2</sub>e

**Intensity:** 10.99 tCO<sub>2</sub>e per metric ton of beef produced.

Science-driven data will play a crucial role in recognizing sustainable practices applied in the value chain and to unearth new commercial opportunities in the growing carbon-credits market. This is the aim of the third front, a pilot project with the aim to connect high-performing ranches to the green finance market. Upon the evaluation of nearly 400 ranches, 60 were selected, located in Brazil and Paraguay, based on the presence of environmental assets for the project being carried out in partnership with Santos Lab and Biofilica Ambipar Environment.



Learn more in  
**Carbon on Track**



## Certification in Uruguay

Also under Minerva Foods partnership with Imaflores, in 2021, partnering ranches in Uruguay began a process for certification by Preferred by Nature, a non-profit organization with 25 years experience in certification systems, in more than 100 countries. The Preferred by Nature (CFM) Carbon Footprint Support and Assurance Program is helping Minerva Foods roll out reliable and responsible climate initiatives aligned around internationally recognized standards, such as the GHG Protocol, PAS, and ISO 14064. This process will enable the systematic management of the carbon footprint in supplier ranch properties, the adoption of targets, and strategies to reduce GHG emissions. The annual audits will track agricultural activities, the adoption of low-carbon practices, and the consequent performance on net emissions.

# mycarbon

## Business Model

### Carbon trading opportunities

Voluntary carbon markets are an important instrument for achieving the emissions reductions agreed upon at the Paris Agreement, providing opportunities for Minerva Foods and its partnering ranchers. The company MyCarbon was created in 2021, engaged in the development, acquisition and trading of high-quality carbon credits within agriculture, forestry, land-use, and renewable-energy projects in Latin America.

MyCarbon provides support to ranchers, in partnership with the *Renove Program*, in implementing best ranching practices, furthering the efficient use of natural resources and low-carbon production.

The company is also working alongside ranchers and technical partners to develop a remote sensing and data management platform which can calculate the net carbon emissions of ranches and estimate their carbon potential, based on industry-leading methodologies.

### Carbon credit development

Development projects  
*Renove Program*



### Sales

Carbon credit transfers or renewal on accredited platforms (Verra, Gold Standard, etc)



### Credit Purchases

Third-party purchases of carbon credit certificates



Employee Rafael Barsanulfo, in Palmeiras de Goiás, Brazil.

# Progress on traceability

## GRI FP1

Minerva Foods traceability practices use the best available technology in order to ensure environmental, labor, and land-use compliance across its supplier properties, with a focus on issues such as biodiversity, human rights, and labor.

On the environmental front, the Company was the first in its industry to expand geospatial monitoring to 100% of direct suppliers across all biomes in Brazil, and in 2021, completed the implementation for the monitoring of 100% of cattle purchases carried out in Paraguay. Minerva Foods plans to achieve the same monitoring coverage in Colombia (by 2023), Uruguay (by 2025) and other countries in which Minerva Foods operates in South America (by 2030).

In Colombia the rollout is currently underway with more than 300 suppliers currently registered. Geospatial monitoring of suppliers ensures that the products Minerva Foods produces are not linked to areas of illegal deforestation or areas of embargo (punitive measures imposed by inspection and control agencies to stop productive activities that harm the environment), encroachment of indigenous lands and protected areas, and use of slave or forced labor.

The Company's internal cattle sourcing policy contains environmental requirements and, in 2020, Minerva Foods began monitoring stocking rates for 100% of cattle sourced within the Amazon biome, in line with the Amazon Cattle Supplier Monitoring Protocol. Properties exceeding a limit of 3 head per hectare per year are required to submit a Ranch Declaration.

The monitoring system is audited annually, and audit results have been highly positive. Minerva Foods remains the top performer in third-party audits by the Pará Federal Prosecution Service, the leading and most trusted social and environmental verification body in Brazil's beef industry. Audit findings show that Minerva Foods' cattle sourcing transactions between January 2018 and July 2019—the assessment period for the 2020 edition—totaled 113,520 animals purchased, and all were sourced from properties operating in compliance with all requirements in the Terms of Adjustment of Conduct (TAC) with the Federal Prosecution Service.

In Paraguay, the second third-party audit was also carried out following the IFC (International Finance Corporation) guidelines for monitoring cattle purchases in the country. The result demonstrated a 100% compliance with the criteria.



100%

of cattle purchases in Brazil and Paraguay verified using geospatial monitoring systems

26 million

hectares monitored in real time

100%

compliance in social and environmental audits by the Pará Federal Prosecution Service, the most trusted public audit against illegal deforestation linked to agriculture in the Amazon



**MPF/PA Findings**

Check out the results of the leading public audit available against illegal deforestation in the Amazon

## Combating child and slave labor

GRI 103-2, 103-3 | 408, 103-2, 103-3 | 409, 103-2, 103-3 | 412, 408-1, 409-1

The Company takes a no-tolerance approach to all illegal forms of labor and monitors the risk of violations in its supply chain. In Brazil, Minerva Foods searches the slave labor blacklist published by the Labor Office, and agency under the Economic Ministry; in other countries where no official blacklists are published, the Company conducts media searches for violations that have been publicly reported.

In 2021, work began on the development of a Business Partner Code, and the Company continued to carry out human rights risk assessments.

Minerva Foods directly and actively addresses the issue of child and slave labor, in conjunction with agreements signed with the Pará State Federal Prosecution Service (since 2009), the Public Livestock Commitment, the Company's commitments to the National Pact for the Eradication of Slave Labor, and the Amazon Cattle Supplier Monitoring Protocol. The country-wide rollout of the Prospec app in Brazil advanced the progress on child- and forced-labor monitoring of indirect suppliers.

In 2021, 28 direct suppliers were deemed to be at significant risk for incidents of forced or compulsory labor in Brazil. The Company immediately and automatically blocked these suppliers, preventing any further purchases from being made.

More than 5,000 suppliers in Brazil were engaged in initiatives addressing forced labor monitoring criteria. These initiatives will be rolled out in other countries in 2022.



Supplier Ranch, Centilena, Paraguay

## Progress in indirect supplier monitoring

One of the biggest challenges in the industry, indirect supplier monitoring requires not only investment in technology but also the engagement of the entire value chain in achieving end-to-end cattle traceability.

Minerva Foods was the first company in the industry to pilot and integrate into its systems the Visipec traceability and monitoring tool for indirect suppliers in the Amazon. The tool intersects information from a property's Rural Environmental Registry (CAR) number with public databases to track cattle movement throughout the production cycle. Visipec was developed by the National Wildlife Federation (NWF) in partnership with the Gibbs-Land-Use and Environment Lab at Wisconsin-Madison University. The tool is currently managed by NWF.

Deploying the tool enables meatpackers to:

1. Map out and monitor indirect suppliers, using GTFI Good Practices to identify potential risks in the supply chain.
2. Compile information to benchmark sustainable practices implemented

by ranchers and anticipate market requirements.

3. Identify and prioritize areas with potential risks for non-compliance in order to engage and support producers in implementing corrective actions.
4. Enhance assurance and transparency in interactions between links in the Brazilian beef value chain.
5. Improve traceability and deforestation monitoring in the Amazon.

Initial tests with this tool have demonstrated a more than 99% compliance with good practices as defined by the Indirect Supplier Working Group (GTFI). In August 2021, the Visipec integration with internal systems was completed, four months ahead of target under the Company's Sustainability Commitments. See a timeline of the Visipec project and its outcomes on the following page.



## Signed

Technical cooperation agreement

## Evaluation testing

Initial testing (monthly transaction samples)

Evaluation testing (one year of transactions)

20-May-2020

24-July-2020

24-July-2020

24-July-2020

24-July-2020

24-July-2020

### Rolim de Moura (Rondônia)

**Analysis details:**

**Transaction window:**

Direct vs SIF: Aug 2018  
Indirect vs direct: Aug 2018  
(1-month sample)

**General data:**

Total direct: 911  
Total indirect tier 1: 723  
Average indirect/direct: 0.8

**Protocol: GTFi good practices**

100% of direct suppliers compliant with good practices

### Mirassol d'Oeste (Mato Grosso)

**Analysis details:**

**Transaction window:**

Direct vs SIF: July-Aug 2018  
Indirect vs Direct: July-Aug 2018 (2-month sample)

**General data:**

Total direct: 685  
Total indirect tier 1: 1,732  
Average indirect/direct: 2.5

**Protocol: GTFi good practices**

99.9% of direct suppliers compliant with good practices

### Mirassol d'Oeste (Mato Grosso)

**Analysis details:**

**Transaction window:**

Direct vs SIF: Oct 2018 (1-month sample)  
Indirect vs Direct: June-July 2017 (2-month samples).

**General data:**

Total direct: 144  
Total indirect tier 1: 378  
Average indirect/direct: 2.6

**Protocol: GTFi good practices**

99.3% of direct suppliers compliant with good practices

### Mirassol d'Oeste (Mato Grosso)

**Analysis details:**

**Transaction window:**

Direct vs SIF: Jan-Dec 2018 (1 year)  
Indirect vs Direct: Aug 2016 July 2017 (1 year).

**General data:**

Total direct: 678  
Total indirect tier 1: 4,033  
Average indirect/direct: 5.9

**Protocol: GTFi good practices**

99.9% of direct suppliers compliant with good practices

### Live Cattle Exports (Pará)

**Analysis details:**

**Transaction window:**

Indirect vs Direct: Aug 2019 – July 2020 (1 year)

**General data:**

Total direct: 130 (sample)  
Total indirect tier 1: 1,787  
Average indirect/direct: 13.7

**Protocol: GTFi good practices**

93% of direct suppliers compliant with good practices

1. Preliminary tests with the tool, not to be interpreted as a supply chain assessment.

2. After the analysis period, a number of tool settings were adjusted.

June 2021

### Calibration

Feedback to calibrate the tool using test results

June-Aug 2021

### API Integration

Visipec integration with Minerva Foods systems, including development of integration views and analytics reports.  
Integration of Amazon states available in Visipec, starting with the state of Pará.

Sept-Dec 2021

### Practical testing – Continuous improvement

Post-integration practical testing using the databases available in the tool, followed by continuous improvement.

## Our value chain at a glance

100%

compliance in audits on Minerva's Public Livestock Commitment, including criteria such as zero illegal deforestation in the Amazon, encroachment into indigenous lands, protected areas, slave labor and embargoes by the environmental authority

100%

compliance with social and environmental criteria and established procedures in Paraguay, according to a third-party audit

300+

suppliers in Colombia registered with geographic data on the SMGeo platform



## MORE TECHNOLOGY ACROSS THE VALUE CHAIN

GRI 103-2, 103-3 | 308

Deploying monitoring technology for indirect suppliers is the next step in the Company's efforts to monitor the end-to-end beef value chain. This is being achieved using an application called SMGeo Prospec.

In a partnership with the app developers, Niceplanet Geotecnologia, Minerva Foods is providing this tool to cattle ranchers throughout Brazil, allowing them to assess their supply chains for compliance. The app uses technology and a database that draw on the Company's traceability expertise and the outcomes from previous assessments and audits. The tool allows ranchers to monitor their own suppliers and identify risks before completing any transaction.



## Environmental assessment of direct suppliers

GRI 308-2

**21,734**

suppliers assessed for actual and potential negative environmental impacts

**374**

suppliers identified as having significant actual or potential negative environmental impacts

**1.7%**

of suppliers removed from Minerva Foods' commercial database following the assessment

## Leather traceability

Minerva Leather, a dedicated leather business, reached an important milestone in 2021: **100% of leather hides sold in Brazil are now tagged and traceable from ranch to slaughter plant.** Progress has also been made in Paraguay where the Company expects the rollout to be completed by mid-2022. Another unique feature in regards to sustainability in this division is start of the commercialization of organic leather, originating from organically certified cattle slaughter facilities. (learn more about certifications on page xx).



Employee Herculano Messias and a partner cattle rancher in Palmeiras de Goiás, Brazil.

### CATTLE RANCHERS: SUPPORTING THEIR DEVELOPMENT

With a focus on production efficiency and continuously improving the superior quality that defines Minerva Foods products, the Company's Carcass Yields Program (PEC) engages ranchers in good production practices, creates added value in sourced cattle, optimizes ranch revenues, and rewards participating ranchers.

The initiative shares with participating ranchers, quality evaluations of the cattle lots received. This information includes weight, age at slaughter, finishing, pH of the meat. This is information that identifies opportunities for improvement. The program is free of charge and the results are used to form a benchmark that serves as a guide for the other participants and as a basis for action plans designed to improve the cattle supply.

With three years in use, the PEC program has reached 718 ranchers and assessed 239,898 head of cattle, as of 2021. The program continues to expand and has proven its potential to improve both meat quality, and the productivity of partner ranches. Supplier reports have been expanded to include more customized, supplier-specific assessments, providing a valuable advisory service to participating ranchers.

#### LAÇO DE CONFIANÇA

*Laço de Confiança* ("Bond of Confidence") is a communication channel for suppliers, created to share technical materials regarding quality, production, and on developing sustainable livestock ranching practices. In 2021, approximately 3,000 suppliers were registered and received 25 technical articles.

## Introducing Angus cattle in Rondônia

Another example of Minerva Foods' support in improving supplier productivity and technology uptake is the Angus cattle program for suppliers in Rondônia. Minerva Foods and Alta Genetics, a global livestock genetic improvement and reproduction company, provide direct assistance in technology adoption. Participating farmers are offered guaranteed bonuses for animals bred in accordance with agreed requirements.

Cattle farming has only recently been introduced in the state, and the challenge now is developing more intensive cattle production systems to increase productivity. The program was kicked off with the opening of Minerva Foods' cattle sourcing office in Ariquemes (RO), also as part of the Company's strategy to build closer relationships with producers.

# Eco-efficiency

Minerva Foods' Environmental Management System comprises a set of activities designed to manage emissions, waste and effluents, and carefully assess business impacts on water and energy resources.

In 2021 Minerva Foods initiated the certification process of its José Bonifácio unit, in Brazil, in accordance with the ISO 14001 standard, an international standard on environmental management systems. Through initiatives of innovation and employee engagement, the Company fortifies its stance on process efficiency and excellence, resulting in direct benefits of managing environmental impacts.

## Emissions and energy efficiency

GRI 103-2, 103-3 | 302, 103-2, 103-3 | 305

In addition to initiatives with partner ranchers and combating illegal deforestation in the value chain, the Company also manages the carbon footprint and energy efficiency of its own operations as part of its commitment to mitigate climate impacts.

All electricity utilized by the operations of Minerva Foods is clean, backed by International Renewable Energy Certificates (I-RECs). Wind power certificates have been purchased in Brazil, and hydropower certificates for the other countries in South America. There is no need to obtain certificates for the operations in Paraguay, as they already derive their power supply from renewable sources.

In addition to zeroing its scope 2 emissions from purchased electricity, the Company is contributing to the development of a high-performance renewables market. **Minerva Foods is also the first company in Brazil to obtain a Renewable Energy Seal of Approval, awarded by Instituto Totum in partnership with the Brazilian Wind Power Association (ABE Eólica) and the Brazilian Clean Energy Association (ABRAGEL). This certification attests that power plants not only use renewable energy sources but also adopt enhanced social and community engagement practices.**

In Brazil, the Company has set a target to reduce its electricity intensity (kWh/metric ton produced) by 3% from a 2019 baseline. In 2021, further efforts were made to improve energy efficiency, including by optimizing refrigeration systems. Impacts

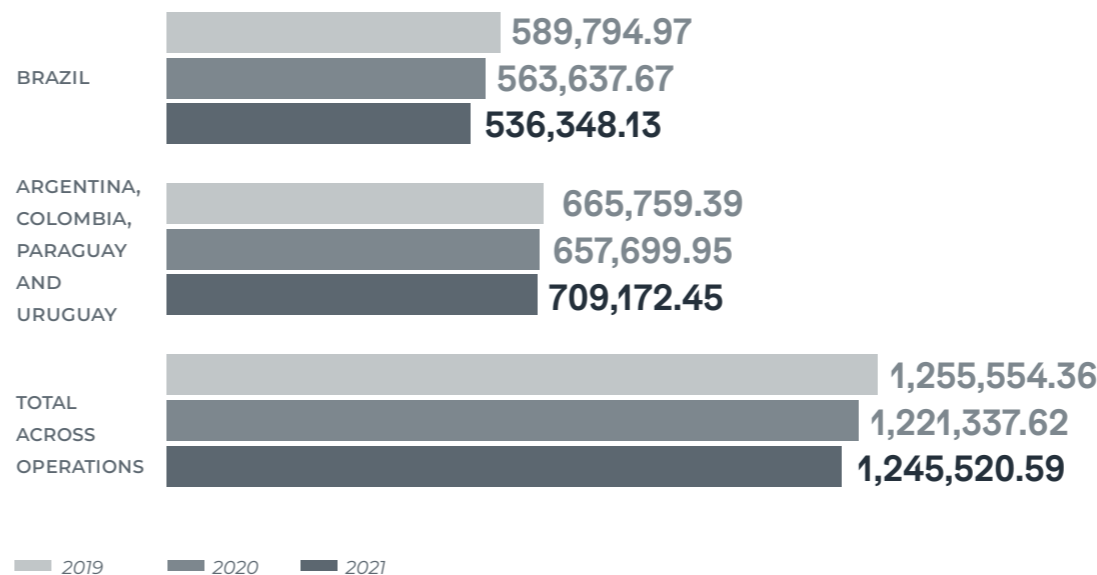
from the pandemic and market fluctuations directly affected the performance of the Company's refrigeration systems, preventing this target from being met in the year. **Absolute electricity consumption was reduced by 4.84% in Brazil.** Several electricity savings projects were also

implemented in other countries, although no targets have been set as performance metrics are currently being standardized.



## Electricity consumption – renewable (GJ)<sup>2</sup>

GRI 302-1



GRI 302-3

0.77

energy intensity in 2021 (GJ/t)<sup>1</sup>

<sup>1</sup> The calculation method for this disclosure was amended in 2021. In the previous method, only the volume of food products was included in the calculation; following the amendment, the calculation includes both food products and co-products such as tallow, hides and biodiesel.

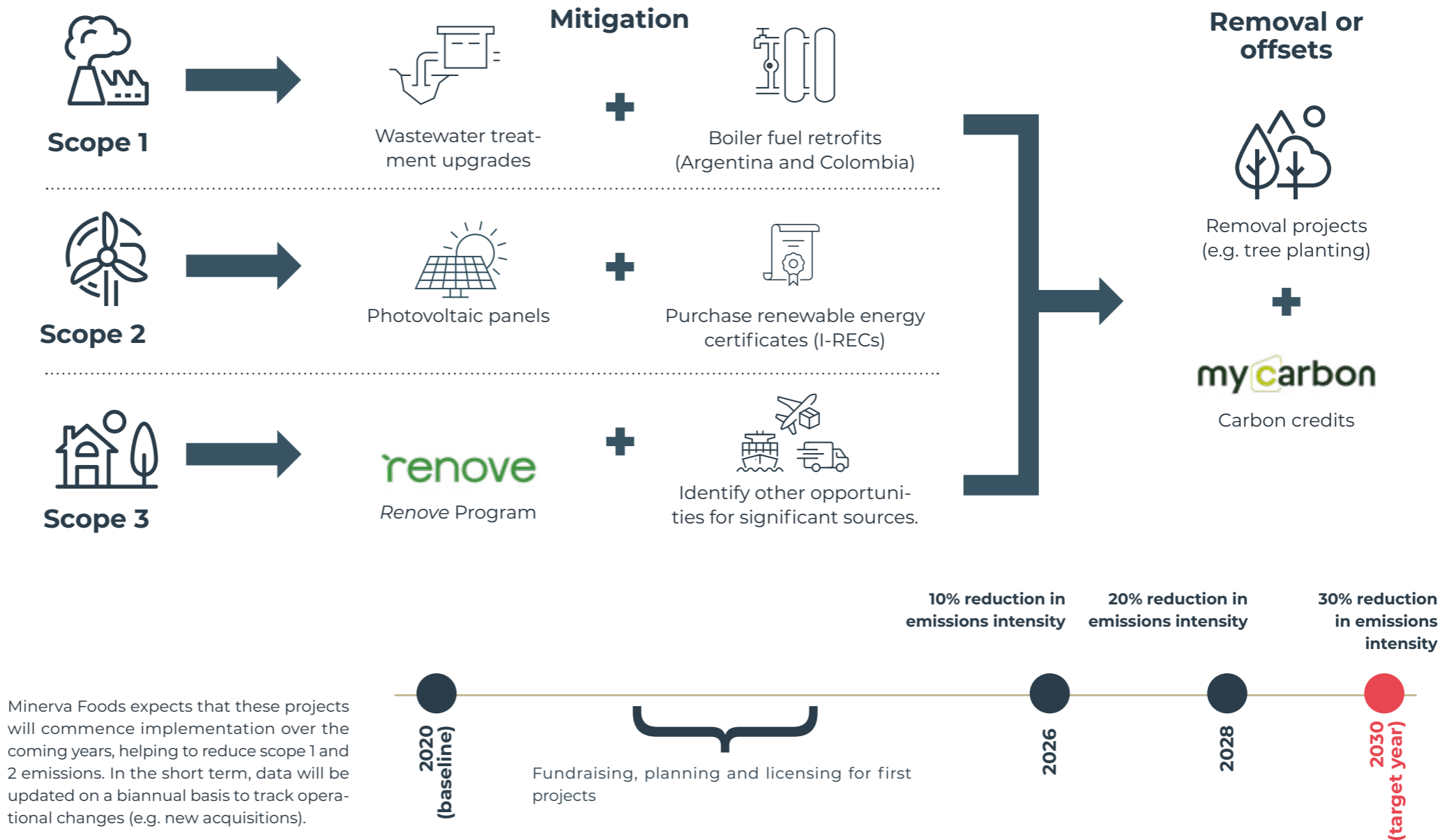
<sup>2</sup> Data for 2019 and 2020 has been restated in this report. The data disclosed in previous reports included only electricity consumed from renewable sources.

### EMISSIONS MANAGEMENT

The Company has continued to conduct assessments to identify energy efficiency projects and initiatives that can contribute to its target of reducing greenhouse gas (GHG) emissions intensity by 30% by 2030 (*learn more about these targets in the section Sustainability management*). The target includes scope 1 and 2 emissions, with emissions intensity measured as the volume of emissions per metric ton of finished product.

In 2021 Minerva Foods carried out an assessment to inform the development of a decarbonization roadmap, with support from specialized consultants. Using internationally recognized methodologies, the assessment benchmarked the Company's scope 1 and 2 emissions in recent years against the broader protein sector's emissions profile, and designed emission scenarios based on the Company's operational and strategic outlook.


This informed the development of a Marginal Abatement Cost Curve (MAC), indicating which emissions abatement projects are most cost effective and need to be prioritized in the coming years. The scope 1 emissions projects to be implemented in the near future include wastewater treatment plant upgrades and boiler fuel retrofits in Argentina and Colombia. Emissions mitigation is the primary focus of these efforts, and offsets are considered only for emissions that cannot be eliminated.





In relation to scope 3 GHG emissions from the value chain, for which Minerva Foods has indirect responsibility, the Company has begun monitoring new sources of emissions that are material to the business: cattle ranching, employee commuting on private vehicles, waste, and logistics. A new assessment was launched toward year-end, this time to inform the development of a decarbonization roadmap for scope 3 emissions. This assessment is expected to be completed within 2022.

Minerva Foods' annual emissions inventories are audited and published in the Brazilian GHG Protocol Program's Public Emissions Registry. In 2021 the Company was awarded Gold reporting status—the highest recognition within the program, awarded to companies that report complete data and obtain third-party assurance. The 2021 emissions inventory will also be audited and published in the Public Emissions Registry.

 For detailed emissions disclosures, see the **Disclosures appendix.**

Employee Hysrael,  
Minerva Biodiesel, Palmeiras de Goiás, Brazil.

**TOTAL EMISSIONS**  
**GRI 305-1, 305-2, 305-3**

Emissions	2019	2020	2021
Scope 1	192,897.10	233,274.66	283,144.86
Scope 2 - Location-based approach	17,292.05	14,590.81	53,093.41
Scope 2 - Market-based approach*	-	0.00	0.00
Scope 3	-	34,541.27	16,762,018.44

\*The Company has purchased International Renewable Energy Certificates (I-RECs) to neutralize 100% of its scope 2 emissions from purchased electricity since 2020.

The increase in scope 1 emissions reflects the higher slaughter and production volumes compared to the previous year, and changes in emissions factors. The Bucaramanga (COL) operation, acquired in the last quarter of 2020, was operational throughout 2021, and the Canelones (UY) site restarted operation in the year.

Changes in rainfall patterns affected hydroelectric generation levels, resulting in higher scope 2 emissions in the year, although these emissions were fully neutralized by purchased International Renewable Energy Certificates (I-RECs).

In relation to scope 3 emissions, in 2021 new categories were included and monitoring was expanded to all countries where the Company operates, resulting in higher total emissions.

In addition, **Minerva Foods helped to remove 8,400 metric tons of carbon from the air through tree planting.**

**0.17**  
net metric tons of CO<sub>2</sub> emitted per metric ton of finished product – the Company's emissions intensity in 2021\*

\*In previous years, only food product volumes were included in the calculation. In 2021 the methodology was revised to incorporate the full range of products produced, including both food products and co-products such as tallow, hides and biodiesel. The metric is calculated as scope 1 and 2 emissions in relation to production volume. Scope 2 emissions amount to zero, as they have been neutralized by purchased International Renewable Energy Certificates (I-RECs). In addition, in previous years only food product volumes were included in the calculation. In 2021 the methodology was revised to incorporate the full range of products produced, including both food products and co-products such as tallow, hides and biodiesel.

**MINERVA BIODIESEL IS CERTIFIED WITHIN RENOVABIO**

Minerva Biodiesel, an operation that produces biodiesel from byproducts from animal slaughter—as well as materials such as soy, coconuts and chicken fat—was certified in 2021 within RenovaBio, a component of the Brazilian Decarbonization Program. With its certification, the operation is now eligible to issue Decarbonization Credits (CBios) for sale to fuel distribution companies.

Minerva Biodiesel has now joined a nation-wide program to reduce GHG emissions, launched by the Federal Government as part of its commitments as a signatory of the Paris Agreement. CBios credits also amplify the Company's ability to generate economic benefits, attract investors and gain faster access to more competitive finance.

Besides tallow, Minerva Biodiesel purchases non-cattle-derived raw materials from around 50 smallholders for the production of biodiesel.

# Water

GRI 103-2, 103-3 |  
303, 303-1 | 306-1, 306-2

Managing water resources is an essential part of Minerva Foods production operations, as are its efforts to expand water reuse, wastewater treatment, and water use reduction. The slaughter and gutting process are responsible for 60% of total water consumption in the industry.

Initiatives such as water reuse for washing trucks and holding pens, and replacement of pressure reducers and other devices at boot washing stations and on wash-down hoses, have helped to increase water efficiency.

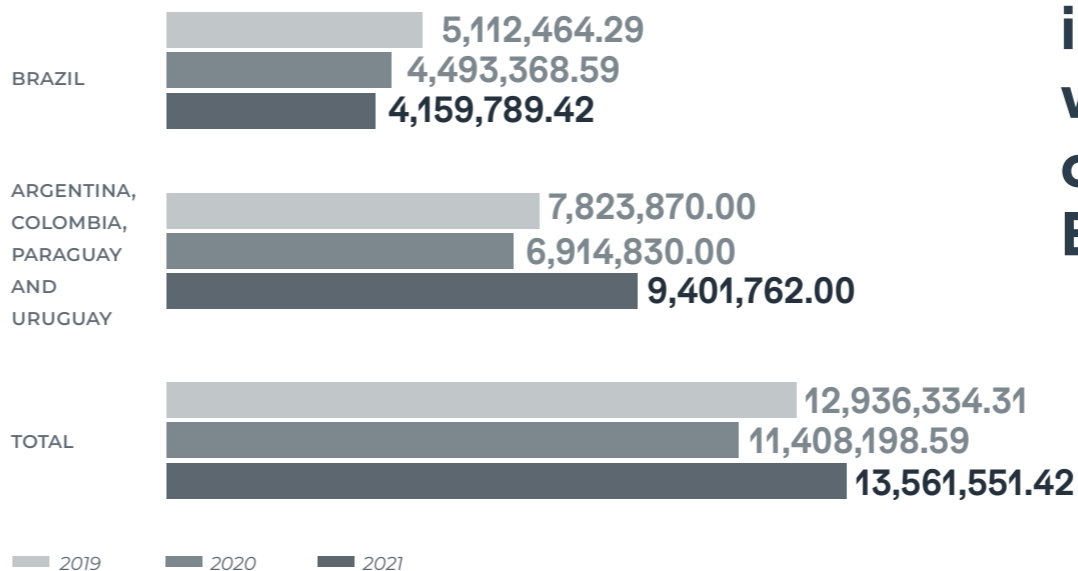
In 2021 we had set a target to reduce water intensity (water consumption per metric ton produced) by 1% in the Company's Brazil operations compared to the previous year. Absolute water consumption in Brazil was reduced by 7.42%, and water intensity by 0.3%. The LatAm division had no water reductions due to the expansion in Argentina and Paraguay, and the start of operation at the Bucaramanga plant in Columbia. All water consumption and treatment is compliant with applicable legal and environmental license requirements. The Company's operations withdraw water from both

surface (rivers and lakes) and groundwater (deep cased wells) sources. All water withdrawals are licensed under a permit issued by the appropriate environmental authorities. Water quality is monitored on a daily basis by local teams, based on multiple parameters (chlorine, pH, turbidity, solids, etc.).

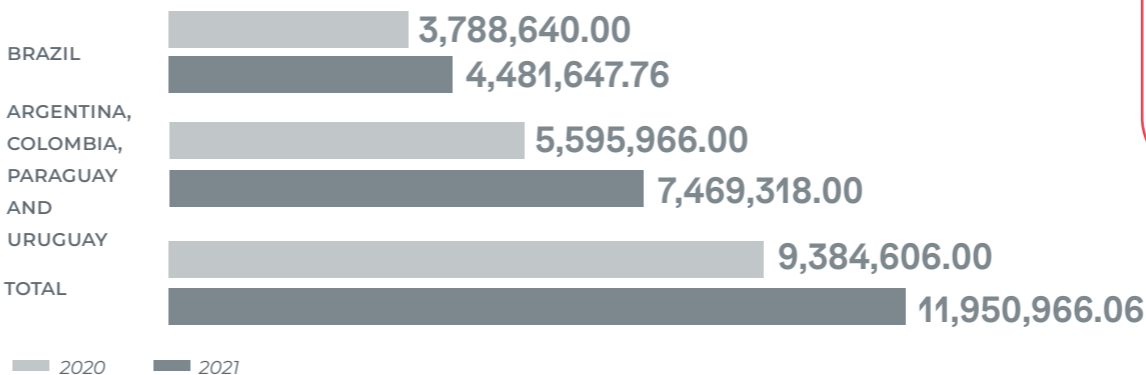
Effluents are treated and discharged in accordance with applicable regulations, environmental license requirements and IFC Performance Standards. All plants have on-site wastewater treatment facilities. In 2021, a new wastewater treatment system using activated sludge technology was built at the Company's José Bonifácio (SP) site. The new facility will reduce methane emissions from wastewater treatment, the primary source of scope 1 emissions.

The Company is also seeking more sustainable approaches to disposing of wastewater, such as pasture fertigation. Among other environmental benefits, fertigation helps to preserve water bodies and reduce the use of nitrogen-based fertilizers, a source of GHG emissions.

## Water withdrawal (m<sup>3</sup>)



## Water discharge (m<sup>3</sup>)



**7.42% reduction in absolute water consumption in Brazil**



For further details, see in the **Disclosures appendix**.



# Waste

## GRI 103-2, 103-3 | 306, 306-1, 306-2

In 2021, Minerva Foods was awarded the Eureciclo label, in recognition of its good practices in reverse logistics for product packaging. The Company is the first in the beef industry to receive this certification for all product lines marketed in Brazil

More than just a label, the platform connects cooperative and waste and recycling operators to product manufacturers via a tracking and data storage system, within an auditable and scalable process that generates new revenue streams for recycling operators, expands reverse logistics of post-consumption packaging, and mitigates the environmental impacts of the packaging materials. The entire Eureciclo process is audited.

By directing waste, equivalent to its own weight and material, to recycling, Minerva Foods directly compensates cooperatives, and collection and sorting operators for their environmental services. **Annually, approximately 1,500 metric tons of post-consumption packaging is sent out for recycling**, equivalent to 22% of the total packaging the Company places on the Brazilian market, in line with the targets set under the Brazilian Solid Waste Policy. In Colombia, all corrugated cardboard packaging from the Ciénaga de Oro site is fully recycled.

The Company's Solid Waste Management Plan sets out requirements on management, segregation and disposal. Waste materials such as rumen fluid and wastewater treatment sludge, which account for the bulk of waste volumes from the production process, are classified as nonhazardous and sent for composting.



“Minerva Foods is the first company in the beef industry to receive certification for all product lines marketed in Brazil”

### Total Waste Generated - metric tons

Brazil	2019	2020	2021
Hazardous	1.05	87.54	12.99
Nonhazardous	48,623.15	41,646.94	19,397.86
<b>Total</b>	<b>48,624.19</b>	<b>41,734.48</b>	<b>19,410.85<sup>1</sup></b>

Argentina, Colombia, Paraguay and Uruguay	2019	2020	2021
Hazardous	18,008.32	29,800.87	18.77
Nonhazardous	5,527.42	15,999.00	83,615.16
<b>Total</b>	<b>23,535.74</b>	<b>45,799.87</b>	<b>83,633.93<sup>1</sup></b>

<sup>1</sup> The reduction was due to shutdowns at several plants during part of the year.

<sup>1</sup> The higher waste volumes in the LatAm Division are due to the inclusion of rumen fluid waste, which is used as boiler fuel in Paraguay and sent for composting in Uruguay. In addition, the Bucaramanga site in Columbia started operation, and the Canelones facility in Uruguay resumed operation following a shutdown.



For detailed disclosures, see the **Disclosures appendix**.

# Getting maximum value from raw materials

Minerva Foods' core business revolves around cattle. We seek to gain maximum value from raw materials, increasing efficiency and delivering social and environmental benefits.

## Biodiesel

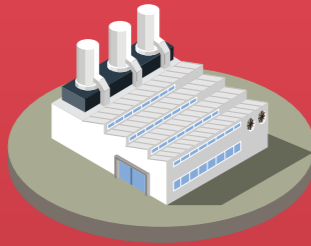
Minerva Biodiesel produces fuel from beef tallow and other co-products.



Triglycerides in animal fat react with a primary alcohol to produce two products: ester and glycerin.



After several purification steps, the glycerin can be used as fuel for internal combustion and compression engines

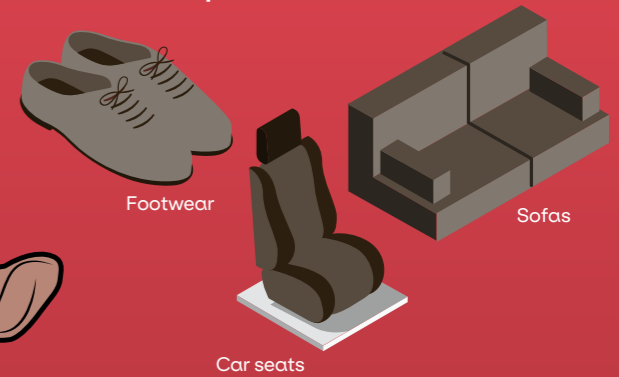


It is also used to produce thermal power for our operations

## Leather

Post-slaughter cattle hides are used to produce high-quality leather for the automotive, footwear, accessories and furniture industries, in addition to collagen for pharmaceutical products and cosmetics, and gelatin.

Among other products, the leather can be processed into



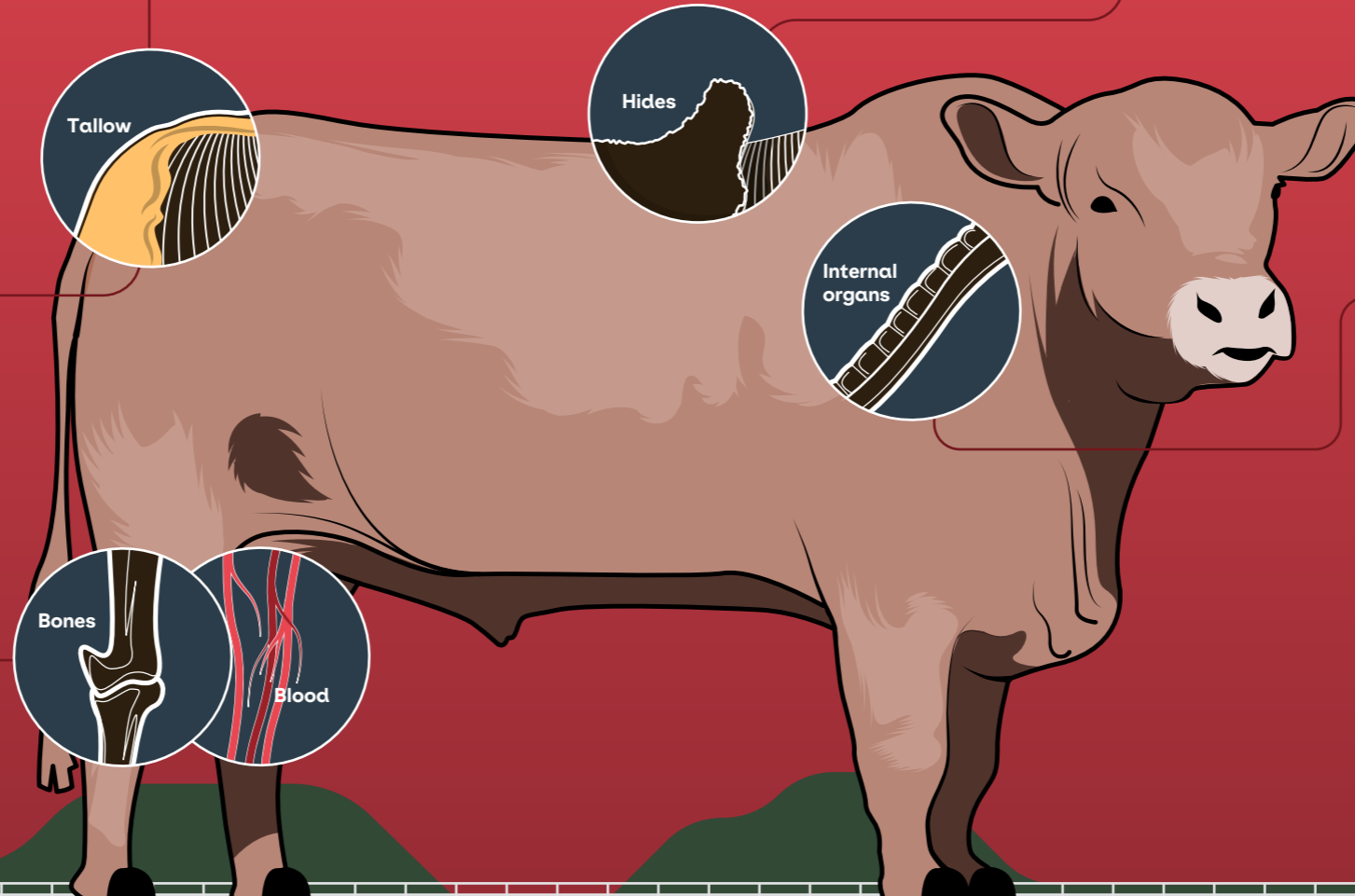
## Ingredients

The Ingredients division sells co-products from our production process, which have high nutritional value and can be used as ingredients in the pet food and treat industry. These include:

- Bone and meat meal
- Blood
- Bones
- Tallow

Everything is produced within the Minerva Foods Quality Management System and is guaranteed to be sustainably sourced:

- ★ Good Manufacturing Practices (GMP)
- ★ Sanitation Standard Operating Procedures (SSOPs)
- ★ Hazard Analysis Critical Control Points (HACCP)



## Sausage casings

Minerva Casings supplies the sausage industry with natural casings produced to the highest standards of quality and food safety.



The casings are used to produce a wide range of sausage products.

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# Benefiting our people



Employees Kassy Marie Antonio and Olga Nizna, Belén, Paraguay



Employees at the Belén plant in Paraguay.

# Benefiting our people

## Organizational culture and development

GRI 103-2, 103-3 | 401, 401-2

Culture is an enabler of strategy, and ensures the identity and differentials of Minerva Foods. Continuing along the process of evolving its organizational culture, in 2021 the Company issued its Culture Manifest, stating its commitment to values and the behaviors to express them.

Culture ambassadors help leaders implement action plans to strengthen each of the values in the Company's organizational culture. This includes translating Minerva Foods' commitment to sustainability into projects with specific targets by country and/or area; reviewing all incentive programs, and digitizing processes and procedures (shifting from an analog to

a digital mindset). By late 2021 66% of the global plan was complete.

In a year that was again marked by the COVID-19 pandemic, all health protocols remained in place, ensuring the safety of all work environments. Healthcare offerings were expanded, along with incentives with vaccination, that enjoyed the ample engagement of our workforce: **Ninety-nine percent of employees in Brazil received two doses of the vaccine in 2021, and 97% of employees in other countries** (*read more about this starting in **Health and safety***).

Employees receive benefits such as food, transportation, life insurance, health insurance, and parental leave, plus all other benefits established by law, regulations, and collective agreements. On-site cafeterias offer meals at subsidized prices, and employees are offered discounts and other advantages from retailers and health and dental insurance providers in the cities where they work.

## WORKFORCE PROFILE

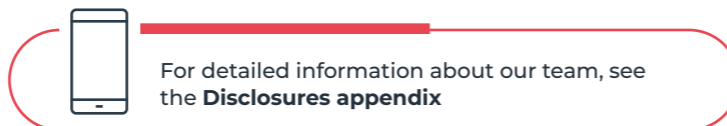
In 2021 our headcount exceeded 21,000 across all our operations: Brazil, Argentina, Colombia, Chile, Paraguay, and Uruguay. The Company also has 651 third-party service providers in Brazil, and 114 in the other countries where it has plants, distribution operations, or offices.

During the year employees were laid off in Mirassol d'Oeste and Paranatinga, and labor agreements were suspended. This was done to adapt to the dynamics of the domestic market and exports to ensure efficient management of the company's resources. These processes are included in collective labor agreements, and include full compensation and two-weeks prior notice.

The Company was also forced to stop its activities at its sites in José Bonifácio (SP) in May, and in Assuncion, Paraguay in October, due to incidents that caused only minor material damages.

## Our people GRI 102-8

Workforce by region	2019	2020	2021
Brazil	10,978	11,539	12,041
Argentina	2,388	2,712	2,609
Chile	51	27	25
Colombia	700	2,568	1,490
Paraguay	2,557	1,878	2,912
Uruguay	1,795	1,226	2,138
<b>Total</b>	<b>18,469</b>	<b>19,950</b>	<b>21,215</b>



**Over 24,000 grocery packages and 40,000 kilograms of Minerva Food products were donated in all countries**

## REINFORCED CARE AND WELL-BEING

Created in 2021, the *Programa Estar Bem* ("Be Well Program") is a set of measures to support and encourage the quality of life of employees and their families, reinforcing the relationship with our workforce, and promoting well-being and a safe and healthy environment. The program also addresses some of the lessons learned from the pandemic period, reinforcing the company's concern with the physical and emotional wellbeing of people.

This initiative is present across all countries, and provides telemedicine services based on the concept of a family physician who monitors the health of our workforce, focuses on preventive measures, and is supported by specialists as necessary.

Employees may also access nutrition services and physical educators at no additional cost, including personalized plans focused on individual needs. Pregnant women are monitored by nurses and obstetricians, supplementing their pre-natal care.

*Estar Bem* includes *Programa de Apoio ao Colaborador* (PAC) ("Employee Assistance Program"), which provides psychological and social services, as well as financial advice, legal support, and other services, including support and counseling. The *Estar Bem* program is available to all employees and their families.

**42,000 lives\***

**benefited from the program across all Minerva Foods operations**

\*A program for employees and their dependents.

**1,300 telemedicine visits**

**6,400 PAC/EAP services.**

**13 presentations**

**by renowned experts such as Leandro Karnal, Mário Sergio Cortella, and Drauzio Varella, among others.**

**Digital library**  
hundreds of titles and *audiobooks* are available free of charge.

**DEVELOPING PEOPLE**

**GRI 103-2, 103-3 | 404**

The Company's key positions were mapped in 2020, and the plan continued in 2021, with assessments as part of the Leadership Development Plan (LDP). **More than 1,300 managers participated in training modules, including one exclusively for cultural aspects, such as the Company's mission and values.**

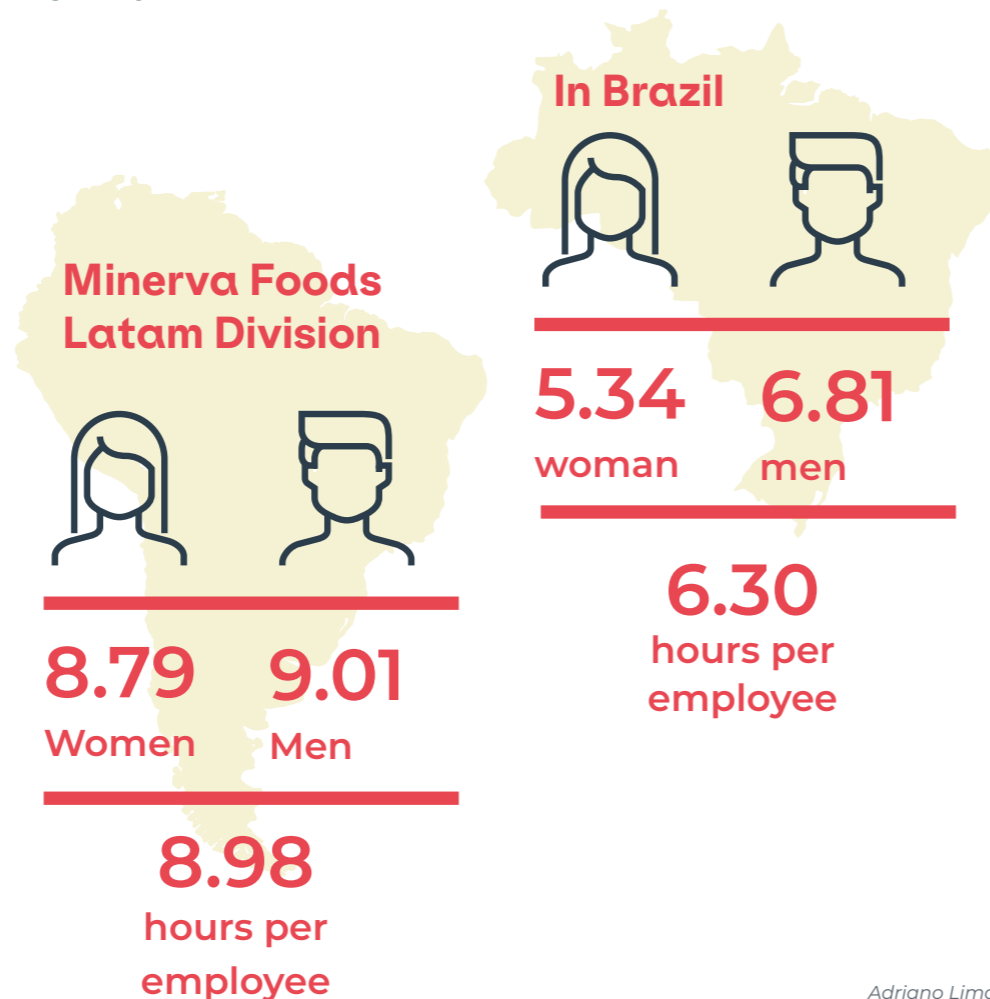
Creating a committee to analyze people management and a focus on leadership development have helped motivate and retain talents, and thus reduce turnover, a challenge that has only become greater with the pandemic and the growth of the agricultural/ranching sector. **Between 2018 and 2021 turnover went from 44% to 22%.**

We also launched a distance learning platform with development pathways to facilitate learning and independence.

Performance assessment cycles are annual for management and administrative staff. The process includes self-assessments, assessments by employees' managers, target setting, feedback meetings, and design of Individual Development Plans (IDP). In 2021, 20% of the employees and all trainees in Brazil had their performance assessed. The process is still in the implementation phase in other countries.

**Average training hours by gender – 2021**

**GRI 404-1**



Adriano Lima,  
Chief Human Resources Officer





## Focus on young talents

The company's entry programs are designed to encourage the professional development of young people, their interest in the agricultural/ranching industry, and job creation in the communities where the Company is present.

### Trainee program

In 2021 a new program was used in Brazil, which turned out to be quite attractive, with over 6,000 applicants. Twelve young professionals were selected. This initiative lasted for an entire year and included a module where they

mentored interns, simultaneously exercising their leadership and management skills, and reinforcing the learning environment for our trainees. In Paraguay the program selected five young people.

### Internship Program

In 2021, 43 interns joined Minerva Foods in Brazil. Their development is enhanced by workshops, behavioral and technical training, and sharing experience with Company leaders.

## ENGAGEMENT AND COMPENSATION

GRI 103-2, 103-3 | 202

In line with its values, the Company seeks to expand its recognition of the engagement and dedication of its people by including not only financial compensation, but also by bringing leaders closer to their teams, and celebrations that value work and performance.

Adjustments were made in performance-based compensation, linked to the Company's strategic goals and commercial areas, seeking a more meritocratic model. The criteria for executive bonuses were also revised to add aspects that help assess adherence to the Company's culture, including sustainability. This program was expanded to include management.

Minerva's compensation practices are designed taking account of market benchmarks, the Company's competitiveness as an employer, surveys, and the ability to attract and retain highly skilled employees. Fixed compensation is adjusted annually, as per collective bargaining agreements that cover all of our operations in Brazil and Uruguay. In other countries these agreements vary according to local legislation: Argentina (93%) and Paraguay (42%) have similar laws. Labor law in Colombia makes no such provision. There are no gender-based differences in basic salaries under collective agreements.



**The bonus program assesses adherence to Company culture, including sustainability, and was extended to managers**



Employee Danilo dos Santos Balbino, Barretos, Brazil.

## Health and Safety

GRI 103-2, 103-3 | 403, 403-2, 403-3, 403-4, 403-5, 403-8, 403-9, 403-10

Addressing the pandemic continued to mobilize management in 2021, with attention to the health protocols that avoided outbreaks of COVID-19, or the need to shut down all our operations.

The Company's protocols were written in 2020, with the support of Hospital Israelita Albert Einstein as consults, and then voluntarily submitted for analysis by health and legal authorities. They include measures to ensure suitable distancing of professionals working in manufacturing areas and in common areas such as cafeterias and rest locations.

Teams were split into small *clusters* that were correctly identified and organized by shift to make tracking easier in the event of a suspected case. Physical barriers were set up between work stations where workers

must work closer together, and air blowers improved air circulation and renewal in collective environments. The start and end of the work day were staggered, the use of biometrics was suspended, and screening measures to identify symptomatic individuals such as temperature measurements were put in place. The Company also reinforced cleaning and disinfection measures.

Employees or contractors who tested positive were monitored by healthcare professionals and received help to purchase medication, grocery packages, allowances, and advances on their 13th salary, among other measures.

Keeping everyone mobilized and compliant with COVID-19 safety measures was a challenge that was monitored throughout the year, and overcome with reinforced communication, including presentations by experts. Campaigns to create awareness of the importance of immunization were reinforced with content to fight fake news and answer employee questions. To encourage them to get vaccinated the company offered grocery packages and Minerva Foods products to whoever showed proof of full vaccination. By the end of 2021 99% of the company's workers in Brazil had had at least two doses of the COVID-19 vaccine, and 97% in other countries.

There were also flu vaccine campaigns. In all, over 11,000 quadrivalent vaccines against influenza and H1N1 were administered free of charge.

99%

of workers in Brazil have received at least two doses of the Covid-19 vaccine, and 97% in other countries

### SUPPORT AND DIALOG WITH LOCAL LEADERS

To help managers with the challenges faced on the ground, made more complicated by the pandemic, and bring operating leaders closer to Company management, dialogs were organized around themes such as workloads, absenteeism, and mental health, among others. About 300 leaders met in 46 online meetings in 2021 for candid and open conversations for support.

### BACK TO WORK

With the more restrictive COVID-19 social distancing period over, and more flexible measures adopted by local governments, Minerva Foods gradually returned to in-person work, monitoring the progress of vaccination in each region. This was a gradual process that took into account recorded cases of COVID-19, the type of transportation used in commuting, and whether or not employees belong to a risk group, among others.



## SAFETY MANAGEMENT

Domestic and international best practices, as well as the IFC Performance Standards are enforced when designing plans and programs focused on worker health and safety, exceeding legal requirements. Within the Company's health and safety management system, all activities are assessed by independent experts to detect risks, and potential incidents that can cause impacts are addressed by emergency response plans.

Human resources and safety committees analyze, measure, and take action to ensure systems evolve and all workers attend onboarding training.

All of the Company's plants have outpatient services with occupational physicians, nurses, nursing technicians, ergonomics experts, speech therapists and other third-party services. Occupational physicians develop and manage Occupational Health Surveillance Programs (PCMSO) linked to an Environmental Risk Prevention Program (PPRA).

Minerva also exercises active and passive surveillance of employee health, compiling data for epidemiological assessments and to inform individual or department-wide actions and awareness campaigns. Internal Accident Prevention Committees (CIPAS) are responsible for working to prevent workplace accidents and diseases, and for analyzing the practices adopted by the Company.

About 9,000 employees participated in the Internal Workplace Accident Prevention Week event, which addressed themes such as COVID-19 prevention, vaccination, alcohol, drugs, smoking, and safe behavior and individual protection, among others.

## Indicators

**In Brazil there were 11 lost-time injuries (injury frequency rate per 1,000,000= 0.53), and 185 no-lost-time injuries (injury frequency rate per 1,000,000=8.99). In other countries there were 325 lost-time injuries (injury frequency rate per 1,000,000= 76.75), and 183 no-lost-time injuries (injury frequency rate per 1,000,000=36.44).**

**There were 404 cases of work-related ill health among employees and one case among contractors, including 203 in Argentina, 2 in Brazil, 1 in Columbia and 179 in Uruguay.**

# 100%

of direct and third-party employees are covered by occupational health and safety management systems.

## Preventive actions

All activities are assessed as part of occupational programs to identify hazards and risks, and corrective and preventive action is taken to either eliminate or mitigate them.

# Over 52 thousand

safety dialogs applied;

# 1,830 sector audits

completed

# Over 11,000

quadrivalent vaccines against influenza and H1N1 were given to employees

# Zero deaths

No deaths were recorded all year across all of the Company's operations



Employees Marcelino Espinola, Lucia Gonzalez, and Cesar Soler, Belén, Paraguay



**Nine thousand employees participated in the SIPAT week event, which addressed COVID-19, vaccination, alcohol, and safe behaviors, among other topics**

# Social investment

GRI 103-2, 103-3 | 202, 103-2, 103-3 | 203, 103-2, 103-3 | 413, 203-1, 413-1

Minerva Foods has operations in 36 cities and towns, most of them small to mid-sized in Brazil, Argentina, Colombia, Paraguay, and Uruguay. Often it is the largest company and employer in that location. Thus, the Company understands its potential to contribute to local communities and support their government and other social institutions.

Community engagement is an ongoing process that is managed based on industry benchmarking surveys, internal and external surveys, and analysis of government statistics and Human Development Indexes (HDI). Corporate social responsibility is addressed in Company audits on Minerva's operations.

Even if indirect impact is not continuously and formally measured, interactions with community representatives, government agents, and healthcare, education, and social integration institutions are within the scope of qualitative analyses used to reinforce the positive impact the Company has on its surroundings. In 2021, once again

the Company's operations achieved social responsibility certifications such as SMETA, whose goal is to attest that the company operates according to the requirements of national and international standards regarding social, environmental, and workplace health and safety aspects.

All operations have social and environmental impact assessment procedures, community consultation committees and processes, occupational advisory committees, and grievance and complaints mechanisms and committees.

An Action Committee, an internal governance forum, meets monthly to discuss and implement social and environmental actions involving employees and local communities. In 2020 and 2021 this committee was involved in actions to fight COVID-19, coordinating support measures for local communities. This committee also assessed local situations to look into investments and actions.

The impact of Minerva Foods extends to its supply chain, which it can influence and promote best practices, not only in manufacturing and environmental matters, but also in the social arena. This underpins its relationship with suppliers, who must demonstrate respect for human rights, labor conditions, and tax requirements (*read more in Sustainable beef*).

Reinforcing its commitment to ensuring human rights, Minerva Foods has completed the first step of a value chain risk assessment process. This process found potential risks to human rights along each step in the chain, and in the next few years more in-depth assessments will be performed on site to confirm this risk.

**100%**

of operations assess environmental impact and promote constant monitoring. They also have local development programs based on community needs. These include 9 sites in Brazil, 4 in Argentina, 2 in Colombia, 4 in Paraguay, and 3 in Uruguay

**100% have local community consultation tools**

and programs, and channels and processes to address workplace health and safety complaints

**40% of sites**

have *stakeholder* engagement plans

## SUPPORTING THE COVID-19 RESPONSE

Minerva Foods remains mobilized to help face the pandemic. In early 2021, the Company participated in a group of companies led by social organization *Comunitas*. This group gathered R\$ 170 million to build Instituto Butantans vaccine plant, which will be able to produce 100 million doses of vaccine and the active pharmaceutical ingredient, which is essential.

The Company also remained alert to the needs of the communities where it is active. All requests and actions are analyzed by the Company's Action Committee.

## This committee analyzes all requests for donations

# Minerva Foods donated over R\$ 43 million

*to different initiatives, in particular:*

**Creating a R\$ 32 million Relief Fund**, with Company funds, to help customers weather this difficult period. Up to R\$ 30,000 in working capital credit available for some 1,200 customers;

**R\$ 1 million donated to the SP government** to build the new Instituto Butantan plant to manufacture COVID-19 vaccines;

*More than 16,600 test kits for COVID-19;*

**Over 153.9 metric tons of beef;**

**20,490+ liters of 70% alcohol gel;**

**Over 152,500 items of PPE;**

*More than 6,700 items of medical equipment;*

**Over 13,000 metric medicines;**

**Donations to campaigns,** public hospitals and hospital units;

**Donation of thousands of grocery packages;**

**Created the Mãos que Criam ("Hands that Create") project** (Paranatinga-MT), to incentivize local women entrepreneurship.

## EDUCATION FOR TRANSFORMATION

The *Educar para Transformar* ("Education for Transformation") program promotes inclusive education by donating school supply kits to the children of employees and other children enrolled in the public education system. In 2021, this program benefited 8,600 children.

## ARRASTÃO PROJECT

Arrastão is an NGO that welcomes and supports families in the Capo Limpo area of São Paulo (SP), with programs in education, culture, income creation, and quality of life. Minerva Foods is a partner in this project and each month donates 300 kg of meat used to prepare and provide 3,500 meals a day.

## FOOD AND CLOTHING DONATIONS

Employee mobilization also expands social actions. Campaigns are organized annually, and across Brazil collected 7,200 thousand sweaters and blankets sent to community institutions.

In Paraguay employees collected 100 kg of clothes and 200 toys. Also in Paraguay, 600 kg of meat were donated to the office of the country's first lady and her social programs. In Uruguay, 22,000 kg of meat were donated

## Caring for immigrants

In 2021 a group of 33 Venezuelans was hired by our plant in Paranatinga (MT), an initiative that supports the Federal Government's Welcome Operation (*Operação Acolhida*). In 2019 and 2020 the Company also hired workers for its Rolim de Moura (RO) facility. In addition to jobs, hires receive housing for them and their families for three months until they are settled, as well as food, personal hygiene and COVID-19 protection supplies.

# Product quality and respect for life



Employee Fabiana de Souza Bertonha, Barretos, Brazil

# Product quality and respect for life

## Food safety

GRI 103-2, 103-3 | 416, 103-2, 103-3 | 417, 417-1

Minerva Foods has a stringent food quality and safety management system that is governed by a unified Integrated Management System Policy spanning all plants across the countries where the Company operates.

Training programs help to improve teams' technical knowledge about quality management. The Company also invests in systematic data collection, and works to optimize quality performance indicators and to improve its analyses of these data.

Production volume manufactured in sites certified by an independent third party according to internationally recognized food safety management system standards:

**100%**  
of production volume certified in Brazil, Paraguay and Uruguay

**94.14%**  
Argentina

**55.62%**  
Colombia



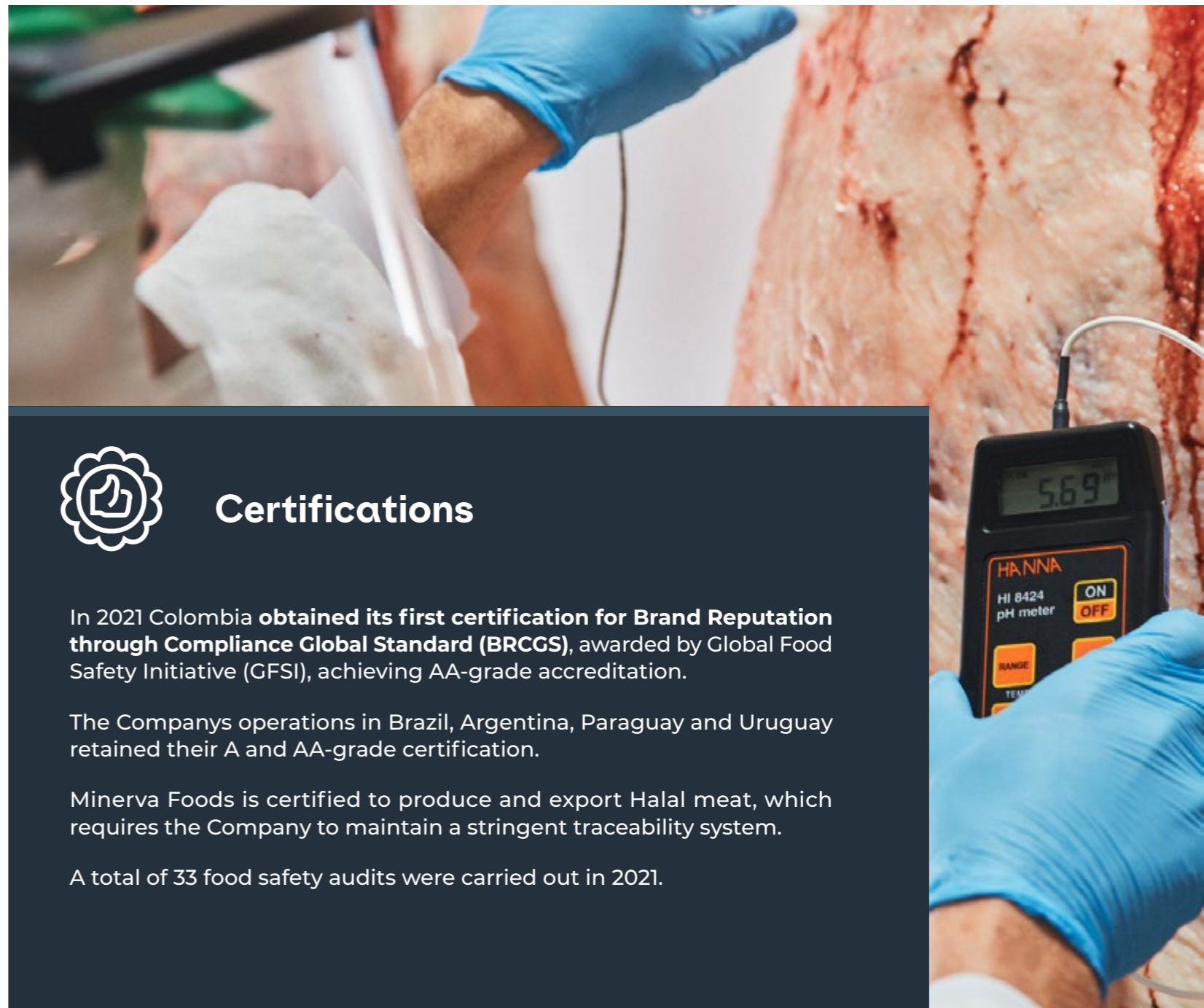
## Certifications

In 2021 Colombia **obtained its first certification for Brand Reputation through Compliance Global Standard (BRCGS)**, awarded by Global Food Safety Initiative (GFSI), achieving AA-grade accreditation.

The Company's operations in Brazil, Argentina, Paraguay and Uruguay retained their A and AA-grade certification.

Minerva Foods is certified to produce and export Halal meat, which requires the Company to maintain a stringent traceability system.

A total of 33 food safety audits were carried out in 2021.





Supplier Farm, Centilena, Paraguay

**Five plants in Brazil and all plants in Paraguay and Uruguay are certified for organic production—without the use of antibiotics and hormones and with stringent animal welfare controls**

## Organic production

International organic beef certifications have been obtained for plants such as Araguaína (TO), Barretos (SP), Janaúba (MG), Palmeiras de Goiás (GO) and Paranatinga (MT), which was certified in 2021. Certified plants are subject to stringent traceability controls under regulations 834/2007 and 889/2008 of the European Community and the National Organic Program (NOP) of the United States. The Company's plants in Paraguay and Uruguay have also been certified to export organic beef. Certified animals are guaranteed to be free from antibiotics, growth hormones and animal feed supplemented with animal products, as well as meeting the highest standards of animal welfare.

Percentage of production volume manufactured in sites certified for food safety	2019	2020	2021
Brazil	100%	100%	100%
Argentina	94.80%	92.5%	94.14%
Paraguay	100%	100%	100%
Uruguay	100%	100%	100%
Colombia <sup>1</sup>	-	-	55.62%

<sup>1</sup> The certification process in Columbia was carried out in mid-2021.

## Quality Metrics

Some of the key food quality and safety management practices and tools used in the Company's operations include:

- ▶ Hazard Analysis and Critical Control Points (HACCP);
- ▶ Sanitation Standard Operating Procedures (SSOPs);
- ▶ Operational Sanitary Procedures (OPS);
- ▶ Good Manufacturing Practices (GMP);
- ▶ Sampling Plans;
- ▶ Traceability Program;
- ▶ Animal Welfare (AW).

All of the Company's operations are continuously monitored by specialized Food Quality & Safety teams. A matrix of quality metrics assists these teams in identifying needed corrections, as well as best practices and opportunities for improvement. Food quality and safety targets are reviewed on an annual basis, or as otherwise necessary.

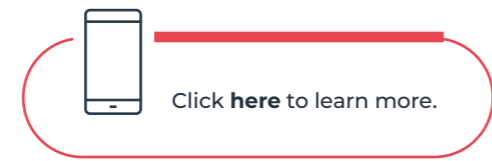
In addition to internal risk assessment, daily monitoring and verification processes, external product quality and safety audits are regularly conducted by the Department of Animal Product Inspection (DIPOA) of the

Brazilian Ministry of Agriculture, Livestock and Food Supply (MAPA), by equivalent agencies in Argentina, Colombia, Paraguay and Uruguay, and by customers.

Minerva Foods has on-site ISO 17.025 accredited laboratories, as well as using third-party laboratories with similar accreditation. These laboratories perform microbiological, physical, and chemical testing to ensure products are safe and not contaminated with pathogens, as well as to determine their composition of proteins, fats, and moisture. Products are traceable from ranch to customer, and are labeled with mandatory information about third-party components, contents and substances, shelf life and storage precautions, and absence of allergens.

**Labels on Estância 92 and Minerva Angus products feature QR Codes providing information about sustainable sourcing, animal welfare practices and quality, as well as the *Eu Reciclo* and *Energia Renovável* eco-efficiency labels.**

All sites follow Good Manufacturing Processes and use labeling that allows consumers to identify products in the event of a recall. The Company has procedures in place for



identifying, assessing and measuring impacts from non-compliant products.

In 2021 there were no product recalls or bans on exports due to issues involving food safety.

A customer service channel is available to answer questions and receive complaints, suggestions and compliments. The customer service channel has received an RA1000 mark from complaint aggregator *Reclame Aqui*, in recognition of high-quality after-sales service.

### CHEMICAL WASTE MANAGEMENT

All facilities approved for meat exports are subject to annual residue and contaminant audits by the appropriate authorities of each country. These audits are for the purpose of detecting any chemical residues that are potentially harmful to the health of consumers.

**All incoming livestock are accompanied by a Ranch Declaration and Letter of Guarantee certifying that no hormones or antibiotics have been used and providing a list of veterinary medicines administered to each animal.** And all livestock must be accompanied by documentation with information about the animals to be slaughtered, such as the administration of medications and non-application of certain antiparasitics. **Any use of antibiotics must be documented and reported to the Company**

**for evaluation, and is only permitted in response to a health problem. Prophylactic use of antibiotics is strictly forbidden.**



**In 2021 there were no recalls or export bans due to food safety issues**

# Animal welfare

## GRI FP12

Minerva Foods' concern for animal welfare is reflected in the sustainability practices that are encouraged and in the adoption of internationally recognized animal welfare protocols. The Company takes a zero-tolerance approach to animal abuse, negligence or cruelty, and observes the Five Freedoms recommended by the Farm Animal Welfare Committee (FAWC).

### Nutrition

freedom from hunger and thirst

### Environment

freedom from discomfort

### Health

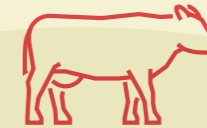
freedom from pain, injury or disease

### Behavior

freedom to express normal behavior

### Mental

freedom from fear and distress



**100%**  
of cattle slaughter operations at Minerva Foods are monitored against an animal welfare compliance matrix

Over the last few years, Minerva Foods has worked to perfect its processes and practices, and has expanded its animal welfare monitoring activities. An Animal Welfare Policy and Program, a compliance matrix comprising a set of 42 indicators spanning the different stages of the production process, a training program that has expanded each year, regular communication on animal welfare, and transparency around AW performance, are some of the practices in place at the Company.

Minerva Foods' increased maturity is reflected in animal welfare ratings and indices. The Company moved up to two tiers in the Business Benchmark on Farm Animal Welfare (BBFAW), the leading global measure of farm animal welfare management; Minerva Foods also improved from 20% to 68% compliance in the Animal Welfare section of the Collier FAIRR Protein Producer Index; and we maintained strong compliance rates in third-party audits against the North American Meat Institute (NAMI) Animal Handling Guidelines, an average of 99% in 2021.



The Company is currently developing its first five-year strategic plan for animal welfare, including a set of commitments centered around a continuous improvement. The new plan will be unveiled in 2022. In addition to maintaining current practices, Minerva Foods is now prioritizing progress on AW practices for poultry, hogs, sheep and fish. In line with the latest international trends, the Company will also work to perfect its supplier management practices in areas such as environmental enrichment in breeding, backgrounding and finishing operations, and animal nutrition.

In 2022, Minerva Foods dedicated animal welfare budget will amount to R\$ 4 million. Much of this budget will be invested in technology to expand monitoring, traceability and artificial intelligence systems for better-targeted management.

## KEY PRACTICES

Minerva adheres to high standards of animal welfare, conforming not only to the regulations of the countries where it operates, but also to internationally recognized codes and protocols.

The Company's Animal Welfare Policy and Program set out stringent requirements that apply to all operations and businesses, covering slaughtering, processing, distribution and sourcing of ingredients for processing. In 2021 AW was included in the criteria for onboarding new suppliers. Current supplier contracts require suppliers to sign

Declarations of Conformity to social, environmental, compliance and animal-welfare requirements. Compliance with these requirements is verified annually using questionnaires. Any nonconformities can result in termination of the contract.

An Animal Welfare Committee meets on a monthly basis, bringing together the heads of the sourcing, logistics, quality, animal welfare, communications and other departments to actively discuss and decide on actions, improvements and investments.

In 2021 the scope of Minerva Foods' animal welfare policy was updated to include all species that are handled in the Company's operations. The Company also continued to standardize its procedures, monitoring and internal documents for more effective management of operations routines, and created new informational materials.

Animal welfare indicators are tracked during weekly meetings, and some indicators, such as severity of bruising, are included in a set of corporate and industry targets which, if not met, result in loss of bonuses.

## HUMANE SLAUGHTER

Minerva Foods is committed to ensuring that 100% of animals are adequately stunned and humanely slaughtered, regardless of the species, with the exception of animals destined for markets subject to religious requirements. In 2021, kosher slaughter accounted for 2.0% of all slaughter in Brazil,

14.79% in Paraguay and 8.63% in Uruguay. Kosher slaughter is not practiced in Argentina and Colombia.

All feedstocks of animal origin purchased for processing and/or distribution (broilers, hogs and lamb) are guaranteed to be derived from animals prestunned before slaughter.

## INFRASTRUCTURE AND TECHNOLOGY

All eight sites in Brazil are equipped with video camera monitoring systems throughout the plant—from unloading through pre-slaughter to slaughter—ensuring that the infrastructure and handling are adequate throughout the process. Cameras have also been installed at all international sites: Argentina, Colombia, Paraguay and Uruguay.

Other investments in 2021 and into 2022 were in automation and implementing systems for continuous improvement in analytics and management processes. Engineering teams are instructed and trained to consider animal welfare in any decisions relating to construction or renovations. This includes considerations such as the type of flooring or the use of chemicals, for example.

## TRAINING

All sites provide training on animal welfare. In 2021, in addition to employees and drivers responsible for animal handling, the scope of training was extended to ranchers and

# A total of 292 individual training sessions were held

ranch hands involved in animal handling. **A total of 292 individual training sessions were held, attended by 486 employees and 1,419 third parties (drivers, farm employees and ranchers).**

Some training sessions were held online for COVID-19 safety reasons. As COVID-19 restrictions were eased, in-person training was gradually resumed. Each site has a six-monthly training program administered by an AW officer. Animal welfare is also addressed during induction training for new employees, and annual training programs are conducted at the Company's plants in collaboration with specialized consultants to instill good animal welfare practices in operational routines.

## Supplier programs




Animal welfare is addressed in all supplier-oriented communication programs, including *Laço de Confiança* ("Bonds of Confidence"), the Carcass Yields Program (PEC) and the exclusive app launched in 2020 by the Cattle Procurement department. In addition to including suppliers in training programs, an animal welfare guide has also been developed to inform them and provide technical guidance on AW practices.



Click [here](#) to view the Animal Welfare Guide.

# Our animals

## Stages in the animal protein value chain

SPECIES						
Slaughter	X				X	
Processing	X	X		X		
Ingredients	X		X			
Distribution	X	X		X	X	X
% of overall value chain	97.43	1.34	0.001	0.87	0.04	0.31
Countries						



Fazenda Colorado, Palmeiras de Goiás, Brazil

## CATTLE

### GRI FP11

Animals acquired, are raised with the ability to move freely and display gregarious behavior, which is maintained and respected throughout all stages of the process chain: backgrounding and fattening (carried out at Minerva Live Cattle Exports facilities) and pre-slaughter (carried out at industrial slaughter units). Minerva Foods does not operate in veal production.

**In 2021, 54.5% of sourced cattle were raised only on pasture, 11.3% in semi-confinement, 4.4% in pasture confinement and 29.8% in confinement operations** (see the percentages of housing types by country in the **Disclosures appendix**).

Within the holding pens, cattle have access to a sufficient amount of quality drinking water a sprinkler system to provide thermal comfort, and suitable stocking densities. Holding pens are equipped with non-slip flooring and sanitized after each lot.

Animal behavior in the holding pens is observed to identify any abnormal behavior, such as sodomy or fights. Offenders are separated from the group.

## POULTRY AND HOGS

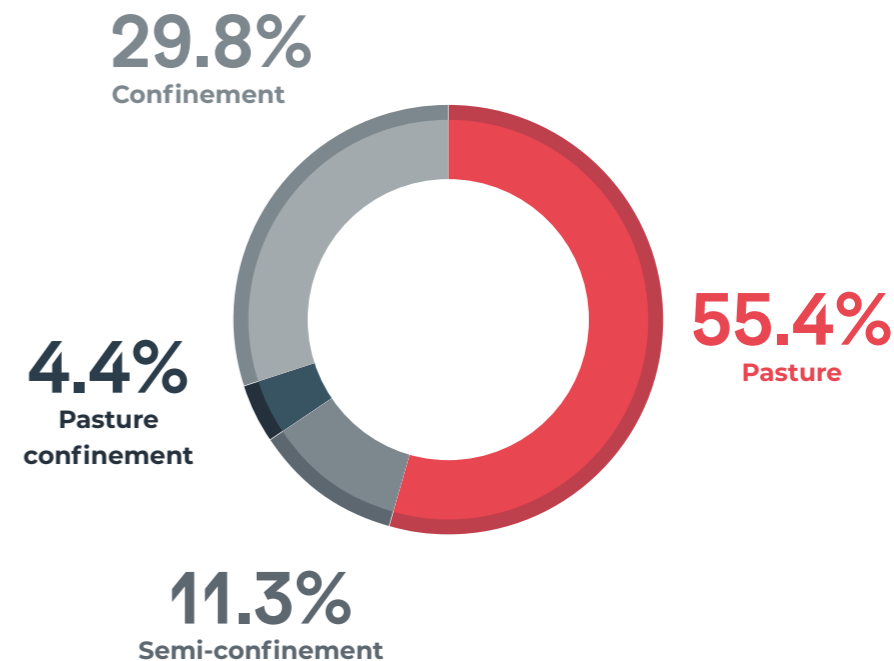
**All hog suppliers are required to transition from individual gestation crates to collective breeder gestation systems by 2026.** In addition, 100% of suppliers perform immunocastration in place of invasive surgical castration, and refrain from performing teeth or dent cutting procedures as a form of identification, instead employing tattooing as an alternative. They have also committed to reduce or abolish mutilation.

Poultry may not be sourced from suppliers that practice cage raising or perform trimming of the beak, crest or wings. The policy limits transportation to eight hours - for poultry destined for Minerva Fine Foods products. For 2021, the average duration of transportation was that of two hours..

All incoming animals are assessed within the Chemical Residue Control Program (CRQ) described on page 53.

Between 2020 and 2021, questionnaires were administered to inform an assessment of these supply chains and commitments to improvement.

## Animal raising



**Most of the cattle we source are raised only on pasture**

## Key animal welfare indicators

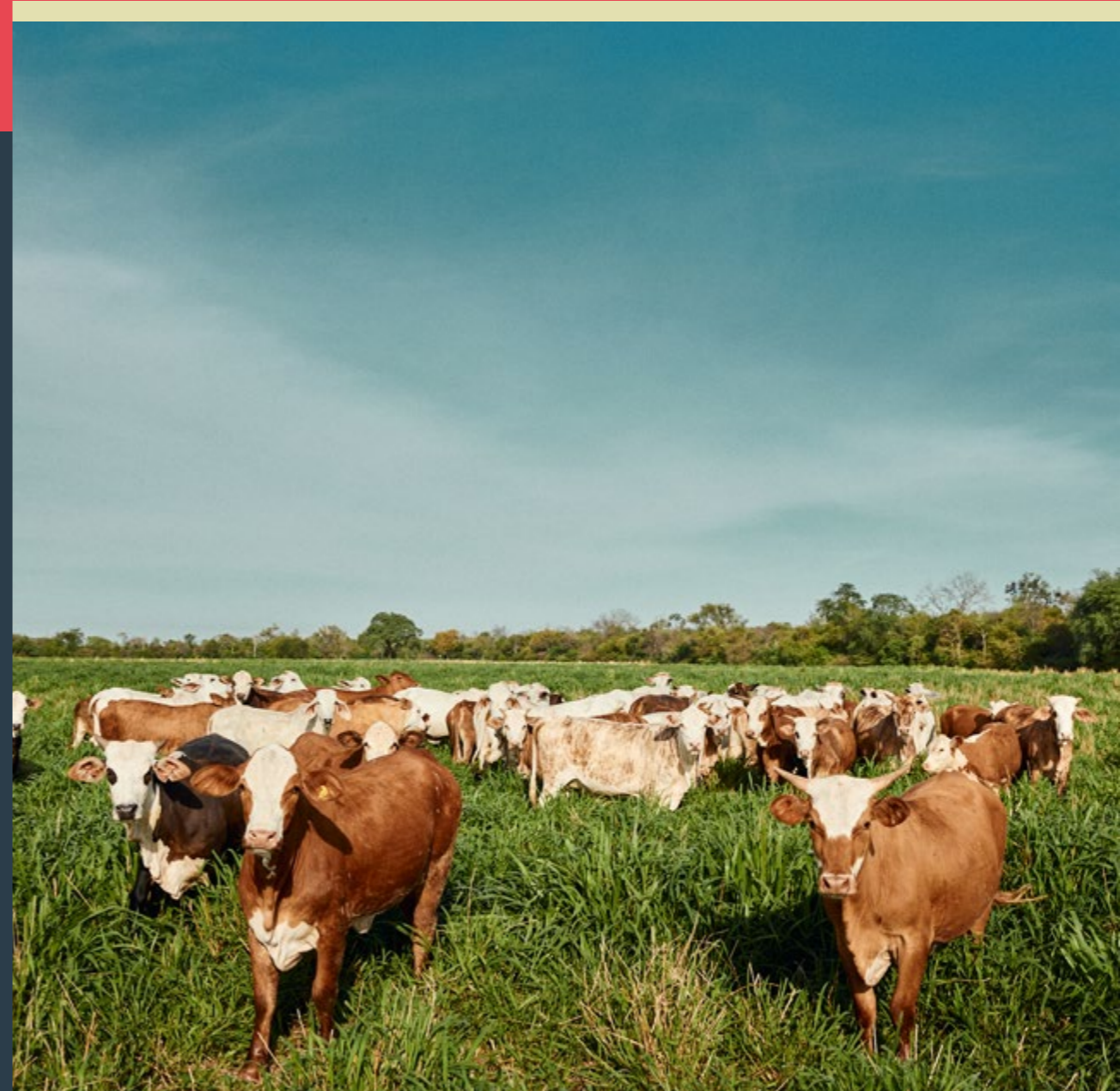
	Average by country									
	Brazil		Argentina		Colombia		Paraguay		Uruguay	
	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021
<b>Processing</b>										
<b>% of animals stunned</b> using penetrating or non-penetrating captive bolt guns to ensure proper stunning	-	99.67%	100.00%	100.00%	80.00%	70.00%	75.77%	80.60%	100%	100%
<b>Stunning efficacy at first attempt</b> Where the first attempt fails, the animal is immediately re-stunned in accordance with animal welfare requirements.	98.00%	98.56%	98.00%	98.80%	90.00%	98.00%	98.56%	99.25%	99.50%	99.50%
<b>Poorly stunned animals on the bleed rail</b> If animals regain consciousness before reaching the bleed rail, they are re-stunned using a portable captive bolt pistol. No operational failures occurred involving animals regaining consciousness on the bleed rail, i.e. effective stunning is ensured prior to hoisting the animal.	0.15%	0.18%	0.00%	0.00%	0.60%	0.00%	0.00%	0.00%	0.00%	0.00%
<b>Stunning to bleed interval</b> The time taken after the captive-bolt shot to cut the animal's large vessels.	52 seconds average	54 seconds average	60 seconds average	60 seconds average	50 seconds average	50 seconds average	60 seconds average	60 seconds average	43 seconds average	49 seconds average
<b>Slips during unloading and in crowd pens and chutes</b> An animal is deemed to have slipped if its hock joint touches the ground	2.19%	1.47%	1.40%	2.40%	5.00%	2.00%	1.52%	0.01%	1.50%	1.50%
<b>Falls during unloading and in crowd pens and chutes</b> An animal is deemed to have fallen if its body touches the ground	0.40%	0.25%	0.90%	0.57%	2.00%	1.00%	0.00%	0.02%	0.00%	0.16%
<b>Animal vocalization in the crowd pen, lead-up chute and stun box</b> Vocalization is when animals make moo sounds during active handling	1.45%	0.55%	1.38%	4.00%	0.00%	0.00%	1.24%	0.00%	2.00%	1.83%

	Average by country									
	Brazil		Argentina		Colombia		Paraguay		Uruguay	
	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021
<b>Processing</b>										
<b>Electric prod use during handling</b> Electric prods are used up to a maximum voltage of 50v and only in situations where the primary driving aid (flag) is ineffective. Electric prods are applied to the animal's rear for no longer than 1 second.	16.20%	15.50%	2.61%	0.80%	0.00%	1.00%	1.86%	0.045%	12.50%	13.30%
<b>Spray washing compliance</b> The following are evaluated: animal density, water chlorination, sprinkler operation, water pressure and spraying time	97.30%	91.96%	-	-	100%	100%	-	-	100%	100%
<b>Corral density</b> % occupancy in relation to total area	2.50 m <sup>2</sup> /animal	2.56 m <sup>2</sup> /animal	2.50 m <sup>2</sup> /animal	2.50 m <sup>2</sup> /animal	2.00 m <sup>2</sup> /animal	2.00 m <sup>2</sup> /animal	2.00 m <sup>2</sup> /animal	2.00 m <sup>2</sup> /animal	2.20 m <sup>2</sup> /animal	2.30 m <sup>2</sup> /animal
<b>% of animals identified as being in poor health</b> Animals with physical or mental problems such as a broken legs, difficulty breathing (panting), lameness, difficulty moving, bleeding or any other clinical sign of illness.	-	0.04%	-	-	-	0.04%	0.01%	0.01%	0.00%	0.00%
<b>Bruised carcasses</b> Bruises are lesions caused by direct trauma on an animal's body without abrading its hide. At Minerva Foods bruises are classified into 3 levels depending on how deep they reach into the muscle.	9.64%	11.28%	-	-	-	2.00%	0.70%	0.025%	3.50%	3.33%
<b>No. of employees trained on animal welfare</b>	250 trained	268	32 trained	29 trained	24 trained	38 trained	105 trained	82 trained	49 trained	69 trained
<b>No. of third-party workers trained on animal welfare</b>	812 trained	445	-	-	45 trained	158 trained	240 trained	262 trained	61 trained	554 trained
<b>No. of animal welfare training sessions</b> Both online and classroom-based training methods are used.	99 training sessions	211	03 training sessions	04 training sessions	4 training sessions	21 training sessions	345 training sessions	27 training sessions	15 training sessions	29 training sessions

	Average by country									
	Brazil		Argentina		Colombia		Paraguay		Uruguay	
	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021
<b>Processing</b>										
<b>% compliance in second-party animal welfare audits</b> Audits conducted by Minerva and Athena Foods employees.	96.00%	95.17%	99.00%	96.00%	-	99.00%	-	-	-	-
<b>% compliance in third-party animal welfare audits</b> Audits conducted by third-party firms (QIMA – WQS and SGS) and accredited PAACO auditors.	99.00%	98.23%	99.70%	99.00%	-	100.00%	99.00%	100%	100%	100%
<b>% mortality</b> Deaths in transit or at slaughter plants	-	0.01%	-	0.07%	0.0020%	0.0020%	-	0.01%	-	0.00%
<b>% emergency slaughters</b> Emergency slaughters to prevent animal suffering	-	0.02%	-	0.21%	0.02%	0.03%	0.01%	0.01%	-	100.00%
<b>Number of surveillance cameras</b>	-	126 cameras	-	7 cameras	2 cameras	2 cameras	-	40 cameras	-	13 cameras
<b>Number of animals slaughtered under kosher conditions</b>	2.00%	2.00%	0.00%	0.00%	0.00%	0.00%	-	14.79%	-	8.63%
<b>Total investment in animal welfare</b>	R\$ 1.15 million	R\$ 3.45 million	-	285,295 Argentine pesos	4,442 Colombian pesos	45,134 Colombian pesos	-	944,384,000 guarani	-	35,270 US dollars
<b>Transportation</b>										
<b>Average transportation time</b>	4.4 hours	3.99 hours	5 hours	5 hours	4 hours	6 hours	6.5 hours	8 hours	3.5 hours	3.7 hours
<b>Proportion of livestock transportation trips with a duration not longer than 8 hours</b>	91.00%	89.51%	80%	80%	80%	80%	100%	100%	86.00%	86.50%
<b>Average transportation distance</b>	226.2 km	239.64 km	300 km	300 km	150 km	300 km	360 km	361 km	236 km	240 km
<b>Farm</b>										
<b>% of animals confined</b> Confinement is a finishing method in which animals are confined at a stocking density of 16 to 20 m <sup>2</sup> /animal for 90 to 120 days, or only 8% to 10% of their lifetime, considering the average slaughter age of 30 months. Even in this method, the breeding and backgrounding stages are entirely pasture-based	59.36%	54.60%	43.14%	24.00%	0.00%	0.00%	24.34%	21.60%	5.72%	6.50%
<b>% of animals castrated</b>	1.7%	2.2%	-	-	27.00%	36.00%	-	17.86%	-	44.15%

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# Disclosures appendix



Supplier Farm, Centinela, Paraguay

# Sustainable Development Goals



1. No poverty



2. Zero hunger and sustainable agriculture



3. Good health & well-being



4. Quality education



5. Gender equality



6. Clean water and sanitation



7. Affordable and clean energy



8. Decent work and economic growth



9. Industry, innovation and infrastructure



10. Reduced inequalities



11. Sustainable cities and communities



12. Responsible consumption and production



13. Climate action



14. Life below water



15. Life on land



16. Peace, justice and strong institutions



17. Partnerships for the goals



TCFD Content Index

2020

**Recommended disclosures**

**Related GRI disclosures**

Governance a	102-18; 102-19; 102-20; 102-26; 102-27; 102-29; 102-31; 102-32
Governance b	102-29; 102-31; 102-32
Strategy a	102-15
Strategy b	201-2
Strategy c	-
Risk management a	201-2
Risk management b	-
Risk management c	-
Metrics and Targets a	102-30
Metrics and Targets b	102-29; 102-30; 201-2
Metrics and Targets c	-



Employees Adrielle Mathias Ferrinho and Matheus Diniz, Palmeiras de Goiás, Brazil

SASB to GRI Correlation

SASB disclosure code	Disclosure description	Related GRI disclosures
SASB FB-MP-000.A	Number of processing and manufacturing facilities	None
SASB FB-MP-000.B	Animal protein production, by category; percentage outsourced	None
FB-MP-110a.1	Gross global Scope 1 emissions	GRI 305-1
FB-MP-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	GRI 103,2 and 103,3   305
FB-MP-130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	GRI 302-1
FB-MP-140a.1	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	GRI 303-1
FB-MP-140a.2	Description of water management risks and discussion of strategies and practices to mitigate those risks	GRI 103,2 and 103,3   303
FB-MP-140a.3	Number of incidents of non-compliance with water quality permits, standards, and regulations	None
FB-MP-160a.1	Amount of animal litter and manure generated, percentage managed according to a nutrient management plan	None
FB-MP-250a.1	Global Food Safety Initiative (GFSI) audit (1) non-conformance rate and (2) associated corrective action rate for (a) major and (b) minor nonconformances	None
FB-MP-250a.2	Percentage of supplier facilities certified to a Global Food Safety Initiative (GFSI) food safety certification program	None
FB-MP-250a.3	(1) Number of recalls issued and (2) total weight of products recalled	None
FB-MP-250a.4	Discussion of markets that ban imports of the entity's products	None
FB-MP-160a.2	Percentage of pasture and grazing land managed to Natural Resources Conservation Service (NRCS) conservation plan criteria	None
FB-MP-160a.3	Animal protein production from concentrated animal feeding operations (CAFOs)	None
FB-MP-320a.1	(1) Total recordable incident rate (TRIR) and (2) fatality rate	GRI 403-8
FB-MP-320a.2	Description of efforts to assess, monitor, and mitigate acute and chronic respiratory health conditions	None
FB-MP-410a.1	Percentage of pork produced without the use of gestation crates	FP11
FB-MP-410a.2	Percentage of cage-free shell egg sales	None
FB-MP-410a.3	Percentage of production certified to a third-party animal welfare standard	GRI FP5
FB-MP-430a.1	Percentage of livestock from suppliers implementing the Natural Resources Conservation Service (NRCS) conservation plan criteria or the equivalent	N/A
FB-MP-430a.2	Percentage of supplier and contract production facilities verified to meet animal welfare standards	FP2
FB-MP-440a.1	Percentage of animal feed sourced from regions with High or Extremely High Baseline Water Stress	None
FB-MP-440a.2	Percentage of contracts with producers located in regions with High or Extremely High Baseline Water Stress	None
FB-MP-440a.3	Discussion of strategy to manage opportunities and risks to feed sourcing and livestock supply presented by climate change	GRI 201-2



A plant in Belén, Paraguay.

# Disclosures appendix

## Economic performance

Direct economic value generated and distributed (R\$ thousand)	GRI 201-1	2019	2020	2021
Net operating revenue		17,122,825.00	19,406,344.00	26,965,360.00
Gross income		3,292,561.00	3,834,923.00	4,645,024.00
Net income before finance revenue (expense)		1,462,082.00	1,793,773.00	2,035,418.00
Finance revenue (expense)		-1,594,692.00	-1,027,759.00	-1,449,811.00
Net income before taxes		-132,610.00	766,014.00	585,607.00
Net income before non-controlling interests		16,157.00	697,092.00	598,879.00
<b>Net income for the period</b>		<b>16,157.00</b>	<b>697,092.00</b>	<b>598,879.00</b>

## Human capital

### Workforce by employment contract and gender GRI 102-8

Employment type	2019			2020			2021		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<b>Brazil<sup>1</sup></b>									
Permanent	7,691	3,287	10,978	7,955	3,584	11,539	8,141	3,900	12,041
<b>LatAm Division<sup>2</sup></b>									
Permanent	6,368	1,123	7,491	7,164	1,247	8,411	7,170	1,400	8,570
Temporary	0	0	0	0	0	0	590	14	604

<sup>1</sup>All employees work full time.

<sup>1</sup>All contracts are for an indefinite term.

<sup>2</sup>Includes Argentina, Colombia, Paraguay and Uruguay.

Workforce by employee category and age group (%) GRI 102-8	2020				2021			
	Men	Women	Men	Women	Men	Women	Men	Women
	Brazil		LatAm Division		Brazil		LatAm Division	
Executive Board	94.87	5.13	100.00	0.00	95.00	5.00	84.62	15.38
Middle Management	78.90	21.10	84.29	15.71	78.79	21.21	90.63	9.38
Coordinators	71.78	28.72	75.81	24.19	66.37	33.63	82.41	17.59
Supervisors	78.30	21.70	78.69	21.31	80.64	19.36	79.28	20.72
Administrative	59.44	40.56	62.86	37.14	54.77	45.23	65.77	34.23
Operational	69.44	30.56	87.15	12.85	68.98	31.02	90.83	9.17
<b>Total</b>	<b>68.94</b>	<b>31.06</b>	<b>85.17</b>	<b>14.83</b>	<b>68.26</b>	<b>31.74</b>	<b>88.42</b>	<b>11.58</b>
Workforce by employee category and age group (%)	Men	Women	Men	Women	Men	Women	Men	Women
	Brazil		LatAm Division		Brazil		LatAm Division	
	Brazil		LatAm Division		Brazil		LatAm Division	
Apprentices*	51.43	48.57	70.00	30.00	37.50	62.25	98.51	1.49
Interns	0.00	0.00	0.00	0.00	68.09	31.91	0.00	0.00
Trainees	0.00	0.00	0.00	0.00	50.00	50.00	0.00	0.00
<b>Total</b>	<b>51.43</b>	<b>48.57</b>	<b>70.00</b>	<b>30.00</b>	<b>42.67</b>	<b>57.33</b>	<b>98.51</b>	<b>1.49</b>

1. In 2020 apprentices and interns will be computed together.

2. Data compiled since 2020.

Workforce by employment contract and country GRI 102-8

	2019			2020			2021		
	Temporary	Permanent	Total	Temporary	Permanent	Total	Temporary	Permanent	Total
Argentina	0	2,388	2,388	0	2,712	2,712	205	2,404	2,609
Chile	0	51	51	0	27	27	0	25	25
Colombia	0	700	700	0	2,568	2,568	399	1,091	1,490
Paraguay	0	2,557	2,557	0	1,878	1,878	0	2,912	2,912
Uruguay	0	1,795	1,795	0	1,226	1,226	0	2,138	2,138
<b>Total</b>	<b>0</b>	<b>7,491</b>	<b>7,491</b>	<b>0</b>	<b>8,411</b>	<b>8,411</b>	<b>604</b>	<b>8,570</b>	<b>9,174</b>

Workforce by region – Brazil GRI 102-8

	2019	2020	2021
North	2,105	2,315	2,429
Northeast	77	73	46
Midwest	3,785	3,887	3,969
Southeast	5,009	5,264	5,597
South	2	0	0
<b>Total</b>	<b>10,978</b>	<b>11,539</b>	<b>12,041</b>



Employees at the Barretos plant, Brazil.

Workforce by age group – Brazil<sup>1</sup> GRI 102-8

	2020	2021
Under 30	5,317	5,669
30 to 50	5,194	5,277
Over 50	1,028	1,095
<b>Total</b>	<b>11,539</b>	<b>12,041</b>

1. Data compiled since 2020.

Workforce by category, age group and country (%)

GRI 102-8

Brazil	2020			2021			Argentina	2020			2021			Paraguay	2020			2021		
	Under 30	30 - 50	Over 50	Under 30	30 - 50	Over 50		Under 30	30 - 50	Over 50	Under 30	30 - 50	Over 50		Under 30	30 - 50	Over 50	Under 30	30 - 50	Over 50
Executive Board	0	44	56	0	35	65	Executive Board	0	50	50	0	50	50	Executive Board	0	75	25	25	50	25
Middle Management	2	82	16	3	80	17	Middle Management	3	69	29	0	81	19	Middle Management	0	0	0	10	80	10
Coordinators	11	83	6	9	85	6	Coordinators	3	66	31	5	70	25	Coordinators	19	72	9	35	65	0
Supervisors	20	72	8	21	71	8	Supervisors	0	0	0	0	0	0	Supervisors	7	83	9	10	85	5
Administrative	42	54	4	50	46	4	Administrative	22	59	19	13	66	21	Administrative	58	40	2	60	38	2
Operational	46	45	9	48	42	10	Operational	42	45	13	39	48	13	Operational	42	53	5	48	48	4
<b>Total</b>	<b>43</b>	<b>48</b>	<b>9</b>	<b>46</b>	<b>45</b>	<b>9</b>	<b>Total</b>	<b>38</b>	<b>48</b>	<b>14</b>	<b>34</b>	<b>52</b>	<b>15</b>	<b>Total</b>	<b>42</b>	<b>53</b>	<b>5</b>	<b>47</b>	<b>49</b>	<b>4</b>

Uruguay	2020			2021			Colombia	2020			2021		
	Under 30	30 - 50	Over 50	Under 30	30 - 50	Over 50		Under 30	30 - 50	Over 50	Under 30	30 - 50	Over 50
Executive Board	0	50	50	0	50	50	Executive Board	0	100	0	0	100	0
Middle Management	50	40	10	13	50	38	Middle Management	0	100	0	0	100	0
Coordinators	38	63	0	6	76	18	Coordinators	18	82	0	7	89	4
Supervisors	24	71	5	8	59	32	Supervisors	18	73	9	24	75	100
Administrative	59	36	4	35	46	19	Administrative	41	56	3	55	39	5
Operational	50	48	2	23	57	19	Operational	29	65	6	43	53	4
<b>Total</b>	<b>49</b>	<b>48</b>	<b>2</b>	<b>23</b>	<b>57</b>	<b>20</b>	<b>Total</b>	<b>29</b>	<b>65</b>	<b>5</b>	<b>42</b>	<b>54</b>	<b>4</b>

## Workforce by employee category, age group and country (%)

GRI 102-8

	2020			2021				2020			2021				2020			2021		
	Under 30	30 - 50	Over 50	Under 30	30 - 50	Over 50		Under 30	30 - 50	Over 50	Under 30	30 - 50	Over 50		Under 30	30 - 50	Over 50	Under 30	30 - 50	Over 50
<b>Brazil<sup>1</sup></b>																				
Apprentices	100	0	0	100	0	0	Apprentices	59	41	0	100	0	0	Apprentices	0	0	0	100	0	0
Interns	0	0	0	100	0	0	Interns	0	0	0	0	0	0	Interns	0	0	0	0	0	0
Trainees	0	0	0	100	0	0	Trainees	0	0	0	0	0	0	Trainees	0	0	0	100	0	0
<b>Total</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>Total</b>	<b>59</b>	<b>41</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>0</b>
<b>Uruguay</b>																				
Apprentices	0	0	0	100	0	0	Apprentices	92	8	0	0	0	0	Apprentices	0	0	0	0	0	0
Interns	0	0	0	0	0	0	Interns	0	0	0	0	0	0	Interns	0	0	0	0	0	0
Trainees	0	0	0	0	0	0	Trainees	0	0	0	0	0	0	Trainees	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>Total</b>	<b>92</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Colombia</b>																				
Apprentices	0	0	0	100	0	0	Apprentices	92	8	0	0	0	0	Apprentices	0	0	0	0	0	0
Interns	0	0	0	0	0	0	Interns	0	0	0	0	0	0	Interns	0	0	0	0	0	0
Trainees	0	0	0	0	0	0	Trainees	0	0	0	0	0	0	Trainees	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>Total</b>	<b>92</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

1. In 2020, trainees and apprentices were computed together in Brazil.

### Employees from underrepresented groups, by employee category (%) – Brazil

#### GRI 405-1

	2021		
	Black and Brown	LGBT	PwDs
Executive Board	0	0	2.50
Middle Management	0	0	3.79
Coordinators	2.65	0	2.65
Supervisors	3.61	0	1.88
Administrative	2.38	0	2.77
Operational	7.9	0	1.80
<b>Total</b>	<b>6.87</b>	<b>0</b>	<b>1.94</b>

### Workers from underrepresented groups, by employee category (%)

Apprentices	9.27	0	0.4
Interns	2.13	0	0
Trainees	0	0	0
<b>Total</b>	<b>7.82</b>	<b>0</b>	<b>0.33</b>

1. Argentina, Colombia, Paraguay and Uruguay do not currently compile information on the number of workers from underrepresented groups.

2. Data for Brazil was first compiled in 2021.

### Individuals within the organization's governance bodies

#### GRI 405-1

By gender	Governance body members	
	Men	17
<b>2021</b>	Women	0
	<b>Total</b>	<b>17</b>

By age group (%)	Governance body members	
	Under 30	0
<b>2021</b>	30 to 50	11.76
	Over 50	88.24

1. Data compiled since 2021.





Employees at our meatpacking plant in Palmeiras de Goiás, Brazil

## New employee hires and employee turnover

### GRI 401-1

	Employee turnover		New employee hires	
<b>Brazil</b>				
<b>By gender</b>	<b>2020</b>	<b>2021</b>	<b>2020</b>	<b>2021</b>
Women	858	1,040	1,129	1,306
Men	2,341	2,796	2,530	2,908
Women (%)	0.75	0.27	30.76	0.33
Men (%)	2.05	0.34	31.02	0.36
<b>By age group</b>				
Under 30	1,678	2,274	2,315	2,982
30 to 50	1,403	1,430	47	1,165
Over 50	118	132	1,297	67
<b>Under 30 (%)</b>	<b>3.31</b>	<b>0.40</b>	<b>46</b>	<b>0.53</b>
30 to 50 (%)	2.45	0.27	0.01	0.22
Over 50 (%)	1.13	0.12	1.25	0.06
<b>By region</b>				
North	698	924	879	1,023
Northeast	23	36	19	11
Midwest	1,208	1,521	1,351	1,549
Southeast	1,268	1,355	1,410	1,631
South	2	0	0	0
North (%)	0.61	0.38	37.08	0.42
Northeast (%)	0.02	0.78	25.67	0.24
Midwest (%)	1.06	0.38	33.44	0.39
Southeast (%)	1.11	0.24	26.38	0.29
South (%)	0.01	0.00	0.00	0.00

New employee hires and employee turnover

GRI 401-1

	Employee turnover		New employee hires	
<b>Argentina</b>				
<b>By gender</b>	<b>2020</b>	<b>2021</b>	<b>2020</b>	<b>2021</b>
Women	14	60	50	41
Men	209	471	412	420
Women (%)	5.65	0.11	20.16	0.09
Men (%)	8.48	0.89	16.72	0.91
<b>By age group</b>				
Under 30	120	300	265	328
30 to 50	88	185	171	126
Over 50	15	46	26	7
Under 30 (%)	11.64	0.56	25.7	0.71
30 to 50 (%)	6.79	0.35	13.19	0.27
Over 50 (%)	3.90	0.87	0.75	0.02

	Employee turnover		New employee hires	
<b>Paraguay</b>				
<b>By gender</b>	<b>2020</b>	<b>2021</b>	<b>2020</b>	<b>2021</b>
Women	238	216	198	838
Men	779	840	600	2,290
Women (%)	42.35	0.20	35.23	0.22
Men (%)	38.70	0.80	29.88	0.78
<b>By age group</b>				
Under 30	368	562	447	1,385
30 to 50	562	466	333	1,433
Over 50	37	28	18	110
Under 30 (%)	34.33	0.53	41.7	0.47
30 to 50 (%)	41.11	0.44	24.36	0.49
Over 50 (%)	28.24	0.03	13.74	0.04

	Employee turnover		New employee hires	
<b>Uruguay</b>				
<b>By gender</b>	<b>2020</b>	<b>2021</b>	<b>2020</b>	<b>2021</b>
Women	19	29	19	58
Men	74	109	74	330
Women (%)	6.40	0.21	6.40	0.15
Men (%)	4.64	0.79	4.64	0.85
<b>By age group</b>				
Under 30	30	49	30	291
30 to 50	24	44	24	89
Over 50	39	45	39	8
Under 30 (%)	9.62	0.36	9.62	0.75
30 to 50 (%)	2.01	0.32	2.01	0.23
Over 50 (%)	10.1	0.33	10.1	0.02

	Employee turnover		New employee hires	
<b>Colombia</b>				
<b>By gender</b>	<b>2020</b>	<b>2021</b>	<b>2020</b>	<b>2021</b>
Women	60	12	0	187
Men	368	215	0	1,239
Women (%)	45.80	0.05	0.00	0.13
Men (%)	33.61	0.95	0.00	0.87
<b>By age group</b>				
Under 30	247	99	525	600
30 to 50	170	128	402	767
Over 50	11	0	27	59
Under 30 (%)	52.44	43.61	111.46	42.08
30 to 50 (%)	24.05	56.39	56.85	53.79
Over 50 (%)	22.92	0.00	56.25	4.14

Turnover by employee category and business division

GRI 405-1

	Classification	Average headcount	Average terminations	Turnover rate
Brazil	Executive Board	23	0	-
	Middle Management	125	1	0.80
	Coordinators	107	2	1.87
	Supervisors	342	7	2.05
	Administrative	1,634	36	2.20
	Operational	9,808	275	2.80
<b>Total Brazil</b>		<b>12,040</b>	<b>321</b>	<b>2.67</b>
LatAm Division <sup>1</sup>	Executive Board	10	0	-
	Middle Management	69	1	1.45
	Coordinators	81	2	2.46
	Supervisors	291	5	1.72
	Administrative	5.99	15	2.50
	Operational	8,138	224	2.75
<b>Total LatAm Division</b>		<b>9,188</b>	<b>247</b>	<b>2.69</b>

1. Data compiled since 2021.

2. includes Argentina, Colombia, Paraguay and Uruguay.

## Ratio of standard entry-level wage compared to local minimum wage (local currency)

### GRI 202-1

	2020		2021	
	Men	Women	Men	Women
<b>Brazil</b>				
Percent ratio	101.58	101.58	101.22	101.22
<b>Argentina</b>				
Percent ratio	210.67	210.67	193.85	193.85
<b>Colombia</b>				
Percent ratio	100.00	100.00	100.00	100.00
<b>Paraguay</b>				
Percent ratio	100.00	100.00	100.00	100.00
<b>Uruguay</b>				
Percent ratio	196.65	196.65	143.56	143.56

1. Figures in local currency. The percent ratio, the minimum wage and the wage required by law or the relevant union are the same for women and men.

2. Data compiled since 2020.

## Average hours of training per employee by gender

### GRI 404-1

	2020			2021		
	Men	Women	Total	Men	Women	Total
Brazil	5.07	3.22	4.33	6.81	5.34	6.30
Argentina	9.71	5.51	9.33	6.12	4.62	5.37
Paraguay	10.06	8.42	9.70	9.13	7.92	8.87
Uruguay <sup>1</sup>	-	-	2.66	18.83	18.48	18.77
Colombia	0.04	0.40	0.07	0.17	0.03	0.04

1. In 2020, training data for Uruguay were not segmented by gender.

## Average hours of training per employee by employee category

### GRI 404-1

	2021	
	Brazil	LatAm Division
Executive Board	7.73	1.92
Middle Management	19.56	10.98
Coordinators	24.24	5.60
Supervisors	25.14	4.65
Administrative	6.41	1.36
Operational	6.09	86.33

1. Data by employee category is not available for Colombia and Uruguay.

2. Apprentices in the LatAm Division attended an average of 8.36 hours of training in 2021.

3. Apprentices and interns attended an average of 0.65 hours of training in 2021.

## Employees receiving regular performance and career development reviews, by employee category (%)<sup>1,2</sup> – Brazil GRI 404-3

	2020			2021		
	Men	Women	Total	Men	Women	Total
Executive Board	30.00	22.20	28.81	50.00	100.00	52.25
Middle Management	100.00	100.00	100.00	97.14	100.00	97.74
Coordinators	89.71	78.57	86.46	97.33	94.74	96.46
Supervisors	100.00	100.00	100.00	87.89	89.78	88.26
Administrative	33.65	26.22	30.32	88.65	86.77	87.80
Operational	1.85	0.49	1.45	3.67	3.90	3.74
<b>Total</b>	<b>10.40</b>	<b>8.3</b>	<b>9.75</b>	<b>19.36</b>	<b>21.68</b>	<b>20.10</b>

1. Argentina, Colombia, Paraguay and Uruguay are currently implementing performance review systems.

2. 100% of interns and trainees receive performance reviews.



An employee at the Barretos plant, Brazil.

## Compliance

### Employees trained on anti-corruption – Brazil<sup>1</sup>

#### GRI 205-2

Regions	Total eligible <sup>2</sup>	Total trained	%
Midwest	574	553	96
Northeast	44	40	91
North	324	297	92
Southeast	1,912	1,797	94
<b>Total</b>	<b>2,854</b>	<b>2,687</b>	<b>94</b>

1. Employees hired up to November 2021.

2. \* Employees in leadership and administrative positions were considered eligible to complete online training.

### Employees trained on anti-corruption – LatAm Division<sup>1</sup>

#### GRI 205-2

Country	Total eligible <sup>2</sup>	Total trained	%
Argentina	457	414	91
Chile	17	17	100
Colombia	185	164	89
Paraguay	316	316	100
Uruguay	190	183	96
<b>Total</b>	<b>1,165</b>	<b>1,094</b>	<b>94</b>

1. Employees hired up to August 2021.

2. \* Employees in leadership and administrative positions were considered eligible to complete online training.

## Employees who have received communications and training on anti-corruption, broken down by employee category

### GRI 205-2

Employee category	Total eligible	Total trained	%
<b>Brazil</b>			
Executive Board	23	15	65%
Middle Management	132	132	100%
Coordinators/Supervisors/Leads	633	584	92%
Administrative	1,266	1,227	97%
Operational	718	648	90%
Trainees/Interns/Apprentices	82	81	99%
<b>Total Brazil</b>	<b>2,854</b>	<b>2,687</b>	<b>94%</b>
<b>Argentina</b>			
Executive Board	4	4	100%
Middle Management	32	32	100%
Coordinators/Supervisors	115	103	90%
Administrative	253	236	93%
Operational	53	39	74%
<b>Total Argentina</b>	<b>457</b>	<b>414</b>	<b>91%</b>
<b>Colombia</b>			
Executive Board	2	2	100%
Middle Management	12	12	100%
Coordinators/Supervisors	43	39	91%
Administrative	107	94	88%
Operational	21	17	81%
<b>Total Colombia</b>	<b>185</b>	<b>164</b>	<b>89%</b>

Employee category	Total eligible	Total trained	%
<b>Paraguay</b>			
Executive Board	2	2	100%
Middle Management	14	14	100%
Coordinators/Supervisors	102	102	100%
Administrative	130	130	100%
Operational	68	68	100%
<b>Total Paraguay</b>	<b>316</b>	<b>316</b>	<b>100%</b>
<b>Uruguay</b>			
Executive Board	2	2	100%
Middle Management	9	9	100%
Coordinators/Supervisors	67	63	94%
Administrative	61	59	97%
Operational	51	50	98%
<b>Total Uruguay</b>	<b>190</b>	<b>183</b>	<b>96%</b>
<b>Chile</b>			
Middle Management	4	4	100%
Coordinators/Supervisors	4	4	100%
Administrative	9	9	100%
<b>Total Chile</b>	<b>17</b>	<b>17</b>	<b>100%</b>
<b>Grand Total</b>			
	<b>4,019</b>	<b>3,781</b>	<b>94%</b>

1. Employees in leadership and administrative positions were considered eligible to complete online training. Data for Brazil include employees hired up to November 2021, and data for the LatAm Division include employees hired up to August 2021.

# Environment

## Water withdrawal GRI 303-3

Water Withdrawal (m <sup>3</sup> )	2019				2020				2021					
	Operation	Surface Water	Groundwater	Utility	Total – all areas	Surface Water	Groundwater	Utility	Total – all areas	Surface Water	Groundwater	Utility	Total – areas with water stress	Total – all areas
<b>Brazil</b>														
Araguaína	369,452.25	123,150.75	0.00	492,603.00	300,106.08	100,035.60	0.00	400,141.68	390,512.98	160,397.00	0.00	–	550,909.98	
Barretos	576,785.72	50,155.28	0.00	626,941.00	513,819.08	44,679.92	0.00	558,499.00	0.00	536,043.00	0.00	–	536,043.00	
Janaúba	140,067.57	238,493.43	0.00	378,561.00	221,827.49	130,285.51	0.00	352,113.00	211,628.56	191,042.00	0.00	–	402,670.56	
José Bonifácio	0.00	600,758.45	0.00	600,758.45	0.00	512,776.51	0.00	512,776.51	0.00	384,188.06	0.00	–	384,188.06	
Mirassol d'Oeste	556,543.00	0.00	0.00	556,543.00	424,464.00	0.00	0.00	424,464.00	208,156.00	0.00	0.00	208,000.16	155.84	
Palmeiras de Goiás	1,278,008.61	0.00	0.00	1,278,008.61	1,141,457.60	0.00	0.00	1,141,457.60	1,035,960.14	0.00	0.00	–	1,035,960.14	
Paranatinga	547,349.43	0.00	0.00	547,349.43	435,205.80	0.00	0.00	435,205.80	360,330.68	0.00	0.00	–	360,330.68	
Rolim de Moura	631,699.80	0.00	0.00	631,699.80	668,711.00	0.00	0.00	668,711.00	681,531.00	0.00	0.00	–	681,531.00	
<b>Total Brazil</b>	<b>4,099,906.38</b>	<b>1,012,557.91</b>	<b>0.00</b>	<b>5,112,464.29</b>	<b>3,705,591.05</b>	<b>787,777.54</b>	<b>0.00</b>	<b>4,493,368.59</b>	<b>2,888,119.36</b>	<b>1,271,670.06</b>	<b>0.00</b>	<b>208,000.16</b>	<b>4,159,789.42</b>	
<b>Argentina</b>														
Rosario	4,383,817.00	0.00	0.00	4,383,817.00	3,608,710.00	79,200.00	0.00	3,687,910.00	4,111,630.00	622,325.00	0.00	–	4,733,955	
Pontevedra	0.00	120,000.00	0.00	120,000.00	0.00	138,450.00	0.00	138,450.00	0.00	143,400.00	0.00	–	143,400.00	
Venado Tuerto	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00	66,860.00	0.00	–	66,860.00	
Pillar	0.00	22,992.00	0.00	22,992.00	0.00	34,336.00	0.00	34,336.00	0.00	54,150.00	0.00	–	54,150.00	
<b>Total Argentina</b>	<b>4,383,817.00</b>	<b>142,992.00</b>	<b>0.00</b>	<b>4,526,809.00</b>	<b>3,608,710.00</b>	<b>251,986.00</b>	<b>0.00</b>	<b>3,860,696.00</b>	<b>4,111,630.00</b>	<b>886,735.00</b>	<b>0.00</b>	<b>–</b>	<b>4,998,365.00</b>	
<b>Paraguay</b>														
Frigomerc – P2	0.00	323,672.00	32,630.00	356,302.00	0.00	276,011.00	18,814.00	294,825.00	0.00	323,638.00	24,506.00	–	348,144.00	
Mussa – P8	0.00	328,696.00	97,383.00	426,079.00	0.00	235,166.00	22,816.00	257,982.00	0.00	260,094.00	70,324.00	–	330,418.00	
San Antonio – P3	0.00	424,723.00	0.00	424,723.00	0.00	424,723.00	0.00	424,723.00	0.00	393,300.00	0.00	–	393,300.00	
Belém – P23	379,652.00	0.00	0.00	379,652.00	440,440.00	0.00	0.00	440,440.00	655,381.00	0.00	0.00	–	655,381.00	
<b>Total Paraguay</b>	<b>379,652.00</b>	<b>1,077,091.00</b>	<b>130,013.00</b>	<b>1,586,756.00</b>	<b>440,440.00</b>	<b>935,900.00</b>	<b>41,630.00</b>	<b>1,417,970.00</b>	<b>655,381.00</b>	<b>977,032.00</b>	<b>94,830.00</b>	<b>–</b>	<b>1,727,243.00</b>	



## Water Withdrawal GRI 303-3

Water Withdrawal (m <sup>3</sup> )	2019				2020				2021				Total – areas with water stress
	Operation	Surface Water	Groundwater	Utility	Total – all areas	Surface Water	Groundwater	Utility	Total – all areas	Surface Water	Groundwater	Utility	
<b>Uruguay</b>													
Melo	539,860.00	0.00	0.00	539,860.00	674,362.00	0.00	0.00	674,362.00	799,057.00	0.00	0.00	799,057.00	-
Carrasco	525,433.00	0.00	304.00	525,737.00	612,259.00	0.00	286.00	612,545.00	656,567.00	0.00	0.00	656,567.00	-
Canelones	366,564.00	0.00	0.00	366,564.00	0.00	0.00	0.00	0.00	614,329.00	0.00	0.00	614,329.00	-
<b>Total Uruguay</b>	<b>1,431,857.00</b>	<b>0.00</b>	<b>304.00</b>	<b>1,432,161.00</b>	<b>1,286,621.00</b>	<b>0.00</b>	<b>286.00</b>	<b>1,286,907.00</b>	<b>2,069,953.00</b>	<b>0.00</b>	<b>0.00</b>	<b>2,069,953.00</b>	
<b>Colombia</b>													
Red Cárnica	0.00	4,148.00	273,996.00	278,144.00	0.00	0.00	275,110.00	275,110.00	0.00	0.00	329,607.00	329,607.00	-
Bucaramanga <sup>1</sup>	0.00	0.00	0.00	0.00	74,147.00	0.00	0.00	74,147.00	276,594.00	0.00	0.00	276,594.00	-
<b>Total Colombia</b>	<b>0.00</b>	<b>4,148.00</b>	<b>273,996.00</b>	<b>278,144.00</b>	<b>74,147.00</b>	<b>0.00</b>	<b>275,110.00</b>	<b>394,257.00</b>	<b>276,594.00</b>	<b>0.00</b>	<b>329,607.00</b>	<b>606,201.00</b>	-
<b>Total LatAm Division</b>	<b>6,195,326.00</b>	<b>1,224,231.00</b>	<b>404,313.00</b>	<b>7,823,870.00</b>	<b>5,409,918.00</b>	<b>1,187,886.00</b>	<b>317,026.00</b>	<b>6,914,830.00</b>	<b>7,113,558.00</b>	<b>1,863,767.00</b>	<b>424,437.00</b>	<b>9,401,762.00</b>	<b>0.00</b>
<b>Total Brazil + LatAm Division</b>	<b>10,295,232.38</b>	<b>2,236,788.91</b>	<b>404,313.00</b>	<b>12,936,334.31</b>	<b>9,115,509.05</b>	<b>1,975,663.54</b>	<b>317,026.00</b>	<b>11,408,198.59</b>	<b>10,001,677.36</b>	<b>3,135,437.06</b>	<b>424,437.00</b>	<b>13,561,551.42</b>	<b>208,000.16</b>

## Water Withdrawal – Brazil – GRI 303-4

Operation	2020			2021		
	Surface water	Groundwater	Total	Surface water	Groundwater	Total
Araguaína	0.00	100,035.60	100,035.60	0.00	552,624.52	552,624.52
Barretos	0.00	44,679.92	44,479.92	1,031,498.50	0.00	1,031,498.50
Janaúba	0.00	130,285.51	130,285.51	402,479.00	0.00	402,479.00
José Bonifácio	414,567.00	512,776.51	927,343.51	464,698.18	0.00	464,698.18
Mirassol D'Oeste	0	0	0	176,884.70	0.00	176,884.70
Palmeiras de Goiás	913,350.00	0	0	0.00	957,080.43	957,080.43
Paranatinga	383,860.00	0	0	0.00	327,909.43	327,909.43
Rolim de Moura	550,550.00	0	550,550.00	568,473.00	0.00	568,473.00
Beef Brasil	N/A	N/A	N/A			
<b>Total</b>	<b>2,262,327.00</b>	<b>787,777.54</b>	<b>3,788,640.00</b>	<b>2,644,033.38</b>	<b>1,837,614.38</b>	<b>4,481,647.76</b>

<sup>1</sup> 2019 data is unavailable for the Bucaramanga operation as it was acquired in September 2020.

### Water Withdrawal – LatAm Division<sup>1</sup> – GRI 303-4

	2020			2021		
	Surface water	Third party	Total	Surface water	Third party	Total
Argentina <sup>2</sup>	3,088,557.00	0.00	3,088,557.00	4,248,610.00	0.00	4,248,610.25
Paraguay	1,093,628.00	0.00	1,093,628.00	1,201,378.00	558,082	1,468,156.80
Uruguay	1,134,376.00	0.00	1,134,376.00	891,379.00	576,778.00	1,237,280.40
Colombia	279,405.00	0.00	279,405.00	515,271.00	0.00	515,270.85
<b>Total</b>	<b>5,595,966.00</b>	<b>0.00</b>	<b>5,595,966.00</b>	<b>6,856,638.00</b>	<b>1,134,860.00</b>	<b>7,469,318.30</b>

1. No regions are considered to be areas with water stress.

2. Wastewater produced by the Venado Tuerto operation is treated on site.

### Waste – Brazil – GRI 306-1, 306-2

Waste directed to disposal, by disposal operation (t) Brazil –	Type	2019	2020	2021
<b>Nonhazardous waste</b>				
Recovery, including energy recovery	Tallow acid	477.00	0	0
Landfilling	General waste	2,139.15	1,773.29	1,909.00
Recycling	Paper and cardboard, clear plastic, mixed plastics, containers and drums, gunny sacks, ferrous metals, non-ferrous metals, pallets and grease waste	2,984.00	2,584.35	3,019.87
Composting	Rumen content and organic waste from cafeterias.	43,023.00	37,289.30	14,468.99
Incineration (mass burn)	Waste from health services, used personal protective equipment, cloth and objects saturated with chemicals or oils and grease	-	-	0
<b>Total</b>		<b>48,623.15</b>	<b>41,646.94</b>	<b>19,397.86</b>
<b>Hazardous Waste</b>				
Recovery, including energy recovery	Tallow acid, batteries	0.026	23.00	1.39
Landfilling	Toxic chemical containers	0.04	7.81	11.60
Recycling	Paper and cardboard, clear plastic, mixed plastics, containers and drums, gunny sacks, ferrous metals, non-ferrous metals, pallets and grease waste	-	-	0
Composting	Rumen content and organic waste from cafeterias.	-	-	0
Incineration (mass burn)	Waste from health services, used personal protective equipment, cloth and objects saturated with chemicals or oils and grease	0.98	56.73	0
<b>Total</b>		<b>1.05</b>	<b>87.54</b>	<b>12.99</b>
<b>Total waste directed to disposal</b>		<b>48,624.19</b>	<b>41,734.48</b>	<b>19,410.85</b>

1. Data compiled since 2021.

**Waste – LatAm Division – GRI 306-1, 306-2**

Waste directed to disposal, by disposal operation (t) LatAm Division –	Type	2019	2020	2021
<b>Nonhazardous waste</b>				
Recovery, including energy recovery	Tallow acid	0	0	0
Landfilling	General waste	2,587.06	4,270.00	34,084.21
Recycling	Paper and cardboard, clear plastic, mixed plastics, containers and drums, gunny sacks, ferrous metals, non-ferrous metals, pallets and grease waste	2,127.36	1,652.00	3,040.41
Composting	Rumen content and organic waste from cafeterias.	813.00	10,077.00	46,490.54
Incineration (mass burn)	Waste from health services, used personal protective equipment, cloth and objects saturated with chemicals or oils and grease	-	-	19.97
<b>Total</b>		<b>5,527.42</b>	<b>15,999.00</b>	<b>83,615.16</b>
<b>Hazardous Waste</b>				
Recovery, including energy recovery	Tallow acid, batteries	0.00	0.00	0
Landfilling	Toxic chemical containers	16,578.95	28,813.87	0
Recycling	Paper and cardboard, clear plastic, mixed plastics, containers and drums, gunny sacks, ferrous metals, non-ferrous metals, pallets and grease waste	-	8.00	0
Composting	Rumen content and organic waste from cafeterias.	1,428.62	-	0
Incineration (mass burn)	Waste from health services, used personal protective equipment, cloth and objects saturated with chemicals or oils and grease	0.75	979.00	18.77
<b>Total</b>		<b>18,008.32</b>	<b>29,800.87</b>	<b>18.77</b>
<b>Total waste directed to disposal</b>		<b>23,535.74</b>	<b>45,799.87</b>	<b>83,633.93</b>

1. Data compiled since 2021.

# GHG Emissions

## GRI 305-1, 305-2, 305-3, 305-4, 305-5

### Greenhouse Gas Emissions (tCO<sub>2</sub>e) - Total for Company

Gas	Scope 1			Scope 2			Scope 3 <sup>1</sup>	
	2019	2020	2021	2019	2020	2021	2020	2021
CH <sub>4</sub>	133,738.50	176,758.92	222,738.44	-	-	0	57.34	15,242,996.00
CO <sub>2</sub>	52,793.09	50,383.62	51,871.06	17,292.05	14,590.81	53,093.41	33,946.15	226,489.31
HFC-32	152.35	30.02	87.28	-	-	0	-	0
HFC-125	789.98	155.64	408.70	-	-	0	-	0
HFC-134	-	0.66	0.00	-	-	0	-	0
HFC-134a	22.82	0.29	77.48	-	-	0	-	0
N <sub>2</sub> O	5,400.36	5,945.52	7,961.90	-	-	0	537.78	1,292,533.13
<b>Total</b>	<b>192,897.10</b>	<b>233,274.66</b>	<b>283,144.86</b>	<b>17,292.05</b>	<b>14,590.81</b>	<b>53,093.41</b>	<b>34,541.27</b>	<b>16,762,018.44</b>

<sup>1</sup> Monitoring of scope 3 emissions began in 2020 for operations in Brazil. In 2021 the scope was expanded to include new emission sources and all countries.

### Greenhouse Gas Emissions (tCO<sub>2</sub>e), by country

Country	Scope 1			Scope 2			Scope 3*	
	2019	2020	2021	2019	2020	2021	2020	2021
Brazil	102,024.52	87,874.82	93,540.31	13,864.85	11,262.66	21,477.07	34,541.27	6,186,297.77
Argentina	45,595.24	80,443.04	65,016.49	1,937.93	1,956.03	24,615.77	-	1,987,866.40
Colombia	8,312.61	9,087.27	44,282.49	582.50	631.42	4,968.19	-	1,586,733.64
Chile**	-	-	-	-	-	-	-	22.58
Paraguay	14,824.98	23,390.88	27,736.62	-	-	0.00	-	3,757,821.34
Uruguay	22,457.02	32,478.65	44,393.90	906.77	740.70	2,032.42	-	3,243,277.70
<b>Total</b>	<b>192,897.10</b>	<b>233,274.66</b>	<b>262,580.35</b>	<b>17,292.05</b>	<b>14,590.81</b>	<b>53,093.42</b>	<b>34,541.27</b>	<b>16,762,018.43</b>

\*Monitoring of scope 3 emissions began in 2020 for operations in Brazil.

\*\*Data on emissions produced by the country's distribution center was first compiled in 2021.

### Greenhouse Gas Emissions (tCO<sub>2</sub>e)

Country	Scope 1			Scope 2			Scope 3	
	2019	2020	2021	2019	2020	2021	2020	2021
Renewable CO <sub>2</sub>	204,800.86	157,200.68	278,213.01	-	-	0	3,907.52	7,023.51

### Greenhouse Gas Emissions (tCO<sub>2</sub>e) - Scope 3

Category	2020 <sup>2</sup>		2021	
Employee commuting	1,720.41		3,178.80	
Transportation and distribution (upstream)	32,212.87		225,845.01	
Business travel	607.99		831.62	
Waste generated in operations <sup>1</sup>	-		30,686.65	
Employee commuting using taxis and ride hailing services <sup>1</sup>	-		0.71	
Purchased goods and services - Cattle farming <sup>1</sup>	-		16,501,475.65	
<b>Total</b>	<b>34,541.27</b>		<b>16,762,018.44</b>	

1. The Purchased goods and services category includes emissions from enteric fermentation and manure.

2. In 2020, scope 3 emissions were monitored only in the Company's Brazil operations.

### GHG Emissions per Metric Ton of Finished Product (TPA) - Scope 1 and 2

Net emissions*	2019 <sup>1</sup>		2020		2021	
	-		0.16		0.17	

### CO<sub>2</sub> removals from the atmosphere (tCO<sub>2</sub>)

Total	2019 <sup>1</sup>		2020		2021	
	-		-38,597.52		-8,458.43	

1. This category was not monitored in 2019. The data include scope 1 and 2 emissions from the production of fresh meat, processed products, slaughter co-products, biodiesel and hides.

\* The data include scope 1 and 2 emissions, with 100% of scope 2 emissions neutralized with purchased International Renewable Energy Certificates (I-RECs).

### Electricity consumption - Brazil (GJ)<sup>1</sup> – GRI 302-1

Operation	2019	2020	2021
Araguaína	62,833.24	52,931.32	57,633.29
Barretos	83,180.31	85,442.54	87,337.37
Janaúba	38,108.37	37,402.03	47,755.74
José Bonifácio	70,175.90	61,746.56	53,034.41
Mirassol D'Oeste	62,225.43	58,768.54	27,847.71
Palmeiras de Goiás	129,449.52	127,795.79	137,491.09
Paranatinga	54,212.27	55,514.35	48,277.03
Rolim de Moura	68,566.40	82,322.00	76,971.49
<b>Total</b>	<b>568,751.44</b>	<b>561,923.13</b>	<b>536,348.13</b>

1. Electricity consumption figures for 2019 and 2020 have been restated.

### Electricity Consumption – LatAm Division(GJ) – GRI 302-1

COUNTRY	OPERATION	Electricity consumption	Electricity generation
ARGENTINA	Rosario	153,180.22	0.00
	Pontevedra	23,779.51	0.00
	Venado Tuerto	18,338.34	0.00
	Pillar	29,256.52	0.00
PARAGUAY	Frigomerc	49,434.94	0.00
	Mussa	42,074.58	0.00
	San Antonio	43,367.04	0.00
	Belén	93,154.79	0.00
URUGUAY	Melo	62,951.97	0.00
	Carrasco	51,661.93	0.00
	Canelones	53,131.40	0.00
COLOMBIA	Red Cárnica	54,326.59	0.00
	Bucaramanga	34,514.62	2,459.37
<b>Total</b>		<b>709,172.46</b>	<b>2,459.37</b>

## Production GRI FP11

### Number of animals purchased, by breed type – Brazil

	Total	Percent
Confinement	751,069	54.6%
Pasture	197,767	14.4%
Semi-confinement	265,704	19.3%
Pasture confinement	160,617	11.7%
<b>Total</b>	<b>1,375,157</b>	<b>100%</b>

### Number of animals purchased, by breed type – Argentina

Breed type	2021	
	Animals purchased	% of animals purchased
Confinement	104,460	24%
Pasture confinement	-	
Pasture	182,364	42%
Semi-confinement	147,704	34%
<b>Total</b>	<b>434,528</b>	<b>100%</b>

### Number of animals purchased, by breed type – Paraguay

	Total	Percent
Confinement	197,000	21.6%
Pasture	712,896	78.4%
Semi-confinement	0	0%
Pasture confinement	0	0%
<b>Total</b>	<b>909,896</b>	<b>100%</b>

### Number of animals purchased, by breed type – Colombia

Breed type	2021	
	Animals purchased	% of animals purchased
Confinement	-	0%
Pasture confinement	-	0%
Pasture	320,269	100%
Semi-confinement	-	0%
<b>Total</b>	<b>320,269</b>	<b>100%</b>

\*100% of animals processed in 2021 were cattle.

### Number of animals purchased, by breed type – Paraguay

	Total	Percent
Confinement	36,530	5.9%
Pasture	582,614	94.1%
Semi-confinement	0	0%
Pasture confinement	0	0%
<b>Total</b>	<b>619,144</b>	<b>100%</b>

### Volume produced (TFP)\*

Product Category	2020	2021
Beef	821,610.48	938,628.94
Processed products	53,172.79	62,496.32
Co-products	567,456.34	725,980.91
<b>Total</b>	<b>1,442,239.61</b>	<b>1,727,106.17</b>

\*TFP: Metric Tons of Finished Product.

# GRI Content Index

General Disclosures				
GRI Standards	Disclosure	Page/URL	Omission	Sustainable Development Goals
▶ GRI 101: Foundation 2016				
GRI 101 contains no disclosures				
Organizational profile				
	102-1 Name of the organization	9		
	102-2 Activities, brands, products, and services	9, 12		
	102-3 Location of headquarters	9		
	102-4 Location of operations	9		
	102-5 Ownership and legal form	9		
	102-6 Markets served	12		
GRI 102: General disclosures 2016	102-7 Scale of the organization	9, 10		
	102-8 Information on employees and other workers	61, 83, 87		8, 10
	102-9 Supply chain	50		
	102-10 Significant changes to the organization and its supply chain	15, 16		
	102-11 Precautionary principle or approach	30		
	102-12 External initiatives	37		
	102-13 Membership of associations	37		
Strategy				
GRI 102: General disclosures 2016	102-14 Statement from senior decision-maker	6		
Ethics and integrity				
GRI 102: General disclosures 2016	102-16 Values, principles, standards, and norms of behavior	11, 30		16
Governance				
GRI 102: General disclosures 2016	102-18 Governance structure	27		

## General Disclosures

GRI Standards	Disclosure	Page/URL	Omission	Sustainable Development Goals	
Stakeholder engagement					
GRI 102: General disclosures 2016	102-40 List of stakeholder groups	4			
	102-41 Collective bargaining agreements	100% of employees in Brazil and Uruguay are covered by collective bargaining agreements. In Argentina the figure is 93% and in Paraguay the figure is 42%. In these countries, employee membership of labor unions is not mandatory by law. In Colombia this is not an established practice.		8	
	102-42 Identifying and selecting stakeholders	4			
	102-43 Approach to stakeholder engagement	4			
	102-44 Key topics and concerns raised	4			
Reporting practices					
GRI 102: General disclosures 2016	102-45 Entities included in the consolidated financial statements	3			
	102-46 Defining report content and topic Boundaries	3			
	102-47 List of material topics	3			
	102-48 Restatements of information	3			
	102-49 Changes in reporting	3			
	102-50 Reporting period	3			
	102-51 Date of most recent report	3			
	102-52 Reporting cycle	3			
	102-53 Contact point for questions regarding the report	3			
	102-54 Claims of reporting in accordance with the GRI Standards	This report has been prepared in accordance with the GRI Standards—"Core" option.			
	102-55 GRI content index	103 a 114			
102-56 External assurance	Report not audited				



# Material topics

General Disclosures				
GRI Standards	Disclosure	Page/URL	Omission	Sustainable Development Goals
Economic performance				
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its Boundary	5		
	103-2 The management approach and its components	32		
	103-3 Evaluation of the management approach	32		
GRI 201: Economic performance 2016	201-1 Direct economic value generated and distributed	83		<b>8, 9</b>
	201-2 Financial implications and other risks and opportunities due to climate change	32		<b>13</b>
Market presence				
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its Boundary	5		
	103-2 The management approach and its components	34, 63		
	103-3 Evaluation of the management approach	34, 63		
GRI 202: Market presence 2016	202-1 Ratio of standard entry level wage by gender compared to local minimum wage	92		<b>1, 5, 8</b>
Indirect economic impacts				
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its Boundary	5		
	103-2 The management approach and its components	66		
	103-3 Evaluation of the management approach	66		
GRI 203: Indirect economic impacts 2016	203-1 Infrastructure investments and services supported	66		<b>5, 9, 11</b>

General Disclosures				
GRI Standards	Disclosure	Page/URL	Omission	Sustainable Development Goals
Anti-corruption				
	103-1 Explanation of the material topic and its Boundary	5		
GRI 103: Management approach 2016	103-2 The management approach and its components	34		
	103-3 Evaluation of the management approach	34		
	<hr/>			
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	34		16
	205-2 Communication and training on anti-corruption policies and procedures	94, 95		16
	205-3 Confirmed incidents of corruption and actions taken	The Company was not party to any legal proceedings for corruption in 2021.		16
Energy				
	103-1 Explanation of the material topic and its Boundary	5		
GRI 103: Management approach 2016	103-2 The management approach and its components	53		
	103-3 Evaluation of the management approach	53		
	<hr/>			
GRI 302: Energy 2016	302-1 Energy consumption within the organization	53, 101		7, 8, 12, 13
	302-3 Energy intensity	53		7, 8, 12, 13
	302-4 Reduction of energy consumption	Overall energy consumption was reduced by 2.4%. In Brazil, absolute consumption decreased by 4.84%, while in the LatAm Division there was no significant reduction as the Bucaramanga plant started operation and the Canelones plant resumed operation in 2021. Electricity generated on site in the Bucaramanga operation is also considered as a reduction of energy consumption.		7, 8, 12, 13
	<hr/>			

General Disclosures				
GRI Standards	Disclosure	Page/URL	Omission	Sustainable Development Goals
Water & Effluents				
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its Boundary	5		
	103-2 The management approach and its components	56		
	103-3 Evaluation of the management approach	56		
GRI 303: Water and effluents 2019	303-1 Interactions with water as a shared resource	56		6, 12
	303-2 Management of water discharge related impacts		The Company has no significant impacts on catchments. Water withdrawals and discharges are compliant with the relevant permits issued by environmental authorities. This ensures water is used responsibly and minimizes potential present and future impacts.	6
	303-3 Water withdrawal	56		6, 8, 12
	303-4 Water discharge	56		6
	303-5 Water consumption	56		6
Biodiversity				
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its Boundary	5		
	103-2 The management approach and its components	42		
	103-3 Evaluation of the management approach	42		
GRI 304: Biodiversity 2016	304-2 Significant impacts of activities, products, and services on biodiversity		The company has no quantitative data available on significant direct and indirect impacts on biodiversity. Initiatives to address deforestation and supplier management are detailed in the chapter Sustainable Beef (page 42).	6, 14, 15

## General Disclosures

GRI Standards	Disclosure	Page/URL	Omission	Sustainable Development Goals
<b>Emissions</b>				
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its Boundary	5		
	103-2 The management approach and its components	53		
	103-3 Evaluation of the management approach	53		
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	55; 100		3, 12, 13, 14, 15
	305-2 Energy indirect (Scope 2) GHG emissions	55; 100		3, 12, 13, 14, 15
	305-3 Other indirect (Scope 3) GHG emissions	55; 100		3, 12, 13, 14, 15
	305-4 GHG emissions	101		13, 14, 15
	305-5 Reduction of GHG emissions	100		13, 14, 15
<b>Waste</b>				
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its Boundary	5		
	103-2 The management approach and its components	57		
	103-3 Evaluation of the management approach	57		
GRI 306: Waste 2021	306-1 Waste generation and significant waste-related impacts	98; 99		3, 6, 11, 12
	306-2 Management of significant waste-related impacts	98; 99		3, 6, 11, 12
	306-3 Waste generated	57; 98; 99		3, 6, 12, 14, 15
	306-5 Waste directed to disposal	98; 99		3, 6, 11, 12, 14, 15
<b>Environmental compliance</b>				
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its Boundary	5		
	103-2 The management approach and its components	30; 31; 32; 42		
	103-3 Evaluation of the management approach	30; 31; 32; 42		
GRI 307: Environmental compliance 2016	307-1 Non-compliance with environmental laws and regulations		Information is currently being updated and will be published in the Company's reference form.	16

## General Disclosures

GRI Standards	Disclosure	Page/URL	Omission	Sustainable Development Goals
Supplier environmental assessment				
	103-1 Explanation of the material topic and its Boundary	5		
GRI 103: Management approach 2016	103-2 The management approach and its components	51		
	103-3 Evaluation of the management approach	51		
GRI 308: Supplier environmental assessment 2016	308-2 Negative environmental impacts in the supply chain and actions taken	51		
Employment				
	103-1 Explanation of the material topic and its Boundary	5		
GRI 103: Management approach 2016	103-2 The management approach and its components	60		
	103-3 Evaluation of the management approach	60		
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	89		5, 8, 10
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	60		3, 5, 8
Occupational health and safety				
	103-1 Explanation of the material topic and its Boundary	5		
GRI 103: Management approach 2016	103-2 The management approach and its components	64; 65		
	103-3 Evaluation of the management approach	64; 65		
GRI 403: Occupational health and safety 2019	403-2 Hazard identification, risk assessment, and incident investigation	64; 65		8
	403-3 Occupational health services	64; 65		3, 8
	403-4 Worker participation, consultation, and communication on occupational health and safety	64; 65		8, 16
	403-5 Worker training on occupational health and safety	64; 65		8
	403-8 Workers covered by an occupational health and safety management system	64; 65		8

## General Disclosures

GRI Standards	Disclosure	Page/URL	Omission	Sustainable Development Goals
Occupational health and safety				
GRI 403: Occupational health and safety 2019	403-9 Work-related injuries	64; 65		3, 8, 16
	403-10 Work-related ill health	64; 65		3, 8, 16
Training and education				
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its Boundary	5		
	103-2 The management approach and its components	62		
	103-3 Evaluation of the management approach	62		
GRI 404: Training and education 2016	404-1 Average hours of training per year per employee	62; 93		4, 5, 8, 10
	404-2 Programs for upgrading employee skills and transition assistance programs		In Uruguay there are policies and procedures in place for employee assessment, development and termination. In Paraguay a professional coach conducts monthly leadership development assessments. In Colombia, development topics and needs are monitored. In Argentina, surveys of organizational development needs are carried out regularly.	8
	404-3 Percentage of employees receiving regular performance and career development reviews	93		5, 8, 10
Diversity and equal opportunity				
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its Boundary	5		
	103-2 The management approach and its components	34		
	103-3 Evaluation of the management approach	34		
GRI 405: Diversity and equal opportunity 2016	405-1 Diversity of governance bodies and employees	88; 91		5, 8

## General Disclosures

GRI Standards	Disclosure	Page/URL	Omission	Sustainable Development Goals
Non-discrimination				
	103-1 Explanation of the material topic and its Boundary	5		
GRI 103: Management approach 2016	103-2 The management approach and its components	34		
	103-3 Evaluation of the management approach	34		
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken		This information is not available in the required format, as data on incidents are compiled in aggregated form and include workplace harassment, physical abuse and discrimination. The Company has worked to perfect data collection practices for future reports.	5, 8
Child labor				
	103-1 Explanation of the material topic and its Boundary	5		
GRI 103: Management approach 2016	103-2 The management approach and its components	47		
	103-3 Evaluation of the management approach	47		
GRI 408: Child labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	47		8.16
Forced or compulsory labor				
	103-1 Explanation of the material topic and its Boundary	5		
GRI 103: Management approach 2016	103-2 The management approach and its components	47		
	103-3 Evaluation of the management approach	47		
GRI 409: Forced or compulsory labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	47		

## General Disclosures

GRI Standards	Disclosure	Page/URL	Omission	Sustainable Development Goals
Human rights assessment				
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its Boundary	5		
	103-2 The management approach and its components	47		
	103-3 Evaluation of the management approach	47		
GRI 412: Human rights assessment 2016	412-1 Operations that have been subject to human rights reviews or impact assessments		Data not available. Human rights reviews are currently in progress.	
Local communities				
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its Boundary	5		
	103-2 The management approach and its components	66		
	103-3 Evaluation of the management approach	66		
GRI 413: Local communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	66		5, 8, 16



## General Disclosures

GRI Standards	Disclosure	Page/URL	Omission	Sustainable Development Goals
Consumer health and safety				
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its Boundary	5		
	103-2 The management approach and its components	69		
	103-3 Evaluation of the management approach	69		
GRI 416: Consumer health and safety 2016	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services		There were 113 incidents of noncompliance with regulations and/or voluntary codes concerning the health and safety impacts of products and services, resulting in fines or penalties. There were another 1,797 incidents resulting in warnings. Corrective action and improvements were implemented in all cases.	16
Food Processing Sector Supplement - Customer health and safety	FP5 Percentage of production volume manufactured in sites certified by an independent third party according to internationally recognized food safety management system standards	42; 69; 102		3
Marketing and labeling				
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its Boundary	5		
	103-2 The management approach and its components	69		
	103-3 Evaluation of the management approach	69		
Marketing and labeling 2016	417-1 Requirements for product and service information and labeling	69		12
Outsourcing and procurement				
Food Processing Sector Supplement - Outsourcing and procurement	FP1 Percentage of purchased volume from suppliers compliant with company's sourcing policy	46		
	FP2 Percentage of purchased volume which is verified as being in accordance with credible, internationally recognized responsible production standards, broken down by standard	46		2, 12, 14, 15

## General Disclosures

GRI Standards	Disclosure	Page/URL	Omission	Sustainable Development Goals
Animal welfare				
	FP9 Percentage and total of animals raised and/or processed, by species and breed type, per housing type	No animals are raised at Minerva Foods' slaughter plants, and all operations within the Minerva Live Cattle Exports division are strictly compliant with the Company's Animal Welfare Policy and Program.		2, 15
	FP10 Policies and practices, by species and breed type, related to physical alterations and the use of anesthetic		Policies and practices, by species and husbandry type, related to physical alterations and anesthetic use will be covered in detail, by species in the animal welfare report. We do not have the complete information, it is still being collected for broilers, laying hens, pigs, sheep, and fish.	
	FP11 Percentage and total of animals raised and/or processed, by species and breed type, per housing type	75		
Food Processing Sector Supplement – Animal welfare				
	FP12 Policies and practices on antibiotic, anti-inflammatory, hormone, and/or growth promotion treatments, by species and breed type	The use of genetically modified or cloned animals or animals that have used hormones or other growth promotion treatments is not permitted in the Company's supply chain. We ensure that no antibiotics are used that are in the World Health Organization list of highest priority critically important antimicrobials, based on Ranch Declarations and Letters of Guarantee. 100% of animals have documentation certifying them to be free from hormones and antibiotics, and providing a list of medications used on each animal.		2
	FP13 Total number of incidents of significant non-compliance with laws and regulations, and adherence with voluntary standards related to transportation, handling, and slaughter practices for live terrestrial and aquatic animals	There were 64 incidents of non-compliance, with R\$ 18,778.20 paid in significant fines. There were 56 cases of non-monetary sanctions, and 56 cases resolved through arbitration mechanisms. Corrective action and improvements were implemented in all cases.		

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