



SUSTAINABILITY PROGRESS REPORT

2021



Dear Reader:

Find below our **Sustainability Progress Report**. In the following pages, we will highlight the advances achieved in practices aimed at controlling protein origins – the main raw material used in our business – and in assuring animal welfare. We will also detail measures adopted to minimize effects of our operations on climate change, including efforts to control and reduce emissions of greenhouse gases, water and energy consumption, and management of effluents and waste residues. We will also show how our efforts have led to positive impacts for our suppliers and for the communities surrounding our operations.

Based on this body of data, we will present a summary of our journey toward sustainability, and a preview of the content which will be presented in our Annual Sustainability Report, to be issued shortly. This is the second year in a row for us to prepare such a report. We do so because we understand how important it is to present, to you, the challenges and results of 2021 in terms of our sustainability strategy, even while the final report is still being completed.

By developing this communications tradition, we are reinforcing our commitment to maintaining a permanent dialog with you and with all our stakeholders. We will continue to improve this channel of communication permanently; for that reason, suggestions and comments are most welcome. We are also available to answer any and all queries and to supply any additional information. Contact us via e-mail sustentabilidade@marfrig.com.br or by phone at 55 11 3792-8600.

Enjoy!



TABLE OF CONTENTS

01

Message from Management

02

A Reference Point for International Sustainability

03

About us

04

Our Journey to Sustainability

Governance and Sustainability
Strategic Pillars

05

Sustainability Platform: Highlights

06

Strategic Pillars: Advances in 2021

Origin Control
Animal Welfare
Greenhouse Gas Emissions
Natural Resources
Effluents and Residues
Social Responsibility

07

Perspectives



MESSAGE FROM MANAGEMENT



"Sustainability, during the 20-year history of our company, has always been treated as a top strategic priority"



Marcos Molina
Controller and Chairman

It is with great satisfaction that we, at Marfrig, can boast of high rankings when it comes to the chief global indices for sustainability. We are among the highest ranked companies when it comes to bovine protein and the only one in the industry out of 15 beef assessed companies classified as "low risk" in the latest edition of the *Coller FAIRR Protein Producer Index*. This study is a reference point for foreign investors who, in making decisions about how to allocate their resources, increasingly utilize ESG criteria for best practices in the areas of Environment, Social Responsibility, and Corporate Governance.

We were the only company in our industry, in the Americas, to obtain "Tier 2" status in the BBFAW, a global reference point for the management of animal welfare. And, once again, we were the only one, on a global scale, to obtain an A rating in the area of water security, for the second year in a row, from the CDP, a global platform that brings together data regarding the environmental performance of companies worldwide, another index closely watched by investors as part of their corporate evaluations.

This kind of recognition confirms that we have taken the right decisions when it comes to these issues and that the path we have carved out for ourselves is the correct one.

Sustainability, during the 20-year history of our company, has always been treated as a top strategic priority. The proof of this is the pioneering spirit which has marked our presence in the development of best practices for our industry; these include geo-monitoring and geo-referencing via satellite of our entire production chain and our commitment to fighting deforestation in the biomes where we are active.

Even as best ESG practices are being introduced in our operations, we have also been assiduous in identifying ways to improve management and governance in these critical areas. We understand the need to develop a robust structure to address the real challenges presented to our industry when it comes to sustainable production balanced against low-carbon needs.

Because of this, we began, in 2019, to develop new ways to deal with the questions relating to sustainability. We developed a detailed diagnosis of the issues, culminating in the establishment of strategies and plans, for short-term as well as medium-term and long-term needs based on clear goals and undertaken, always, in partnership with producers and civil society. This effort at planning is now in full swing; in 2021, for the first time, we were able to put the plan into practice, in its totality, throughout our organization.



“Despite these difficulties, we continued to give the highest possible priority to ESG issues; and we are committed to continuing down this path.”

a consequence all the people and operations involved. Despite these difficulties, we continued to give the highest possible priority to ESG issues; and we are committed to continuing down this path.

We are grateful for the confidence and engagement of our employees, suppliers, shareholders, and other partners. We will continue adopting concrete actions aimed at sustainability, ones which translate into positive impacts on all of the publics involved in our day-to-day operations.

Marcos Molina

Controller and Chairman

We have already seen many of our policies and actions come to maturity through our Marfrig Verde+ Program, which touches upon economic, environmental, and social aspects of our operations. We are quickly advancing in efforts to bring these advances to all of our indirect suppliers, a critical link in the chain when it comes to any strategy for combating deforestation in key biomes. We should also highlight initiatives aimed at restauration of forests and production of meats via low-carbon and carbon-neutral techniques, all of which will be detailed in the following pages.

I would also mention our highly differentiated strategy for the reduction of greenhouse gas emissions, given that we are the only company in the industry with a clear objective in this area, supported by scientific data. I would especially highlight our actions in relation to Scope 3 goals, which include supply chain participants. These include enteric fermentation in animals, a factor responsible for the greatest portion of emissions. Our practices are in line with commitments made by the signatories of the United Nations Global Compact, which embraces agendas such as human rights, decent working conditions, environmental protection, and the battle against corruption.

The improvement in ESG management, in recent years, coincides with the challenges that arose from the advent of the Covid-19 pandemic. The need to coexist with the virus had a knock-on effect on the economies of all the countries with which we do business, affecting as



A REFERENCE POINT FOR INTERNATIONAL SUSTAINABILITY

FAIRR GLOBAL RANKING

THE BOVINE PROTEIN COMPANY WITH THE HIGHEST RANKING AND THE ONLY COMPANY IN THE BEEF INDUSTRY CLASSIFIED AS LOW RISK

For the second year in a row, we were the highest ranked company in the bovine protein industry under the FAIRR Protein Producer Index 2021. Our score rose eight points, marking Marfrig as the only low-risk company in the industry, out of 15 beef assessed companies.

The study, undertaken every year by the FAIRR Initiative, an organization based in London (UK) and supported by institutional investors, is a global reference point for decision-making by the investing public; its results are based on criteria related to sustainability. The analysis covers 60 companies worldwide in the animal protein business and is based on measuring performance in 10 different risk categories, including greenhouse gas emissions, water use, deforestation, and animal welfare, among others. To access the complete Collier FAIRR Protein Producer Index 2021 report, click [here](#).

CONSISTENCY IN ESG PRACTICES = RESULTS FOR ALL OF OUR PUBLICS

We enjoy positions of distinction within all of the main international rankings when it comes to ESG practices, results which confirm the effectiveness of our efforts and the value of our policy of continuous improvement in all aspects of our operations.



A REFERENCE POINT FOR ANIMAL WELFARE

Tier 2 in the BBFAW 2020, the most important global ranking for management of animal welfare. **We are the only bovine protein company, in the Americas, to obtain this distinction.**



UNIQUE PERFORMANCE IN THE AREA OF WATER SECURITY

A-rating in water security via the CDP, for the second year in a row. We are the only company in the bovine protein industry, globally, to notch this achievement.

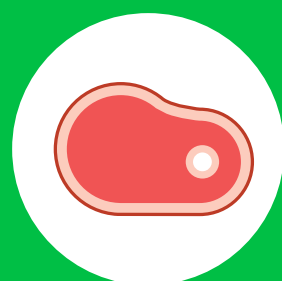


A PIONEER IN ADOPTION OF GREENHOUSE GAS EMISSION REDUCTION TARGETS

The first bovine protein company in Brazil to commit to **Science Based Targets**, a global initiative which promotes the establishment of targets supported by scientific data as part of efforts to reduce greenhouse gas emissions.



Global leader in
hamburger production



Second biggest producer
of bovine protein in the
world in terms of capacity



Pioneers in production
of items based on
vegetable protein



Products sold in **more
than 100 countries**

ABOUT US

We are the **global leader in hamburger output and one of the largest bovine protein companies in the world** in terms of capacity. We produce foodstuffs of high aggregate value based on animal protein, also including a range of ready-for-consumption options such as frozen vegetables, lamb, fish, and sauces.

We are engaged in **the production and sale of foodstuffs based on vegetable protein** through our PlantPlus Foods! Unit, the result of a partnership with Archer Daniels Midland Company (ADM) of the U.S. Headquartered in the U.S., the company produces and markets its products through various retail outlets as well as food service chains in both North and South America.

Our operations, consolidated throughout the Americas, are divided into two regions. In **North America**, we conduct our operations through National Beef, the fourth largest meatpacker and the most efficient company of its kind in the United States. In **South America**, we do business through units in Brazil, Uruguay, and Argentina, dedicated to slaughtering and deboning bovine protein and to the production of industrialized and processed foodstuffs. We are also active in Chile, where we are the chief importer of bovine meat and where we engage in the slaughter of sheep. For more information, [click here](#).



OUR JOURNEY TOWARD SUSTAINABILITY

A strong Corporate Governance structure plus Management based on strategic pillars. That's how sustainability best practices permeate our day-to-day operations.



SUSTAINABILITY GOVERNANCE

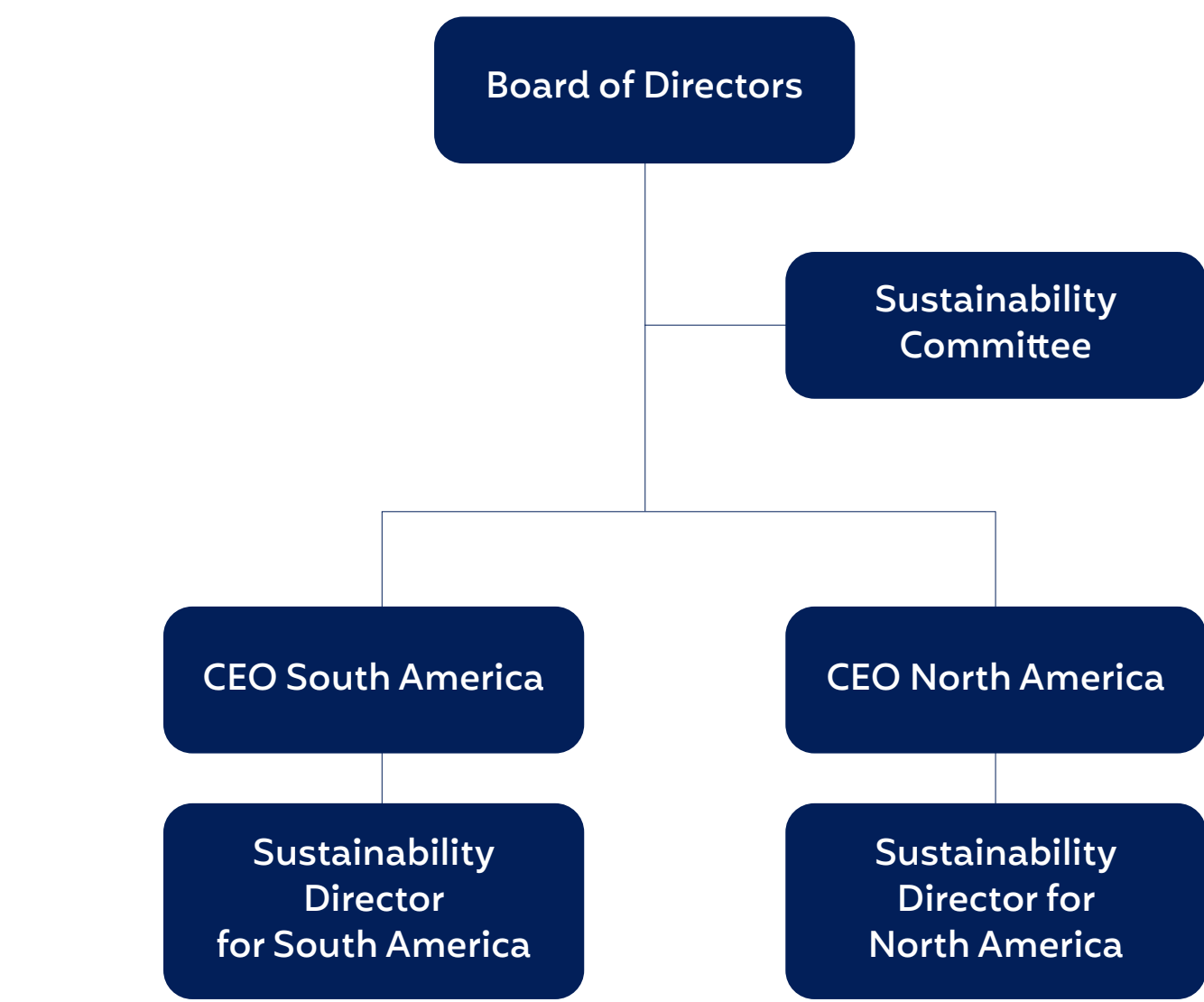
Structure

When it comes to business strategy, decisions are made and global directives are developed and are observed throughout our operations. These are established by our Board of Directors, which is supported by a Sustainability Committee composed of specialists in sustainability with well-known professional backgrounds.

In order to execute our strategic plan, we rely on the expertise of the Sustainability Directorates in each of our two business divisions. These report directly to the divisional CEOs and are responsible for analyzing risks and opportunities related to sustainability; they also set performance goals for the operational units.

Polices

The principles that guide our sustainability practices are encapsulated in specific policies. With a global reach, such directives are approved by the Board of Directors. Currently, our work is oriented by these five policies , avaiable [here](#).



- 📍 Sustainability
- 📍 Animal Welfare
- 📍 Social Responsibility
- 📍 Engagement with Stakeholders
- 📍 Acquisition of forest-origin material

STRATEGIC PILLARS

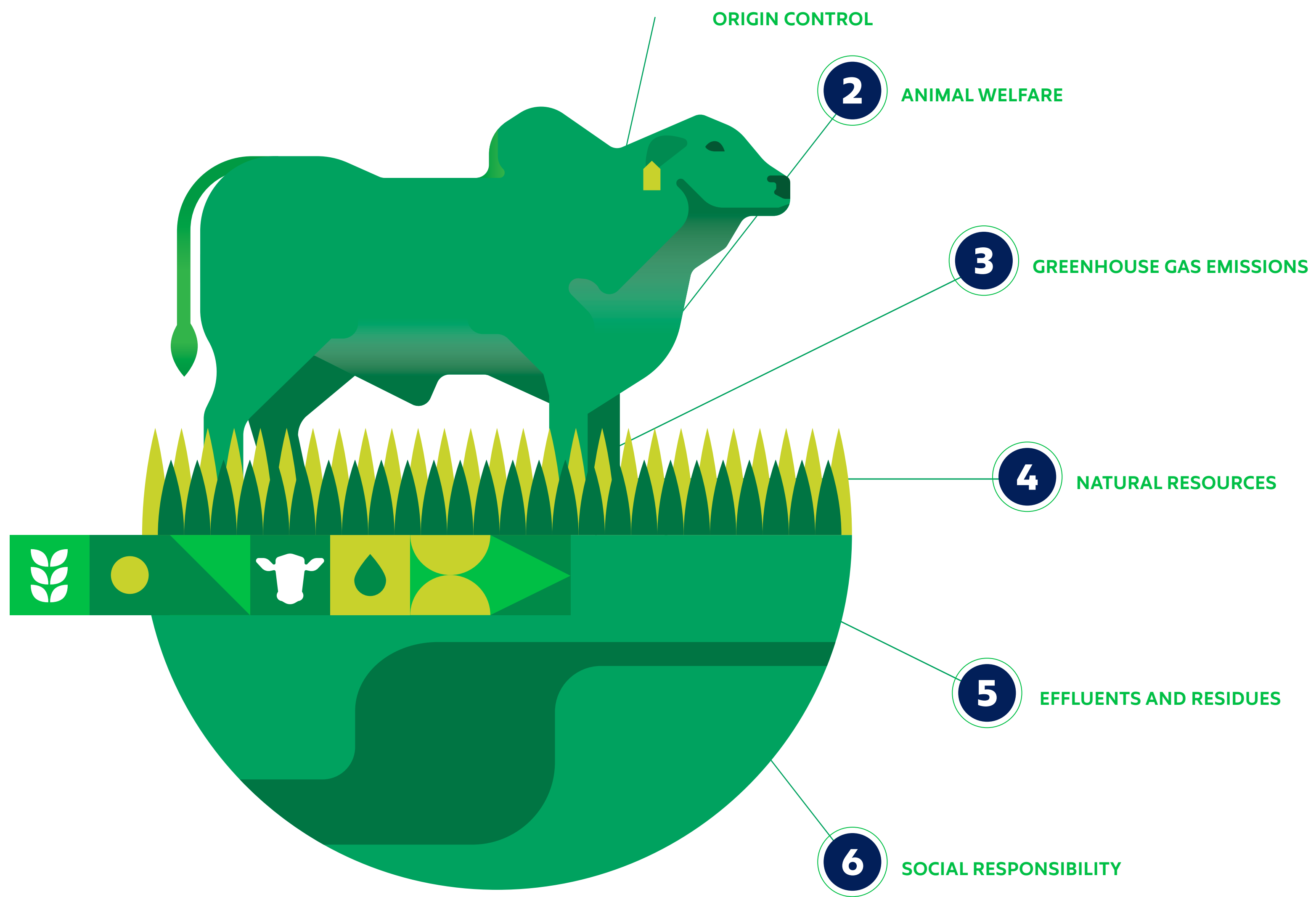
Management of best practices aimed at sustainability is developed based on long-term strategic planning. This, in turn, is supported by clear goals established with the intention of minimizing the impact of our operations on the environment. In developing our approach, we also consider the effect of our operations on climate change by developing tactics that help us effectively meet our commitments under Agenda 2030, the United Nations initiative establishing 17 Sustainable Development Goals (SDG).

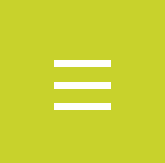
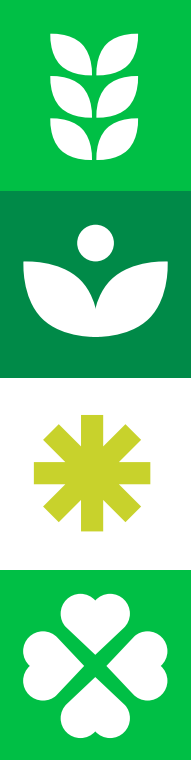
We closely monitor the performance of our operations in line with the established practices. To that end, we employ Key Performance Indicators (KPIs) as a way to measure progress and to effect eventual corrections, as needed.

We have divided sustainability management into six strategic axes. The advances obtained through each of these practices, as well as fulfilment of goals and SDG performance benchmarks set under each initiative, will be detailed in the pages that follow.

Click on  to learn about the pillars.

SUSTAINABILITY PLATFORM





01

02

03

04

05

06

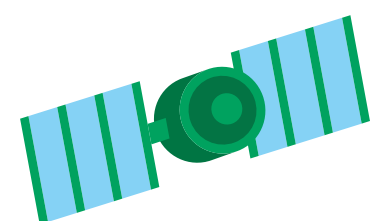
07

SUSTAINABILITY PLATFORM – HIGHLIGHTS

1

ORIGIN CONTROL

- 100% of supplier properties are monitored via satellite.
- 100% of direct suppliers – some 8,000 – take part in the Marfrig Club Program, which disseminates best sustainability practices throughout the Brazilian production chain.
- 99.5% of indirect supplier chain, in Brazil, adheres to sustainable husbandry criteria.
- 33% of direct producers improved their sustainability practices, migrating to higher Marfrig Club classifications.
- 100% approval in pilot program testing for the Unified Protocol for Monitoring of Amazon Cattle Suppliers ("Beef on Track").
- US\$ 30 million investment in management of supply chains located in the Amazon and Cerrado biomes.
- € 1.75 million investment through 2025 in technical and environmental support for small-scale producers in the Juruena Valley (MT), part of the Amazon biome, via the Sustainable Calf Program.
- 3,800 direct producers had access to the blockchain tracking platform (Conecta).
- 2,300 accesses to the recently launched Cattle Breeder Portal, which offers this targeted public information about cattle sales, slaughter, management, sustainability, animal welfare, and many other topics of interest relating to husbandry.



2

ANIMAL WELFARE

- 100% of slaughterhouse activities (cattle) audited for animal welfare, a procedure undertaken by third parties.
- 99.5% of ranches meeting at least one criterion for animal welfare under the Marfrig Club Program.
- 94% of slaughterhouse units (cattle and sheep) audited for NAMI Animal Welfare Standards.
- 1,275 hours (per annum) of Animal Welfare training.
- 88% of cattle transported over routes of less than eight hours.
- US\$ 2.3 million investment in improvements aimed at animal welfare practices.



3

GREENHOUSE GAS EMISSIONS

- +120,000 animals arriving from ranches declared as bred under low-carbon production conditions.
- First bovine protein company in Brazil committed to Science Based Targets.

4

NATURAL RESOURCES

- 100% of operational units possess Water Treatment Plants (WTP).
- 80% of WTPs objects of internal audits in 2021.
- +90% of energy utilized in operations obtained on the free market.
- 58% of units in Brazil follow water re-use practices.

5

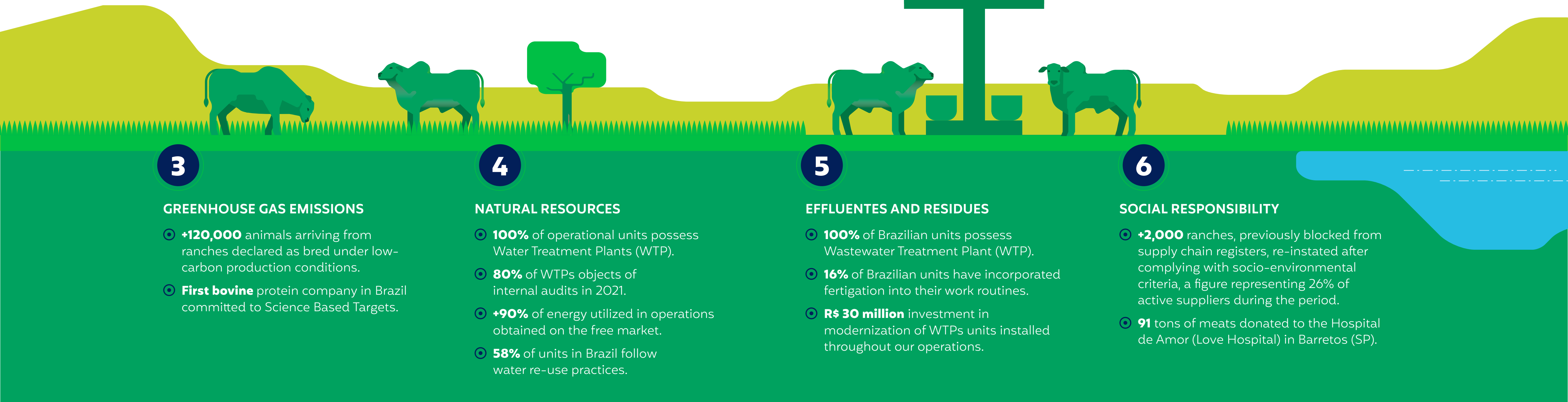
EFFLUENTES AND RESIDUES

- 100% of Brazilian units possess Wastewater Treatment Plant (WTP).
- 16% of Brazilian units have incorporated fertigation into their work routines.
- R\$ 30 million investment in modernization of WTPs units installed throughout our operations.

6

SOCIAL RESPONSIBILITY

- +2,000 ranches, previously blocked from supply chain registers, re-instated after complying with socio-environmental criteria, a figure representing 26% of active suppliers during the period.
- 91 tons of meats donated to the Hospital de Amor (Love Hospital) in Barretos (SP).





STRATEGIC PILLARS: ADVANCES IN 2021

1 ORIGIN CONTROL

100% of our direct and indirect animal protein suppliers are active in sustainable practices and are free of deforestation. We now monitor the totality of our direct suppliers and we are working to reach the same goal for our indirect suppliers by 2025 in the Amazon biome and by 2030 in the Cerrado and other biomes.

We met this goal through promotion of **sustainable livestock** practices throughout our entire supply chain. A number of initiatives were adopted along these lines, all of them subsumed under the rubric of the **Marfrig Verde+ Program**. In 2021, we completed the first year of implementation of this strategy, with significant results for each of the three pillars that sustain it.

Marfrig Verde+ is the result of a partnership with the IDH – the Sustainable Trade Initiative, a Dutch public-private organization.



01

02

03

04

05

06

07

MARFRIG VERDE+ PROGRAM

Advances in 2021 related to the three pillars supporting sustainability:

DEVELOPMENT OF INNOVATIVE FINANCING MECHANISMS

US\$ 30 million investment in management of supply chain producers in the Amazon and the Cerrado through initiatives that engage them in efforts to conserve the rainforest, intensify use of pastures, recover degraded areas and restore deforested clearings. We took on a series of commitments related to the furtherance of these practices, for fulfilment by 2030, as a prerequisite for obtaining support from the Dutch&Green Fund.

STRUCTURING OF TECHNICAL ASSISTANCE AND TECHNICAL UPGRADES

Sustainable Calf Program. We officialized our participation in the Program and expanded its resources. The objective is to contribute toward a doubling of the number of participants. The program ended 2021 with 142 small-scale producers in the Jurueña Valley (MT), a region of the Amazon biome. To meet the goal, we will invest € 1.75 million through 2025, an amount that will go toward technical and environmental support for small-scale suppliers, including orientations regarding best production practices, technical assistance for genetic and pastureland improvements, and land ownership

and environmental licensing regularization. In addition, the program will help promote access to adequate lines of finance. In parallel with our involvement in the Program, and as a result of our partnership with the Sustainable Trade Initiative (IDH), we initiated, in 2021, the first slaughters of cattle coming from ranches belonging to the Program. We acquired 1,071 animals with tracking records covering the complete cycle from breeding to slaughterhouse under the objectives set by the Marfrig Verde+ Program.

Environmental Protection Project. A pilot program to reinstate, within our supply chain, ranches which had been suspended because of operations outside the aegis of established environmental criteria. During 2021, we were able, through environmental diagnostics and projects aimed at restoring natural vegetation, to reinstate 25 properties in the State of Mato Grosso. Through the program, we mapped the affected areas and effected a quantitative and qualitative analysis as a way to seek alternative land-use solutions. As a result, in 2022 we are going to develop, in partnership with property owners, a corrective plan of action focused on the rebuilding of forests in areas suffering damage and adoption of policies for long-term sustainable operations.

Marfrig Club. We revised and updated the Marfrig Club, a program designed to engage suppliers in the continuous improvement of their practices, in line with the most

relevant international sustainability indices. We expanded outreach, improved orientations dealing with themes such as climate-change, and quantification of greenhouse gas emissions and environmental risks such as effects of dry spells; these alterations were made in line with initiatives and directives under the aegis of Marfrig Verde+ as a way to help our suppliers develop models for sustainable production. The Marfrig Club was first instituted in 2010, with the objective of supporting Brazilian ranchers in their journey toward sustainability. Through the club, we offer orientations aimed at best practices and technical support, while establishing routines including periodic evaluations of issues such as animal welfare and social and environmental responsibility. Such orientations involve both the suppliers themselves and club experts. Performance is measured through various classifications ranging from beginner, or bronze, through silver and gold, in line with adherence to Marfrig Club criteria. Currently, 100% of our direct suppliers, some 8,000, take part in the program and have achieved at least one of the three classification grades. In 2021, 33% of producers improved their practices and earned an upgrade.

Relationship with ranchers. We launched our Ranchers Portal, a communications channel exclusive to our supplier partners throughout Brazil. Through this initiative, ranchers enjoy access to information and content regarding cattle sales, slaughter, management, sustainability, animal welfare, and many other themes of interest to the business.

In parallel, we also sponsored monthly webinars bringing together specialists to address issues related to the day-to-day activities of ranchers. Throughout 2021, various issues, all of them having a major impact on cattle breeding, were addressed: "Challenges for Husbandry"; "Production via Genetic Selection"; "Importance of Water and Its Treatment for the Herd"; "Genetic Improvements for Better Production of Nelore Cattle"; and "The Importance of Pastureland to Animals." We counted more than 2,300 accesses to this material, which remains available to producers and to the general public [here](#).

Production models based on low-carbon technologies.

Good husbandry allows us to offer the public a variety of products. This is the case for meat cuts offered by our Viva! brand. Animals used by this brand come from ranches which have adopted techniques for integrated production under the Integrated Cattle Ranching protocol (ICR) and the Integrated Forest Ranching protocol (IFR), systems which allow for the neutralization of methane gas emissions.



MECHANISMS FOR MONITORING AND TRACKING

We have also continued to improve our routines for animal origin identification. In 2021, we adjusted our methodology and expanded the reach of our monitoring: in addition to verifying the origin of cattle, through data furnished by direct suppliers, we also improved the criteria and practices utilized by such suppliers so that they provide us information about their suppliers. In this way, we have been able to increase our bank of information about indirect suppliers, a critical link in the supply chain. Cattle breeders who do not share such data with us are blocked from further sales until the information is furnished and the producer complies with the necessary commitments.



Consequently, we registered a high level of identification for indirect suppliers in 2021, bringing us closer to realizing our objective: to track **100% of direct and indirect suppliers in the Amazon by 2025, a benchmark we hope to duplicate for the Cerrado by 2030.**

- 100% of direct supplier properties are monitored.
- 63.21% of indirect producers, with properties in the Amazon biome, provide information related to their suppliers, thereby giving us information about our indirect suppliers.
- 67.21% of direct suppliers located in the Cerrado also send us information about their respect supply chains, providing us with more valuable information about our indirect suppliers.

These new parameters for monitoring have much to do with the objectives of the Marfrig Verde+ Program, focused on support for breeders and an advanced agenda for sustainability in fighting deforestation. Other initiatives add to and expand the scope of monitoring and tracking, in line with our commitment to transparency regarding information and the continuous improvement in our procedures:

Deforestation Risk Map. The year 2021 was the first in which we used this tool, originally developed at the end of 2020. By using it, we are able to sharpen, even more, the practices associated with responsible purchasing. For example, we obtain additional information through cross-checking of two different maps: one, which shows the presence of native vegetation, and another, which offers a snapshot of cattle grazing. From this, we can identify areas exposed to higher socio-environmental risks in biomes such as the Amazon and the Cerrado. By differentiating among cattle breeders in critical areas we can arrive at a clearer evaluation of conditions. This is a process which, consequently, guarantees that our operations are in full conformity with commitments undertaken in the name of sustainable husbandry. The process is being expanded to include other biomes where cattle breeders operate as suppliers for our operations. We have already developed maps for the Pantanal and Pampa biomes. In 2022, we will add the Mata Atlântica biome. With this addition, we will have made a clean sweep of all the areas which serve as cattle suppliers within Brazil.

Tracking platform based on blockchain (Conecta). This is a tool which we also adopted in 2021. It was developed, during the year, in conjunction with satellite monitoring and is based on blockchain technology. The Conecta system helps us verify the occurrence of deforestation and other practices in violation of socio-environmental rules covering the supply chain. The platform cross-references information about ranches and their herds, based on information made available by suppliers themselves, via a computer application, with public data. One of the interesting aspects of this system is that it can also be used by suppliers to monitor their supply chains, thus contributing to our efforts to fight irregularities among indirect as well as direct suppliers. In addition, breeders can access socio-environmental analyses regarding their own operations and those of their suppliers. In 2021, Conecta was made available to more than 3,800 direct cattle suppliers in Mato Grosso and Rondônia.

Unified Protocol “Beef on Track.” 100% approval in tests of a pilot project called the Unified Protocol for Monitoring of Amazon Cattle Suppliers (“Beef on Track”). This initiative seeks to verify compliance among slaughterhouses operating in the Amazon region regarding measures agreed to under terms of the Legal Meats Programs (LMPs), created in 2009 to assure that companies are adopting and executing responsible production practices. To this end, companies take on the commitment to, for example, acquire cattle only from areas free of deforestation and in which there is no land ownership conflict; nor do the companies acquire cattle raised in Indigenous lands or lands set aside for conservation or from producers known to employ slave labor. The Unified Protocol is an initiative of the Federal Prosecutor’s Office (MPF) and of the Institute for Management and Certification of Forested and Agricultural Lands (Imaflora). Each year sees adherence to the protocol by more companies, representing an advance for the entire industry for a program which is also part of the Marfrig Verde+ initiative.

VISIPEC. We obtained 99.5% adherence among our indirect suppliers for criteria related to sustainable cattle breeding, chiefly in the realms of deforestation-free production, and respect for Indigenous lands and lands set aside for conservation. This particular snapshot of conditions is the result of an exercise initiated in 2021 designed to verify producer data conforming to the desired profile. This was done through a program called Visipec, a tool for monitoring and tracking of the cattle-raising value chain. We will continue this initiative in 2022, integrating it more and more with the other controls we have adopted for practices surrounding cattle purchases.

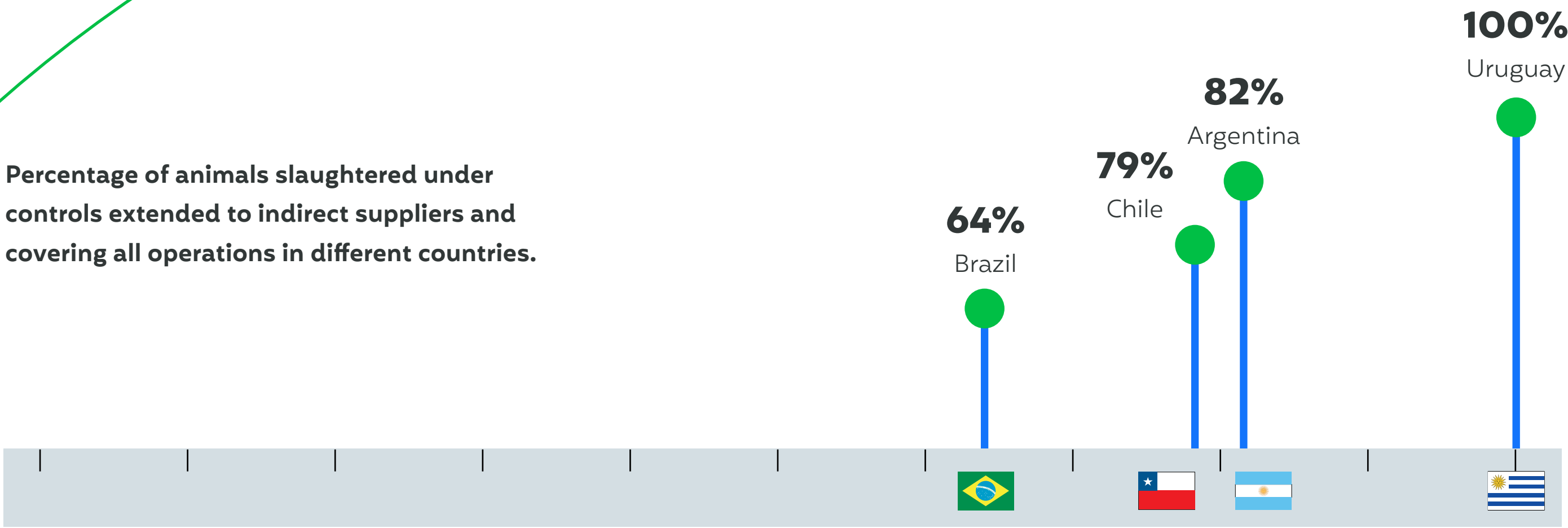


MANAGEMENT INDICATORS

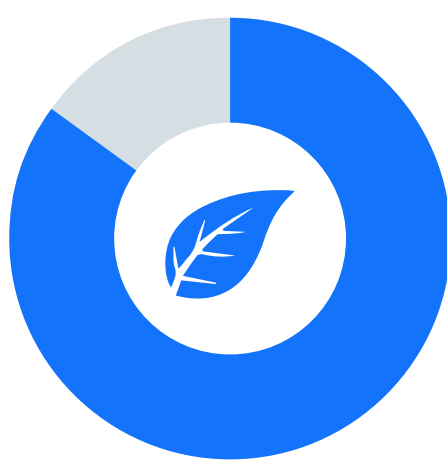
Parallel with the actions developed under the aegis of the Marfrig Verde+ Program and taking into consideration the peculiarities of the systems involved and the policies and arrangements made throughout the supply chain in the different countries where we operate, we have established a series of indicators to measure the performance of our operations. Such metrics allow us to verify performance for all of our productive units:



Percentage of animals slaughtered under controls extended to indirect suppliers and covering all operations in different countries.



Percentage meeting performance pillars (Environmental and Social) under the Best Practices for Cattle Production Program/Marfrig Club within Brazil.

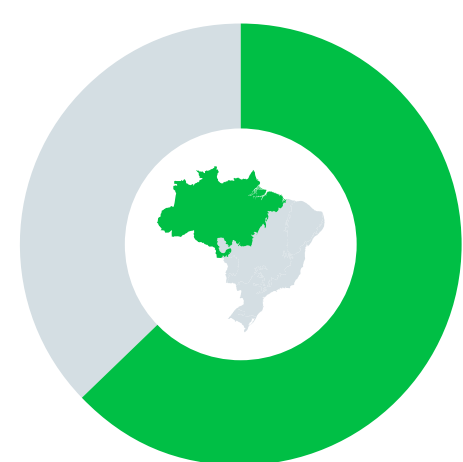


85%
Environmental
Respect Pillar

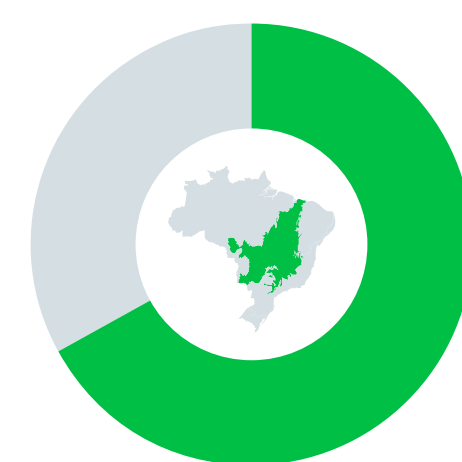


86%
Social Respect
Pillar

Percentage of supplier ranches among direct suppliers exercising control over indirect suppliers in the Amazon and Cerrado biomes in Brazil.



63%
Amazon



67%
Cerrado

Our origin control practices contribute to meeting nine SDG:



2 ANIMAL WELFARE

The only company in the industry, in the americas, to reach tier 2 in the BBFAW 2020 scale, the chief global ranking for animal welfare management

To have attained Tier 2 is to have our animal welfare practices – which we have adopted throughout our operations and which we are expanding to include our entire supply chain – recognized by a global authority on this important subject. The ranking, made public in 2021, places us two notches above the previous survey, in 2019, when we were classified as Tier 4. We have been taking part in the BBFAW (Business Benchmark on Farm Animal Welfare) since 2012, the first year the study was issued, and this is the second time for us to reach Tier 2, a ranking we previously achieved in 2015.

This year, we advanced on all four pillars of the BBFAW 2021 methodology; the pillars are more and more demanding with each new survey. They are – Management Policies and Commitments, Management and Governance, Leadership and Innovation, and Reporting and Impact. This latest ranking reflects our constant search for better animal welfare management, as seen through the following 2021 initiatives:

In our operations:

Our animal welfare policy is now followed in all of our global operations. In addition to this expanded outreach and to the alignment of all units behind company directives, we have also revised some key documents, including those pertaining to policies for handling other animal species besides cattle. Although cattle is our chief raw material, we also produce items based on pork and poultry and we sell seafood through our own branded stores; for this reason, we expanded the reach of our policies.

All of our slaughterhouse-related activities (bovine), independent of country, went through an animal welfare audit in 2021, always undertaken by third parties. As such, we brought forward our goal of 100% compliance with this practice; the previous goal was 2023.

Revision of internal practices adopted for global operations, with a view toward bringing greater agility to information exchanges; this has been reflected in improved ability to report on progress in the area of animal welfare practices.

In the supply chain:

We have adopted, as part of our animal welfare policy, certain new criteria which are being observed on an obligatory basis by all of our suppliers in all the countries where we do business. One example is the demand for an animal welfare certificate from slaughterhouses that sell meat to our units.

We expanded the scope of our Declaration against use, by producers, of substances such as anti-biotics, especially those presenting the highest risk factors, classified as HPClAs (Highest Priority Critically Important Antimicrobials).

We have standardized, on a global basis, information furnished by suppliers regarding practices adopted for animal welfare. Through this initiative, we have improved communications with this public as well as the management of tools used to monitor day-to-day operations.

PUBLIC COMMITMENTS

Another area of advance for us in 2021 has to do with a series of commitments already undertaken in Brazil which we are now expanding to other countries where we operate:

In management:

Established time frame ¹	Target
By 2024	Undertake audits of all public information regarding animal welfare throughout the company, conducted by third parties.

In preparation of products under company brand names:

Established time frame ²	Target
2023	100% of bovine slaughters undertaken in accordance with NAMI Standards (North American Meat Institute).
2028	100% of suppliers operating in accordance with NAMI Standards.

100%

of bovine slaughters undertaken in accordance with NAMI Standards (North American Meat Institute) by 2023

¹ For all years listed in this and other tables in this chapter, consider the year ending in December

In relation to products under company brand names using protein sources other than bovine (eggs and/or pork):

Established time frame	Target
2025	Use eggs from hens in free-roaming environments.
2026	Acquire pork meat through creation of a collective management matrix (allowing, at most, 28 days for individual management systems).
2026	Acquire pork meat through systems which do not practice animal mutilation (such as mutilation of the ears).
2026	Acquire pork meat through systems which practice animal castration through chemical means that do not cause pain and suffering for the animals (in substitution for traditional surgical castration).
2026	Restrict purchases of pork meat only to suppliers who do not cut the teeth of their animals. In extreme cases, when there is proven incidence of aggressive behavior among animals, the practice may be permitted.
2028	Utilize pork meat from breeders who maintain enriched environments (malleable materials).

In the commercialisation of non-company brands:

Established time frame	Target
2028	Restrict marketing to egg-based products only from suppliers who use free-range hens.

OUR DIRECTIVES

All of these improvements in animal welfare are in line with the principle directive guiding our policies on this question: to assure that animals, to the extent possible, enjoy the five freedoms outlined by the *Farm Animal Welfare Council*, an independent British group which has become the international reference point on this issue. We also follow the legal requirements and regulations set down by governments in the jurisdictions where we work and we meet the demands of our clients in many different countries. Find out more about our practices, described in the Corporate Animal Welfare Policy document available [here](#).



KPIS AND GOALS FOR ANIMAL WELFARE

We closely follow the performance of each of our productive units with the purpose of correcting course, as needed, and advancing consistently toward increased adherence to the best possible practices. To that end, we monitor performance regarding animal welfare on a day-to-day basis throughout our South American holdings via Key Performance Indicators (KPIs). The targets established for each of these, in 2021, were met. The only exception had to do with the total for annual training per unit. Although we exceeded the average number of hours of training, on a global basis, we did not reach the minimum for our unit in Chile, because of restrictions imposed by the Covid-19 pandemic. This was due, in turn, to seasonal factors in that country. Operations are concentrated on the first months of the year, which happened to coincide with the most severe period of social restrictions.

In addition to the results obtained in relation to each of our targets, we can also point to other highlights achieved by our global operations during the period:

- 100% of Marfrig slaughterhouses audited under NAMI Protocol Standard
- US\$ 2.3 million investment in improvements aimed at animal welfare practices

Established time frame	Taarget	2021 performance
Starting in 2020	At least 40 hours of training per year, per unit.	1,275 (64h per slaughterhouse unit)
Starting in 2021	65% of cattle transported on routes of eight hours or less.	88%
By 2025	100% of slaughterhouses (bovine and sheep) audited for compliance with NAMI Animal Welfare Standards.	94%
By 2025	100% of ranches meet at least one criterion for animal welfare under the Marfrig Club Program.	99.5%

3 GREENHOUSE GAS EMISSIONS

The first animal protein company in Brazil to commit to Science Based Targets.

SBT is an international initiative resulting from collaboration with the CDP, the Global Compact under the United Nations, the *World Resources Institute*, and the *Worldwide Fund for Nature*. By this means, we have given the maximum of transparency to the measures adopted for meeting objectives outlined by the Paris Accord: to limit global warming to 2°C. We have even gone beyond that goal: at Marfrig, our target is to keep global warming down to 1.5°C.

Low-carbon husbandry

Our strategy to minimize the impact of our operations on climate change is to promote and support low-carbon husbandry. Through measures adopted covering our entire production chain, we have set ambitious targets for reduction of greenhouse gas emissions by 2035:

68%

of reduction in direct emissions at our own operations (Scope 1) along with those produced by the energy resources we purchase (Scope 2)

33%

of reduction in indirect emissions, throughout our chain of production (Scope 3)



Sustainable production reflected in our products

Our sustainability practices allow us to offer differentiated products to consumers. Such is the case when it comes to our Viva! brand of meat cuts, which come from cattle bred via Integrated Pasture Systems (IPS) and Integrated Forest-Pasture Systems (IFPS).

Meat sold under the Viva! label brings together cattle breeding and forested pasturelands. Under this system of production, based on extensive research and developed by Embrapa, the emission of greenhouse gases by herds is neutralized through absorption by trees. The use of pasturelands interspersed by trees also provides shade for the comfort of the animals. Wood from the forest can serve as an additional source of income for owners. Ranches supplying meat cuts to Viva! under the program are located in the state of Mato Grosso do Sul.

In our operations

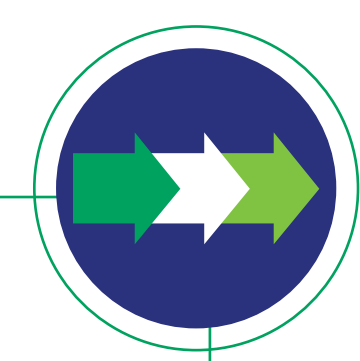


Monitoring

We undertake an annual inventory of our total greenhouse gas emissions, and we improved this practice in 2021: all relevant information was submitted, for the first time, to an external audit undertaken by a third party auditing firm, a procedure which will now become routine. The results of the inventory are available through the CDP questionnaire on Climate Change, available [here](#).

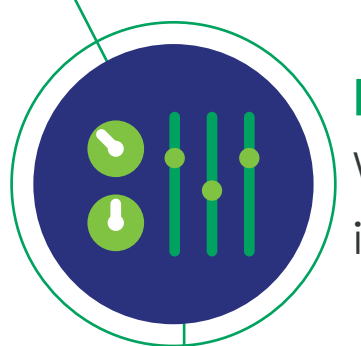


In the production chain



Management Procedures

Engagement with suppliers when it comes to low-carbon production practices. In 2021, more than 120,000 animals came from ranches which declared adoption of systems with the required profile. We have disseminated the protocol's directives via the Marfrig Club, our program of sustainable practices to be observed by breeders. Some examples of the recommendations include these:

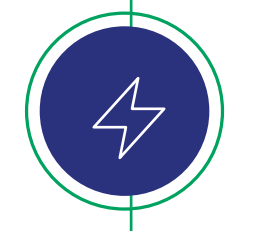


Management Indicators

We monitor performance for all of our operational units in accordance with the following metrics:



1. Percentages attained in pursuit of greenhouse gas emissions reduction targets (Scopes 1+2)



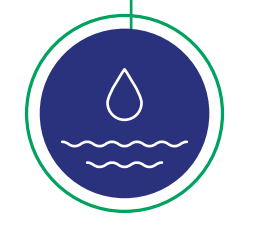
2. Percentage of electric power, demonstrably renewable, as a total of all electric energy consumed



3. Percentage of greenhouse gas emissions reduction compared to targets (Scope 3)



4. Percentage reduction of methane gas emissions from slaughter of animals coming from systems featuring low greenhouse gas emissions



5. Reduction in emissions of Methane at Wastewater Treatment Plants (WTPs)



Offer animals nourishment from pasturelands that are appropriately maintained, a practice which allows for the fixation of carbon in the soil.



Production of animals through systems based on low-carbon emissions, which permits precocious slaughter, thus reducing overall methane emissions.



Investments in improvement of genetic quality, among other instructions.

Our practices in management of greenhouse gas emissions contribute to meeting one of the SDG:

4 NATURAL RESOURCES

For the second year in a row, we obtained an A-rating in water security from the CDP, an achievement obtained by no other company in the entire global bovine protein industry.

This rating, conferred annually by CDP, comes in recognition of best practices adopted in the responsible consumption of water and in the development of procedures, in our operations and throughout our value chain, designed to minimize the risk of shortages, caused by climate change, when it comes to this vital resource. The CDP is a global platform bringing together data on environmental performance as reported by companies and which aims to contribute to investor and government decision-making via the transparent communication of such data. The tool can also be used by companies seeking information from agents within their own value chains, including information about sustainability policies as adopted by their respective operations.

¹ Units located in South America.

What differentiates us when it comes to water consumption management from other companies in the industry:

- **100% of our operational units¹ possess Water Treatment Plants (WTPs).** In 2021, we instituted internal auditing of our installations in order to reinforce quality controls in relation to raw materials utilized in work routines. During the period, 80% of the WTSs submitted to such audits.
- **100% of our plants**, in the various countries where we operate, undertake the measurement of water volumes used.
- **20% reduction in volume of water consumed** in production per metric ton is the **target we are committed to reaching by 2035**, with 2020 performance as the base.
- **Management indicators.** Initiatives and actions adopted to manage water consumption are measured by the following indicators:
 1. Volume of water used per slaughterhouse unit (m³/ton of products)
 2. Volume of water used per slaughterhouse unit (m³/head)
 3. Percentage of water re-used

- **Water re-use.** as producers of foodstuffs, we face certain restrictions regarding water consumption: we cannot re-use water from industrial processes, for example. Consequently, we need to look for opportunities for re-use in areas which do not require potable water. These can include re-use of water for after-work cleaning of filters at Water Treatment Plants (WTPs), for cleaning of outdoor areas around slaughterhouses such as patios and access roads, and for cleaning of water treatment equipment.

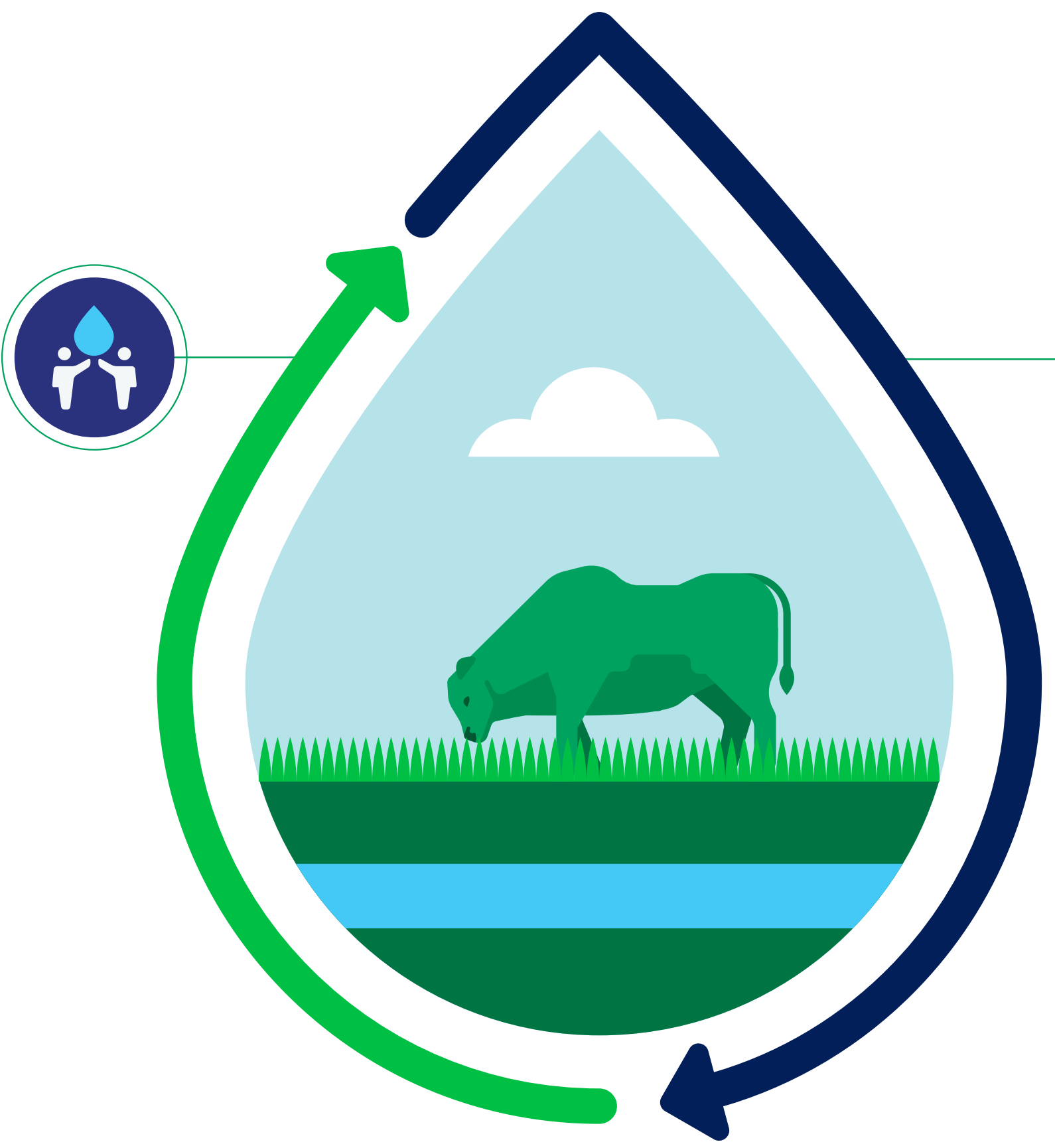
58%
of units in Brazil adhere to water re-use practices.

8%
of units are developing procedures for water re-use.

HOW WE MANAGE WATER CONSUMPTION

In the value chain:

Engagement and best practices. We offer orientations regarding water management to our suppliers via the Marfrig Club Practical Sustainable Practices Guide. Within the guide, readers can find ways to reduce water use in the breeding of animals as well as information about use of raw materials in the feeding of cattle, among other topics.



In our operations



Measuring and monitoring. Routines developed in line with environmental protection norms for the countries in which we operate.



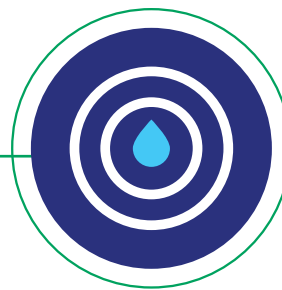
Treatment. Water Treatment Plants (WTPs) in all units, adapted to respective supply, i.e., subterranean or surface, for example, allowing for raw materials, after treatment, to be re-used in accordance with potability standards as set by law in the countries where we have a presence.



Management of water-related risk. Procedures for identification of the quality and quantity of water available at a given workplace, performed with specialized tools¹ for hydraulic analysis of the specific areas.



Hydraulic efficiency. Use of equipment in our operations designed to diminish water consumption, and training of teams to disseminate conscientious use.



Targets. All of our units work within targets designed to reduce consumption as established by agreements covering their respective production volumes.

¹We used, in this process, AQUEDUCT, a tool developed by the WRI (World Resource Institute).

ENERGY

+90% of energy utilized in our operations acquired through the free market¹

Meeting our energy needs through migration to the free market has been a constant in our strategy. In 2021, we were able to supply all of our units in this way; contracts permit us to choose suppliers freely and, consequently, we can increasingly use cleaner sources such as small hydroelectric suppliers or solar or wind-power sources. This strategy also contributes to the management of risks when it comes to price variations, since delivery of power is fixed through previously set contracts.

The search for **more sustainable energy sources**, in substitution for traditional ones, is a priority for us. In Uruguay, for example, we own a wind-power park, which generates enough energy to meet 30% of the demand, on average, at our Tacuarembó unit. In the United States, we use bio-methane as a fuel for our boilers. This gas, which is derived from the purification of bio-gas produced from organic residues such as cattle manure, also contributes to the reduction of Scope 1 gas emissions, since methane carries a greenhouse effect 28 times greater than that of carbonic gas. In this manner, our operations double their advantage.

¹ Data referring to operations in Brazil

Measures adopted to manage water consumption include the following:

- ⦿ **Rationalization of consumption**, dissemination, among our employees, of best practices through training and continuous communications.
- ⦿ **Adoption of energy efficient equipment** in our operations.
- ⦿ **Indicators** to help monitor energy consumption continuously, allowing us to seek improved per-unit productivity. We use two metrics:
 - ⦿ KW/h per metric ton of product
 - ⦿ KW/h per head of cattle

Other advances in energy management:

In 2021, we set our own target for renewable energy via the CDP (2020 cycle). By doing so, we reinforced our commitment to seeking renewable sources of energy while also reducing overall energy consumption in our operations.

We also began acquisition of renewable energy certificates to compensate for carbon emissions from our operations. In 2021, we structured a plan of action in this area which will be executed in 2022.

Through practices and measures designed to guide energy consumption, we have contributed to meeting four SDG:





Performance Management

Our practices when it comes to the treatment of effluents and residues are tracked via indicators that allow us to observe performance for all of our units as we seek to constantly improve our methods. Some of the metrics we use include the following:

1. Wastewater Treatment Quality Index (WWQI)
2. Quantity of non-dangerous residues generated by animal slaughter
3. Quantity of non-dangerous residues generated per metric ton of production procedures



EFFLUENTS AND RESIDUES

Effluents

Utilizing water in a responsible way in our operations includes taking care of water at the source. For that reason, we have sought, every year, to improve our practices in relation to the disposal of effluents, with the objective of minimizing the impact of our operations on the environment.

To that end, we are using a new technique, to an ever greater extent, in our operations: **fertigation**. Instead of disposing of water after using it in our productive processes, we put the effluents to use in irrigation of productive areas at farms near our plants. By re-utilizing the organic material and nutrients obtained through the long industrial process, this technique can improve soil and growing conditions for farmers, helping them to reduce their own use of conventional fertilizers.

16% of our units in Brazil have already integrated fertigation into their work routines. Another 16% are in the final phases of implementation while an additional 16% are now finalizing environmental studies and technical plans.

Routines such as these, combined with others adopted by our operations, have the objective of guaranteeing the correct disposal of effluents:

100% of our units boast Wastewater Treatment Plants (WTPs), giving them the autonomy needed to treat the effluents generated in the various stages of production.

R\$ 30 million in investments to modernize WTPs at our operational units in Brazil. By using these biological and technological means of segregation, we have advanced in adoption of efficient procedures for the treatment of effluents.





Solid Waste Residues

We have adopted various practices to guarantee that solid waste generated by our operations is disposed of properly. All of the procedures adopted for this purpose observe the demands of the localities in which we operate and follow directives established under the National Policy on Solid Waste (PNRS). Among other things, the policy seeks to share responsibility for the correct disposal of waste while encouraging recycling. An example of the practices described in the document is that of environmental compensation for residues left by consumer packaging. In Brazil, we have developed the practice of obtaining recycling certificates from companies which specialize in the collection and negotiation of recyclable materials; there are also cooperatives known for the practice of reverse-logistics. Other practices adopted by our operations for the management of solid waste include the following:

ENVIRONMENTAL MANAGEMENT SYSTEM

All of our units operate under the Environmental Management System, which, among other practices, guides warehousing, transportation, and disposal of materials, including those denominated as dangerous, such as certain chemical substances.



Value Chain

Best practices to minimize the impact of effluents and solid residues on the environment are not limited just to our own operations. We are also engaged with our suppliers in adopting routines with this objective; we do so through our Marfrig Club Guide to Sustainable Practices. The guide offers orientations about the treatment of effluents, the protection of water sources, and the care needed to avoid water contamination from residues generated by ranches, among others. More information [here](#).

Our practices related to management of effluents and solid waste residues have contributed to meeting two SDG:



6 SOCIAL RESPONSIBILITY

Social responsibility is the principle that drives us to promote **sustainable husbandry**. To preserve and protect bio-diversity in Brazil, especially in the Amazon and Cerrado biomes, also means promoting the socio-economic inclusion of producers, including the re-integration of cattle breeders blocked because of governance issues but who have made the effort necessary to comply with our sustainability criteria.

+2,000 ranches were re-integrated in 2021 through the efforts of the Marfrig Verde+ Program, which helped ranchers return to their operations by conforming with our socio-environmental commitments. The figure represents 26% of active suppliers during the period.

Inclusion of suppliers – one leg of the tripod that supports Marfrig Verde+ alongside production and conservation – delivers a major positive impact because it does not just speak to the problem of environmental protection. By blocking suppliers because of irregularities in their operations we provoke a decline in rancher earnings, which produces a knock-on effect not only in terms of degraded productive practices but also in the form of unemployment for workers and a falloff in family incomes, factors which damage local economies.

Another factor which permeates our operations is **respect for human rights**. We repudiate the use of child labor and labor analogous to slavery. We insist on respect for decent conduct not only in our own operations but also in those of our suppliers and we do so from the moment we sign a contract; and we maintain that commitment throughout our business relationships.

We are aware of the social impact produced by our operations. Consequently, parallel to our work with a long chain of suppliers, we also seek to contribute pro-actively to the socio-economic welfare and overall welfare of the communities in which we have a presence. We have developed a number of programs, in the different countries where we operate, including the Marfrig Institute, and a partnership we maintain with *Hospital de Amor* (the Love Hospital) in Brazil, along with campaigns for charitable donations undertaken in other countries.

Marfrig Fazer e Ser Feliz Institute (The Marfrig Be Happy Institute)

As part of our contribution to the communities in which we have a presence, the Company has maintained *Marfrig Fazer e Ser Feliz* (the Marfrig Be Happy Institute) since 2011. With installations in three towns where Marfrig has facilities – Promissão (SP), Bataguassu (MS), and

Chupinguaia (RO) – the non-profit entity has developed programs for some 150 socially vulnerable children between the ages of six and eleven who are matriculated in public schools. Activities are designed for after-school hours from Monday through Friday and include things like refresher studies and computer use as well as crafts and Bible studies. In 2021, because of the Covid-19 pandemic and in response to social distancing rules, activities at the Marfrig Institute were suspended.

Hospital de Amor (Love Hospital)

Since 2017, we have maintained a partnership with the *Hospital de Amor* (Love Hospital), a center for oncological excellence located in Barretos (SP). We furnish all the meat products needed for the hospital's daily functioning; the hospital serves 16,000 patients per month. To make our impact even greater, we created a Program called *Agro contra o Câncer* (Agriculture against Cancer) so that ranchers can also make their contribution to the hospital's functioning. For every animal slaughtered, our suppliers donate R\$ 1.00, funds which are used to maintain treatment and to help prevent cancer through early diagnosis, a service offered free by the Unified Health System (SUS). In 2021, our Montana brand donated a total of 91 tons of meat to the institution.



PERSPECTIVES

Our journey toward sustainability continues. Guided chiefly by the commitments we have assumed under the Marfrig Verde+ Program, we have established clear targets to be met over both the short- and the long-term in order to assure sustainable husbandry within an ambience of low-carbon production. By 2025, our supply chain in the Amazon will be both sustainable and free from deforestation. We are working toward achieving the same result in the Cerrado and other biomes by 2030. We have made rapid progress in this direction, reflecting the success of the strategies we developed in partnership with civil society and other private actors, especially cattle breeders.

As mentioned previously, we have also evolved in the area of best practices and sustainability management in all of our operations – independent of location in the United States, Brazil, Argentina, Chile, or Uruguay – through policies, criteria, and targets in line with the demands of each of the countries where we have a presence and each of the markets which purchase our products. We have formalized public commitments to reduce greenhouse gas emissions generated by our plants, and to rationalize our use of water and energy; we have also evolved when it comes to practices related to animal welfare and the disposal of effluents and solid wastes.

Meanwhile, we are maturing in our routines and in the use of the management indicators that help us achieve our goals. Through such indicators, we are able to measure and track our operational performance, making changes and improvements, as needed. Such procedures allow us to improve transparency in our accounting and to properly evaluate our performance in terms of ESG (Environment, Social Responsibility, and Corporate Governance) goals.

The challenges we have taken on are not trivial. To surmount them, we can count on the support of partners such as our suppliers, organizations of civil society, other private sector actors such as financial institutions, and governments. It is a source of great satisfaction for us to be as close as we are to these varied publics as we seek definitive solutions to the critical questions affecting our objectives. The results are consistent. We can achieve them because our 30,000 employees, spread over several countries, are confident and engaged with our strategies, despite the pandemic conditions we currently face. The trajectory we must follow is clear. We will continue to follow it in the hope that, shortly, the coronavirus will become a thing of the past.



02

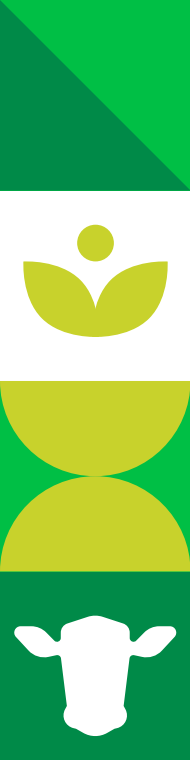
03

04

05

06

07



01

02

03

04

05

06

07

CORPORATE INFORMATION

MARFRIG GLOBAL FOODS S.A.

Avenida das Nações Unidas, 14.401 Edifício Jequitibá
Chácara Santo Antonio – CEP 04730-090 – São Paulo – SP
Phone: + 55 11 3792-8600

CREDITS

COORDINATION

Sustainability Office

Phone: + 55 11 3792-8600
sustentabilidade@marfrig.com.br

TEXTUAL AND GRAPHIC PRODUCTION

Aiurú ESG

Text: Soraia Duarte

Graphic Design and infographics: Multi Design

