



SUSTAINABILITY REPORT
2020-2021 | 2021-2022

zilor **Biorigin**
Energia e Alimentos Arte em Ingredientes Naturais

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SUSTAINABILITY REPORT 2020-2021 | 2021-2022



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INTRODUCTION

For 75 years, completed in the 2021/2022 harvest year, Zilor has been producing clean, renewable energy and natural, healthy food to supply Brazil and the world in a sustainable way. In this eighth biennial edition, the Sustainability Report aims to communicate, to all audiences, the way in which the Company has evolved in its governance and socio-environmental management processes to generate value and contribute to environmental, social, and economic development.

This document reports Zilor's ESG¹ performance, a multinational in the sugar-energy sector that diversifies its portfolio into two business areas: Agroindustry and Biotechnology, based on the Biorigin Natural Ingredients business unit. In the first, the Company operates in the cultivation and processing of sugarcane for the production of sugar, ethanol, and clean and renewable electricity. Biorigin Natural Ingredients specializes in biotechnological processes for the production of 100% natural ingredients for the human food and animal nutrition (Feed) industries.

Since the 2006/2007 harvest, Zilor has published its Biennial Sustainability Report in line with the best market practices and in accordance with the principles and premises of the Global Reporting Initiative (GRI), organization that has established one of the most internationally recognized sustainability communication standards. This report has been prepared in accordance with the GRI Standards: Essential option.

1. ESG is the acronym in English that refers to the processes and practices of organizations for the management of Environmental, Social, and corporate Governance risks and impacts related to their activities and businesses.



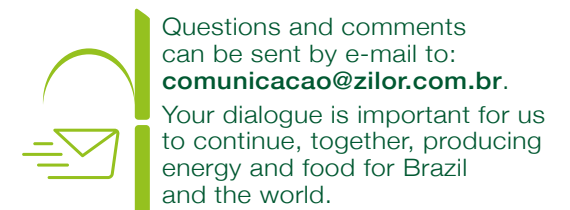


In this cycle, the report's priority topics were updated through a materiality process conducted in December 2021, with 160 participants. In addition, the document began to incorporate, for the first time, the indicators proposed by the Sustainability Accounting Standards Board (SASB) for the Agricultural Products and Biofuels sectors. This advance contributes to the alignment of Zilor's accountability to the most modern reporting parameters for the investor market, in accordance with ESG guidelines.

All data and information presented refer to harvest years 2020/2021 and 2021/2022 and were determined by an internal and multidisciplinary working group, with the approval of the Executive Board and the Board of Directors. As of this edition, the process of integrating information regarding Biorigin's production unit, located in the United States, begins, in order to give greater scope to the impacts and opportunities of the Company's business model.

Zilor remains committed to transparency and sustainable growth, improving the report and communication with all links in its chain with each edition.

Have a good read!



MESSAGE FROM THE BOARD

With 75 years of experience in the sugar-energy sector, completed in the 2021/2022 harvest year, Zilor is a Brazilian multinational that actively contributes to the sustainable development of the municipalities where its agro-industrial and biotechnology units are installed. The partnership with local sugarcane producers and communities is an expressive mark of the way in which the Company, since its foundation, has conducted its business with a focus on generating environmental, social, and economic value.

Along this trajectory, the challenges and opportunities have been changing and becoming more relevant. Climate change, the opening of the energy market for renewable generation from biomass, recognition of the importance of ethanol for the decarbonization of the national energy matrix and the growing demand for natural ingredients for human food and animal nutrition are some examples of transformations that impact the business directly.

To respond to this scenario and maintain competitiveness, Zilor built a solid and agile corporate governance model. The establishment of this structure to support decision-making, managing risks and directing investments to capture opportunities is one of the main developments that

led the Company to achieve positive results in recent harvests and to reach a new level of governance and performance in its story.

The presence of external and independent members on the Board of Directors, the review and expansion of internal policies and regulations and the construction of a robust plan of internal and independent audits are some of the developments that Zilor has made in recent years. Also noteworthy is the performance of the three Committees that advise the Board of Directors, with analyzes and recommendations on strategic topics of great impact on the ability to generate value.

The Finance, Audit and Risk Committee is responsible for developing and monitoring the Company's risk management and finance policies. It is incumbent upon the Strategy and Innovation Committee to support the Board of Directors in matters related to long-term strategic guidelines and actions and initiatives concerning research and technological innovation. The People Management and Sustainability Committee directs the way actions and investments related to the development of Zilor's workforce are conducted, as well as the analysis of sustainability issues, evaluating trends, risks, and opportunities in the ESG sphere - acronym in English that defines the management processes of Environmental, Social and corporate Governance aspects.

The performance of the three Committees, which are coordinated by independent external board members, allows Zilor to develop its growth strategy in line with the most current expectations and demands of global society.

In conjunction with the search for maximum efficiency and productivity in business, the Company works to increasingly contribute to environmental preservation and social development. A responsible and sustainable way of producing bioenergy and natural food, which was born from the shareholders' vision and has been strengthened for over seven decades.

At Zilor, everyone is committed to the continuity and perpetuity of this positive impact. The transformation of sugarcane into sustainable energies and natural ingredients for human food and animal nutrition drives investments in technology and innovation, offering natural solutions for the planet and a cycle of growth and prosperity for shareholders, customers, Agricultural Partners, suppliers, employees, and local communities.

Francisco Amaury Olsen
Chairman of the Board of Directors

MESSAGE FROM THE CEO

In the biennium between 2020 and 2022, we overcame major challenges and celebrated important achievements for Zilor. We completed 75 years in the 2021/2022 harvest year as a Company that is renewed every day to grow and generate value for all stakeholders, preserving the values of our Corporate Culture and the principles of ethics, respect for people and care for the environment, always present in our trajectory.

In the 2020/2021 and 2021/2022 harvests, we materialized several projects that generated operational and results improvements. In both cycles, total productivity, measured by the ton of cane per hectare (TCH), showed an increase in relation to previous harvests. Biorigin's production volumes of sugar, ethanol and natural ingredients also grew, as a result of the efficiency actions we have implemented in our industries.

As a result of these developments, we achieved growth in total net revenue in the two harvest years (R\$ 2.4 billion in the 2020/2021 harvest and R\$ 3.2 billion in the 2021/2022 harvest) and in adjusted EBITDA (R\$ 750 million and R\$ 1.1 billion, in the two periods, respectively). We also had a

significant increase of 65% in net income and a significant reduction in the Company's leverage over the last four years: the net debt/adjusted EBITDA ratio went from 5.00x in March 2019 to 1.26x in March 2022.

These achievements took place even in a very adverse external scenario for operations in the fields, with challenging weather conditions, such as frosts and droughts. The Covid-19 pandemic, since 2020, has generated instability in markets and logistics chains, in addition to having demanded even greater care to protect people's health while keeping our essential operations running. Thus, the discipline to fulfill all commitments, the engagement of employees and partners, better production planning and the strengthening of our management skills allowed us to take advantage of more favorable commodity prices.

Our remarkable performance is also the result of our business diversification strategy to reduce the impact of fluctuations in commodity prices and increase predictability in cash generation. Biorigin, which exports 90% of its production to more than 60 countries, is one of our main growth drivers.

Fabiano Zillo
Zilor CEO





We innovated in financing mechanisms, raising **R\$ 100 million** via BNDES RenovaBio and new modalities for purchasing sugarcane from Agricultural Partners

In the last biennium, the business unit was impacted by the effects of Covid-19, which affected the global logistics chain, in addition to geopolitical instabilities. To respond to this scenario, we implemented a series of actions aimed at better cost management and negotiations for fixing sea freight. On the other hand, changes in consumption habits and patterns in the same period increased the demand for healthy food and greater care for domestic animals, enhancing opportunities for Biorigin products, such as ingredients that source vitamins and proteins, which promote health and well-being and those that improve pet performance.

Another diversification lever is the renewable electricity export business. We won the right to sell and operate in auctions promoted by ANEEL and we will invest approximately R\$ 550 million to expand the cogeneration capacity in the São José units, starting in 2023, and Barra Grande, in 2024. The installation of additional turbines will increase the boiler efficiency, allowing the growth of energy generation with the same amount of biomass, in addition to the reduction in steam consumption in the plants.

Along with the evolution of all businesses, we led a transformation of our corporate governance and risk management model, adopting even better practices for conducting business and investments. Supported by internal control processes and efficient cost management, we made progress in optimizing the strategy for raising funds and allocating financial capital.

We raised, for example, R\$ 100 million through the BNDES RenovaBio financing line, linked to the achievement of carbon emission reduction targets. The funds will be used to improve our industries' energy and environmental efficiency. Funding, and issuance of securities in the 2020/2021 and 2021/2022 harvests totaled around R\$ 780 million. These operations contributed to strengthen the Company's cash position, which ended the 2021/2022 harvest at R\$ 1.8 billion.

We also created the Agricultural Partners Financing Program, an innovative way to encourage sugarcane producers who are part of Zilor's Agricultural Partnerships Program, with whom we have a long-term relationship and mutual trust. The program is made possible through a Credit Rights Investment Fund (FIDC), with the funding of R\$ 120 million.

We also structured the ATR (Total Recoverable Sugar) Future Price Fixing Program for Partners, a complement that aims to improve the ecosystem with Partners with a tool that mitigates the risks of market price fluctuations and provides more predictability to the flow of cash, contributing to strengthening the sustainability of Agricultural Partners.

We have also strengthened the ESG pillars that have been part of our values since the beginning of our activities and have been consistently maturing. With the support of a consultancy specializing in economic sustainability, we carry out a diagnosis of our practices and a benchmarking study with the best market practices. Thus, we identify priority themes for our management and disclosure of results and developments in a continuous and transparent manner, through quarterly reports aimed at the market.

To monitor this project, we created an internal multidisciplinary committee dedicated to addressing the issues and implementing improvements, which have been unfolding into programs with goals and which will be carried out in accordance with the Company's level of maturity.

In this sense, one of the most important issues on which we act is the safety of our employees, a non-negotiable value of our Company practiced in our daily lives through structured programs to mitigate risks and prevent accidents. During the most critical moments of Covid-19, we adopted strict safety protocols, adapted, and digitized our processes, supported communities in the municipalities where we operate and managed to navigate the most acute moments of the health crisis with determination.

In addition to our operations, we accelerated the consolidation of our private social investment strategy, focused on supporting education, culture and sport. We carried out our first selection process within the scope of the Aprender Sempre (Always Learn) Program to encourage projects supported by Income Tax, with the training of proponents from the communities based on the selection of

26 initiatives and a total contribution of R\$ 4.3 million. In the 2021/2022 harvest year, R\$ 5.2 million was invested, including owned and incentivized resources, primarily in education projects in the communities where we have industrial operations.

The advance of vaccination against the coronavirus, in the second half of 2021, allowed the resumption of productive activities, in a global socioeconomic context significantly oriented towards sustainable development. In this environment, renewable energies and the decarbonization of the economy are central themes to promote the fight against climate change.

On the other hand, the uncertainties in the global economy, especially in the China and Asia markets, continue to be a challenge for all businesses. Therefore, attention to cost management, efficiency and product quality are pillars that we must continually strengthen.

We arrived at the 75 Harvest as a result of the delivery capacity of a team focused on innovation, operational efficiency, and



We made **progress on the ESG agenda** with an internal multidisciplinary committee and the identification of priority topics for management and accountability

sustainable growth. Our trajectory is marked by the entrepreneurship of our founders, by overcoming the challenges of our teams and by the desire to transform the world from clean and renewable energy and the food and natural ingredients we produce.

We continue together, with the conviction that we are the energy that takes us to the future and our activity contributes to three of the greatest challenges on the planet: food safety, energy safety and climate safety.

Thank you all!

Fabiano Zillo
Zilor CEO

MATERIALITY MATRIX

The preparation of content and information related to Zilor's ESG performance is based on the materiality matrix, which lists the most relevant topics for the assessment of stakeholders and the management of the socio-environmental impacts, risks, and opportunities of the Company's business model. In 2022, Zilor completed a new study to identify and consolidate the Sustainability Report's material topics.

Guided by the GRI principles, the process involved the engagement of internal and external audiences through an online survey, open to any interested party, and qualitative interviews with representatives of the prioritized stakeholders (financial institutions, customers, distributors, sector entities, public power and experts).

The most current trends for ESG management and topics of interest to the sectors in which it operates were also evaluated, through the analysis of sector studies, reference frameworks in sustainability and benchmarking with customers and peer companies. Throughout this work, the specificities of Zilor's business in the Agroindustry and Biotechnology divisions were considered.

In the end, the materiality matrix was consolidated with six Zilor corporate themes. Two other topics are specific – one concerns only Agroindustry operations and the other is related to the Biorigin Natural Ingredients business unit –, totaling eight material topics.

Materiality Matrix Topics (March 2022)



Material topics

STRATEGY AND COMPLIANCE

It covers the business governance, in order to guarantee an ethical, integral performance, in compliance with the legislation. It also includes the expectations of stakeholders for clarity in decision-making and the Company's strategic direction and the alignment of assumptions and guidelines for the two business divisions.



INNOVATION AND PRODUCTIVITY

It brings together the operational performance of the two divisions and the innovation initiatives applied to the activities. It encompasses the incessant search for improved performance and productivity, from the field to the industry.



CLIMATE CHANGE

Perspectives for mitigation and adaptation to climate change. The first highlights initiatives to reduce fuel consumption, expand the presence of renewable energy sources and, thereby, reduce greenhouse gas (GHG) emissions associated with operations. In the second, the sector's central topic is ethanol's role in the value chain's decarbonization.



WATER RESOURCES

Company impacts on the availability and quality of water resources in the regions where it operates. Since water is necessary for both agricultural and industrial activities, there is concern about the impacts associated with this consumption and the practices adopted by the Company to reduce its water demand.



RELATIONSHIP WITH COMMUNITIES

It covers hiring people from communities and promoting social investments that contribute to reducing inequalities and promoting sustainable socio-economic development. It also addresses the focus so that operations do not affect the rights of vulnerable communities.



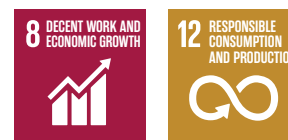
LABOR PRACTICES

The topic focuses on the qualification of teams to work with mechanized agriculture and industrial technological innovations. It also covers occupational health and safety issues.



SUPPLIER MANAGEMENT

It covers the monitoring of the sugarcane supply chain in order to ensure the environmental and labor compliance of these partners in Zilor's business chain.



PRODUCT DIFFERENTIATION

It deals with Biorigin's efforts to guarantee the traceability of its renewable origin products and appropriate marketing and labeling practices, adding technology to its products and differentiation for its customers.



ESG Diagnosis

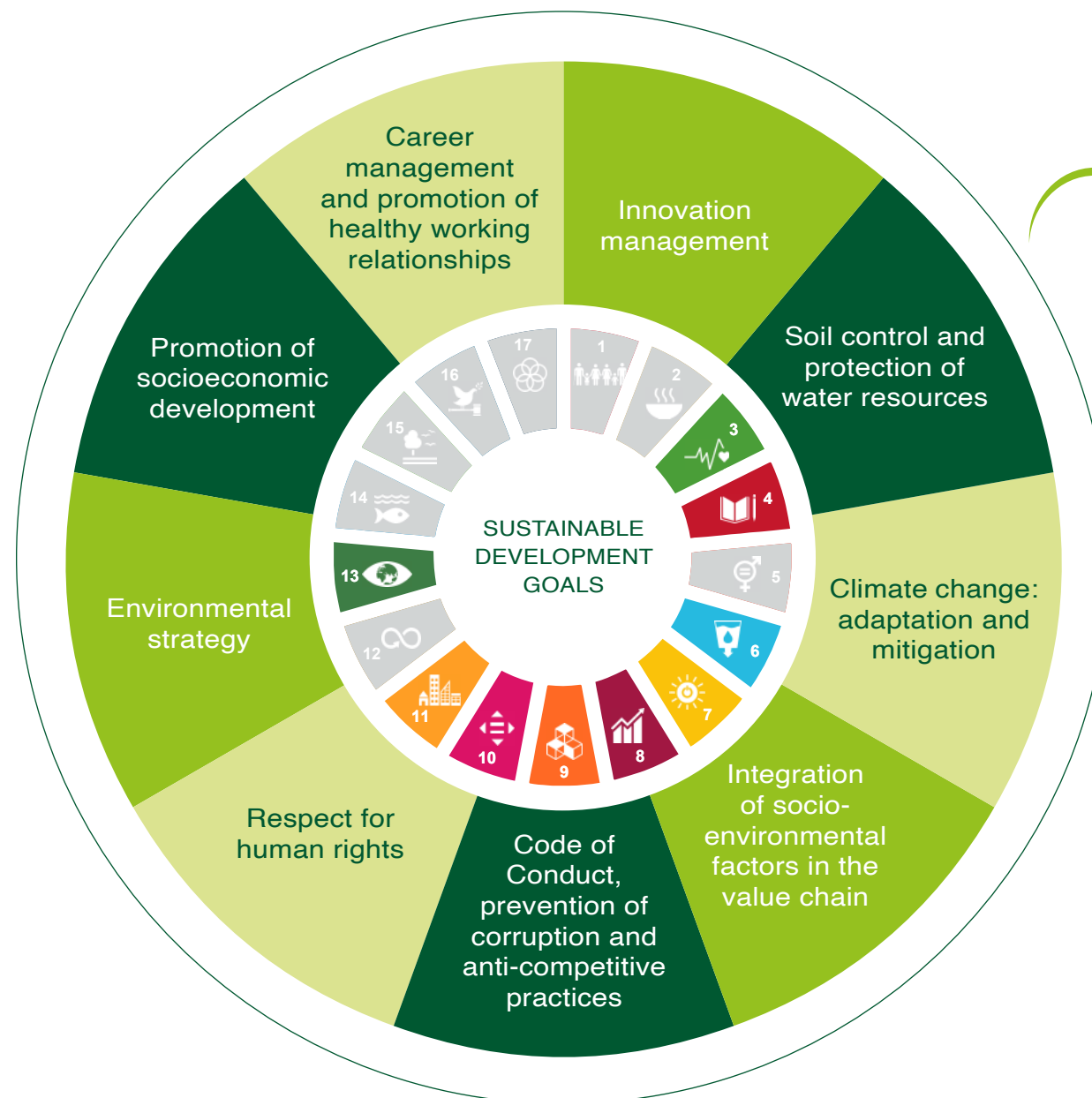
In the 2021/2022 harvest, with the support of a consultancy specializing in economic sustainability, the Company underwent a diagnosis process of ESG actions and, with a study carried out in comparison with the best market practices, nine topics and indicators classified as “priority” and “important” were identified, in line with the material topics reported by Zilor in its Sustainability Report and listed in the diagram at the right.

These topics are related to the Sustainable Development Goals, or SDG, (3, 4, 6, 7, 8, 9, 10, 11 and 13) and will be addressed, with implementation of improvements, monitored, and reported on a quarterly basis, alternating by topics throughout the Harvest, with transparency for monitoring results and developments.

With the support of an internal multidisciplinary committee, the topics are discussed and taken to the top management for follow-up. This work has been unfolding in a program that is being built and will have goals and initiatives that will be implemented according to the Company’s level of maturity.

Zilor is also evaluating the topics identified as priorities for reporting, in order to contribute to the measurement and evolution of the Company’s sustainable goals in a transparent manner. The complete and detailed themes and indicators will be reported in the next Zilor Sustainability Report, covering the 2022/2023 harvest year, and will be published on the Company’s website in the “Sustainability” section (www.zilor.com.br).

“PRIORITY” AND “IMPORTANT”
ESG TOPICS IDENTIFIED





Zilor 75 years

Zilor's history began in 1946, in the municipality of Macatuba (São Paulo), and was marked by innovation and business transformation. Founded by entrepreneurs from the Zillo and Lorenzetti families, the Company played a fundamental role in the development of the country's sugarcane culture and in the professionalization of sugar, ethanol, and electric energy production in the interior of the state of São Paulo.

In the 2021/2022 harvest, Zilor celebrated its 75th anniversary with a series of initiatives that recalled the beginning and consolidation of this successful trajectory. A pioneering journey that has several examples of how socio-environmental responsibility and sustainability have always been part of the founders' vision and continue to inspire the business conduct.

The 75th anniversary celebration program included more than 25 actions for employees and communities in the municipalities where the Company's units are located. One of the many events held, with the presence of the community, senior leadership, shareholders, employees, authorities and guests, was the Lima Family show. In partnership with the Ministry of Tourism and through Incentive Law resources, the performance of the musical group of great recognition in Brazil was promoted at Teatro Adelia Lorenzetti, in Lençóis Paulista (SP).

The celebration schedule ended with the launch of the Zilor Virtual Museum, an online platform that brings together the milestones of this history and details the Company's trajectory of growth and innovation.

Learn more about Zilor's 75th anniversary celebrations

Click here and check out the celebration event, with a concert by the Lima Family.

Click here to see more about the Company's history and how the Zilor Virtual Museum was created.

Click here and access the Virtual Museum to learn more about the Company's history.



Uma história
escrita com
muito amor
e trabalho



Navegue pelo
Museu Virtual
em 360°



Compatível com
computador,
celular e tablet



Use o mouse e a
setas para nav
no computa





In the 1950s, Zilor was the first sugar producer to employ women in packaging operations. In 1998, it started a voluntary program of reforestation in permanent preservation areas and, 20 years ago, it was a pioneer in the sector by launching a project to issue carbon credits certified in accordance with the Kyoto Protocol rules.

Also two decades ago, the Company created the Agricultural Partnership Program, an innovative relationship model with sugarcane suppliers. In 2018, Biorigin Natural Ingredients achieved Bonsucro certification (learn more on page 44) for the entire chain of custody – an unprecedented feat for a company in the Biotechnology segment.

Harvest after harvest, business evolution, innovation and commitment to responsible action were strengthened by the ethical values and appreciation of the human being that characterize Zilor's Corporate Culture. A way of working that is increasingly focused on generating positive impacts for customers, employees, suppliers, shareholders, and communities.



Zilor

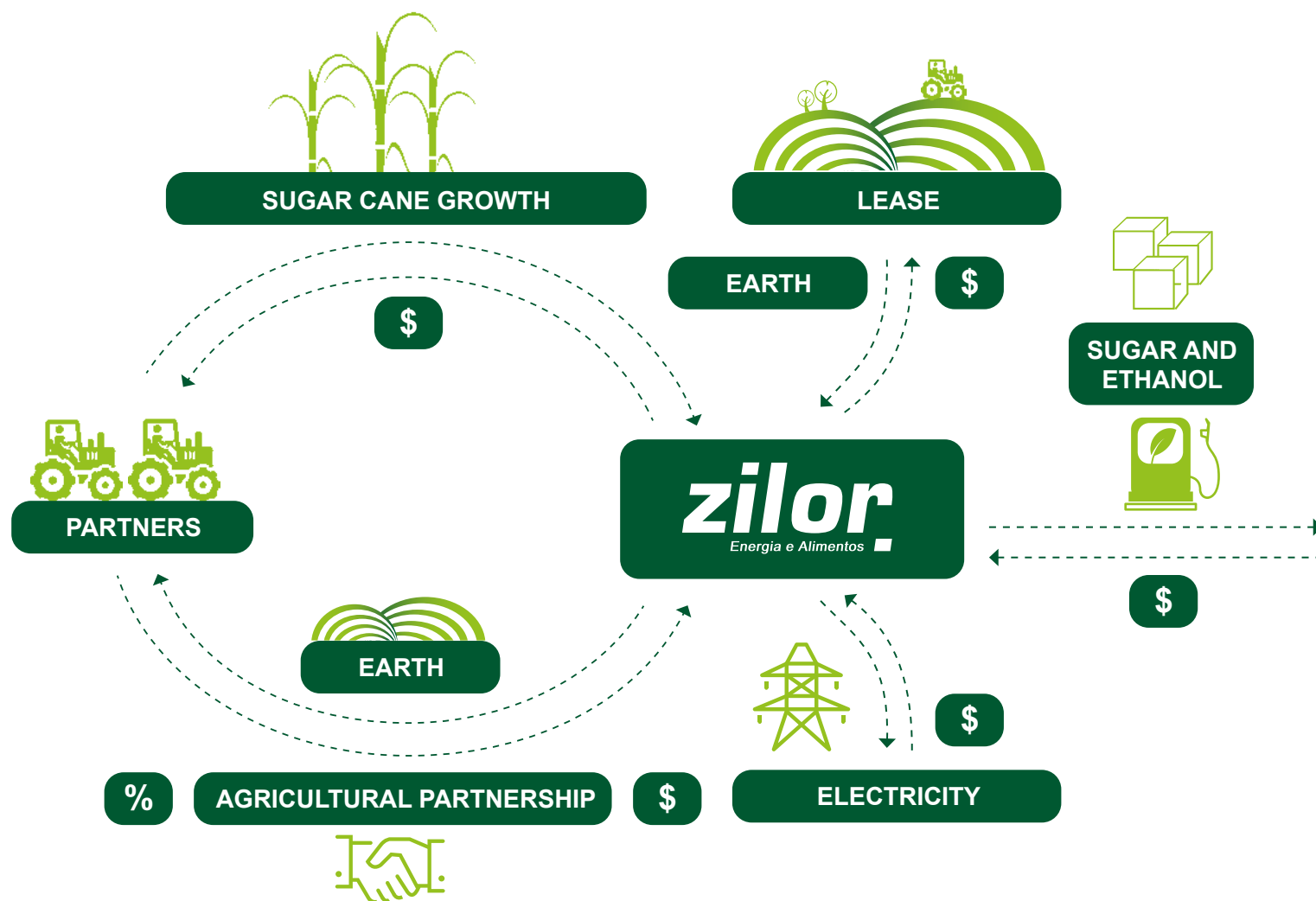
Zilor is a privately held Brazilian multinational that, since 1946, has aimed to contribute to the positive transformation of society through natural and sustainable solutions. The Company, headquartered in the city of Lençóis Paulista (State of São Paulo), has two business divisions – Agroindustry and Biorigin Natural Ingredients – which produce clean energy and natural foods from sugarcane, with a responsible and sustainable performance from agricultural production to customer service.

BUSINESS MODEL OF THE AGROINDUSTRY DIVISION

Agroindustry, dedicated to the production of sugar, ethanol, and clean and renewable electricity from sugarcane, has three industrial units, located in the interior of the state of São Paulo: Barra Grande (Lençóis Paulista), São José (Macatuba) and Quatá.

All sugar and biofuel production is sold by Copersucar S.A., the global leader in the market for these commodities. Zilor is also a shareholder in Copersucar, with a 12.2% stake in the company's share capital.

The electricity generated from sugarcane bagasse is used to supply industries and the surplus is exported to the National Interconnected System (SIN), contributing to increasing renewable sources in the national energy matrix. The amount of energy exported annually is enough to light a city with more than 500,000 inhabitants. Based on the new investments in electricity, the Company will increase its generating capacity by 60%, with two expansion projects at the São José and Barra Grande units, with start-up scheduled for 2023 and 2024, respectively.



All of Zilor's sugar and ethanol production is sold by Copersucar S.A., the global leader in the market for these commodities.

New investments **will expand** the generation capacity of clean and renewable electricity by **60%**



The Biorigin business unit, created in 2003, specializes in the production of 100% natural ingredients through biotechnology processes. Its diversified product portfolio serves industries in the human (Food) and animal nutrition (Feed) sectors.

Biorigin production takes place in four industrial plants – three in Brazil, located in the state of São Paulo, and one in the United States. The unit also has a distribution center and a sales office in Belgium. With this structure, around 90% of its products are exported to more than 60 countries, serving the North American, European, Asian, and Latin American markets.

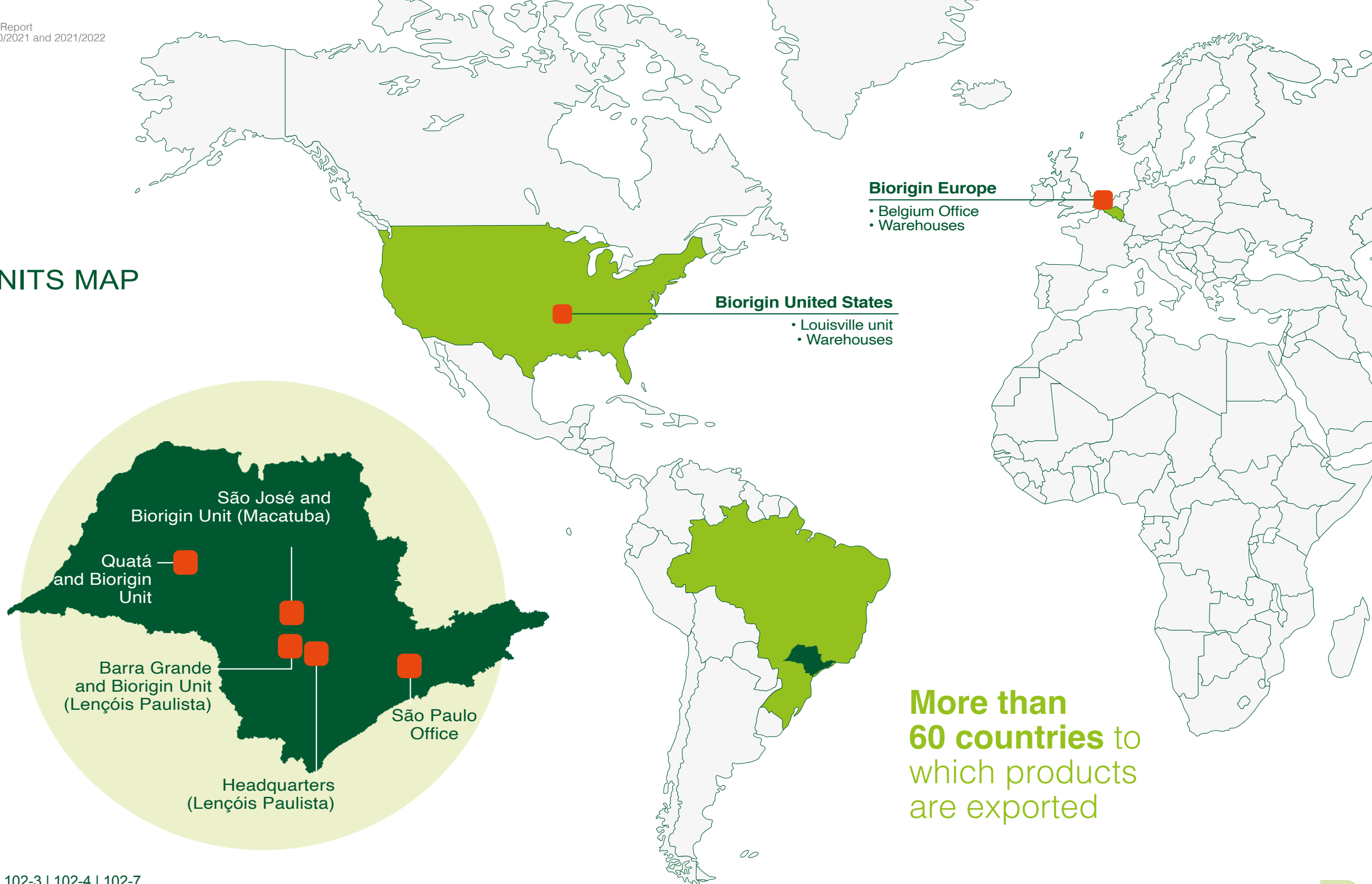
Highlights of the Biorigin Natural Ingredients division

Its own
**R&D
Center**

Pure culture
factory
Selection of yeast strains
for each product

Partnership with universities and
biotechnology research
institutes

UNITS MAP



More than 60 countries to which products are exported

CORPORATE GOVERNANCE

Zilor's strategy, based on business diversification and the search for maximum operational efficiency, is materialized with a corporate governance structure and management processes that follow the best market practices. The Company's decision-making process has been continuously strengthened to ensure the execution of the strategic plan and value generation in the long term.

The guidelines are established by the **Board of Directors**, made up of ten members, including three external members: the Chairman of the Board and two independent advisory board members. Among its attributions, the Board of Directors, which holds monthly meetings, has the role of evaluating the implementation of management policies and processes in the two business divisions, approving investment plans, and establishing the direction of operations considering risks and opportunities for Zilor.

Therefore, the Board of Directors has the support of three **Advisory Committees**, responsible for in-depth analyzes and evaluations and for making recommendations for deliberation. Each Committee has its own internal charter, which

defines roles and responsibilities, and is coordinated by an independent director.

- The Finance, Audit and Risk Committee is responsible for developing and monitoring the Company's risk management and finance policies, as defined by its name. The Committee regularly reports to the Board of Directors on its activities.
- It is incumbent upon the Strategy and Innovation Committee to support the Board of Directors in matters related to long-term strategic guidelines and actions and initiatives concerning research and technological innovation.
- The People Management and Sustainability Committee directs the way actions and investments related to the development of Zilor's workforce are conducted, as well as the analysis of sustainability issues.

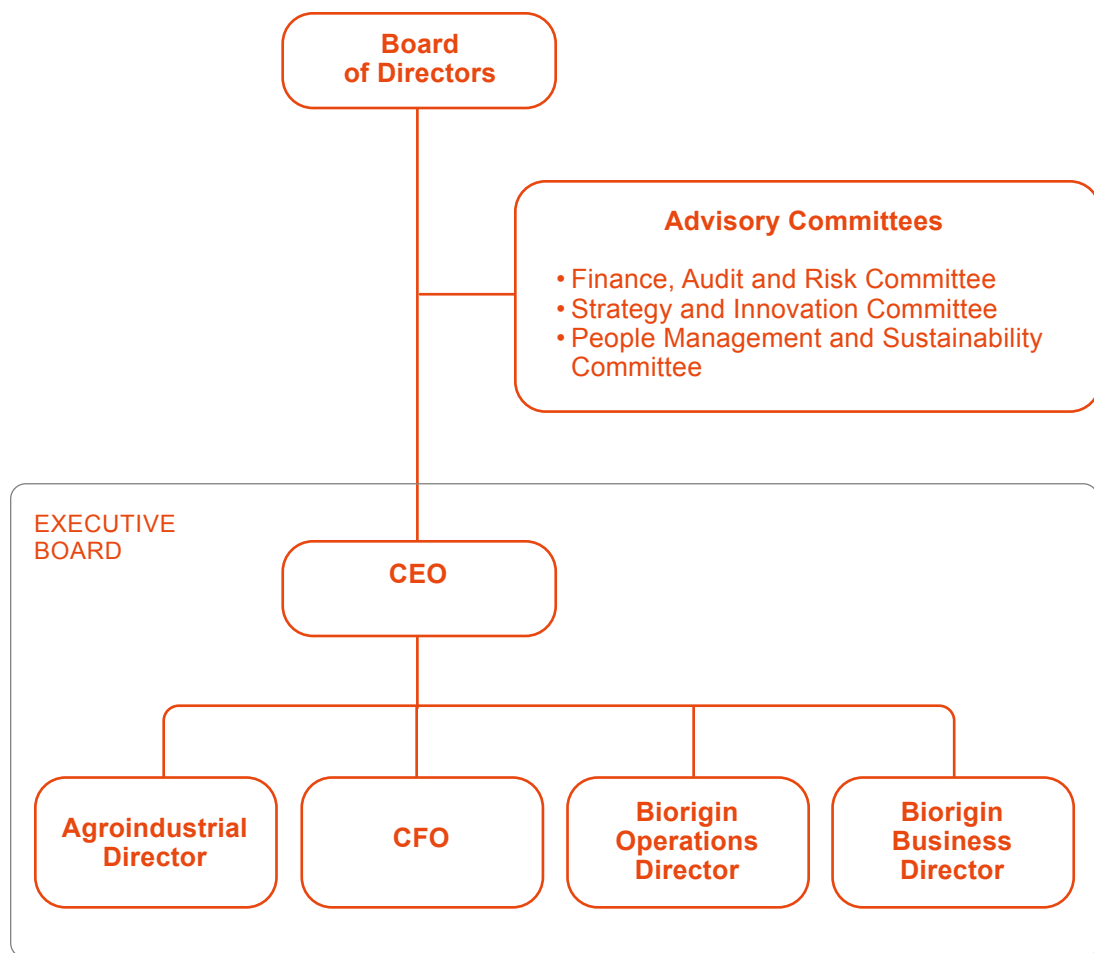
In 2021, Zilor revised the charter of the People Management and Sustainability Committee, in order to expand its scope of action to assess trends, risks and opportunities



on ESG aspects, together with the analysis of instruments for the development and appreciation of employees.

Zilor's **Executive Board**, made up of five executives with solid experience in the sugar-energy sector, is responsible for establishing the strategic plan for materializing the guidelines defined by the Board.

GOVERNANCE STRUCTURE



Governance highlights

20% of independent members in the formation of the Board of Directors

The Chairman of the Board of Directors is **external**

The Vice-Presidency of the Board is occupied by a **woman**

Two independent external advisory directors

coordinate the three Advisory Committees of the Board

Zilor's Chief Executive Officer does not hold a position on the **Board**

Monthly meetings

of the Board of Directors with the support of Advisory Committees to monitor the business strategy

Ethics PROGRAM

The conduct of business at Zilor and Biorigin is guided by the Code of Ethics principles; its guidelines cover 100% of operations and are disclosed to employees through communication and training actions. In 2021, its content was reviewed and approved by Zilor's Executive Board and disseminated to all stakeholders.

As part of the commitment to ethics, integrity and transparency, the development of the Code of Ethics for Agricultural Suppliers and Partners in 2022 reinforced Zilor's corporate values throughout the supply chain. The two Codes ensure, among other principles, respect for fundamental labor rights, repudiating any violation of the right of union association and collective bargaining and degrading work practices, including child, forced or slave-like labor.

Tools such as the Code of Ethics, the Code of Ethics for Agricultural Suppliers and Partners and the Ethics Channel itself strengthen the Zilor Ethics Program, which also has integrated initiatives and actions for training and internal communication for employees and external communication for partners, suppliers, and communities to consolidate Zilor's Corporate Culture of integrity and transparency.



The **Ethics Program** covers the management of the **Ethics Channel**, a tool for receiving doubts and communications about attitudes that do not comply with corporate values

Click here
to access
the Code of
Ethics



Click here
and access the
Code of Ethics for
Agricultural Suppliers
and Partners





Ethics Program Highlights

306
multiplying
collaborators

100%
of managers
engaged
in training

17
lives held

6
face-to-face training
sessions in Quatá and
Lençóis Paulista

100%
of employees
trained



FAZER O CERTO FAZ PARTE DA GENTE!

One of the initiatives carried out in the last biennium involved training multipliers to disseminate information about the Ethics Channel to teams in all business units. During the period, 17 online sessions were held on the topic and six face-to-face training sessions were held, covering 100% of the Zilor and Biorigin leaders.

After the training, the multipliers were trained to conduct training in a face-to-face format and through online platforms, taking information about the Ethics Program to employees in the administrative, industrial, and agricultural areas.

The management of the Program is carried out by the Deliberative Ethics Committee, a group of leaders formed to coordinate the communication and education process of employees and monitor the initiatives implemented. In addition, the Committee is responsible for evaluating the communications received through the Ethics Channel and for defining the actions to be taken.

The Ethics Program covers the management of the Ethics Channel, a tool for receiving doubts and communications about attitudes that do not comply with corporate values.

Ethics Channel

Available in three languages (Portuguese, English and Spanish), the Ethics Channel was created so that employees, suppliers, and any other interested party can communicate acts and situations involving Zilor’s operations that are in disagreement with the Company’s values, policies and codes or legislation.

The Ethics Channel is open 24 hours a day, every day of the week (including Saturdays and Sundays), and the technologies used guarantee the confidentiality of the data and information presented. Communications authors may also report anonymously. All information registered in the Channel is received by an independent and specialized company, which ensures the appropriate treatment of each situation without influences or conflicts of interest.

The reports are received and evaluated by the Deliberative Ethics Committee, which conducts the internal investigations and handles the reports. According to the results of the investigations, the group decides on the application of disciplinary measures, according to internal policies and rules and procedures to investigate reports (NP).

The number of complaints received through the Ethics Channel in the 2021/2022 harvest was about 36% higher than in the 2019/2020 harvest. This growth demonstrates that disclosure in internal and external communication channels, such as newspapers, radio, website, intranet, application, and social media, has increased adherence to the tool.

In the last two harvests, approximately 35% of the complaints received were classified as valid after conducting internal investigations. None of them are related to cases of corruption, such as fraud and bribery of public officials. There were also no identified situations in which there was violation of human rights, of traditional communities or indigenous peoples. In addition, there were no complaints related to the use of degrading work (child labor or slave-like labor).



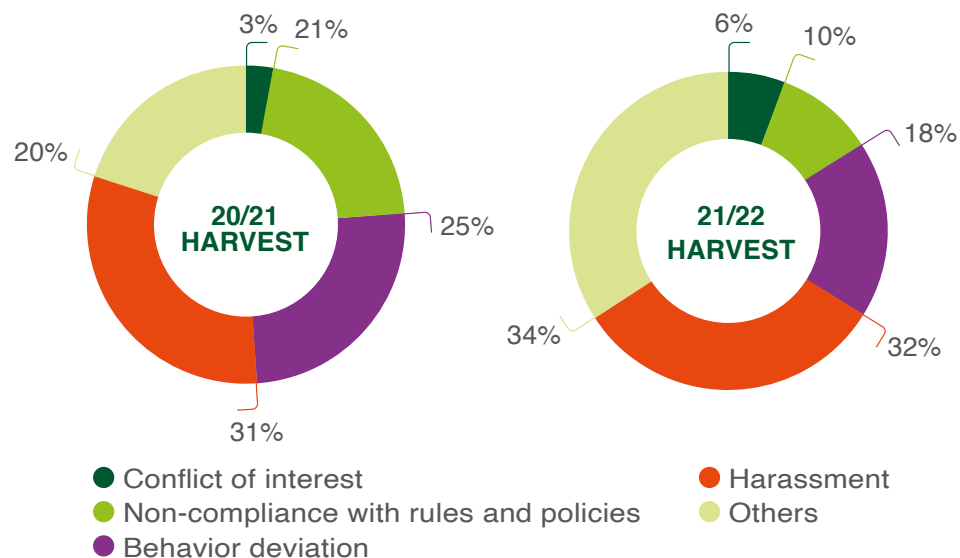
Ethics Channel
www.canaldeeticazilor.com.br
 0800 180 9000
 24 hours a day
 7 days a week

ZERO
 complaints related to cases of corruption, such as fraud and bribery of public officials

ZERO
 complaints of violation of human rights, of traditional communities or indigenous peoples

ZERO
 complaints related to the use of degrading work (child labor or slave-like labor)

TYPES OF COMPLAINTS RECEIVED ON THE ETHICS CHANNEL



Risk MANAGEMENT

In the last biennium, the Integrated Risk Management area was established, advancing in governance and the adoption of best practices for the topic. The formation of this area contributes to a global and systemic view of risk management in the Company, which operates according to the three lines of defense model promoted by the Institute of Internal Auditors (IIA), an international organization based in the United States. The effective identification and management of risks goes far beyond this corporate team and demands the involvement of the entire organization.

Through Annual Risk Workshops and periodic meetings with all the Boards of Directors and their respective teams, the main risks to which Zilor is exposed are identified and classified according to their potential positive and negative impacts in reputation and image, environment, health, and safety, legal and financial dimensions, in addition to the assessment of their materialization probability and the speed of the Company's response.

Action Pillars

Zilor's Integrated Risk Management operates on three main pillars, focused on ensuring the adequacy of procedures and minimizing weaknesses, promoting continuous improvement.

- Corporate Risk Management**
Proactive approach in the identification and treatment of risks that may impact the Company's strategy.
- Internal Controls**
Ensure the Company's protection through the implementation of a set of best practices of controls and governance.
- Audit Management**
Relationship with Audits (internal and external), Ethics and Compliance Channel.

The creation of the Integrated Risk Management area contributed to the **improvement of the methods for prioritizing and mitigating** the risks to which the Company is exposed

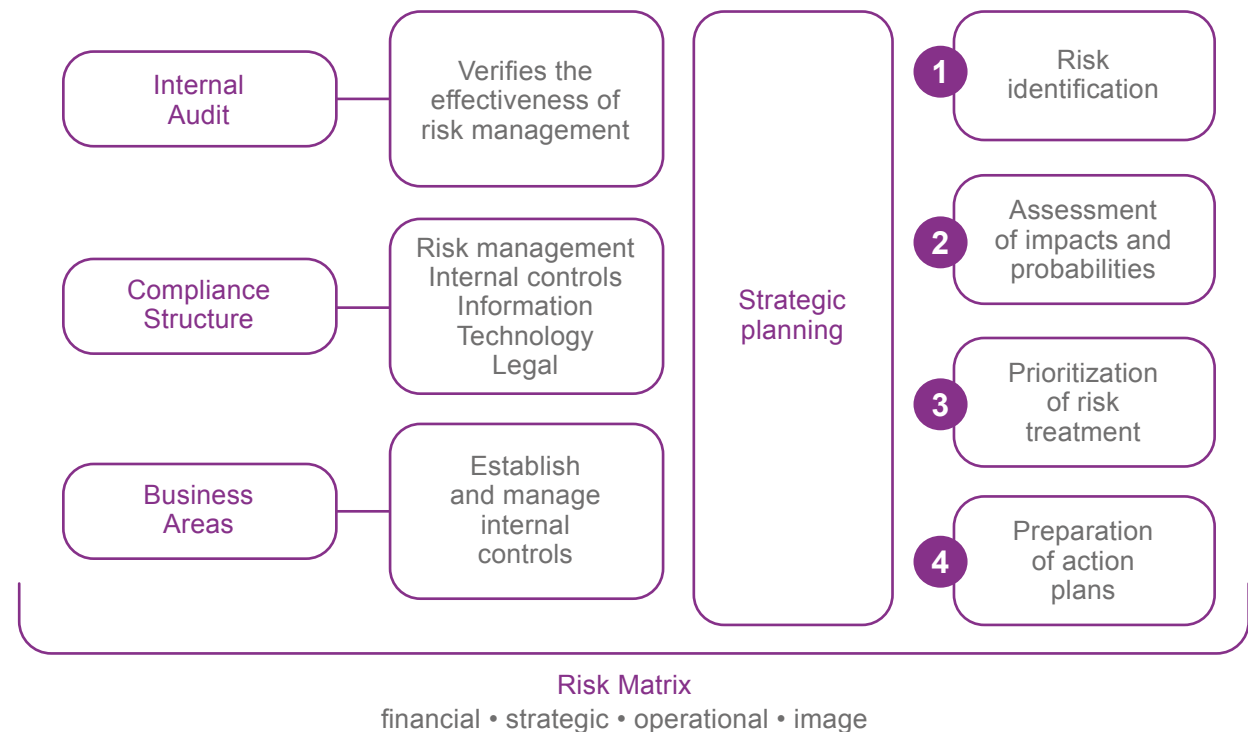


As a result of this work, the Company built its Risk Prioritization Matrix, from which the risks that should receive greater attention are visually identified, in line with the interests of stakeholders. After this analysis, actions are planned and monitored and reviewed according to governance levels; and the roles and responsibilities of all those involved are clearly established ensuring integrity, leadership, and transparency in the process.

In addition to the first (Company areas) and second (Integrated Risk Management area) lines of defense, the Company has an outsourced internal audit team (third line of defense), which acts independently in the objective assessment of risks, controls, and governance. On a quarterly basis, both the Integrated Risk Management area and the internal audit report to the Finance, Audit and Risk Committee and to Zilor’s Board of Directors.

To support Zilor’s Integrated Risk Management, the Communication area developed, during the 2021/2022 harvest, a Communication Management System in Crisis Situations, aimed at senior leadership, based on a diagnosis considering the Prioritization Matrix and the Company’s executives, enabling better management of adverse situations, especially in terms of reputation and image during communication with its stakeholders.

Zilor’s risk management is structured according to the **three lines of defense model**, with quarterly reporting to the **Board of Directors**





The business

Investments in sugarcane fields and in the modernization of the industrial park contributed to the achievement of expressive results in the 2020/2021 and 2021/2022 harvests, recording greater operational efficiency, even in the midst of a challenging scenario due to climate impacts.

FINANCIAL PERFORMANCE

Taking advantage of market opportunities and the favorable scenario for the price of **sugar and ethanol** commodities, it contributed to the Company achieving important results, especially in the 2021/2022 harvest, which reached a record total net revenue. Capturing these opportunities was only possible due to the Company's preparation, which worked with discipline to deliver on its commitments, in addition to better production planning.

At the **Biorigin unit**, one of the Company's growth levers, the logistical challenges faced in the last two harvests, which impacted the Unit's results, were overcome by implementing several actions within the scope of its commercial and supply model. Better

cost management and negotiation for fixing sea freight contributed to the greater predictability of container allocation for export. Biorigin recorded its highest net revenue in the 2020/2021 harvest, amounting to R\$ 722.8 million, and its second largest revenue in US dollars in the 2021/2022 harvest, a smaller volume in reais due to the devaluation of the US dollar, since around 90% of its revenue comes from exports.

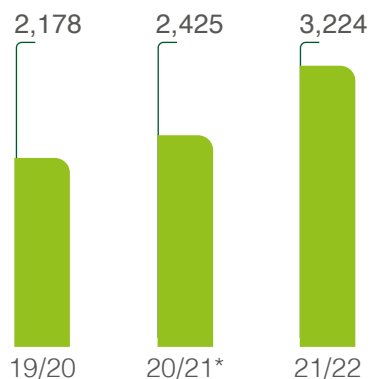
The **Energy** business represents around 4% of total revenue and is part of the Company's diversification strategy. Energy trading is carried out through long-term contracts in the regulated energy market and guarantees greater predictability in cash flow. Important investments to expand this business will be directed towards increasing the energy generation capacity by approximately 60% in the Lençóis Paulista region, in the amount of approximately R\$ 550 million, the result of two projects, one with the right to commercialize energy via auction and

another for the acquisition of the right to operate via auction. The two projects will be implemented in 2023 and 2024.

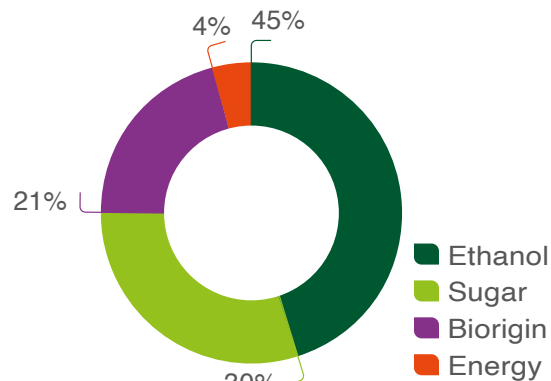
The discipline in the management of resources to conduct the business reflects in the better result of the adjusted EBITDA, which has shown important evolution. Greater operational efficiency, a combination of higher Total Recoverable Sugar (ATR) and productivity, even with a lower crushing volume in the 2021/2022 harvest, combined with a better price scenario, contributed to its result.

The better performance of operations and the strict management of costs and expenses, as well as the discipline in the allocation of resources, also reflected in the 2020/2021 and 2021/2022 harvests' net income evolution, with a record in the last harvest presented.

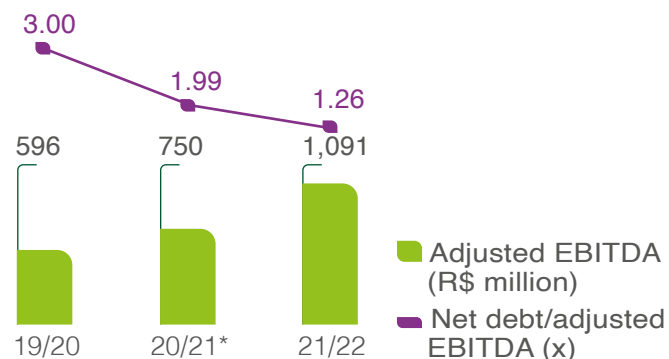
NET REVENUE (R\$ MILLION)



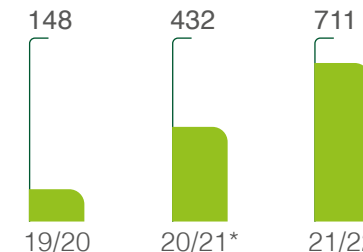
NET REVENUE PER PRODUCT IN THE 2021/2022 HARVEST



ADJUSTED EBITDA AND LEVERAGE



NET INCOME (R\$ MILLION)



*Values adjusted according to the rules of the Securities and Exchange Commission (CVM).

Capital market FUNDING AND INDEBTEDNESS

The Company has been evaluating alternatives with attractive fundraising conditions in the market and, in this sense, with an intense process of changes started in 2018, the net debt/adjusted EBITDA indicator has been showing an important deleveraging trajectory, which went from 3.0x in 03/31/2020 to 1.26x on 03/31/2022. In the biennium, R\$ 480 million were raised with the issuance of the Agribusiness Receivables Certificate (CRA) for investments in the production and sale of sugarcane, sugar, and ethanol; and an additional R\$ 202.0 million was obtained

with the issuance of simple debentures, for investment in maintenance and recovery projects for sugarcane plantations aimed at ethanol production. The funding reinforced the Company's cash position, which ended the 2021/2022 harvest year with R\$ 1,783.5 million and net debt of R\$ 1,370.9 million, of which 66% is long-term. Most of the debt (84%) is in local currency. The portion of the debt in foreign currency (US\$) is naturally hedged due to Biorigin's exports.

Funding linked TO ESG CRITERIA

In 2022, Zilor carried out its first fundraising pegged to ESG criteria, in the amount of R\$ 100 million. The credit was obtained through the BNDES RenovaBio portfolio, which offers an incentivized rate to encourage the reduction of CO₂ emissions from the use of biofuels. The National Bank for Economic and Social Development (BNDES) created the RenovaBio loan line with the objective of encouraging increased production and environmental efficiency in biofuel-producing industries. At Zilor, the funds will be used to improve the infrastructure for ethanol production. With an eight-year maturity, the loan provides for the possibility of reducing rates by achieving decarbonization targets in line with the National Biofuels Policy. The metric to be used is the emission factor of decarbonization credits (CBIOs), an indicator calculated by the National Agency for Petroleum, Natural Gas and Biofuels (ANP).



Click
here

to learn more about
Zilor's operating
and financial results
on the Company's
Investor Relations
website

BIENNIUM HIGHLIGHTS

POSITIVE EVOLUTION IN FINANCIAL RESULT INDICATORS



+ 32.9%
in net revenue*

+ 45.4%
in adjusted EBITDA*

+ 64.7%
in net income*

*2021/2022 X 2020/2021



Historical record of net income
in the 2021/2022 harvest:

R\$ 711 million

FUNDING IN THE MARKET



R\$ 100 million

through the BNDES RenovaBio portfolio
(1st operation of Zilor linked to ESG criteria)



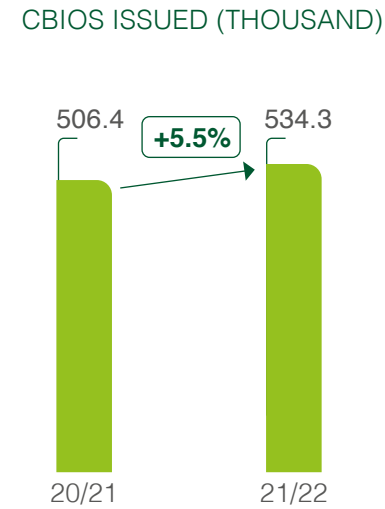
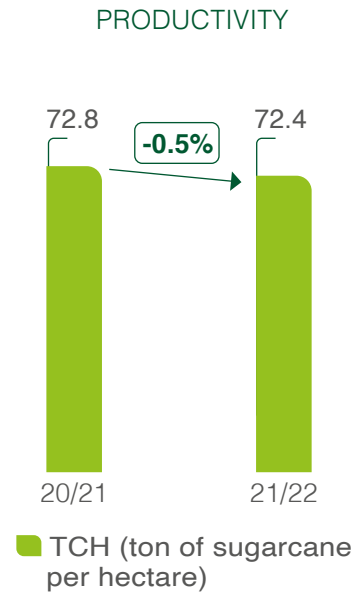
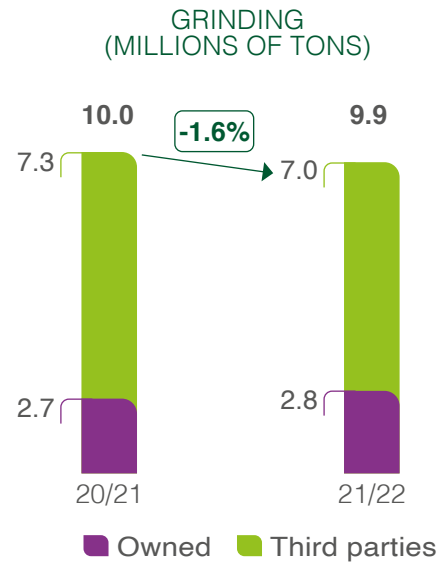
R\$ 480 million

with the issuance of the Agribusiness
Receivables Certificate (CRA)

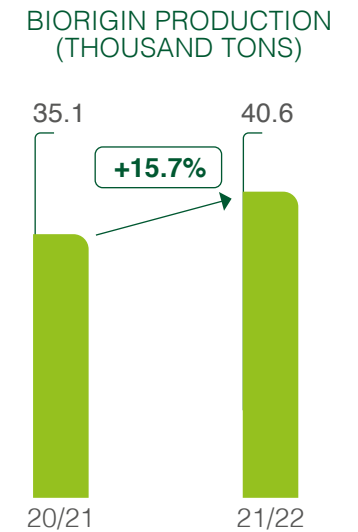
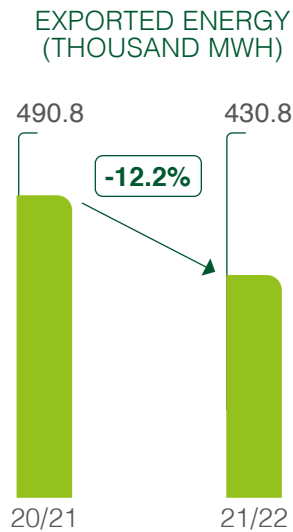
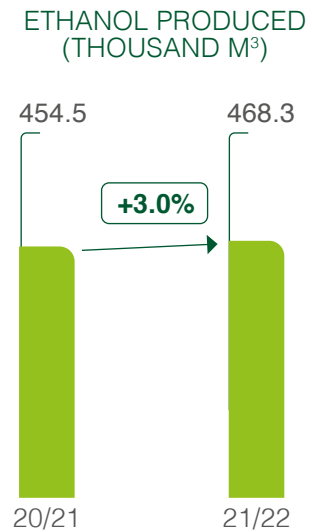
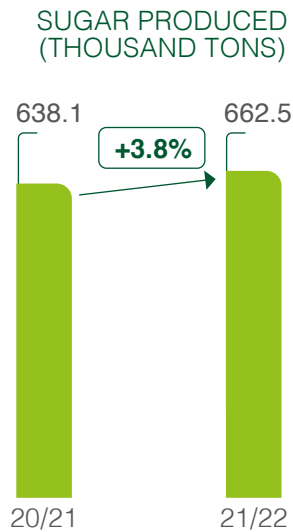


R\$ 202 million

with the issuance of simple debentures



Zilor set a **record in white sugar production and increased ethanol production in 2021/2022**, which demonstrates the advance in sugarcane productivity and operational efficiency indicators, even with the grinding reduction due to climate challenges



AGROINDUSTRY

Zilor is one of the largest companies in the sugar-energy sector in the country and has a vertical and diversified business model to produce sugar, ethanol, and electricity. The Company plants sugarcane in its own areas and in the model of the Agricultural Partnerships Program, with the best cultivation and management techniques, and the transformation of raw material in the industrial units, having the safety of people as the non-negotiable value of its Corporate Culture.

Zilor's own sugarcane production is mainly carried out to supply the Quatá and Barra Grande units (Lençóis Paulista). Adding the 2020/2021 and 2021/2022 harvests, the Company cultivated around 125 thousand hectares (61 thousand hectares in 2020/2021 and 64 thousand hectares in 2021/2022), applying different agricultural techniques with the objective of increasing productivity and efficiency.





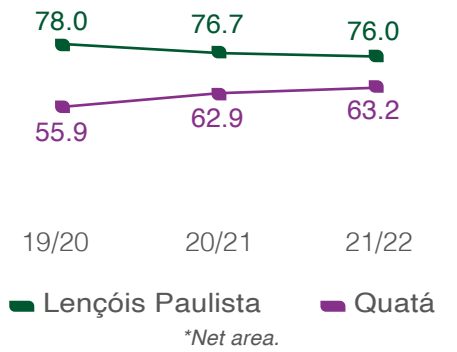
Zilor was the **1st company to adhere to 100% mechanized harvesting**, in 2007, to eliminate sugarcane burning (Greener Ethanol Agro-environmental Protocol)

Among these actions are the elaboration of a master plan for fertigation and conservation practices and soil cover for protection in periods of greater rainfall. As a result, the Company achieved significant productivity gains – measured by the TCH (tons of sugarcane per hectare) indicator.

All sugarcane milled by Zilor (owned sugarcane) has been harvested in a 100% mechanized way and without the use of the burning technique, since 2011. Zilor was the 1st company to adhere to 100% mechanized harvesting of sugarcane, in 2007, through the Greener Ethanol Agro-environmental Protocol. The movement, a pioneer in Brazil, an initiative by the State of São Paulo Government, represented by the Secretary of the Environment, Secretary of Agriculture and Supply and by the Environmental Company of the State of São Paulo (Cetesb), and by the sugar-energy sector, represented by the Union of Sugarcane Agroindustry of the State of São Paulo (Unica) and by the Organization of Sugarcane Planters of the Center-South Region of Brazil (Orplana), promoted sustainable development of the ethanol, sugar and bioenergy production chain.

At each harvest, approximately 70% of the total volume crushed in the three industrial units is harvested by third-party producers, within the Agricultural Partnerships Program. In the biennium, expenditures on the purchase of sugarcane for industry processing totaled R\$ 2 billion. Therefore, the Agricultural Partnerships Program and actions to share knowledge and experiences on field operations are essential for strengthening the Company’s business model.

PRODUCTIVITY BY REGION (TCH)*



Agricultural PARTNERS

The Agricultural Partnerships Program has existed for over 20 years and was created by Zilor to support sugarcane production in the Lençóis Paulista region, ensuring the supply of raw material to the Barra Grande and São José units. The platform generates a positive economic impact on the entire sector, encouraging the generation of jobs, the increase in sugarcane technology and entrepreneurship in the region's municipalities.

Currently, 17 producers are part of the Program. Each of them is responsible for harvesting sugarcane in an average area of 5,100 hectares, owned by Zilor or leased by the Company.

Agricultural Partners sign long-term contracts with Zilor, which guarantees financial and operational predictability for both parties, and are committed to adopting and applying good sugarcane management practices. The commercial model provides for additional incentives for partners that reach productivity rates above the potential of the production environment in which they operate.

Zilor currently has 17 producers in the **Agricultural Partnerships Program**, a model that contributes to good practices in the origination of sugarcane

In the 2020/2021 and 2021/2022 harvests, the partners were responsible for harvesting approximately 173,500 hectares and produced approximately 13 million tons of sugarcane.

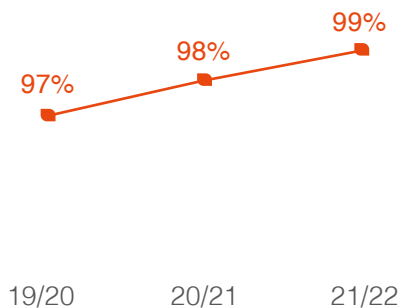
The management of the Agricultural Partnerships Program is carried out by a dedicated team from Zilor and takes into account, in addition to aspects of productivity and remuneration, the socio-environmental performance of the participating producers. All partners adhere to the Social and Environmental Conduct Commitment and the Code of Ethics for Agricultural Suppliers and Partners.

Every year, all partners are evaluated regarding their adherence to good socio-environmental practices, through on-site visits and documentary evaluation. In the 2021/2022 harvest, the socio-environmental performance index reached a record level of 99%, reflecting the effectiveness of the engagement and improvement plans carried out in partnership with Zilor. All non-conformities identified in these audits are addressed in action plans together with the partners.

In the 2020/2021 and 2021/2022 harvests, the Company recorded, respectively, 9 and 14 minor non-compliances, resulting in rates (number of non-compliances divided by the number of units audited) of 69.2% and 82.4% in each period.

With these actions, the Company seeks to act proactively to ensure compliance with environmental and labor legislation, in addition to promoting good ESG management practices in its value chain. Thus, Zilor works to even mitigate the risks of child labor or slave-like labor and disrespect for human rights and fundamental labor rights.

AVERAGE SCORE OF AGRICULTURAL PARTNERS IN GOOD SOCIO-ENVIRONMENTAL PRACTICES



99%

average score of Agricultural Partners in good socio-environmental practices in the 2021/2022 harvest



Financing of Agricultural Partners

In 2021, Zilor launched the Agricultural Partners Financing Program to facilitate access to credit by partner producers, with the aim of improving operations in the sugarcane fields. The Program was made possible through the Credit Rights Investment Fund (FIDC) and raised R\$ 120 million. The FIDC was structured with initially Zilor and the supporting bank as shareholders, and it can be expanded over time according to demand.

These resources will enable loans for funding and investments in planting, with financing rates linked to risk and productivity and payment terms between 1 and 5 years. In this way, partners will be able to strengthen their working capital structures to guarantee the supply of inputs for the Company's operations.

In addition to the FIDC, Zilor also started to provide partners with access to the risk management tool, which

enables the setting of the ATR's (Total Recoverable Sugar) future price, with the ATR Future Price Fixing Program. This initiative provides a better view of cash flows and results and contributes to the economic support of partners in the long term.

Structured FIDC
R\$ 120
million

65%
of Agricultural Partners
joined the Financing Program
in the first year



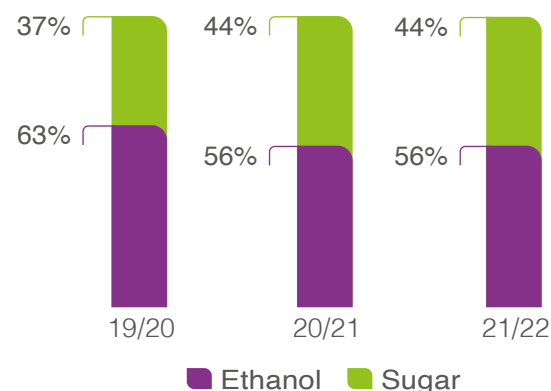
Innovation and productivity IN THE INDUSTRY

In the three agro-industrial units it owns – São José, Barra Grande and Quatá –, Zilor produces sugar and ethanol with the highest quality and safety standards. In addition, all units are equipped with systems for generating electricity from biomass (sugarcane bagasse).

Each crop year, the production distribution between sugar and ethanol is established according to market analysis and commodity price fluctuations, following the marketing strategy defined by Copersucar, in which Zilor is a member and one of the largest shareholders. In the last biennium, the sugar appreciation led to a slight increase in the production of this type of product to comply with signed contracts. In the 2021/2022 harvest, the Company reached a new white sugar production record, with 557.5 thousand tons.

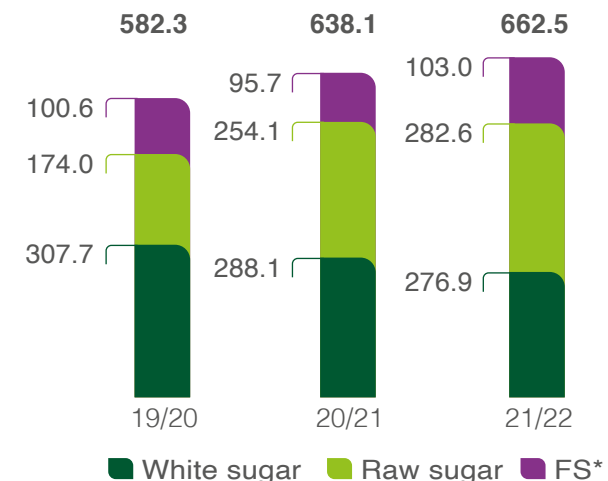
Ethanol production was reduced, adapting to the lower demand caused by the Covid-19 pandemic. The appreciation of biofuel, driven by the appreciation of gasoline, allowed the capture of relevant opportunities for the Company's financial performance.

PRODUCTION MIX*



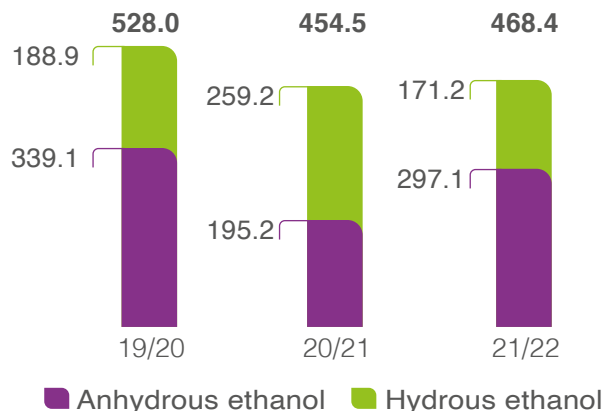
*In Unicops: measurement factor that allows comparison between ethanol and sugar in the same unit. Does not consider FS (Fermentable Sugar).

SUGAR PRODUCTION (THOUSAND TONS)



*Fermentable sugar (Biorigin input).

ETHANOL PRODUCTION (THOUSAND M³)



Investments in ELECTRICITY COGENERATION

The energy generation from biomass guarantees 100% of the electricity and steam supply that Zilor’s industries consume throughout the harvest from a renewable source. The surplus electricity is sold to distribution companies (regulated market) and traders (free market), a relevant strategy for business diversification and cash flow stability.

In 2021, two important contracts for electricity supply via auction were closed. Therefore, the Company will allocate approximately R\$ 550 million to expand the cogeneration capacity by 60% at the Barra Grande and São José units, both in the Lençóis Paulista region (São Paulo).

Through the acquisition, via auction, of the right to operate with transfer approval granted by ANEEL, the São José unit will receive investments to expand its capacity and operate for the next 25 years from the beginning of the operation, scheduled for 2023. At the Barra Grande unit, through the right to commercialize via auction, the start of operations will take place in 2024. The investments will bring more efficiency in boilers with more turbines, using the same amount of biomass to generate more energy per ton of cane and reduce steam consumption in the plants.

Investments in Bioenergy

Around
R\$ 150.0 million
already invested by the end of the 2021/2022 harvest

Expansion of the generator park capacity by around
60%

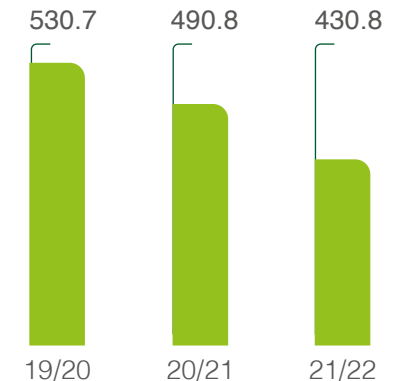
Start of operation scheduled for 2023 at the São José Unit

Start of operation scheduled for 2024 at the Barra Grande Unit

Approximately
R\$ 550 million
in investments

Barra Grande (Lençóis Paulista-SP) and São José (Macatuba-SP) Units

EXPORTED ENERGY (THOUSAND MWH)*



*The reduction in energy exports is due to adverse weather conditions in the last biennium.



Continuous IMPROVEMENT

In industrial operations, Zilor focuses on promoting efficiency and productivity growth, with investments and improvement plans for industrial processes. For this, the Company relies on the Excellence Maintenance System, a set of tools, organizational procedures, practices, and behaviors aimed at a state-of-the-art operation in all industrial units.

The industrial teams are qualified and trained to seek continuous improvement, supported by the Lean Six Sigma philosophy. In the 2020/2021 and 2021/2022 harvests, 15 new continuous improvement projects were carried out and other initiatives that had been implemented in previous years continued. During these harvests, 58 employees trained in Green Belt were involved in continuous improvement projects at the agro-industrial and biotechnology units.



Investments in innovation and efficiency

Projects to innovate, apply cutting-edge technology and improve efficiency in Zilor's operations include resources from the Lei do Bem (Law No. 11,196/05), which grants tax incentives to companies that invest in research, development and technological innovation. In the last two years, the Company raised funds in the order of R\$ 9.7 million under this legislation, an indicator of the time transformed into resources and invested in productivity, with the achievement of superior results. Check below some of the outstanding initiatives in the two business divisions.

AGROINDUSTRY

Increase in the operational yield of sugarcane harvesters

During the 2020/2021 harvest, a project was carried out to promote an increase in the operating income of the sugarcane harvesters. The gain presented, after the development of the Lean methodology, was more than R\$ 2 million.

Reduction of the outsourcing rate in the auto repair shop

With the objective of reducing the outsourcing rate in the automotive workshop at the Quatá unit, a study was developed that resulted in savings of R\$ 1 million in the budget planned for this activity. In this case, the economy was directed to other lines of work (such as an increase in parts in stock), as a strategy for the lack of equipment and high prices due to the pandemic.

BIOTECHNOLOGY

Increase in monthly production of yeast cream by 9.8%

Using the tools presented in the training and qualification of the Green Belt, it was possible to increase the availability of the pure culture plant's fermenters by 10.2% and increase the monthly production of yeast cream by 9.8%.

7% increase in type B fermentations yield

In a journey of digital transformation, with the support of the Information Technology area, assisted by the Historian and MES software and the artificial analysis of the data made in CSense, it was possible to increase Type B fermentations yield by 7%, increasing cream production, without loss of quality.

BIORIGIN NATURAL INGREDIENTS

Biorigin, one of the Company's growth drivers, is Zilor's business unit specialized in biotechnology for the production of 100% natural ingredients used by the Food and animal nutrition (Feed) industries.

Biorigin is focused on innovation, technological research and sustainability and its purpose is to promote people's health and well-being, developing ingredients that enhance flavor, reduce sodium content, and extend the shelf life of food produced by its customers, in addition to investing in solutions that increase the functionality of animal feed, strengthening the health and performance of production and pet animals.

With practically 90% of its production destined for export, Biorigin has great relevance in Zilor's diversification and growth strategy. Since 2003, when it was founded, the company has shown significant growth rates and already accounts for around 25% of the Company's total net revenue.

Product quality, raw material traceability to ensure a sustainable production model and innovation to meet customer demands are Biorigin's strategic pillars. For this, the company invests in research and development of new solutions and establishes channels to continuously assess customer satisfaction with products and services.

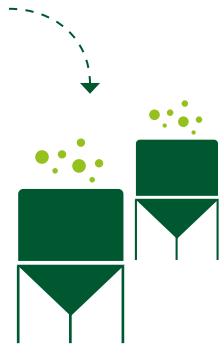


PRODUCTION OF NATURAL INGREDIENTS



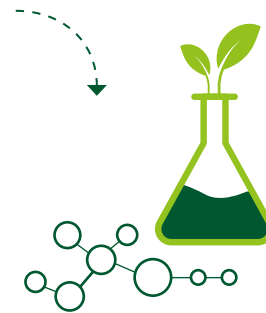
CANE MOLASSES – BRAZIL

CORN DEXTROSE
OR WHEY - USA

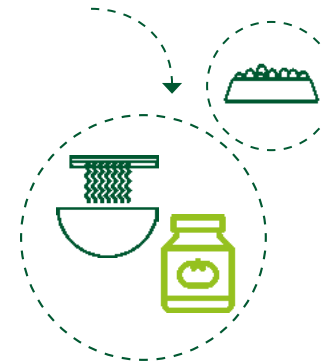


YEAST – BRAZIL

BACTERIAL
FERMENTATION - USA



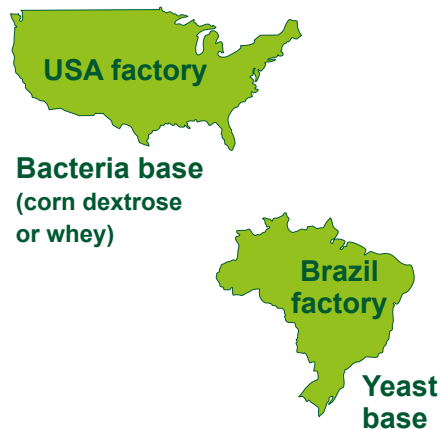
BIOTECHNOLOGICAL
PROCESSES
(FERMENTATION) –
BRAZIL AND USA



NATURAL PRODUCTS
– BRAZIL AND USA

Through biotechnological processes, natural ingredients are developed that enhance the flavor of food and help the health and well-being of animals.

TRACEABILITY OF THE ENTIRE PRODUCTION CHAIN PROCESS



90% of
products are
exported



MORE THAN
60 COUNTRIES



BIORIGIN'S
SHARE IN
ZILOR'S
REVENUE

21%



Biorigin's portfolio is divided into two segments and offers natural solutions based on the biotechnology process designed to meet many of today's labeling and formulation challenges.



Food

Biorigin supplies a unique range of natural ingredients: yeast extract, yeast derivatives and natural flavors, bringing delicious flavor to your recipes, being the right choice for natural salty taste, increasing Umami notes, mouthfeel, and specific flavors for many recipes.

Biorigin Differentials

- Raw material traceability
- Product quality
- Innovation to meet customer demands
- Sustainable production model



Feed

Natural solutions to improve the performance, nutrition and health of farm animals and the well-being of companion animals (pets) to serve the animal nutrition industries.

New investments approved for **expansion of Biorigin's industrial park** (forecast for the next two years)

The perspectives of the sector and consumption behavior, especially in the most critical period of the pandemic, present opportunities for growth in the niche of healthy food and care for domestic and production animals, enhancing the increase in consumption of Biorigin products, such as the ingredients that are sources of vitamins and proteins and promote the best performance of the animal, health, and well-being.

Given these perspectives and the growing demand scenario, the Company approved investments in the Biorigin unit to expand the industrial park. The main project will be carried out at the São José unit, in the Lençóis Paulista region (São Paulo), which will help boost production, in line with the unit's growth plan, in the Food segment, in the production of yeast extracts, and with production gains for the Feed segment. The projects are expected to be implemented in the next 2 years.

Innovation and PRODUCTIVITY AT BIORIGIN

With a focus on meeting customer needs, Biorigin conducts its innovation processes through the Research & Development Center, located at the Biorigin São José unit, in Macatuba (SP). The area has 35 professionals specializing in the areas of biology, chemistry, food engineering and biotechnology.

The objective of the R&D Center is to identify and anticipate trends in the markets to direct the development of new products and processes that meet customer demands for natural and healthy ingredients.



In the Food segment, for example, innovations are aimed at meeting plant-based products, developing preservatives and products with a high protein content. In the last biennium, based on the process of innovation and joint creation with customers, Biorigin launched two new products with these characteristics.

- **Biogard ONJ**

Natural aroma of caramelized onion, with technology based on the complex mixture of organic acids, for culinary flavor enhancement without leaving any aftertaste.

- **Bionis YE**

Yeast extract with a neutral sensory profile, which enhances and reinforces the flavor of meat products. Its matrix was designed by Biorigin to help maintain the succulence of injected and marinated products, without leaving a residual flavor.

In the Feed segment, the trends are the growing market for companion animals, also known as the pets segment, and new products for aquatic creations. On that front, two new products were launched.

- **Tilápias Blend**

Blend developed for the aquaculture market customer. The product's efficiency was proven after testing on tilapia to evaluate the improvement of intestinal health, performance, immunological profile, and survival against important pathogens in national tilapia farming.

- **PalaUp**

The PalaUp product line is derived from yeast that intensifies the intrinsic flavor of foods and contributes specific flavor notes such as beef and roast chicken. The line meets the pet market demands, which is looking for natural, food-standard, and highly palatable foods for dogs and cats.

Customer SATISFACTION

As a form of engagement and approximation with customers, Biorigin carries out a comprehensive satisfaction survey every two years. The practice makes it possible to identify the company's differentials and opportunities for improvement both in the development of new products and in the service processes.

The last survey cycle was carried out in 2020 and the results reflected the efforts of technical and

application management and sales teams to improve mechanisms for understanding needs and responding to customers.

In 2021, Biorigin started the Endurance project, with the support of an external consultancy. The initiative seeks to map the development of the biotechnology market for natural ingredients and will support the definition of a new strategic plan for the next five years.

Satisfaction survey highlights

89.7%
perception of overall
quality

- 5.5 p.p. above the result of 2018
- 4.7 p.p. above market average

97%
product
satisfaction
(+4.2 p.p.)

93.8%
satisfaction
in technical
support
(+8.2 p.p.)

91.4%
customer service
satisfaction
(+10 p.p.)



CERTIFICATIONS AND QUALITY

Product and process certifications are important tools for Zilor and the Biorigin business unit to gain access to strategic markets and prove the quality and sustainable production of sugar, ethanol, electricity, and natural ingredients. The Company continually invests in adapting its procedures and internal controls to meet the highest standards recognized in Brazil and abroad.



ISO 14.001/2015

The certification of the environmental management system in the international standard ISO14.001 guarantees that the Company has recognized environmental practices and meets the legal requirements applicable to the business. The three units in Brazil have been certified since 2019 and seek continuous improvement of their processes.

GRI 102-11 | 102-12 | 103-1 | 103-2 | 103-3 | 416-1 | 417-1
SASB FB-AG-250A.2 | FB-AG-430A.1 | RR-BI-430A.2



BONSUCRO

Bonsucro certification is one of the most relevant for the sugar-energy sector and attests to the adoption of good sustainability practices in agricultural production and the industry. In 2021, Zilor renewed the certification for the three agro-industrial units, extending the certification to 100% of the Agricultural Partners' areas, 17 in total.

With this scope, the Company has the largest areas certified by Bonsucro in the world. There are 65.5 thousand hectares at the São José unit, followed by 59 thousand hectares at the Barra Grande unit and 50.4 thousand hectares at the Quatá unit, totaling 174.8 thousand hectares certified by Bonsucro.

Biorigin units are also certified by Bonsucro, throughout the chain of custody. This segmentation is relevant to ensure that the company's customers adopt responsible practices throughout the production chain, including sugarcane production.

Certified for the first time in 2011, Zilor was one of the first companies in the world to have its production model recognized by Bonsucro.



RENOVABIO

Zilor's three ethanol production units are certified for the issuance of decarbonization credits (the CBIOs) under the RenovaBio Program. The certificates were awarded in 2020, recertified in 2021 and are valid for three years.

The RenovaBio Program recognizes, through audits prior to certification and its own calculation methodology, RenovaCalc, the contribution of ethanol to combating climate change. Plants certified under the Program receive an Energy-Environmental Efficiency Score (NEEA), which measures the carbon footprint per liter of ethanol. Combined with the eligibility percentage, the NEEA results in the potential to issue CBIOs.

Zilor's units were among the top ten in the country to be certified by RenovaBio.

More than
1 million CBIOs issued
Each CBIO represents 1 ton of carbon equivalent (1 tCO₂e) that is no longer emitted due to the use of ethanol.

To capture this same volume, it would be necessary to plant
7 million trees
in an area of approximately 4,500 hectares.

Learn more on page 60.



CARB – UNITED STATES

In 2022, the three Zilor units received certification from the California Atmospheric Resources Board (CARB) for ethanol. CARB is the body of the state of California (United States) that defines parameters and rules for reducing emissions from the use of fossil fuels.

This certification allows Zilor's ethanol to be exported to the region, one of the main consumer markets for biofuel in the world. The sale to California will be carried out by Copersucar S.A., which has logistics infrastructure and expertise for export operations.

Other international certifications for ethanol

- **RFS2 (Renewable Fuel Standard):**
Registration with the US Environmental Protection Agency, required for the marketing of biofuels in US territory.
- **METI:**
Criteria related to the sustainability of biofuel required by the Ministry of Economy, Trade, and Industry (METI) of Japan.
- **British Columbia:**
Registration with the regulatory body of British Columbia (Canada) that oversees the compliance of production and transport of low carbon fuels in the state.





Food SAFETY

The FSSC 22000 certification, recognized by the Global Food Safety Initiative (GFSI), ensures the adoption of best practices for the Food Safety System. Biorigin's Quatá Unit has this certification, attesting to the quality of food safety plans for all products, with an assessment of the probability and severity of potential chemical, physical and microbiological risks for raw materials, inputs, and process steps.

At the São José and Barra Grande units, Biorigin has ISO 22000 certification, also for food safety management systems. In these plants, Biorigin, as it has an integrated management system, uses the same practices and processes as the Quatá Unit. In the United States, the Biorigin unit is certified by Safe Quality Food (SQF).

The FSSC 22000 certification also applies to the production of crystal sugar shipped in 1,200 kg big bags at the São José, Barra Grande and Quatá units of Zilor's agro-industrial operation.



GMP +

Biorigin has GMP+ B2 and GMP + B3 certifications, focused on the Feed segment (animal nutrition). The model ensures quality management by integrating a hazard analysis plan and critical controls with the HACCP (Hazard Analysis and Critical Control Point) methodology.

Other certifications

● SMETA (Sedex Members Ethical Trade Audit) and Ecovadis:

Platform that allows to store, share and communicate production and quality information with the Company's customers, ensuring the promotion of sustainability in production chains.

● Greener Ethanol:

Memorandum of intent signed between the state of São Paulo and entities in the sugar-energy sector (ORPLANA and UNICA) that defines ten guidelines for the adoption of best practices in the sector chain.

● Green Energy Seal:

Certification granted annually by UNICA and CCEE to companies that use energy generated from sugarcane biomass.

● Kosher and Kosher Badatz:

For food prepared in accordance with Jewish dietary laws.

● Halal:

For food prepared in accordance with Islamic food laws.

● Non-GMO:

The products do not use genetically modified inputs, and the Company has the NON-GMO Project Verified certification for products in the Food segment.



People

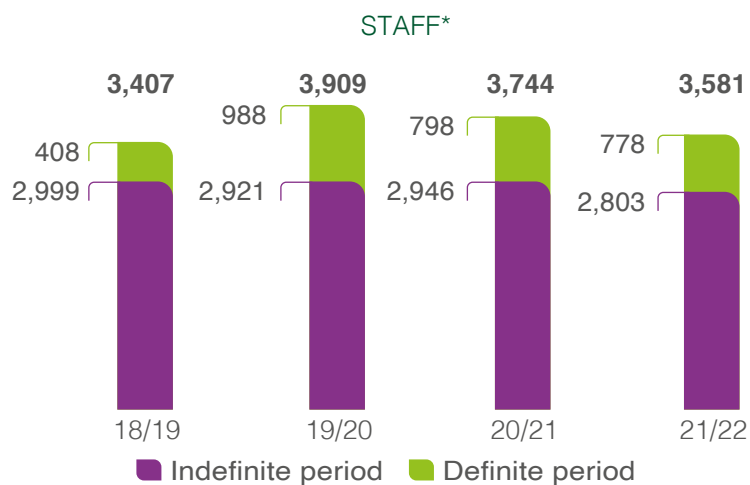
The performance of Zilor and Biorigin employees is guided by the Company's Corporate Culture, the set of principles and values that drive professional development, combined with the search for efficiency, productivity and innovation and the commitment to sustainable development. These guidelines are continually reinforced and strengthened through programs to attract talent, develop teams, assess competencies, and promote diversity and inclusion.

Within the Internship Program, the Company had 63 students in the 2020/2021 harvest year and 93 in the 2021/2022 harvest year. At the beginning of their careers, the selected young people were able to learn about the practices of the agro-industrial and biotechnology sectors, experiencing knowledge exchanges alongside experienced professionals, qualifying for selection processes at the Company and being prepared for the job market.

A page dedicated to the registration of CVs was also made available on the institutional website, with information for applying for open positions. These vacancies can also be filled by internal employees, through the internal recruitment program.

In the 2020/2021 harvest, a platform was also implemented for the onboarding of new employees from Zilor and Biorigin. The tool assists in overcoming the challenges of the pandemic, facilitating access to the Company’s information, and carrying out the necessary training in the professional’s “Integration Trail,” according to their area of activity.

The entire admission process for new employees was digitized and automated in the last biennium. Zilor implemented an approval flow that systematizes these activities without the need for a personal interface, from defining the candidate, conducting the admission exam to delivering documents. The process speeds up hiring time and information security, ensuring process reliability.



*100% of employees are covered by collective bargaining agreements. All of them work in the Southeast region.

Leadership engagement

People materialize Zilor’s way of being and acting. Therefore, the Company values teamwork and the sharing of ideas. With this objective in mind, since 2018 it has carried out the Coffee with Leadership program, in which groups of 12 employees meet with the Company’s Chief Executive Officer to exchange perceptions and suggestions for process improvements. Each meeting lasts two hours. During the program, around 720 employees participated in the program, which has had more than 60 editions since its inception.

DIVERSITY AND INCLUSION

At Zilor, our energy is plural. This is the motto that, since 2020, guides actions to build an environment with more diversity and inclusion. In the last biennium, the topic has gained strength on the people management agenda in all organizations, as a driver of innovation capacity and talent retention in companies. For this reason, the Company built a transversal and purposeful program to discuss the matter and outline an organizational development route, in line with the Corporate Culture.

This is how the **+ Diversity & Inclusion Program** was born, an initiative that brings together research and knowledge actions on the subject, employee engagement, dissemination of the importance of diversity and inclusion and training for leaders and teams. The Program encompasses actions to promote gender equity, the inclusion of people with disabilities and the appreciation of ethnic-racial, sexual, and intergenerational diversity.

In the harvest year 2021/2022, the first diversity census was carried out, a diagnosis performed by an external consultancy to identify the perception of employees regarding the strategic importance of the topic in the Company. The initiative carried out the characterization of staff and, at the same time, created a space for active listening and suggestions from the employees themselves. The conversation raised important topics to achieve a greater understanding of differences at work and how to be able to build a more equitable, healthy, and better corporate environment for everyone.

PROGRAMA
**+ DIVERSIDADE
& INCLUSÃO**

#NossaEnergiaÉPlural

zilor Biorigin



165 employees

participated in the diversity
and inclusion diagnosis

43%

of them occupy leadership
positions at Zilor

Participants profile

30%

are women

6%

are people with
physical disabilities

6%

declared
themselves black

35%

belong to
generation X
(born between
1960 and 1980)

4%

declared themselves
non-heterosexual

GRI 103-1 | 103-2 | 103-3



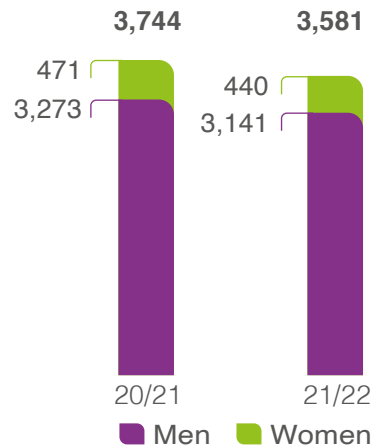


Once the diagnosis is concluded, a Diversity Commission will be structured, which will include the participation of employees and will initially focus on promoting gender equity in all units and operations, including in leadership positions.

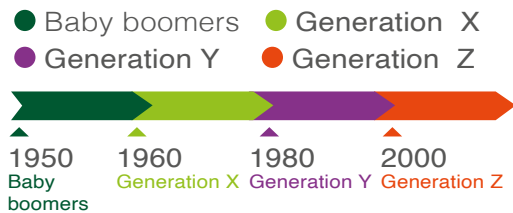
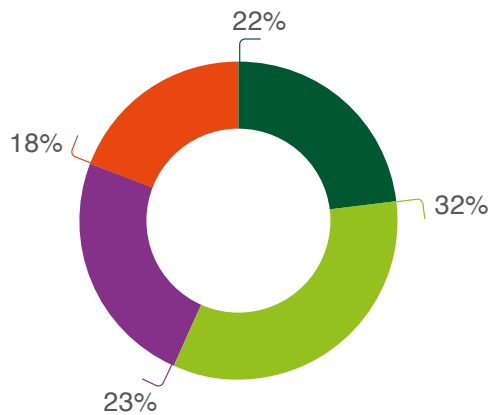
The People and Organization area promoted meetings and discussions on diversity and inclusion with a group of 165 employees, representatives of all functions. At the end of this listening and dialogue work, a report was produced with information that was validated by the Company's top leadership that will subsidize actions that will be carried out in the next two harvest years to promote an even more inclusive environment.

Actions to promote diversity & inclusion take place through the Company's various internal and external channels, as the topic is extremely necessary for organizations and society.

DISTRIBUTION OF EMPLOYEES BY GENDER



GENERATIONAL DIVERSITY OF EMPLOYEES



GRI 103-1 | 103-2 | 103-3

Women represent around
12%
of all Zilor employees

In leadership positions, they occupy
21%
of the positions (considering director, management, and coordination positions)

29%
of employees declare themselves to be black, brown, and yellow



DEVELOPMENT AND TRAINING

The development of teams is carried out with 100% of its own investment, with a set of training and qualification programs aimed at improving technical and behavioral skills. These actions are developed using a wide range of tools – in-company and external in-person courses, in addition to e-learning platforms. Technical training is also conducted in partnership with educational organizations dedicated to industrial learning, such as Senai, Senar and technical schools.

In the 2020/2021 harvest year, 54,800 hours of training were offered to teams. In 2021/2022, this total grew to 59,300 hours. This level of training is in line with what was practiced in previous years, even with the restrictions on face-to-face interactions caused by the Covid-19 pandemic.

The use of digital platforms was essential for the continuity of training programs in this scenario. One of the highlights was the holding of the “Meeting with the Leaders” module, an action aimed at 100% of directors and managers carried out completely online.

Industrial teams are qualified and trained to seek continuous improvement, supported by the Lean Six Sigma philosophy. In the 2020/2021 and 2021/2022 harvests, 15 new continuous improvement projects were carried out and other initiatives that had been implemented in previous years continued.

With the advancement of vaccination and the reduction of restrictions for face-to-face actions, the Company conducted



+114
thousand
hours
of training to employees were
promoted in the last biennium



the Zilor and Biorigin Leadership Development Program (PDL) in a completely face-to-face manner for employees. Coordinators, supervisors, production leaders and agricultural leaders were engaged on this front, mainly focused on the development of skills for team management and safety culture.

To strengthen the team of the Biorigin Business Department, the formation of teams in the area was promoted through the Bioispire Program. The initiative involved 84 employees from the Biorigin Brasil and Exterior teams

with workshops, conversation circles and design thinking sessions, among other activities. The actions were entirely online and had the participation of external guests, such as Amyr Klink, (Brazilian navigator and writer, the first person to cross the South Atlantic by rowing, in 1984, aboard the IAT boat), with the objective of reinforcing the learning culture as a relevant part of the business strategies, in addition to building bonds through the deepening of relationships and the sharing of knowledge in an expanded and disruptive way.

Average hours of training per employee

	21/22 harvest	20/21 harvest
By gender		
Men	17.2	15.7
Women	11.6	7.4
By functional level		
Leaders	11.7	13.0
Operational	14.6	14.8
Total	16.5	14.6

360° competency assessment

In the 2021/2022 harvest, the skills assessment model was restructured with the aim of expanding the transversal contribution to the structured development of leaderships. Zilor's culture values cooperation and synergy between areas, and the 360° evaluation process strengthens the attributes and characteristics that need to evolve for even better results and engagement.

This restructuring was made more robust by the application of the 9 Box methodology for these leaders, at which point the information on competencies, results, and potentials to be achieved is crossed. From this base, development plans are defined for the improvement of managerial competences. With this objective, the Company held a seminar for employees released to the managerial role, assessment with an external consultancy specialized in the area that participated in the training in the Management Grid for their professional development and skills development. The action engaged 100% of the new leaders promoted in the period.

SAFETY: LIFE IN FOCUS

The Life in Focus Program, created in 2018, is the platform for tools and safety management in operations. With its own governance structure and prevention orientation, Life in Focus strengthens the culture of safety and the adoption of safe and responsible behaviors in Zilor and Biorigin's agricultural and industrial activities.

Life in Focus was structured based on an internationally recognized methodology, which privileges the observation of the environment and the prevention of accidents, with continuous processes for the awareness of leaders and teams, in addition to the area and line owner culture.

In the 2021/2022 harvest, the Company completed the training of leaders and professionals to operate the tools. The training covered 100% of managers, supervisors, production leaders, agricultural leaders, and operators. As of the 2022/2023 harvest, the focus is on expanding training for the correct use of the tools already implemented for the prevention and control of incidents.



Safety and health training covers 100% of Zilor and Biorigin employees. Annually, a series of training and qualification and refresher courses are held to ensure compliance with the legal requirements applicable to the business.

The maturation of Life in Focus led to a 23% reduction in the total number of accidents in the 2021/2022 harvest, compared to the 2020/2021 harvest. However, there was an increase in the number of accidents with lost time (CAF), demanding greater attention to the severity of the occurrences.

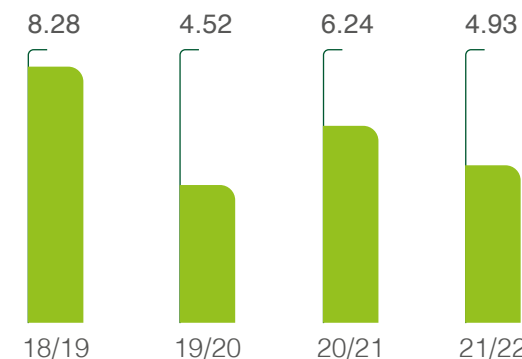
Despite continuous efforts in safety, the 2021/2022 harvest recorded the occurrence of one fatality in one of the industrial units. In the investigation of the accident's root cause, the methodology and analysis tools provided for in the Life in Focus Program were applied, by a multidisciplinary team, reinforcing safety and care for the lives of employees as a priority within the Company.



VIDA EM FOCO

With the maturity of Life in Focus, the Company achieved a **23% reduction** in the total number of accidents (2021/2022 X 2020/2021)

FREQUENCY RATE OF ACCIDENTS WITH AND WITHOUT LEAVE



HEALTH AND WELLNESS

Attention to the health and well-being of employees, always present in the Company's Corporate Culture, has gained even more relevance in the last biennium, due to the Covid-19 pandemic. The maintenance of essential services for the supply of sugar, ethanol, electricity, and natural ingredients required a series of initiatives to protect people during this period.

All actions are monitored by a crisis commission, which constantly monitors the guidelines of national and international health authorities to reassess the measures taken in accordance with established protocols. The Company encourages vaccination among teams and, at the end of the 2021/2022 harvest, 98% of employees had a complete immunization cycle (at least two doses).

Zilor provides all employees with a hotline for assistance in case of suspected Covid-19. The channel can be accessed

by phone, WhatsApp, or email. Through internal communications and other communication platforms, all teams were informed about the security protocols and measures to be taken as a form of prevention.

The ZAPPI – Zilor Employee Integration Application was also implemented to provide various information for the interaction between the Company and employees, in the palm of the hand, including the Covid-19 Self-Exam, a questionnaire with 10 questions and a passport to access the industrial units.

Measures to **prevent and combat Covid-19** were essential to ensure the safety of employees who maintained their **face-to-face activities** during the pandemic



Prevention measures began to be taken by the Company even before the pandemic was declared by the World Health Organization (WHO). In January 2021, due to the seriousness of the situation in Europe, international travel was preventively banned.

In March, the day after the pandemic status was declared, the the remote work system (home office) was installed for all administrative teams. Professionals in the industrial and agricultural areas who continued to work face-to-face began to be monitored daily to assess their physical and health conditions.

Cleaning actions at the units were intensified, and several protection and prevention measures were implemented, in line with the safety protocols released by the health authorities. The use of masks has become mandatory both in units and in transport vehicles, as well as actions to ensure distance and non-concentration of people in the same environment.



zilor Energia e Alimentos **Biorigin** Arte em Ingredientes Naturais



#Eu ♥ Chiquinho
Projeto **APRENDER SEMPRE**
NOVOS TALENTOS, NOVOS DESEJOS,
NOVOS CAMINHOS!


All these initiatives aimed at protecting employees and their families were accompanied by initiatives to support communities:

- Donation of 70% alcohol to the health departments of the municipalities, through the #Éportodos campaign, of the Sugarcane Industry Union (UNICA).
- Donation of market baskets to families in situations of social vulnerability in the cities of Lençóis Paulista, Macatuba and Quatá, in the State of São Paulo.
- Support for the making of masks by the Mãos que Costuram Esperança project. The items were made by seamstresses in the Quatá and Lençóis Paulista regions, helping to prevent and generate income for the communities.
- Donation of tablets and cell phones to students at Escola Chiquinho, in Quatá, to support distance learning during the social distancing phase, as well as training given to educators.



Climate change

Climate change has a strong influence on Zilor's business model. The need to reduce the concentration of greenhouse gases in the atmosphere increases the demand for clean and renewable energy and drives the strategic importance of ethanol and electricity generated by biomass in the global energy matrix.



At the same time, the impacts of climate change are a challenge for the entire agro-industrial sector. Changes in rainfall regimes and the increase in extreme weather events, such as windstorms and prolonged droughts, can reduce productivity in the field.

Therefore, the Company works both to increase the supply of bioenergy to society, through production activities, and to seek greater efficiency in all operations, with actions to reduce direct carbon emissions. This climate benefit of products is recognized mainly by the RenovaBio Program, a Brazilian public policy to encourage the decarbonization of the fuel matrix. Learn more about Zilor's work at RenovaBio on page 45.

In the 2021/2022 harvest, RenovaBio's performance improved due to the inclusion of Agricultural Partners with the collection of primary data within the scope of certification. The expansion of socio-environmental monitoring in the value chain, together with efficiency improvements in the industrial and agricultural processes of the three industrial units, enabled a 5.5% increase in the issuance of CBIOs.

506.4 thousand CBIOs
issued in the 2020/2021 harvest

534,3 thousand CBIOs
issued in the 2021/2022 harvest

The São José unit has the
6th best
score

in terms of CO₂ sequestration
efficiency, with the lowest
anhydrous ethanol conversion
rate (678 liters)

In the 2021/2022 harvest
year, 491,000 CBIOs
were sold, totaling a net
revenue of

R\$ 18.5
million

On March 31,
2022, Zilor had

178.8
thousand
CBIOs
issued and not yet sold



EMISSIONS MANAGEMENT

More than 90% of Zilor/Biorigin's direct emissions are biogenic. This means that CO2 emissions were previously captured by the sugarcane growth cycle, without a direct contribution to the accumulation of greenhouse gases in the atmosphere.

All electrical energy used in the production units of Zilor and Biorigin has zero emissions. The industries are equipped with generating units that guarantee 100% of the energy supply and are even able to export the surplus to the National Interconnected System (SIN).

In order to identify opportunities for improvement and achieve even more efficient performance, an emissions inventory is carried out annually, following the guidelines and protocols of the Brazilian GHG Protocol Program. Zilor and the Biorigin business unit each have their own inventory, considering that there are singularities in the production process.



6%
reduction in
scope 1 GHG
emissions
(2021/2022 X 2020/2021)

The Agroindustry inventory covers scope 1 emissions (direct emissions related to operations) and scope 2 (energy purchase). At Biorigin, in addition to these two scopes, in 2021, the accounting of scope 3 emissions (indirect emissions in the value chain) began, to give greater visibility to the impact of logistics processes and product distribution.

Also with the objective of providing transparency to the management of the risks and impacts associated with the topic, Biorigin has answered, since 2019, the CDP questionnaires on Climate Change and Water Security. The CDP is a voluntary initiative that provides global investors with information from responding organizations on the governance of environmental aspects.

90%

of Agribusiness scope 1
emissions are biogenicZILOR AGROINDUSTRY | GHG inventory (tCO₂e)

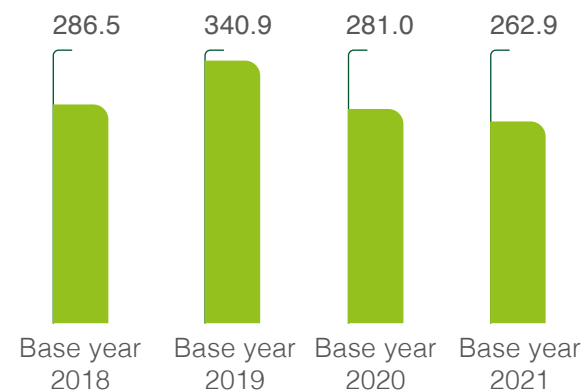
	Base year 2021	Base year 2020
Scope 1		
Gross emissions	262,935.1	280,999.7
Biogenic emissions	2,800,804.6	2,889,171.4
Scope 2*		
Location approach	0.0	0.0
Purchase choice approach	0.0	0.0

*According to the GHG Protocol methodology, scope 2 emissions are zeroed due to the production of bioelectricity at the plants.

99.9%

of Biorigin's Scope 1 emissions
are biogenicBIORIGIN | GHG inventory (tCO₂e)

	Base year 2021	Base year 2020
Scope 1		
Gross emissions	14.8	0.5
Biogenic emissions	34,200.9	33,487.3
Scope 2		
Location approach	0.0	0.0
Purchase choice approach	5,320.0	4,533.1
Biogenic emissions	280,283.2	233,659.5
Scope 3		
Gross emissions	2,632.7	na
Biogenic emissions	304.1	na

GROSS SCOPE 1 EMISSIONS
(THOUSAND TCO₂E)CONSOLIDATED | GHG inventory (tCO₂e)

	Base year 2021	Base year 2020
Scope 1		
Gross emissions	262,950.0	281,000.1
Biogenic emissions	2,835,005.5	2,922,658.7
Scope 2		
Location approach	0.0	0.0
Purchase choice approach	5,320.0	4,533.1
Biogenic emissions	280,283.2	233,659.5
Scope 3		
Gross emissions	2,632.7	0.0
Biogenic emissions	304.1	0.0

Geração de Energia



FIGHTING FIRES

The preservation of natural vegetation areas and the recovery of degraded areas are among the main contributions of Zilor's activities to combat climate change. Natural reserves play a key role in maintaining the carbon stock captured during the process of forest cover formation, in addition to offering an environment conducive to the development and conservation of biodiversity.

In this sense, one of the main fronts of action is the program to fight fires in agricultural areas. As 100% of the sugarcane harvest is carried out mechanically and without the use of burning, the Company's activities do not pose risks to natural areas. Still, fires can occur because of external factors – natural or human (accidental or intentional).

To respond to emergencies of this type, Zilor has 200 firefighters and 123 water trucks. The teams are trained and equipped to act in the first firefighting and to activate the Civil Defense and Fire Department teams.

Zilor is part of the **Fogo Zero** action, coordinated by Copersucar to raise awareness in the communities surrounding the associated plants on how to prevent fire outbreaks and which communication channels to inform about possible occurrences. The campaign also highlights the risks and damage caused by fire and encourages the reporting of criminal fires.

Another initiative is the **Juntos contra o Fogo Project**, in partnership with the Association of Sugarcane Planters of the Middle Tietê (Ascana). In 2021/2022, a digital system was implemented to detect fires in real time. The technology was provided by companies specializing in camera monitoring and georeferencing.

The population can inform the occurrence of fire in the sugarcane fields by telephone

0800 700 1930

Preservation of natural areas

In its own and leased areas where sugarcane is grown, the Company manages a total of 5,800 hectares comprising springs, permanent preservation areas and forest remnants. In these locations, reforestation actions are carried out with the planting of seedlings and monitoring of the biodiversity development. Zilor's reforestation program started in 1997 and currently covers all regions where the Company has operations. In the 2021/2022 harvest year, 50 hectares of native forests were planted, reaching the mark of 631 hectares planted since 2014, an area equivalent to 631 football fields.



Water resources

Water is an essential natural resource to guarantee the supply of ethanol and natural foods to society. Water resources, in operations, are used in industrial processes with responsibility, with the main objective of continuously reducing water abstraction through more efficient processes and reuse systems.

None of the three industrial units are in areas considered to be of water stress, as assessed in the Aqueduct Water Risk Atlas tool, from the World Resources Institute (WRI). Neither does the sugarcane originate from suppliers located in areas with water stress. Even so, Zilor established goals for the management of water use, considering the water balance of each plant, variables of the production process and the volume of abstraction authorized by the grant. In this way, the risks of impacts related to water scarcity are minimized.

Investments in projects to improve water efficiency enabled a reduction of around 22% in the volume of water abstracted, comparing crop year 2021/2022 with crop year 2019/2020. Investments made in water efficiency improvements at the São José and Barra Grande units were around R\$ 42 million in the period 2020/2021 and 2021/2022.

In addition to internal actions, employees participate in regional and state technical chambers dedicated to the conservation of water resources. Zilor is a member, for example, of the Lençóis River Watershed Committee.

In the 2021/2022 harvest, the Company captured 18.9 million cubic meters of water, a reduction of 13.6% compared to the previous period. Among the main factors that allowed this decrease, the installation of a closed water recirculation circuit at the São José unit and improvements in water

efficiency at the Barra Grande unit stand out. Together, these two units were responsible for 99% of the reduction achieved between the years.

The wastewater resulting from the operations is reused in agricultural activities. The input is applied in fertigation, along with vinasse, a residue rich in potassium and other important nutrients for crop development.

The application of vinasse follows the parameters of environmental legislation and meets the annual plan approved by the Environmental Company of the State of São Paulo (Cetesb). The volume of water intended for fertigation has remained stable in recent harvests.

Water abstraction by source (thousand m³)*

	21/22 harvest	20/21 harvest
Surface water	14,334.7	17,204.8
Groundwater	4,543.0	4,649.8
Total	18,877.6	21,854.6

**The entire volume captured has a total dissolved solids concentration of less than 1 g/l.*

Water discharges by type (thousand m³)

	21/22 harvest	20/21 harvest
Vinasse	5,698.7	6,042.7
Wastewater	5,928.9	5,845.9
Total	11,627.6	11,888.6





Zilor and Lençóis Paulista City Hall start project for the Água da Prata Spring

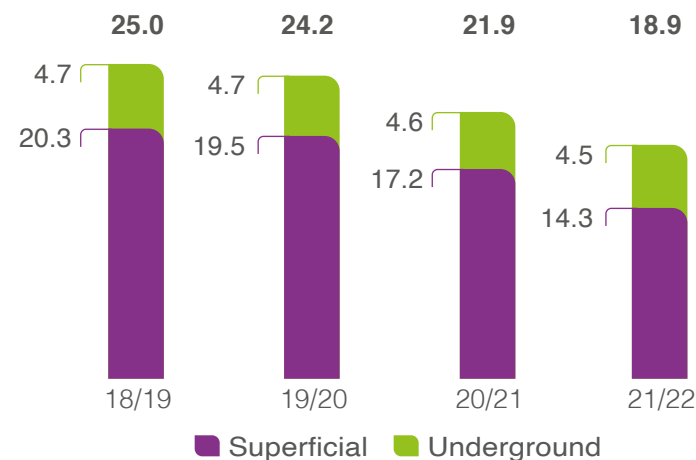
In 2021, Zilor launched the Nascente Modelo Água da Prata project, an initiative in partnership with the city hall of Lençóis Paulista to promote environmental protection and community engagement. The objective is to make the spring, located in a permanent preservation area of the Company, become a point of visitation and environmental education for the local community.

The source is a tributary of the Prata stream, an important body of water in the region. With the partnership, the site will receive infrastructure for visitors, such as signposts, identification of native trees, walkways, and kiosks.

In the 2021/2022 harvest, the **relative water consumption index** was 1.61 m³ per ton of cane processed in the crushing period, a reduction of 10% compared to the 2020/2021 harvest, in which 1.80 m³ per ton of processed cane was registered

13.6%
reduction in
water abstraction
(2021/2022 X
2020/2021)

WATER CAPTURE BY SOURCE
(MILLION M³)



WASTE

The waste management process goes all the way from the separation to the destination of industrial waste. Thus, the Company guarantees the proper destination for 100% of the materials to be discarded.

Hazardous waste, such as batteries, fluorescent lamps, oils and greases and chemical product packaging, are stored and sent for disposal through companies licensed by environmental agencies.

Zilor uses the concept of circular economy, in which the waste produced in the process enters a new process flow, either by reuse or recycling. Other types of waste from industrial units, such as boiler ashes and filter cakes, in addition to the vinasse itself, are reused in the agribusiness production process. These by-products contain important nutrients for soil fertilization, reducing the need for chemical inputs in the sugarcane fields.

In addition, all the bagasse resulting from the sugarcane milling process is used as biomass to generate electricity and steam, in a clean and renewable way.

Zilor guarantees the
proper disposal of 100% of
discarded materials



Communities

In its business growth and diversification trajectory, which completed 75 years in the 2021/2022 harvest year, Zilor has contributed to the social and economic development of the municipalities where its units are located.

Partnership and proximity to communities is one of the pillars of the longevity and sustainability of the Company's business model.

Zilor's presence in the municipalities where its units are located has a positive impact on the local community and opens up the opportunity for the Company to act as a protagonist in the sustainable development of these regions.

Social investments, in line with the corporate strategy, help people to have access to initiatives that promote education, citizenship and culture.





Zilor's Private Social Investment

Aprender Sempre:
education program for children and young people

R\$ 2.2 million in the 2020/2021 harvest year

Community strengthening initiatives

R\$ 5.2 million in the 2021/2022 harvest year

Therefore, the Company promotes private social investment, which is the voluntary transfer of private resources in a planned, monitored, and systematic manner for social, environmental, cultural, and scientific projects of public interest.

Guided by the Private Social Investment Policy, Zilor follows the guidelines for the allocation of financial and human resources to support projects and initiatives of local

communities. In this way, it seeks to contribute to the structuring of initiatives that prioritize local transformation with sustainable long-term results and that promote improved opportunities and quality of life.

In accordance with the Policy's guidelines, social investments support projects that strengthen education, culture, and sports in the municipalities of Lençóis Paulista, Macatuba and Quatá.

Aprender Sempre PROGRAM

The Aprender Sempre Program is the main social investment initiative carried out continuously since 2001. The action benefits young students from elementary and high schools in Lençóis Paulista, Macatuba and Quatá with structuring activities that strengthen citizenship, diversity, and social inclusion.

The Program's premise is to engage, train and encourage young people for life and work, with the objective of bringing innovative learning initiatives to young people and students in the municipalities where Zilor operates, which dialogue with their way of being, stimulate their artistic interest, strengthen their social participation, and develop socio-emotional and entrepreneurial skills that are decisive for their personal and professional success.

In the last biennium, because of the restrictions imposed by the Covid-19 pandemic, actions were directed towards increasing digital tools for pedagogical teaching.

With the education project "Eu Amo Chiquinho," promoted since 2018 at the Francisco Balduino de Souza State School, Zilor has benefited the community of Quatá by offering mentoring and training in the use of software and contributed with psychosocial support for teachers, students and their families.



The 2021/2022 harvest consolidated a great advance in the actions developed to improve education in the territories where Zilor is present. With a greater focus on social action, the Aprender Sempre Program is presented through incentive projects focused on learning through culture and sports for the development of empowerment, protagonism and leadership skills of children and adolescents in the regions where Zilor is inserted.

● Technology Center

In 2022, the Francisco Balduino State School, “Chiquinho” school, inaugurated the Technology Center, a space built and equipped with support by Zilor, the Meu Futuro Digital NGO and the Softtek company to boost learning through new technologies and innovation, which aims to transform the place into a connected school with the aim of developing digital skills in young people, with a positive impact for around 900 students.

● Graffiti workshop

Through the Connection Project, promoted through incentive laws, the students of the Chiquinho School took classes in graffiti, an artistic expression that seeks to explore the sociocultural themes of the urban environment. Two classes were held, with 25 students each.

● Cultural Education Program (PEC)

An initiative aimed at children and young people in the public school system, it promotes awareness of environmental impacts and the development of healthy habits in favor of a sustainable society. The project was carried out via incentive laws in partnership with Lwart Soluções Ambientais.



Relationship with stakeholders

Zilor has always sought a close and enriching relationship with its various strategic audiences. In this category are the community and its economic, philanthropic, political, educational, and religious organizations. The Company also manages the relationship with its shareholders, environmental agencies, partners and suppliers, customers, employees and their families, class entities, the press, and unions.

To increase the competence of Zilor’s relationship with its stakeholders, the Integrated Relationship Program (PRI) defines those responsible for interacting with each of the stakeholders. Since its implementation in 2001, the PRI has given greater direction to Zilor’s communication with its stakeholders, defining and preparing spokespersons and supporting the Crisis Communication Management System.

Incentivized PROJECTS

To expand the reach of investments and strengthen local development, the Company allocates financial resources to support social projects through state and federal incentive laws. In 2021, the first selection process of incentivized projects was carried out, with the objective of identifying initiatives aligned with the Social Investment Policy and that add benefits to local communities.

At the end of the process, 26 projects were selected to be implemented throughout the year 2022. The actions will be supported through resources made possible by the Rouanet Law and the Sports Incentive Law; by the National Support Program for Health Care for Persons with Disabilities (PRONAS) and the National Support Program for Oncological Care (PRONON); and by the Municipal Funds for Children and the Elderly.

Other supported initiatives

● Safe Pedal Campaign

Developed in partnership with the Association of Sugarcane Planters of the Middle Tietê to raise cyclists and drivers' awareness about aspects of traffic safety, during Yellow May. The action was reinforced in November, with a cycling tour promoted by Zilor, Ascana and the City Hall of Lençóis Paulista.

● Musical Energy

Launch of an interactive portal with outstanding songs performed by the Zillo Lorenzetti choir, a social project supported by the Company and which will celebrate its 40th anniversary in 2022.



Projects incentivized via Income Tax (IR)

● Cine Boa Praça

Itinerant cinemathèque project with free film screenings to bring the family together. In Macatuba, the event was held in the drive-in model, with participants inside their cars, to ensure protection against the coronavirus. More than 800 people participated.

● TransformaSom Project

It offers musical initiation classes for children between 7 and 11 years old, through 100% online choral singing workshops. The meetings were carried out for four months, with activities carried out after school hours.

Highlights of the 1st Selection of Incentivized Projects

133
projects
registered

30
projects from
local bidders

26
selected
projects

R\$ 4.3
million
in investments via
incentive laws



Report attachments

COMPLEMENT TO GRI AND SASB DISCLOSURES

GRI 102-8 | Information on employees and other workers

Number of employees

	21/22 harvest			20/21 harvest		
	Men	Woman	Total	Men	Woman	Total
By job type						
Full time	3,084	408	3,492	3,225	434	3,659
Part time	57	32	89	48	37	85
By employment contract						
Indefinite period	2,510	293	2,803	2,678	268	2,946
Definite period	631	147	778	595	203	798
Per unit						
Agricultural Zilor	1,617	155	1,772	1,686	206	1,892
Zilor Industry	994	59	1,053	1,099	52	1,151
Zilor Corporate	215	94	309	191	84	275
Zilor Subtotal	2,826	308	3,134	2,976	342	3,318
Biorigin industry	293	92	385	278	92	370
Corporate Biorigin	22	40	62	19	37	56
Biorigin Subtotal	315	132	447	297	129	426
By functional level						
Leaders	256	30	286	262	23	285
Operational	2,885	410	3,295	3,011	448	3,459
Total	3,141	440	3,581	3,273	471	3,744

GRI 102-9, 308-1, 308-2, 414-1 and 414-2 | Supply chain, New suppliers that were screened using environmental criteria, Negative environmental impacts in the supply chain and actions taken, New suppliers that were screened using social criteria and Negative social impacts in the supply chain and actions taken

The corporate Procurement area consolidates purchases and contracts that are not related to Agricultural Partners. In the biennium, expenditures on corporate contracts totaled R\$ 2.3 billion, the most significant being the categories of agro-industrial inputs and services (together, they represent more than 60% of expenditures in each harvest). The number of suppliers contracted in each period was 936 and 1,013, respectively, in the 2020/2021 and 2021/2022 harvests.

Corporate supplier management includes prioritizing suppliers on an ABC curve according to expenditure and using the Kraljic Matrix methodology, which considers the level of complexity or risk of each purchase category, in addition to its financial impact. The Company has not yet implemented a structured process to assess socio-environmental criteria in the selection and monitoring of corporately contracted suppliers.

GRI 102-13 | Membership of associations

The Sugarcane Industry Association (UNICA) is the main association representing the sugarcane industry; in addition to being members, Zilor is part of the entity's Deliberative Council and work groups in the areas of soil, water and air, sustainability, and bioelectricity. The Company also acts as UNICA representatives on the Aguapeí-Peixe and Tietê-Jacaré River Basin Committees, which involve local actors in actions to preserve water resources.

Among the other entities in which Zilor participate, the Council of Sugarcane and Alcohol Producers of São Paulo (Consecana), the Environmental Chamber of the Sugar-Energy Sector and the Brazilian Biogas Association (ABiogás) deserve mention. At the local level, we are part of the Management Committee of the Lençóis River Watershed and are effective members of the Integrated Emergency Network of the Bauru Region and of the Mutual Emergency Assistance Plan in the Assis region. Biorigin participates in associations in Brazil and abroad, which contribute to the alignment with market demands and trends. Among them, the Brazilian Association of Industry and Commerce of Ingredients and Additives for Food (Abiam),

the National Union of the Animal Feed Industry, the Brazilian Association of Fish Farming (Peixe BR), the Brazilian Association of the Pet Products Industry (Abinpet), the Brazilian Food Industry Association (Abia), the EU Association of Specialty Feed Ingredients and their Mixtures (Fefana), the American Feed Industry Association (Afia) and the European Association for Specialty Yeast Products (Eurasyp).

GRI 102-45 | Entities included in the consolidated financial statements

The Sustainability Report covers the Agroindustry and Biotec hnology divisions, the same scope covered by the Financial Statements of the Zilor Group. For more information, click here and access the Company's financial disclosure.

GRI 102-48 | Restatements of information

There was no reformulation in the presentation of information disclosed in previous reports.

GRI 102-51 | Date of most recent report

The last Sustainability Report was published in 2020.

GRI 102-52 | Reporting cycle

The Sustainability Report is published every two years.

GRI 102-56 | External assurance

Data related to GRI and SASB contents were not submitted to external verification. The financial information, detailed in the Annual Financial Disclosures and replicated in this report, was audited by an independent external company.

GRI 202-1 | Ratios of standard entry level wage by gender compared to local minimum wage

The lowest salary paid by Zilor is in accordance with the salary floors negotiated in collective agreements with the unions, and the gender issue is not a factor in determining remuneration. In the 2021/2022 harvest, the lowest salary paid by the Company was 14.7% higher than the national minimum wage. In the previous period, due to the absence of women in the position with the lowest salary in the company, the percentage difference between the lowest remuneration paid and the national reference was 18% and 15%, respectively, for women and men.

GRI 307-1, SASB RR-BI-120a.2, SASB FB-AG-140A.3 and SASB RR-BI-140A.3 | Non-compliance with environmental laws and regulations, Number of incidents of non-compliance associated with air quality permits, standards, and regulations and Number of incidents of non-compliance associated with water quality permits, standards, and regulations

The notices received by Zilor in the last biennium related to environmental issues totaled R\$ 30.9 million. The Company has presented its defense to the environmental agency in all these cases and is awaiting judgment.

Specifically in relation to air quality parameters, three assessments were received, for emission of smoke with colorimetric density outside the standards determined by legislation. One of the assessments resulted in a warning, and the other two amounted to a fine of R\$ 21,900. The cases were discussed in the first instance, resulting in the payment of the respective fines by the Company. The three occurrences were due to a one-off condition due to equipment breakdown, which was promptly repaired or replaced. Notwithstanding the technical and legal discussion of the cases, chimney emissions are periodically monitored, according to technical and legal parameters, as well as good control practices.

GRI 401-1 | New employee hires and employee turnover

Hiring and Termination

	21/22 harvest		20/21 harvest	
	Hires	Dismissals	Hires	Dismissals
By gender				
Men	1,066	1,210	1,001	1,248
Women	226	254	252	260
By age group				
Up to 30 years old	549	516	518	577
From 31 to 50 years old	596	757	631	768
From 51 years old	147	191	104	163
Total	1,292	1,464	1,253	1,508

Hiring and turnover rates

	21/22 harvest		20/21 harvest	
	Hiring rate	Turnover rate	Hiring rate	Turnover rate
By gender				
Men	33.9%	36.2%	30.6%	34.4%
Women	51.4%	54.5%	53.5%	54.4%
By age group				
Up to 30 years old	54.7%	53.0%	49.5%	52.3%
From 31 to 50 years old	29.5%	33.5%	29.2%	32.4%
From 51 years old	26.3%	30.2%	19.3%	24.8%
Total	36.1%	38.5%	33.5%	36.9%

GRI 401-2 | Benefits provided to full-time employees that are not provided to temporary or part-time employees

All benefits offered by Zilor also cover employees with an indefinite-term contract and those with a fixed-term contract. Among the benefits offered, it is worth mentioning the private pension plan, health and dental plans, group life insurance, various types of assistance (day care, optical care, medication, and food), the offer of food in the units' cafeterias and transportation chartered for industrial units and agricultural work fronts. There are restrictions on the coverage of these benefits only for interns and apprentices, hired under specific legislation. Interns are entitled to health insurance, transportation vouchers and meals at the units, while apprentices only have transportation vouchers.

GRI 403-9 | Work-related injuries

SASB FB-AG-320a.1 | (1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR) for (a) direct employees and (b) seasonal and migrant employees

Work safety indicators

	21/22 harvest	20/21 harvest
Base data		
Number of man-hours worked (MHW)	6,691,275	6,889,008
Number of near misses	1,468	899
Total number of accidents (with and without leave)	33	43
Number of accidents with leave of more than 15 days	5	3
Number of accidents resulting in fatalities	1	0
Number of days lost/debited	6,231	188
Rates calculated with the factor of 1 million MHW (GRI)		
Recordable accident frequency rate	4.93	6.24
Frequency rate of accidents with leave of more than 15 days	0.75	0.44
Frequency rate of fatal accidents	0.15	0.00
Accident severity rate	931.21	27.29
Rates calculated with the factor of 200 thousand MHW (SASB)		
Near miss frequency rate	43.88	26.10
Recordable incident frequency rate (TRIR)	0.99	1.25
Fatality rate	0.03	0.00

GRI 413-2 | Operations with significant actual and potential negative impacts on local communities

The Company continually seeks to minimize the negative impacts associated with its activities on local communities. At the industrial units, Zilor adopts equipment to control atmospheric pollution and ensures that atmospheric emissions comply with environmental legislation.

In the cultivation areas, 100% of the harvest is free of fires, and the Company fights the proliferation of the stable fly, which affects livestock, preventing outbreaks where egg laying can occur and raising awareness of neighboring producers about good practices that avoid the plague in the stables.

SASB RR-BI-000.A | Biofuel production capacity

Production capacity per unit (thousand gallons)*

	21/22 harvest	20/21 harvest
Barra Grande	60,733.1	59,570.8
São José	63,929.6	63,348.4
Quatá	58,741.3	61,705.3
Total	183,404.0	184,624.5

*Biofuel production capacity calculated from the daily production capacity (m3/day) authorized by the National Agency of Petroleum, Natural Gas and Biofuels (ANP) for each unit, multiplied by the days of harvest. The authorized capacity of hydrated ethanol is considered the maximum production limit of the distillation apparatus. Therefore, since the dehydration of ethanol is subsequent to its distillation, the sum of the average daily production volumes of hydrous ethanol and anhydrous ethanol must not exceed the authorized hydrous ethanol capacity. Capacity available in the Dynamic Report of biofuel production facilities authorized by the ANP.

SASB RR-BI-120a.1 | Air emissions of the following pollutants: (1) NOx (excluding N2O), (2) SOx, (3) volatile organic compounds (VOCs), (4) particulate matter (PM10), and (5) hazardous air pollutants (HAPs)

Atmospheric emissions (tons)

	21/22 harvest	20/21 harvest
NOx	490.00	410.61
Particulate material	2,118.69	2,170.10

GRI 419-1 | Non-compliance with laws and regulations in the social and economic area

In the last two years, Zilor received tax notices in the amount of R\$ 31.2 million. In all cases, the Company presented a defense and is awaiting progress. Zilor conducts its business in full compliance with current regulations, which are reflected in Internal Policies, Protocols and Management Systems in order to ensure compliance with the Brazilian legal system. In the event of any questions, assessments or imposition of penalties for alleged non-compliance, the Legal area will evaluate the measures, with the other areas, to identify the cause and deal with the problems, based on the current legislation.

GRI CONTENT INDEX

GRI Standard	Disclosure	Page	Omissions	Global Compact	SDG
GRI 101 Foundation 2016					
General disclosures					
GRI 102 General disclosures 2016	Organizational profile				
	102-1 Name of the organization	15	-	-	-
	102-2 Activities, brands, products, and services	15, 16 and 17	-	-	-
	102-3 Location of headquarters	15 and 18	-	-	-
	102-4 Location of operations	18	-	-	-
	102-5 Ownership and legal form	15	-	-	-
	102-6 Markets served	15, 16 and 17	-	-	-
	102-7 Scale of the organization	18, 27 and 49	-	-	-
	102-8 Information on employees and other workers	49 and 77	-	6	8 and 10
	102-9 Supply chain	33 and 77	-	-	-
	102-10 Significant changes to the organization and its supply chain	28 and 35	-	-	-
	102-11 Precautionary Principle or approach	44	-	-	-
	102-12 External initiatives	44, 45, 46 and 47	-	-	-
	102-13 Membership of associations	78	-	-	-
	Strategy				
	102-14 Statement from senior decision-maker	6, 7 and 8	-	-	-
	102-15 Key impacts, risks, and opportunities	24 and 25	-	-	-
Ethics and integrity					
102-16 Values, principles, standards, and norms of behavior	21	-	10	16	
102-17 Mechanisms for advice and concerns about ethics	23	-	10	16	

GRI Standard	Disclosure	Page	Omissions	Global Compact	SDG
GRI 102 General disclosures 2016	Governance				
	102-18 Governance structure	19 and 20	-	-	-
	Stakeholder engagement				
	102-40 List of stakeholder groups	9	-	-	-
	102-41 Collective bargaining agreements	49	-	3	8
	102-42 Identifying and selecting stakeholders	9	-	-	-
	102-43 Approach to stakeholder engagement	9	-	-	-
	102-44 Key topics and concerns raised	10	-	-	-
	Reporting practice				
	102-45 Entities included in the consolidated financial statements	78	-	-	-
	102-46 Defining report content and topic Boundaries	9	-	-	-
	102-47 List of material topics	10	-	-	-
	102-48 Restatements of information	78	-	-	-
	102-49 Changes in reporting	4	-	-	-
	102-50 Reporting period	3	-	-	-
	102-51 Date of most recent report	78	-	-	-
	102-52 Reporting cycle	78	-	-	-
	102-53 Contact point for questions regarding the report	4	-	-	-
	102-54 Claims of reporting in accordance with the GRI Standards	3	-	-	-
	102-55 GRI content index	81, 82, 83, 84 and 85	-	-	-
102-56 External assurance	78	-	-	-	

GRI Standard	Disclosure	Page	Omissions	Global Compact	SDG
Material topic I Management of sugarcane suppliers					
GRI 103 I Management approach 2016 ¹	103-1 I Explanation of the material topic and its Boundary	10, 33, 34 and 35	-	-	-
	103-2 I The management approach and its components	33, 34 and 35	-	-	-
	103-3 I Evaluation of the management approach	33, 34, 35, 44, 45, 46 and 47	-	-	-
GRI 308 I Supplier environmental assessment 2016	308-1 I New suppliers that were screened using environmental criteria	34 and 77	-	8	-
	308-2 I Negative environmental impacts in the supply chain and actions taken	34 and 77	-	8	-
GRI 407 I Freedom of association and collective bargaining 2016	407-1 I Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	21 and 34	-	3	8
GRI 408 I Child labor 2016	408-1 I Operations and suppliers at significant risk for incidents of child labor	21 and 34	-	5	8 and 16
GRI 409 I Forced or compulsory labor 2016	409-1 I Operations and suppliers at significant risk for incidents of forced or compulsory labor	21 and 34	-	4	8
GRI 414 I Supplier social assessment 2016	414-1 I New suppliers that were screened using social criteria	34 and 77	-	2	5, 8 and 16
	414-2 I Negative social impacts in the supply chain and actions taken	34 and 77	-	2	5, 8 and 16
Material topic I Strategy and compliance					
GRI 103 I Management approach 2016 ²	103-1 I Explanation of the material topic and its Boundary	10, 19, 20, 21, 22, 23, 24, 25, 26, 27 and 28	-	-	-
	103-2 I The management approach and its components	19, 20, 21, 22, 23, 24, 25, 26, 27 and 28	-	-	-
	103-3 I Evaluation of the management approach	19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 44, 45, 46 and 47	-	-	-
GRI 205 I Anti-corruption 2016	205-3 I Confirmed incidents of corruption and actions taken	23	-	10	16
GRI 307 I Environmental compliance 2016	307-1 I Non-compliance with environmental laws and regulations	79	-	8	16
GRI 419 I Socioeconomic compliance 2016	419-1 I Non-compliance with laws and regulations in the social and economic area	80	-	-	16

¹The management approach refers to all GRI topics in the material topic “Management of sugarcane suppliers.”

²The management approach refers to all GRI topics in the material topic “Strategy and compliance.”

GRI Standard	Disclosure	Page	Omissions	Global Compact	SDG
Material topic Innovation and productivity					
GRI 103 Management approach 2016	103-1 Explanation of the material topic and its Boundary	10, 36, 37, 38, 39, 40, 41 and 42	-	-	-
	103-2 The management approach and its components	36, 37, 38, 39, 40, 41 and 42	-	-	-
	103-3 Evaluation of the management approach	36, 37, 38, 39, 40, 41, 42, 44, 45, 46 and 47	-	-	-
Material topic Climate change					
GRI 103 Management approach 2016	103-1 Explanation of the material topic and its Boundary	10, 60, 61, 62, 63, 64 and 65	-	-	-
	103-2 The management approach and its components	60, 61, 62, 63, 64 and 65	-	-	-
	103-3 Evaluation of the management approach	44, 45, 46, 47, 60, 61, 62, 63, 64 and 65	-	-	-
GRI 305 Emissions 2016	305-1 Direct (Scope 1) GHG emissions	64	-	7 and 8	3, 12, 13, 14 and 15
	305-2 Energy indirect (Scope 2) GHG emissions	64	-	7 and 8	3, 12, 13, 14 and 15
	305-3 Other indirect (Scope 3) GHG emissions	64	-	7 and 8	3, 12, 13, 14 and 15
Material topic Water resources					
GRI 103 Management approach 2016	103-1 Explanation of the material topic and its Boundary	10, 67, 68 and 69	-	-	-
	103-2 The management approach and its components	67, 68 and 69	-	-	-
	103-3 Evaluation of the management approach	44, 45, 46, 47, 67, 68 and 69	-	-	-
GRI 303 Water and effluents 2018	303-1 Interactions with water as a shared resource	68 and 69	-	8	6 and 12
	303-2 Management of water discharge-related impacts	68	-	8	6
	303-3 Water withdrawal	68 and 69	-	7 and 8	6
	303-4 Water discharge	68	-	7 and 8	6
Material topic Relationship with communities					
GRI 103 Management approach 2016 ³	103-1 Explanation of the material topic and its Boundary	10, 71, 72, 73, 74 and 75	-	-	-
	103-2 The management approach and its components	71, 72, 73, 74 and 75	-	-	-
	103-3 Evaluation of the management approach	44, 45, 46, 47, 71, 72, 73, 74 and 75	-	-	-
GRI 202 Market presence 2016	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	78	-	6	1, 5 and 8
GRI 411 Rights of indigenous peoples 2016	411-1 Incidents of violations involving rights of indigenous peoples	23	-	1	2
GRI 413 Local communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	72	-	1	-
	413-2 Operations with significant actual and potential negative impacts on local communities	80	-	1	1 and 2

³The management approach refers to all GRI topics in the material topic "Relationship with communities."

GRI Standard	Disclosure	Page	Omissions	Global Compact	SDG
Material topic Labor practices					
GRI 103 Management approach 2016 ⁴	103-1 Explanation of the material topic and its Boundary	10, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58 and 59	-	-	-
	103-2 The management approach and its components	48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58 and 59	-	-	-
	103-3 Evaluation of the management approach	44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58 and 59	-	-	-
GRI 401 Employment 2016	401-1 New employee hires and employee turnover	79	-	6	5, 8 and 10
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	79	-	-	3, 5 and 8
GRI 403 Occupational health and safety 2018	403-1 Occupational health and safety management system	56	-	-	8
	403-2 Hazard identification, risk assessment, and incident investigation	56 and 57	-	-	8
	403-3 Occupational health services	58 and 59	-	-	8
	403-4 Worker participation, consultation, and communication on occupational health and safety	57	-	-	8 and 16
	403-5 Worker training on occupational health and safety	56 and 57	-	-	8
	403-6 Promotion of worker health	58 and 59	-	-	3
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	34 and 59	-	-	8
	403-8 Workers covered by an occupational health and safety management system	57	-	-	8
	403-9 Work-related injuries	57 and 80	-	-	3, 8 and 16
GRI 404 Training and education 2016	404-1 Average hours of training per year per employee	55	-	6	4, 5, 8 and 10
	404-2 Programs for upgrading employee skills and transition assistance programs	54 and 55	-	-	8
Material topic Product differentiation					
GRI 103 Management approach 2016 ⁵	103-1 Explanation of the material topic and its Boundary	10, 39, 40, 41, 42, 43, 44 and 47	-	-	-
	103-2 The management approach and its components	39, 40, 41, 42, 43, 44 and 47	-	-	-
	103-3 Evaluation of the management approach	39, 40, 41, 42, 43, 44, 45, 46 and 47	-	-	-
GRI 416 Customer health and safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	44 and 47	-	-	-
GRI 417 Marketing and labeling 2016	417-1 Requirements for product and service information and labeling	44 and 47	-	-	12

⁴The management approach refers to all GRI topics in the material topic "Labor practices."

⁵The management approach refers to all GRI topics in the material topic "Product differentiation."

SASB CONTENT INDEX

SASB Topic	SASB Code	Metrics requested by SASB	Page
Agricultural Products			
Greenhouse gas emissions	FB-AG-110a.1	Gross global Scope 1 emissions	64
	FB-AG-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	61 and 63
	FB-AG-110a.3	Fleet fuel consumed, percentage renewable	For reasons of strategy or management, this information will not be reported in this biennium.
Energy management	FB-AG-130a.1	(1) Operational energy consumed, (2) percentage grid electricity, (3) percentage renewable	For reasons of strategy or management, this information will not be reported in this biennium.
Water management	FB-AG-140a.1	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	68
	FB-AG-140a.2	Description of water management risks and discussion of strategies and practices to mitigate those risks	68 and 69
	FB-AG-140a.3	Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations	79
Food safety	FB-AG-250a.1	Global Food Safety Initiative (GFSI) audit (1) non-conformance rate and (2) associated corrective action rate for (a) major and (b) minor non-conformances	For reasons of strategy or management, this information will not be reported in this biennium.
	FB-AG-250a.2	Percentage of agricultural products sourced from suppliers certified to a Global Food Safety Initiative (GFSI) recognized food safety certification program	44
	FB-AG-250a.3	(1) Number of recalls issued and (2) total amount of food product recalled	For reasons of strategy or management, this information will not be reported in this biennium.
Workforce health & safety	FB-AG-320a.1	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR) for (a) direct employees and (b) seasonal and migrant employees	80
Environmental & social impacts of ingredient supply chain	FB-AG-430a.1	Percentage of agricultural products sourced that are certified to a third-party environmental and/or social standard, and percentages by standard	44
	FB-AG-430a.2	Suppliers' social and environmental responsibility audit (1) non-conformance rate and (2) associated corrective action rate for (a) major and (b) minor non-conformances	For reasons of strategy or management, this information will not be reported in this biennium.
	FB-AG-430a.3	Discussion of strategy to manage environmental and social risks arising from contract growing and commodity sourcing	For reasons of strategy or management, this information will not be reported in this biennium.
GMO Management	FB-AG-430b.1	Discussion of strategies to manage the use of genetically modified organisms (GMOs)	47
Ingredient sourcing	FB-AG-440a.1	Identification of principal crops and description of risks and opportunities presented by climate change	60, 61 and 65
	FB-AG-440a.2	Percentage of agricultural products sourced from regions with High or Extremely High Baseline Water Stress	68
Activity metrics	FB-AG-000.A	Production by principal crop	30 and 32
	FB-AG-000.B	Number of processing facilities	18
	FB-AG-000.C	Total land area under active production	31
	FB-AG-000.D	Cost of agricultural products sourced externally	32

SASB Topic	SASB Code	Metrics requested by SASB	Page
Biofuels			
Air quality	RR-BI-120a.1	Air emissions of the following pollutants: (1) NO _x (excluding N ₂ O), (2) SO _x , (3) volatile organic compounds (VOCs), (4) particulate matter (PM10), and (5) hazardous air pollutants (HAPs)	80
	RR-BI-120a.2	Number of incidents of non-compliance associated with air quality permits, standards, and regulations	79
Water management in manufacturing	RR-BI-140a.1	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	68
	RR-BI-140a.2	Description of water management risks and discussion of strategies and practices to mitigate those risks	68 and 69
	RR-BI-140a.3	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	79
Lifecycle emissions balance	RR-BI-410a.1	Lifecycle greenhouse gas (GHG) emissions, by biofuel type	For reasons of strategy or management, this information will not be reported in this biennium.
Sourcing & environmental impacts of feedstock production	RR-BI-430a.1	Discussion of strategy to manage risks associated with environmental impacts of feedstock production	34
	RR-BI-430a.2	Percentage of biofuel production third-party certified to an environmental sustainability standard	44
Management of legal & regulatory environment	RR-BI-530a.1	Amount of subsidies received through government programs	45
	RR-BI-530a.2	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	45
Operational safety, emergency preparedness & response	RR-BI-540a.1	Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR)	For reasons of strategy or management, this information will not be reported in this biennium.
Activity metrics	RR-BI-000.A	Biofuel production capacity	80
	RR-BI-000.B	Production of: (1) renewable fuel, (2) advanced biofuel, (3) biomass-based diesel, and (4) cellulosic biofuel	30
	RR-BI-000.C	Amount of feedstock consumed in production	30



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