



Annual Sustainability Report

2022 | 2023

zilor
Energy and Food

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WELCOME

GRI 2-2, 2-3, 2-4, 2-5, 2-14

WELCOME

ZILOR

MANAGEMENT
STRATEGY, QUALITY
AND INNOVATION

FINANCIAL
PERFORMANCE AND
INVESTMENTS

HUMAN AND SOCIAL
CAPITAL

ENVIRONMENT

INDICATORS



By publishing its Annual Sustainability Report, Zilor is reinforcing its commitment to transparency and socio-environmental responsibility, and is proud to present its stakeholders (communities, customers, suppliers, partners, employees, investors and shareholders) with the highlights of the 2022/2023 harvest results.

This publication begins a cycle of annual reports (until now, our reports were biannual) and contains important information on the company's activities between April 1, 2022, and March 31, 2023, as well as data on business performance in the agribusiness area - the Barra Grande Unit, located in Lençóis Paulista (SP), the São José Unit, based in Macatuba (SP), and the Quatá Unit (SP) – and in the area of biotechnology, beginning with the Biorigin Business Unit, with three industrial units in the state of São Paulo and one in the United States, as well as a Distribution Center in Belgium. The legal entities covered in the report are the same as those included in the company's Financial Statements, available [here](#).

The structure of the report is based upon the Company's sustainability material topics, defined by means of a process developed in 2022 (read more in the next topic), bringing together business issues and environmental, social and governance (ESG) aspects, which include climate change, community relations, labor relations, our portfolio, and management of suppliers, innovation and compliance, amongst others.

The indicators and content presented are guided by the 2021 Standards of the Global Reporting Initiative (GRI), recognized as the best global practices for the public reporting of different environmental, social and economic impacts. The indicators developed by the Sustainability Accounting Standards Board (SASB) for the Biofuels and Agricultural Products sector have also been adopted. The Company also guides and discloses its activities in line with the United Nations' (UN) Sustainable Development Goals (SDGs) established.

The Board of Directors analyzes and approves the information reported here, including the organization's material topics, with support from the advisory committees. Furthermore, this document was validated by an external auditor, which provided the information contained in the letter attached to this report.

In case of any doubts or suggestions concerning the content of this report, please write to:

comunicacao@zilor.com.br

Materiality

GRI 2-29, 3-1, 3-2

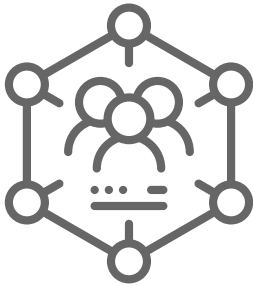
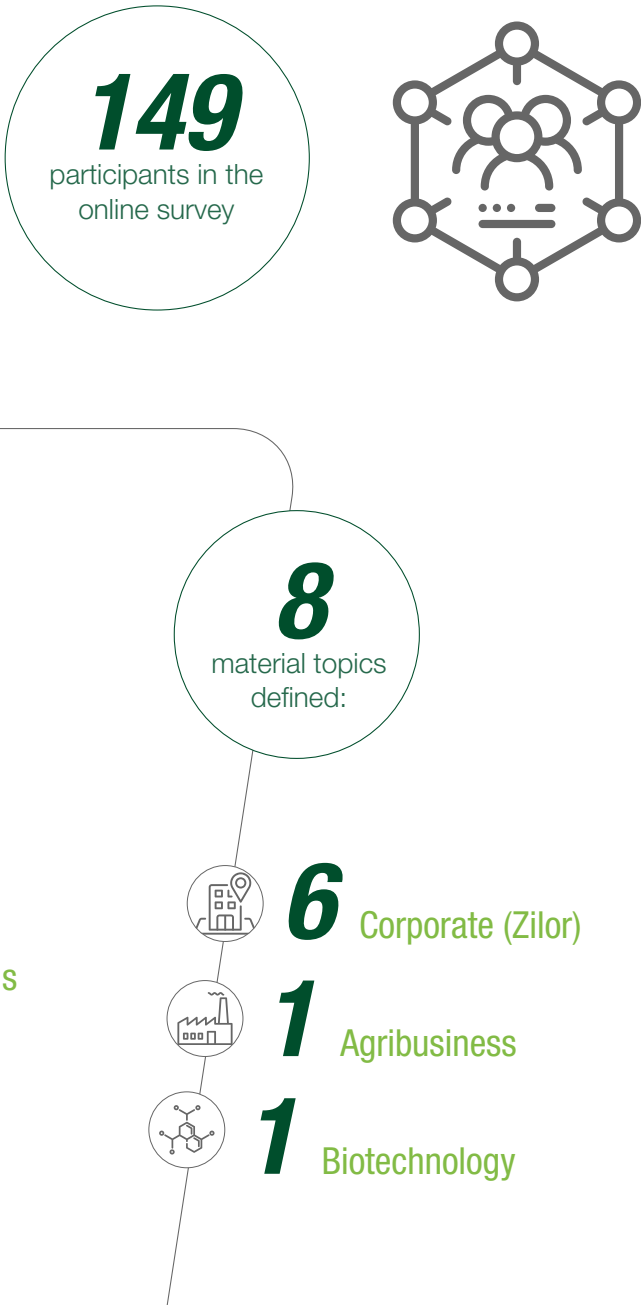
Reflecting its commitment to the disclosure of ESG information that is consistent with its impacts, relations and business responsibilities, over the course of the 2021/2022 cycle, Zilor undertook a new materiality process. This process is responsible for outlining the Company's most important topics in the view of the stakeholders and aspects outside the company's limits.

The new study was based upon the GRI Standards and involved engagement with the internal and external stakeholders by means of an open online survey and qualitative interviews with representatives of the priority publics (financial institutions, customers, distributors, sector organizations, public authorities and specialists).

For the development of this process, which involved different areas and leaders, trends in the ESG management of the business were assessed along with important issues for the sectors in which the Company operates. During this stage, analyses were undertaken of sector studies, regulations, sustainability directives and benchmarks, considering the aspects unique to the Agribusiness and Biotechnology divisions (Biorigin).

Six priority corporate topics were defined, as well as specific matters for the business divisions, totaling a materiality matrix made up of eight themes. In relation to the previous materiality (from 2017), the topic of climate change was added and the classifications and scope of the others were reviewed. The updated list can be found below.

The process in figures



Material topic GRI 3-2

Approach

SDGs

Associated indicators

Scope

Strategy and compliance

This covers the governance of the business, in order to ensure ethical and honest operations in compliance with the law. It also includes the stakeholders' expectations of clear decision-making and strategic management of the Company, as well as alignment of the premises and directives between the two business divisions.

8 9 16

201-1, 205-1, 205-2, 205-3, RR-BI-530a.1, RR-BI-530a.2

Agribusiness
Biotechnology

Innovation and productivity

This combines the operational performance of the two divisions and the innovation initiatives applied in the activities. It includes the constant pursuit for improved performance and productivity, from the field to the factory.

9

RR-BI-000.A, RR-BI-000.B, RR-BI-000.C, FB-AG-000.A, FB-AG-000.B, FB-AG-000.C, FB-AG-000.D

Agribusiness
Biotechnology

Climate Changes

Perspectives on mitigation and adaptation to climate change. In relation to the first, of special note are the initiatives for reducing fuel consumption, increasing the use of renewable energy sources and, consequently, reducing the greenhouse gas (GHG) emissions associated with the operations. As for the second, the sector's central concern regards the role of ethanol in the decarbonization of the value chain.

3 6 7
8 11 12
14 15 13
16

302-1, 302-2, 302-3, 304-2, 304-3, 305-1, 305-2, 305-3, 305-4, 305-5, 306-1, 306-2, 13.5.1, RR-BI-410a.1, FB-AG-110a.1, FB-AG-110a.2, FB-AG-110a.3, RR-BI-430a.1, RR-BI-430a.2, FB-AG-130a.1, RR-BI-120a.1, RR-BI-120a.2

Agribusiness
Biotechnology

Hydro-resources

The impacts of the Company on the availability and quality of the water resources in the regions where it operates. As water is an essential element in both the agricultural and industrial activities, the Company is extremely concerned about the impacts associated with this area of consumption and the practices it adopts to reduce its water requirements.

6 8 9
12

303-1, 303-2, 303-3, 303-4, 303-5, FB-AG-140a.2, FB-AG-140a.3, RR-BI-140a.1, RR-BI-140a.2, RR-BI-140a.3, FB-AG-440a.2, FB-AG-140a.1

Agribusiness
Biotechnology

Community relations

This involves hiring personnel from the communities and the implementation of social investments which contribute to reducing inequalities and promoting sustainable socioeconomic development. It also focuses on ensuring that operations do not affect the rights of vulnerable communities.

1 2 5
8

202-1, 202-2, 411-1, 413-1, 413-2

Agribusiness
Biotechnology

Labor practices

This topic focuses on training the teams to work with mechanized farming and technological innovations in industry. It also covers occupational health and safety issues.

3 4 5
8 10 16

401-1, 401-2, 401-3, 403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-7, 403-8, 403-9, 404-10, 404-2, 404-3, FB-AG-320a.1, RR-BI-540a.1

Agribusiness
Biotechnology

Management of suppliers

This includes monitoring the sugarcane chain of suppliers in order to guarantee the environmental and labor compliance of these partners in Zilor's business chain.

5 8 16

308-1, 308-2, 407-1, 408-1, 409-1, 414-1, 414-2, 13.23.1, 13.23.2

Agribusiness

Product differentiation

This concerns Biorigin's efforts to ensure the tracking of its products of renewable origin and the proper practices involved in marketing and labeling, aggregating technology and distinguishing its products for its customers.

12 16

416-1, 416-2, 417-1, 417-2, 13.6.1, 13.6.2, FB-AG-430b.1, FB-AG-430a.1, FB-AG-430a.2, FB-AG-430a.3, FB-AG-440a.1, FB-AG-250a.2, FB-AG-250a.1, FB-AG-250a.3

Biotechnology

Message from the Board of Directors

GRI 2-22



Reflecting the increasing maturity of our governance and planning processes, we have consolidated the ESG Zilor + Sustainable 2030 Program, with actions that strengthen the connection between the business and the challenges of sustainable development. Also in 2022/2023, we approved the incorporation of environmental, social and governance targets with variable remuneration criteria for the CEO and other employees, applicable as of the coming harvest.

Measures such as this reiterate the shareholders' and the administration's commitment to the consolidation of a more solid, resilient and responsible Zilor that is attuned to the needs of society. Our culture has continued evolving, and we believe that we are prepared to address the risks and opportunities of the business, including climate change, the energy transition, and the pursuit of productivity and excellence in the field and in the factory.

The international and domestic scenarios for companies in our sector are promising, despite facing uncertainties and complexities. On the one hand, the public policies providing incentives for renewable energy and energy transition are increasing - a trend which strengthens our strategy in the expansion of the energy business. On the other, geopolitical conflicts have caused a breakdown in the supply chains and led to economic instability and a volatile exchange rate, to which we have responded promptly through different financial instruments and risk management.

Regardless of the short-term contexts, we are aware of the potential profitability of the business, and improvement in productivity through investments in growth, innovation and technology. Special mention should be made of the energy expansion project, which will allow for an increase of up to 60% of the Company's cogeneration of clean and renewable electricity. The new cogeneration unit in São José was completed in April 2023. The second TPP project at the Barra Grande Unit, meanwhile, is on course, with conclusion expected in 2024. In order to fund this energy expansion project, we emitted infrastructure debentures in the sum of R\$ 450 million during the harvest, with a longer term established for payment and highly competitive rates, confirming our structured financial management focused on the future.

Zilor is commemorating its 76th anniversary at a time notable for important transformations, delivering the best results in the Company's history, with a record net revenue of R\$ 3.4 billion.



*Advances in our ESG strategy
reflect our commitment to
the sustained growth of the
business*

Productivity in the agribusiness and industrial areas is another highlight. Despite the unfavorable weather conditions (with increasingly more common periods of very heavy rainfall and extreme climate events), we have been working to increase the productivity of our own sugarcane, combining techniques such as crop rotation, pest and weed control, and increasing the area of fertigation. As a result, the TCH (tons of cane per hectare) saw a consolidated increase of 5.4% this harvest.

The Agricultural Partnerships Program provides a competitive advantage and represents one of the company's strengths in this area: we are investing in the strengthening of ties and in the ESG controls with our sugarcane production partners, combining risk management with the sustained growth of the businesses. The same approach extends to the industrial operation and to Biorigin, in both of which we have achieved improvements in the use of natural resources and invested in technologies and programs for productive and logistical efficiency.

Grounded in the sphere of diversification of the business, Biorigin, a biotechnology unit which will have been operating for 20 years in 2023, is one of Zilor's strategic assets. With 15 lines and more than 100 products in its global portfolio, serving clients in more than 60 countries, the division brings together a large portion of our investments in research, development and innovation, and fulfills the Company's commitment to offering top-quality natural products providing aggregate value.

Finally, we should not forget to highlight the alterations we have implemented in our governance structure, which has continued evolving. In light of the Company's strategy of offering support for future projects, we have created two new boards - the Personnel & Organization Board, and the Legal Board - which will allow us to strengthen our approach to issues involving culture, engagement and compliance.

In the political arena, we have revised our Code of Ethics, and this harvest we have also published our Code of Ethics for Agricultural Suppliers and Partners, and our Anti-corruption Policy. We have also broadly revised our jobs and remuneration structure, involving support provided by an external consultancy, with the aim of consolidating Zilor as a benchmark employer and retaining the best talents and leaders.

Harvest after harvest, we are committed to proving the solidity of the business model that Zilor has constructed with its stakeholders over the past 76 years. We believe in the potential of the Company to convert natural raw-materials into sustainable energies and top-quality ingredients that contribute to humanity and the planet. We would like to thank everyone for one more strong and successful cycle and for the partnership the Company has formed with its customers, employees, suppliers, shareholders and communities.

Francisco Amaury Olsen
Chairman of the Board of Directors

Message from the CEO

GRI 2-22

The 2022/2023 harvest began with a complex and challenging outlook for companies such as Zilor. Geopolitical conflicts affecting the agribusiness production chains and climate conditions notable for rainfall concentrated in specific periods, as well as high freight and input costs in the biotechnology scenario, led to significant variations in the exchange rate, with immediate pressure on our cost structure.

This scenario has meant that, over recent months, our governance and management structures have experienced a trying period. Fortunately, the foundations of Zilor have proven to be correct and we ended the year with a positive balance: we achieved the highest net income in the Company's 76-year history this harvest, with R\$ 3.4 billion, 5.8% higher than the previous year, and a positive result in terms of productivity.

Zilor's foundations have proven to be right: we achieved the highest net revenue in our 76-year history



R\$ 3.4 bi
in revenue, 5.8%
more than in
2021/2022

It is clear that this performance is down to the dedication of each one of our more than 3,600 employees working at our Agribusiness and Biorigin divisions, who held nothing back and fully applied themselves to our strategic plan. We have counted upon each individual's commitment to face the challenges of productivity, efficiency, rational use of resources and management of the supply and delivery chain this harvest, to achieve results consistent with our potential and the expectations of our shareholders.

In the Agribusiness division, we have experienced a year of significant increases in terms of the crops and industrial production. We have directed our efforts towards increased productivity, with the evolution of the technology package, associated with the correct timing for the application of fertilizers, control of pests and expansion in the area of fertigation. We

experienced a 5.4% gain compared to the 2021/2022 harvest, reaching 76.3 t/ha. The highlight was the Quatá Unit, where growth was recorded at over 15.1%. Our crushing was 7.0% greater than the previous harvest, reaching 10.5 million tons.

At the Biorigin Unit, we have continued to pursue a journey of innovation. Our attention turned once again to increasing our industrial productivity and we began activities at our Applications Center in São Paulo (SP), a space dedicated to our customers who wish to find out about the best application of our natural ingredients in the food industry. We also improved the logistics operation, renegotiating maritime freight arrangements and making better use of air freight to fully meet the requirements of our customers. As a result, we achieved record invoicing in dollars in the foodstuffs sector and a greater delivery of the final product in the pet feed and animal nutrition and health segment.

In terms of financial management, we have kept our indebtedness at satisfactory levels, achieving a Net Debt/Adjusted Ebitda ratio of 1.94x, experiencing a temporary rise due to the funding of the investment project for expansion of energy cogeneration at two of the Company's three agribusiness units. Furthermore, we ended the harvest with an Ebitda of 961.1 million (a margin of 28.2%), a net revenue of R\$ 350.8 million, and a healthy cashflow of R\$ R\$ 1,651.5 million.

The financial sustainability is part of an increasingly more noticeable commitment to the environmental, social and governance pillars (ESG). Of special note is the evolution and consolidation of our Zilor + Sustainable Program, with ESG targets and commitments involving our leaders. We have made efforts on various fronts connected to the production chain, the development of personnel and the generation of a positive impact on the communities, as well as being highly committed to controlling the use of natural resources.

These and other indicators and highlights presented over the course of this report make us proud of the resilience of each member of the Zilor team, for reflecting, acting and delivering results consistent with our history and potential to have a positive impact on the communities in which we operate. I would like to invite you to read more about what the Company has delivered in terms of value this year over the following pages.

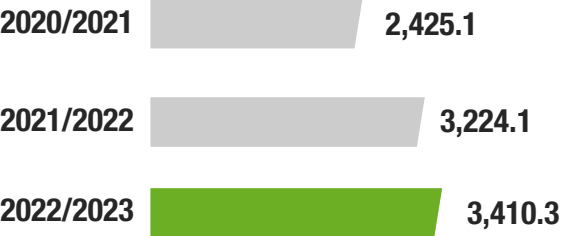
Fabiano Zillo
CEO of Zilor

We have remained committed to being a solid, stable and healthy Company - one of which everyone who works here can feel proud.

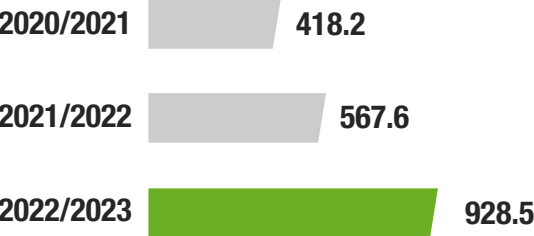
Harvest Highlights

Financial performance

Net revenue (in R\$ millions)



Capex (in R\$ millions)



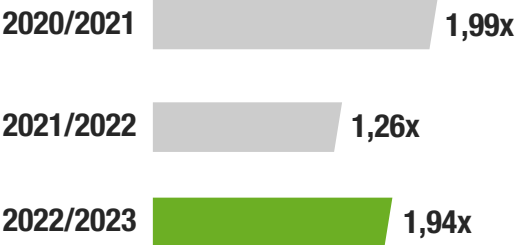
Adjusted Ebitda (in R\$ millions)



Net debt (in R\$ millions)



Indebtedness (net debt/adjusted Ebitda ratio - through to the end of March)



Sugarcane crushing (Lençóis Paulista, Macatuba and Quatá units) (in millions of tons)



Productivity (tons/hectare)

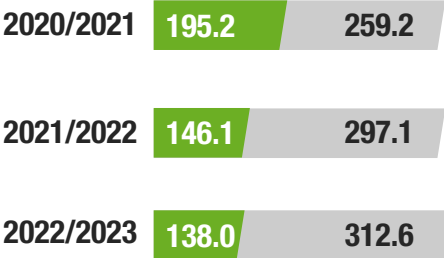


Agribusiness Operation

Sugar (thousands of tons)



Ethanol (thousands of m³)



Hydrated Anhydrous

Cogeneration of energy (thousands of MWh)

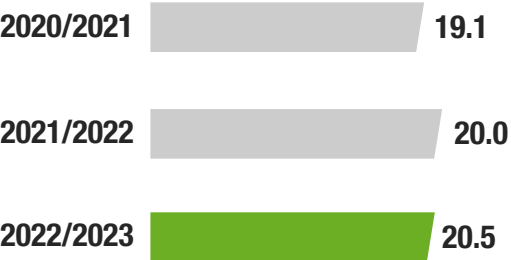


Biorigin Operation

Total Biorigin Production¹ (thousands of tons)



Foodstuffs Industry (thousands of tons)



¹ Includes the production of Biorigin USA.

Pet Feed and Animal Nutrition and Health (thousands of tons)



The Biorigin activities contribute to Zilor's results in the sum of 20% of the Company's revenue



ESG governance

*Structuring of the **ESG Zilor + Sustainable 2030 Program***

ESG criteria tied to the variable remuneration of the global CEO and all the employees (as of 2023)



Environmental, social and governance responsibility



Incorporation of ESG into the CEO's targets and the global targets for the 23/24 harvest



Consolidation of the ESG Zilor + Sustainable 2023 Program



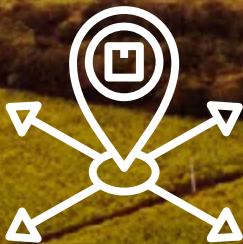
Report including addition of the 9 topics identified as priority and relevant to ESG



ESG commission with a multi-disciplinary team, meeting periodically and reporting to the Board of Directors

R\$ 19.7 million

in socio-environmental investments (HSE and communities)



Expansion

Delivery of the energy generation expansion project at the São José Unit; operations having begun in April 2023

Expectation for expansion of

60%

in Zilor's cogeneration, following the completion of the two projects receiving expansion investments - the São José Unit (already completed and in operation) and the Barra Grande Unit, with completion expected for the 2024/2025 harvest.



Social development

R\$ 3,7 mi+

in support for the communities, including the company's own funds and contributions via Incentive Laws

R\$ 2.3 mi

in positive impact (Return on Social Investment - S-ROI) in the form of generation of employment and income in the communities, via projects involved in the Cultural Incentive Federal Law (Corporate Income Tax)

51,000
people impacted

220

sponsorship and donation actions

47

local proponents trained in the local communities

27

social projects benefited

30

institutions served in the neighboring communities



Health, safety and the environment (HSE)

0.41 rate of frequency of accidents with time off work, almost 66% lower than 2021/2022¹

R\$ 16 mi

in investments in HSE projects

1,000

Employees trained in recognizing risks and safety (Life in Focus Program - Safety)

¹ Within the expected average in relation to the Company's historical average



Climate change

539,000

CBIOs issued this harvest¹

144.1%

jump in the average price,
ending in R\$ 96.4 per
CBIO

R\$ 44.3

million in net revenue
through the sale of CBIOs

Growth of 1% against the 2021/2022 harvest

631

hectares of
reforested areas
since 2014 (Forest
Program – read
more on page 111),
the equivalent of

631

football fields

1
million+

Saplings planted since 2014
(Forest Program – read more on
page 111)



Ethics & integrity

Revision of the Code of Ethics to include leadership training

Launch of the Code of Ethics for Agricultural Suppliers and Partners

200+ leaders trained

Publication of the Anti-corruption Policy

¹ Potential carbon sequestration equivalent to 3.77 million trees

ZILOR

GRI 2-1, 2-6



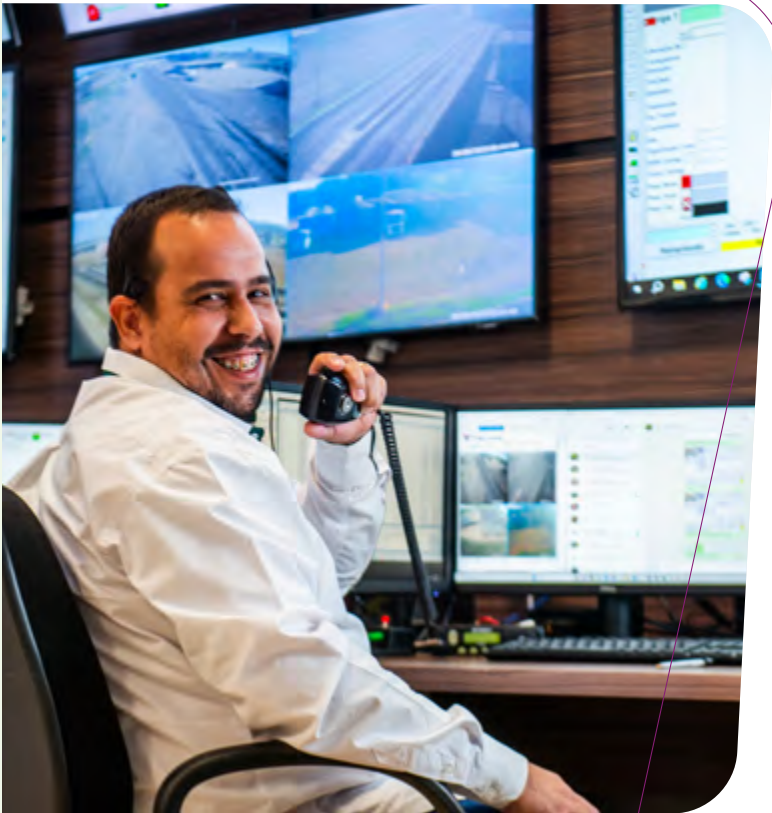
With 76 years in the market, Zilor is a Brazilian multinational occupying a benchmark position in the Brazilian sugar and ethanol and biotechnology sectors, with products distributed to around 60 countries.



Around 3,600 direct employees make up the Zilor workforce, with another 7,000 plus suppliers in Brazil, and 16 cane producers operating under the Agricultural Partners exclusive model.

With head offices in Lençóis Paulista (SP), Zilor has an operating structure that includes three agribusiness units in São Paulo, three Biorigin units located in Brazil and one in the United States, and a distribution center in Belgium. The Company also has two corporate offices, one being the head office in Lençóis Paulista (SP) and another in the São Paulo state capital.

Zilor is currently the biggest shareholder in Copersucar, a Brazilian sugar and ethanol trading company, and one of the biggest global exporters of these products, holding around 12% of the company's capital. The total volume produced by the Company is traded by Copersucar, which has a business model that includes storage, trading and logistics capabilities consistent with the value chain and needs of Brazil and the other global markets.



3,600

direct employees
on our team

The Company works from the start to finish of the energy and food cycles, with activities ranging from the farming and processing of sugarcane for the production of sugar, ethanol and biotechnology, to the manufacture of natural ingredients, at the Biorigin biotechnology processes unit. In addition to this, Zilor's 35,000 hectares of proprietary farmland are registered by means of the Companhia Agrícola Quatá S.A. (CAQ). The other 145,000 hectares are leased by Açucareira Quatá S.A. and leased out to Agricultural Partners in the form of long-term contracts for the production of sugarcane which is delivered to Zilor, thus totaling 180,000 hectares of cultivated area.



In 2022/2023, Zilor's net revenue totaled R\$ 3,410.3 million, 6% higher than the previous harvest and the highest in the Company's 76-year history. Even within a context of domestic and global macro-economic challenges, the commitment to productivity was combined with expansion plans in the energy sector, in the form of the energy cogeneration projects involving the São José Unit and Barra Grande Unit.

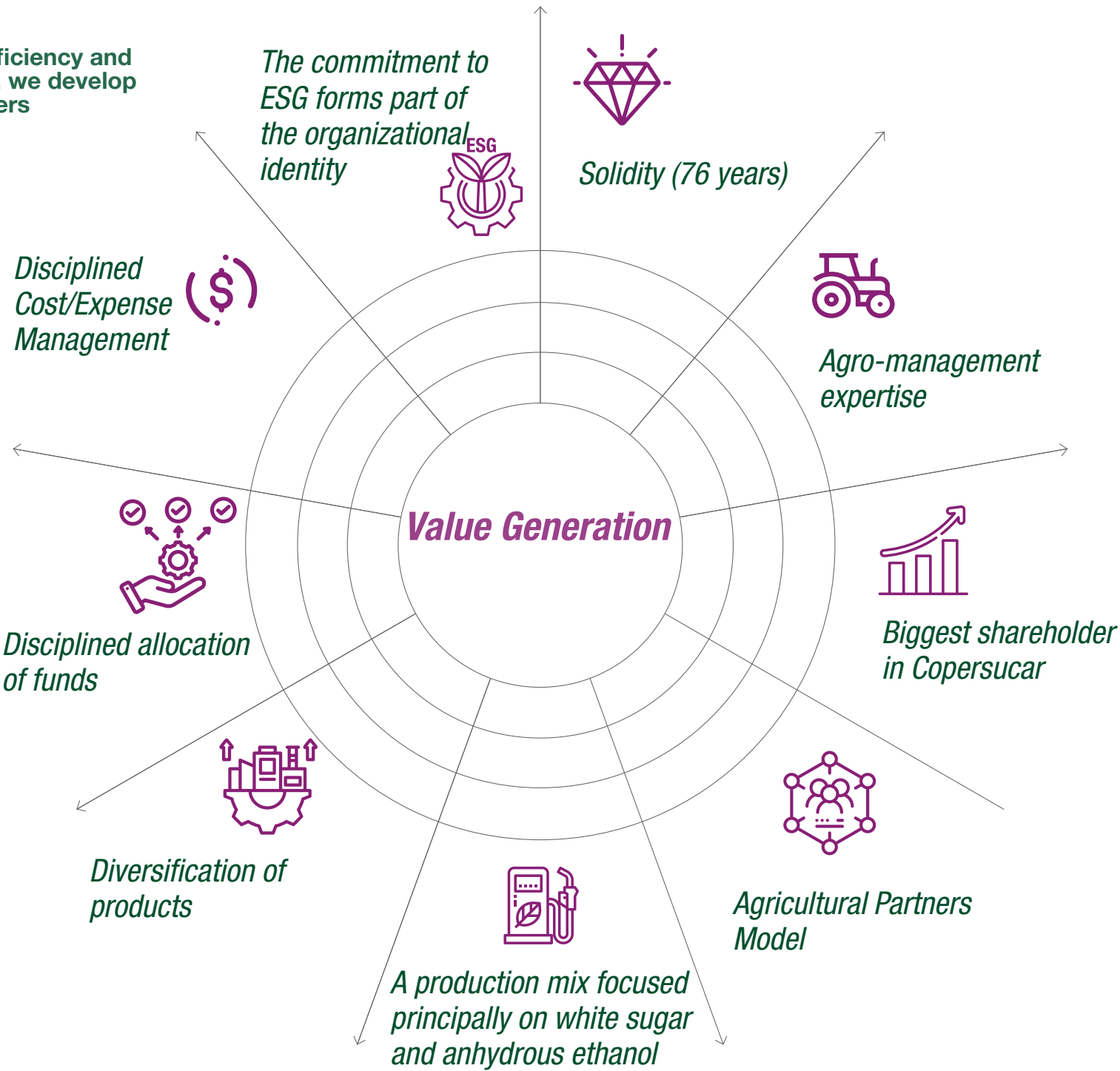
The focus on a responsible performance model led to important advances in Zilor's ESG agenda. Amongst the most important initiatives were the structuring of the ESG Zilor + Sustainable 2030 Program and the senior management's set of targets focusing on the longevity of the business.



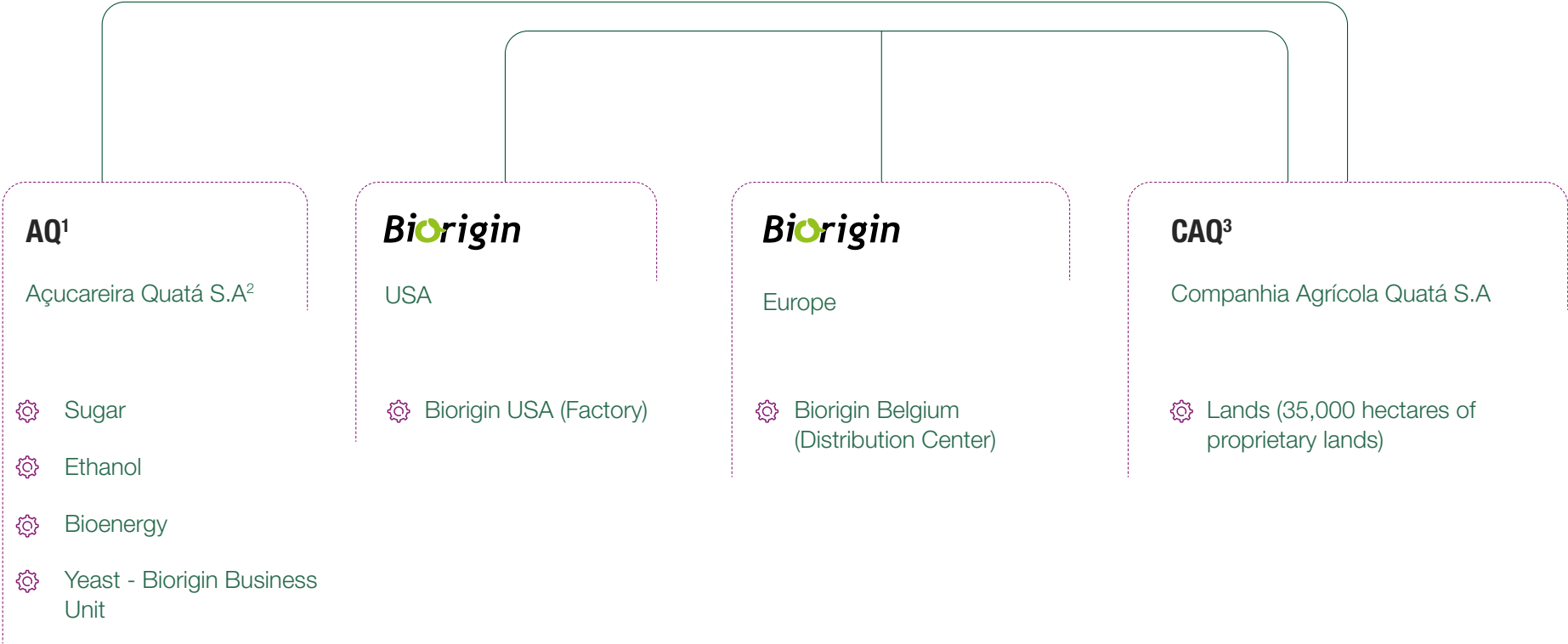
*The ESG agenda engages with
our commitment to growth and
generation of shared value*



Focused on efficiency and diversification, we develop important drivers



zilor



Companies

Business units

1 AQ – Açucareira Quatá S.A
Includes all the Company's operations and registers all the land lease agreements for sugarcane farming.

2 Around 145,000 hectares owned by AQ for sugarcane production.

3 CAQ – Companhia Agrícola Quatá S.A
Registers proprietary lands for sugarcane farming, **valued at R\$ 3.8 billion for the 2022/2023 harvest, meaning a growth of 16% compared to the R\$ 3.3 billion registered in the 2021/2022 harvest.**

The Biorigin USA and Biorigin Europe units provide support for the Biorigin business unit for the production and distribution of the products by means of a Distribution Center in Europe.

Mission

GRI 2-22

Our reason for existing

Building wealth and promoting society's well-being by turning innovative and natural agricultural resources into food and energy.









Purpose

What we do

We imagine, develop and provide intelligent solutions from sugarcane.

Principles

What we believe in

-  Maintaining committed relations with our customers, employees and shareholders
-  Working, growing and dreaming of the future
-  Integrity
-  Austerity
-  Continuous Learning
-  Social Responsibility
-  What is ours is ours. What belongs to others is theirs
-  Loyalty
-  Innovation



Business and operations GRI 2-1, 2-6

Zilor is composed of two business divisions: that focused on Agribusiness, dedicated to the production of sugar, ethanol and clean and renewable electricity using sugarcane; and that focused on Biotechnology, developed under the Biorigin brand, with products traded in 60 markets worldwide.



Click here to read about the Company's highlights:

[Timeline](#)

76
years in
existence

[Read more](#)
[about the](#)
[history of](#)
[Zilor](#)



Agribusiness

Sugar and Ethanol

The Agribusiness division operates with a start to finish business model, covering the farming of sugarcane by producers, contracted under the Agricultural Partners system, and processing of the raw materials. Zilor works with the production of sugar, ethanol and electricity (which supplies the operations with any surplus production being sold). Under the Agricultural Partners model, 100% of the the lands are leased by Zilor and assigned for farming by means of partnership agreements, in which all the sugarcane produced is delivered to Zilor, resulting in a safer model with all risks being diluted.

Sugar (thousands of tons)

2020/2021	<div></div>	638.1
2021/2022	<div></div>	660.5
2022/2023	<div></div>	695.0

Ethanol (thousands of m³)

2020/2021	<div></div>	195.2	259.2
2021/2022	<div></div>	146.1	297.1
2022/2023	<div></div>	138.0	312.6

Hydrated Anhydrous

All the sugar and ethanol is sold through Copersucar, a global leader in these commodities, thereby mitigating the counterpart risk and allowing access to funding for working capital.

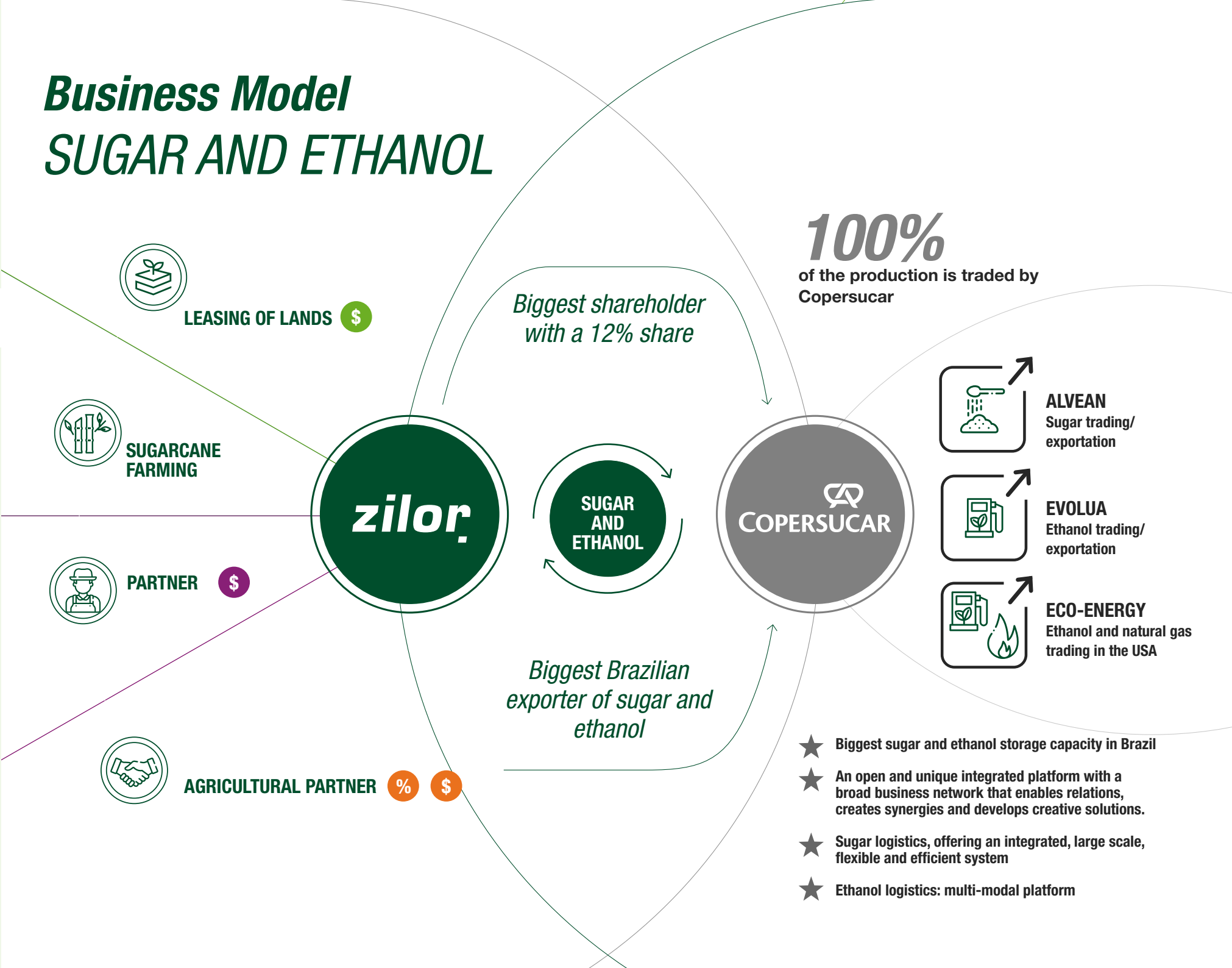


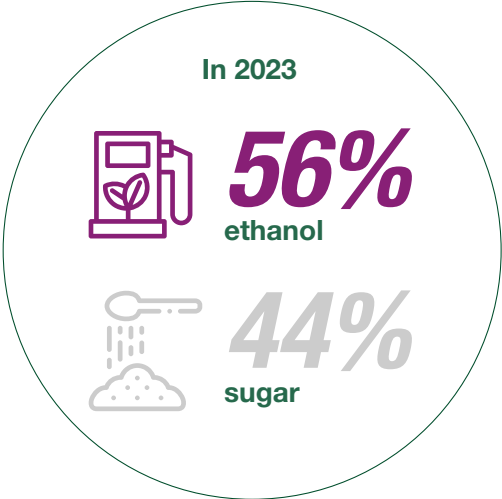
100%

of lands are leased
and assigned for
farming

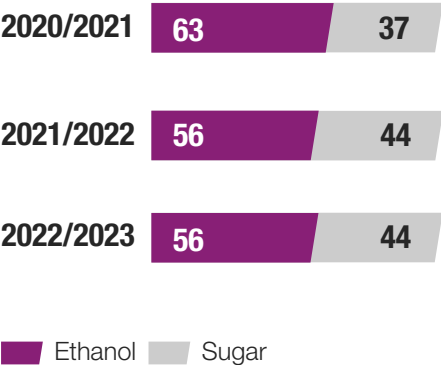
Business Model

SUGAR AND ETHANOL

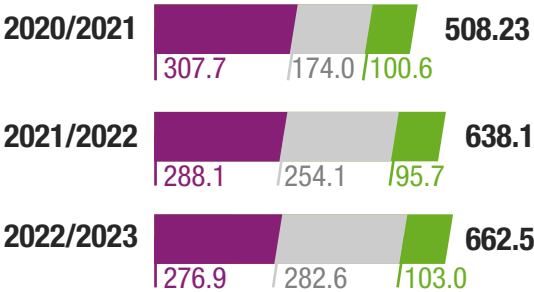




Production mix (%)*



Sugar production (thousands of tons)



*Fermentable Sugar Raw product used in the Biorigin processes



Bioenergy

The generation of clean and renewable electrical energy using biomass guarantees that 100% of the electricity and steam supply that the Zilor industries consume over the course of the harvest is drawn from a renewable source. The surplus electricity is sold to distribution companies (regulated market) and traders (free market), an important strategy for business diversification and cash flow stability.

Exported energy (thousands of MWh)



Production capacity per unit (thousands of gallons)^{1 2}

SASB RR-BI-000.A

	22/23 harvest	21/22 harvest	20/21 harvest
Barra Grande	65,390.0	60,733.1	59,570.8
São José	66,260.0	63,929.6	63,348.4
Quatá	67,640.0	58,741.3	61,705.3
Total	199,290.0	183,404.0	184,624.5

¹ Biofuels production capacity calculated using the daily production capacity (m³/day) authorized by the National Agency for Petroleum, Natural Gas and Biofuels (ANP) for each unit, multiplied by the days of harvest. The authorized capacity of hydrous ethanol is considered to be the maximum production limit for the distillation devices.

As such, since the dehydration of the ethanol follows the distillation, the sum of the average daily volumes of hydrous ethanol production and anhydrous ethanol should not exceed the authorized capacity of hydrated ethanol. Capacity available in the Dynamic Report of biofuel production facilities authorized by the ANP.

² Bioenergy data.

In figures



200
MW
of installed capacity

100%
of the energy needs
of the Zilor power
stations supplied

319 MW
expected following the
expansion of the complex,
part of the Company's
range of projects along
these lines

490,000
MWh/year
in exported energy capacity,
with a possible rise to

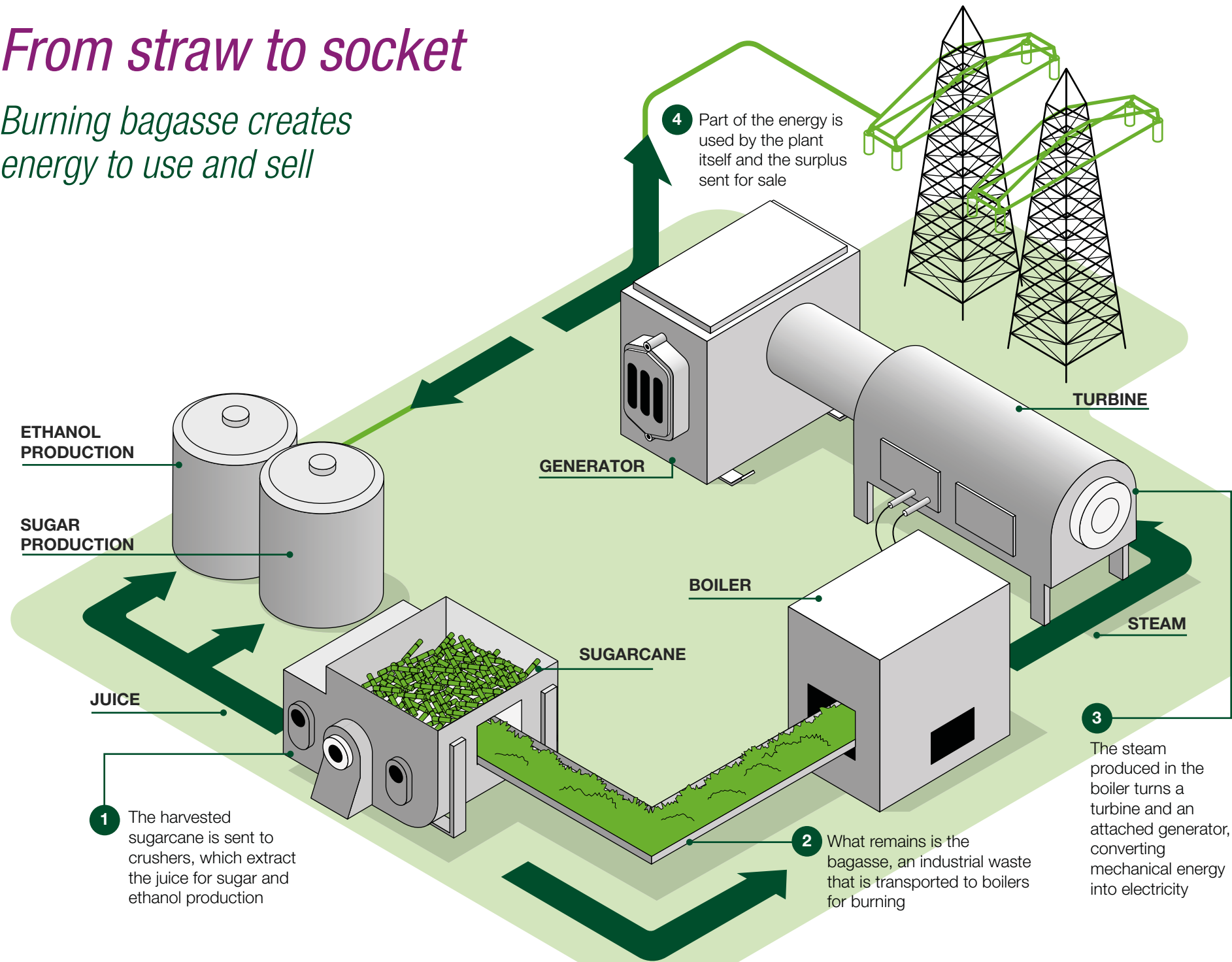
770,000
MWh/year
following expansion

60%
is the expected jump in
production of the generation
complex resulting from the
expansion projects of the São
José and Barra Grande units;
the first project was concluded
in 2023

One city of 500,000 inhabitants
This is the annual average volume of
the energy supply exported by Zilor

From straw to socket

Burning bagasse creates energy to use and sell



Agricultural partners

The planting and harvesting of the sugarcane that feeds the Quatá Agribusiness Unit are performed by the company itself. Around 92% of the raw material received by the Barra Grande and São Jose units, meanwhile, comes from areas farmed by partners, working on their own properties or leased under the Agricultural Partners model.

One of Zilor's strategic assets, the Agricultural Partners has been a pioneering program. Created two years ago, it ensures inclusion, generation of employment and income, as well as the sharing of results with the local economies. Under this model, producers sign long-term agreements of between six and twelve years (covering up to two sugarcane plantation cycles), basing their work on the requirements of the Zilor Socio-environmental Conduct and Performance Commitment, and the Code of Ethics for Suppliers and Agricultural Partners. The sugarcane produced by the Partners accounts for around 70% of Zilor's total crushing.

100%
of the Quatá Unit's supply
comes from proprietary
lands



Read more
about the
Agricultural
Partners Program
in the Supplier
Management
chapter.

Leasing of Lands

The 35,000 hectares in the possession of the Companhia Quatá Agrícola are valued at R\$ 3.8 billion and are leased by the company.

Furthermore, the area of 145,000 hectares is leased by Agrícola Quatá for use by the Partners as well as for use by the Company itself. The lands are located in the regions of Lençóis Paulista and Quatá/SP.



***Production area in
detail***

180,000
hectares - total

35,000
hectares of proprietary
lands (Quatá and
Lençóis Paulista - SP)

145,000
of leased lands, located in the
regions of Lençóis Paulista
and Quatá - SP

14
municipalities in the state of
São Paulo

*A flexible mix, in
which up to **54% can
be sugar** and **58%
ethanol***

SUGAR AND ETHANOL

Leasing of land

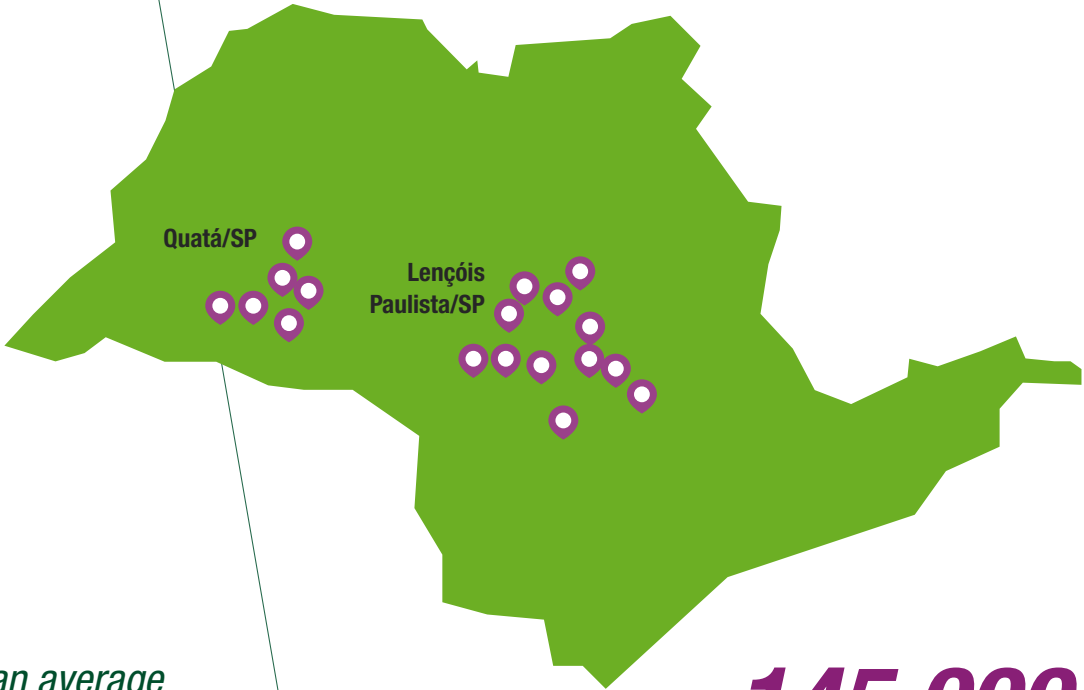


1,900+
lease agreements
involving lands and
partnerships

100%
of the lands are leased by
Zilor (AQ)

The agreements are signed for an average term of between six and twelve years, whilst this may be extended for another one of two years (the period covers up to two sugarcane plantation cycles)

Municipalities in the state of São Paulo with leased lands



Lençóis Paulista

São Manoel
Botucatu
Avaré
Areiópolis

Macatuba

Agudos
Bauru
Borebi
Piratinga
Pederneiras

Boraceia

Quatá

Paraguaçu Paulista
João Ramalho
Rancharia
Borá
Tupã

145,000
hectares of leased lands in
14+ municipalities in the state
of São Paulo

Biorigin Biotechnology Business Unit

Biorigin is Zilor’s business unit that specializes in developing innovative solutions in natural ingredients for human foods, pet foods and feed for production animals, using biotechnology processes. The operations provide for an essentially exporter profile: around 90% of the production is sold to more than 60 countries, serving the North American, European, Latin American and Asian markets.



Read more
WATCH THE VIDEO
[Tour Biorigin - PT](#)



Food Industry

Biorigin possesses the expertise in biotechnology to be able to get the best out of the fermentation process and, together with its partners, develop the best solutions for creating tasty and successful dishes.

The leading clients are:

*Food and
beverage
creation
businesses*

*Industrial
Fermentation*

*Food
Industries*

Application examples

Drinks with a hint of coffee or chocolate

An emphasis on flavor with less sugar

Chocolate éclairs

An emphasis on flavor with less sugar

More flavored potato chips

Less sodium

Flavored popcorn

Hints of cheese

Meat equivalent

Plant based hamburgers

Instant pasta/ soups

Less sodium and more flavor

‘Brigadeiro’ sweets

An emphasis on flavor

Peanuts

An emphasis on flavor with less

Sodium Sauces

Mayonnaise/Ketchup

An emphasis on flavor with less sodium

Savory snacks

Manioc tortillas

Pet foods

The pet food market has experienced enormous growth throughout the world, and, together with the trends that guide it, such as humanization, an increase in premium products, and segmentation (nutritional and healthcare phases and needs, specifically focusing on areas such as intestinal problems, immunity, skincare and weight control, etc.), the development and launch of innovative products has become essential in helping a business to stand out.

Biorigin understands this need and, for the past 20 years, has been offering natural ingredients to meet these market demands and increase the aggregate value of its customers' products.

The ingredients produced for use in pet food have benefits that contribute to improving:

- 1 Immunity, helping maintain natural defenses, the health of the skin and fur, healthy joints and general healthcare of obese animals;
- 2 Intestinal health, making better use of the nutrients and modulation of the intestinal microbiota;
- 3 Palatability, offering more flavor and making the food more attractive
- 4 Solutions that are a source of proteins, offering support for animal development and better digestion.

Production animal health and nutrition

Biorigin has been operating in the Animal Nutrition market since 1994, offering its customers solutions that favor performance, and the health and wellbeing of the animals. The products are developed using exclusive biotechnological processes, based upon special strains of *Saccharomyces cerevisiae* yeast, that allow total control from the raw material through to the final product.

Biorigin is extremely concerned about the quality and safety of its ingredients and is constantly seeking innovative solutions to meet the demands of the market, contributing to the preventive protection of the health

of the animals, avoiding production losses and guaranteeing a more sustainable form of production for the planet.

The main impacts for production animals are related to the reduction in mortality rates, thanks to:

- Fortification of animal immunity
- Intestinal health
- Improvement of food conversion
- Increased productivity

The main customers in this segment are animal producers (poultry, pigs, fish, ruminants/cattle).

The main customers in this segment are:



Pet food
producers



Animal feed
producers



20 years of Biorigin

Biorigin is celebrating its 20th anniversary in 2023, with the aim of promoting public health and wellbeing, developing ingredients that emphasize flavor, reduce sodium content and extend the useful life of the food produced by its customers. Three important pillars define the future vision of the business unit:



the quality of the products;



the tracking of the raw-materials¹;



the innovation capable of meeting the customers' demands.

With this solid base, the business unit continually invests in the research and development of new solutions, innovation and sustainability.

Biorigin's production takes place at three industrial plants in Brazil, all of which are in the state of São Paulo (focused on yeast fermentation), and one in the United States (bacterial fermentation). In Belgium, the unit is made up of a distribution center and a sales office.

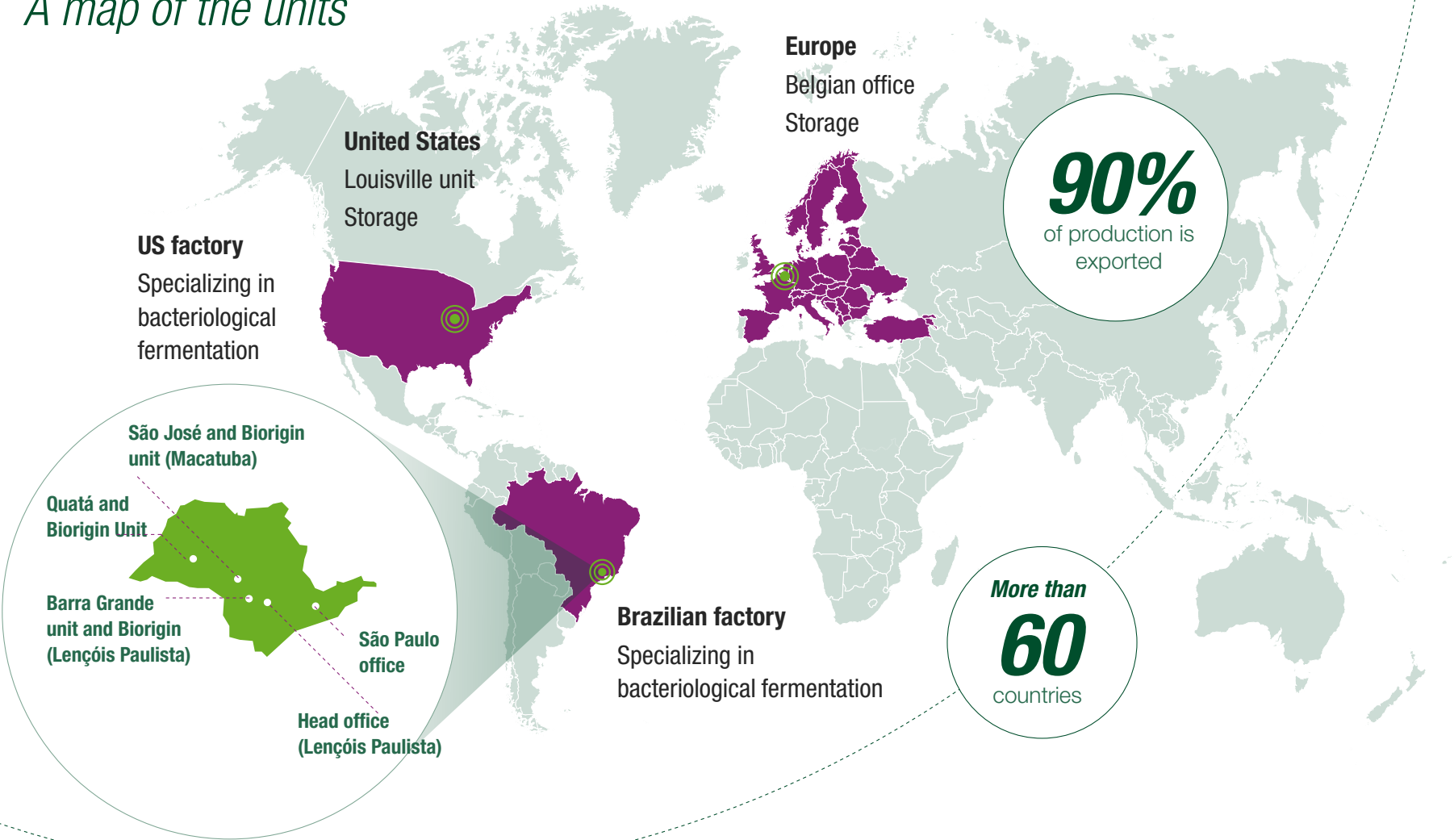
Biorigin plays a strategic part in Zilor's growth and diversification. Since it was founded in 2003, the Company has shown significant growth indexes and now accounts for around 20% of the Company's total net revenue.

¹ To guarantee a sustainable production model, covering everything from the planting of the sugarcane to the final product.

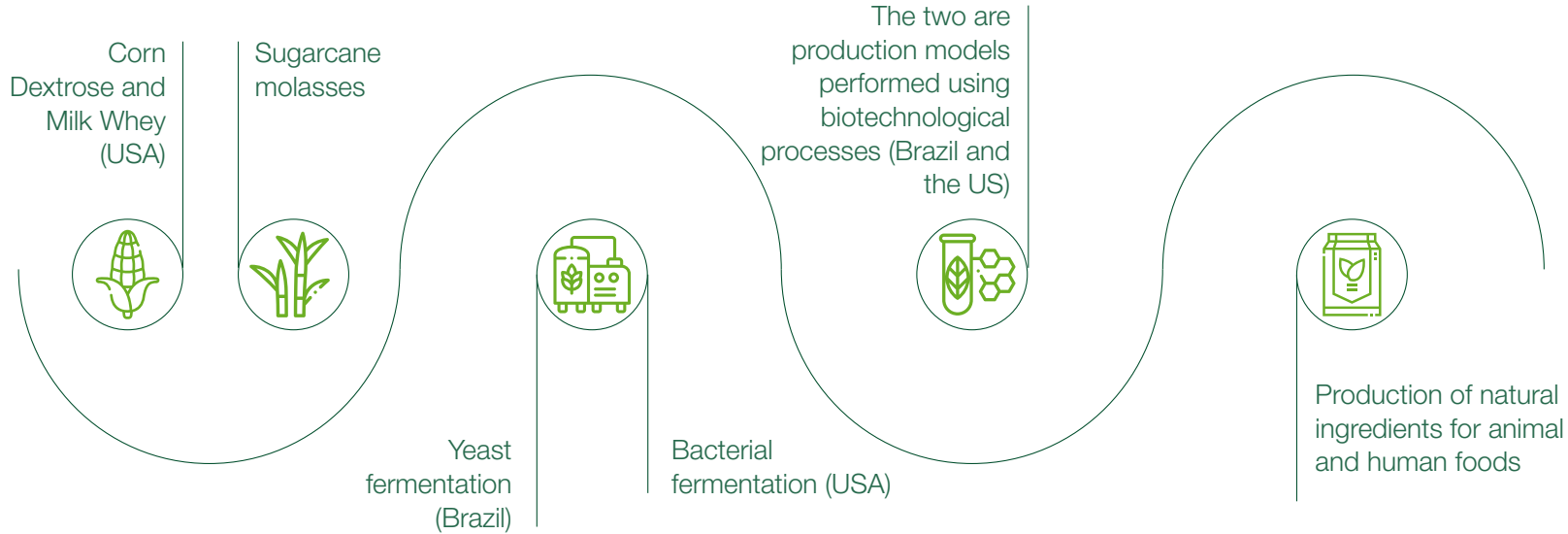
Inside Biorigin

A Brazilian multinational with global operations

A map of the units



Manufacturing process



Our units

GRI 2-1

Zilor Agroindústria – agribusiness units

São José - Macatuba (SP)

Barra Grande - Lençóis Paulista (SP)

Quatá - Quatá (SP)

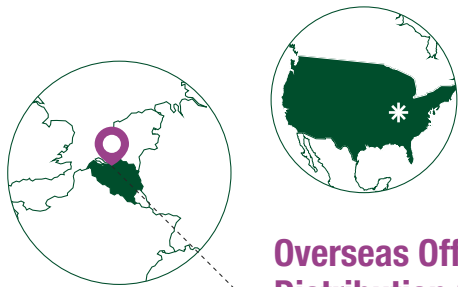
Biorigin – industrial units

Biorigin Quatá (SP)

Biorigin and São José R&D - Macatuba (SP)

Biorigin Barra Grande - Lençóis Paulista (SP)

Biorigin USA - Louisville, United States



Overseas Office and
Distribution Center
Antwerp, Belgium

Corporate offices in Brazil

São Paulo (SP)

Lençóis Paulista (SP)

Membership of associations

GRI 2-28

Agribusiness

- Sugarcane Industry Association (UNICA)
- Aguapeí-Peixe and Tietê-Jacaré River Basin Committees, which involve local actors in actions aimed at preserving water resources.
- Council of Sugarcane and Alcohol Producers of São Paulo (Consecana)
- Environmental Chamber of the Sugar and Ethanol Sector
- Brazilian Biogas Association (ABiogás)
- Management Committee of the Lençóis River Basin
- Bauru Region Integrated Emergency Network
- Assis Region Mutual Emergency Assistance Plan

Biorigin – Biotechnology

- Association of the Pet Products Industry (Abinpet) - Brazil
- Sindirações (National Animal Food Industry Union) - Brazil
- Feedlatina (Asociación de las Industrias de Alimentos para Animales de America Latina Y Caribe) - Latin America
- Fefana (EU Association of Specialty Feed Ingredients and their Mixtures) - Europe
- Ifif (The International Feed Industry Federation) - Global
- Abia (Brazilian Food Industry Association) - Brazil



Corporate governance

GRI 2- 9, 2-10, 2-11, 2-17, 2-19, 2-20

Zilar operates in line with the best corporate governance practices performed in the Brazilian market. Over recent years, it has been evolving and maturing in areas such as management policies and commitments related to sustainability that include the leadership, thus encouraging the ESG culture in the decision-making.



In the 2022/2023 harvest, there were three actions that highlight this evolution:



Variable Remuneration

The first was the approval of the incorporation of ESG criteria in the variable remuneration of the global CEO, cascading down through the other leaders and employees of the Company, a process which is to be implemented in the 2023/2024 harvest. The decision was taken in conjunction with the restructuring of the Zilar + Sustainable 2030 Program (read more on this in Strategy and Management).



Advances in Compliance

Another advance was the revision of the Code of Ethics, including training sessions for leaders in the new version, with these individuals assuming the role of disseminating this culture in the company, and the launch of the Anti-corruption Policy. The focus of the documents is to provide support for the evolution of the management and the Company's processes in line with good domestic and international practices.



Creation of the Personnel & Organization and Legal Boards

Also of note this harvest was the structuring of the Personnel & Organization and Legal boards, an important step forward in strengthening the internal processes and the leadership associated with the themes of compliance and risk management.

Zilor's governance structure is composed of the General Assembly, the Board of Directors and its Advisory Committees (coordinated by external board members), and the Executive Board . Together, the governing bodies, respectively, allow for the planning and definition of strategic directives, leadership of the administrative and operational areas for establishment of the planning and advice for the Companies. Another responsibility of the bodies is risk management and the impacts the Company has on the economy, people, environment and human rights, amongst other aspects of sustainability.

Raising awareness and training the senior management on ESG issues falls under the coordination of a working group that is focused solely on the issue and is connected to the Strategic Planning. The group takes part in regular meetings dedicated to strategic considerations. All the measures proposed on this matter require approval from the Executive Board and the Board of Directors.

Rules on professionalism are applied to the make up and selection of the governing bodies. The Chairperson of the Board of Directors is always someone from outside the organization who does not hold an executive position at the company. Suggestions for the positions are approved by the Company's General Assembly. In the case of the Board of Directors, implemented in 2018, each family block indicates an individual as a member. As such, eight of the board members are shareholders or are indicated by shareholders to represent them. The nomination of the external members is based upon the criteria of independence, technical abilities and a broad understanding of the market, and of the business pursued by the Companies, as well as finance, corporate management, and personnel management.

In relation to remuneration, a Personnel Management and Sustainability executive committee (CGPS) presents strategies on the matter at meetings with the Executive Board, which are approved by the Board of Directors. The criteria for the members of the highest governance body and for the senior executives are tied to the organization's performance objectives in relation to the management of the impacts on the economy, environment and people. The executives' individual targets, the organization's collective targets and the variable remuneration programs are presented and discussed, ensuring a connection with aspects of sustainability and impact management.

Highlights of Zilor's governance

3 independent external members on the Board of Directors

Advisory committees with external coordinators

External members with nominations based upon their independence, technical ability and specialist knowledge

Remuneration connected to the work of the executive committee, with approval from the Board of Directors

Presidency (executive level) without voting rights at Board level

Board of Directors

10 members

3 external members (Chair + 2 independent consultative members)

Mandates: two years, with the possibility of reelection

Frequency of meetings: monthly

Responsibilities:

- ⚙️ *Evaluate the implementation of management policies and processes*
- ⚙️ *Approve investment plans and monitor their execution*
- ⚙️ *Approve management policies*
- ⚙️ *Define the Company's strategic directives*
- ⚙️ *Evaluate risks and opportunities for Zilor and its business divisions*

Executive Board

The Executive Board of Zilor, composed of seven executives with solid experience in the agribusiness and biotechnology sectors, is responsible for establishing the strategic plan for the materialization of the directives defined by the Board of Directors. The members of the Executive Board are elected by the Board of Directors, with a mandate of two years, with the possibility of reelection.

7 members

Mandates: two years, with the possibility of reelection

Frequency of meetings: weekly

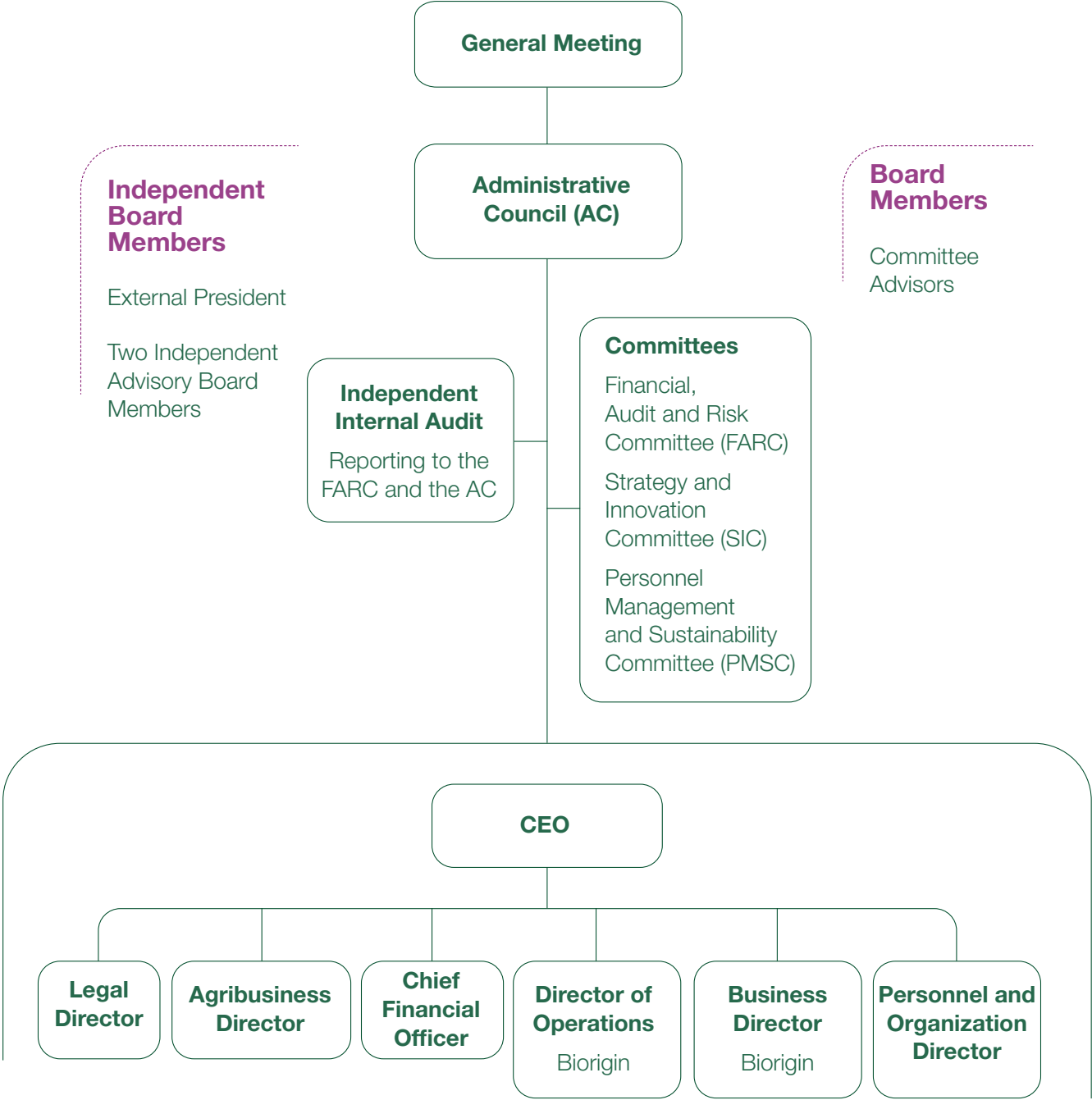
Responsibilities:

- ⚙️ *Manage, organize and control the administrative and operational activities of the different departments.*
- ⚙️ *Establish plans for the materialization of directives defined by the Board*



Read more

Find out about the members of the senior management in more detail [here](#).



Advisory Committees

Finance, Audit and Risk Committee (FARC)

Responsible for developing and monitoring the Company's risk and financial management policies.

Strategy and Innovation Committee (SIC)

Designed to support the Board of Directors in matters relating to long-term strategic directives and actions and initiatives concerning technological research and innovation.

Personnel Management and Sustainability Committee (PMSC)

Directs analyses related to the management of human capital and actions focused on the Company's ESG agenda.

STRATEGIC, QUALITY AND INNOVATION MANAGEMENT

GRI 2-22, 2-23, 2-24, 2-28



Revenue 2023

Breakdown of Revenue

We always aim to diversity our portfolio in order to mitigate risks of commodity price fluctuations. As such, our Business Units are able to establish greater predictability, security and sustainability for the business.



Ethanol

- Anhydrous ethanol for sale to fuel distribution companies and later addition to gasoline
- Hydrated ethanol sold directly to gas stations
- Clean biofuel, produced from sugarcane
- Accepted in regulated countries, such as the US, Japan and Canada
- Certified for emission of RenovaBio CBIOs with emissions from 2020 on
- Exposure to the price variations of Ethanol accounts for around 20% of the total revenue

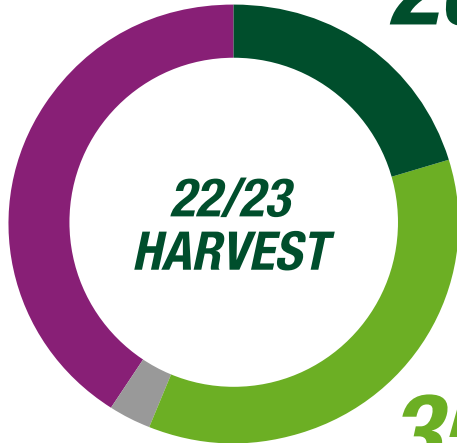
40%



3%

Bioenergy (clean and renewable)

- Supplies 100% of the energy needs of the Zilor and Biorigin power plants, with the surplus being sold
- Production efficiency
- Generation of more energy per ton of sugarcane, reducing the consumption of steam at the plants
- Installed capacity potential of 200MW
- Exportation of around 480,000 MWh/year (contributing to the stability of the cash flow)
- Entry into the harvest with energy that has already been contracted, meaning a lower risk of exposure, in accordance with the Company's policy



Biorigin

- Innovation in the use of biotechnology processes for the production of ingredients created from natural sources such as sugarcane
- Operations in the following segments:
 - > Food with an emphasis on flavor, reduced sodium, extension of the lifespan of the foods; and
 - > Feed with nutritional enrichment and improvement of the animal's health

20%

35%



Sugar

- Raw grain sugar (VHP) for sale to large refineries
- White sugar in sacks (direct consumption) for the domestic and overseas markets
- Bonsucro and FSSC 22000 certifications

Fixing of the future price for up to
80%
of production



Commodities

Sugar and Ethanol sold by Evolua | Copersucar



Non-commodities

Diversification of the portfolio in order to mitigate risks of commodity price fluctuations

The evolution of Zilor's strategic vision is focused on the longevity of the business with sustainable growth and generation of value for all the stakeholders. As such, the company's five-year planning is based upon the following pillars: maintenance of the liquidity that allows it to survive crises and not miss opportunities; exploration of the full potential of the Agribusiness division, whilst maximizing the profitability of the assets; the ability to count upon the Agrícola Quatá S.A. (CAQ) land company, a stronghold in assets with the potential to pay dividends to the shareholders; pursuit of the best positioning in Biorigin's product and client mix, both in the food industry and pet food and production animal nutrition markets, always achieving the best margins and greatest profitability.

Having pursued a strong and consolidated path over the decades in the commodities segment, always subject to the habitual fluctuation of prices in the domestic and global markets, Zilor's strategy involves diversifying its business, mitigating risks by moving deeper into areas such as biotechnology and renewable energy, whilst also trading decarbonization credits (CBIOS).

Our strategy involves diversifying our business, mitigating risks by moving deeper into areas such as biotechnology and renewable energy, as well as CBIOS

In order to increase its already consolidated positioning in the spheres of agribusiness, renewable energy production, and biotechnology, Zilor has been evolving its governance and operations with each passing cycle. Amongst the tactical priorities are: investment in the production efficiency of Biorigin; expansion of the sugarcane plantation area, focusing on the clean energy market; and evolution of the Company's legal structure, in the area of asset growth management.

At the beginning of 2023, the strategic vision of each of the Company's business areas was updated, in line with the decisions of the Executive Board and the Board of Directors. The 'Swot' matrix was also created for each business, with a view to the external scenario and a survey of the risks and opportunities. Based upon this survey, the Balanced Scorecard (BSC) was updated, with effects stretching out into each one of the areas. The work also led to connecting the ESG performance to the CEO's targets for the next harvest and to the Company's global targets, with an impact on the variable remuneration.



Compliance *and risks*

GRI 3-3: Management of a Material Topic, 205-3



The company has been improving its Ethics and Compliance Program through internal controls, policies, processes and training. Proof of this is that, during the 2022/2023 harvest, a specialist management approach was structured around the themes of Governance, Compliance and Contracts (GCC).

*The harvest was notable for the publication of the fourth version of **Zilor's Code of Ethics**, with pertinent updates that were disseminated by means of training sessions that included the leadership and highlighted the importance of the culture of ethics and integrity.*

To the Code of Ethics can be added the Code of Ethics for Agricultural Suppliers and Partners, that was launched in 2022 to focus on this important link in the production chain.

During the same harvest, the Anti-corruption Policy was launched, in line with Brazilian legislation and the beliefs of the Company. The document focuses on aspects such as combating bribery and corruption, the prohibition of facilitation payments, the offer and/ or receipt of gifts, presents and hospitalities, relationships with the public sector and interactions with suppliers, intermediaries and service providers.

Zilor is currently monitoring the risks related to corruption in these areas, as well as those connected to conflicts of interest and reputational damages arising from transactions with disreputable third parties or the practicing of illegal or unethical acts by such third parties.





The Company performed a maturity survey of the Ethics and Compliance Program to be able to identify possible scenarios which are liable to fraud and corruption. This mapping contributed to better management and internal controls, in order to mitigate the Company's exposure to risks of this nature. There have been no records of cases of corruption within Zilor or its business divisions.

In order to ensure the management of potential and current impacts in this area, with structured processes, the Compliance department provides

quarterly reports to the Finance, Audit and Risks Committee, addressing the evolution of the Ethics and Compliance Program, as well as relevant information on its implementation and improvement. The progress made by the department is also presented at the Management and Performance (M&P) forums focusing specifically on law and information technology, as well as the ESG forums.

One of the Company's objectives for the 2023/2024 harvest is to update and revise the risks matrix, review its set of policies, and work on spreading knowledge by means of cyclical training sessions. To do so, the company has adopted indicators such as the number of employees trained, policies approved, and registration of reports to the Ethics Hotline for monitoring purposes.

Advances in privacy and data protection

Since 2021, Zilor has been working on the development of its structures focused on information security, in line with the requirements set forth by the General Personal Data Protection Law (LGPD). During 2022, the Personal Data Protection and Privacy Program was strengthened. Other highlights were the launch of the corporate policy on the subject, the naming of the person responsible for Zilor's data department, and the structuring of communication actions on the theme, as well as training sessions, adjustments to the Company's websites and portals, and the installation of totems in the offices and units.

During the 2022/2023 harvest, Zilor moved forward with its Information Security Program

in response to the increasing number of attacks in the market involving the invasion of systems and hijacking of data, in many different sectors, in order to mitigate potential risks to the Company.

The Company implemented a series of initiatives based upon the NIST Cybersecurity Network methodology, used worldwide to help companies attain high standards of cyber security.

In the planning stages for the 2023/2024 harvest is the implementation of a Security Operations Center (SOC), which will operate 24/7 and make use of artificial intelligence tools to monitor, prevent, detect, investigate and respond to cyber threats.

Amongst the actions which Zilor practices as part of its Information Security Program is the frequent undertaking of initiatives such as training sessions, bulletins and simulations, taking the form of test e-mails and phishing simulations involving matters that are sensitive to the Company, with the intention of raising the awareness of the employees on the ever-present risks.

The actions are aimed at promoting a safer environment and increasing understanding to ensure that the employees are fully aware of how to make the best use of the work tools.

To support the employees in their use of the tools, Zilor raises their awareness and instructs them, so that, should they come into contact with suspicious content, they will immediately report the sender by means of a tool contained in the e-mail software. Also designed to raise employee awareness, one highlight of the company's education actions was a campaign involving a video that employed regular language and vocabulary to orient the employees. Watch the video [here](#).



Information Security actions in figures (2022/2023 harvest)



12

communication
campaigns

3

training
sessions

1

workshop

3

phishing
simulations¹

There have been no critical information security incidents at Zilor during the last two harvests.

¹ With an average phishing report rate above 10%.

Governance & monitoring

GRI 2-25, 2-26, 2-19, 2-20

Zilor’s Codes of Ethics contain specific guidance on guaranteeing respect for fundamental labor rights, the prohibition of violations of human rights of any kind (including slave, child and degrading labor), conflict of interests and respecting every worker’s right to union membership.

In order to ensure it is correctly applied, the Ethics and Compliance Program also involves the Ethics Hotline and cycles of training for employees and partners, suppliers and communities, according to the nature of the matter, so as to guarantee the inclusion of the management policy commitments at all levels of the organization and in its external relations.

Available in three languages (Portuguese, English and Spanish), the Ethics Hotline was created so that employees, suppliers and any other interested parties could communicate acts or situations involving Zilor operations that are not in compliance with the values of the Company, its policies and codes, or the law.

The Ethics Hotline is available to receive complaints, criticism, praise and accusations 24-hours per day, seven days per week. All the information registered on this Channel is received by an independent, specialist company, which ensures that every situation is handled correctly, thus ensuring confidentiality and protection against retaliation for those

employees who make the accusations in good-faith.

The channel can be accessed at www.canaldeeticazilor.com.br or by means of a special telephone number (0800 180 9000). The platform collects the reports which are later analyzed by the outsourced company. Zilor’s evaluation is performed by a multi-disciplinary team specializing in investigations, that sends the critical reports to the Internal Investigation Commission, which can later, depending upon the results of the investigation, apply disciplinary measures.

An Ethics Hotline Management Policy was developed during the last harvest, containing different information on its governance and structure, formally establishing its precepts of non-retaliation, equality and anonymity, amongst others. Furthermore, the Application of Disciplinary Measures was also formally established.

Of the reports received by the Ethics Hotline during the 2022/2023 harvest, 100% were investigated and 14.5% of them were considered to have grounds. As a result of the cases assessed by the internal investigation commission, a number of different disciplinary measures were implemented. A total of 387 reports were received, of which 56 were considered to have grounds.





*Of the reports received that were classified as having grounds following internal investigations during the period, **none were considered to be related to cases of corruption**, such as fraud or bribery involving public authorities.*

Reports to the Ethics Hotline by type/nature (%)

	22/23 harvest	21/22 harvest	20/21 harvest
Conflicts of interest	2%	6%	3%
Non-compliance with regulations and policies	5%	10%	21%
Deviation from agreed behavior	18%	18%	25%
Moral harassment	18%	32%	31%
Others	57%	34%	20%

Nor were there identified any situations in which there was any violation of human rights, traditional communities or indigenous peoples. Furthermore, there were no accusations relating to the use of degrading labor (child labor or conditions analogous to slavery).



387
reports received

100%
reports addressed

56
reports considered to have grounds



Training

Zilor maintains a continuous stream of internal communication and, as part of the Ethics and Compliance Program, provides specific training sessions. In 2022/2023, online training sessions were conducted for managers and coordinators, bolstering the understanding of the Code of Ethics, the role of leadership in the dissemination of this knowledge and details on future training sessions for employees in leadership positions.

In addition to this, in-person training sessions were conducted for leaders and supervisors, with the support of a theater Company, designed to encourage discussions on the Code of Ethics, issues such as moral and sexual harassment, and the ethics hotline.

Other important training sessions involved the corporate policies on privacy and data protection; the internal processes for communication with the legal department; and the Company's new contracts policy.



The launch of the Code of Ethics for Agricultural Suppliers and Partners was one of the highlights of the year

Risk management

GRI 2-12, 2-13

Zilor has a well-organized structure dedicated to the analysis, evaluation of the magnitude, and proper control of all the risks associated with the performance sector and the Company's business model.

The management of all the impacts caused by the business, including those related to the ESG pillars, is the responsibility of the Executive Board and the department of risk and internal controls.

The Finance, Audit and Risk Committee is responsible for developing and monitoring the Company's risk and finance management policies, reporting all of its activities to the Board of Directors. Furthermore, the dedicated structure of risk and control management, assembled in 2022/2023, allows for all of Zilor's internal processes and controls to be monitored, covering all the operational units and business divisions.

The identification and management of the risks that affect the economy, environment and people are performed by the relevant departments of the company, such as internal control, financial, information technology, environment, energy, agribusiness, biotechnology, human resources and community relations. These themes are discussed at the monthly meetings of the Board of Directors and its advisory committees, with updating and mapping of the potential risks and the action

plans and mitigating initiatives that have been presented.

The organization takes a stance of diligence by means of an Integrated Risk Matrix, developed by all the areas of the company but with focused support from the internal controls department. The action plans identified for the mitigation of risks and exploitation of opportunities are submitted to the advisory committee and the Board of Directors.

Zilor's risk management performance model is based upon criteria for lines of defense proposed by the Institute of Internal Auditors (IIA), involving concepts that allow for deployment of the directives developed by the management area and incorporation of the culture by the Company's different teams. As a result of the annual risk workshops, the meetings between the key-directors and the analyses, the Integrated Risk Matrix takes on a dynamic character, undergoing periodic revisions, involving risk aspects and categories such as image, reputation, environment, health, security, finance and legal/regulatory.

Zilor is constantly seeking a close and rich relationship with its strategic publics

Falling into this category are the community and its economic, philanthropic, political, educational and religious organizations. The Company also manages its relationship with its shareholders, environmental organs, partners and suppliers, customers, employees and their families, business organizations, the press and unions.

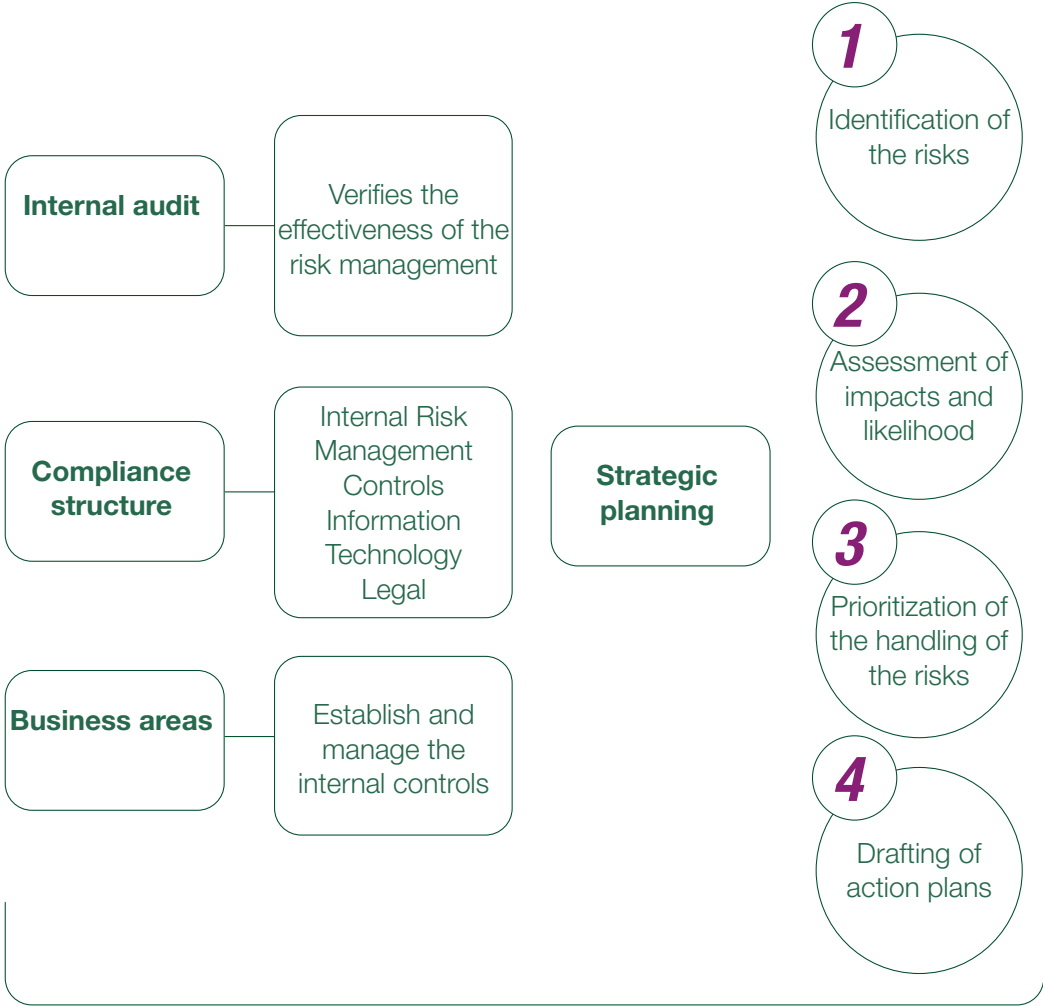
To improve the quality of the relationship that Zilor has with its publics, the Integrated Relationship Program (PRI) defines those responsible for interaction with each one of the different groups. Since its implementation in 2001, the PRI has given greater direction to Zilor's communication with its stakeholders, defining and preparing spokespersons, and informing employees and leaders about its responsibilities and activities.

In order to provide advice and support for the Integrated Risk Matrix, Zilor has a Crisis Communication Management System (SISGECRI) in place, with development of the material based upon the company's Integrated Risk Matrix and used to provide the senior management with support in communicating crises. The Company's leaders receive frequent online and in-person media training on matters that have been mapped in the corporate risks, thus preparing them to act in times of crisis.

Integrated risk management
pillars



In the model proposed, the first line of defense is found in the business areas, the second in the area of risk management, and the third in the outsourced internal audit, which operates independently. Each quarter, the Integrated Risk Management reports to the Board of Directors' advisory committee.



Risk Matrix

financial • strategic • image

Management of quality

GRI 3-3: Management of a Material Topic, 416-1, SASB RR-BI-530a.2

By means of rigorous certification processes and quality controls ranging from the field to the distribution and post-sales of its products, Zilor strives to ensure access to strategic markets and position itself as a benchmark in its sectors. Along the same lines, it works to minimize specific risks involved in the business, and position itself positively in the sugar and ethanol and biotechnology sectors, with opportunities to expand its business.

For decades, the Company has taken an integrated approach to the quality of its products, as a way of minimizing all potentially negative impacts on the health and wellbeing of its customers and end consumers. At the Agribusiness and Biorigin units, every one of the major product and service categories are assessed for their impacts on health and safety. The founding documents for the management of food safety are the Quality Manual, the Quality Policy, and the Food Safety Plan.

In its sugar production, the Company adopts a series of quality requirements and is certified in accordance with the FSSC 22000 certification, which establishes standards for the safe production of food. During the auditing cycles performed for this certification, there have never been any significant records of non-compliance and/or criticisms.

Zilor's transparency policy ensures that all the customers who acquire products via Copersucar can make regular visits to the installations. Regular audits are performed to check the installations and obtain the certification. During the 2022/2023 harvest, the Company was approved in 100% of the audited activities.

In the area of certificate management systems, attention to ESG aspects focused on the ISO 14001 international norm, which concerns environmental management systems (awarded to Biorigin's three industrial units in Brazil and by the Quatá (SP) sugar and ethanol operation), and on Bonsucro, an extremely important certification in the sector, since it attests to the adoption of good socio-environmental practices throughout the entire agribusiness production process.

In line with this commitment, the Biorigin units are also certified by Bonsucro throughout the chain of custody, thereby guaranteeing its customers conformity along the entire production chain.



During the 2022/2023 harvest, Zilor renewed the Bonsucro certification for its three agribusiness units, and extended the certification to 100% of the areas managed by its 16 agricultural partners. This indicator means that the Company has continued to stand out globally in the areas certified by Bonsucro, totaling 11.38% of the world:

Bonsucro certified properties

65,500
hectares in São José

53,900
hectares in Barra Grande

51,800
hectares at the Quatá unit

Another certification that is essential to the business model is the 'RenovaBio', which is connected to the National Biofuels Policy and currently held by Zilor's three ethanol production units. With this certification, it is possible to issue decarbonization credits (CBIOS).



In 2022/2023

539,000
CBIOS were issued

This represents a reduction of 539,000 tons of mitigated CO₂eq.

Revenue of

R\$ 44.3 million

This is an amount equal to approximately 3.77 million trees in terms of carbon sequestering, based upon a ratio of one ton = 7 trees.





Internal and external audits

All Zilor units are regularly visited by the customers which acquire our products through Copersucar and by the regular auditors, in order to check the facilities and obtain the certifications. During the 2022/2023 harvest, 100% of the processes were approved, attesting to the high standard of quality of Zilor's operations and products.

During the 2022/2023 harvest, Zilor was approved in 100% of the audits performed

Third parties' biofuel certifications
SASB RR-BI-430a.2

The percentage of certified biofuel produced by third parties at a standard of environmental sustainability is:

86%

in accordance with the Japanese Ministry of the Economy, Trade and Industry sustainability certification;

79%

in accordance with the Bonsucro sustainability certification;

87%

in accordance with the sustainability certification awarded by the United States' Environmental Protection Agency (EPA), which administrates the Renewable Fuel Standard (RFS/Low Carbon Fuel Standard – California Air Resources Board).

Certifications map

The certifications of Zilor's products and processes are important tools for the company and the Biorigin business units to obtain access to strategic markets and prove the quality and sustainable products of sugar, ethanol, electricity and natural ingredients. The Company is continually investing in the adaptation of its procedures and internal controls to meet the highest standards recognized in the Brazil and overseas markets.

Agribusiness

Zilor was the first company to commit to 100% mechanized harvesting, in 2007, as a means of eliminating the burning of sugarcane ('Agri-Environmental Green Ethanol Seal')

Agribusiness certifications

								
Bonsucro International certification focused on sustainability in the production of sugarcane and its derivatives	RenovaBio National policy focused on expanding the production of biofuels	Registration with the USA's Environmental Protection Agency Required to comply with biofuel trading regulations in the US	CARB Certification with the California Air Resources Board (CARB), the California regulatory agency which supervises compliance in the production of low-carbon transportation fuels.	METI Criteria relating to the sustainability of biofuels required by the Japanese Ministry of the Economy, Trade and Industry (METI)	Green Ethanol Certification awarded by the state of São Paulo and entities from within the sugar and ethanol sector (UNICA and ORPLANA) defining directives for the adoption of best practices in the sector chain	ISO 14001 International norm specifying the requirements for a system of environmental management	I-REC International norm for the sale of electricity credits	EcoVadis Collaborative platform that awards sustainability classifications involving members of the global supply chain

Green Ethanol

A memorandum of intent executed between the state of São Paulo and entities from within the sugar and ethanol sector (ORPLANA and UNICA) defining directives for the adoption of best practices in the sector chain.

Bonsucro

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

Percentage of agricultural products sourced that are certified to a third-party environmental and/or social standard, and percentages by standard SASB FB-AG-430a.1

RenovaBio
São José Unit

98.35%

RenovaBio
Barra Grande Unit

97.57%

RenovaBio
Quatá Unit

99.04%

Biorigin

Biorigin also has raw-material certifications and tracking systems which help the company stand out in the field, being recognized as a benchmark in product quality. The Company's Quality policy is widely disseminated on its channels of communication.

Biorigin certifications



Bonsucro
International certification focused on sustainability - Chain of Custody Standard



ISO 14001
International certification focused on sustainability - Chain of Custody Standard International norm specifying the requirements for a system of environmental management



GHG Protocol
A tool used to understand, qualify and manage GHG (Greenhouse Gas) emissions



EcoVadis
A collaborative platform that awards sustainability classifications involving members of the global supply chain

FSSC 22000

Where: Quatá unit
Food safety
certification recognized
by the GFSI – Global
Food Safety Initiative.

Halal

Where: Quatá unit
Foods prepared in
accordance with
Islamic laws

Kosher

Where: Quatá and
São José units
Foods prepared in
accordance with
Jewish laws

GMP+

Where: Quatá, São
José and Barra
Grande units; and
European Trade
Food safety for the
animal nutrition chain

Non-GMO

Where: Quatá unit
Recognition of Non-
GMO foods



ISO 22000

Where: São José and
Barra Grande Units
Food safety management

SQF

Where: USA unit
Food safety and quality
(Biorigin US)

Excellence in relations

Care over the punctuality and quality of deliveries is of constant concern to the Company. At the Biorigin biotechnology business unit, the harvest was notable for the efforts made in improving the logistics, with maritime freight contracts being renegotiated and improvement of air freight, with a focus on providing the best service for customers.

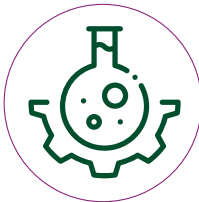
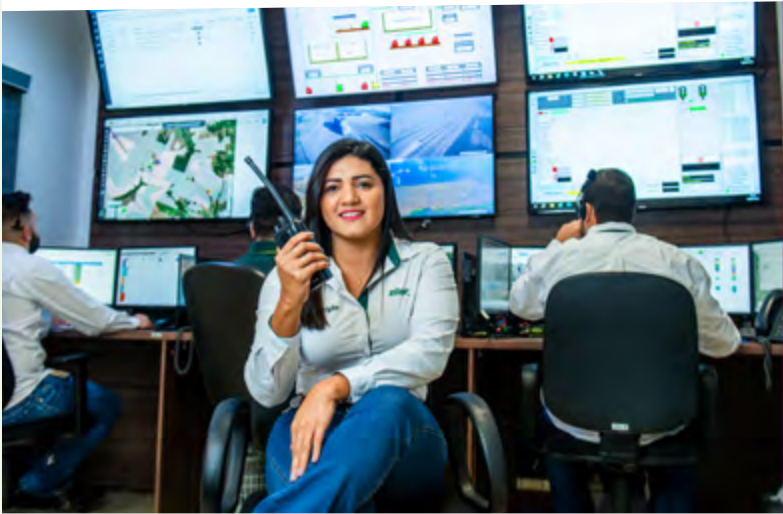
Biorigin undertakes a broad satisfaction survey once every two years. Due to the still lingering effects of the Covid-19 pandemic, it was not possible to perform this survey in 2022. The new cycle took place at the beginning of 2023, and the results are under analysis and expected to be released on Biorigin's official communication channels shortly.

Innovation and technology

GRI 3-3: Management of a material topic

Zilor's history has been marked by the entrepreneurship of its founders, by the teams overcoming the challenges they have faced, and the desire to transform the world by means of clean and renewable energy and the natural foods produced.

To achieve this vision of the future, the Company is continually investing in technological innovation and research, working on the continued improvement of the industrial processes and the production of sugar and ethanol to the highest standards of quality and safety. On the biotechnology front, Biorigin stands out in the research of development of ingredients that emphasize flavor, reduce the sodium content and extend the lifespan of the foods produced by its customers, whilst also investing in solutions that increase the functionality of animal feeds, improving the health and performance of production animals and pets.



The 'Good Law'

Zilor employs funds resulting from the 'Lei do Bem' (Law nº. 11,196/05), the so-called 'Good Law', that provides tax incentives for companies that invest in technological research, development and innovation in their projects. During the 2022/2023 harvest, the Company had R\$ 20.8 million connected with the law invested in advanced technology projects, with the aim of increasing efficiency and productivity at its two business divisions.

During the previous period, investment in the Good Law stood at R\$ 9.7 million. This harvest, the sum was practically doubled, demonstrating an indicator of the time transformed into funds and invested in productivity, with the subsequent achievement of greater results.

Of the areas that receive contributions and investments, we can highlight:

Industrial projects

20%

Corporate Projects (regulatory matters)

2%

Biorigin Research & Innovation

57%

Corporate Projects (project management)

8%

Agricultural Technology Development

13%



Good practices in farming and management

SASB FB-AG-440a.1

Zilor operates together with its agricultural partners (read more in Management of suppliers) to adopt a set of good practices and agricultural technologies, capable of contributing to the results of the business and minimizing external environmental factors. Amongst these are:

- ⚡ Biological control of pests, such as the use of cotesia to combat the sugarcane wireworm, thus reducing the dependence on pesticides;
- ⚡ Precision farming techniques for greater efficiency in the use of resources and reduction of GHG (Greenhouse Gas) emissions;
- ⚡ Spreading of straw on the plantations to protect the soil, conserve humidity and maintain productivity;
- ⚡ Use of advanced geo-technologies, such as automated sugarcane transportation, to reduce the compacting of the earth and optimize agricultural processes;
- ⚡ Crop rotation with leguminous plants, such as soybean and crotalarias, to improve the fertility of the soil and increase productivity;
- ⚡ Use of technologies for the application of soil correctives, such as limestone and gypsum, based upon soil analyses, to achieve greater productivity on sugarcane plantations.

New solutions

In the pursuit of new technological solutions, Zilor has established a number of partnerships with universities and research institutes, such as the Federal University of São Carlos (Ufscar), and the São Paulo State University (Unesp), whilst special mention should be made of the Campinas Agronomic Institute for its work on the management of different types of crops.

Amongst the innovations adopted by the company is the project designed to monitor the harvests of its agricultural partners, by means of which satellite images are collected on a daily basis. Still in its planning phase, with implementation forecast for the coming harvest, irrigation lines make use of cutting-edge technologies for the irrigation of localized vinasse, thus increasing the application capacity.

Another important project implemented during the harvest involved telemetry for monitoring the fleet of vehicles. This technology provides added safety for the company and the drivers, helping to avoid accidents in the transportation of products. Still in the area of monitoring, in partnership with the Mid-Tietê Sugarcane Growers Association (Ascana), Zilor has also implemented a camera system for monitoring agriculture wildfires, both in the production of its own sugarcane and on those lands managed by its agricultural partners (read more on page 98).

Following the pioneering work done on the launch of the Agricultural Partners Financing Programs, through the Credit Rights Investment Fund (FIDC) and the Future Price Fixing of the Total Recoverable Sugars (TRS) for agricultural

partners, Zilor has continued along the path of innovation in the financial market by launching a digital platform for fixing the TRS using digital tokens and 'smart contract' technology (providing contract guarantee codes for the operations) in a blockchain environment, thus providing greater security and practicality, whilst generating liquidity and opportunities for profitability from the variations in the price of sugar.

The tool is an innovation in the market, since it fixes the future TRS price on a horizon of two harvests, allowing a supplier to be paid through flexible and secure transactions, with an optimization of the treasury processes and digital control. The negotiation of tokens by means of blockchain technology is considered to be even safer, and more agile and efficient than the previous format, whilst stimulating the ecosystem with mutual benefits.

'Lean Seis Sigma' project

In the pursuit of operational excellence in its results, Zilor restructures its projects annually, using the 'Lean Seis Sigma' tool. By means of this, 'yellow belts', 'green belts' and 'black belts' are created each year, within which Working Groups can be formed, which will carry out the selected projects, strengthening the culture of ongoing improvement, reduction of deviations and greater efficiency of the Zilor units.

Amongst these success stories, we can cite the "Adherence to the vinasse application planning by the Agricultural Team" project, which created gains of R\$ 1.7 million for the Company in the 2022/2023 harvest.

In order to adapt and understand the theme, the Treasury department holds workshops with specialist consultancies and platform training sessions for the partners.

Cogeneration of bioenergy

Since 2021, Zilor has been operating a project for the expansion of energy drawn from sugarcane biomass, which will require a total investment of R\$ 550 million and enable an energy exportation increase of up to 60%. By the end of the 2023/2024 harvest, R\$ 332 million had been invested in the two projects, since the beginning of the program (read more about this in Financial Performance on page 67). The investment in the expansion of the renewable energy business is aligned with the business diversification strategy, and is designed to reduce the impact of the fluctuations in commodities and confer greater predictability on cash generation.

The bioenergy cogeneration expansion project, developed at the São José Unit in the municipality of Macatuba, was inaugurated in April 2023, and is operating with contracted energy for the 2023/2024 harvest. The Barra Grande Unit expansion project, in Lençóis Paulista, is also under way, with inauguration expected for the 2024/2025 harvest.

The investments will enable an updating of the industrial units' technological parks, providing greater efficiency in the boilers due to a greater number of turbines, whilst using the same amount of biomass to generate more energy per ton of sugarcane and reducing the consumption of steam at the plants.

The generation of energy using biomass guarantees that 100% of the electricity and steam supply that the Zilor industries consume over the course of the harvest is drawn from a renewable source. The surplus electricity following implementation of the two projects will be sold to distribution companies (regulated market) and traders (free market), an important strategy for business diversification and cash flow stability.

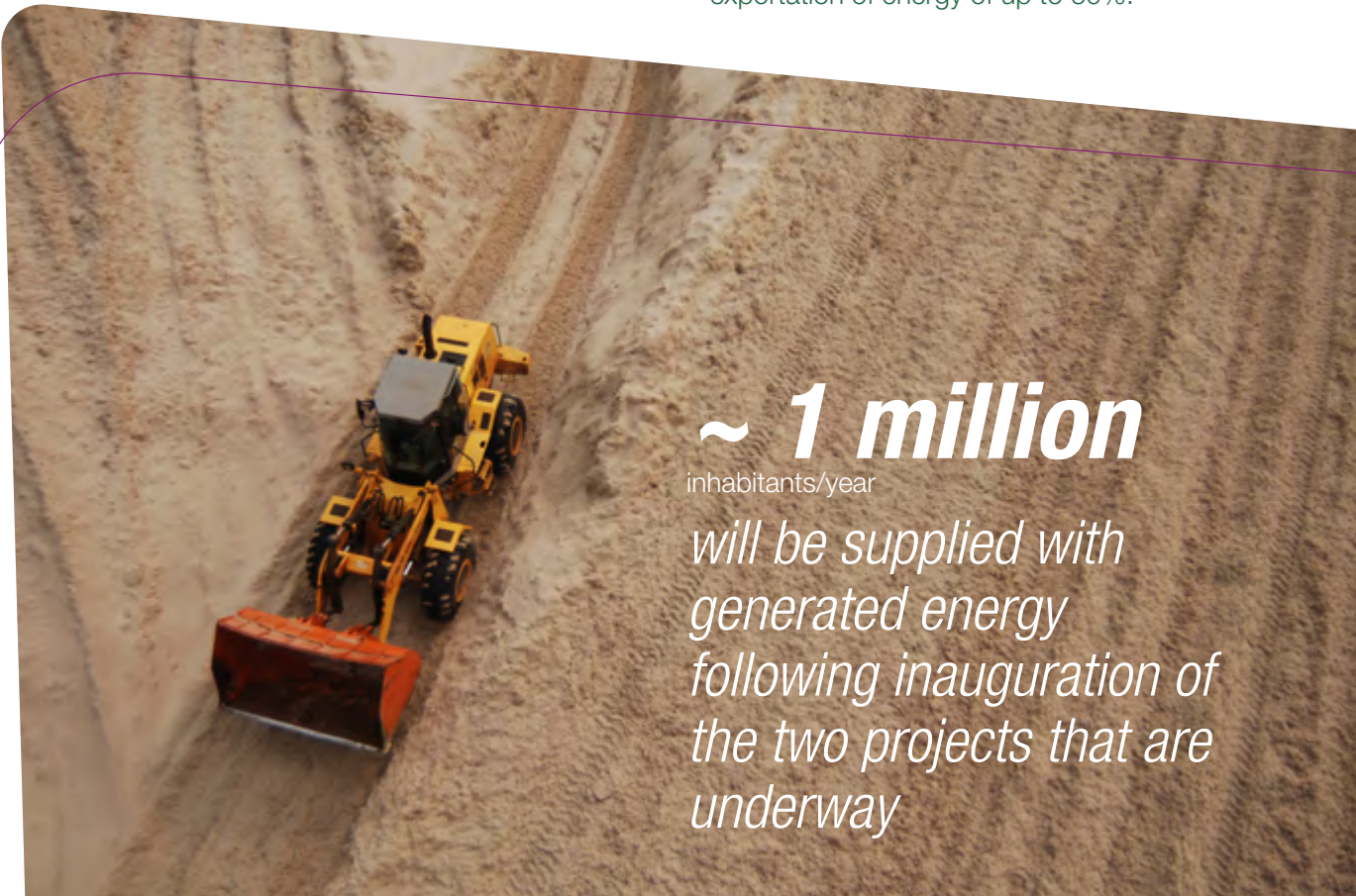


60%

expected expansion in the capacity of the generation complex

R\$ 550 mi

was the total investment that will enable an increase in the exportation of energy of up to 60%.



~ 1 million

inhabitants/year

will be supplied with generated energy following inauguration of the two projects that are underway

Innovation at Biorigin

The Biorigin business model has focused on innovation since it was founded 20 years ago. The guaranteeing of unique solutions for the market is based upon full control of the production chain, with raw-materials supplied by Zilor itself, with tracking of the yeast through to the final product, as well as the first Pure Culture factory in Brazil - which permits yeast strains for each product. Special mention should also be made of the unit's Research and Development Center, which involves three laboratories and a pilot-plant, with cutting-edge equipment and trained and qualified professionals.

The emphasis on the development of its employees allows Biorigin to be able to count on a workforce with a high level of technical knowledge and research experience, with doctorates and post-doctorates in biotechnology and related areas, as well as laboratory maintenance.

The work on identifying and anticipating market trends and developing new products is concentrated at the company's Research & Development (R&D) Center, which involves professionals specialized in the areas of biology, chemistry, engineering and biotechnology. The R&D team is in constant interaction with all the most recent innovations in biotechnology, be it with regard to fermentation or yeast strains.

One of the results of this work during the harvest was an improvement in the extract yield. Another area of great importance in the research and development of solutions in 2022 was that involving feed for pets and production animals.

Advances were also made in the availability of the pilot-plant (in São Jose - Macatuba - SP) for product tests prior to the formulas going to the factory, thus providing benefits for the human food

line and that designed for pets and production animals. Another advance involved the structuring of the Pilot-Kitchen, located in São Paulo (SP), for the development of applications of products and to meet customers' needs.

During the 2022/2023 harvest, as part of the 'Feed' line, Biorigin launched 'PalaUp', a set of yeast extracts focused on pet food. Zilor's biotechnology division ended the harvest with 15 lines of products in the human, pet and production animal food segments, and more than 100 products in its portfolio, some of which are produced exclusively for customers.



77%

of employees have MBAs or
have conducted Specialized
Research

0.5%

of employees have Post-
Doctorates

37%

of employees have
Master's Degrees

22%

of employees
have Doctorates

Biorigin also has partnerships with
universities and research institutes
throughout Brazil and overseas:

44

universities in Brazil

20

universities overseas

Read more
about Biorigin's history,
competitive advantages
and investments in
innovation [here](#)

ESG Strategy

Zilor seeks to integrate social, environmental and governance criteria into its business decisions and, as a result, has registered advances in the formation of a business model that is formally tied in with the sustainability aspect. During the most recent harvest, the company performed internal studies to adopt the ABNT PR 2030 parameters in the 2023/2024 harvest as a reference for the assessment and evolution of the ESG agenda.

These recommended directives offer guiding material on the theme, covering conceptualization and orientations for incorporating ESG into the organization, whilst also providing an assessment model and directions to be applied to the proposed criteria. The model allows the organization to identify its stage of evolution in relation to the requirements and draft an evolution plan based upon clear criteria.

To report the advances in the ESG agenda to the market with transparency, Zilor's Investor Relations area publishes a quarterly Earnings Release, containing the advances made on the nine topics identified as priority in relation to the United Nations' Sustainable Development Goals (alternately focusing on SDGs 3, 4, 6, 7, 8, 9, 10, 11 and 13). To access it, visit <https://www.zilor.com.br/relacoes-com-investidores/informacoes-aos-investidores/central-de-resultados>.

ESG topics aligned with the SDGs and disseminated amongst investors and the market



In addition to this, the Zilor + Sustainable 2030 Program combines the company's commitments and ambitions relating to ESG themes and reports its progress and challenges to the market by means of this report. As such, the Company is able to bring together the United Nations' 2030 Agenda and the material topics of sustainability that are of most importance to its business.

FINANCIAL

PERFORMANCE AND INVESTMENTS



Financial performance GRI 201-1

Even in the face of a challenging scenario, aggravated by overseas geo-political conflicts, such as the war between Russia and Ukraine, and inflationary pressure, a crisis in the supply of raw materials, especially fertilizers, and hard rainfalls in concentrated periods, the Company registered its highest net revenue in its 76-year history in the 2022/2023 harvest. Furthermore, it broke its own operating records, the result of improvement actions, investments in technology, elimination of waste and greater efficiency amongst the teams.

Zilor ended the 2022/2023 harvest with a record net revenue, totaling R\$ 3.4 billion, 5.8% higher than the previous cycle. Greater volumes and higher sugar prices contributed to this result.



R\$ 44.3 mi

in revenue from
CBIOs during the
harvest

The hedge operations surrounding sugar contributed enormously to the price levels and are related to the future price fixing of sugar for the mitigation of market fluctuations and better predictability of the revenue. The ethanol unit saw a slight increase in the volume of sales, which partially offset the drop in price recorded during the year. The price, meanwhile, was impacted, principally, by the tax exemptions on fuels applied in 2023, added to the variation in the price of oil which, despite being higher during the 2022/2023 harvest, was mitigated by the lower exchange rate when comparing the periods.

In relation to electricity, one of the Company's diversification units experienced a rise in revenue as a reflection of the greater volume of contracted energy exports compared to the previous harvest. The price was heavily affected due to the greater volume of rainfall during the 2022/2023 harvest. The CBIOs, recorded in the "Others" line, have been increasing, with R\$ 44.3 million registered and 459,200 CBIOs traded at an average price of R\$ 96.4/CBIO over the accumulated harvest.

The Biorigin unit, one of the Company's growth drivers, experienced logistics challenges during the harvest, optimizing its processes through the renegotiation of maritime freight contracts and making better use of air freight, with a focus on meeting the needs of the customers. During this harvest, with the definition of the strategic and commercial planning, the unit worked consistently with price readjustments and the recovery of margins, which offset the reduction in the volume of sales during the harvest and the



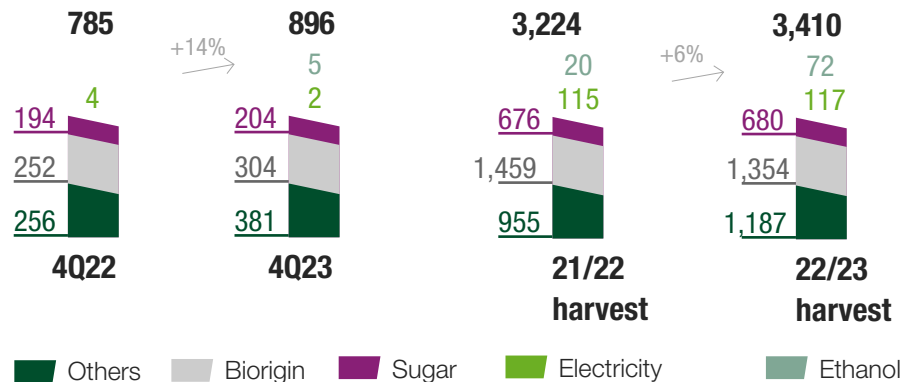
lower exchange rate, principally against the Euro, which contributed to the rise in the unit's revenue.

The Adjusted Ebitda was R\$ 961.1 million, with a 28.2% margin. The reduction in the Adjusted Ebitda is related to the increased costs, due to the pass-through of the price rise to the partners (Consecana), higher prices of inputs and the depreciation related to greater investments and sugar and ethanol trading costs in the Agribusiness sphere. The increase in costs related to the Biorigin unit, meanwhile, was due to the higher price of raw materials, which was partially offset by the drop in the exchange rate and the lower volume traded compared to the previous harvest. In both the businesses, the increase in costs was not accompanied in equal proportion by the increase in revenue.

The Company recorded a net revenue of R\$ 350.8 million and a margin of 10.3%, against the R\$ 711.4 million and a margin of 22.1% recorded during the previous harvest. The result was impacted due to the costs, with a rise in interest rates, inflation, a crisis in the supply of raw materials, especially fertilizers, and hard rains in concentrated periods. To deal with these issues, Zilor pursues a disciplined line on the management of costs and expenses, as well as the allocation of funds in its pursuit of longevity and better results.

The direct economic value generated during the 2023/2024 harvest period was R\$ 3,410.3 million. The economic value retained, meanwhile, was R\$ 2,176.0 (generated value, less distributed value).

Discrimination of revenue by product (thousands of tons)



Economic value distributed (R\$ million) GRI 201-1

Operating costs	302.30
Employee wages and benefits	115.04
Payments to capital providers	422.45
Payments to the government	390.83
Investments in the community	3.69
Total	1,234.32



**R\$ 350.8
million**
in net revenue

Cash, funding and indebtedness

The company's indebtedness has undergone an important process of deleveraging over the last five years, moving from an indicator of 5.0x Net Debt/Adjusted Ebitda in 2019 to 1.26x in 2022, with a temporary rise in 2023 to 1.94x, to cover the investment in the cogeneration project. The investment in the expansion of the renewable energy business is aligned with the business diversification strategy, reducing the impact of the fluctuations in the commodities and contributing to the greater predictability in cash generation. The São José power station's energy cogeneration expansion project was inaugurated in April 2023, and is operating with contracted energy for the 2023/204 harvest.

The Company has assessed attractive fund raising alternatives in the market. Due to this, to be able to move ahead with the energy expansion project, which will allow an increase in energy exportation of up to 60%, infrastructure debentures were issued in the sum of R\$ 450 million, with a longer payment term and competitive rates. This measure is connected to the aim of keeping a long term eye on the Company's levels of indebtedness and guaranteeing a sufficient availability of cash for the business in the long-term.

The cash position closed 31-Mar-2023 with a robust volume of R\$ 1,651.5 million, sufficient for the size of the Company to handle the commitments it has assumed.



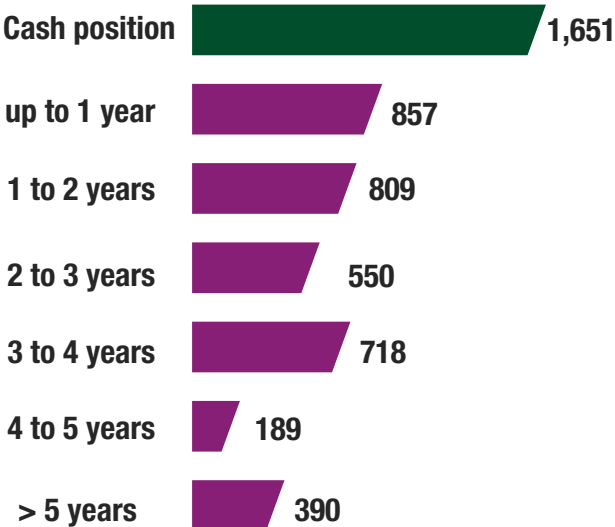
R\$ 450 mi

raised from the issue of
infrastructure debentures
connected to the energy expansion
project



Read more
about Zilor's economic
and financial
performance [here](#).

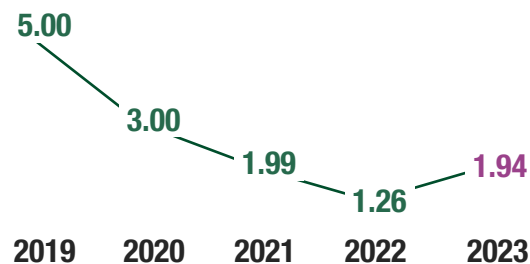
Amortization timeline (R\$ mm) Mar/23



Net Debt (R\$ mm)



Net Debt / Adjusted Ebitda (x)



Read more

Follow the quarterly financial statements on Zilor's [Investors Relations](#) website

Communication with the market

During the harvest, Zilor held quarterly online conferences to present its financial results, thereby allowing interaction with the investor market. The company also participated in bank conferences in order to strengthen ties with the capitals market, whilst there were also engagement actions, such as a perception survey concerning interests relating to the Company, with a focus on understanding those areas that could be improved in terms of its relations with the market.

In the interests of transparency, Zilor's Investor Relations area publishes a quarterly Earnings Release, containing the advances made on the nine topics identified as priority in relation to the United Nations' Sustainable Development Goals (alternately focusing on SDGs 3, 4, 6, 7, 8, 9, 10, 11 and 13) (read more on this on page 6).



Good practices in the chain

With an eye on the financial sustainability needs of its agricultural partners, Zilor develops viability studies on the offer of financial products that can mitigate risks and provide them with cash predictability, with a focus on support through the fixing of future TRS prices. One highlight of the harvest was the launch of the digital platform for TRS price fixing for the partners by means of digital tokens, with support from Zilor's Treasury department.

The first operation by a Zilor Agricultural Partner on the platform was performed in September 2022, with the other partners joining soon after. On March 31, 2023, Zilor had negotiated with 94% of the Agricultural Partners, with a 70% increase in the fixed volume compared to the previous harvest, reaching a sum of around R\$ 200 million.

Financial indicators (in R\$ million)

	22/23 harvest	21/22 harvest	Variation 22/23 Harvest x 21/22 Harvest
Net Revenue	3,410.3	3,224.1	5.8%
Gross Profit	778.4	974.6	-20.1%
Gross Margin	22.8%	30.2%	-7.4 p.p.
Adjusted Ebitda	961.1	1,091.2	-11.9%
Adjusted Ebitda Margin	28.2%	33.8%	-5.7 p.p.
Adjusted Ebit	525.0	683.6	-23.2%
Adjusted Ebit Margin	15.4%	21.2%	-5.8 p.p.
Net Revenue	350.8	711.4	-50.7%
Net Margin	10.3%	22.1%	-11.8 p.p.

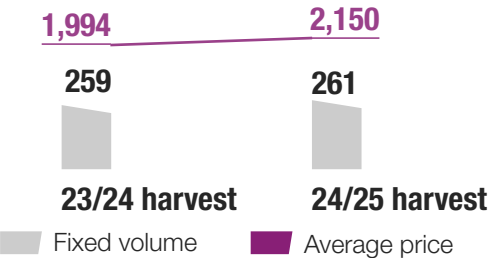
Balance sheet	31-Mar-2023	31-Mar-2023	Variation
Total Assets	8,462.3	7,785.9	8.7%
Net Equity	1,925.3	1,638.7	17.5%
Cash and Cash Equivalents	1,651.5	1,783.5	-7.4%
Gross Debt	3,513.1	3,154.4	11.4%
Net Debt	1,861.7	1,370.9	35.8%
Net Debt/Adjusted Ebitda (LTM)	1,94x	1,26x	0.7x
Current Liquidity ¹	1,78x	1,87x	-0,2x

¹ Adjusted by the Biological Asset in Assets and by the Leasing and impacts of the IFRS16 on the Liability

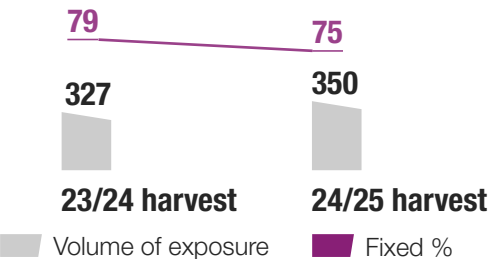
Sugar Hedge

Zilor’s hedge strategy complements the business model focused on the business’ longevity and sustainability, mitigating risks of fluctuation in the price of sugar. In the 2023/2024 harvest, the volume of 259,000 tons was fixed at an average price of R\$ 1,994/t, representing 79% of the exposure for the period. The price fixing of sugar for the 2024/2025 harvest totaled 261 tons at an average price of R\$ 2,150/t, representing 75% of the exposure for the period.

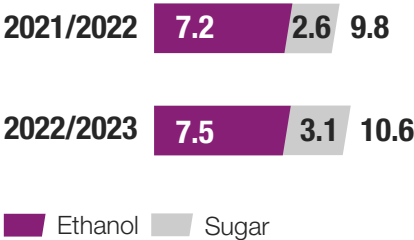
Fixed volume (thousands of tons) versus fixed average price (R\$/t)



Fixed volume (thousands of tons) versus fixed average price (R\$/t)



Operational performance



(thousands of tons)	22/23 harvest	21/22 harvest	Variation 22/23 Harvest x 21/22 Harvest
Total Crushing	10,550.0	9,859.1	7.0%
Proprietary Crushing	3,367.4	2,815.1	19.6%
Third Party Crushing	7,182.6	7,044.0	2.0%

Information by Region

Lençóis Paulista (SP) ¹	7,482.9	7,241.3	3.3%
Quatá (SP)	3,067.1	2,617.8	17.2%

¹ Lençóis Paulista includes information on the Macatuba unit.

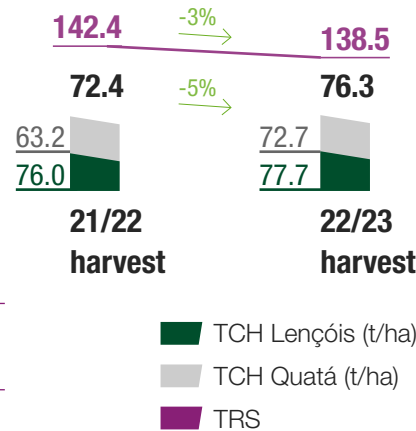
Productivity

	22/23 harvest	21/22 harvest	Variation 22/23 harvest x 21/22 Harvest
Consolidated Information			
TCH ¹ (t/ha)	76.3	72.4	5.4%
TRS ² (kg/t)	138.5	142.4	-2.7%
Information by Region			
Lençóis Paulista/SP			
TCH (t/ha)	77.7	76.0	2.2%
TRS (kg/t)	140.0	143.2	-2.3%
Quatá/SP			
TCH (t/ha)	72.7	63.2	15.1%
TRS (kg/t)	134.8	141.6	-4.8%

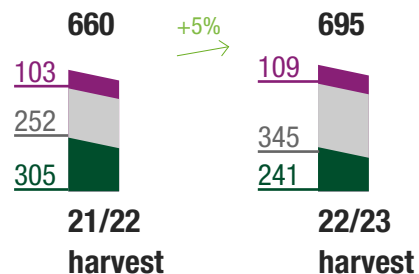
¹ TCH (Tons of Cane per Hectare) average productivity indicator

² TRS (Total Recoverable Sugar) sugar concentration and sugarcane quality

Agricultural productivity

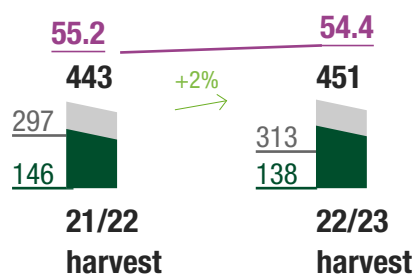


Sugar production (thousands of t)



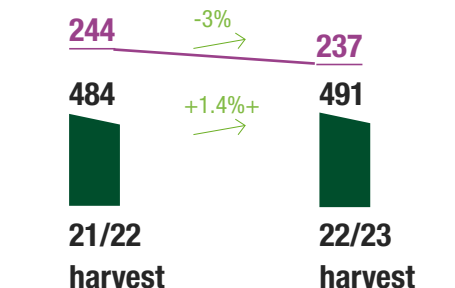
White Gross FS*

Ethanol production and mix (thousands of m³)



Hydrated Anhydrous Ethanol mix (%)

Energy cogeneration



Exports Average price (R\$)

Record performance

Due to the consolidated results of the harvest, Zilor broke 13 records, including industrial efficiency, agricultural productivity, crushing, sugar and energy production, and natural ingredients, amongst others, with special mention going to the 'Celebrar - Targets and Results Program' involving commemorative meals at which the leaders recognize the performance of the teams working at the units.



Biorigin Production

	22/23 harvest	21/22 harvest	Variation 22/23 harvest x 21/22 harvest
(thousands of tons)	42.5	39.9	6.6%
Feed - Food for pets, animal nutrition and health	22.0	19.9	10.5%
Food - food industry	20.5	20.0	2.7%

Agribusiness Production

	22/23 harvest	21/22 harvest	Variation 22/23 harvest x 21/22 harvest
Sugar (thousands/t)	694.9	660.4	5.2%
White	240.9	305.3	-21.1%
Gross	344.8	252.1	36.8%
FS¹	109.2	103.0	6.0%
Ethanol (thousands/m³)	450.6	443.2	1.7%
Anhydrous	312.6	297.1	5.2%
Hydrated	138.0	146.1	-5.5%
Exported energy (thousands of MWh)	491.0	483.7	1.4%
Contractor	462.0	438.2	5.4%
Spot	28.5	45.5	-37.4%
Ethanol Mix (without FS)	54.4%	55.2%+	-0.8 p.p.

1 FS: Fermentable sugar (Biorigin raw material)

Projects and investments

Zilor is convinced that its activities contribute to tackling three of the greatest threats to the planet: food security, energy security and climate security. The company is therefore continually investing in all of its operations.

In the agribusiness area, the improvement of farming and industrial processes has resulted in increased productivity and crushing. With total investment (Capex) of R\$ 928.5 million, the principal initiatives of the 2022/2023 harvest were:



Investment in farming, focusing on planting and crop handling;



Advances in the irrigation master plan, with expansion of the fertigation area in Quatá;



Acquisition of machinery and improvement of the existing equipment, contributing to the increased efficiency and modernization of the industrial complex;



Modernization of the industry, including the energy cogeneration project (read more about this in Innovation and Technology), with an investment of R\$ 304 million in the 22-23 harvest, totaling R\$ 332 million since the start of the cogeneration projects.

Investments (in R\$ millions)

	2022/2023 harvest	2021/2022 harvest	Var. 22/23 harvest x 21/22 harvest
Capex (maintenance)	571.3	412.8	38.4%
Sugarcane planting	199.2	142.9	39.4%
Crop handling	179.4	94.1	90.7%
Off-season maintenance	140.8	126.5	11.3%
Industry/agriculture	51.8	49.4	4.9%
Modernization/mechanization/expansion	357.2	154.8	130.8%
Total	928.5	557.6	63.6%

At Biorigin, the revision of the processes has allowed greater accuracy in the production, which has been reflected in the improved efficiency, with greater yield of yeast extracts and better control. The initiatives aim to guarantee the quality of the products and reduce reprocessing. Internal restructuring has ensured that the strategic objectives can be better addressed, with commercial transformation and supply projects being boosted. The different improvement actions that have been performed, in line with the strategic objectives, have optimized the unit as one of Zilor's growth drivers.

The harvest's other milestones

Beginning of activities at the Biorigin Applications Center in São Paulo (SP), which will allow customers to better understand the application of the products offered by the Company.



Logistics optimization, through the renegotiation of maritime freight contracts and better use of air freight, focused on better meeting customers' needs.

Investment in a new evaporator at the Barra Grande (SP) unit, which has led to greater efficiency in the use of raw materials and improved delivery of the final product in the pet food and production animal feed segment.

Awards and recognitions

During the 2022/2023 harvest, Zilor was recognized a number of times by important markets. Read about the main highlights relating to innovation, business and ESG below

						
2022	July	September	November	December	2023	January
Visão Agro Centro Sul 2022 Award Three highlights: “Personalities of the Year - Center-South Region”, “Best Managers” and “Sustainable Development” Ethics in Business Award 2022 Four trophies awarded in the categories of ‘Ethics and Compliance’; ‘Communication and Transparency’; ‘Environment’; and ‘Social Responsibility’.		Valor 1000 Ranking – Valor Econômico/ Globo Group – 3 rd Best Company in Bioenergy	Best in Agro 2022 - Globo Rural Top 3 Best of the Year Award Jornal o Eco – Special Mention in Bioenergy	19th Visão Agro Brasil Award Zilor was elected the best in Financial Management, with special mentions in the ‘Leadership Benchmark’ and ‘Best Manager’ categories	Zilor was highlighted in the Forbes Agro 100 for the 3rd consecutive year The ranking of Agro giants placed Zilor 58 th	



Read more
about the
[Awards and certification](#)



HUMAN AND SOCIAL CAPITAL

GRI 3-3 Management of a material topic 2- 7, 2-8, 2-30,
401-1



Zilor has a workforce involved in different operations, areas and units, the members of which are responsible for ensuring the success of the business and protecting the identity, culture and values of the organization. The more than 3,600 employees work in the Agribusiness and Biotechnology (Biorigin) divisions and also contribute to the efficiency, productivity and innovation of the business, and to driving the Company's commitment to sustainable development forward.

During the 2022/2023 harvest, 100% of the employees worked for the company full time.

Programs designed to attract talents, develop teams, assess skills, develop the corporate culture, and promote inclusion and diversity, make up Zilor's list of initiatives aimed at strengthening engagement and valuing a work environment guided by cooperation and respect.

Another highlight of the period was the structuring of actions in the area of Healthcare, including a commission focused on managing absenteeism, claim rates to health plans, insurance companies and benefits, as well as initiatives concerning the mental health agenda.

A culture of engagement

In order to disseminate the values of the corporate culture and the principles of ethics and respect for people, Zilor has a series of initiatives that emphasize the committed relations with customers, employees and shareholders. In line with Zilor's values of work, growth and dreaming of the future, the Company has developed different programs directed at the employees.



Coffee with the Leaders Program

Aimed at recognizing the work performed by the employees and sharing ideas, Zilor has implemented the Coffee with the Leaders Program. First held in 2018, this series of monthly meetings brings together groups of ten employees to chat with the Company's CEO. This is an opportunity to exchange experiences of the day-to-day work and make suggestions about the status quo. Each meeting lasts two hours. More than 840 people have participated in the program since it began. In the 2022/2023 harvest, 20 meetings were held as part of the program, involving 200 employees.





Celebrar - Targets and Results Program

Another highlight of the engagement initiatives is the Celebrar Program. Created and implemented during the 2022/2023 harvest, this program is a celebration offered in the form of a special meal for those teams that hit targets and productivity and efficiency records, involving all those employees at a unit which has achieved the target, be it in the field or at the factory.

During the 76 Harvest, 13 records were broken in the Agribusiness and Biorigin divisions.



Employee Appreciation Program

Created to recognize employees and honor them for their time at the company, the Employee Appreciation Program celebrated its 25th anniversary during the 2022/2023 harvest. The employees received special mention at a recognition event, involving the Company's senior management. The event, which is held every five years, started up again in 2023, following a period during the pandemic in which in-person celebrations were suspended. The honor is dedicated to those employees who have been with the company for between ten and fifty years.




Brand Ambassadors Program -
Zilovers and Bio lovers

To increase the synergy of “Zilor and Biorigin’s way of doing things”, the 2022/2023 harvest saw the launch of the first group of Zilor and Biorigin Brand Ambassadors. Ten employees were selected to participate in the program, representing the Company's principal areas, with the mission of sharing their day-to-day experiences at Zilor and Biorigin on social media for a period of ten months. The aim is to explain the history of the organization, its achievements and future aspirations, from the point of view of the employees themselves, in order to strengthen employee-employee, employee-company, and company-society relations.




Read more
about the interactions of
the ambassadors on
[Zilor’s LinkedIn account](#)




Read more
about the programs
[here](#)



ZibiCast Program

Launched during the 2022/2023 harvest, this Zilor and Biorigin webcast is broadcast on the Zilor YouTube channel. Created as an opportunity to strengthen Zilor’s connection with its stakeholders in the form of a video, meaning it is more accessible, attractive and relaxed, there are three program models (with launches being staggered once a month on the platform):
LiderCast: presents the career histories of the Zilor and Biorigin leaders, the business culture, corporate values and information on the future of the Company.



JobCast: in this program, the leaders discuss their professional histories in the world of agribusiness and biotechnology, discussing career opportunities at Zilor and the possibilities for personal and professional development.



SocialCast: this addresses the Social Responsibility and Private Social Investment initiatives in the communities where Zilor is active, in the form of a chat with the social organizations and tax-deducted projects supported by Zilor.

Personnel Management

GRI 2-7, 2-8, 2-30, 401-2, 401-3, 404-1, 404-2, 404-3, 202-1, 202-2

During the harvest, Zilor made important headway in its procedures involving personnel management. A specialist consultancy was contracted to perform maturity surveys concerning the company's Personnel & Organization processes. In line with the efforts made to better understand the progress that has been made and the future challenges, the Company has drafted a work plan to improve the P&O programs, paying special attention to the employee's experience.

With respect to Performance Management and Skills Management, Zilor performed 360 degree and 9Box skills assessments of the management during the 2022/2023 harvest. During this initiative, 100% of the managers were assessed.

The process involved the mapping of the leaders regarding their personnel management and results performance. Following the assessments, conversations were held to provide feedback and Individual Development Plans (IDPs) were drafted to promote their skills. The 9Box assessment involves mapping those employees with high potential/ delivery of results who could assume succession positions in the future or take advantage of new career opportunities.

This program will be expanded during the 2023/2024 harvest, with the implementation of assessments for all the leaders, with feedback and adjustments under 9Box extending to everyone from the directors to coordinators.

Also during the 2022/2023 harvest, the Industrial Maintenance Skills Matrix was consolidated with the aim of developing technical skills and knowledge for those employees in positions of operational support.

One of the actions connected to the improvements in P&O was the 360 degree leadership assessment process.



The initiative attends the need for constant improvement of these employees and demonstrates the commitment to offering the opportunity to develop skills to every area of the Company. The work was performed with the support of Zilor's leaders, in partnership with the National Industrial Learning Service (Senai), resulting in the preparation of improvement courses focused on the industrial maintenance public in the Agribusiness and Biorigin areas.

Planned for implementation during the forthcoming cycle, the Leadership Training Matrix was also developed, addressing different themes such as business, skills and finance.

During the 2022/2023 harvest, efforts were directed towards the management of the quality

of life of the employees, with investments in the quality of food, employee transport and safety, as well as in the structuring of the Life in Focus, Mental Health and Quality of Life programs, with the launch planned for later this year. This concern over the quality of life within the organizations is also a point that is being increasingly considered in the professional choices being made by the younger generations, who are more concerned with balancing their life expectations at work and in their personal development.

In January 2023, with the integration, wellbeing and comfort of the employees in mind, Zilor inaugurated its new office in São Paulo (SP), covering an area of 1,000m² offering space for 120 employees to work comfortably. The corporate space is located in the heart of São Paulo's financial district, at the intersection

of Avenida Faria Lima and Avenida Juscelino Kubitschek.

Intergenerational relations are common at Zilor, above all in the agribusiness area, in which different generations coexist in the same working environment. This scenario also creates specific opportunities for the company to improve and evolve in terms of the diversity of visions and skills.

In the organizational planning, publication of the Long-Term Incentive Policy, a program directed towards the strategic public, from the CEO to management level, was validated and published. The aim of the Program is to achieve results that consolidate growth and the creation of long-term, sustainable value, as well as attract and retain eligible participants, encouraging them to perform well and compensating them for achieving targets as of the 2023/2024 cycle.



1,000m²

of area at the new
office in SP

Strategic Personnel Planning

For the coming years, Zilor will be operating primarily on attracting and retaining personnel on eight specific action fronts:

- Establishment of a performance management process which will drive the growth, recognition, attraction and retention of talents;
- Training Grant ("layoff");
- Career Program;
- Internal development and recognition;
- LDP - Leadership Development Program and a skills matrix for the different publics;
- Succession Program, with a plan for strategic positions designed to prepare successors in all of the organization's key positions;
- Culture and Engagement (motivating people and achieving increased performance, permanence, creativity, innovation and productivity across the organization); and
- Personnel and Organization Processes (guaranteeing good operations and activity, and efficient and well-structured processes).

Revision of the structure of positions and salaries

One of the highlights of the 2022/2023 harvest was the broad revision of the structure of the company's positions and salaries. Performed with the support of the Korn&Ferry consultancy, the aim of the project was to analyze the context of Zilor and adapt the practices to the maturing of the operations and their respective corporate positioning in the market in which it operates. This guarantees the employees remuneration in line with market practices, and best suited to their challenges and career moves, whilst recognizing internal relativism.

At the end of the organizational design and budget process stage, the results involved the restructuring of positions and salaries and a plan for implementation of the new structure, which is now underway. The target for 2023/2024 is to have developed a structured career plan that has been shared with everyone within the organization, as a means of engaging, guiding development, and demonstrating the opportunities for growth within the Company.

With regard to the selection process for new talents, the directives for the coming cycle involve ensuring the participation of at least one woman on the shortlist for the hiring of supervisors, coordinators and managers. By doing so, we are strengthening our position of making advances

with the policies of inclusion and diversity, in the requirements of gender equality.

In relation to the benefits offered to the employees, improvements were made to the quality of food served in the restaurants, with the participation of the employees in the form of a menus commission; improvement and expansion of the fleet of vehicles used by employees during working hours; and electronic systems for fatigue control and telemetry, thus contributing to employee safety.



Training

Development of the teams is extremely important to the Company, which employs a series of training sessions focused on improving technical and behavioral skills. A number of in-person training programs are provided (both within the company and elsewhere) as well as on e-learning platforms, apps and other forms of distance learning. Furthermore, technical training sessions are provided in partnership with educational institutions specializing in industrial learning, such as Senai, Senac and technical schools.

Zilor invested more than R\$ 1 million in the training and development of its employees during the 2022/2023 harvest.

With regard to the training of future generations, the following initiatives deserve mention:

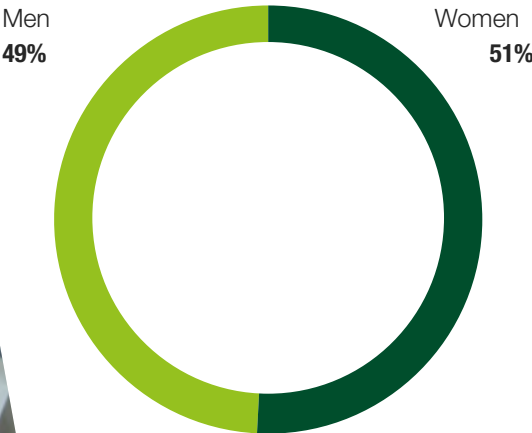
Young Energy Program: by means of Zilor's connections with universities and technical schools, young people are trained in skills related to the Company's manufacturing process, such as engineering, administration and biotechnology. The students have the opportunity to understand the practices that form part of the agribusiness and biotechnology sectors, with guidance from experienced professionals, whilst also making contact with the senior management. These young people receive specific skills, through a development program, and also participate in internal selection programs.



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students participated in this internship program, with an achievement rate of 41% in the 2022/2023 harvest

Percentage of men to women on the Young Energy Program



Young Learner Program: this initiative was reformulated to provide structured training in technological development for young people from the communities neighboring the Zilor units aged between 18 and 23. In 2022/2023, a pilot-project conducted in Quatá (SP) attracted 34 participants, 80% of whom were women, who received training in Production Line Assistance. The project is to be expanded in 2023/2024 to involve four groups. It is a program aimed at technical improvement developed in partnership with Senai, offering academic training, whilst Zilor offers practical experience outside school hours, with mentoring from leaders for the development of these young professionals. The mentors of these young people receive

investment in mentor training, ensuring that the classes received by these young people are that much more assertive.

For the development of leaders, a key-theme for Zilor in its long-term planning, the advances in terms of diagnoses and assessment of maturity are reflected in a more strategic perspective being taken in the preparation of future business leaders. Amongst the highlights are the construction of the Leadership Matrix, the formation of training sessions based upon ethics and integrity for leaders, modules on labor relations, and a partnership with a Unicamp researcher for research into Assertive and Sustainable Leadership.



80%

of the participants
on the Production
Line Assistance
course were
women

Development and strengthening of skills

Based upon a survey of technical skills specifically for industrial maintenance, performed in partnership with Senai, specialist courses meet the needs of each employee in the area, as a means of taking a close and individual look at the operational staff. This is an approach that favors the engagement of the employee with their own career and optimization of the time spent on training sessions. The coming cycle is set to include the mapping of skills in the industrial process areas.

Another development in the 2022/2023 harvest was the launch of a Training Grant Program for employees on harvest-specific work agreements in the agricultural area, making use of the Workers' Assistance Fund, known in the market as a 'layoff'. This is an opportunity for professional development during the off-season, aimed at keeping employees in the Company on an indefinite contract, promoting greater adherence to Zilor's culture, processes and practices of safety, whilst also generating employment and income with a positive social impact in the communities. During this first stage, implemented at the Quatá (SP) unit, 203 contracted employees remained with the company.

Also in relation to training, another initiative during the off-season period was the soldering and welding training course, offered for the development of technical skills in the operation of machines that are switched off during this period for maintenance work. Participation is voluntary for this program, which allows these professionals to continue working in the

area (rather than being sent to perform other functions during the off-season). In addition to this, Zilor offers the opportunity for new areas of growth and career development. More than 60 professionals took this opportunity to develop skills for qualification in the operations area, with good chances of promotion for employees who assume new roles. As a result of this initiative, Zilor promoted the first woman to the role of automotive mechanic, reinforcing its commitment and evolution in relation to the gender equity agenda.

Hours of training

2021/2022 54,816

2022/2023 76,435

The total number of training hours per employee (22.2) increased to 33% in 2022/2023 when compared to the 2021/2021 harvest (16.7).



Employees by type of employment agreement and gender^{1 2 3 4} GRI 2-7

Type of contract	22/23 harvest			21/22 harvest			20/21 harvest		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Permanent	2,703	375	3,170	2,510	293	2,803	2,678	268	2,946
Temporary	467	86	461	631	147	778	595	203	798
Total	3,170	461	3,631	3,141	440	3,581	3,273	471	3,744

¹ In order to compile the data, reports from the Senior System were used, based upon the reference date of March 31, 2023. The figures stated include employees from both Zilor and Biorigin.

² During the reported period, no significant fluctuations were observed in the number of employees. This means that there were no significant variations in the number of employees during this period.

³ We do not employ the form of hiring without a guarantee of working hours.

⁴ All the company's employees operate in the Southeastern region.

Employees categorized by gender and type of employment agreement GRI 2-7

Type of employment	22/23 harvest			21/22 harvest			20/21 harvest		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Full-time	3,170	461	3,631	30.84	408	3,492	3,225	434	3,659
Part-time	0	0	0	57	32	89	48	37	85
Total	3,170	461	3,631	3,141	440	3,581	3,273	471	3,744

Employees by employment category and gender^{1 2 3} GRI 2-8

	Men	Women	Total
Apprentices	51	44	95
Interns	51	44	95
Total	102	88	190

- ¹ The cut-off point used to establish the data was the last day of the harvest (31-Mar-2023).
- ² We include only apprentices and trainees; for the other categories we do not monitor third parties or partners.
- ³ There was no significant fluctuation.

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apprentices and
trainees on our
team



Health and safety

GRI 3-3: Management of a Material Topic, 403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-7, 403-8, 403-10, SASB FB-AG-320a.1

Respect for life, wellbeing and integrity forms a central part of Zilor's commitment to its human capital, which is why the company has implemented the 'Life in Focus - Safety' program. By means of an Occupational Health and Safety Management System, different requirements and norms are adopted to guide investments and projects. Amongst these are occupational health services, a Risk Management Program (RMP), an Observation and Prevention Program (OPP), Daily Safety Discussions (DSD), job safety analyses and other behavioral management actions.

The governance of this topic includes bimonthly talks with the Executive Board and the managers of the Agribusiness division and Biorigin, as well as a monthly meeting with the Safety Management Group (SMG) at all the units. As such, the analysis of performance, the directing of decisions and awareness-raising of the senior management are assured.

For every activity, aspects are considered such as the location where it is to be performed, and the need for blocks on electricity, pneumatics, mechanics and hydraulics, amongst other potential risk factors.

The management system follows the directives of Brazilian legislation and includes instructions for analysis of all the workstations in terms of health and safety risks.

At all of its units, Zilor has implemented procedures for the identification of warnings, access controls, and instructions for active employees, with training sessions in the relevant Regulatory Norms (RNs) and, if necessary, permissions for hazardous work, with the active participation of the employees in the analysis of the dangers present at each location. Employees and third parties receive explanations concerning the right to refuse to work, should they have identified situations which could lead to accidents. Near accidents that get reported are assessed by the health and safety team and converted into an action plan, which is monitored by the SMG as well as by the Integrated Operations Group (IOG); the report concerning the data of near accidents is developed by the Company using the ZZAP, which ensures swift and precise transmission to the responsible team. To prevent and mitigate impacts to health and safety, all workers are trained and receive collective and individual protection equipment.





The participation of the employees in this process is assured by means of health and safety campaigns, daily discussions and entities such as the Internal Accident Prevention Commission (Cipa), which represents the Company's workforce. All employees and workers, be they direct or employed by a third party, or in other words, 100% of the personnel, whilst on the premises of the units, are covered by the health management system, having been audited internally or certified by an external party.

As well as the analysis and the risk controls, the employees are submitted to periodic exams designed to monitor their health conditions, with clinical evaluations performed by the occupational doctor and a dossier which can only be accessed by the Zilor medical staff. For third parties, the evaluation and release occurs by means of controls presented to the employer. The confidentiality of the information is guaranteed, in line with the General Data Protection Law (LGPD).

Medical outpatients clinics are installed at each of the units, providing treatment and orientation, with patients being directed to specialist doctors, psychologists and nutritionists. Workplace exercises and quality of life are other services that are provided. In addition to this, 'ZAPPI' - the Zilor Integration App - is an essential tool for communication between the company and the employee. During the 2023/2024 harvest, Zilor will be expanding the online self-examinations relating to the area of mental health, by means of which, depending upon the answers provided in a questionnaire on the health conditions of the employee,

the Occupational Health department makes contact to provide all the support necessary. This tool was implemented at the beginning of the Covid-19 pandemic to record and monitor cases, and has continued operating to provide the employees with healthcare support.

To increase this healthcare, during the 2023/2024 harvest, Zilor will also be expanding the Life in Focus Program to meet the employees' mental health, nutrition and wellbeing needs.

During the harvest, Zilor maintained its focus on safe behavior and aimed to reinforce the culture of risk perception amongst its employees. There were no fatalities or records of work-related illness requiring obligatory communication. During this period, 1,379 reports of near-accidents were mapped.

There was a Total Recorded Incident Rate (TRIR) of 5 incidents during the 2022/2023 harvest. This included the total number of incidents with and without time off work. The incidence rate for accidents with time off work was 0.41, the lowest rate ever recorded by the Company.



R\$ 16 mi

in investments in Health, Safety
and the Environment (HSE)
during the harvest

Life in Focus Program - Safety



The Life in Focus Program, created in 2018, is the platform providing tools and management of safety in the operations. With its own governance structure and guidance on prevention, the Life in Focus Program strengthens the culture of safety and adoption of safe and responsible behavior in Zilor and Biorigin’s agricultural and industrial activities.

The Program was structured using an internationally recognized methodology, which privileges the observation of the environment and prevention of accidents, with ongoing processes to raise the awareness of the leaders and teams, as well as a culture of ownership and engagement with respect to the department and line.

Currently covering 100% of the business units, involving employees and service providers, the program has certified 1,000 employees in training sessions in the areas of risk perception and improving the application of safety tools.

The efficiency of the program can be seen in Zilor’s 2022/2023 Health, Safety and the Environment (HSE) results, which recorded a drop in the number of accidents involving time off work, with the rate falling to 0.41 against 1.2 in 2021/2022.

Work-related injuries^{1 2 3} GRI 403-9, SASB FB-AG-320a.1

Basic data	22/23 harvest	21/22 harvest	20/21 harvest
Number of man hours worked (MHW)	7,407,019	6,691,275	6,889,008
Number of near-accidents	1,379	1,468	899
Total number of accidents (with and without time off work)	37	33	43
Total number of accidents involving more than 15 days off work	3	5	3
Number of accidents resulting in fatalities	0	1	0
Number of days lost/debited	203	6,231	188

Rates calculated using a factor of one million MHW (GRI)

Recordable accident frequency rate (TRIR)	5	4.93	6.24
Rate of frequency of accidents involving more than 15 days off work	0.41	0.75	0.44
Rate of frequency of accidents with fatalities	0	0.15	0
Accident severity rate	27.41	931.21	27.29

Rates calculated with the factor of 200,000 MHW (SASB)

Near miss frequency rate	37.23	43.88	26.10
Recordable incident frequency rate (TRIR)	1.00	0.99	1.25
Fatality rate	0	0.03	0

1 All incidents are investigated by a multi-disciplinary team involving improvement actions and training whenever necessary. The incidents are attended to by the Emergency Crew with the ambulance’s exit from the gatehouse being registered and controlled.

2 The investigations follow the DuPont “Tree of Reasons” analysis, and are performed by multi-disciplinary teams to break the incident down and obtain a comprehensive understanding of its cause and mitigation possibilities. We use the NBR 14280 to calculate the rates.

3 The main types of work-related accidents involve hands and the lower limbs (feet and legs).

Traffic Safety

In partnership with the Mid-Tietê Sugarcane Growers Association (Ascana), Zilor hosted two annual events focusing on motorists and the community:



Pedaling Safely is Pedaling Well Bike Ride:

this event aims to establish a good relationship between cyclists, motorists and pedestrians on rural and urban roads. The cooperative event (involving donations of milk), is held on the last Sunday of November and involves support from the Lençóis Paulista City Council and Ascana. The donations are forwarded to social organizations in the towns of Lençóis Paulista, Macatuba and Pederneiras. In 2022, the ride attracted 200 cyclists with 1,000 liters of milk being donated. The 30 km ride marks the end of the Safe Transit campaign and the Lençóis Paulista Cyclist Day.



Gathering of Drivers for Road Safety

This event brought together 1,000 workers in Lençóis Paulista and Quatá, in March 2023, with the aim of ensuring the safety of all the drivers working for Zilor and the Agricultural Partners, through Ascana. The gathering of drivers reinforced the training sessions conducted on this issue and encouraged a reflection upon the importance of the work made by each individual to have a positive impact on traffic safety.

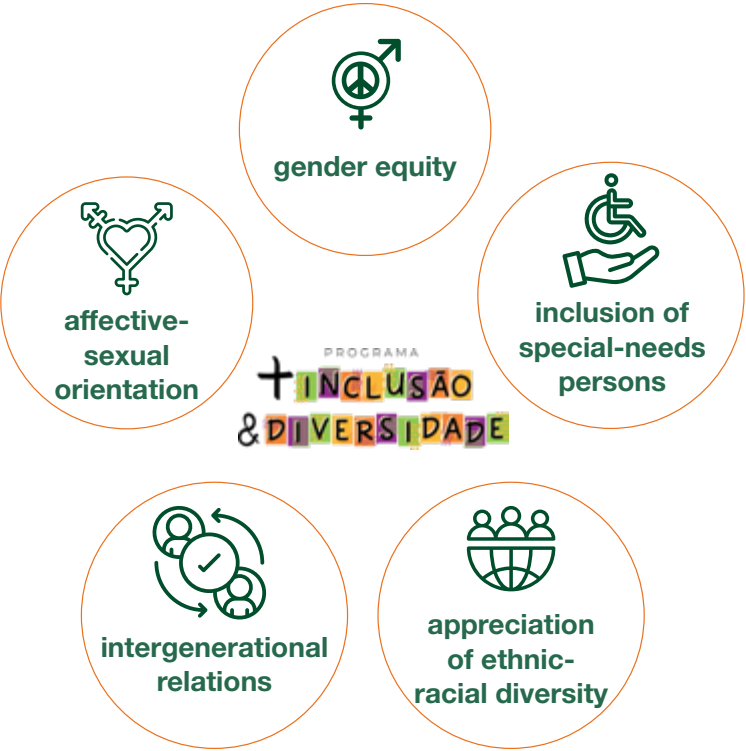


Awareness Blitz: a number of employee orientation actions were conducted, focusing on traffic safety, and following three central axes: the use of the seatbelt, respect for signaling and obeying speed limits. Another action for drivers was an online training course in defensive driving - a pre-requisite for the handling of any Zilor vehicle.



Inclusion & Diversity

The “More Inclusion & Diversity Program” took shape during the course of the 2022/2023 harvest. Taking a cross-sectional and constructive approach, this program aims to outline a path for organizational development in line with Zilor’s corporate culture. The initiative brings together research and understanding on the theme, engagement of the employees through communication campaigns, dissemination of the importance of inclusion and diversity, and training sessions for the leaders and teams. The program involves actions designed to promote information on:



During the 2021/2022 harvest, Zilor performed a survey and mapped the theme within the Company. The initiative provided an understanding of the workforce and, at the same, created a space for active listening and suggestions from the participants. During the 2022/2023 harvest, Zilor expanded its actions on the theme, by contracting the ‘Mais Diversidade’ (‘More Diversity’) consultancy, resulting in a diagnosis of the maturity of Zilor and the creation of a specific department. This involves a group of employees from different areas specifically dedicated to the issue, with the aim of guiding the Company’s handling of the themes in the commissions that will be formed during the coming cycle.

Based upon this diagnosis, a working group was formed involving representatives of different areas. This group is responsible for defining the agendas,

themes and internal alignments with partner areas, senior management and the support consultancy.

Zilor’s initial focus is to work on promoting gender equity at all the units and operations, including leadership positions. In parallel, the Company works hard on awareness raising campaigns and engagement, involving a positive monthly communication agenda. The aim is to spread a better understanding of these themes, encouraging reflection on the part played by each individual to transform the work environment and society into spaces that are more respectful and empathetic, offering equal opportunities.

Amongst the actions promoted during the period, in March 2023 - Women’s Month - the company conducted the ‘A Woman’s Place is Wherever She Wants to Be - A Woman’s Place is at Zilor and Biorigin! Campaign’, which addressed issues such as respect for women, diversity, and inclusion, and diversity in society and at work.



The activities began with the presentation of the Quem são Elas (“Who Women Are”) show in Lençóis Paulista and Macatuba. The project involved actions designed to encourage reading, with the distribution of illustrated books outlining the stories of 24 women who managed to transform their dreams into reality.

The campaign included a number of internal activities appreciating women in the work space and concluded with the first ‘A Woman’s Place is Wherever She Wants to Be - A Woman’s Place is at Zilor and Biorigin!’ workshop, with a talk from Dr. Gabriela Manssur, a legal expert, defender of women’s rights and founder of the Justiça de Saia Institute and the Justiceiras Project.

The next stage of the More Inclusion & Diversity Program is to establish targets, indicators and processes. To achieve this, the Company is working to construct and maintain an inclusive and resilient environment that is prepared to operate with all the diversity that is a feature of the company’s work environment. Zilor believes that the affirmative actions are a consequence of an environment that is more conscientious with respect to inclusion, with the participation of the leaders, employees, partners and communities.

20,000+

views of the **What is Diversity?** video, Zilor’s first action on the theme, launched during the 2021/2022 harvest.



200

people attended the workshop
(conducted in hybrid form).



Amongst Zilor’s policies focusing on gender equity, especially worthy of mention are:



Salary equity: men and women who occupy the same position are grouped in the same salary band;



Combating any and every type of harassment: through the Ethics Hotline, a secure and confidential tool that is open to all stakeholders, complaints are received by an independent, specialist company, 24 hours a day, seven days a week;



Extended maternity leave for pregnant women: Zilor has adopted the model of the Citizen Company Project, which guarantees six months for maternity leave and stability upon returning to work;



Development of positions and leaders: women participate in the program and currently occupy 21% of the leadership positions at the company.

Suppliers

GRI 3-3: Management of a material topic, 2-6, 308-1, 308-2, 414-1, 414-2, 13.23.1

Zilor and Biorigin count upon an extensive chain of suppliers of materials, technologies, services and raw-materials, which are responsible for contributing to the success of the business and driving the socioeconomic development of the communities.

Around 70% of the Company's sugarcane, which supplies its three industrial units in Brazil, is provided by the third party producers which make up the Agricultural Partners Program.

Having been in operation for two decades, the program currently involves 16 producers operating in the Lençóis Paulista region, which supply the needs of the Barra Grande and São Jose units. This is a platform focused on contractual long-term relationships that generates a positive economic impact in the sector, with the creation of jobs, the transfer and sharing of technology, and entrepreneurship in the municipalities of the region.

Each of the 16 producers works with sugarcane production on an area of 5,100 hectares of land belonging to Zilor or operated under leasing agreements from the Company. The relationship is balanced by agreements that ensure financial and operational predictability and encourage the adoption of good sugarcane management practices. The model establishes incentives

depending upon the productivity rates - in line with the premises of mutual development and the strategic objectives of the Company.

Zilor has a dedicated team responsible for managing the Partners Program, taking into consideration criteria such as socio-environmental/ESG performance, productivity and remuneration.



100%

adhere to Zilor's Socio-environmental Conduct Commitment

Since the launch of the Code of Ethics for Agricultural Suppliers and Partners (in 2022), every company involved has been required to sign the agreement.



The Agricultural Partners Program
in figures

Crop (in thousands of hectares)



Production (in millions of tons)



ESG tracking and awareness

GRI 408-1, 409-1, 13.23.1, 13.23.2, 408-1, SASB FB-AG-430a.2, FB-AG-430a.3, RR-BI-430a.1

Close attention to tracking and ensuring compliance throughout the planting, harvesting and processing cycle forms a central part of the actions employed to monitor the suppliers. In-person visits and document checks form part of the work performed by Zilor's dedicated team, with the creation of a Socio-environmental Performance Index, an in-house indicator designed to analyze the performance of suppliers and monitor the risks. The Company has developed a risk prioritization matrix and an action plan, inspired by the mapping of potential impacts in the chain.

All instances of non-compliance identified in the audits are addressed in actions plans developed with the partners. During 2022/2023:

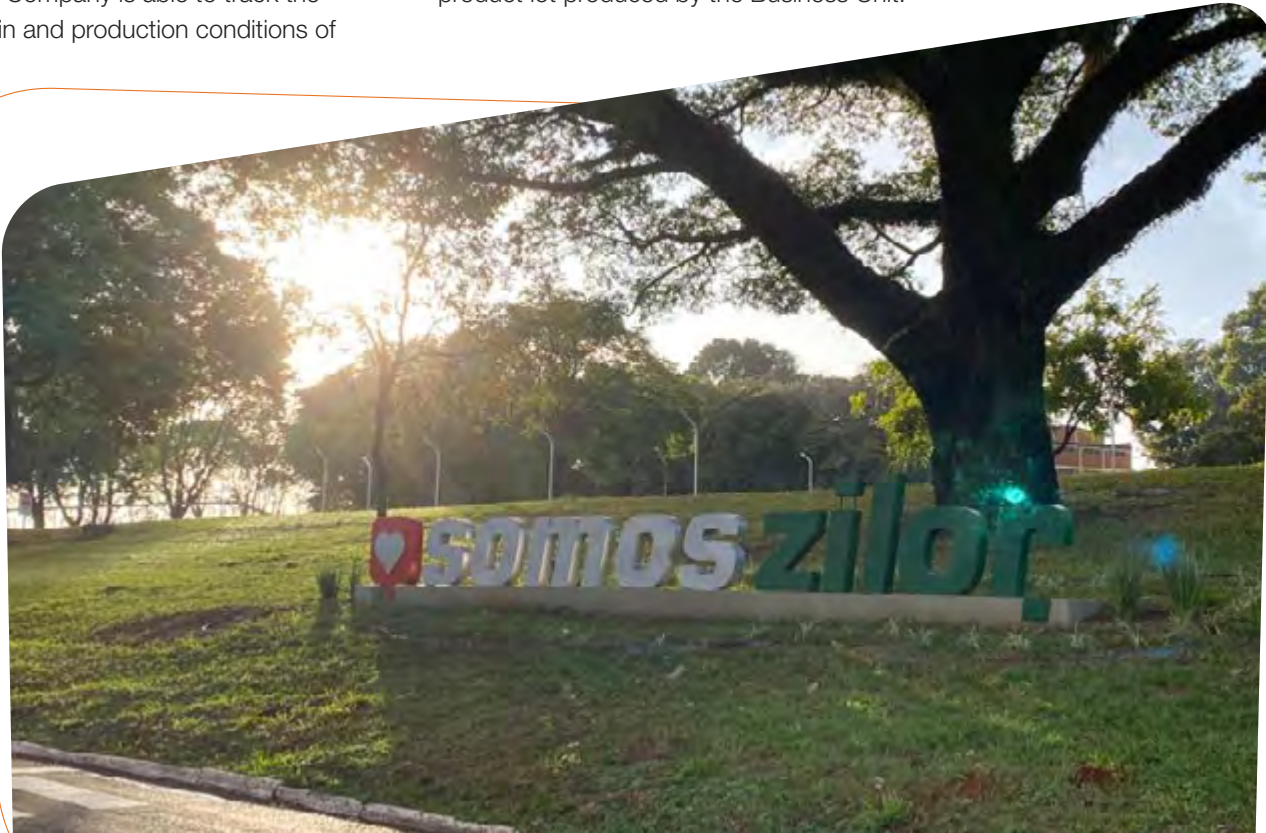
- There were no confirmed cases amongst Zilor's sugarcane suppliers of violations of human rights such as slave, child or degrading labor.
- There were only cases of non-compliance considered to be minor and presenting no risk to the business or the maintenance of the suppliers' certificates identified in the audits of socio-environmental responsibility (58 cases, 48 of which were identified by internal audits and ten by external audits), with these being properly addressed and reported to the certification agencies.

Those operations that could present significant risks of occurrence of cases of forced, compulsory or child labor are associated with the provision of services for the maintenance of industrial and agricultural areas in Lençóis Paulista, Macatuba, Barra Grande and Quatá, in Brazil.

To contribute to the elimination of all forms of forced, compulsory and child labor, the Health, Safety and Environment (HSE) department performs periodical on-site inspections of the agricultural partners and service providers which have labor performing maintenance and refurbishment work in the industrial spaces.

By means of these measures and management policies, the Company is able to track the source, origin and production conditions of

the products acquired. The origins of all the sugarcane acquisitions destined for the São José, Barra Grande and Quatá units are fully tracked as established in the internal regulations on traceability. Furthermore, all the agricultural partners are certified by Bonsucro, with training sessions and technical discussions with the representatives of the companies to emphasize the importance of the controls and good socio-environmental management practices. In the areas farmed under the Agricultural Partners Program, the assessment also involves fulfillment of the Socio-environmental Conduct and Performance Commitment. The same attention is paid at Biorigin, with registration in a SAP management system, which tracks the raw materials, inputs and packaging used in each product lot produced by the Business Unit.



During the 2022/2023 harvest, 19 Agricultural Partners/Condominiums took part in the ICC Program (three Condominiums) and Bonsucro (16 Partners). All (100%) were assessed in relation to the social and environmental impacts, with monitoring also being provided by a specialist technical team.

No suppliers were identified as possibly generating significant real or potential negative impacts on human rights.



The Agricultural Partners Program and the requirements of the Bonsucro certification process were used for the ESG assessments, including issues of forced and child labor, freedom of association, collective bargaining, remuneration, working conditions in the field, worker health and safety, and environmental and social aspects.

With an eye on future opportunities, one of Zilor's targets for the coming harvest (2023/2024) is to implement a sustainability assessment tool for the service providers, covering social and environmental aspects.

Socio-environmental Performance Index: average score of agricultural partners (%)



Economic impact in focus

Zilor works to stimulate the local and regional economies, by means of actions such as providing financial support to its suppliers. Since 2021, an Agricultural Partners Funding Program has been in place providing the producers with access to credit to be able to finance improvements in their sugarcane farming operations.

With the initial quotaholders being Zilor and the supporting bank, and developed through the Credit Receivables Investment Fund (FIDC), the program has raised R\$ 120 million to be used as loans to pay for and invest in farming, with rates tied to the risk and productivity, and repayment terms of between one and five years.

Zilor also provided support in the form of the risk management tool, which enables the future price fixing of TRS (Total Recoverable Sugar), this being an instrument aimed at improving the partners' cash flow perspectives and results.

Pesticides and biological controls GRI 13.6.1

Zilor and its agricultural partners have a comprehensive plan designed to control pests through integrated management. The effective and responsible protection of crops includes the use of fertilizers, with tracking being adopted to guarantee compliance with the country's current regulations.

In order to reduce the use of agricultural pesticides, we use the filter cake, a form of waste from the industrial process involved in cane juice filtration, which is rich in phosphorus, calcium and other micro-nutrients that guarantee good germination of the sugarcane. Another process employed is fertigation, performed with the vinasse, a residual liquid arising from the ethanol manufacture process.

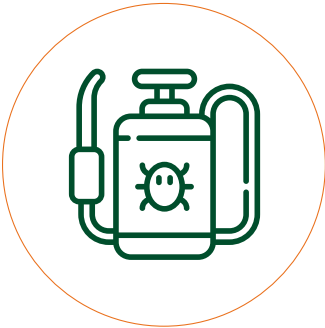
By means of this practice, we are promoting circularity, making the fertilization more sustainable in comparison to the use of chemical fertilizers, and ensuring a safer and healthier product for human consumption. The biological control of pests is also a premise in the planting, since it substitutes the use of chemical fertilizers and pesticides on part of the lands.

The application of cotesia - a component of biological control produced in the company's own laboratories - is performed by both manual means and by high-precision drones developed specifically for this purpose.

In relation to firefighting campaigns, Zilor has been working consistently over the years. The highlights of the harvest can be seen on two fronts.

One of them, in support of Ascana, provided for an important technological advance in the operations. The new firefighting tool is the result of a combination of two technologies. The first consists of a system of monitoring involving four long-range, high-resolution cameras installed in strategic positions, with the second involving a satellite monitoring system.

In another initiative, Zilor has joined forces with Copersucar on the 'Zero Fire' campaign, designed to prevent wildfires. The action encourages the care of the planted, vegetation and environmental protection areas of the associated power plants (read more in Biodiversity and Ecosystems).



Community relations

GRI 3-3 Management of a material topic, 413-1

Over the course of its history, Zilor has always been committed to the development of the communities where its industrial units are operating.

Along these lines, the Company pursues a model of private and tax-deducted social investment, involving the planned, monitored and systematic voluntary pass-through of company funds, and support via tax-deduction laws for social, environmental, cultural and scientific projects in the public interest. 100% of Zilor's operations have implemented engagement, assessments of impact and/or development programs focused on the local community

Guided by its Social Investment Policy, Zilor follows its directives for the investment of financial resources in support of local community projects and initiatives. As such,

it seeks to contribute to the structuring of actions that prioritize social transformation in the regions, with long-term sustainable results which promote an improvement in opportunities and quality of life.

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

The impact assessments are published and shared with society by means of Zilor's institutional communication channels. The company is also dedicated to local development programs based on the needs of the communities in which it is active, concentrating its efforts on two large-scale initiatives:



'Zilor É + Social' Program

In order to increase the reach of its social investments and strengthen local development, the Company provides financial support for social projects by means of the federal tax incentive laws, working with the Rouanet Law (cultural incentive), Sports Law, Elderly Fund, and Child and Adolescent Support Fund.

The support provided through the funds is directed exclusively into the municipalities in which Zilor operates directly in the form of its industrial units: Lençóis Paulista, Macatuba and Quatá, in the state of São Paulo. When available in the federal sphere, the Company also invests funds for projects through the Pronas (National Support Program for Health Care for People with Special Needs) and Pronon (National Support Program for Oncological Care) laws.

Zilor launches public calls for proponents in the communities (sports, social and cultural project producers), promotes the training of these artists and sports and citizenship developers, promotes a selection of projects under the public call notice model, provides financial support via tax incentive laws (Income Tax), monitors the implementation of the projects in the communities, as well as the social impact generated in these communities, including the creation of employment and income, and the people benefiting from the projects in the communities. By doing so, the Company is promoting a virtuous cycle of initiatives to provide sustainability for the communities in the municipalities in which its operations are located.

As such, the communities can manage the resources and promote the financial sustainability of the tax-deducted projects, thus driving the local economy. During the 2022/2023 harvest, the S-ROI (unit of social impact value) was implemented to benefit the need for employment and income, in a system whereby for each R\$ 1.00 invested, R\$ 1.6 is generated for the community.

Zilor é + Social’ Virtuous Circle



On this front, in 2022, Zilor selected 27 projects, contributing with more than R\$ 2.5 million involving four tax incentive laws. The Company values its dialog with the local government and the community, who point out the most pressing needs of each municipality, focused on initiatives that encourage the development of citizenship, diversity and social inclusion.

Amongst the local projects and organizations included are:



Lençóis Paulista Integrated Literature Festival (Fillp): now in its 14th edition, this event brings together a series of attractions in the fields of literature, music, theater, dance and storytelling. After spending two years in an online format, the festival is now able to once again provide in-person gatherings for children, adolescents and adults at the Adélia Lorenzetti Municipal Theater.



Lençóis Paulista Cultural Encouragement Association: this is a program focused on bringing plays to the Adélia Lorenzetti Municipal Theater in Lençóis Paulista.



Always Volleyball Project: an initiative that takes volleyball professionals to the schools of Lençóis Paulista to teach children the basic fundamentals of this sport.

Strengthening the Regions

Still in the scope of the Zilor é + Social Program, the Company has embraced a campaign focused on raising society's awareness of the importance of citizens contributing to the projects developed under the Income Tax Incentive programs. As such, the community can help with the sustainability of these projects. Find out more by watching the YouTube video entitled 'ZILOR + SOCIAL | Alô, contribuinte do IR – Imposto de Renda saiba como apoiar iniciativas sociais!'



Aprender Sempre Program

This program consolidates one of Zilor's values and centralizes the investment in actions focused on middle school and high school students in Lençóis Paulista, Macatuba and Quatá, with an emphasis on Youth Leadership through citizenship, and social diversity and inclusion initiatives.

In 2022, the Company invested R\$ 450,000 in initiatives aiming to develop skills and abilities that prepare young people for the labor market. The program is performed in partnership with organizations such as Softtek and the Lidera Jovem Institute, which promote actions such as the 'Profituro' Professions Fair, and the Young People's Congress.

Another project benefited is called 'Eu amo Chiquinho'. Conducted since 2018 at the Francisco Balduino de Souza State School in Quatá, the only high school in the municipality, the project aims to strengthen youth leadership and professional development amongst students and teachers.



**R\$
450,000**
invested in youth
leadership initiatives in
the communities

In figures: Social Investment

R\$ 3.7 million directed to communities in the form of company investments and tax-deducted funds

Strengthening the Community

1

workshop for local proponents

47

local proponents trained

8

local proponents received mentoring

3

Events in the communities (FILLP) (Cultural Forum / Municipality Conference on the Rights of Children and Adolescents)

Investments in communities

Support Funds via Income Tax

2 income tax contributions during the 2022 tax year

27 (Jul/Dec)

projects supported

22

projects involving local proponents

81.5% of income tax funds invested in the communities

51,092 people impacted by the initiatives

ICMS Support Funds - via Copersucar¹

2 local projects supported Por Onde a Banda Passa; Sempre Vôlei Educacional I

R\$ 140,000

amount via Copersucar

¹ The ICMS tax investments arise from the taxes resulting from Copersucar's sales of sugar and ethanol.

Stakeholder relations

Sponsorships and donations

220 requests met via the Sponsorships and Donations site

30 institutions served (Lençóis Paulista, Macatuba, Quatá)





ENVIRONMENT

Due to the nature of its business, Zilor is aware of the external factors, and the risks and opportunities related to environmental management on its different fronts, including the use of natural resources, climate change and emissions, waste, effluents and impacts on biodiversity.

The Company has adopted an approach guided by its own management system, with 66.66% of the Agribusiness Units and 75% of its Biorigin units in Brazil and overseas holding the IAO 14001 Norm.

In line with the survey conducted and the engagement of stakeholders, the environmental issues of most importance to the Company cover the impacts generated in the manufacturing process - for example in the use of water - as well as those associated with the supply chain and the contributions made to the energy transition guided by bioenergy in the domestic and international markets.

Climate Administration

GRI 3-3: Management of a Material Topic

Zilor operates in a sector that is constantly influenced by climate change. All the agribusiness companies are directly affected by alterations in the rainfall and temperature patterns, as well as by the occurrence of extreme events, which reduce productivity in the field.

Aware of this issue, the Company has invested in mechanisms designed to gauge and understand the magnitude of its greenhouse gas emissions, in order to remain resilient and prepared to respond to extreme climate events, monitor risks and opportunities, and establish indicators and metrics to understand its progress on climate management.

The prevention of potential and actual negative impacts begins during the ethanol and sugar manufacturing process, with a focus on ensuring the lowest possible carbon footprint. The management of waste, control of emissions and use of natural resources are the main focuses. The production chain is also the object of a partnership with the sugarcane producers, with actions that involve management of the soil, conservation of biodiversity, and the responsible use of agrochemicals.

Furthermore, the production of energy using sugarcane bagasse provides an opportunity to have a positive impact of energy transition, providing a source of renewable electricity and a potential circularity for the byproducts of the agribusiness division.

This benefit, directly tied to the product, is recognized by initiatives such as the RenovaBio Program, a Brazilian public policy that establishes lines for the decarbonization of the country's fuels matrix. This action, moreover, resulted in more 16 an R\$ 44 million in revenue (2022/2023 harvest) for Zilor, through the sale of Decarbonization Credits (CBIOS) (read more on page 16).





Governance, strategy and targets

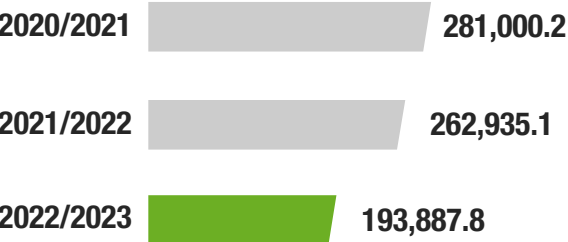
Zilor’s climate management currently covers discussions by the Board of Directors, advisory committees and ESG working commissions. Through an emphasis on bioenergy, the Company’s Strategic Planning makes mention of, and benefits from, opportunities associated with the climate to evaluate future paths and business scenarios.

In 2023/2024, ESG targets began to form a part of the factors involved in the variable remuneration of the CEO and further out to all the Company’s employees.

Our emissions

GRI 305-1, 305-2, 305-3

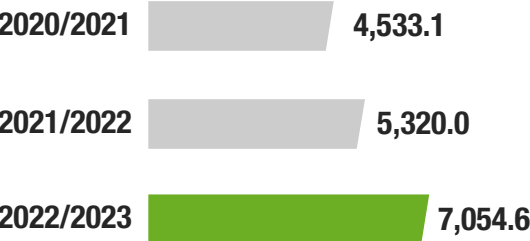
Direct emissions - Scope 1 (t CO₂ equivalent)



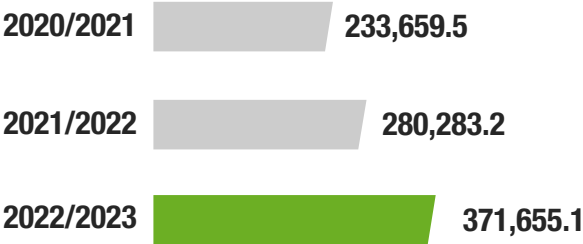
Biogenic emissions - Scope 1 (t CO₂ equivalent)



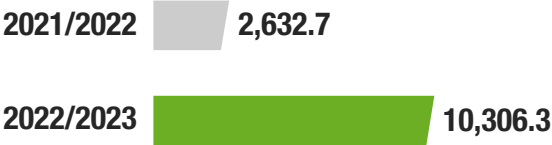
Indirect emissions - Scope 2 (t CO₂ equivalent)



Biogenic emissions - Scope 2
(t CO₂ equivalent)



Indirect emissions - Scope 3 (t CO₂ equivalent)¹



Biogenic emissions - Scope 3
(t CO₂ equivalent)



¹ These emissions are specific to Biorigin. In 2022/2023, we expanded the inventory assessment bases, meaning that, since 2022, the entire logistics chain of products, be it by land, sea or air, has been covered. In addition to this, the transportation of brewer's yeast as a raw material was included in the calculations. We have increased the inspection and sampling and, to do so, we use the 'berth to door' concept, which has led to a significant increase in emissions.



Read more

The Annex contains tables with the detailed indicators for emissions by scope and business unit



Lifecycle greenhouse gas (GHG) emissions, by biofuel type (gCO₂eq/MJ) SASB RR-BI-410a.1

Carbon footprint	Location		
	São José	Barra Grande	Quatá
Anhydrous ethanol	67.1	63.9	59.3
Anhydrous ethanol	66.8	63.5	59.0

Natural resources

GRI 3-: Management of a material topic

Involving more than 90% of the direct biogenic emissions, the CO₂ emissions are collected by means of the sugarcane growth cycle, without there being any direct contribution to the accumulation of greenhouse gases in the atmosphere.



The energy generation model adopted at the Zilor industrial units guarantees 100% of the energy supply and actually generates a surplus, which is exported to the National Interconnected Grid (SIN). The company publishes an annual Greenhouse Gases Inventory, in line with the directives of the Brazilian GHG Protocol Program.

The implementation of the new boilers project at the São Jose and Barra Grande power stations, in the 2022/2023 harvest, will lead to a significant increase in the Company's energy efficiency. At the São José unit, the innovation moved into operation in April 2023, whilst finalization of the project at the Barra Grande unit is expected in 2024.

The management of water resources is also a priority in the company's operations, being taken into consideration in the decisions made by the Executive Board and the Board of Directors. This focus is manifested in the form of clear measures to prevent or mitigate potential negative impacts, such as the investment in improvements in the processes employed to reduce the withdrawal of water, prioritizing reuse, and projects that promote the use of condensed water generated by means of the company's own processes.

The company works in collaboration with the local communities, regulatory agencies and other interested parties to guarantee the proper repair and mitigation actions. Zilor assumes responsibility for the damages caused and seeks solutions that minimize the negative impacts to the environment and all those involved.

By defining performance targets and indicators, the Company assesses actual and potential positive impacts. To track the effectiveness of the measures adopted, the company uses indexes such as that which measures the withdrawal of water per ton of processed sugarcane and that which gauges cubic meters per ton of dry product. Targets are established for improving efficiency in the use of water in line with the indicators, such as the employment of 0.8 cubic meters of water per ton of processed sugarcane in the industrial division.

Based upon investments made by the organization in the closure of the cycle of waters and the monitoring of the performance indicators, the theme of water resource management is addressed at every level of the Company, all of which report to the Board of Directors through ESG management and performance meetings.

Water and effluents GRI 303-1, 303 303,

Zilor adopts a comprehensive approach to the collection, consumption and disposal of water and its impacts. To manage this resource, the company takes into account the water balance of the industrial units, process variables, and the amount of water authorized, as measures for mitigating the risks of water stress in its operations.

To identify the impacts, the Company uses the Aqueduct Water Risk Atlas at all its units and has a program named ‘ReduZilor’, providing a means of evaluating water risk and allowing a better understanding of the water-related challenges and opportunities. Even though it does not operate in areas of water stress, Zilor aims to improve its management by means of investments and actions designed to minimize the use of water in its operations. The quality of the water and withdrawals made by the agricultural partners is also monitored, thus ensuring compliance with environmental regulations.

Aware of the impacts on the basins serving for water withdrawal in the regions where its installations are located - the Tietê-Jacaré basin (São José and Barra Grande units) and the Mid-Paranapanema (Quatá unit), the company is committed to managing them responsibly and sustainably, taking into consideration the socio-environmental aspects and local needs. From the 18/19 harvest through to the 23/24 harvest, approximately R\$ 60 million has been invested in projects for the adaptation of the São José and Barra Grande units as well as to reduce the volume of water they withdraw. Of this sum, 8

million was invested during the 18/19 to 19/20 period, 8 million during the 20/21 harvest, 34 million during the 21/22 harvest, 9 million during the 22/23 harvest, and approximately 10 million has already been invested in the 23/24 harvest. For the Quatá unit, studies are being developed along the same lines for the treatment of wastewater.

On another front, the quality of the effluents disposed of in the environment is closely monitored in order to guarantee compliance with current environmental legislation and the proper functioning of the water cycle. Disposal is only performed at the São José and Barra Grande units. These effluents are treated in stabilization ponds before being sent to surface bodies of water in line with the regulations issued by the

relevant environmental agency. Furthermore, the three units dispose of sanitary waste into waterways following the proper treatment.

Even though wastewater and vinasse is not released into rivers or streams, the quality of these effluents is still monitored, as are the underground waters, in accordance with the procedures established by Technical Norm P4231, that defines the criteria and procedures for the disposal of vinasse in agricultural soil. The results of the analyses are included in the Vinasse Application Plan, that is presented to the environmental agency each year. In the process of environmental licensing, the sector standards and regulations applicable to the disposal of effluents are also taken into consideration.



Total volume of water collected in all areas and in hydro-stress areas, per source (ML) GRI 303-3

	22/23 harvest	21/22 harvest	20/21 harvest
Surface water (Total)	10,270.7	14,334.7	17,204.8
Underground water (Total)	4,318.1	4,543.0	4,649.8

Total disposal of water in all areas and in hydro-stress areas itemized by the following sources (ML)^{1 2} GRI 303-4

	22/23 harvest	21/22 harvest	20/21 harvest
Vinasse	6,196.4	5,698.7	6,042.7
Waste waters	6,139.7	5,928.9	5,845.9
Total	12,336.1	11,627.6	11,888.6

¹ At Zilor 80,100 m³ of wastewater is disposed of in surface waters, with this water arising from sanitary sewage, which undergoes biological treatment.

² No wastewater is disposed of in underground waters, the sea or third party waters.



Waste

GRI 306-1, 306-2

Zilor has developed a Solid Waste Management Plan to work on reducing the generation of waste and ensuring its proper disposal, in compliance with environmental legislation.

The principal byproducts generated in the industrial process are reused, following the principles of circularity, with the aim of minimizing the environmental impacts, promoting sustainability, and adding value to the waste. Some examples are the use of bagasse as a biomass for the generation of clean energy, the use of vinasse for fertigation on the sugarcane plantations (our own and those operated by the Agricultural Partners) and application of the filter cake, boiler ashes and soot as a source of nutrients for organic compost in the plantations.

The application of vinasse at the sugarcane plantations follows the Vinasse Application Plan (PAV), presented each year to Cetesb (the São Paulo State Environmental Company), ensuring the proper monitoring and inspection. With respect to the São José and Barra Grande units, the company has a partner which is responsible for mixing the filter cake, boiler ashes and soot, and adopting the proper waste management practices, in order to guarantee the correct disposal, and compliance with the contractual and legal obligations.

The significant impacts related to the waste are related to both that generated during the organization's own activities and the upstream and downstream waste generated in the value chain. This means that the management covers not only the waste that is generated internally, but also considers the impact of the waste long the entire supply chain.

The hazardous waste generated in the processes is sent to companies certified by Cetesb, thus guaranteeing compliance with the applicable norms and regulations. The recyclable waste, meanwhile, is donated to municipal entities, such as Asquare, in Quatá; Lixo Rico, in Macatuba; and Adefilp, in Lençóis Paulista. This practice contributes to the generation of income for the families involved in the projects of the municipal organizations.

The waste management process involves everything from separation to the disposal of the industrial waste. Zilor guarantees the proper allocation of 100% of the materials that are disposed of.

Recicla Mais Zilor Program

Zilor adopts the concept of the circular economy, in which the waste produced in the process enters into a new process flow, be it reuse or recycling.



Flow of processes that can generate impacts related to waste



1 Entries

raw-material (sugarcane), water, electricity, chemical products.



2 Activities

processing of the sugarcane, extraction of the juice, production of ethanol, production of sugar, generation of energy from the bagasse.



3 Exits

vinasse, filter cake, boiler ashes, soot, chemical waste, solid waste.

Biodiversity and ecosystems

GRI 304-3, 13.5.1



The preservation of areas of natural vegetation and the recovery of damaged areas are amongst the main contributions of the activities performed by Zilor in combating climate change.

Zilor manages an area of 5,500 hectares of forest, including water springs, permanent conservation areas and forest remnants, distributed across its own land and the land leased for sugarcane farming.



Nascente Modelo Água da Prata **Project:** continuing with the Project launched in 2021, in partnership with the Lençóis Paulista City Council, Zilor will be developing the environmental architecture project, executed by the municipal government, which will receive visitor infrastructure, signposts, identification of native trees, and footbridges, with the launch planned for 2024. The aim is to ensure that the water spring, located in a permanent conservation area owned by the Company, becomes a natural space for visits and environmental education for the local community.

Florestar **Program:** Zilor has developed the 'Forest Program', which, since 2014, has been planting native tree saplings for the reforestation of environmental conservation areas and recovery of damaged areas, which has also involved monitoring of the development of the biodiversity. During the 2022/2023 harvest, an area of 100 hectares was cared for to ensure that it attained a high level of conservation, with more than one million saplings planted and investment of around seven million reais. Other



 **1 million**
saplings planted in 2022

environmental monitoring and preservation initiatives under way are:

Visita Ilustre - Registro de Fauna **Program:** planned during the 2022/2023 harvest, this program will be implemented in the 2023/2024 harvest, and will involve employees registering animals by means of the Zilor Integration App (ZAPPI), providing images and GPS data, and with geo-referencing of the location of the animal by means of images (photos) sent in by the employees.

Colmeia da Cana **Program:** planned during the 2022/2023 harvest, with implementation planned for the 2023/2024 harvest, this project, developed in partnership with beekeepers, aims to better manage the apiaries located near the sugarcane crops in Zilor's permanent conservation areas (PCAs).





Firefighting

In line with the actions taken to preserve the biodiversity, Zilor works on fighting wildfires in the agricultural areas. Despite 100% of the sugarcane farming being mechanized and without the use of chemicals, wildfires can occur as a result of natural or human forces (accidental or intentional). To assist on this front, the Company has 245 firefighters and 23 spray tankers. The teams are trained and equipped to fight wildfires and alert the Civil Defense and Fire Department units.

Amongst the initiatives are:

Zero Fire: an action coordinated by Copersucar to raise public awareness amongst the communities neighboring the plants, with a focus on prevention, and use of communication channels to provide information on criminal or accidental occurrences. The aim is to orient the public on how to prevent possible incendiary agents and, in the event of a fire, who to contact and how. It also aims to explain what causes accidental fires and how to avoid them, encourage the reporting of criminally-started fires, and alert the public to the damages that fires can cause to the community.



Together against Fire: this is a project developed jointly with the Mid-Tietê Sugarcane Growers Association (Ascana). Amongst the initiatives is the implementation of a digital system for detecting the focal points of wildfires in real time. The new firefighting tool is the result of a combination of two technologies. The first consists of a system of monitoring involving four long-range, high-resolution cameras installed in strategic positions, mounted atop towers located in Lençóis Paulista, Pederneiras, Pratânia and Borebi, allowing fires to be detected from many kilometers away. The second is a satellite monitoring system, which also detects smoke and provides a set of climate data that allow detailed analyses of the conditions of each area. Following identification of the possible focal points of fires, the firefighting teams which are closest are sent to the exact location by means of a geo-referencing system, with the coordinates sent by a messaging app. The integrated action involving the two systems will pinpoint the exact focal point of the fire in real time and, using the coordinates, the engagement of the firefighters will be that much faster.

During the reported period, Zilor also created a campaign to encourage participation by the community, by making hotlines available at the three units: Lençóis Paulista and Macatuba – 0800 700 1930; Quatá – 0800 700 1933.

Soil management

Based upon the premise that the earth is the company's greatest asset, conservation of the soil is the basis of the sustainability of the plantations and perpetuity of Zilor's business. As such, the Company has adopted innovative practices that are in line with the circular economy to ensure a high-rate of productivity and promote the longevity of the raw-material.

To protect the soil against extreme rainfall and optimize the water use on the farms, Zilor has implemented a series of soil management measures. One of these measures involves the distribution of straw in the farmed areas which, as well as protecting the soil, preserves the humidity, temperature and productivity. During the mechanized harvest, between four and 12 tons of straw per hectare are distributed, depending upon the productivity of the crop harvested. As part of these preservation efforts, advanced geo-technologies are applied and geo-localization equipment is adopted, including autopilots, which allow the machines to follow predetermined routes, thereby reducing the compacting of the soil. All Zilor's operations are equipped with an autopilot and onboard computer, allowing the processes to be monitored, managed and controlled.

Crop rotation policies are adopted in the plantation reform areas, including leguminous plants, such as soybean and crotalarías. This practice improves the fixing of nitrogen and the fertility of the soil, resulting in productivity gains of up to 10 tons per hectare.

Zilor also uses technologies for the application of soil correctives, such as limestone and gypsum, following a high-performance fertilization plan, based upon soil analyses.

All these actions are oriented towards work that is centered on the careful management of the soil - making the business possible. The Company believes in the possibility of conducting a business that is essential to humanity - energy and food - based upon precepts that help face the global challenges of energy, food and climate security.



Habitats protected or restored GRI 304-3

Information	
Size and location of all habitat areas protected or restored (km²)	56,859,300
Location of all habitat areas protected or restored	Municipalities of Lençóis Paulista, Macatuba, Pederneiras, Areiópolis, São Manuel, Borebi, Quatá and Paraguaçu Paulista.
Report whether the success of the restoration measure was or is approved by independent external professionals.	Yes. The measures were externally validated.
Report whether partnerships exist with third parties to protect or restore habitat areas distinct from where the organization has overseen and implemented restoration or protection measures.	There are no partnerships with third parties.
Report the status of each area based on its condition at the close of the reporting period.	99.8% of the areas are protected and recovered. There are 100 hectares still to be recovered.
Report the standards, methodologies, and assumptions used.	SMA Resolution 32 dated 2014.

INDICATORS



GRI Content Index

Declaration	Zilor has reported in accordance with the directives of the GRI Standards for the period between April 1 2022, and March 31, 2023.
GRI 1 used	GRI 1: 2021 Foundations
Applicable GRI Sector Standards	GRI 13: Agriculture, Aquaculture and Fishing Sectors 2022

GRI Standards	Contents	Location	Omission			Reference n°. of the GRI sector standard	SDGs
			Requirement(s) omitted	Reason	Explanation		
General Disclosures							
GRI 2: General disclosures 2021	2-1 Details of the organization	17, 23, 37	W-				
	2-2 Entities included in the organization's sustainability reporting	3					
	2-3 Reported period, frequency and point of contact	3					
	2-4 Restatements of information	There were no restatements of information in relation to previous years.					
	2-5 External assurance	4, 135					
	2-6 Activities, value chain and other commercial relationships	17, 23, 95				-	
	2-7 Employees	78, 82, 87, 88				-	
	2-8 Workers who are not employees	78, 82, 88				-	

GRI Standards	Contents	Location	Omission			Reference n°. of the GRI sector standard	SDGs
			Requirement(s) omitted	Reason	Explanation		
	2-9 Governance structure and composition	39				-	
	2-10 Nomination and selection of the highest governance body	39				-	
	2-11 Chair of highest governance body	39				-	
	2-12 Role of the highest governance body	52				-	
	in overseeing the management of impacts						
	2-13 Delegation of responsibility for managing impacts	52				-	
	2-14 Role of the highest governance body	3				-	
	in sustainability reporting						
	2-15 Conflicts of interests	During the harvest, Zilor had no formal processes established by the highest governance body to prevent conflicts of interest, but the provisions on this issue are included in the Code of Ethics and the Policy on Related-Party Transactions				-	
	2-16 Communication of critical concerns	During the last fiscal year, there were no communications of critical concerns to the highest governance body.				-	
	2-17 Collective knowledge of highest governance body	39				-	
	2-18 Evaluation of the performance of highest governance body	Zilor has no specific evaluation process for the Board of Directors in relation to supervision of the management of the organization's impacts on the economy, environment and people. However, annual evaluations are performed on the Executive Board and professionals in management positions. These evaluations are conducted internally, and the results are submitted to the Calibration Committee. Based upon the results, the Committee takes appropriate measures and develops an individual and specific action plan for each professional evaluated.				-	
	2-19 Remuneration policies	39, 129				-	
	2-20 Process to determine remuneration	100% of the organization's positions were mapped and dimensioned by an external and independent remuneration consultancy. The opinions of the stakeholders, including the shareholders, are considered in the process performed to determine remuneration. In addition to this, the votes of the stakeholders on the remuneration policies and proposals are reported, whenever applicable. More information can be found on page 39.				-	

GRI Standards	Contents	Location	Omission			Reference n°. of the GRI sector standard	SDGs
			Requirement(s) omitted	Reason	Explanation		
	2-21 Annual total compensation ratio	During the 2022/2023 harvest, the organization recorded a ratio of 3,030 between the remuneration of the highest paid individual and the average of the other employees. The percentage increase of the highest remuneration was 1.4%, whilst the average increased by 16.1%. The ratio between the percentage increase of the highest remuneration and the average was -12.6%, possibly influenced by demographic changes within the company.				-	
	2-22 Statement on sustainable development strategy	7, 9, 22, 43				-	
	2-23 Policy commitments	43, 49				-	
	2-24 Embedding policy commitments	43, 49				-	
	2-25 Processes to remediate negative impacts	49				-	
	2-26 Mechanisms for seeking advice and raising concerns	49				-	
					The fines applied during the reported period are not considered to relate to significant non-compliance, since they arise from an interpretation of the currently applicable (tax) legislation, and do not represent actions of the Company practiced with the intention of violating the law, OR they are actions practiced by stranger third parties or not determined by the Company, OR they do not, in the opinion of the Company, represent significant impacts to third parties or the environment (environmental).	-	
	2-27 Compliance with laws and regulations	129	Requirements A and C	N.A.		-	
	2-28 Membership associations	38, 43				-	
	2-29 Approach to stakeholder engagement	5				-	

GRI Standards	Contents	Location	Omission			Reference n°. of the GRI sector standard	SDGs
			Requirement(s) omitted	Reason	Explanation		
	2-30 Collective bargaining agreements	100% of employees are covered by collective bargaining agreements.				-	
Material topics							
GRI 3: Material Topics 2021	3-1 Process to determine material topics	5	-				
	3-2 List of material topics	5					
Climate change							
GRI 3: Material Topics 2021	3-3 Governance of material topics	104					
GRI 302: Energy 2016	302-1 Energy consumption within the organization	134					7, 8, 12, 13
	302-2 Energy consumption outside of the organization		All	Information not available.	This information was not calculated.		7, 8, 12, 13
	302-3 Energy intensity	134					7, 8, 12, 13
GRI 304: Biodiversity 2016	304-2 Significant impacts of activities, products, and services on biodiversity		All	Information not available.	We do not have a specific methodology, matrix or indicator to demonstrate the impacts on biodiversity, be they positive or negative, significant or insignificant, direct or indirect.		6, 14, 15
	304-3 Habitats protected or restored	111, 113					6, 14, 15

GRI Standards	Contents	Location	Omission			Reference n°. of the GRI sector standard	SDGs
			Requirement(s) omitted	Reason	Explanation		
GRI 305: Emissions 2016	305-1 Direct (Scope 1) emissions of greenhouse gases (GHG)	105, 132, 133					3, 12, 13, 14, 15
	305-2 Indirect emissions (Scope 2) of greenhouse gases (GHG) arising from the acquisition of energy	105, 132, 133					3, 12, 13, 14, 15
	305-3 Other indirect (Scope 3) GHG emissions	105, 132, 133					3, 12, 13, 14, 15
	305-4 Intensity of emissions of greenhouse gases (GHG)	132, 133					13, 14, 15
	305-5 Reduction of emissions of greenhouse gases (GHG)	132, 133					13, 14, 15
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	109					3, 6, 11, 12
	306-2 Management of significant waste-related impacts	109					3, 6, 11, 12
GRI 13: Agriculture, Aquaculture and Fishing	13.5.1 Describe the soil management plan	111					
Sectors 2022							
Hydro-resources							
GRI 3: Material Topics 2021	3-3 Governance of material topics	107					
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	108					6, 12
	303-2 Management of water discharge related impacts	108					6
	303-3 Water withdrawal	108, 109					6
	303-4 Water discharge	109					6
	303-5 Water consumption	134					6

GRI Standards	Contents	Location	Omission			Reference n°. of the GRI sector standard	SDGs
			Requirement(s) omitted	Reason	Explanation		
Strategy and compliance							
GRI 3: Material Topics 2021	3-3 Governance of material topics	46					
GRI 201: Economic performance 2016	201-1 Direct economic value generated and distributed	67, 78					8, 9
GRI 205: Anti-corruption 2016	205-1 Operations assessed in terms of the risks relating to corruption	<p>The company performed a maturity survey of the Compliance Program and identified 29 scenarios which are liable to fraud and corruption, which, following the Company's critical analysis were consolidated into three specific risks:</p> <p>(I) Practicing of corrupt acts in the form of promise, offering or payment of undue advantages to public or private agents or to related third parties;</p> <p>(ii) Conflict of Interests; and</p> <p>(li) Accountability and reputational damages due to transactions with disreputable third parties, or the practicing of illegal or anti-ethical acts performed by such.</p>	Requirement A	Information not available	The Compliance department still does not have information on the total number of operations submitted for formal evaluation of risks of corruption		16
GRI 205: Anti-corruption 2016	205-2 Communication and training on anti-corruption policies and procedures	<p>The 16 members of the Board of Directors were all (100%) informed of the anti-corruption procedures implemented within the Company, despite not receiving specific training. In relation to Zilor's 16 Agricultural Partners, 100% received communications and received training on the currently applicable anti-corruption policies and procedures. With regard to the total number of 3,631 employees, awareness raising campaigns were performed for 100% of them, with 37.68% being directly informed about such policies, whilst 5.70% took part in training sessions. It should be highlighted that all Zilor and Biorigin operations are located in the Southeastern region.</p>	Requirements B and E	Information not available.	The Compliance department does not have information separated by position.		16
	205-3 Confirmed incidents of corruption and actions taken	46					16

GRI Standards	Contents	Location	Omission			Reference n°. of the GRI sector standard	SDGs
			Requirement(s) omitted	Reason	Explanation		
Labor practices							
GRI 3: Material Topics 2021	3-3 Governance of material topics	77					
GRI 401: Employment 2016	401-1 New hirings and employee turnover	77, 130, 131					5, 8, 10
	401-2 Benefits offered to full-time employees that are not provided to temporary or part-time employees	All the benefits offered by Zilor equally cover all the employees with employment agreements of indefinite terms and those without. Of the benefits offered, special mention should be made of the Health Plan and maternity leave.					3, 5, 8
	401-3 Parental leave	81, 131					5.8
GRI 403: Occupational health and safety 2018	403-1 Occupational health and safety management system	88					8
	403-2 Hazard identification, risk assessment and incident investigation	88					8
	403-3 Occupational health services	88					8
	403-4 Worker participation, consultation, and communication on occupational health and safety	88					8, 16
	403-5 Training for workers in occupational health and safety	88					8
	403-6 Promotion of worker health	88					3
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	88					8
	403-8 Workers covered by an occupational health and safety management system	88					8

GRI Standards	Contents	Location	Omission			Reference n°. of the GRI sector standard	SDGs
			Requirement(s) omitted	Reason	Explanation		
	403-9 Work-related injuries	90					3, 8, 16
	403-10 Work-related ill health	88					3, 8, 16
	404-1 Average hours of training per year per employee	81, 131, 132					4, 5, 8, 10
GRI 404: Training and Education 2016	404-2 Programs for upgrading employee skills and transition assistance programs	81					8
	404-3 Percentage of employees receiving regular performance and career development reviews	81, 132					5, 8, 10
Management of sugarcane suppliers							
GRI 3: Material Topics 2021	3-3 Governance of material topics	94					
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers selected following consideration of environmental criteria	94					
	308-2 Negative environmental impacts in the supply chain and actions taken	94					
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1 Operations and suppliers in which the right to freedom of association or collective bargaining may be at risk	Zilor has not experienced any occurrences or accusations related to the violation of the right to exercise freedom of union membership or collective bargaining in its operations or with its suppliers.					8

GRI Standards	Contents	Location	Omission			Reference n°. of the GRI sector standard	SDGs
			Requirement(s) omitted	Reason	Explanation		
		The operations that could represent significant risks of cases of child labor are related to the provision of services connected with the maintenance of the agricultural areas or partners which supply the sugarcane.					
		During the reported period, the organization adopted specific measures to contribute to the effective abolition of child labor.					
GRI 408: Child Labor 2016	408-1 Operations and suppliers considered to have significant risk for incidents of child labor	<p>The Health, Safety and Environment (HSE) Department performs periodic on-site inspections of the Agricultural Partners and service providers which employ labor in the maintenance and reform of the industrial spaces.</p> <p>The Health, Safety and Environment (HSE) department performs periodical on-site inspections of the agricultural partners and service providers which have labor performing maintenance and refurbishment work in the industrial spaces.</p>	Requirement A	Information not available.	The Compliance department is aware of the principal risk profiles, but has yet to map all the suppliers which could fall into this category.		5, 8,16
		More information can be found on page 96.					
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers considered to have significant risk for incidents of forced or compulsory labor	96					5, 8

GRI Standards	Contents	Location	Omission			Reference n°. of the GRI sector standard	SDGs
			Requirement(s) omitted	Reason	Explanation		
GRI 414: Social assessment of suppliers 2016	414-1 New suppliers that were screened using social criteria	94					5, 8,16
GRI 414: Social assessment of suppliers 2016	414-2 Negative social impacts in the supply chain and actions taken	94					5, 8,16
GRI 13: Agriculture, Aquaculture and Fishing Sectors 2022	13.23/1 Report the tracing of the supply chain	94, 96					
	13.23.2 Report the tracing of the supply chain	96					
Product differentiation							
GRI 3: Material Topics 2021	3-3 Governance of material topics	54, 55					
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	54, 55					16
	416-2 Cases of non-compliance concerning the health and safety impacts of products and services	During the harvest, there were no cases of non-compliance with laws and/or voluntary codes in relation to the impacts on health and safety caused by products and services.					16
GRI 417: Marketing and Labeling 2016	417-1 Requirements for product and service information and labeling	The procedures of the organization do not require information or the labeling of products and services, since the sugar packaged in 1,200 kilo sacks are not legally required to bear labeling information.					12.16
GRI 417: Marketing and Labeling 2016	417-2 Incidents of noncompliance concerning product and service information and labeling	In the 2022/2023 harvest period, there were no cases of non-compliance with regulations or voluntary codes in relation to the information and labeling of products and services.					16
GRI 13: Agriculture, Aquaculture and Fishing Sectors 2022	13.6.1 Reporting on pesticides use	98					

GRI Standards	Contents	Location	Omission			Reference n°. of the GRI sector standard	SDGs
			Requirement(s) omitted	Reason	Explanation		
GRI 13: Agriculture, Aquaculture and Fishing Sectors 2022	13.6.2 Report the volume and intensity of pesticides used by the following toxicity hazard levels	134					
Community Relations							
GRI 3: Material Topics 2021	3-3 Governance of material topics	99					
GRI 202: Market presence 2016	202-1 Ratio between standard entry level salary, compared to local minimum wage, by gender	The lowest salary paid by Zilor is R\$ 1,564.20, which is in accordance with the salary levels negotiated and established by collective agreements with the unions and does not take into consideration gender criteria when being determined. Such criteria apply to all of Zilor’s operational units, with no form of exclusion.					1, 5, 8
	202-2 Ratio of senior management hired from the local community	81, 130					8
GRI 411: Rights of indigenous peoples 2016	411-1 Incidents of violations involving the rights of indigenous peoples	The Company has experienced no cases of violations involving the rights of indigenous peoples.					2
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	99					1.2
GRI 413: Local Communities 2016	413-2 Operations with significant (actual and potential) negative impacts on local communities	Zilor’s agricultural areas involve significant actual and potential negative impacts on the local communities, with effects seen on the farmers and residents neighboring the operational units. Amongst the impacts are an increase in the flow of trucks on the highways, inconveniences caused by dust, noise and anxiety over the transportation of sugar cane, the smell caused by the application of vinasse and agricultural pesticides, and the impacts caused by stable flies.					1, 2
Innovation and productivity							
GRI 3: Material Topics 2021	3-3 Governance of material topics	60					

SASB Content Index

Topic	Material topic	Title	Code	Page
Balance of emission in the lifecycle	Climate Changes	Lifecycle greenhouse gas (GHG) emissions, by biofuel type	RR-BI-410a.1	106
	Climate Changes	Emissions of greenhouse gases	FB-AG-110a.1	132
Emissions of greenhouse gases	Climate Changes	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	FB-AG-110a.2	Reason for omission: Information not available. Explanation: For the 2022/2023 harvest, no short or medium-term plans were defined for the reduction of emissions, nor were there any analyses of the results in relation to these objectives.
	Climate Change	Fleet fuel consumed, percentage renewable	FB-AG-110a.3	We do not have a fleet for the transportation of products.
Supply and environmental impacts in the production of raw materials	Climate Change	Discussion of strategy to manage risks associated with environmental impacts of feedstock production	RR-BI-430a.1	96
	Climate Change	Percentage of biofuel production third-party certified to an environmental sustainability standard	RR-BI-430a.2	56
	Hydro Resources	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with high or extremely high baseline water stress	FB-AG-140a.1	Considering the use of the Water Risk Atlas published by the World Resources Institute (WRI), as recommended by the SASB, it can be concluded that none of the operating units are in areas of high or extremely high water stress.
Water management	Hydro Resources	Description of water management risks and discussion of strategies and practices to mitigate those risks	FB-AG-140a.2	Zilor has adopted water risk evaluation at all its units through the use of the WRI's Aqueduct Water Risk Atlas, which allows identification of those areas of greater vulnerability. Despite none of the units being located in regions of high water stress, the Company has been improving its management in this area by means of investments and actions designed to reduce water consumption. The principal initiatives involve the reduction of the volume of water withdrawn, and encouragement of the reuse of water for industrial and agricultural purposes.
	Hydro Resources	Number of incidents of non-compliance with water quality permits, standards, and regulations	FB-AG-140a.3	There were no incidents of non-compliance associated with water quantity and/or quality licenses, standards and regulations.
Water management in the manufacturing operations	Hydro Resources	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with high or extremely high baseline water stress	RR-BI-140a.1	Considering the use of the Water Risk Atlas published by the World Resources Institute (WRI), as recommended by the SASB, it can be concluded that none of the operating units are in areas of high or extremely high water stress.

Topic	Material topic	Title	Code	Page
	Hydro Resources	Description of water management risks and discussion of strategies and practices to mitigate those risks	RR-BI-140a.2	To evaluate and manage these risks, Zilor uses the WRI's Aqueduct Water Risk Atlas at all its units. This water risk evaluation helps identify areas with a higher likelihood of water scarcity or stress. Despite none of the company's areas currently being located in areas of high water risk, Zilor continues to improve its management of water by means of investments and actions designed to reduce the use of water in its operations.
	Hydro Resources	Number of incidents of non-compliance with water quality permits, standards, and regulations	RR-BI-140a.3	There were no incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations.
Energy management	Climate Change	(1) Operational energy consumed, (2) percentage grid electricity, (3) percentage renewable	FB-AG-130a.1	134
Management of GMOs	Product differentiation	Discussion of strategies to manage the use of genetically modified organisms (GMOs)	FB-AG-430b.1	Zilor has adopted a policy of zero use of genetically modified organisms (GMOs) in its industrial units, thereby guaranteeing that its products are free from GMOs. The company has implemented rigorous tracking controls to check on the origin of the raw-material and keep itself updated on all government regulations related to the use of GMOs. These measures guarantee compliance and provide the consumers with safe products that are free from GMOs.
Management of the Legal & Regulatory Environment	Strategy and compliance	Amount of subsidies received through government programs	RR-BI-530a.1	R\$ 10,375,348
Management of the Legal & Regulatory Environment	Strategy and compliance	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	RR-BI-530a.2	54, 55
Social and environmental impacts in the ingredients supply chain	Product differentiation	Percentage of agricultural products sourced that are certified to a third-party environmental and/or social standard, and percentages by standard	FB-AG-430a.1	58
	Product differentiation	Suppliers social and environmental responsibility audit (1) non-conformance rate and (2) associated corrective action rate for (a) major and (b) minor non-conformances	FB-AG-430a.2	96
	Product differentiation	Discussion of strategy to manage environmental and social risks arising from contract growing and commodity sourcing	FB-AG-430a.3	96
Activity metrics	Innovation and productivity	Biofuel production capacity	RR-BI-000.A	27, 130
	Innovation and productivity	Production of (1) renewable fuel, (2) advanced biofuel, (3) biomass-based diesel, and (4) cellulosic biofuel.	RR-BI-000.B	Zilor produces 119 Mgal of advanced biofuel (first generation sugarcane ethanol).
	Innovation and productivity	Amount of feedstock consumed in production.	RR-BI-000.C	The Zilor Group's accumulated crushing in the 2022/2023 harvest was 10,550,000.00 tons.
	Hydro Resources	Percentage of agricultural products sourced from regions with high or extremely high baseline water stress	FB-AG-440a.2	None of the areas are in water stressed regions. Analysis performed in accordance with the WRI's Aqueduct Water Risk Atlas.
	Innovation and productivity	Production by principal crop	FB-AG-000.A	10,550,006 tons

Topic	Material topic	Title	Code	Page
	Innovation and productivity	Number of processing facilities	FB-AG-000.B	Three processing units.
	Innovation and productivity	Total land area under active production	FB-AG-000.C	Total land area under active production: 183,062,36 ha. Proprietary area: 34,178.69 ha. Leased area: 148,883.67 ha.
	Innovation and productivity	Cost of agricultural products sourced externally	FB-AG-000.D	Omitted due to this being confidential information. This metric is sensitive for the business and, therefore, confidential.
Origin of ingredients	Product differentiation	Identification of principal crops and description of risks and opportunities presented by climate change	FB-AG-440a.1	61
Air quality	Climate Change	Air emissions of the following pollutants: NOx (excluding N2O), SOx, volatile organic compounds (VOCs), particulate matter (PM10), and (5) hazardous air pollutants (HAPs)	RR-BI-120a.1	132
	Climate Change	Number of incidents of non-compliance associated with air quality licenses, standards and regulations.	RR-BI-120a.2	There were no incidents of non-compliance associated with air quality permits, standards, and regulations
Health and safety at work	Labor practices	(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	FB-AG-320a.1	88, 90
Food safety	Product differentiation	Percentage of agricultural products sourced from suppliers certified to a Global Food Safety Initiative (GFSI) recognized food safety certification program	FB-AG-250a.2	5.1%
	Product differentiation	Global Food Safety Initiative (GFSI) audit, non-conformance rate and associated corrective action rate for (a) major and (b) minor non-conformances	FB-AG-250a.1	There was no major non-compliance in GFSI audits. There were a total of six minor non-compliances, all involving corrective actions (100% rate).
	Product differentiation	(1) Number of recalls issued and (2) total amount of food products recalled	FB-AG-250a.3	There is no history of recalls issued or products recalled.
Operational safety, preparation and emergency response	Labor practices	Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate, (PSTIR), and Process Safety Incident Severity Rate (PSISR)	RR-BI-540a.1	There were no process safety incidents (PSIC).

The Sustainable Development Goals are a global appeal for action to end poverty, protect the environment and the climate, and guarantee that everyone, everywhere, can enjoy peace and prosperity. These are the goals to which the United Nations is contributing so that we can achieve the Agenda 2030 in Brazil.

Sustainable Development Goals



Annex

Governance and compliance

Remuneration of senior executives GRI 2-19

Fixed pay / Variable pay / sign-on bonuses or recruitment incentive payments	The organization’s remuneration strategy follows the market average for the employees, including the board. Special hiring conditions may be negotiated in specific situations, such as a hiring bonus, payment of accommodation and meal expenses, and moving expenses.
	The automobile benefit is granted to members of the board by means of a loan agreement for the acquisition of a new vehicle exclusively for work use.
	The organization has a Participation in the Profits and Results (PPR) program for employees in certain positions, with criteria related to the generation of results, individual performance and contribution made during the evaluation period. The employees lose eligibility to participate in the PPR if they resign.
	There are plans for the implementation of a Long-Term Incentive (LTI) program for the CEO, C-Levels and their rights, aiming to consolidate growth, create sustainable value and reward good performance. For retention purposes, should the minimum results not be achieved, a percentage is guaranteed for each options grant, with payment at the end of three years.
Rescission payments	The payment includes all the labor rights due to fully-certified employees. In the event of the dismissal of an executive, the company shall provide outplacement support through a partner consultancy.
Compensation	The Company has retention programs, but these do not include the reimbursement of bonuses or incentives. Consequently, this involves the loss of future eligibility in the programs.
Retirement benefits	Itaú + Zilor Private Pension:
	Zilor believes that planning for one’s retirement is the best way of enjoying the fruits after a life of hard work. As such, Zilor has a Private Pension Plan for its employees. The program is modern and flexible. Under the plan, employees can choose how much they wish to invest (there is a ceiling - a percentage of the salary) and Zilor makes monthly contributions in its own name to complement the plan.

Cases of compliance with laws and regulations¹ GRI 2-27

22/23 harvest	
finances for cases of non-compliance with laws and regulations that occurred during the reported period	R\$ 2,413,693.67
finances for cases of non-compliance with laws and regulations that were paid during previously reported periods;	R\$ 801,051.96
Total	R\$ 3,214,745.63

¹ The Company considers cases of violation that could be practiced consciously by the Company or by third parties at its command, or which could cause significant impacts to third parties or the environment, as being important.

Production

Production capacity per unit (thousands of gallons)¹ SASB RR-BI-

000.A

	22/23 harvest	21/22 harvest	20/21 harvest
Barra Grande	65,390.0	60,733.1	59,570.8
São José	66,260.0	63,929.6	63,348.4
Quatá	67,640.0	58,741.3	61,705.3
Total	199,290.0	183,404.0	184,624.5

¹ Biofuels production capacity calculated using the daily production capacity (m³/day) authorized by the National Agency for Petroleum, Natural Gas and Biofuels (ANP) for each unit, multiplied by the days of harvest. The authorized capacity of hydrous ethanol is considered to be the maximum production limit for the distillation devices. As such, since the dehydration of the ethanol follows the distillation, the sum of the average daily volumes of hydrous ethanol production and anhydrous ethanol should not exceed the authorized capacity of hydrated ethanol. Capacity available in the Dynamic Report of biofuel production facilities authorized by the ANP.

Human capital

Proportion of senior management hired from the local community^{1, 2 3} GRI 202-2

7

members of the board

1

members of the board contracted from the local community

14.28%

of the board contracted from the local community

¹ We consider a “Director” to be an individual tasked with leading business and/or back office areas. This person may or may not be one of the Executive Officers and has the authority to manage teams and make strategic decisions.

² The geographic definition of “location” adopted by our organization covers the towns where we have our Agribusiness Units and Biorigin.

³ This applies to all Zilor’s units.

New employee hires and employee turnover GRI 401-1

Hiring and turnover rate ^{1 2}	22/23 harvest		21/22 harvest		20/21 harvest	
	Hiring rate	Turnover rate	Turnover rate	Turnover rate	Turnover rate	Turnover rate
By gender						
Men	29.31%	28.00%+	33.9%+	36.2%+	30.6%+	34.4%+
Women	41.65%	28.00%+	51.4%+	54.5%+	53.5%+	54.4%+
By age group						
Under 30	52.04%	45.42%+	54.7%+	53.0%+	49.5%+	52.3%+
30 to 50 years of age	25.73%	25.38%+	29.5%+	33.5%+	29.2%+	32.4%+
Over 50	22.83%	22.69%+	26.3%+	30.2%+	19.3%+	24.8%+
Total	30.87%	29.21%+	36.1%+	38.5%+	33.5%+	36.9%+

¹ Calculation methodology: [(hires + dismissals)/2]/total headcount

² All the company’s employees are located in the Southeastern region. 41 employees form part of the Biorigin USA Business Unit.

Turnover and Hirings¹ GRI 405-1

	22/23 harvest		21/22 harvest		20/21 harvest	
	Hirings	Terminations	Hirings	Terminations	Hirings	Terminations
By gender						
Men	929	846	1,066	1,210	1,001	1,248
Women	192	154	226	254	252	260
By age group						
Under 30	409	305	549	516	518	577
30 to 50 years of age	554	539	596	757	631	768
Over 50	158	156	147	191	104	163
Total	1,121	1,000	1,292	1,464	1,253	1,508

¹ All the company's employees are located in the Southeastern region.

Maternal¹/paternal² leave GRI 401-3

Employees who had the right to take leave	men	3,170
	women	461
Employees who <u>took</u> leave	men	93
	women	12
Employees who returned to work, during the period covered by the report, following the end of the leave	men	93
	women	12
Employees who returned to work following the leave and who continued to be employed 12 months after their return to work	men	72
	women	5
Employees who returned from leave during the previous period	men	95
	women	7
Return rate	men	100.00
	women	100.00
Rate of retention	men	75.79
	women	71.43

¹ Six months of maternity-leave were considered, since Zilor participates in the Citizen Company program.

² The length of the paternity leave will be increased in the next harvest as part of the Citizen Company program.

Average number of training hours per employee GRI 404-1

	22/23 harvest	21/22 harvest	20/21 harvest
By gender			
Men	25.7	17.2	15.7
Women	16.2	11.6	7.4
By employment level			
Senior Management	1.1		
Management	9.0	11.7	13.0
Coordination	23.7		
Supervision	19.2		
Specialists	6.2		
Analysts	10.9	14.6	14.8
Technicians	25.7		
Operational staff	26.5		
Total	24.5	16.5	14.6

Employees receiving performance analyses by
employment category (%)¹ GRI 404-3

	Men	Women	Total
Senior Management	100.0%	0%+	100.0%+
Management	100.0%	100.0%+	100.0%+
Coordination	100.0%	100.0%+	100.0%+
Supervision	100.0%	100.0%+	100.0%+
Specialists	100.0%	88.9%+	94.4%+
Analysts	98.7%	100.0%+	99.1%+
Technicians	99.6%	100.0%+	99.6%+
Operational staff	35.5%	19.8%+	34.1%+
Total	46.1%	53.4%+	46.9%+

¹ Workers who were not evaluated in relation to performance.

Average number of employee
training hours by employment
category GRI 404-1

Apprentices	3.8
Interns	12.0
Total	7.9

Climate & emissions management

GRI 305-1, 305-2, 305-3, 305-4, 305-5, SASB FB-AG-110a.1

Zilor - Greenhouse gas emissions (t CO₂ equivalent)^{1 2 3 4} GRI 305-1, 305-2, 305-3

	Base year 2022	Base year 2021	Base year 2020
Scope 1²			
Generation of electricity, heat or steam	52,705.3	N.D.	N.D.
Physicochemical processing	101,989.1	N.D.	N.D.
Transportation of materials, products, waste, employees and passengers	36,865.9	N.D.	N.D.
Fugitive emissions	461.4	N.D.	N.D.
Total gross emissions	192,021.7	262,935.1	280,999.7
Biogenic emissions	3,172,635.2	2,800,804.6	2,889,171.4
Scope 2			
Location approach	0	0	0
Procurement choice approach	0	0	0

¹ Operational control was used as the consolidation approach. All the gases included in the Kyoto Protocol were considered in the calculations: CO₂, CH₄, N₂O, HFCs, PFCs, SF₆ and NF₃.

² Emissions relating to CO₂, CH₄, N₂O and HFCs.

³ Emission factors considered in accordance with the Brazilian GHG Protocol Program - Version 2023.0.1.

⁴ The Scope 3 inventory has not yet been drafted; inclusion is still being evaluated.

Atmospheric emissions (t) SASB RR-BI-120a.1

	22/23 harvest	21/22 harvest	20/21 harvest
NO _x	537.61	490.00	410.61
Particulate Matter	1,627.32	2,118.69	2,170.10

Biorigin - Greenhouse gas emissions (t CO₂ equivalent)^{2 3}

GRI 305-1, 305-2, 305-3

	Base year 2022	Base year 2021	Base year 2020
Scope 1¹			
Generation of electricity, heat or steam	1,850.5	N.D.	N.D.
Physicochemical processing	0	N.D.	N.D.
Transportation of materials, products, waste, employees and passengers	0	N.D.	N.D.
Fugitive emissions	15.7	N.D.	304.1
Total gross emissions	1,866.2	14.8	0.5
Biogenic emissions	33,338.5	34,200.9	33,487.3
Scope 2			
Location approach	0	0	0
Procurement choice approach	7,054.6	5,320.0	4,533.1
Biogenic emissions	371,655.1	280,283.2	233,659.5
Scope 3			
Gross emissions	10,306.28	2,632.7	N.D.
Biogenic emissions	485.2	304.1	N.D.

Consolidated - Greenhouse gas emissions (t CO₂ equivalent) GRI 305-1, 305-2, 305-3

	Base year 2022	Base year 2021	Base year 2020
Scope 1			
Gross emissions	193,887.9	262,950.0	281,000.1
Biogenic emissions	3,205,973.7	2,835,005.5	2,922,658.7
Scope 2			
Location approach	0	0	0
Procurement choice approach	7,054.6	5,320.0	4,533.1
Biogenic emissions	371,655.1	280,283.2	233,659.5
Scope 3			
Gross emissions	10,306.3	2,632.7	N.D.
Biogenic emissions	485.2	304.1	N.D.

1 Consolidation approach: operational control

2 Report the base year: 2022

3 Standards, methodologies, and premises used: GHG Protocol

Scope 1 gross emissions
(thousands t CO₂ eq)

2020/2021  281.0

2021/2022  262.9

2022/2023  192.0

Intensity of greenhouse gas emissions^{1 2}

GRI 305-4

Zilor	0.02
Biorigin	0.22

¹ Includes Scopes 1 and 2.

² Metric: Scope 1 and 2 emissions in kg divided by production in kg.

Reductions in GHG emissions (tCO₂ equivalent) GRI 305-5

Reductions arising from direct emissions (Scope 1)	69,062.1
Reductions arising from indirect emissions from the acquisition of energy (Scope 2)	-1,734.6
Reductions arising from other indirect emissions (Scope 3)	-7,673.6
Total reduction of GHG emissions	59,653.9
Reductions arising from offsetting	1,160.3

Natural resources

Total volume of water consumed by all areas (ML) ¹ GRI 303-5

	22/23 harvest
Total withdrawal of water	14,077.7
Total discharge of water (disposal of sanitary waste)	80.1
Water consumption	13,997.6

¹ Water consumption calculations were based upon the difference between the total withdrawal of water and the total discharge of water. These data were compiled taking into consideration the specific norms, methodologies and premises adopted for this purpose. The sanitary waste estimate was performed considering the number of employees as a relevant factor.

Volume and intensity of pesticides used by toxicity hazard levels GRI 13.6.2

Row Labels	Sum total of active ingredients by kg	Total (%)	% by Category
Fungicides / Nematicide	17,613.13	7.38%	100.00%
Highly hazardous	7,553.77	3.16%	42.89%
Moderately hazardous	9,998.40	4.19%	56.77%
Slightly hazardous	60.95	0.03%	0.35%
Herbicide	206,984.05	86.69%	100.00%
Highly hazardous	2,416.17	1.01%	1.17%
Extremely hazardous	47,315.99	19.82%	22.86%
Unlikely to present an acute hazard	4,487.99	1.88%	2.17%
Moderately hazardous	140,478.41	58.84%	67.87%
Slightly hazardous	12,285.48	5.15%	5.94%
Insecticide	13,507.68	5.66%	100.00%
Highly hazardous	3,862.98	1.62%	28.60%
Extremely hazardous	4.74	0.00%	0.04%
Unlikely to present an acute hazard	0	0.00%	0.00%
Moderately hazardous	9,116.53	3.82%	67.49%
Not present	147.35	0.06%	1.09%
Slightly hazardous	376.09	0.16%	2.78%
Ripener	645.96	0.27%	100.00%
Highly hazardous	0	0.00%	0.00%
Extremely hazardous	645.96	0.27%	100.00%
Moderately hazardous	0	0.00%	0.00%
Total	238,750.81	100.00%	100.00%+

Energy consumption (GJ) GRI 302-1, SASB FB-AG-130a.1

	Zilor ¹	Biorigin ²
Consumption of fuels from non-renewable sources (GJ)		
Diesel oil (used in the boiler for the generation of steam)	0	149,455.0
Liquefied Petroleum Gas (LPG)	4,144.0	531,075.5
Diesel S500	404,906.0	0
Diesel S10	132,910.0	0
Gasoline	43.0	0
Subtotal	542,003.0	680,530.5
Consumption of fuels from renewable sources (GJ)		
Sugarcane bagasse	27,746,322.0	0
Hydrous ethanol	12,702.0	0
Anhydrous ethanol	0	0
Subtotal	27,759,024.0	0
Purchased energy consumed (GJ)		
Electricity	124,618.0	324,384.3
Steam	0	2,970,270.4
Subtotal	124,618.0	3,294,654.7
Energy consumed sold (GJ)		
Electricity	1,630,458.0	0
Subtotal	1,630,458.0	0
Total	26,795,187.0	3,975,185.2

¹ Conversion factors for GJ/Reference/Source: S 500 diesel oil, Gasoline, LPG, Bagasse, Ethanol, Electricity - EPE 2007; S10 diesel oil - GHG calculation tool.

² Information taken from the system with conversions of the EPE conversion table and the January 2023 Monthly Electricity Bulletin (2022 definition of the percentage of renewables).

³ Neither Zilor nor Biorigin purchase energy for consumption in the form of heating, refrigeration, nor is any energy sold for heating, refrigeration or steam.

Energy intensity(GJ) ¹ GRI 302-3

2.5 Zilor²


0.1 Biorigin³

¹ There is no energy consumption outside of the organization.

² Metric used: total consumption of energy, in GJ, divided by tons of sugarcane processed. Types of energy included: fuels and electricity. The amounts were taken from the S&OP production plan at the close of the 2022/2023 harvest. Amounts within the organization used, harvest and off-season consumption highlighted in the spreadsheet. Sugarcane crushing = 10,550,007 tons. Amounts converted from MWh to GJ using the website: <https://www.convertunits.com/from/mwh/to/gj>.

³ Metric used: Electrical consumption of energy, in GJ, divided by kg of product produced. Types of energy included: fuels and electricity. The EPE data table was used for conversion.


Letter of Assurance



Building a better
working world

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A limited assurance engagement conducted in accordance with NBC TO 3000 (ISAE 3000) consists primarily of inquiries to management and other Açucareira Quatá S/A professionals who are involved in preparing the information, as well as the application of analytical procedures to obtain evidence that make it possible to conclude, in the form of a limited assurance, on the information taken as a whole. A limited assurance work also requires the execution of additional procedures, when the independent auditor becomes aware of matters that lead him to believe that the indicators disclosed in the Report, taken as a whole, may present material distortions.

The selected procedures were based on our understanding of the aspects related to the compilation, materiality and presentation of information contained in the Report, other circumstances of the work and our consideration of areas and processes associated with the material information disclosed in the Report, in what material misstatements could exist. The procedures comprised, among others:

- a) the planning of the work, considering the relevance, the volume of quantitative and qualitative information and the operational systems and internal controls that served as a basis for the preparation of indicators contained in the Report;
- b) understanding the calculation methodology and procedures for compiling indicators through inquiries with the managers responsible for preparing the information;
- c) the application of analytical procedures on the quantitative information and inquiries about the qualitative information and its correlation with the indicators contained in the Report;
- d) for cases in which the indicators correlate with indicators of a financial nature, the confrontation of these indicators with the financial statements and/or accounting records.

The limited assurance work also included adherence to the guidelines and criteria of the GRI Standards and SASB applicable in the preparation of the indicators contained in the Report.

We believe that the evidence obtained in our work is sufficient and appropriate to support our limited conclusion.

Scope and limitations

Procedures performed in limited assurance engagements vary in nature and timing and are less extensive than in reasonable assurance engagements. Consequently, the level of assurance obtained in a limited assurance engagement is substantially less than that which would have been obtained if a reasonable assurance engagement had been performed. If we had carried out a reasonable assurance work, we could have identified other matters and possible distortions that may exist in the indicators contained in the Report. Accordingly, we do not express an opinion on this information.

Non-financial data are subject to more inherent limitations than financial data, given the nature and diversity of methods used to determine, calculate or estimate such data. Qualitative interpretations of data materiality, relevance and accuracy are subject to individual assumptions and judgments. Additionally, we did not carry out any work on data reported for previous periods, nor in relation to future projections and targets.

The preparation and presentation of sustainability indicators followed the GRI Standards and SASB, therefore, do not have the objective of ensuring compliance with social, economic, environmental, or

EY | 2 / 3



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engineering laws and regulations. The aforementioned standards provide, however, for the presentation and disclosure of any non-compliance with such regulations when sanctions or significant fines occur. Our assurance report must be read and understood in this context, inherent to the selected criteria (GRI Standards and SASB).

Conclusion

Based on our procedures carried out, described in this report and on the evidence obtained, nothing has come to our attention that leads us to believe that the non-financial information contained in the Report for the year ended march 31st, 2023 of Açucareira Quatá S/A , were not prepared, in all material respects, in accordance with the criteria and guidelines of the Global Reporting Initiative – GRI and SASB.

São Paulo (SP), October 6th, 2023.

Ernst & Young
Auditores Independentes S/S Ltda.
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Luana Silva - GRI and SASB indicators
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Naná Freitas – layout
Ana Souza – project management and relationship
Steve Wingrove - Translation

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Zilor Image Bank

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